thyssenkrupp nucera AG & Co. KGaA (formerly thyssenkrupp Uhde Chlorine Engineers GmbH) (thyssenkrupp nucera Group)

Consolidated Financial Statements

As of and for the fiscal years ended September 30, 2022, September 30, 2021 and September 30, 2020

thyssenkrupp nucera Group – Consolidated Statement of Financial Position

thousand €	Note	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Property, plant and equipment	5	10,512	8,160	8,417
Goodwill	4	57,047	57,232	57,425
Intangible assets other than goodwill	4	1,665	1,298	902
Other financial assets	9	1,151	789	513
Other non-financial assets	10	0	0	1,985
Deferred tax assets	27	4,261	7,043	9,992
Total non-current assets		**74,636**	**74,522**	**79,234**
Inventories	6	90,988	61,296	77,252
Trade accounts receivable	7	37,820	38,263	35,903
Contract assets	8	4,081	16,089	10,488
Other financial assets	9	161,060	189,355	256,005
Other non-financial assets	10	15,487	23,966	54,710
Current income tax assets		649	415	476
Cash and cash equivalents		5,330	11,660	27,349
Total current assets		**315,415**	**341,044**	**462,183**
Total assets		**390,051**	**415,566**	**541,417**
Equity and liabilities				
Capital stock		10,000	10,000	100,000
Additional paid-in capital		99,215	99,215	16,955
Retained earnings		74,584	92,793	88,831
Cumulative other comprehensive income		(295)	1,382	5,630
Equity attributable to thyssenkrupp nucera Group equity holders	11	**183,504**	**203,390**	**211,416**
Accrued pension and similar obligations	12	7,459	7,910	6,784
Provisions for other non-current employee benefits	13	87	135	183
Other provisions	13	3,850	2,958	1,785
Deferred tax liabilities	27	3,532	7,607	7,404
Lease liabilities, non-current	17	3,729	2,281	1,766
Total non-current liabilities		**18,657**	**20,891**	**17,922**
Provisions for current employee benefits	13	1,215	2,139	3,388
Other provisions	13	22,010	24,036	33,201
Current income tax liabilities		3,298	2,829	3,229
Lease liabilities, current	17	1,947	1,696	2,354
Trade accounts payable	14	20,844	37,561	43,125
Other financial liabilities	15	1,427	1,273	4,407
Contract liabilities	8	130,146	115,062	209,020
Other non-financial liabilities	16	7,003	6,689	13,355
Total current liabilities		**187,890**	**191,285**	**312,079**
Total liabilities		**206,547**	**212,176**	**330,001**
Total equity and liabilities		**390,051**	**415,566**	**541,417**

thyssenkrupp nucera Group – Consolidated Statement of Income

thousand €	Note	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Sales	22, 21	254,247	319,496	383,145
Cost of sales		(193,944)	(250,389)	(311,783)
Gross margin		**60,303**	**69,107**	**71,362**
Research and development cost	23	(6,773)	(10,746)	(16,030)
Selling expenses	23	(10,447)	(14,321)	(15,527)
General and administrative expenses	23	(10,667)	(12,966)	(28,380)
Other income	24	906	904	3,749
Other expenses	25	(6,576)	(5,079)	(6,357)
Income from operations		**26,746**	**26,899**	**8,817**
Finance income	26	1,213	555	3,082
Finance expenses	26	(385)	(739)	(1,288)
Financial income/(expense), net		**828**	**(184)**	**1,794**
Income before tax		**27,574**	**26,715**	**10,611**
Income tax expense	27	(5,906)	(5,421)	(4,573)
Net income		**21,668**	**21,294**	**6,038**
Thereof: thyssenkrupp nucera Group's equity holders		**21,668**	**21,294**	**6,038**
Earnings per share attributable to equity holders of thyssenkrupp nucera Group (in €) (cf. Note 11) Basic / diluted		0.22	0.21	0.06
Weighted average of outstanding shares (in million units)				
Basic / diluted	11	100	100	100

thyssenkrupp nucera Group – Consolidated Statement of Comprehensive Income

thousand €	Note	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Net income		**21,668**	**21,294**	**6,038**
Items of other comprehensive income that will not be reclassified to profit or loss in future periods:				
Remeasurements of pensions and similar obligations		(323)	544	1,869
Thereof: tax effect		*147*	*(267)*	*(883)*
Items of other comprehensive income that could be reclassified to profit or loss in future periods:				
Cash flow hedges		136	57	297
Foreign currency translation adjustment		(3,414)	1,076	2,082
Other comprehensive income		**(3,601)**	**1,677**	**4,248**
Total comprehensive income for the period		**18,067**	**22,971**	**10,286**
Thereof: attributable to equity holders of thyssenkrupp nucera Group		18,067	22,971	10,286

thyssenkrupp nucera Group – Consolidated Statement of Changes in Equity

thousand €	Capital stock	Additional paid-in capital	Retained earnings	Other comprehensive income: Remeasurements of pensions and similar obligations	Other comprehensive income: Foreign currency translation adjustment	Other comprehensive income: Cash flow hedges	Total equity attributable to equity holders
Balance as of Oct. 1, 2019	**10,000**	**139,715**	**63,815**	**(2,062)**	**5,484**	**(116)**	**216,836**
Net income/(loss)			21,668				21,668
Other comprehensive income				(323)	(3,414)	136	(3,601)
Total comprehensive income			**21,668**	**(323)**	**(3,414)**	**136**	**18,067**
Payment of dividend to equity holders			(10,897)				(10,897)
Capital repayment to equity holders		(40,500)					(40,500)
Other changes			(2)				(2)
Balance as of Sept. 30, 2020	**10,000**	**99,215**	**74,584**	**(2,385)**	**2,070**	**20**	**183,504**
Net income/(loss)			21,294				21,294
Other comprehensive income				544	1,076	57	1,677
Total comprehensive income			**21,294**	**544**	**1,076**	**57**	**22,971**
Payment of dividend to equity holders			(3,085)				(3,085)
Balance as of Sept. 30, 2021	**10,000**	**99,215**	**92,793**	**(1,841)**	**3,146**	**77**	**203,390**
Net income/(loss)			**6,038**				**6,038**
Other comprehensive income				1,869	2,082	297	4,248
Total comprehensive income	**-**	**-**	**6,038**	**1,869**	**2,082**	**297**	**10,286**
Payment of dividend to equity holders			(10,000)				(10,000)
Contributions from tk Group*		7,740					7,740
Capital increase (cf. Note 3)	90,000	(90,000)					-
Balance as of Sept. 30, 2022	**100,000**	**16,955**	**88,831**	**28**	**5,228**	**374**	**211,416**

*Thereof contribution in-kind amounting to €2,354 million recognized in connection with a waiver regarding “thyssenkrupp” trademark license fees (cf. Note 20)

thyssenkrupp nucera Group – Consolidated Statement of Cash Flows

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Net income/(loss)	**21,668**	**21,294**	**6,038**
Adjustments to reconcile net income/(loss) to operating cash flows:			
Deferred income taxes, net	1,586	1,061	(4,153)
Depreciation, amortization and impairment of non-current assets	3,293	3,154	3,405
(Gain)/loss on disposal of non-current assets	4	27	20
Changes in assets and liabilities, net of non-cash effects:			
– Inventories	(5,743)	29,269	(15,879)
– Trade accounts receivable	(10,599)	(257)	2,906
– Contract assets	571	(11,964)	5,596
– Accrued pension and similar obligations	(120)	1,265	1,633
– Other provisions	(1,056)	2,086	9,351
– Trade accounts payable	(15,191)	17,793	6,125
– Contract liabilities	18,019	(16,650)	93,572
– Other assets/liabilities not related to investing or financing activities	(8,154)	(10,483)	(21,508)
Operating cash flows	**4,278**	**36,595**	**87,106**
Capital expenditures from property, plant and equipment (inclusive of advance payments)	(1,750)	(94)	(1,019)
Capital expenditures for intangible assets (inclusive of advance payments)	(74)	(169)	(166)
Proceeds from disposals of property, plant and equipment, intangible assets and other non-current assets	394	380	223
Cashpool withdrawals (deposits)*	42,256	(25,262)	(62,371)
Cash flows from investing activities	**40,826**	**(25,145)**	**(63,333)**
Cash flows from redemption of lease liabilities	(1,988)	(2,028)	(2,346)
Contributions from tk Group**	-	-	5,386
Repayment of capital to equity holders	(40,500)	-	-
Payment of dividend to equity holders	(10,897)	(3,085)	(10,000)
Cash flows from financing activities	**(53,385)**	**(5,113)**	**(6,960)**
Net increase/(decrease) in cash and cash equivalents	**(8,281)**	**6,337**	**16,813**
Effect of exchange rate changes on cash and cash equivalents	(429)	(7)	(1,124)
Cash and cash equivalents at beginning of year	14,040	5,330	11,660
Cash and cash equivalents at end of year	5,330	11,660	27,349
Additional information regarding income tax amounts included in operating cash flows:			
Income tax paid	(12,897)	(5,957)	(8,154)
Interest received	1,157	533	1,079
Interest paid	(184)	(141)	(107)

* cf. Note 2 regarding the change in presentation of cash pooling activities

** Reimbursed expenses for services relating to the preparation of the IPO by tk Group

thyssenkrupp nucera Group – Notes to the Consolidated Financial Statements

1 General information

1.1 Background

thyssenkrupp nucera AG & Co. KGaA (formerly thyssenkrupp Uhde Chlorine Engineers GmbH) (hereinafter referred to as "Parent" or "Company") is a is a partnership limited by shares (Kommanditgesellschaft auf Aktien) incorporated and existing under the laws of the Federal Republic of Germany with its registered office and its headquarters in Dortmund, Germany. The Company's legal form was changed from a limited liability company (Gesellschaft mit beschränkter Haftung) to a partnership limited by shares in preparation of the Initial Public Offering ("IPO") in which the Company will be the issuer. The Company was registered with the commercial register (Handelsregister) of the local court (Amtsgericht) of Dortmund, Germany on November 15, 2013, under HRB 26097 under its old legal form and name and on February 18, 2022, under HRB 33774 under its new legal form and name. thyssenkrupp nucera management AG, a stock corporation (Aktiengesellschaft) incorporated in Germany and governed by German law, is the General Partner (Komplementär) of the Company ("General Partner") which has no interest in the issued and outstanding share capital of the Company.

Pursuant to Section 7 (2) of the Articles of Association of the Company, the General Partner has not made a capital contribution to the Company, does not hold any shares in the Company and, therefore, will not participate in its assets or its profits and losses. The Company together with its wholly owned subsidiaries collectively represent the operations of thyssenkrupp nucera Group (hereinafter referred to as "thyssenkrupp nucera Group" or "the Group"). thyssenkrupp nucera management AG is not part of the group of consolidated companies. The Company's fiscal year ends on September 30 of each calendar year.

The ultimate parent of the Company is thyssenkrupp AG (hereinafter "tk AG" or together with its subsidiaries "tk Group") which owns 66% of the shares in the capital of the Company as of September 30, 2022, September 30, 2021 and September 2020, respectively, and is based and listed in Germany. Until September 30, 2021, the tk Group share was held via thyssenkrupp Industrial Solutions AG (hereinafter "tk IS AG") who transferred the tk Group share to thyssenkrupp Projekt 1 GmbH effective September 30, 2021 as part of a legal reorganization for purposes of the IPO. The remaining 34% of the shares in the capital of the Company are held by Industrie De Nora S.p.A., Milano, Italy (hereinafter "IDN"). The same ownership structure applies for thyssenkrupp nucera management AG. Further information on the Group's structure is provided in Note 3.

tk AG and IDN are considering thyssenkrupp nucera Group for a public listing. tk AG plans to retain a controlling interest in the Group after the IPO. The measures carried out in the fiscal years ended September 30, 2022, in preparation for the planned IPO, are presented in the relevant sections of the notes, in particular Summary of significant accounting policies and critical accounting estimates (cf. Note 2), Related Party (cf. Note 21) and Management Incentive Plans (cf. Note 28).

According to Commission Delegated Regulation (EU) 2019/980, an issuer must present historical financial information covering the latest three fiscal years in its securities prospectus. This requires the preparation of Consolidated Financial Statements for thyssenkrupp nucera Group for the fiscal years from October 1, 2019 to September 30, 2020, from October 1, 2020 to September 30, 2021 and from October 1, 2021 to September 30, 2022.

The Consolidated Financial Statements consist of Consolidated Statements of Financial Position as of September 30, 2022, 2021 and 2020, as well as Consolidated Statements of Income, Consolidated Statements of Comprehensive Income, Consolidated Statements of Changes in Equity and Consolidated Statement of Cash Flows for the fiscal years ended September 30, 2022, 2021 and 2020, respectively (collectively referred to hereafter as "Consolidated Financial Statements").

The Management Board of thyssenkrupp nucera management AG (hereinafter referred to as "Management Board") compiled these Consolidated Financial Statements.

This set of Consolidated Financial Statements of the Group was authorized for issue in accordance with a resolution of the directors on January 9, 2023.

1.2 Basis of preparation

General

The Consolidated Financial Statements of thyssenkrupp nucera Group have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union. The term IFRS also includes the International Accounting Standards (IAS), the interpretations issued by the International Financial Reporting Standards Interpretations

Committee (IFRS IC) or its predecessor the International Financial Reporting Interpretations Committee (IFRIC), and those of the former Standing Interpretations Committee (SIC). Further information on the underlying accounting policies can be found in Note 2.

This set of Consolidated Financial Statements has been prepared on a voluntary basis. The Company is and historically has been exempt from the obligation to prepare and disclose consolidated annual financial statements and group management reports in accordance with section 291 (2) of the German Commercial Code (HGB) due to the fact that the Company's financial information historically has been included as part of the published consolidated financial statements of tk AG.

The Consolidated Financial Statements have been prepared on a historical cost basis, except for derivative financial instruments, financial assets and liabilities that have been measured at fair value.

The annual financial statements of companies included in the Group have been prepared using uniform accounting policies summarized in Note 2. The reporting date for the individual financial statements of companies included in the Group is the same as the reporting date for the Consolidated Financial Statements.

The Consolidated Financial Statements are presented in euros and all values are rounded to the nearest thousand (€ thousand), except when otherwise indicated. Due to rounding, numbers presented may not add up precisely to totals provided.

The Group has prepared the financial statements on the basis that it will continue to operate as a going concern.

Cost structure

Based on a general service agreement, tk Group provided the Group with general and administrative services such as tax, legal, controlling, accounting, IT or insurance. The general service agreement also covered operational functions such as construction management, engineering, project management, quality management and R&D. In conjunction with the IPO, the terms of the general service agreement between tk Group and the Group have been re-negotiated. Beginning from October 1, 2021 additional services historically not covered by the general service agreement, especially governance functions like internal audit services, tax statement preparation and handling as well as compliance services are provided to the Group. As such, costs historically charged to the Group differ from the costs that have been charged to the Group beginning from October 1, 2021 based on the re-negotiated terms. Therefore, the costs for service contracts for the twelve-month period ended September 30, 2022 are not comparable to prior periods, since additional services have been agreed. In addition, the Group is also establishing new functions in conjunction with the IPO which will further increase the cost base. Therefore, the cost structure as reflected in these Consolidated Financial Statements may not be representative for the future in this regard. Further information on related party transactions is provided in Note 20.

1.3 Business

The Group is a leading electrolysis technology provider to its global customers by share of installed capacity. Its business consists of: (i) the design, engineering and procurement of electrolysis technologies and the plants into which they are incorporated ("New Build"); and (ii) the provision of aftermarket services for existing plants ("Service"). The Group's New Build product group is divided by the underlying electrolysis technology used, i.e., the chlor-alkali electrolysis ("CA") and alkaline-water electrolysis ("AWE" or "AW") resulting in the following product groups offered to the Group's customers: (i) New Build CA, (ii) New Build AWE, and (iii) Service.

The product group New Build CA covers the construction of new plants involving CA electrolysis and hydrogen chloride ("HCl") electrolysis. The Group's chlor-alkali electrolysis technologies include the BM2.7 single-element family (the "BM2.7"), the filter press bipolar ion-exchange membrane process electrolyzer ("BiTAC") and sodium chloride oxygen depolarized cathode ("NaCl-ODC") electrolysis. The Group's HCl electrolysis technologies include HCl diaphragm electrolysis and HCl-ODC electrolysis. The Group has a wide range of CA customers across industry sectors, with the polyvinyl chloride ("PVC") production industry representing a large portion of these customers. Most customers' CA plants are integrated production units which, in addition to the CA electrolysis plant, contain the entire vinyl production chain. The Group's CA customers are linked to the polyurethane industry as well as the polycarbonate industry and other organic and inorganic chemical synthesis applications. The related projects are customer-specific and long-term, with an average term of two to three years.

The product group New Build AWE covers the construction of new plants involving the AW technology used for the production of green hydrogen. There is a wide range of AW electrolysis technology customers across industry and energy sectors, including the power-to-x markets, as well as operators of refineries, power utility companies, steel manufacturers and project developers. The related projects are customer-specific and long-term, with an average term of two to three years.

The product group Service covers a comprehensive portfolio of aftermarket services for its technologies in support of its goal of entering into long-term partnerships with its customers. Historically, Service focused primarily on the maintenance and operation of its CA technologies. AW technology related Service projects are expected to grow in the future once the AWE plants come into operation and the ordinary service cycle of electrolysis technologies begins. The Group, in partnership with IDN, a critical supplier and procurer to the Group, offers several maintenance and operation related services to its customers:

- Spare parts supply and management: The Group offers certified and carefully-tested spare parts, including component parts and electrolysis cells, to its customers when components require replacement. The sale of its spare parts is supported by its proven supply chains to minimize delivery time.
- Refurbishments and revamps: To improve plant performance, the Group offers a range of services that can be provided on-site which significantly reduce the energy consumed per metric ton of sodium hydroxide. General plant improvements, refurbishments and revamps can be carried out for an entire cell room or individual electrolysers. Similar to the product group New Build, projects are customer-specific and in case of revamps long-term, with an average term of two to three years.
- Digital plant monitoring and optimization: The Group uses third party data tools to measure and analyse plant operating data on a continuous basis to ensure maximum safety and operation. By transmitting actual operating data, regular reports are generated, including all relevant key performance indicators, benchmarks and recommendations. The data that is collected is then analysed by the Group's service specialists for the purposes of predictive maintenance and troubleshooting, optimization and performance improvement across its customers' plants. The Group also offers digital twins of electrolysers, advanced process control and remote expert support.
- Consulting: The Group has dedicated consulting specialists to support its customers' day-to-day plant operations. The consulting service offers regular consultation visits to benchmark customer plants and check them against the latest technical developments.

From its headquarters in Germany and facilities in China, Japan, Italy, the United States, Australia and Saudi Arabia, the Group is able to provide fast and comprehensive technology services to its customers alongside its product group portfolio. Further information on the Group’s business structure and operating segments is provided in Note 21.

The use of hydrogen is a key lever to decarbonize a wide range of carbon-emitting activities. The Group sees a continued strong political willingness to support green hydrogen solutions and AWE capacity expansion, providing a setting for increased customer demand. The high demand for hydrogen solutions will drive growth in water electrolysis. The need for decarbonisation results also from climate change effects. Risks and rewards are considered in our estimations regarding accounting and recoverability of non-current assets and provisions. Judgement and estimations are made to the best of management’s knowledge and belief in order to fairly present the group’s financial position and results of operations.

2 Summary of significant accounting policies and critical accounting estimates

Consolidation

The Group’s Consolidated Financial Statements comprise the financial statements of the Company and the entities which are directly or indirectly controlled by the Company (subsidiaries). Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee;
- The ability to use its power over the investee to affect its returns.

Typically, control is assumed if the Group possesses more than half of the voting rights. Further information on the scope of consolidation is provided in Note 3.

The financial statements of subsidiaries are included in the Consolidated Financial Statements from the date that control commences until the date that control ceases. Capital consolidation is performed by offsetting the carrying amounts of subsidiaries against their attributable equity. On acquisition, the identifiable assets and liabilities of a subsidiary are measured at their fair values at the date of the acquisition. A contingent liability is recognised at their fair values at the date of the acquisition, if it is a present obligation that arises from past events and its fair value can be measured reliably.

All significant intercompany transactions and balances between group entities are eliminated on consolidation.

Goodwill arising on the acquisition of subsidiaries is presented separately in the balance sheet.

Consolidated statement of income

The consolidated statement of income is prepared based on the cost-of-sales method by classifying expenses according to their function.

Cost of sales includes the engineering and purchase costs incurred to generate the sales. In addition to direct material costs, procurement and construction services, non-staff overheads and personnel costs, which represent the majority of cost of sales, cost of sales also includes project and non-project-related indirect costs, including depreciation and amortization and warranty costs.

Research and development cost includes expenses in connection with research and development activities not eligible for capitalization and other costs related to the functional area of research and development.

Selling expenses includes personnel, service and material costs related to the business development and sales process, particularly the preparation of any New Build or Service order proposals, including marketing and other costs related to the functional area of sales.

General and administrative expenses include costs incurred in operating and administering the business and consist primarily of expenses for salaries of non-project-related personnel and headquarters expenses and other costs related to the functional area of general administration.

Consolidated statement of cashflows

The Group uses the indirect method to prepare its consolidated statement of cashflows. Net income or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments, and items of income or expense associated with investing or financing cash flows.

In previous fiscal years cash pooling activities with tk Group have been presented within cash flow from financing activities. As of the fiscal year ended September 30, 2022, the Group presents cash pooling activities within cash flow from investing activities for the current fiscal year and the comparable periods. The Group has a continuously net receivable due to excess cash that corresponds with the character of a mid-term investment. Moreover, in the context of the planned IPO and the associated anticipated replacement of the cash pool agreement, the presentation within cash flow from investing activities is intended to ensure more meaningful information and better comparability in the light of the investment strategy selected for excess cash in the future.

Current versus non-current classification

The Group presents assets and liabilities in the statement of financial position based on current/non-current classification. Assets and liabilities are classified by maturity. An asset is current when it is (i) expected to be realised or intended to be sold or consumed in the normal operating cycle, (ii) held primarily for the purpose of trading, (iii) expected to be realised within twelve months after the reporting period or (iv) Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period. All other assets are classified as non-current.

A liability is current when (i) it is expected to be settled in the normal operating cycle, (ii) it is held primarily for the purpose of trading, (iii) it is due to be settled within twelve months after the reporting period or (iv) there is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period. The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

Foreign currency translation

thyssenkrupp nucera Group's consolidated financial statements is presented in euro (€), which is also the Company's functional currency. For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency.

Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date. Differences arising on settlement or translation of monetary items are recognised in profit or loss.

On consolidation, the assets and liabilities of foreign operations are translated into euros at the rate of exchange prevailing at the reporting date and their statements of profit or loss are translated at average exchange rates of the respective reporting period. The exchange differences arising on translation for consolidation are recognised in OCI.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the spot rate of exchange at the reporting date

The exchange rates of those currencies significant to the Group have developed as follows:

	Exchange rate as of (Basis €1)			Annual average exchange rate for the year ended (Basis €1)		
	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
US Dollar	1.17	1.16	0.97	1.12	1.20	1.09
Chinese Renminbi Yuan	7.97	7.48	6.94	7.85	7.78	7.10
Japanese Yen	123.76	129.67	141.01	120.71	128.47	134.41
United Arab Emirates Dirham	4.30	4.26	3.59	4.11	4.39	3.99
Australian Dollar	1.64	1.61	1.51	1.65	1.59	1.52

Intangible assets including goodwill

Intangible assets with finite useful lives are capitalized at cost and amortized depending on their estimated useful lives. Useful lives are examined on an annual basis and adjusted when applicable on a prospective basis. The amortization expense of intangible assets is primarily included in cost of sales in the consolidated statement of income.

	Useful lives
Franchises, trademarks and similar rights and values as well as licenses thereto	3 to 15 years
Self-created intangible assetss, internally developed software and website	3 to 10 years

Goodwill is stated at cost and tested for impairment annually or on such other occasions that events or changes in circumstances indicate that it might be impaired. Goodwill impairment losses are included in other expenses, if any.

Property, plant and equipment

Fixtures and equipment are stated at cost less accumulated depreciation and impairment losses. Capitalized production costs for self-constructed assets include costs of material, direct labour, allocable material and manufacturing overhead. Administrative costs are capitalized only if such costs are directly related to production. Maintenance and repair costs (day-to-day servicing) are expensed as incurred.

Fixtures and equipment are depreciated over the customary useful life using the straight-line method. The following useful lives are used as a basis for calculating depreciation:

	Useful lives
Buildings	4 to 50 years
Technical machinery and equipment	4 to 25 years
Factory and office equipment	3 to 15 years

Impairment of non-financial assets

At each balance sheet date, the Group reviews the carrying amounts of its intangible assets, property, plant and equipment to determine whether there are any indicators of impairment. If such indicator does exist, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the Cash Generating Unit to which the asset belongs.

At thyssenkrupp nucera Group the Cash Generating Units are represented by the individual legal entities which are located in Germany, Italy, China, Japan, the USA, Saudi Arabia and Australia and are operating in different geographical regions. The various legal entities operate with high autonomy and generate cash inflows that are largely independent of other legal entities of thyssenkrupp nucera Group.

Goodwill arising from acquisitions is allocated to the Cash Generating Units that are expected to benefit from the synergies of the acquisition. These Cash Generating Units represent the lowest level within the Group at which goodwill is monitored for internal management purposes. The recoverable amount of the Cash Generating Unit that carries a goodwill is tested for impairment annually as of September 30, or on such other occasions that events or changes in circumstances indicate that it might be impaired. For more details refer to Note 4.

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. Impairment losses are recognized as an expense immediately.

In case of impairment losses related to Cash Generating Units that contain goodwill the carrying amount of any goodwill allocated to the Cash Generating Unit is reduced first. If the amount of impairment losses exceeds the carrying amount of goodwill, the difference is generally allocated proportionally to the remaining non-current assets of the Cash Generating Unit to reduce their carrying amounts accordingly. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the Cash Generating Unit.

When an impairment loss subsequently reverses, the carrying amount of the asset (Cash Generating Unit) is increased to the revised estimate of its recoverable amount. The revised amount cannot exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (Cash Generating Unit) in prior years. A reversal of an impairment loss is recognized as income immediately. However, impairment losses of goodwill may not be reversed.

Leases

A contract constitutes a lease if the contract conveys the lessee

- the right to control the use of an identified asset (the leased asset)
- for a specific period
- in exchange for a consideration.

The Group as a lessee recognizes in general for all leases within the statement of financial position an asset for the right of use of the leased assets and a liability for the lease payment commitments at present value. These are primarily rentals of property and buildings, transport vehicles, technical equipment and machinery, other plants and operating and office equipment. The right of use assets reported under property, plant and equipment are recognized at cost less accumulated depreciation and impairment losses. Payments for non-lease components are not included in the determination of the lease liability. The lease liabilities reported under financial liabilities reflect the present value of the outstanding lease payments at the time the asset is made available for use. Lease payments are discounted at the interest rate implicit in the lease if it can be readily determined, otherwise, they are discounted at the lessee's incremental borrowing rate. The determination of the interest rate is based on the assumption that an adequate amount of funds will be raised over an adequate period of time, taking into account the respective currency area.

The lease liabilities include the following lease payments:

- Fixed payments, less lease incentives to be paid by the lessor,
- variable lease payments that are based on an index or an interest rate,
- expected amounts to be payable by the lessee under residual value guarantees,
- the exercise price of a purchase option, if the exercise is reasonably certain and
- payment of penalties for the termination of the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

Right-of-use assets are measured at cost, which are comprised as follows:

- Lease liability,
- lease payments made at or before the commencement date less any lease incentives received,
- initial direct costs and
- dismantling obligations.

Subsequent measurement is performed at amortized cost. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets. If the lease agreement contains reasonably certain purchase options, the right of use is depreciated over the useful life of the underlying asset. The following useful lives are used as a basis for calculating depreciation:

	Useful lives
Buildings	1 to 5 years
Other equipment, factory and office equipment	1 to 4 years

In subsequent measurement, the lease liability is compounded, and the corresponding interest expense is recognized in the financial result. The lease payments made reduce the carrying amount of the lease liability.

In accordance with the recognition exemptions, low-value leases and short-term leases (less than twelve months) are recognized in the statement of income. The Group has identified certain asset classes (e.g., PCs, telephones, printers, copiers) which regularly contain leased assets of low value. Outside these asset classes, only leased assets with a value of up to €5 thousand are classified as low-value leased assets. In general, IFRS 16 regulations are not applied to leases of intangible assets. For contracts including a non-lease component as well as a lease component, each lease component must be accounted for separately from non-lease component as a lease. The lessee must allocate the contractually agreed-upon payment to the separate lease components based on the relative standalone selling price of the lease component and the aggregated standalone selling price of the non-lease components.

The term of the lease is determined based on the non-cancellable lease term together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised. Especially real estate leases contain extension and termination options to offer greater operational flexibility to the Group. In determining the lease term, all facts and circumstances are considered that provide an economic incentive to exercise renewal options or not to exercise termination options.

Inventories

Inventories are stated at the lower of acquisition/manufacturing cost or net realizable value. In general, inventories are valued using the weighted average cost method. Manufacturing cost includes direct material, labour and allocable material and manufacturing overhead based on normal operating capacity. Work in progress refers to costs incurred (e.g., direct material purchased from suppliers) on unfinished spare sparts and single elements which are in progress of refinement.

Contract assets and contract liabilities

Contract asset and contract liabilities are recognized especially in the context of the Group’s New Build CA, New Build AWE, and large-scale Service projects, for which revenue is recognized over time. If the performance obligations fulfilled by the Group exceed the payments received or due from its customers, contract assets are recognized in the statement of financial position on a net basis insofar as the right to receive payment from the customer is still conditional. Unconditional rights to receive payment are recognized under trade accounts receivable and from this point payment automatically becomes due with the passage of time. If the payments received or due from the customer exceed the performance obligations fulfilled, contract liabilities are recognized in the statement of financial position on a net basis.

As contract assets relate to construction contracts and long-term service agreements in progress, that have not yet been invoiced, they are subject to similar credit risks as trade receivables for the same types of contracts. Therefore, the expected loss rates of trade receivables are applied to the impairment of contract assets.

Financial instruments

A financial instrument is any contract that at the same time gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments are recognized as soon as the Group becomes a contracting party to the financial instrument. In cases where trade date and settlement date do not coincide, for non-derivative financial instruments the settlement date is used for initial recognition or derecognition, while for derivatives the trade date is used. Financial instruments stated as financial assets or financial liabilities are generally not offset; they are only offset when a legal right to set off exists at that time and settlement on a net basis is intended.

Financial assets

In particular, financial assets include trade accounts receivable, cash, cash equivalents and time deposits, derivative financial assets, as well as debt instruments. Trade accounts receivable are initially measured at the transaction price. Other financial assets are initially recognized at fair value. This includes any transaction costs directly attributable to the acquisition of financial assets, which are not carried at fair value through profit or loss in future periods. The fair values recognized on the balance sheet usually reflect the market prices of the financial assets.

The classification and measurement of financial assets is based on the financial asset’s cash flow characteristics and on the Group’s business model for managing the financial assets.

If a debt instrument is held with the objective of collecting contractual cash flows and if the cash flows are solely payments of principal and interest, the instrument is recognized at amortized cost. At the Group this mainly concerns trade accounts receivable, contract assets, and cash, cash equivalents and time deposits.

Derivatives that do not qualify for hedge accounting are also recognized at fair value in profit or loss.

Debt instruments, trade accounts receivable and contract assets recognized at amortized cost are measured according to the expected loss model. The expected credit loss is generally calculated by multiplying the three parameters carrying value of the financial asset, probability of default, and loss given default using forward-looking information. The Group applies the simplified impairment model under IFRS 9, and reports lifetime expected losses for all trade accounts receivable and contract assets.

The Group has established a model to determine the expected credit loss, in particular to determine the expected default rates for trade accounts receivable. The expected default rates are determined mainly on the basis of external credit information and ratings for each counterparty. If no rating information is available at counterparty level, an assessment is made based on the average probability of default for each segment plus an appropriate risk premium. Consideration is also given to the respective business model, customer groups, and economic environment of the region.

Financial assets are fully or partially written-off on the basis of individual allowances if it is reasonable to assume that they can no longer be fully realized, e.g., because the due date has long passed, or owing to insolvency or similar proceedings. Credit default is generally assumed after 360 days.

Cash, cash equivalents and time deposits include cash on hand and demand deposits as well as financial assets that are readily convertible to cash and which are only subject to an insignificant risk of change in value. Cash, cash equivalents and time deposits are measured at amortized cost.

Financial liabilities

Financial liabilities are liabilities that must be settled in cash or other financial assets. Financial liabilities are initially carried at fair value. This includes any transaction costs directly attributable to the acquisition of financial liabilities, which are not carried at fair value through profit or loss in future periods.

Trade accounts payable and other non-derivative financial liabilities are in general measured at amortized cost using the effective interest method. Finance charges, including premiums payable on redemption or settlement, are periodically accrued using the effective interest method and increase the liabilities' carrying amounts unless they have already been settled in the period in which they were incurred.

Derivative financial instruments

Derivative financial instruments, solely foreign currency forward contracts, are used generally to reduce the currency risk. Such derivatives must be accounted for separately, are measured initially and subsequently at fair value. If the fair value is positive, they are recognized as financial assets. If the fair value is negative, they are recognized as financial liabilities. If they do not qualify for hedge accounting, they are recognized at fair value in profit or loss, and gains or losses due to fluctuations in fair value are recognized immediately in profit or loss.

Hedging relationships are solely used to hedge foreign currency risks of firm commitments, future receivables and liabilities denominated in foreign currency. In the case of cash flow hedges, the fluctuations in fair value are divided into an effective and an ineffective portion. The effective portion of fluctuations in fair value as well as hedging costs (forward element and currency basis spread) in connection with designated foreign currency derivatives is recognized in other comprehensive income. Reclassification to profit or loss takes place when the hedged item affects profit or loss.

The presentation of changes in the fair value of derivative financial instruments that qualify for hedge accounting in the statement of income follows the presentation of the hedged items. For foreign currency contracts used to hedge sales risks, they are presented under net sales. For hedging instruments used to hedge procurement risks, they are presented under cost of sales, and for hedging instruments used to hedge financing risks they are presented under financial income/expense.

If a hedging relationship does not meet the requirements for hedge accounting in accordance with the conditions under IFRS 9 or hedge accounting is economically not reasonable, the derivative financial instrument is recognized as a derivative that does not qualify for hedge accounting. The resulting impact on profit and loss from derivative financial instruments that do not qualify for hedge accounting are recognized either in other income or other expenses.

Certain immaterial reclassifications have been made regarding the presentation of derivatives that do not qualify for hedge accounting. In consequence, changes in fair value are no longer presented within Sales or Cost of sales. Instead, the effect is presented either within other operating income (2021/2022: €1.306 thousand, 2020/2021: €288 thousand; 2019/2020: €426 thousand) or other operating expenses (2021/2022: €0 thousand, 2020/2021: €403 thousand; 2019/2020: €1.783 thousand).

Qualified transaction costs incurred in connection with services relating to the preparation of the IPO

The Group made the accounting policy choice under *IAS 32 Financial Instruments: Presentation* to accrue qualified transaction costs incurred in connection with services relating to the preparation of the IPO instead of directly offsetting such transaction costs against equity. Upon the occurrence of the IPO the accrued transaction cost will be offset against equity. Qualified transaction costs are based on a reasonable estimate of the number of new shares that will be issued in the IPO. In this context, there is uncertainty and future changes in such assumptions may require adjustments to the amount of accrued qualified transaction costs already recognized.

More information about financial instruments is provided in Note 19.

Income taxes

Income taxes comprise all current and deferred taxes based on taxable profit. They are calculated by taking into account the statutory provisions applying in the countries in which the Group operates. Interest and other surcharges in connection with income taxes are not recognized in income tax expense.

In this connection management judgments are required which may differ from the interpretations of local tax authorities. If this results in changes to income taxes from the past, these are reported in the period in which sufficient information is available for an adjustment. Generally, income taxes are calculated on the basis of the taxable profits, temporary difference reported for the fiscal year and the tax losses carried forward. Current income taxes are recognized in the amount in which it is assumed they will be paid to the tax authorities in the future. Current income taxes relating to items recognised directly in equity is recognised in equity.

Deferred taxes are accounted for based on temporary differences between the carrying amount of an asset or liability in the statement of financial position and its tax basis. Additionally, deferred tax assets are derived from unused tax losses carried forward and credits. Where deferred tax assets occur, they are measured and adjusted according to an assessment of their future recoverability using forecast calculations and realizable tax strategies. Deferred taxes are calculated at the enacted or substantially enacted tax rates that are expected to apply when the asset or liability is settled.

Deferred taxes relating to items recognised outside profit or loss is recognised outside profit or loss. Deferred tax items are recognised in correlation to the underlying transaction either in OCI or directly in equity.

The Group offsets deferred tax assets and deferred tax liabilities raised by the same taxation authority on the same taxable entity by reference to their maturity.

Cumulative other comprehensive income

The equity line item “Cumulative other comprehensive income” presents changes in the equity of the Group that were not recognized in the consolidated statement of income of the period and that are not resulting from capital transactions with the owners. Cumulative other comprehensive income includes foreign currency translation adjustments, unrealized gains and losses on derivative financial instruments in cash flow hedging, hedging costs in connection with designated foreign currency derivatives. Remeasurements of pensions and similar obligations are reported in cumulative other comprehensive income in the period that they are recognized as other comprehensive income.

Accrued pension and similar obligations

The Group’s net obligation for defined benefit and other postretirement benefit plans have been calculated for each plan using the projected unit credit method as of the balance sheet date.

In Germany, the company of the Group offered pension benefits via a pension fund promise (“Pensionskasse”). This multi-employer plan is defined benefit by nature but due to insufficient information regarding the attributable asset portion the plan was accounted as a defined contribution plan. However, the legally required pension indexation is not expected to be covered by the pension fund but needs to be paid by the company directly. Accordingly, the proportioned pension indexation share is accounted as defined benefit plan. As far as the fair value of plan assets related to pensions or similar obligations exceeds the corresponding obligation, the recognition of an asset in respect to such surplus is limited. As far as in connection with plan assets minimum funding requirements related to past service exist, an additional liability may need to be recognized in case the economic benefit of a surplus – already taking into account the contributions to be made in respect of the minimum funding requirements – is limited. The limit is determined by the present value of any future refunds from the plan or reductions in future contributions to the plan asset (asset ceiling).

With the exception of net interest, all income and expenses related to defined benefit plans are recognized in income/(loss) from operations. Net interest included in net periodic pension cost is recognized in net financial income/(expense) in the Group’s statement of income.

The Group’s obligations for contributions to defined contribution plans are recognized as expense in income/(loss) from operations as incurred.

The effects of remeasurements of pensions and similar obligations are recognized in other comprehensive income and reported in cumulative other comprehensive income. They consist of actuarial gains and losses, the return on plan assets and changes in the effects of asset ceiling excluding amounts already included in net interest. Deferred taxes relating to remeasurements are also recognized in other comprehensive income.

The Group continues to recognize accrued pension liabilities for plan participants in cases where the pension liability is legally transferred but the Group is not released from all risks associated with the defined benefit plans subsequent to the legal transfer (only relevant for accrued pension liabilities for members of the Management Board of thyssenkrupp nucera Management AG, cf. Note 12). In such cases any cash payment made in connection with the legal transfer of the defined benefit plans as well as future compensation payments regarding current service costs are accounted for as a reimbursement right. As such it is initially recognized at fair value to the extent such reimbursement right does not exceed the accrued pension liability (remeasurement through other comprehensive income) and presented as other non-financial (non-current) asset. The reimbursement right does not qualify as a plan asset and is therefore presented as a separate asset, rather than as a deduction from the accrued pension liability. The reimbursement right is accounted for like a plan asset, i.e., (i) recognizing interest arising from passage of time as interest income and (ii) any difference to the actual return or due to changes of the impact of asset ceiling in other comprehensive income.

Share-based compensation

Equity settled transactions

The cost of equity-settled transactions is determined by the fair value at the date when the grant is made using an appropriate valuation model. That cost is recognized in employee benefits expenses, together with a corresponding increase in equity (additional paid in capital), over the period in which the service and, where applicable, the performance conditions are fulfilled (the vesting period). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group’s best estimate of the number of equity instruments that will ultimately vest. The expense or credit in the statement of profit or loss for a period represents the movement in cumulative expense recognised as at the beginning and end of that period. Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of the Group’s best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

Cash settled transactions

A liability is recognized for the fair value of cash-settled transactions. The fair value is measured initially and at each reporting date up to and including the settlement date, with changes in fair value recognized in employee benefits expenses. The fair value is expensed over the period until the vesting date with recognition of a corresponding liability. The approach used to account for vesting conditions when measuring equity-settled transactions also applies to cash-settled transactions

Other provisions

Provisions are recognized when the Group has a present obligation as a result of a past event which will result in a probable outflow of economic benefits that can be reasonably estimated. The amount recognized represents best estimate of the settlement amount of the present obligation as of the balance sheet date. Expected reimbursements of third parties are not offset but recorded as a separate asset if it is virtually certain that the reimbursements will be received. Where the effect of the time value of money is material, provisions are discounted using a market rate.

A provision for warranties is recognized when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities. Expenses related to the fulfilment of warranties qualify as subsequent contract costs and are therefore recognized in cost of sales. The reversal of such provisions is vice versa recognized in cost of sales.

Revenue recognition

Revenue from contracts with customers is recognized when the included distinct performance obligations, i.e., the distinct goods or services promised in the contract, are transferred to the customer. Transfer takes place when the customer obtains control of the promised goods or services. This is generally the case when the customer has the ability to direct the use of and obtain substantially all of the remaining benefits from the transferred goods or services. Revenue from contracts with customers corresponds to the transaction price. The transaction price includes in rare cases variable consideration only to the extent it is highly probable that actual occurrence of the variable consideration will not result in a significant revenue reversal. Variable consideration can include volume discounts, delay penalties, early completion incentives, or credits in connection with bonus agreements. The transaction price is not adjusted for a financing component, mainly because the period between the transfer of goods and services and the date of payment by the customer is generally less than twelve months.

Depending on the nature of the transfer of the underlying good or service, the following revenue recognition methods are applied:

Recognition of revenue at a point in time

Recognition of revenue at a point in time is generally applied in the Service product group (cf. Note 1.3) with respect to the delivery of standard spare parts and single elements (finished goods and merchandise). Revenue for short-term service contracts is recognized at a point in time.

Revenue from the sale and delivery of goods and short-term services is recognized at the point in time at which control is transferred to the customer. The time of transfer of control is determined partly on the basis of the delivery clauses (incoterms) agreed with the customer.

Recognition of revenue over time

Recognition of revenue over time is generally applied to all construction contracts, including New Build CA and New Build AWE contracts (cf. Note 1.3). The method is also applied to service contracts involving plant refurbishment, revamps or other long-term contracts in our Service product group (cf. Note 1.3). Revenue is recognized over time, whereas the progress of satisfying the performance obligations of construction and service contracts is measured by using the input method based on contract costs. The progress is determined by the ratio of contract costs incurred up to the reporting date to the total estimated contract costs as of the reporting date.

To demonstrate that the transfer of goods is progressive, the following required cumulative criteria must be fulfilled to recognize revenue over time:

- the goods sold have no alternative use, and
- enforceable right to payment (corresponding to costs incurred, plus a reasonable profit margin) for the work performed to date exists, in the event of early termination for convenience by the customer.

This method is applicable for plant engineering projects (engineering, procurement, construction and commissioning), as the constructed assets are highly customized.

In case of onerous contracts, the total anticipated losses, i.e., the amount of unavoidable costs exceeding the transaction price, is recognized within current other provisions.

Research and development costs

Research costs are expensed as incurred. Results from research activities are used to initiate, plan and execute development projects.

Development costs are capitalized if the product or process is technically and commercially feasible, it is intended to complete the intangible asset, the intangible asset will generate probable future economic benefits, the attributable expenditure can be measured reliably, and the Group has sufficient resources to complete development. Other development costs are expensed as incurred. Capitalized development costs of completed projects are stated at cost less accumulated amortization and impairment losses.

Government grants

Government grants are recognised where there is reasonable assurance that the grant will be received, and all attached conditions will be complied with. When the grant relates to an expense item, it is recognised as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed.

The Group spends significant amounts for research activities in particular related to green hydrogen technology and receives for such activities grants from the government. Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received, and the Group will comply with all attached conditions.

Earnings per share

Undiluted or basic earnings per share are calculated by dividing the result attributable to the holders of registered shares by the weighted average number of shares outstanding during the period. The calculation is adjusted for transactions that change the number of shares outstanding without a corresponding change in resources for all periods presented even if some of such transactions happened after the year-end but before the approval of the financial statements. Diluted earnings per share equal undiluted or basic earnings per share as no dilutive instruments exist.

Segment reporting

Segment reporting is prepared in accordance with IFRS 8 based on the management approach. This approach corresponds to the internal organisational and management structure as well as reporting to the Management Board as the Chief Operating Decision Maker (CODM). At thyssenkrupp nucera Group the operating segments are represented by the individual legal entities and their respective country of incorporation. The legal entities in the USA, Saudi Arabia and Australia are not reportable individually due to their size and therefore combined as all other segments and disclosed in the segment Rest of World (RoW) (cf. Note 21).

Financial statement classification

Certain line items on the consolidated balance sheet and in the consolidated statement of income have been combined. These items are disclosed separately in the Notes to the Consolidated Financial Statements.

In general, the Group classifies assets and liabilities as current when they are expected to be realized or settled within twelve months after the balance sheet date or held primarily for the purpose of trading. Group companies that have operating cycles longer than twelve months classify assets and liabilities as current if they are expected to be realized within the company's normal operating cycle.

Estimates and judgments

The preparation of the Group financial statements requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. All estimates and assumptions are made to the best of management's knowledge and belief in order to fairly present the Group's financial position and statement of income; they are reviewed on an ongoing basis. This applies in particular with regard to the possible impacts of the current global coronavirus pandemic. Actual results may differ from these estimates.

Accounting estimates and judgments made by management in the application of IFRS that have a significant effect on the Consolidated Financial Statements are relevant for the following issues:

Recoverability of goodwill

The Group performs goodwill impairment testing at least annually and whenever any impairment indicators are present. If there is an indication, the recoverable amount of the cash-generating unit has to be estimated as the greater of the fair value less costs to sell and the value in use. The determination of the value in use involves estimates related to the projection and discounting of future cash flows (cf. Note 4). The Group's growth strategy is dependent upon market acceptance of, as well as enhancements to, its AWE products. A mass market for the Group's AWE products and technologies may take longer to develop than anticipated or may never develop because the green hydrogen production industry is an emerging market and there can be no certainty that the Group will achieve or maintain commercialisation of its products and technologies. Although management believes the assumptions used to calculate recoverable amounts are appropriate, any unforeseen changes in these assumptions could result in impairment charges to goodwill which could adversely affect the future financial position and operating results.

Recoverability of assets

At each balance sheet date, the Group assesses whether there is any indication that the carrying amounts of its property, plant and equipment or intangible assets may be impaired. If any such indication exists, the recoverable amount of the asset is estimated. The recoverable amount is the greater of the fair value less costs to sell and the value in use. In assessing the value in use, discounted future cash flows from the related assets have to be determined. The recoverable amount is generally determined on cash-generating unit level as individual assets typically do not generate independent cash flows. Estimating the discounted future cash flows involves significant assumptions, including particularly those regarding future sale prices and sale volumes, costs and discount rates (cf. Note 4 and 5). Although management believes that its estimates of the relevant expected useful lives, its assumptions concerning the economic environment and developments in the industries in which the Group operates and its estimations of the discounted future cash flows are appropriate, changes in the assumptions or circumstances could require changes in the analysis. This could lead to additional impairment charges in the future or to reversal of impairments if the trends identified by management reverse or the assumptions or estimates prove incorrect.

Leases

Some leases contain extension and termination options. These contractual conditions offer the Group as lessee maximum operational flexibility. In determining the lease term, all facts and circumstances are considered that provide an economic incentive to exercise renewal options or not to exercise termination options. In determining the lease term, possible options are only taken into account if they are considered reasonably certain. Where facts and circumstances change over time, exercise of the option is re-assessed.

Other provisions

The recognition and measurement of other provisions are based on the estimation of the probability of a future outflow of resources as well as empirical values and the circumstances known at the reporting date. This means that the actual later outflow of resources may differ from the other provisions, cf. also the remarks under Note 13.

Revenue recognition from contracts with customers

The Group accounts for New Build CA and New Build AWE contracts as well as specific service contracts, e.g., relating to plant refurbishment or revamps, as construction contracts. Revenue is recognized over time, whereas the progress of satisfying the performance obligations of construction and service contracts is measured by using the input method based on contract costs. This method requires accurate estimates of the extent of progress towards completion. Depending on the methodology to determine contract progress, significant estimates include total contract costs, remaining costs to completion, total contract revenues, contract risks and other judgments. Total expected revenue and cost on a contract reflect management's current best estimate of the probable future benefits and obligations associated with the contract. Management continually reviews all estimates involved in such construction contracts and adjusts them as necessary.

In rare cases the Group enters into contracts, typically New Build projects, including a minor variable consideration element. Such variable consideration is estimated at the inception of the contract, reviewed at each reporting date and adjusted as necessary.

Income taxes

The recognition and measurement of current and deferred tax receivables and liabilities depend on management estimates of tax uncertainties and future business performance. This includes both the interpretation of existing tax regulations and the testing of deferred tax assets for impairment. These estimates are adjusted when there is sufficient evidence indicating an adjustment would be required.

Employee benefits

The Group accounts for pension and other postretirement benefits in accordance with actuarial valuations. These valuations rely on statistical analyses and other factors in order to anticipate future events. These factors include key actuarial assumptions including the discount rate, expected salary increases, mortality rates and health care cost trend rates. These actuarial assumptions may differ materially from actual developments due to changing market and economic conditions and therefore result in a significant change in postretirement employee benefit obligations, of equity and the related future expense (cf. Note 12 for further information).

Legal contingencies

The Group companies are parties to litigations related to a number of legal matters as further described in Note 18. The outcome of these matters may have a material effect on the financial position, results of operations or cash flows. Management, with the support of both in-house legal counsel as well as external legal counsel, regularly analyses current information about these matters and provides provisions for probable contingent losses, including the estimate of legal expense to resolve the matters. In making the decision regarding the need for loss provisions, management considers the degree of probability of an unfavourable outcome and the ability to make a sufficiently reliable estimate of the amount of loss. The filing of a suit or formal assertion of a claim against the Group companies or the disclosure of any such suit or assertions, does not automatically indicate that a provision of a loss may be appropriate.

Uncertainties from geopolitical developments and COVID-19 pandemic

The development of the global economy also in parts depends on the further course of Russia's invasion of Ukraine and its knock-on effects. A possible suspension of the supply of Russian gas would represent a substantial risk for probably major parts of the economy, as the war can indirectly lead to a further strong increase in inflation rates with negative impact on consumer and investment confidence, also due to further interest rate hikes as central banks might respond to inflation with a clear tightening of monetary policy. In many countries, inflation has become a central concern. In some advanced economies, including the United States and some European countries, it has reached its highest level in more than 40 years.

The Group currently has only small, short-term service contracts with customers in Russia or Ukraine. Consequently, the Group's operational business is not directly affected by the imposed sanctions on Russia. There are no material financial risks from such contracts as of the date of the Consolidated Financial Statements and therefore there is no significant direct impact of the recent developments on the Group.

At the present time, the specific extent of the indirect consequences of the war in Ukraine on the business development of the Group – such as uncertainty in supply chain including increased prices of raw materials and their processing costs as well as energy prices – remains associated with high uncertainties. Even though the Group has implemented ongoing risk mitigation actions – such as inventory build-up for selected materials, intense vendor management and refined price escalation clauses for future projects – it cannot be ruled out that the economic implications of this crisis will have an impact on the Group's business, results of operations, cash flow or financial condition.

The continuing high level of inflation and the risk of changes in interest rates are continuously monitored by the Group regarding its potential impact on significant estimates. Therefore, the Group performed an impairment test of its goodwill for all segments and an assessment of its expected credit loss model. The Group did not identify any need for adjustments.

Due to the uncertainties associated with the coronavirus pandemic, especially potential lockdown restrictions as implemented in China recently, further impacts on the results of operations and financial position of the company cannot be ruled out. Future economic development will depend critically on the course of the crisis, including whether the new virus strains prove vulnerable to vaccines or lead to the prolongation of the pandemic situation, the effectiveness of political measures to limit the ongoing economic impact, the development of financial conditions, and the adaptability of the economy. Thus, the uncertainties associated with the pandemic by limiting economic activity and public life will continue to make for a challenging market environment and limit the Group's ability to give an exact statement on the concrete financial impact due to the agile pandemic situation. Nevertheless, based on the experience gained since spring 2020 the Group is prepared for this situation in terms of organization and processes and expects further normalization over time.

The valuation of the Group's goodwill (cf. Note 4), deferred tax assets (cf. Note 27), trade accounts receivable and contract assets (cf. Note 7 and 8) is particularly sensitive with respect to the assumptions regarding the macroeconomic effects of geopolitical developments and COVID-19 and the respective impact on the Group's business.

Issued financial reporting standards that have not yet been applied

The IASB has issued the following interpretations and amendments to standards whose application is not mandatory or require EU endorsement before they can be applied. Management currently assumes that the application of these standards, interpretations and amendments will not have a material impact on the presentation of the Consolidated Financial Statements:

- Amendments to IFRS 17 "Insurance contracts: Initial Application of IFRS 17 and IFRS 9 – comparative information", issued in December 2021, expected initial application in fiscal year 2023 / 2024
- Amendments to IAS 1 "Presentation of Financial Statements: Classification of Liabilities as Current or Non-current", issued in January 2020, expected initial application in fiscal year 2023 / 2024
- IFRS 17 "Insurance Contracts", issued in May 2017, expected initial application in fiscal year 2023 / 2024
- Amendments to IAS 1 "Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting Policies", issued in February 2021, expected initial application in fiscal year 2023 / 2024
- Amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates", issued in February 2021, expected initial application in fiscal year 2023 / 2024
- Amendments to IAS 12 "Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction", issued in May 2021, expected initial application in fiscal year 2023 / 2024

Mandatory adoption of new accounting standards

The following amendments to financial reporting standards were applied for the first time as of October 1, 2021. The amendments had no material impact on the Group's financial position or results of operations.

Amendment to IFRS 16 "Covid-19-Related Rent Concessions beyond 30 June 2021"

The amendment was issued in March 2021 with initial application in fiscal year 2021 / 2022; the Group does not apply the amendment giving lessees an optional practical expedient to account for COVID-19-related rent concessions such as rent holidays and temporary rent reductions.

Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 "Interest Rate Benchmark Reform – Phase 2"

The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate (IBOR) is replaced with an alternative nearly risk-free interest rate (RFR). The amendments include the following practical expedients:

- A practical expedient to require contractual changes, or changes to cash flows that are directly required by the reform, to be treated as changes to a floating interest rate, equivalent to a movement in a market rate of interest
- Permit changes required by IBOR reform to be made to hedge designations and hedge documentation without the hedging relationship being discontinued
  Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component

3 Consolidated companies and equity interests

The Consolidated Financial Statements of the Group include the following subsidiaries:

	Country of incorporation	% equity interest as of		
		Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
thyssenkrupp nucera Italy S.R.L. *(formerly thyssenkrupp Uhde Chlorine Engineers (Italia) S.R.L)*	Italy	100%	100%	100%
thyssenkrupp nucera Japan Ltd. *(formerly thyssenkrupp Uhde Chlorine Engineers (Japan) Limited)*	Japan	100%	100%	100%
thyssenkrupp nucera USA Inc. *(formerly thyssenkrupp Uhde Chlorine Electrolysis (USA) Inc.)*	USA	100%	100%	100%
thyssenkrupp nucera (Shanghai) Co. Ltd *(formerly thyssenkrupp Uhde Chlorine Engineers (Shanghai) Co., Ltd)*	China	100%	100%	100%
thyssenkrupp nucera (Australia) Pty. Ltd.	Australia	-	-	100%
thyssenkrupp nucera Arabia for Contracting Limited LLC	Saudi Arabia	-	-	100%

4 Intangible assets, including goodwill

Changes in intangible assets

Changes in the Group's intangible assets were as follows:

thousand €	Franchises, trademarks and similar rights and values as well as licenses thereto	Self-created intangible assets	Goodwill	Total
Gross amounts				
Balance as of Oct, 1 2019	**3,123**	**3,879**	**58,060**	**65,062**
Currency differences	(24)	(193)	(1,013)	(1,230)
Additions	74	-	-	74
Transfers	-	-	-	-
Disposals	(423)	-	-	(423)
Balance as of Sept. 30, 2020	**2,750**	**3,686**	**57,047**	**63,483**
Currency differences	11	(167)	185	29
Additions	87	83	-	170
Transfers	23	54	-	77
Disposals	(53)	(9)	-	(62)
Balance as of Sept. 30, 2021	**2,818**	**3,647**	**57,232**	**63,697**
Currency differences	12	(283)	193	(78)
Additions	66	99	-	165
Transfers	-	-	-	-
Disposals	(54)	-	-	(54)
Balance as of Sept. 30, 2022	**2,842**	**3,463**	**57,425**	**63,730**
Accumulated amortization and impairment losses				
Balance as of Oct. 1, 2019	**2,652**	**2,061**	**-**	**4,713**

Currency differences	(22)	(112)	-	(134)
Amortization expense	255	359	-	614
Transfers	-	-	-	-
Disposals	(422)	-	-	(422)
Balance as of Sept. 30, 2020	**2,463**	**2,308**	**-**	**4,771**
Currency differences	11	(108)	-	(97)
Amortization expense	171	357	-	528
Transfers	-	-	-	-
Disposals	(35)	-	-	(35)
Balance as of Sept. 30, 2021	**2,610**	**2,557**	**-**	**5,167**
Currency differences	11	(220)	-	(209)
Amortization expense	114	365	-	479
Transfers	-	-	-	-
Disposals	(34)	-	-	(34)
Balance as of Sept. 30, 2022	**2,701**	**2,702**	**-**	**5,403**
Net amounts:				
Balance as of Oct. 1, 2019	**471**	**1,818**	**58,060**	**60,349**
Balance as of Sept. 30, 2020	**287**	**1,378**	**57,047**	**58,712**
Balance as of Sept. 30, 2021	**208**	**1,090**	**57,232**	**58,530**
Balance as of Sept. 30, 2022	**141**	**761**	**57,425**	**58,327**

Self-created intangible assets largely relate to the Group’s BiTAC filter press technology developed and maintained in Japan.

Impairment of intangible assets

Goodwill has been allocated to cash generating units (CGUs) of all segments. Under IFRS, the recoverable amount of a CGU is the higher of its value in use and fair value less costs of disposal. For year-end reporting, the recoverable amount for each CGU was determined by calculating the value in use based on the discounted cash flow method. The cashflows were derived from financial budgets covering a three-year plan period (the “budget period”) prepared by the local management of the legal entities and approved by thyssenkrupp nucera Group’s management. For cash flows beyond the budget period, two further plan periods are extrapolated based on the third budget year using business-specific assumptions. The last planning period is used to calculate the perpetuity based on a long-term growth rate of 1.3 % as of September 30, 2022 (September 30, 2021: 1.3 %, September 30, 2020: 1.3 %). The weighted average cost of capital discount rate is based on a risk-free interest rate of 1.5 % as of September 30, 2022 (September 30, 2021: 0.1 %, September 30, 2020: 0.0 %) and a market risk premium of 7.5% as of September 30, 2022 (September 30, 2021: 7.5 %, September 30, 2020: 7.5 %). The cost of debt and the capital structure is derived individually from the relevant peer group. In addition, CGU specific tax rates and country risk premiums are used. To discount cash flows after-tax discount rates are applied.

Based on an iterative calculation the following pre-tax discount rates are derived from the after-tax discount rates:

In %	Pre-tax Discount Rate		
	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Germany	10.1%	11.0%	15.5%
Japan	10.8%	12.2%	17.0%
China	10.2%	11.2%	15.7%
Italy	13.7%	13.6%	18.8%
USA	8.4%	9.6%	13.8%

Goodwill by CGU

thousand €	Goodwill by CGU		
	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Germany	25,625	25,625	25,625
Japan	12,466	11,897	10,940
China	11,393	12,134	13,093
Italy	6,552	6,552	6,552
USA	1,011	1,023	1,215

For all CGUs with goodwill, the recoverable amount is at least 504% higher than the carrying amount as of September 30, 2022. The applied valuation model takes forward-looking information derived from current macroeconomic conditions into account (e.g., increase in material and personnel costs in the short-term; a degressive increase in material and personnel costs in the mid-term). Under consideration of the current macroeconomic conditions, increasing interest rates have been considered as part of a sensitivity analysis. In accordance with the aforementioned valuation model, critical goodwill does not exist.

Goodwill as of September 30, 2022

CGU	Carrying amount of goodwill allocated to CGU in thousand €	Proportion of total goodwill in %	Pre-tax discount rate, %	Growth rate	Key assumptions for impairment testing
Germany	25,625	45%	15.5%	1.3%	Growth prospects from AWE technology materialize Realization of planned order intake and profitability of projects
Japan	10,940	19%	17.0%	1.3%	Realization of planned order intake and profitability of projects
China	13,093	23%	15.7%	1.3%	Realization of planned order intake and profitability of projects
Italy	6,552	11%	18.8%	1.3%	Realization of planned order intake and profitability of projects
USA	1,215	2%	13.8%	1.3%	Realization of planned order intake and profitability of projects

5 Property, plant and equipment

Changes in the Group's property, plant and equipment were as follows:

thousand €	Technical machinery, factory and office equipment	Right-of-use assets	Construction in progress	Total
Gross amounts				
Balance as of Oct. 1, 2019	**9,264**	**9,463**	**650**	**19,377**
Currency differences	(132)	(242)	-	(374)
Additions	77	291	1,459	1,827
Transfers	-	-	-	-
Disposals	(31)	-	-	(31)
Balance as of Sept. 30, 2020	**9,178**	**9,512**	**2,109**	**20,799**
Currency differences	13	(17)	-	(4)
Additions	94	366	-	460
Transfers	3	-	(80)	(77)
Disposals	(131)	-	-	(131)
Balance as of Sept. 30, 2021	**9,157**	**9,861**	**2,029**	**21,047**
Currency differences	21	26	-	47
Additions	771	2,405	-	3,176
Transfers	-	-	-	-
Disposals	(39)	-	-	(39)
Balance as of Sept. 30, 2022	**9,910**	**12,292**	**2,029**	**24,231**
Accumulated depreciation and impairment losses:				
Balance as of Oct. 1, 2019	**5,760**	**2,034**	**-**	**7,794**
Currency differences	(87)	(72)	-	(159)
Depreciation expense	615	2,065	-	2,680
Transfers	-	-	-	-
Disposals	(28)	-	-	(28)
Balance as of Sept. 30, 2020	**6,260**	**4,027**	**-**	**10,287**
Currency differences	29	19	-	48
Depreciation expense	598	2,027	-	2,625
Transfers	-	-	-	-
Disposals	(73)	-	-	(73)
Balance as of Sept. 30, 2021	**6,814**	**6,073**	**-**	**12,887**
Currency differences	22	18	-	40
Depreciation expense	748	2,178	-	2,926

Transfers	-	-	-	-
Disposals	(39)	-	-	(39)
Balance as of Sept. 30, 2022	**7,545**	**8,269**	**-**	**15,814**
Net amounts:				
Balance as of Oct. 1, 2019	**3,504**	**7,429**	**650**	**11,583**
Balance as of Sept. 30, 2020	**2,918**	**5,485**	**2,109**	**10,512**
Balance as of Sept. 30, 2021	**2,343**	**3,788**	**2,029**	**8,160**
Balance as of Sept. 30, 2022	**2,365**	**4,023**	**2,029**	**8,417**

Property, plant and equipment also include right-of-use assets that are presented in Note 17.

Construction in progress largely relates to an AWE test stand being constructed in our Germany segment.

There were no property, plant and equipment assets pledged as collateral for financial debt as of any of reporting dates. No impairment was accrued for property, plant and equipment during the reporting periods ended September 30, 2022, 2021 and 2020.

6 Inventories

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Raw materials	38,013	27,509	32,893
Work in progress	37,544	22,828	33,892
Finished products, merchandise	15,431	10,959	10,467
Total	**90,988**	**61,296**	**77,252**

Working capital, including inventory is driven by the Group's project business. The volatility of the inventories over time is mainly caused by the nature and status of various projects as the majority of the purchases is related to contracted orders. Raw materials are used for both, long-term constructions contracts, esp. New Built projects, and short-term Service projects. The raw material level is mainly driven by procurement volumes, raw material prices and the consumption of raw material especially in long-term construction projects, and therefore fluctuates over time. The increase of work in progress in fiscal years 2021/2022 is mainly driven by postponed processing of major element orders upon the Group's customers' request for later delivery due to delays in project execution and therefore later customer acceptance.

In the reporting period ended September 30, 2022, €54 thousand (September 30, 2021: €217 thousand, September 30, 2020: €1,768 thousand) of inventory write-downs have been recognized as an expense. In the reporting period ended September 30, 2022, €92 thousand (September 30, 2021: €0 thousand, September 30, 2020: €35 thousand) have been recognized as a reversal of previous write-downs.

During the fiscal year ended September 30, 2022 inventories of €267,047 thousand (2021: €227,714 thousand, 2020: €162,191 thousand) are recognized as cost of sales.

7 Trade accounts receivable

Working capital, including trade accounts receivable, is driven by the Group's project business. The volatility over time is mainly caused by the nature and status of various projects.

The cumulative impairment losses of €784 thousand as of September 30, 2022 (September 30, 2021: €2,278 thousand, September 30, 2020: €2,741 thousand) are recognized for doubtful accounts. For more details, refer to the disclosures in Note 19.

8 Assets and liabilities from contracts with customers

Contract assets and contract liabilities

Contract assets and contract liabilities are reported within the Consolidated Balance Sheets at the end of each reporting period as follows:

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Contract assets	4,132	16,173	10,631

Thereof those having remaining term of more than one year	*2,921*	*4,742*	*9,359*
Allowance for expected credit losses	(51)	(84)	(143)
Contract assets (net)	**4,081**	**16,089**	**10,488**
Contract liability	**(130,146)**	**(115,062)**	**(209,020)**
Thereof remaining term of more than one year	*(58,921)*	*(65,324)*	*(92,629)*

The level of contract assets and contract liabilities is driven by the Group's project business. The significant volatility over time is mainly caused by the nature and status of various projects. The Group typically obtains significant prepayments in connection with New Build and large-scale Service projects having an average term of two to three years at inception of each project. The significant increase in contract liabilities is driven by new projects which are in an early stage and are turning into sales over time.

Contract assets decreased by €5,601 thousand in the fiscal year 2021/2022 (2020/2021: increase of €12,008 thousand) primarily due to a decrease (2020/2021: increase) in unbilled revenue related to the satisfaction of performance obligations, in excess of the amounts billed to customers for contracts that were in a contract asset position.

Contract liabilities increased by €93,958 thousand in the fiscal year 2021/2022 (decreased €15,084 thousand in the fiscal year 2020/2021) primarily due to an increase (2020/2021: decrease) of prepayments related to new major projects, in excess of revenue recognized from satisfied performance obligations for contracts that were in a contract liability position.

In the course of the 2021/2022 fiscal year, sales in the amount of €55,261 thousand (2020/2021: €55,999 thousand, 2019/2020: €48,637 thousand) reflected in the contract liability balance at the beginning of the fiscal year were recognized.

Remaining performance obligations

Amounts of a customer contract's transaction price that are allocated to the remaining performance obligations represent contracted revenue that has not yet been recognized. The total transaction price allocated to performance obligations that were unsatisfied or partially satisfied as of September 30, 2022 comprised €1,249,159 thousand (September 30, 2021: €332,737 thousand, September 30, 2020: €228,824 thousand). This amount mostly comprises obligations to construction contracts, including New Build CA and New Build AWE contracts as well as service contracts involving plant refurbishment, revamps or other long-term contracts in our Service product group, as the respective contracts typically have durations of one or multiple years. The significant increase in the remaining performance obligation is mainly driven by two large scale long-term agreements signed in the fiscal year 2021/2022. The sales recognized from these two contracts contributed to the Alkaline-Water Electrolysis (AWE).

The majority of the remaining performance obligation is expected to be recognized as revenue over the next 12 to 36 months following the respective balance sheet date. This estimate is based on our best judgment, as it needs to consider estimates of possible future contract modifications.

9 Other financial assets

thousand €	Sept. 30, 2020		Sept. 30, 2021		Sept. 30, 2022	
	current	non-current	current	non-current	current	non-current
Receivables from cash pooling arrangements with tk Group (cf. Note 20)	159,687		186,840		252,567	
Miscellaneous other financial assets	1,086	1,151	1,929	789	1,248	513
Derivatives not qualifying for hedge accounting	284	-	513	-	1,399	-
Derivatives qualifying for hedge accounting	3	-	73	-	791	-
Total	**161,060**	**1,151**	**189,355**	**789**	**256,005**	**513**

The receivables from cash pooling arrangements with tk Group relate to excess liquidity transferred into tk Group's cash pooling and cash management system, cf. Note 20.

There were no impairments amounts recorded against other financial assets as of September 30, 2022, 2021 and 2020.

10 Other non-financial assets

thousand €	Sept. 30, 2020		Sept. 30, 2021		Sept. 30, 2022	
	current	non-current	current	non-current	current	non-current
Advance payments to suppliers	10,198	-	18,778	-	45,214	-
Other prepayments	1,584	-	1,826	-	2,273	317
Tax refunds	1,353	-	1,531	-	5,709	-
Miscellaneous other non-financial assets	2,352	-	1,831	-	1,514	1,668
Total	**15,487**	**-**	**23,966**	**-**	**54,710**	**1,985**

As of September 30, 2021 and 2020 miscellaneous other non-financial assets primarily include value-added tax (VAT) receivables due from tk AG in connection with the German tax group arrangement, in which the Company participated until August 31, 2022. After the Company left the VAT tax fiscal unit with tk AG effective August 31, 2022, miscellaneous other non-financial assets as of September 31, 2022, primarily include value-added tax (VAT) receivables due from the German tax authority as well as major VAT refund in Japan. Significant increase due to a timing effect related to outstanding payments by tax authorities as of the balance sheet date.

Miscellaneous other non-current non-financial assets includes a reimbursement right in connection with the accrued pension liability relating to defined benefit plans existing in Germany for members of the Management Board of thyssenkrupp nucera Management AG (cf. Note 19).

No impairments regarding other non-financial assets were accrued during the reporting periods ending September 30, 2022, 2021, 2020.

11 Total equity

Capital stock

The capital stock amounting to €100,000 thousand as of September 30, 2022, is divided into one hundred million shares with a nominal value of €1 each. In previous periods presented, i.e. as of September 30, 2021 and September 30, 2020, the capital stock amounted to €10,000 thousand and was divided into ten million shares with a nominal value of €1 each.

On February 28, 2022, the Group conducted a capital increase from €10,000 thousand by €90,000 thousand to €100,000 thousand by issuing 90,000,000 new shares in the Company. The capital increase was carried out as a capital increase from Group's capital reserve (*Kapitalerhöhung aus Gesellschaftsmitteln*). In accordance with IAS 33.64 this capital increase and the higher number of shares is considered in the calculation of earnings per share in all periods presented.

Authorized capital

On February 28, 2022, the Group introduced authorized capital. Thereunder, the General Partner is authorized, with the approval of the Supervisory Board, to increase the share capital by up to €50,000 thousand by issuing up to 50,000,000 new no-par value bearer shares in return for cash and/or non-cash contributions on one or more occasions until February 28, 2027.

Conditional capital

On March 30, 2022, the general meeting of the Company resolved to establish a conditional capital. Thereunder, the share capital of the Company is conditionally increased by up to €20,000 thousand by issuing up to 20,000,000 new shares. The conditional capital increase shall only be implemented to fulfil subscription rights of Convertible Bonds and/or Warrant Bonds, Profit Participation Rights or Participating Bonds which may be issued based on the enabling resolution of the general meeting of the Company dated March 30, 2022, authorizing the General Partner, subject to the consent of the Supervisory Board, to issue, on one or more occasions until March 29, 2027, bearer or registered convertible and/or warrant bonds or combinations of these instruments for an aggregate nominal amount of up to €1,000,000 thousand in each case with or without a definite maturity date, and to grant the holders of bonds option or conversion rights for up to 20,000,000 no-par value bearer shares of the Company with a pro rata amount of the share capital of up to a total of €20,000 thousand. This authorization can be utilized in whole or in part.

Additional paid-in capital

Additional paid-in capital represents payments or contributions made by the Group’s equity holders to the extent they are not reflected in capital stock.

Retained earnings

Retained earnings include prior years' undistributed consolidated income.

Capital Management

Capital Management for the thyssenkrupp nucera Group was performed by tk Group during the periods under consideration. For the purpose of the Group's capital management the Group was integrated into the cash pooling and cash management systems of tk Group (cf. Note 9). No financial covenants are required to be monitored since no such existed during the period under consideration due to financing primarily via cash pooling. In addition, in connection with the Group's New Build and large-scale Service projects tk Group issues guarantees to the Group's customers (cf. Note 18).

Dividends and capital transactions

In accordance with the regulations of the joint venture agreement between tk Group and IDN ("JVA") tk Group is entitled – under certain circumstances – to receive preferred dividends as compensation for tax benefits of the nucera Group created by the contribution of assets of certain tk companies into nucera Group when the joint venture was formed as set forth in the JVA. Pursuant to these regulations as tk Group and IDN intend to list the Company they do not intend to maintain preferred dividends after a listing of the shares in nucera Group. As compensation for the total amount of preferred dividends which – under certain circumstances – may become payable in the future according to the JVA a preferred dividend has been distributed to tk Group in the amount of €10,000 thousand as of March 1, 2022, based on an agreement between tk Group and IDN as of February 14, 2022, as reflected in the Consolidated Statement of Changes in Equity in the fiscal year 2021/2022.

Dividends have also been paid in the fiscal years 2019/2020, 2020/2021 in amounts of €10,897 thousand and €3,085 thousand respectively, related to distribution of the profit to equity holders of the Group.

In addition, the cash flows from financing activities reflect a repayment of capital to the Group's direct shareholders in the amount of €40,500 thousand made in the fiscal year 2019/2020 in accordance with the regulations of the JVA and based on a resolution of the Group's shareholder meeting. According to the JVA, cash injections made by the Group's shareholders in the total amount of €40,500 thousand as of April 1, 2015, the closing date of the JVA, shall be repaid five years later, i.e., April 1, 2020, to the extent such cash injections are not required to remain in the Group for legal or financing purposes.

Cumulative Other Comprehensive Income

Cumulative other comprehensive income includes the cumulative amount of gains or losses recognized outside the statement of income in equity.

12 Accrued pension and similar obligations

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Accrued pension liability	6,890	7,372	6,014
Partial retirement	62	157	381
Other accrued pension-related obligations	507	381	389
Total	**7,459**	**7,910**	**6,784**

Accrued pension liability

The accrued pension liability relates to voluntary Group's pensions through defined benefit (DB) plans existing in Germany and Japan.

The benefits under these plans are funded either by pension assets held separately from the employer ("plan assets") or through pension provisions, with the amount of the provision stated on the balance sheet reflecting the value of the pension obligations already reduced by the respective plan assets. Reimbursement rights, which do not qualify as plan assets and are therefore presented as a separate asset, rather than as a deduction from the accrued pension liability, additionally exist in Germany.

In Germany, the company of the Group offered pension benefits via a pension fund promise ("Hoechster Pensionskasse"). This multi-employer plan is defined benefit by nature but due to insufficient information regarding the attributable asset portion the plan was accounted as a defined contribution plan. However, the legally required pension indexation is not expected to be covered by the pension fund but needs to be paid by the company directly. Accordingly, the proportioned pension indexation share is accounted as defined benefit plan. The pension fund promise was closed for new entries by the end of 2014 and replaced by a contribution-based pension plan with risk-optimized payout forms (lump sum, instalments, or life-long pension). Particularly for newly recruited professionals and managers, the "flex plan" was introduced on January 1, 2017. The "flex plan" is a share-based pension plan with a 1% minimum interest per annum guaranteed by the employer.

Effective June 1, 2022, the accrued pension liability relating to voluntary Group's pensions through defined benefit plans existing in Germany for members of the Management Board of thyssenkrupp nucera Management AG was legally transferred from thyssenkrupp nucera AG & Co. KGaA to thyssenkrupp nucera Management AG against payment in cash. According to the Company's articles of association the Company has the obligation to reimburse thyssenkrupp nucera Management AG for any and all expenses in connection with the management of the Company's business, which includes remuneration of its corporate bodies. Such expenses to be compensated by the Company include expenses in connection with the defined benefit plans granted to the Management Board of thyssenkrupp nucera Management AG and will, at a minimum, include current service cost relating to services performed after the legal transfer of the defined benefit plan which will be charged to the Company on a regular basis, but could also include additional payments required to be made by the Company to cover potential plan deficits arising at the level of thyssenkrupp nucera Management AG in the future. As such, thyssenkrupp nucera AG & Co. KGaA is not released from all risks associated with the defined benefit plans subsequent to the legal transfer effective June 1, 2022 and therefore, continues to recognize the accrued pension liability for members of the Management Board of thyssenkrupp nucera Management AG. The cash payment to thyssenkrupp nucera Management AG made in connection with the legal transfer of the defined benefit plans as well as future compensation payments regarding current service costs are accounted for as a reimbursement right. As such it is recognized at fair value to the extent such reimbursement right does not exceed the accrued pension liability (ceiling of reimbursement right) and presented as other non-financial (non-current) asset (cf. Note 10).

In Japan the company offers a voluntary defined benefit plan in the form of "end of service" benefits. The benefit amount is defined as total accrued points at retirement / resignation / death multiplied by a factor linked to service and a factor linked to involuntary or voluntary vesting requirements. The multiple varies depending on the reason for exit, so that the amount received for voluntary resignation is lower (for any service period) than if reaching the mandatory retirement age. The plan in Japan includes a Corporate Pension Plan and a Retirement Allowance Plan. The Corporate Pension Plan is governed by the Ministry of Health, Labour and Welfare in accordance with the Defined Benefit Corporate Pension Law in Japan. The plan is subject to minimum funding requirements stipulated in law, which requires the company in Japan to pay additional contributions to achieve a minimum funding level within a certain time scale if the plan does not hold sufficient assets. The Japan company, as an employer, is responsible for the governance of the defined benefit plan. For further information regarding the composition of and investment strategy for funding assets, refer to the disclosures of the plan assets.

Material risks associated with the different types of pension plans include all financial risks as well as risks in the areas of inflation and biometrics.

As the plans are based on salary with annual pension modules directly linked to current salaries (e.g., contribution-oriented plans), inflation risks which could lead to an increase in benefit obligations of DB plans exist. Therefore, an increase in salaries above the trend assumptions used in the valuation of the obligation would also require a direct increase in future service cost.

The pension plans in Germany paid as an annuity are required by law to provide a cost-of-living adjustment and may also be required under collective bargaining agreements or on a voluntary/discretionary basis. As such, further charges could result from a cost-of-living adjustment in excess of current pension trend assumptions during the pension payment phase, which would lead to an immediate increase in the provisions.

Biometric risks can result either from early benefit claims (risk of sudden changes to the balance sheet after death or invalidity) or from underestimated life expectancies (longevity risk) and could likewise result in costs to the company due to unexpected increases in provisions and early cash outflows.

Risks from changes to the discount rate are balance sheet-related and the provisions are adjusted directly against equity without affecting income or cash outflows.

In Japan, employees leaving the company after more than 10 years are allowed to opt for receiving a 15-year annuity instead of lump sum payout posing an annuity selection rate risk to the company. Due to the conversion factors used for the annuity benefit determination, employees opting for annuity payment result in a higher liability for the company. If a higher percentage of employees opt for pension payment, the liability may increase considerably.

Under the pension plans in Germany, individual beneficiaries are considered more than once in the employee count due to entitlements under different components of the pension systems. The breakdown of total of pension plans is as follows:

	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022

	Germany	Japan	Total	Germany	Japan	Total	Germany	Japan	Total
Active employees	183	72	255	231	67	298	439	69	508
Terminated employees with vested benefits	11	2	13	19	4	23	28	5	33
Pensioners	5	19	24	6	17	23	8	14	22
Total	199	93	292	256	88	344	475	88	563

Changes in defined benefit obligations, plan assets, reimbursement rights and ceiled reimbursement rights

The reconciliation of the changes in the defined benefit obligations and the fair value of plan assets are as follows:

	Sept. 30, 2020			Sept. 30, 2021			Sept. 30, 2022		
thousand €	Germany	Japan	Total	Germany	Japan	Total	Germany	Japan	Total
Change in defined benefit obligations (DBO):									
DBO at beginning of fiscal year	**5,804**	**10,024**	**15,828**	**7,009**	**9,389**	**16,398**	**7,616**	**8,916**	**16,532**
Service cost	366	537	903	450	476	926	851	421	1,272
Interest expense	41	19	60	50	51	101	89	41	130
Remeasurement: Actuarial (gains)/losses from experience adjustments	(78)	121	43	124	(220)	(96)	98	(26)	72
Remeasurement: Actuarial (gains)/losses from changes in demographic assumptions	-	6	6	-	-	-	-	-	-
Remeasurement: Actuarial (gains)/losses from changes in financial assumptions	901	(437)	464	(103)	91	(12)	(3,142)	(339)	(3,481)
Currency differences	-	(497)	(497)	-	(428)	(428)	-	(704)	(704)
Participant contributions	-	67	67	-	63	63	-	55	55
Benefit payments	(26)	(451)	(477)	(28)	(506)	(534)	(37)	(270)	(307)
Others	1	-	1	114	-	114	1,114	(105)	1,009
DBO at end of fiscal year	**7,009**	**9,389**	**16,398**	**7,616**	**8,916**	**16,532**	**6,589**	**7,989**	**14,578**
Change in plan assets:									
Fair value of plan assets at beginning of fiscal year	**71**	**9,953**	**10,024**	**119**	**9,551**	**9,670**	**244**	**9,810**	**10,054**
Interest income	1	19	20	1	54	55	2	47	49
Remeasurement: Actuarial gains/(losses) on plan assets, excluding amounts included in interest income	(1)	43	42	31	672	703	(19)	53	34
Currency differences	-	(498)	(498)	-	(441)	(441)	-	(790)	(790)
Employer contributions	48	417	465	74	370	444	236	263	499
Participant contributions	-	67	67	-	63	63	-	55	55
Benefit payments	-	(436)	(436)	-	(445)	(445)	-	(257)	(257)
Administration cost	-	(14)	(14)	-	(14)	(14)	-	(13)	(13)
Others	-	-	-	19	-	19	111	(128)	(17)
Fair value of plan assets at end of fiscal year	**119**	**9,551**	**9,670**	**244**	**9,810**	**10,054**	**574**	**9,040**	**9,614**
Change in reimbursement rights:									
Fair value of reimbursement rights at beginning of fiscal year	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Interest income	-	-	-	-	-	-	18	-	18
Remeasurement: Actuarial gains/(losses) on reimbursement rights, excluding amounts included in interest income	-	-	-	-	-	-	(18)	-	(18)
Employer contributions	-	-	-	-	-	-	2,343	-	2,343
Fair value of reimbursement rights at end of fiscal year	**-**	**-**	**-**	**-**	**-**	**-**	**2,343**	**-**	**2,343**
Change in ceiled reimbursement rights:									
Fair value of ceiling of reimbursement rights at beginning of fiscal year	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Reduction of Interest income because of reimbursement right ceiling	-	-	-	-	-	-	2	-	2
Remeasurement: Actuarial gains/(losses) on ceiled reimbursement rights, excluding amounts included in reduction of interest income	-	-	-	-	-	-	673	-	673
Fair value of ceiled reimbursement rights at end of fiscal year	**-**	**-**	**-**	**-**	**-**	**-**	**675**	**-**	**675**
Net amounts:									
Reimbursement right after ceiling at the end of fiscal year	**-**	**-**	**-**	**-**	**-**	**-**	**1,668**	**-**	**1,668**

As of September 2022, defined benefit obligations of €14,578 thousand (September 30, 2021: €16,532 thousand, September 30, 2020: €16,398 thousand) related to plans that are wholly unfunded in the amount of €4,347 thousand (September 30, 2021: €7,372 thousand, September 30, 2020: €6,890 thousand), to plans that are wholly or partly funded in the amount of €8,563 thousand (September 30, 2021: €9,160 thousand, September 30, 2020: €9,508 thousand) and accrued pension liability for members of the Management Board of thyssenkrupp nucera Management AG in the amount of €1,668 thousand (September 30, 2021: €0 thousand, September 30, 2020: €0 thousand), for which reimbursement rights exist.

Changes of net defined asset and liability

The net assets/liabilities of defined benefit plans changed as follows:

	Sept. 30, 2020			Sept. 30, 2021			Sept. 30, 2022		
thousand €	Germany	Japan	Total	Germany	Japan	Total	Germany	Japan	Total
Net defined benefit asset/(liability) at the beginning of fiscal year	(5,733)	(71)	(5,804)	(6,890)	162	(6,728)	(7,372)	894	(6,478)
Service cost plus net interest income/(expense)	(406)	(537)	(943)	(499)	(473)	(972)	(938)	(415)	(1,353)
Remeasurements	(824)	353	(471)	10	801	811	3,026	418	3,444
Currency differences	-	(1)	(1)	-	(13)	(13)	-	(86)	(86)
Employer contributions	48	417	465	74	370	444	236	263	499
Participant contributions									
Benefit payments	26	15	41	28	61	89	37	13	50
Administration cost	-	(14)	(14)	-	(14)	(14)	-	(13)	(13)
Other	(1)	-	(1)	(95)	-	(95)	(1,003)	(23)	(1,026)
Net defined benefit liability at end of fiscal year	(6,890)	162	(6,728)	(7,372)	894	(6,478)	(6,014)	1,051	(4,963)
thereof: accrued pension liability	(6,890)	-	(6,890)	(7,372)	-	(7,372)	(6,014)	-	(6,014)
thereof: other non-financial assets	-	162	162	-	894	894	-	1,051	1,051

Net periodic pension costs

The net periodic pension costs for defined benefit plans were as follows:

	Year ended Sept. 30, 2020			Year ended Sept. 30, 2021			Year ended Sept. 30, 2022		
thousand €	Germany	Japan	Total	Germany	Japan	Total	Germany	Japan	Total
Service cost	366	537	903	450	476	926	851	421	1,272
Net interest cost	40	0	40	49	(2)	47	71	(5)	66
Administration cost	-	14	14	-	14	14	-	13	13
Net periodic pension cost	406	551	957	499	488	987	922	429	1,351

Sensitivity analysis and underlying assumptions

The Group applied the following weighted-average assumptions to determine benefit obligation:

	Sept. 30, 2020		Sept. 30, 2021		Sept. 30, 2022	
in %	Germany	Japan	Germany	Japan	Germany	Japan
Discount rate	0.7	0.6	0.9	0.5	3.7	0.9
Rate of compensation increase	2.5	varies by age	2.5	varies by age	3	Varies by age
Rate of pension progression	1.8	-	1.9	-	2.2	-

The assumptions for discount rates, rates of compensation increase, and the rate of pension progression on which the calculation of the obligations is based were derived in accordance with standard principles and established for each country based on their respective economic conditions. Discount rates are generally determined based on market yields of AA-rated corporate bonds of appropriate term and currency.

The rate of compensation increase for plans in Japan varies depending on age. The rate varied from 2.3% as of September 30, 2022 (September 30, 2021: 2.3%, September 30, 2020: 2.3%) to 11.1% (September 30, 2021: 11.1%, September 30, 2020: 11.0%).

The increase (decrease) in rate of pension progression in Germany is due to the increased (decreased) inflation expectations for Germany. In Japan, the pension plan is provided as a lump sum and the option to choose an annuity instead of lump sum exists if 10 or more years of service have been provided. Additionally, in Japan, a fixed 15 year annuity is available starting from age 60. 20% of plan participants selected the option across all reporting dates.

Accrued pension obligations in Germany are recognized on the basis of the "2018 G tables" of Prof. Dr. Klaus Heubeck, adapted to group-specific circumstances. In Japan, MHLW Standard were used in determination for the demographic assumptions.

Alternative assumptions would result in the following changes in the defined benefit obligation and the corresponding reverse changes in equity.

The table shows the effects of the change in one assumption with all other assumptions remaining unchanged for plans in Germany:

thousand €		Increase/(decrease) in defined benefit obligation for plans Germany		
		Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Discount rate	Increase by 0.5 percentage points	(704)	(743)	(501)
	Decrease by 0.5 percentage points	782	823	555
Rate of compensation increase	Increase by 0.5 percentage points	32	22	15
	Decrease by 0.5 percentage points	(32)	(22)	(15)
Rate of pension progression increase	Increase by 0.25 percentage points	532	521	287
	Decrease by 0.25 percentage points	(494)	(487)	(287)
Mortality probability	Decrease by 10.0 percentage points	271	277	113

To test the sensitivity of the defined benefit obligation due to a change in the mortality and life expectancy assumptions, an alternative analysis was carried out using of 10% lower mortality probabilities from retirement age. For beneficiaries currently aged 63 to 65, this roughly corresponds to a one-year increase in life expectancy on entering retirement.

A change in the discount rate for the plan in Japan would result in following increases in the defined benefit obligation and the corresponding decrease in equity. The table below shows effect from change in discount rate while all other assumptions remaining unchanged. Changes of other assumptions do not have any material impact on the defined benefit obligation.

thousand €		Increase/(decrease) in defined benefit obligation for plan Japan		
		Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Discount rate	Increase by 0.5 percentage points	(460)	(449)	(375)
	Decrease by 0.5 percentage points	484	473	407

Plan assets

The Group invests in diversified portfolios consisting of an array of asset classes that attempt to maximize returns while minimizing volatility. The major part of the Group's reported plan assets associated with the funded pension plans are located in Japan. The asset classes in Japan mainly include investments in insurance contracts and pension trust fund. Plan assets do not include any direct investments in Group's debt securities, treasury shares or real estate used on its own.

The Group uses professional investment managers to invest plan assets based on specific investment guidelines. The Investment Committees of the respective plan consist of senior financial management especially from treasury and other appropriate executives. The Investment Committees meet regularly to review the risks and performance of the major assets and approve the selection and retention of external managers.

For the Group's main pension assets, asset liability studies are also regularly carried out, as part of which actuaries conduct a detailed analysis of the structure of the pension obligations (specifically focusing on age structure, duration, possible interest rate/inflation risks etc.). The investment strategy and target portfolio of the pension assets are then defined and updated as a result of these studies. For risk management purposes, liability-driven investment strategies may be used through which assets are geared towards the pension liabilities.

The processes established for managing and monitoring the plan assets as described above are used to counteract the common risks associated with capital market investment - counterparty, liquidity/market and other risks.

As of the balance sheet dates, the portfolio of these major plan assets comprises the following asset categories:

As of Sept. 30, 2020	Fair value (€ thousand)			
Asset categories	Total	Quoted market price in an active market	No quoted market price in an active market	Portion of major plan assets (in %)

Equity securities	94	94	-	1
Bonds	24	24	-	0
Others	9,552	-	9,552	99
Total	9,670	118	9,552	100

As of Sept. 30, 2021	Fair value (€ thousand)			
Asset categories	Total	Quoted market price in an active market	No quoted market price in an active market	Portion of major plan assets (in %)
Equity securities	194	194	-	2
Bonds	49	49	-	0
Others	9,811	-	9,811	98
Total	10,054	243	9,811	100

As of Sept. 30, 2022	Fair value (€ thousand)			
Asset categories	Total	Quoted market price in an active market	No quoted market price in an active market	Portion of major plan assets (in %)
Equity securities	422	422	-	4
Bonds	152	99	53	2
Others	9,040	-	9,040	94
Total	9,614	521	9,093	100

The Other asset category relates to investments in insurance contracts and pension trust funds in Japan.

In general, the group's funding policy is to contribute amounts to the plans sufficient to meet the minimum statutory funding requirements relevant in the country in which the plan is located. The group may from time to time make additional contributions at its own discretion. The Group's expected contribution in fiscal year 2022/2023 is €536 thousand (2021/2022: €371 thousand, 2020/2021: €482 thousand) related to its plan assets.

Pension benefit payments

In fiscal year 2021/2022, pension benefit payments for plans in Germany comprised €37 thousand (2020/2021: €28 thousand, 2019/2020: €26 thousand) and were made from provisions; in Japan, the pension benefits payments of €270 thousand (2020/2021: €506 thousand, 2019/2020: €451 thousand) were made mainly from plan assets.

The estimated future pension benefits to be paid by the Group's defined benefit pension plans are as follows:

thousand €	Germany	Japan	Total
(for fiscal year)			
2022/2023	100	308	408
2023/2024	146	821	967
2024/2025	188	384	572
2025/2026	202	264	466
2026/2027	210	443	653
2027/2028 – 2030/2031	1,621	3,343	4,964
Total	**2,467**	**5,563**	**8,030**

As of September 2022, the duration of defined benefit plans amounts to 16.3 years for Germany (2021: 20.3 years, 2020: 21.0 years) and to 10.2 years (2021: 10.6 years, 2020: 9.9 years) for Japan.

Defined contribution plans

The Group maintains defined contribution plan in USA and Italy. In fiscal year 2021/2022, €250 thousand (2020/2021: €215 thousand, 2019/2020: €203 thousand) were charged to the income statement as contributions to defined contribution plans.

The Group's contribution to the multi-employer defined benefit pension plans in Germany ("Hoechster Pensionskasse"), which are accounted as defined contribution plans, amounted to €192 thousand in 2021/2022 (2020/2021: €151 thousand, 2019/2020: €160 thousand) and are expected to be at €198 thousands for 2022/2023. The total amount of contributions received by "Hoechster Pensionskasse" from all sponsoring employers was €171,828 thousands in calendar year 2021 (€165,148 thousands in calendar year 2020 and €164,187 thousands in calendar year 2019). Correspondingly, thyssenkrupp nucera Group’s contributions reflect a proportioned share of the overall pension fund contributions of approximately 0.1%. Potential costs associated with the termination of the plans implemented through the “Hoechster Pensionskasse” would not be material to the Group.

Defined contribution plans are regularly funded through mandatory or voluntary contributions (statutory/contractual) by the employer and/or employee. The contributions are transferred to an entity which is legally separate from the employer. Under this form of plan the employer has no risks beyond the payment of contributions. The contributions are reported under personnel expenses.

Partial retirement

In fiscal years 2019/2020, 2020/2021 and 2021/2022, the Parent company accrued obligations resulting from partial retirement agreements. Under these agreements, employees work additional time prior to retirement, which is subsequently paid for in instalments after retirement. In addition, employees receive a supplement on top of their pay. For these obligations, accruals were recognized in accordance with IAS 19 “Employee Benefits”.

Other accrued pension-related obligations

Other accrued pension-related obligations mainly include provision for indemnity severance payments in Italy (September 30, 2022: €297 thousand, September 30, 2021: €304 thousand, September 30, 2020: €403 thousand) and accruals for retirement payment for directors in Japan (September 30, 2022: €86 thousand, September 30, 2021: €72 thousand, September 30, 2020: €98 thousand).

13 Provisions for employee benefits and other provisions

thousand €	Employee benefits	Product warranties	Decommissioning obligations	Litigation	Others	Total
Balance as of Oct. 1, 2019	**1,740**	**25,736**	**238**	**-**	**800**	**28,513**
Thereof non-current:	31	4,430	238	-	-	4,699
Currency differences	(1)	(274)	(10)	-	-	(285)
Additions	1,245	6,093	-	1,245	238	8,821
Amounts utilized	(1,286)	(2,873)	-	-	(127)	(4,285)
Reversals	(396)	(5,195)	-	-	(12)	(5,603)
Balance as of Sept. 30, 2020	**1,302**	**23,488**	**228**	**1,245**	**899**	**27,161**
Thereof: non-current	87	3,622	228	-	-	3,937
Currency differences	1	(53)	(7)	82	-	23
Additions	2,152	5,659	-	-	193	8,004
Amounts utilized	(1,050)	(714)	-	-	(150)	(1,914)
Reversals	(131)	(3,875)	-	-	-	(4,006)
Balance as of Sept. 30, 2021	**2,274**	**24,505**	**221**	**1,327**	**942**	**29,268**
Thereof: non-current	135	2,737	221	-	-	3,093
Currency differences	1	(139)	(16)	104	(9)	(59)
Additions	3,470	8,220	-		3,663	15,353
Amounts utilized	(1,768)	(545)	-	(170)	(158)	(2,641)
Reversals	(407)	(2,939)	-		(18)	(3,364)
Balance as of Sept. 30, 2022	**3,571**	**29,101**	**205**	**1,261**	**4,420**	**38,557**
Thereof: non-current	183	1,580	205		-	1,968

As of September 30, 2022, other provisions contain a potential claim amounting to € 1,241 thousand unrelated to any performance obligation 2022 (September 30, 2021: €0 thousand, September 30, 2020: €0 thousand).

Employee benefits

Management Incentive Plans

Provisions relating to management incentive plans reflected in provisions for employee benefits amount to €0 thousand as of September 30, 2022 (September 30, 2021: €110 thousand, September 30, 2020: €54 thousand). For details regarding management incentive plans reference is made to Note 28.

Other employee benefits

The remaining balance included in provisions for employee compensation and benefit costs primarily represent employment anniversary bonuses. Pension related obligations for partial retirement agreements and early retirement programs are part of the provision for pensions and similar obligations (cf. Note 12).

Other Provisions

The product warranties provisions reflect the Group's responsibility for the proper functioning of the goods sold (product warranty) as well as obligations that arise from the use of the products sold (product defect). The amount of the provisions is established on a case-by-case basis. In the context of the measurement of warranty provisions, the Group takes into account experience related to actual warranty claims as well as technical information concerning product deficiencies discovered.

The provision for decommissioning obligations refers to restoration obligations of the head office leased by the Japan segment.

The risks arising from litigation cases is estimated to be €1.261 thousand on September 30, 2022 and €1,327 thousand on September 30, 2021 (September 30, 2020: €1,245 thousand). The outcome as well as the timing of any outflow of litigation cases is by nature uncertain and therefore represents a risk. There is a reasonable probability that individual cases could be decided against the Group. Identifiable risks have been adequately covered by recognizing appropriate provisions.

The item "others" comprises a provision for one customer for cost incurred which exceed the economic benefits amounting to €2.241 thousand as of September 30, 2022 (September 30, 2021: €700 thousand; September 30, 2020: €683 thousand). Moreover, it contains a possible claim amounting to €1,241 thousand unrelated to any contractual performance obligation. Furthermore, provision for audit fees and various other individual items of minor value.

14 Trade accounts payable

Working capital, including trade accounts payable is driven by the Group's project business. The volatility over time is mainly caused by the nature and status of various projects.

As of September 30, 2022, trade accounts payable in the amount of €62 thousand (2021: €1,377 thousand, 2020: €460 thousand) have a remaining term of more than one year.

15 Other financial liabilities

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Payables to tk Group	191	208	2,209
Payables from cash pooling arrangements with tk Group	188	-	
Derivatives not qualifying for hedge accounting	235	454	514
Derivatives qualifying for hedge accounting	11	27	381
Other accruals	794	582	776
Other financial liabilities	8	2	527
Total	**1,427**	**1,273**	**4,407**

As of September 30, 2022, other payables to tk Group mainly relate to license fees accounted for by reference to the Old Licensing Agreement and payables to tk Management AG (the General Partner), who is reimbursed for any expenses incurred in connection with the fulfilment of its duties. For more details on payables to tk Group and payables from cash pooling arrangements with tk Group refer to Note 20.

Other accruals relate to outstanding invoices and other deposits received.

16 Other non-financial liabilities

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022

Liabilities to employees	4,099	4,509	6,095
Tax liabilities (without income taxes)	2,899	1,863	6,905
Other non-financial liabilities	5	317	355
Total	**7,003**	**6,689**	**13,355**

Liabilities to employees relate to wage, salary and remuneration. Increase in tax liabilities are mainly related to Chinese VAT due to increased customer prepayments received, which cannot be offset with the VAT recognized in the non-financial assets from other jurisdictions.

There were no other non-financial liabilities with a remaining term of more than one year as of September 30, 2022, 2021 and 2020.

17 Leases

The Group is primarily a lessee of buildings as well as other equipment, factory and office equipment.

The following right-of-use assets are recognized under property, plant and equipment:

thousand €	Buildings	Other equipment, factory and office equipment	Total
Gross amounts			
Balance as of Oct. 1, 2019	**8,983**	**480**	**9,463**
Currency differences	(241)	(1)	(242)
Additions	193	98	291
Transfers	-	-	-
Disposals	-	-	-
Balance as of Sept. 30, 2020	**8,935**	**577**	**9,512**
Currency differences	(38)	21	(17)
Additions	49	317	366
Transfers	-	-	-
Disposals	-	-	-
Balance as of Sept. 30, 2021	**8,946**	**915**	**9,861**
Currency differences	(10)	36	26
Additions	2,322	83	2,405
Transfers	-	-	-
Disposals	-	-	-
Balance as of Sept. 30, 2022	**11,258**	**1,034**	**12,292**
Accumulated depreciation and impairment losses			
Balance as of Oct. 1, 2019	**1,811**	**223**	**2,034**
Currency differences	(73)	1	(72)
Depreciation expense	1,862	203	2,065
Impairment losses	-	-	-
Reversals of impairment losses	-	-	-
Transfers	-	-	-
Disposals	-	-	-
Balance as of Sept. 30, 2020	**3,600**	**427**	**4,027**
Currency differences	1	18	19
Depreciation expense	1,811	216	2,027
Impairment losses	-	-	-
Reversals of impairment losses	-	-	-
Transfers	-	-	-
Disposals	-	-	-
Balance as of Sept. 30, 2021	**5,412**	**661**	**6,073**
Currency differences	(10)	28	18
Depreciation expense	2,077	101	2,178
Impairment losses	-	-	-
Reversals of impairment losses	-	-	-
Transfers	-	-	-
Disposals	-	-	-
Balance as of Sept. 30, 2022	**7,479**	**790**	**8,269**
Net amounts			

Balance as of Oct. 1, 2019	**7,172**	**257**	**7,429**
Balance as of Sept. 30, 2020	**5,335**	**150**	**5,485**
Balance as of Sept. 30, 2021	**3,534**	**254**	**3,788**
Balance as of Sept. 30, 2022	**3,779**	**244**	**4,023**

The resulting lease liabilities are reported in the Statement of Financial Position of the Group.

The maturities of the outstanding discounted lease payments were as follows:

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Maturing within 1 year	1,947	1,696	2,354
Maturing in 1–5 years	3,395	2,230	1,766
Maturing after 5 years	334	51	-
Total	5,676	3,977	4,120

The maturities of the outstanding undiscounted lease payments were as follows:

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Maturing within 1 year	2,062	1,772	2,428
Maturing in 1–5 years	3,532	2,306	1,813
Maturing after 5 years	341	53	-
Total	5,935	4,131	4,241

Further details of lease liabilities are given in Note 19.

The following table presents income and expenses resulting from leases:

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Expense from short-term leases	133	48	102
Expense from leases for low-value assets	389	464	643
Depreciation and amortization expense	2,065	2,027	2,178
Interest expense from lease liabilities	163	123	96
Total amount recognized in profit & loss	**2,750**	**2,662**	**3,019**

No expense from off-balance variable lease payments was recognized during the period under consideration.

No income was recognized from sublease contracts or the gain or loss from sale and lease back transactions.

The Group prolonged existing lease contracts and signed new lease contracts during the fiscal year 2022 whereof not all yet commenced as of the balance sheet date September 30, 2022. These new lease contracts, which not yet commenced, will result in a future cash outflow of € 18,668 thousand within the next ten years after commencement date.

18 Contingencies and commitments

In connection with the Group's New Build and large-scale Service projects tk Group issues guarantees to the Group's customers (cf. Note 20). Guarantees issued by tk Group amounted to €1,355,289 thousand as of September 30, 2022 (September 30, 2021: €179,064 thousand, September 30, 2020: € 201,171 thousand). The guarantees comprise of group liability declarations and bank guarantees and are issued based on tk Group's financial policies and the special terms and conditions for the guarantee business.

In addition, there were bank guarantees issued to the Group's customers in the amount of €2,765 thousand as of September 30, 2022 (September 30, 2021: €1,687, September 30, 2020: Nil).

The Group did not have any other commitments and contingencies as of September 30, 2022, 2021 and 2020.

19 Financial instruments

Financial instruments by category

The following table shows the carrying amounts, measurement categories under IFRS 9 and fair values of financial assets and liabilities by classes. Lease liabilities, contract assets and derivatives that qualify for hedge accounting are also included although they are not considered a IFRS 9 measurement category.

	Measurement category in accordance with IFRS 9			Measurement in accordance with IFRS 16/IFRS 15	
	Carried at amortized cost	Carried at fair value			
thousand €	Carrying amount	Fair value recognized in profit or loss	Fair value in equity (with recycling)	Carrying amount	Carrying amount in the statement of financial position as of Sept. 30, 2020
Trade accounts receivable	37,820				37,820
Contract assets				4,081	4,081
Other financial assets	161,924	284	3	-	162,211
Receivables from cash pooling arrangements with tk Group (cf. Note 20)	159,687				159,687
Miscellaneous other financial assets	2,237				2,237
Derivatives not qualifying for hedge accounting		284			284
Derivatives qualifying for hedge accounting			3		3
Cash and cash equivalents	5,330				5,330
Total of financial assets	**205,074**	**284**	**3**	**4,081**	**209,442**
Lease liabilities				5,676	5,676
Trade accounts payable	20,844				20,844
Other financial liabilities	1,181	235	11	-	1,427
Miscellaneous other	1,181				1,181
Derivatives not qualifying for hedge accounting		235			235
Derivatives qualifying for hedge accounting			11		11
Total of financial liabilities	**22,025**	**235**	**11**	**5,676**	**27,947**

	Measurement category in accordance with IFRS 9			Measurement in accordance with IFRS 16/IFRS 15	
	Carried at amortized cost	Carried at fair value			
thousand €	Carrying amount	Fair value recognized in profit or loss	Fair value in equity (with recycling)	Carrying amount	Carrying amount in the statement of financial position as of Sept. 30, 2021
Trade accounts receivable	38,263				38,263
Contract assets				16,089	16,089
Other financial assets	189,558	513	73	-	190,144
Receivables from cash pooling arrangements with tk Group (cf. Note 20)	18 6,840				186,840
Miscellaneous other financial assets	2,718				2,718
Derivatives not qualifying for hedge accounting		513			513
Derivatives qualifying for hedge accounting			73		73
Cash and cash equivalents	11,660				11,660
Total of financial assets	**239,481**	**513**	**73**	**16,089**	**256,156**

Lease liabilities				3,977	3,977
Trade accounts payable	37,561				37,561
Other financial liabilities	792	454	27	-	1,273
Miscellaneous other	792				792
Derivatives not qualifying for hedge accounting		454			454
Derivatives qualifying for hedge accounting			27		27
Total of financial liabilities	**38,353**	**454**	**27**	**3,977**	**42,811**

	Measurement category in accordance with IFRS 9			Measurement in accordance with IFRS 16/IFRS 15	
	Carried at amortized cost	Carried at fair value			
thousand €	Carrying amount	Fair value recognized in profit or loss	Fair value in equity (with recycling)	Carrying amount	Carrying amount in the statement of financial position as of Sept. 30, 2022
Trade accounts receivable	35,903				35,903
Contract assets				10,488	10,488
Other financial assets	254,328	1,399	791	-	256,518
Receivables from cash pooling arrangements with tk Group (cf. Note 20)	252,567				252,567
Miscellaneous other financial assets	1,761				1,761
Derivatives not qualifying for hedge accounting		1,399			1,399
Derivatives qualifying for hedge accounting			791		791
Cash and cash equivalents	27,349				27,349
Total of financial assets	**317,580**	**1,399**	**791**	**10,488**	**330,258**
Lease liabilities				4,120	4,120
Trade accounts payable	43,125				43,125
Other financial liabilities	3,512	514	381	-	4,407
Miscellaneous other	3,512				3,512
Derivatives not qualifying for hedge accounting		514			514
Derivatives qualifying for hedge accounting			381		381
Total of financial liabilities	**46,637**	**514**	**381**	**4,120**	**51,652**

The carrying amounts of trade accounts receivable measured at amortized cost, other current receivables as well as cash, cash equivalents equal their fair values due to the short remaining terms.

The fair value of foreign currency forward transactions is determined on the basis of the middle spot exchange rate applicable as of the balance sheet date, adjusted for any forward premiums or discounts arising for the remaining contract term compared to the contracted forward exchange rate.

The carrying amounts of trade accounts payable and other current liabilities are equal their fair values as they are considered short-term in nature.

Financial assets and liabilities measured at fair value can be categorized in the following three-level fair value hierarchy:

FAIR VALUE HIERARCHY AS OF SEPT. 30, 2020

thousand €	Sept. 30, 2020	Level 1	Level 2	Level 3
Financial assets at fair value				
Fair value recognized in profit or loss				
Derivatives not qualifying for hedge accounting	284		284	
Fair value recognized in equity				

Derivatives qualifying for hedge accounting	3		3	
Total	**287**		**287**	
Financial liabilities at fair value				
Fair value recognized in profit or loss				
Derivatives not qualifying for hedge accounting	235		235	
Fair value recognized in equity				
Derivatives qualifying for hedge accounting	11		11	
Total	**246**		**246**	

FAIR VALUE HIERARCHY AS OF SEPT. 30, 2021

thousand €	Sept. 30, 2021	Level 1	Level 2	Level 3
Financial assets at fair value				
Fair value recognized in profit or loss				
Derivatives not qualifying for hedge accounting	513		513	
Fair value recognized in equity				
Derivatives qualifying for hedge accounting	73		73	
Total	**586**		**586**	
Financial liabilities at fair value				
Fair value recognized in profit or loss				
Derivatives not qualifying for hedge accounting	454		454	
Fair value recognized in equity				
Derivatives qualifying for hedge accounting	27		27	
Total	**481**	**-**	**481**	**-**

FAIR VALUE HIERARCHY AS OF SEPT. 30, 2022

thousand €	Sept. 30, 2022	Level 1	Level 2	Level 3
Financial assets at fair value				
Fair value recognized in profit or loss				
Derivatives not qualifying for hedge accounting	1,399		1,399	
Fair value recognized in equity				
Derivatives qualifying for hedge accounting	791		791	
Total	**2,190**	**-**	**2,190**	**-**
Financial liabilities at fair value				
Fair value recognized in profit or loss				
Derivatives not qualifying for hedge accounting	514		514	
Fair value recognized in equity				
Derivatives qualifying for hedge accounting	381		381	
Total	**895**	**-**	**895**	**-**

The fair value hierarchy reflects the significance of the inputs used to determine fair values. Financial instruments with a fair value measurement based on quoted prices in active markets are disclosed in level 1. In level 2, determination of fair values is based on observable inputs, e.g., foreign exchange rates. Level 3 is comprised of financial instruments for which a fair value measurement is based on unobservable inputs using recognized valuation models.

In the reporting year there were no reclassifications between level 1 and level 2.

Impairment of financial assets

For financial assets measured at amortized cost, an impairment loss is recognized for expected losses.

The impairment losses on trade accounts receivable recognized at amortized cost and contract assets are as follows:

IMPAIRMENT OF TRADE ACCOUNTS RECEIVABLE RECOGNIZED AT AMORTIZED COST AS WELL AS CONTRACT ASSETS

thousand €	Expected credit loss	Individual allowances	Total of impairments
Balance as of Oct. 1, 2019	**310**	**2,323**	**2,633**

Currency differences	(20)	(5)	(25)
Additions	348	228	576
Amounts utilized	(4)	(388)	(392)
Reversals	-	-	-
Balance as of Sept. 30, 2020	**634**	**2,158**	**2,792**
Currency differences	1	(9)	(8)
Additions	216	164	380
Amounts utilized	(252)	(42)	(294)
Reversals	-	(508)	(508)
Balance as of Sept. 30, 2021	**599**	**1,763**	**2,362**
Currency differences	5	(7)	(2)
Additions	191	(80)	111
Amounts utilized	8	(1,539)	(1,531)
Reversals	-	(13)	(13)
Balance as of Sept. 30, 2022	**803**	**124**	**927**

Individual allowances amounting to €0 thousand as of September 30, 2022 (September 30, 2021: €1,375 thousand; September 30, 2020: €1,375 thousand) relate to trade accounts receivable from one customer which were impaired in fiscal year 2010/2011 due to the customer's inability to pay.

In the Group's leading valuation model, the expected default rates are mainly derived from external credit information and ratings for each counterparty, which allows more accurate calculation of the probability of default compared with the formation of rating classes. The customer risk numbers assigned by trade credit insurers and the creditworthiness information provided by credit agencies are translated into an individual probability of default per customer using a central allocation system. This individual probability of default per customer is used uniformly throughout the thyssenkrupp nucera Group. The information is updated quarterly. If no rating information is available at counterparty level, an assessment is made based on the average probability of default for each segment plus an appropriate risk premium. For the Group financial statements as of September 30, 2022, 2021 and 2020 the latest external credit information and ratings were used, which already take into account current expectations of the possible effects of the coronavirus pandemic. In addition, the model takes forward-looking information derived from current macroeconomic conditions into account (e.g., increase in material and personnel costs in the short-term; a degressive increase in material and personnel costs in the mid-term). According to this valuation model, no additional adjustment of impairment is necessary. Overall, this model shows a moderate but not significant increase in the valuation of individual customers.

The gross carrying amounts, impairment losses and average probabilities of default for each segment are shown below.

Impairments of trade accounts receivable and contract assets by segments

as of Sept. 30, 2022

thousand €	Gross carrying amount	Expected credit loss	Individual allowances	Total of impairments	Average probability of default
Germany	31,650	183	55	238	1.05
Italy	12,259	378	-	378	5.61
Japan	4,078	52	69	121	2.33
China	11,515	151	-	151	2.38
RoW	(9,736)	39	-	39	(0.72)

Impairments of trade accounts receivable and contract assets by segments

as of Sept. 30, 2021

thousand €	Gross carrying amount	Expected credit loss	Individual allowances	Total of impairments	Average probability of default
Germany	24,084	175	1,430	1,605	1.32
Italy	9,290	119	244	363	2.36
Japan	14,257	185	89	274	2.35
China	8,117	75	0	75	1.67

RoW	3,414	45	0	45	2.39

Impairments of trade accounts receivable and contract assets by segments as of Sept. 30, 2020

thousand €	Gross carrying amount	Expected credit loss	Individual allowances	Total of impairments	Average probability of default
Germany	30,265	435	1,472	1,907	2.61
Italy	5,186	21	463	484	0.75
Japan	3,662	57	223	280	2.81
China	5,247	64	0	64	2.23
RoW	2,781	57	0	57	3.74

The default risk is derived from the risk profile of the Group's customers. The individual segment's average probability of default, as shown in the tables above, is primarily driven by the risk profile of customers in the regions the respective segments are operating in (cf. Note 21), i.e., customer specific country risk premiums are reflected therein. To minimize default risk for trade accounts receivable and contract assets the Group concludes transactions only with counterparties who have a good credit rating or are members of a deposit protection fund. For long-term contracts, additional security is provided in the form of advance payments received. The creditworthiness of the business partners with which projects are made is continuously monitored by tracking their credit ratings (cf. Credit Risk section). The Group therefore considers the default risk to be low

The maximum credit risk exposure of the financial assets subject to the impairment models corresponds to the gross carrying amounts less the recognized impairment losses.

Derivative financial instruments

The Group uses foreign currency forward contracts. Derivative financial instruments are generally used to hedge existing or anticipated underlying transactions so as to reduce foreign currency risks. In rare cases, the derivatives are designated in the Japan segment as hedging instruments for hedge accounting purposes to hedge future cash flows against foreign currency risks arising from future sales and purchase transactions.

The following table shows the notional amounts and fair values of derivatives used within the Group:

DERIVATIVE FINANCIAL INSTRUMENTS (Hedging of foreign currency risk)						
thousand €	Notional amount as of Sept. 30, 2020	Carrying amount as of Sept. 30, 2020	Notional amount as of Sept. 30, 2021	Carrying amount as of Sept. 30, 2021	Notional amount as of Sept. 30, 2022	Carrying amount as of Sept. 30, 2022
Assets						
Foreign currency derivatives that do not qualify for hedge accounting						
Foreign currency contracts US Dollar	6,098	276	22,547	448	13,525	1,362
Foreign currency contracts Other	1,973	8	2,278	64	2,079	37
Foreign currency derivatives qualifying as cash flow hedges						
Foreign currency contracts US Dollar	290	3	2,246	39	3,455	659
Foreign currency contracts Other	-	-	1,374	35	1,501	131
Total	**8,361**	**287**	**28,445**	**586**	**20,561**	**2,189**
Liabilities						
Foreign currency derivatives that do not qualify for hedge accounting						
Foreign currency contracts US Dollar	8,403	195	12,372	322	3,673	380
Foreign currency contracts Other	2,730	40	5,835	132	7,268	135
Foreign currency derivatives qualifying as cash flow hedges						

Foreign currency contracts US Dollar	1,250	8	455	14	7,238	345
Foreign currency contracts Other	253	3	625	13	857	36
Total	**12,636**	**246**	**19,287**	**481**	**19,036**	**896**

Derivatives that qualify for hedge accounting - cash-flow hedges

In rare cases cash flow hedges are used in the Japan segment to hedge future cash flows against foreign currency risks arising from future sales and purchase transactions. In the case of cash flow hedges, the earnings effect of the hedging instruments is generally also shown in the same profit and loss item as the hedged underlying transaction. The Group did not maintain significant derivatives qualifying as cash flow hedges during the reporting periods.

Derivatives that do not qualify for hedge accounting

The Group mainly uses derivative financial instruments in order to economically hedge against exchange rate risks in the German and China segment. If a hedging relationship does not meet the requirements for hedge accounting in accordance with the conditions under IFRS 9 or hedge accounting is economically not reasonable, the derivative financial instrument is recognized as a derivative that does not qualify for hedge accounting. The resulting impact on profit and loss from derivative financial instruments that do not qualify for hedge accounting are recognized either in other income or other expenses (cf. Note 24 and 25).

Financial risk

During the course of ordinary activities, the thyssenkrupp nucera Group is exposed to financial risks in the form of credit risks (default risk), liquidity risks and market risks (foreign currency risks). The aim of risk management is to limit the risks arising from operating activities and associated financing requirements by applying selected derivative hedging instruments. Within the framework of risk management, financial risks and credit risks must be avoided as far as possible, compensated by a risk portfolio, passed on to third parties or limited (principle of risk aversion).

Credit risk

Credit risk (default risk) is the risk of the Group incurring financial losses due to the non-fulfilment or partial fulfilment of existing debt obligations. Credit risk management is governed by corporate guidelines. Segments and group companies are required to implement credit risk management in accordance with these guidelines.

In order to minimize default risks (credit risks) from the use of financial instruments, such transactions are only concluded with counterparties that meet our internal minimum requirements. Credit risk management defines minimum requirements for the selection of counterparties so that financial instruments in the financing area are only entered into with counterparties who have a good credit rating or are members of a deposit protection fund. Creditworthiness is monitored on the basis of assessments by recognized rating agencies and also taking into account short-term early warning indicators. Continuous and standardized monitoring of ratings and early warning indicators enables us to minimize risks at an early stage. Derivative financial instruments are generally entered into on the basis of standard contracts in which it is possible to net open transactions with the respective business partners.

Default risks are generally hedged with suitable instruments. These include private and state credit insurance as well as letters of credit and guarantees from banks, insurance companies and management companies. For long-term contracts, additional security is provided in the form of advance payments received. In order to further minimize default risks from operating activities, the corporate guidelines provide for the assessment of default risk based on the risk profile of the business partner using suitable internal and, where available, external information, such as ratings and credit reports. Credit limits are set for each business partner using this credit rating. The assessment of the risk profile for each business partner is subject to appropriate, ongoing monitoring, which enables the Group to minimize risk at an early stage. Based on the individual characteristics of the operating segments customers there are processes and guidelines for determining which measures are to be taken in the event of a deterioration creditworthiness or payment default to mitigate the maximum default risk.

Transactions whose value exceeds specified materiality thresholds, especially when the business is undergoing major projects, also require prior approval at thyssenkrupp nucera Group level. Additionally, the amount and hedging of default risks is assessed.

Liquidity risk and maturity analysis

Liquidity risk is the risk that the Group is unable to meet its existing or future obligations due to insufficient availability of cash or cash equivalents. Liquidity risk was managed by the Group by means of integration into the cash pooling and cash management systems of tk Group.

The following table shows the future undiscounted cash outflows from financial liabilities based on contractual agreements:

FUTURE UNDISCOUNTED CASH OUTFLOWS AS OF SEPT. 30, 2020

thousand €	Carrying amount Sept. 30, 2020	*Cash flows within 1 year*	*Cash flows between 2 and 5 years*	*Cash flows of more than 5 years*
Lease liabilities	5,676	2,062	3,532	341
Trade accounts payable	20,844	20,384	460	-
Derivative financial liabilities not qualifying for hedge accounting	519	478	41	-
Derivative financial liabilities qualifying for hedge accounting	14	12	2	-
Other financial liabilities	1,427	1,427	-	-

FUTURE UNDISCOUNTED CASH OUTFLOWS AS OF SEPT. 30, 2021

thousand €	Carrying amount Sept. 30, 2021	*Cash flows within 1 year*	*Cash flows between 2 and 5 years*	*Cash flows of more than 5 years*
Lease liabilities	3,977	1,772	2,306	53
Trade accounts payable	37,561	36,184	1,377	-
Derivative financial liabilities not qualifying for hedge accounting	967	896	71	-
Derivative financial liabilities qualifying for hedge accounting	101	87	13	-
Other financial liabilities	1,273	1,273	-	-

FUTURE UNDISCOUNTED CASH OUTFLOWS AS OF SEPT. 30, 2022

thousand €	Carrying amount Sept. 30, 2022	*Cash flows within 1 year*	*Cash flows between 2 and 5 years*	*Cash flows of more than 5 years*
Lease liabilities	4,120	2,428	1,813	-
Trade accounts payable	43,125	43,063	62	-
Derivative financial liabilities not qualifying for hedge accounting	1,913	1,890	23	-
Derivative financial liabilities qualifying for hedge accounting	1,172	927	245	-
Other financial liabilities	4,407	4,407	-	-

Cash flows from derivatives are offset by cash flows from hedged underlying transactions, which have not been considered in the analysis of maturities. If cash flows from the hedged underlying transactions were considered, the cash flows shown in the table would decrease.

Sensitivity analysis

Market risk is the risk that fair values or future cash flows of non-derivative or derivative financial instruments will fluctuate due to changes in risk factors. Among market risks relevant to the Group are foreign currency, procurement (commodity price), and especially raw material price risks. Associated with these risks are fluctuations in income, equity and cash flow.

The results and figures identified through sensitivity analyses represent hypothetical, future-oriented data that can differ from actual outcomes because of unforeseeable developments in financial markets. Non-financial or non-quantifiable risks, such as business risks, are not considered.

Foreign currency risk exposure

Foreign currency hedging is used to fix prices on the basis of hedging rates as protection against any unfavourable exchange rate fluctuations in the future. Hedging periods are generally based on the maturities of underlying transactions. Foreign currency derivative contracts usually have maturities of twelve months or less but can also be up to six years in single exceptional cases.

The US dollar is the only relevant risk variable for sensitivity analyses under IFRS 7, as the vast majority of foreign currency cash flows occurs in US dollars. As hedging transactions are generally used to hedge underlying transactions, opposite effects in underlying and hedging transactions are almost entirely offset over the total period. Therefore, the currency risk exposure described results from hedging relationships with off-balance sheet underlying transactions, i.e., hedges of firm commitments and forecasted sales. Based on our analysis, the exposure to the US dollar as of September 30, 2022, 2021 and 2020 was as follows:

If the euro had been 10% stronger against the US dollar as of September 30, 2022, the earnings resulting from the measurement as of the balance sheet date would have been €1,265 thousand lower (September 30, 2021: €591 thousand higher, September 30, 2020: €66 thousand higher).

If the euro had been 10% weaker against the US dollar as of September 30, 2022, the earnings resulting from the measurement as of the balance sheet date would have been €1,418 thousand higher (September 30, 2021: €660 thousand lower, September 30, 2020: €96 thousand lower).

Interest rate risk

The Group is only exposed to a minor interest rate risk resulting from the cash pooling financed at arm's length.

20 Related Parties

These Consolidated Financial Statements include transactions between the Group and tk Group (tk AG and its direct and indirect subsidiaries, excluding the Group) and with IDN. tk Group is a related party, as tk AG controls the Group (cf. Note 1.1). IDN has a significant influence over the Group.

On August 4, 2022 tk Group, IDN and the Group signed a relationship agreement in which the parties desire, and see it in their best interest, to lay down in this agreement certain general principles for their future relationship, the areas they wish to co-operate in for the benefit of the Parties and the tk Group as a whole.

Transactions with tk Group

Based on a general service agreement tk IS AG provides the Group with general and administrative services such as tax, legal, controlling, accounting, IT or insurance on arm's length basis. The general service agreement also covers operational functions such as construction management, engineering, project management, quality management and R&D.

In conjunction with the IPO, the terms of the general service agreement between tk Group and the Group have been re-negotiated. Beginning from October 1, 2021 additional services historically not covered by the general service agreement, especially governance functions like internal audit services, tax statement preparation and handling as well as compliance services are provided to the Group. As such, costs historically charged to the Group differ from the costs that have been charged to the Group beginning from October 1, 2021 based on the re-negotiated terms. Therefore, the costs for service contracts for the twelve-month period ended September 30, 2022 are not comparable to prior periods, since additional services have been agreed. The new service agreements have a term of 12 months with a one-time, unilateral right of renewal for 12 months, in some cases, a two-time, unilateral right of renewal for 12 months. As of the balance sheet date the Group was in the process to prolong its service level agreements with tk Group (cf. Note 31 subsequent events).

In addition, supply and delivery agreements exist between the Group and tk Group. The Group is supplied by the tk Group and delivers to tk Group goods and services on a case-by-case basis.

Transactions with tk Group were as follows.

Service, supply and delivery agreements

thousand €	Sales			Supplies & Services		
	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022

Service, supply and delivery agreements with tk Group	8,471	17,142	24,553	22,459	28,811	37,500

Interest income and expense from cashpool

During the reporting periods, the Group was integrated into the cash pooling and cash management systems of tk Group. Cash pooling is largely centralized at tk AG and certain financing companies (i.e., Cashpool leaders). Relevant Cashpool leaders for thyssenkrupp nucera Group Entities are located in Germany (EUR), USA (USD) and China (CNY). The Group typically has excess liquidity which is transferred into the tk Group's cash pooling and cash management system on a regular basis; reference is also made to Note 9. Basis for the cash pooling system is the tk Group Operating Instruction Financing and the cash management agreement. The cash management agreement was concluded for an indefinite period of time. Group companies with bank accounts connected to an automatic cash pool system are required to communicate their financial requirements or surplus funds to the cash pool leader in order to ensure effective cash management. Financial receivables and liabilities from/due tk Group are presented without netting in the Consolidated Financial Statements. Cashpool balances are interest-bearing. Both, borrowings and deposits are subject to interest at a pre-defined base interest rate that is oriented on the money market (EURIBOR for Euro or LIBOR for foreign currencies, floored at 0%). In case of borrowings, a refinancing cost levy is charged on top of the base interest rate. This refinancing cost levy is based on the funding costs of tk AG and is determined on a quarterly basis. Interest income received from cashpool receivables are provided in Note 26.

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Interest income from cashpool with tk Group	1,125	477	1,076

The applicable weighted average interest rates for the most significant currencies were as follows.

	Borrowings			Deposits		
	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
EUR	0.6%	1.0%	1.0%	0.0%	0.0%	0.2%
USD	1.4%	1.8%	2.5%	0.8%	0.8%	1.7%
CNY	3.5%	3.2%	3.2%	1.6%	1.6%	1.6%

Derivative financial instruments

The Group's hedging activities for the Germany segment are performed on an arm's length basis via tk AG. The consideration is based on the normal market rates. The related receivables and payables are disclosed in other financial assets (cf. Note 9) and other financial liabilities (cf. Note 15) in lines "Derivatives not qualifying for hedge accounting".

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Net gains (losses) from hedging activities performed by tk AG for the Group	(1,099)	(80)	929

The following table shows the notional amounts and fair values of derivative financial instruments entered into by the Group with tk AG:

DERIVATIVE FINANCIAL INSTRUMENTS (Hedging of foreign currency risk)						
thousand €	Notional amount as of Sept. 30, 2020	Carrying amount as of Sept. 30, 2020	Notional amount as of Sept. 30, 2021	Carrying amount as of Sept. 30, 2021	Notional amount as of Sept. 30, 2022	Carrying amount as of Sept. 30, 2022
Assets						
Foreign currency derivatives that do not qualify for hedge accounting						
Foreign currency contracts US Dollar	6,098	276	8,106	304	13,281	1,324
Foreign currency contracts Other	1,973	8	2,278	64	97	1
Total	**8,071**	**284**	**10,384**	**368**	**13,378**	**1,325**
Liabilities						

Foreign currency derivatives that do not qualify for hedge accounting						
Foreign currency contracts US Dollar	8,403	195	9,762	291	2,361	319
Foreign currency contracts Other	2,730	40	5,344	110	6,281	112
Total	**11,133**	**235**	**15,106**	**401**	**8,641**	**431**

The volumes of hedging transactions entered into in the respective year are as follows.

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Sell Amount	62,968	31,687	19,351
Buy Amount	75,720	27,789	2,622

License fee

Based on a licensing agreement tk Group in the past granted the Group the non-exclusive right to use the thyssenkrupp corporate brand. For this license the Group paid a license fee to tk Group on an annual basis ("tk Group trademark fee"). The basis for the fee calculation was the Group's sales, excluding sales to tk Group. The license fee applied was variable and based on the Group's Adjusted EBIT margin. In fiscal year 2021/2022 tk Group and the Group signed a new licensing agreement (the "New Licensing Agreement") that allows the Group the royalty free use of the "thyssenkrupp" and "nucera" trademarks. The New Licensing Agreement has been signed on June 29, 2022. The New Licensing Agreement is royalty free and time-limited with an option to renew but can be terminated by each party at any time with a six months' prior notice. The New Licensing Agreement reflects both parties' expectation of mutual benefits from the combined use of the "thyssenkrupp" and "nucera" trademark to be balanced over the expected lifetime of the contract: nucera benefits from the use of the trademark thyssenkrupp by continuous association with thyssenkrupps reputation as a leading engineering company and reliable business partner with a global reach and network. thyssenkrupp benefits from the combined use of the trademark nucera associated with nucera's AWE business, representing a key technology and innovation in the green transformation of the industry. According to the New Licensing Agreement, tk Group is the legal owner and the Group is the beneficial owner of the trademark "nucera". As the beneficial owner, the Group has to bear all costs in relation to the "nucera" trademark, including but not limited to registration, communicative introduction, maintenance, prosecution and monitoring. As the "nucera" trademark does not represent an intangible asset in accordance with IAS 38 all related costs will be expensed as incurred. In case of the termination or expiration of the New Licensing Agreement the Group has the right to acquire the "nucera" trademark free of any consideration.

With conclusion of the New Licensing Agreement the existing licensing agreement with tk Group for the right of use for the "thyssenkrupp" trademark has been terminated. In this context claims to receive a trademark fee for the period between January 1, 2022 and the signing date of the New Licensing Agreement amounting to €2,354 million, which had been recognized as an expense and accrued as a liability from the Group's perspective, have been waived on June 29, 2022, by tk Group. This waiver represents a shareholder transaction and was recognized as a contribution to equity.

Given the New Licensing Agreement is royalty free, no license fees have been or will be recognized in the Consolidated Financial Statements thereunder.

The license fees recognized in the Consolidated Statement of Income under the terminated licensing agreement are as follows:

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
tk Group trademark fee	4,292	4,417	3,538

Transactions with thyssenkrupp nucera Management AG

The General Partner will be reimbursed for any expenses incurred in connection with the fulfilment of its duties, including the remuneration of the General Partner's members of the Management Board and General Partner's Supervisory Board pursuant to Section 8 (4) of the Articles of Association. In addition, in return for assuming the management of the Company and its liability exposure, the General Partner will receive an annual compensation of €5 thousand pursuant to Section 8 (5) of the Articles of Association.

As of September 30, 2022, the reimbursed expenses amounted to €1,530 thousand (as of September 30, 2021: €0 thousand, as of September 30, 2020: €0 thousand). As of September 30, 2022, a corresponding liability amounting to €921 thousand (as of September 30, 2021: €0 thousand, as of September 30, 2020: €0 thousand) is included within the table "balances due to tk Group" in line "tk Group other transaction". As of September 30, 2022, a receivable amounting to €1,674 thousand (as of September 30, 2021: €0 thousand, as of September 30, 2020: €0 thousand) is included within the table "balances from tk Group" in line "tk Group other transactions".

Guarantees

In connection with the Group's New Build and large-scale Service projects tk Group issues guarantees to the Group's customers. The guarantees comprise of group liability declarations and bank guarantees and are issued based on tk Group's financial policies and the special terms and conditions for the guarantee business. The conditions for the guarantees are variable, derived from tk Group's creditworthiness and determined at arm's length basis. Guarantees issued by tk Group amounted to €1,355,289 thousand as of September 30, 2022 (September 30, 2021: €179,064 thousand; September 30, 2020: € 201,171 thousand).

Transactions with IDN

IDN is an innovative procurer and provider of electrodes, key components such as electrolysis cells and elements, and electrochemical coating solutions, all of which are widely used across the Group's products. As such IDN acts as a critical procurer and supplier to the Group.

Transactions with IDN were as follows.

thousand €	Sales			Supplies & Services		
	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Service, supply and delivery agreements with IDN	697	796	1,387	64,413	85,841	129,125

Balances due to/from tk Group and IDN

thousand €	Assets			Liabilities		
	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
tk Group cashpool	159,687	186,840	252,567	188	-	
Foreign currency derivatives with tk Group	284	368	1,325	235	400	431
tk Group other transactions	3,123	2,539	4,589	24,447	22,798	17,683
IDN	2	530	13,045	1,341	9,327	10,876

The IDN transactions include mainly prepayments for inventory from the China segment. The outstanding balances as of each reporting date are unsecured and interest free except for the interest-bearing cashpool receivable due from tk Group. Settlement of these transactions occurs in cash. Except for the guarantees issued by tk Group to the Group's customers, there were no other guarantees provided or received for any related party receivables or payables.

Lease contracts

The Group has entered into lease contracts with tk Group for office spaces in Germany as well as cars. The lease contracts with IDN are related to office spaces in Italy, Japan and the US. The lease contracts are on an arm's length basis.

thousand €	Right of use assets			Lease liabilities		
	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
tk Group	408	213	241	472	228	255
IDN	2,027	1,644	1,179	2,044	1,670	1,207

Transactions with key management personnel

Key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the Group, directly or indirectly, in particular members of the Management Board, the Supervisory Board.

The members of the Management Board comprising of Dr. Werner Ponikwar (Chief Executive Officer since July 1, 2022), Denis Krude (CEO until June 30, 2022, Chief Operations Officer since July 1, 2022), Dr. Arno Pfannschmidt (Chief Financial Officer) and Fulvio Federico (Chief Technology Officer) represent key management personnel of the Group.

Compensation of the members of the Management Board is as follows:

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Short-term benefits	590	787	1,150
Long-term benefits			
MTI program (cf. Note 28)	0	20	87
LTI program (cf. Note 28)	28	37	326
Post-employment benefits	140	142	122
Total	**758**	**986**	**1,685**

Liabilities payable to the members of the Management Board only exist with respect to their compensation and are as follows:

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Short-term benefits	139	300	263
Long-term benefits			
MTI program (cf. Note 28)	0	20	0
LTI program (cf. Note 28)	54	91	110
Post-employment benefits	2,362	2,424	1,668
Total	**2,555**	**2,835**	**2,041**

Short-term benefits comprise of fixed compensation, annual bonus, and compensation for company cars.

Post-employment benefits comprise of pension benefits granted to the members of the Management Board, in accordance with the provisions included in the individual employment contracts. The two German board members are eligible to pension benefits in accordance with plan rules stipulated by "Essener Verband". The plans represent defined benefit plans and are either designed as career-average plan or contribution-based plan granting benefits in case of retirement, disability or death. In case of an insured event the benefits are paid as annuities.

For the third board member the group provides statutory severance benefits ("Trattamento di fine rapporto" - TFR) complemented by special termination benefits for executives in Italy. Both plans are organized via outside pension funds and represent defined contribution plans. In either case the benefits are paid as a lump sum.

A special payment to three members of the Management Board in connection with the IPO preparation efforts before the transfer of the employment contracts to thyssenkrupp nucera Management AG and the implementation of the new remuneration system has been made by the Group.

Compensation attributable to members of the Supervisory Board comprised in fiscal year 2021/2022 base compensation and additional compensation for committee work and amounted to €436 thousand (2020/2021: €0 thousand, 2019/2020: €0 thousand) including meeting fees.

No advances or loans have been granted to key management personnel in the reporting period nor in the previous years.

21 Segment reporting

Segment reporting is prepared in accordance with IFRS 8 based on the management approach. This approach corresponds to the internal organisational and management structure as well as reporting to the Management Board as the Chief Operating Decision Maker (CODM). At thyssenkrupp nucera Group the operating segments are represented by the individual legal entities (cf. Note 3) and their respective country of incorporation:

Legal Entity	Operating Segment	Disclosures in Segment Reporting
thyssenkrupp nucera AG & Co. KGaA	Germany	Germany
thyssenkrupp nucera Italy S.R.L.	Italy	Italy
thyssenkrupp nucera Japan Ltd.	Japan	Japan
thyssenkrupp nucera (Shanghai) Co. Ltd	China	China

thyssenkrupp nucera USA Inc.	USA	Rest of World (RoW)
thyssenkrupp nucera (Australia) Pty. Ltd.	Australia	Rest of World (RoW)
thyssenkrupp nucera Arabia for Contracting Limited LLC	Saudi Arabia	Rest of World (RoW)

While technology-related parts are procured centrally by the Germany segment (BM 2.7 Single element technology) or the Japan segment (BiTAC filter press technology), each segment is responsible for its own activities, operates largely independently within the Group and has full responsibility for its operations and operating results. The legal entities' managing directors directly report to the thyssenkrupp nucera Group Management Board. The thyssenkrupp nucera Group Management Board regularly reviews the operating results of the segments to assess their performance and make decisions about resources to be allocated to each segment.

All segments of thyssenkrupp nucera Group generally cover the Group's product portfolio and provide comprehensive solutions for electrolysis plants to customers in regions they are responsible for.

The **Germany** segment mainly serves clients located in Europe and Middle East and offers the entire product group portfolio covering New Build CA, Service and New Build AWE which is expected to grow significantly. The Germany segment is driving the ramp-up of the New Build AWE product group. The Germany segment is also responsible for research and development activities, identifying business opportunities across different markets and industries and rolling out new products and product groups to the other segments. The Germany segment manages the BM 2.7 Single element technology and centrally procures technology-related parts for the other segments.

The **Italy** segment offers its New Build CA and Service products to a wide range of clients located in different geographical areas, primarily in Middle East and North Africa (MENA) as well as Sub-Saharan Africa, South America and in the Commonwealth of Independent States (CIS).

The segment is primarily using the BM 2.7 Single element technology. The New Build AWE business is developing.

The **Japan** segment offers its New Build CA and Service products to clients primarily concentrated in the Asia-Pacific (APAC) area. The segment is primarily using the BiTAC filter press technology. The New Build AWE business is developing. The Japan segments owns the BiTAC filter press technology and centrally procures technology-related parts for the other segments.

The **China** segment has established a clear focus on clients in the local Chinese market, offering New Build CA and Service products and predominately applying BiTAC filter press technology. The New Build AWE business is developing and considered a high priority.

The **RoW** segment combines financial information of all other operating segments that are not reportable individually, i.e., the Group's operating segments in the USA and the newly established Nucera companies representing operating segments in Australia and Saudi Arabia (the new established companies are in the ramp-up phase and therefore do not have any significant business activities for the period ended September 30, 2022). It primarily covers operations with clients in the US market as well as with clients located in several other regions in the Americas, such as Canada and Mexico. The segment primarily offers Service products by employing both, the BiTAC filter press technology and BM 2.7 Single element technology. The AWE business is developing and considered a high priority.

Consolidation of the segments sales and results contains the elimination of intercompany sales and profits.

The accounting principles for the segments are the same as those described for the Group in the summary of significant accounting principles. Intersegment pricing is determined on an arm's length basis.

Management decisions are primarily taken on the key performance indicators – sales, income from operations, adjusted EBIT - described below:

Sales is a key performance indicator used to measure performance of the operating segments. Sales help measure the viability and the growth potential of the different operational segments while also providing resources needed to spur continual growth and assessing performance of the business.

thyssenkrupp nucera Group's key earnings performance indicator is **Income from operations**. It provides information on the profitability of segments and contains all elements of the income statement relating to operating performance.

Adjusted EBIT (Earnings Before Interest and Taxes) is Income from operations adjusted for special items (e.g., restructuring expenses, impairment losses/impairment reversals and other non-operating expenses and income) as well as the tk Group trademark fee. It is considered more suitable than **Income from operations** for comparing operating performance over several periods in case there are significant non-recurring items (special items).

Sales are allocated to the segments (countries) based on where the sales have been originated.

thousand €	Germany	Italy	Japan	China	RoW	Reconciliation/ Consolidation	Group
For the fiscal year ended Sept. 30, 2020							
Sales (external)	125,744	31,367	36,436	43,831	16,870	-	254,247
Sales (internal)	14,096	1,965	21,754	694	169	(38,678)	-
Total Sales	**139,840**	**33,332**	**58,190**	**44,525**	**17,039**	**(38,678)**	**254,247**
Income from operations	14,749	5,132	3,006	2,909	556	394	26,746
Adjusted EBIT	16,325	6,182	3,550	3,623	969	394	31,043
Thereof depreciation	*912*	*577*	*1,164*	*547*	*93*	*-*	*3,293*

thousand €	Germany	Italy	Japan	China	RoW	Reconciliation/ Consolidation	Group
For the fiscal year ended Sept. 30, 2021							
Sales (external)	176,031	40,955	38,754	45,244	18,512	-	319,496
Sales (internal)	12,173	1,090	15,725	692	155	(29,835)	-
Total Sales	**188,204**	**42,045**	**54,479**	**45,936**	**18,667**	**(29,835)**	**319,496**
Income from operations	8,951	6,841	5,399	3,816	1,676	216	26,899
Adjusted EBIT	11,476	7,773	5,788	4,298	1,795	216	31,346
Thereof depreciation	*942*	*503*	*1,060*	*562*	*87*	*-*	*3,154*

thousand €	Germany	Italy	Japan	China	RoW	Reconciliation/ Consolidation	Group
For the fiscal year ended Sept. 30, 2022							
Sales (external)	216,881	29,202	41,236	63,251	32,575	-	383,145
Sales (internal)	18,705	1,801	20,160	1,293	316	(42,275)	-
Total Sales	**235,586**	**31,003**	**61,396**	**64,544**	**32,891**	**(42,275)**	**383,145**
Income from operations	(10,951)	4,413	8,107	7,122	1,553	(1,427)	8,817
Adjusted EBIT	(4,156)	5,334	8,560	7,651	1,871	(1,427)	17,833
Thereof depreciation	*1,311*	*391*	*976*	*631*	*96*	*-*	*3,405*

Reconciliation Adjusted EBIT to Income before tax

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Adjusted EBIT as presented in segment reporting	31,043	31,346	17,833
Special Items:			
tk Group trademark fee (cf. Note 20)	(4,292)	(4,417)	(3,538)
Expenses incurred in connection with services relating to the preparation of the IPO	-	-	(5,455)
Other special items	(5)	(30)	(23)
Total special items	**(4,297)**	**(4,447)**	**(9,016)**
Income from operations	**26,746**	**26,899**	**8,817**
+ Finance income	1,213	555	3,082
– Finance expense	(385)	(739)	(1,288)
Income before tax	**27,574**	**26,715**	**10,611**

In fiscal year 2021/2022 16.2% (2020/2021: 12.6%, 2019/2020: 0.5%) of total Group sales were achieved by one major customer. In fiscal year 2021/2022 the second and third largest customer accounted for 7.3% (2020/2021: 0.9%, 2019/2020: 0%) and 7.0% (2020/2021: 12.0%, 2019/2020: 8.1%) of total Group sales, respectively. Sales from major customers are all included within the Germany segment.

The following table discloses the amount of revenues from external customers, broken down by location of the customers.

Thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Saudi Arabia	15,004	62,247	98,293
China	47,091	38,355	69,929
USA	13,401	21,582	42,264
Germany	46,102	31,734	38,430
Spain	30,078	32,781	27,167
Other	102,571	132,797	107,062
Total	**254,247**	**319,496**	**383,145**

External Sales by Electrolysis Technology

thousand €	**Chlor-Alkali Electrolysis - CA**	**Alkaline-Water Electrolysis - AWE**	**Group**
Year ended Sept. 30, 2020	253,203	1,044	**254,247**
Year ended Sept. 30, 2021	314,578	4,918	**319,496**
Year ended Sept. 30, 2022	332,397	50,748	**383,145**

Non-Current Assets by Segments

thousand €	Germany	Italy	Japan	China	RoW	Group
Non-current assets (intangible assets, property, plant and equipment and other non-financial assets) (location of assets)						
Sept. 30, 2020	32,749	8,992	18,109	13,484	1,302	74,636
Sept. 30, 2021	35,237	8,464	15,801	13,790	1,230	74,522
Sept. 30, 2022	29,257	8,250	15,681	15,390	10,656	79,234

For sales split by regions refer to Note 22.

22 Sales

Sales, including sales from contracts with customers, are presented below:

thousand €		Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Sales category	**Revenue recognition method**			
Sales from sale of finished products	Point in time	37,067	35,282	53,667
Sales from sale of merchandise	Point in time	5,172	5,806	7,309
Sales from rendering of services	Over time	85,750	119,516	150,961
Sales from construction contracts	Over time	126,258	158,892	171,208
Total		**254,247**	**319,496**	**383,145**

Sales from contracts with customers by region were as follows:

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Europe	93,146	95,014	90,775
North America	20,577	21,398	44,029
South America	5,310	6,639	8,013
Asia / Pacific	34,952	36,265	34,713

Greater China	67,852	74,302	76,747
India	8,501	17,168	18,219
Middle East & Africa	23,909	68,710	110,649
Total	**254,247**	**319,496**	**383,145**

In presenting information for geographical areas, the allocation of sales is based on the location of the construction site of each project. Segment assets and capital expenditures are presented based on the location of the assets. Capital expenditures are presented in line with the definition of the cash flow statement.

In the fiscal year ended September 30, 2022, of the sales from contracts with customers, €243,636 thousand (2021: €192,680 thousand, 2020: €156,894 thousand) results from long-term contracts and €139,509 thousand (2021: €126,816 thousand, 2020: €97,353 thousand) from short-term contracts.

23 Functional Cost

Research and development costs

The future competitiveness of the Group is guaranteed through sustained development of new products, applications, and processes. This is also reflected in the Group's research and development cost amounting to €16,030 thousand in fiscal year 2021/2022 (2020/2021: €10,746 thousand, 2019/2020: €6,773 thousand). Research and development are largely centralized and mainly incurred in the Germany segment, serving as pioneer with regards to the increasing AWE technology. AWE technology related research and development cost increased from €6,800 thousand in fiscal year 2020/2021 to €11,255 thousand in the fiscal year 2021/2022 (€2,600 thousand in fiscal year 2019/2020) and are the main driver of the overall research and development costs increase. Research and development costs relating to the CA technology remained largely stable in all three fiscal years.

Selling expenses

Selling expenses includes personnel, service and material costs related to the business development and sales process, particularly the preparation of any plant projects or service order proposals, including marketing and other costs related to the functional area of sales.

The Group's selling expenses increased by €1,206 thousand, or 8.4%, from €14,321 thousand in the fiscal year 2020/2021 to €15,527 thousand in the fiscal year 2021/2022. In the fiscal year 2020/2021 the Group's selling expenses increased by €3,874 thousand, or 37.1%, from €10,447 thousand in fiscal year 2019/2020 to €14,321 thousand in the fiscal year 2020/2021. Selling expenses are highly correlated to research and development cost, as the main increase is primarily driven by AWE project bids, including proposal and pre-engineering costs, mainly incurred in Germany.

Selling cost also include impairment losses and reversals regarding trade receivables and contract assets in line with the Group's accounting policies. In fiscal year 2021/2022 the change of the valuation allowance amounts to an expense of €55 thousand (2020/2021: expense of €139 thousand, 2019/2020: expense of €146 thousand).

General and administrative expenses

General and administrative expenses include costs incurred in operating and administering the business and consist primarily of expenses for salaries of non-project-related personnel and headquarters expenses as well as other costs related to the functional area of general administration. The Group's general and administrative expenses increased by €15,414 thousand, or 118.9%, from €12,966 thousand in fiscal year 2020/2021 to €28,380 thousand in fiscal year 2021/2022. In the fiscal year 2020/2021 the Group's general and administrative expenses increased by €2,299 thousand, or 21.6%, from €10,667 thousand in fiscal year 2019/2020 to €12,966 thousand in fiscal year 2020/2021. The increase was primarily driven by the increase in personnel and advisory expenses in Germany related to the ramp-up of the AWE business.

Expenses by nature

For additional information on the nature of expenses, including employee benefits expense (cf Note 29) and material expenses (cf. Note 6), refer to the respective reference. Depreciation and amortisation expenses are as follows:

thousand €	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
Amortization (cf. Note 4)	614	528	479
Depreciation (cf. Note 5)	2,680	2,625	2,926
Total	**3,294**	**3,153**	**3,405**

24 Other income

Other income includes all operating income which is not included in or attributable to sales and is composed of the following categories:

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Government Grants	-	-	2,218
Other miscellaneous	31	367	94
Foreign exchange gains	449	249	131
Income from derivatives not qualifying for hedge accounting	426	288	1,306
Total	**906**	**904**	**3,749**

Government grants relate to research & development projects. They are recognized in profit or loss over the period necessary to match them with the costs that they are intended to compensate. There are no unfulfilled conditions or other contingencies attaching to these grants.

25 Other expenses

Other expenses include all operating expenses which are not included in or attributable to the functional categories and is composed of the following categories:

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
tk Group trademark fee (cf. Note 20)	4,292	4,417	3,538
Foreign exchange losses	215	200	1,544
Losses from disposals	4	27	20
Other miscellaneous expenses	282	32	1,255
Expenses from derivatives not qualifying for hedge accounting	1,783	403	-
Total	**6,576**	**5,079**	**6,357**

In fiscal year 2021/2022 other miscellaneous expenses contain a possible claim amounting to €1,241 thousand unrelated to any contractual performance obligation (cf. Note 13).

26 Finance income/(expense), net

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Interest income from cashpool with tk Group (Note 20)	1,125	477	1,076
Other finance income	88	78	2,007
Finance income	**1,213**	**555**	**3,083**
Interest expense from leases liabilities	(163)	(123)	(96)
Net interest cost of pensions and similar obligations	(40)	(52)	(76)
Other finance expenses	(182)	(564)	(1,117)
Finance expense	**(385)**	**(739)**	**(1,289)**
Total	**828**	**(184)**	**1,794**

Other finance income and expenses comprise of foreign currency valuation relating to intercompany financing in connection with the Group’s project business and to a minor extent also default interest.

27 Income taxes

Income tax expense of the Group consists of the following:

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Current income tax expense	4,303	4,037	8,144
Deferred income tax expense	1,586	1,061	(4,153)
Withholding tax expenses (direct cash-out)	17	324	582
Total	**5,906**	**5,422**	**4,573**

The components of income taxes recognized in total equity are as follows:

thousand €	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Income tax expense as presented on the statement of income	5,906	5,422	4,573
Income tax effect on other comprehensive income	(147)	267	883
Total	**5,759**	**5,689**	**5,456**

The income tax effect recognized in other comprehensive income primarily relates to accrued pensions and similar obligations.

As of September 30, 2022, taxable temporary differences from undistributed profits of subsidiaries in the Group for which no deferred tax liability is recognized, as such profits are not to be distributed in the foreseeable future, amount to €2,057 thousand (2021: €1,753 thousand, 2020: €1,638 thousand).

Components of the deferred tax assets (DTA) and deferred tax liabilities (DTL) are as follows:

thousand €	Sept. 30, 2020		Sept. 30, 2021		Sept. 30, 2022	
	DTA	DTL	DTA	DTL	DTA	DTL
Deferred income taxes on non-current items						
Intangible assets	0	1,160	0	1,005	246	45
Property, plant and equipment	4	321	17	187	76	328
Financial assets	45	-	24	-	203	-
Other assets	-	-	-	-	-	-
Accrued pension and similar obligations	2,216	479	2,134	717	1,542	793
Other provisions	569	9	750	14	478	11
Other liabilities	357	-	33	-	160	63
Deferred income taxes on current items						
Inventories	32,105	641	58,339	468	89,221	50
Other assets	-	6,036	-	289	1,575	-
Other provisions	770	6,046	1,081	7,347	813	8,674
Other liabilities	3,112	23,757	2,677	58,877	4,101	93,640
Valuation allowance – temporary differences	-	-	-	-	-	-
Subtotal	**39,178**	**38,449**	**65,055**	**68,904**	**98,415**	**103,604**
Tax loss carried forward	-	-	3,285	-	7,777	-
Valuation allowance – tax loss carried forward etc.	-	-	-	-	-	-
Subtotal	**-**	**-**	**3,285**	**-**	**7,777**	-
Gross amount before offsetting	**39,178**	**38,449**	**68,340**	**68,904**	**106,192**	**103,604**
Offsetting	(34,917)	(34,917)	(61,297)	(61,297)	(96,200)	(96,200)
Balance sheet amount	**4,261**	**3,532**	**7,043**	**7,607**	**9,992**	**7,404**

As of September 30, 2022, the Group reported accumulated deferred tax losses of €105 thousand (2021 gain: €779 thousand, 2020 gain: €1,046 thousand) on items recognized outside profit or loss, mainly from accrued pension and similar obligations, in equity.

As of September 30, 2022, based on the existing tax losses carried forward, the following deferred tax assets are recognized as these are supported by substantial evidence for sufficient future taxable income: €7,777 thousand (2021: €3,285 thousand, 2020: €0 thousand). According to tax legislation as of September 30, 2021 the tax losses may be carried forward indefinitely and in unlimited amounts.

The German corporate income tax law applicable for 2021 / 2022 sets a statutory income tax rate of 32.4% (2020/2021: 32.2%, 2019/2020: 32.3%). The applicable tax rates for companies outside Germany range from 21% to 30,6% (2020/2021: 25.0% to 30.6%, 2019/2020: 25.0% to 30.6%).

thousand €	Year ended Sept. 30, 2020	in %	Year ended Sept. 30, 2021	in %	Year ended Sept. 30, 2022	in %
Expected income tax expense	8,902	32.3%	8,602	32.2%	3,434	32.4%
Tax rate differentials to the German combined income tax rate	(452)	(1.6%)	(870)	(3.3%)	(634)	(6.0%)
Changes in tax rates or laws	-	0.0%	-	0.0%	-	0.00%
Change in valuation allowance	(4)	(0.0%)	(2)	(0.0%)	(78)	(0.7%)
Permanent items	(2,198)	(8.0%)	(2,842)	(10.6%)	1,768	16.7%
Non-creditable withholding taxes	-	0.0%	-	0.0%	-	0.00%
Tax expense related to prior periods	(435)	(1.6%)	251	0.9%	145	1.4%
Others	93	0.3%	284	1.1%	(62)	(0.6%)
Income tax expense as presented on the statement of income	**5,906**	**21.4%**	**5,422**	**20.3%**	**4,573**	**43.1%**

28 Management Incentive Plans

The Group currently has the following management incentive plans, comprising plans implemented at the Company level and, exclusively with respect to member of the Management Board at thyssenkrupp nucera Management AG level.

Long-term incentive program

The long-term incentive plan (LTI) is a long-term oriented compensation component under which stock rights of the ultimate parent of the Company (i.e., tk AG) were issued to eligible participants until fiscal year 2019/2020. Plan participants are Management Board members and several other selected executive employees of the Group. As of September 30, 2022, no stock rights were issued of the LTI (September 30, 2021: 13,437 stock rights; September 30, 2020: 19,184 stock rights).

The number of stock rights issued will be adjusted at the end of the respective three-year tk AG Value Added (tkVA) performance period based on the average tkVA over the period compared to a tkVA target value set in advance. The amount of payment for an instalment is calculated by multiplying the adjusted number of stock rights by the average price of tk AG's stock in the first three months after the end of the tkVA performance period, with the result that the term of each instalment extends over four fiscal years in total.

The LTI is exclusively settled in cash after the end of the respective performance period. The fair value of these rights is calculated on the date of grant and on each balance sheet date and recognized as an expense on a straight-line basis over the vesting period with a corresponding increase in provisions for other non-current employee benefits. The provision is remeasured at each balance sheet date and at settlement date. Any changes in the fair value of the provision are recognized in the Consolidated Statement of Income.

To determine the fair value of the stock rights used to calculate the pro-rata liability as of the balance sheet date forward prices of the tk AG stock are calculated in consideration of existing caps. The forward calculation is carried out for predefined periods (averaging periods) using the tk AG stock price and the euro interest rate curve as of the balance sheet date and the dividends assumed to be paid until the stock rights reach maturity.

In conjunction with the transfer of the Management Board members' employment agreements to thyssenkrupp nucera Management AG the instalments of the LTI granted to members of the Management Board in the fiscal year 2019/2020 were paid in March, respectively June 2022, at its initially granted base amount.

In fiscal year 2021/2022 the group recorded a total expense of €0 thousand from the LTI (2020/2021: expense of €47 thousand; 2019/2020: expense of €31 thousand). The total liability included in provisions for employee benefits arising from the LTI amounts to €0 thousand as of September 30, 2022 (September 30, 2021: €129 thousand; September 30, 2020: €106 thousand).

Mid-term incentive program (MTI)

In order to support the Group's growth, thyssenkrupp nucera Group has designed and implemented a Group's specific mid-term incentive (MTI) scheme for members of the Management Board and its executive personnel effective as of October 1, 2020. The incentive scheme establishes a direct link between the remuneration of the entitled personnel and financial and non-financial key performance indicators of the Group's companies which have to be achieved over a three-year performance period. The MTI is based on following financial key performance indicators:

- Adjusted EBIT (Performance component)
- Order intake volume (Growth component)
- Order intake Margin (in %)

In conjunction with the transfer of the Management Board members' employment agreements to thyssenkrupp nucera Management AG the MTI was settled as follows:

- The instalments of the mid-term incentive program (MTI) granted to members of the Management Board in the fiscal year 2020/2021 were paid out in March, respectively June 2022, assuming a 100% achievement of the financial and non-financial goals agreed to be achieved over a three-year performance period (i.e., at its initially granted base amount).
- 5/12 of the instalments of the MTI that would have been granted to members of the Management Board in the fiscal year 2021/2022 was paid out in March, respectively June 2022, assuming a 100% achievement of the financial and non-financial goals over a three-year performance period.

The provision for employee benefits comprises benefits accrued according to MTI program for the executive personnel as of September 30, 2022 in the amount of €184 thousand (September 30, 2021: €71 thousand, September 30, 2020: €0 thousand).

Short-term incentive program (STI)

The bonus system for non-tariff employees comprises the elements company targets (60% share) and individual targets (40% share). Each target from the two elements is limited to a maximum of 200% of the share of the target bonus. The total bonus amount is therefore limited to a maximum of 200% of the target bonus. The bonus system applies worldwide to all Nucera executives specified in the bonus agreement.

In conjunction with the transfer of the Management Board members' employment agreements to thyssenkrupp nucera Management AG the STI was settled as follows:

- 5/12 of the short-term benefits granted to members of the Management Board in the fiscal year 2021/2022 was paid out in March respectively June 2022, in accordance with the latest available estimation of financial and non-financial target achievement, as of February 28, 2022, based on the annual targets agreed to be achieved in fiscal year 2021/2022.

Management Incentive Plans at thyssenkrupp nucera Management AG level

In connection with the change of the legal form of the Company the Management Board members' employment agreements for the three board members were transferred to thyssenkrupp nucera Management AG. A new Management Board remuneration system has been implemented at the level of thyssenkrupp nucera Management AG, replacing the system in place at the Group before the transfer. All remuneration cost of the Management Board of thyssenkrupp nucera Management AG will be charged to the Company in the future (cf. Note 20), including any expenses in connection with the following management incentive plans:

New Long-term incentive program (New LTI)

Effective March 2022 thyssenkrupp nucera Management AG has contractually committed to grant a New LTI instalment for fiscal year 2021/2022 that will be issued after the IPO. The new LTI instalment amounts to a 7/12 share of the amount that would have been granted if the New LTI had been issued effective October 1, 2021. The New LTI has a performance period of four years and is granted in annual installments. At the beginning of each installment, a certain number of virtual shares is allocated on a provisional basis to each board member. This number is calculated by dividing the annual gross target amount of the LTI for each board member by the arithmetic mean of the Company's share closing price over the last 30 stock exchange trading days before the start of the fiscal year for which the respective new LTI installment is issued. The final number of virtual shares at the end of the four-year performance period depends on the target achievement with regard to the relative Total Shareholder Return (TSR) of the Company compared to the Solactive Hydrogen Economy Index NTR. The final number of virtual shares is subsequently converted into the final payout amount using the share price at the end of the performance period, which is then paid out in cash. New LTI compensation is capped at 250% of the target amount.

New Short-term incentive program (New STI)

Effective March 2022 thyssenkrupp nucera Management AG has contractually committed to grant a new short-term incentive plan (STI) installment (new STI). The new STI compensation is based on company's financial targets Order Intake and EBITDA as well as individual performance targets (non-financial targets). The overall target achievement and resulting payout are capped at 200% of the respective target amount. Targets are set by the supervisory board based on annual planning and individual performance criteria for each fiscal year.

Both, New LTI and New STI provided to the Management Board have been implemented at thyssenkrupp nucera Management AG level. Since the Company receives the service and both companies are part of the tk Group, the New LTI qualifies as a share-based payment transaction among group entities. Share-based compensation of the Management Board is recognized as equity-settled share-based payments at Company level, i.e., over the period in which the service conditions are fulfilled (the vesting period). Reimbursement by the Company paid to thyssenkrupp nucera Management AG directly linked to share-based payments are considered as a deduction within equity of the Company.

Subject to a successful IPO, all Management Board members will be required to invest at least 25% of the net payout from the performance-related compensation components (New STI and New LTI) to purchase Company's shares until the shareholding requirement of one year's gross base salary is fulfilled. The Management Board members will be required to hold these shares for the duration of their appointment.

29 Additional disclosures on the statement of income

Personnel expenses included in the statement of income are comprised of:

	Year ended Sept. 30, 2020	Year ended Sept. 30, 2021	Year ended Sept. 30, 2022
Wages and salaries	23,498	27,805	40,935
Net periodic pension cost – defined benefit[1)]	903	926	1,273
Net periodic pension costs – defined contribution	160	151	267
Other expenses for pensions and retirements	4,250	5,236	6,676
Related fringe benefits	517	608	1,036
Total	**29,328**	**34,726**	**50,187**

1) Excluding net interest that is recognized as part of financial expenses.

The annual average number of employees for each local entity is as follows:

	Sept. 30, 2020	Sept. 30, 2021	Sept. 30, 2022
thyssenkrupp nucera Italy S.R.L.	60	62	63
thyssenkrupp nucera AG & Co. KGaA	121	143	240
thyssenkrupp nucera Japan Ltd.	88	87	84
thyssenkrupp nucera (Shanghai) Co. Ltd.	60	69	72
thyssenkrupp nucera USA Inc.	5	5	11
thyssenkrupp nucera (Australia) Pty. Ltd.	-	-	0
thyssenkrupp nucera Arabia for Contracting Limited LLC	-	-	0

30 Notes to the statement of cash flows

Cash and cash equivalents

The liquid funds considered in the Consolidated Statement of Cash Flows correspond with cash and cash equivalents as presented in the Consolidated Statement of Financial Position and comprises of the current cash accounts in bank and on hand. There are no restricted cash or cash collaterals as of September 30, 2022, 2021 and 2020.

The maximum exposure to credit risk on cash and cash equivalents is equal to the respective book value.

Non-cash investing activities

In the year ended September 30, 2022, a non-cash addition of €2,405 thousand (September 30, 2021: € 366 thousand, September 30, 2020: € 291 thousand) results from right-of-use assets according to IFRS 16.

Changes of liabilities from financing activities

The following tables show the changes of liabilities from financing activities including the changes of cash flows and non-cash items:

RECONCILIATION IN ACCORDANCE WITH IAS 7							
	Oct 1, 2019	Cash flows from financing activities	Operating cash flows	Non-cash changes			Sept. 30, 2020
thousand €		Principal portion	Interest paid	Currency differences	Additions	Other changes	
Lease liabilities	7,547	(1,988)	(163)	(173)	291	163	5,676
Total	**7,547**	**(1,988)**	**(163)**	**(173)**	**291**	**163**	**5,676**

RECONCILIATION IN ACCORDANCE WITH IAS 7							
	Sept. 30, 2020	Cash flows from financing activities	Operating cash flows	Non-cash changes			Sept. 30, 2021
thousand €		Principal portion	Interest paid	Currency differences	Additions	Other changes	
Lease liabilities	5,676	(2,028)	(123)	(36)	366	123	3,977
Total	**5,676**	**(2,028)**	**(123)**	**(36)**	**366**	**123**	**3,977**

RECONCILIATION IN ACCORDANCE WITH IAS 7							
	Sept. 30, 2021	Cash flows from financing activities	Operating cash flows	Non-cash changes			Sept. 30, 2022
thousand €		Principal portion	Interest paid	Currency differences	Additions	Other changes	
Lease liabilities	3,977	(2,346)	(96)	11	2,405	169	4,120
Total	**3,977**	**(2,346)**	**(96)**	**11**	**2,405**	**169**	**4,120**

Cash flows from financing activities

Withdrawals are driven by dividends or other capital distributions made to the Group's equity holders. The dividends paid in the fiscal years 2019/2020, 2020/2021 and 2021/2022 in amounts of € 10,897 thousand, € 3,085 thousand, and € 10,000 thousand related to distribution of the profit to equity holders of the Group. In addition, the cash flows from financing activities reflect a repayment of capital in the amount of € 40,500 thousand to the Group's direct shareholders tk IS AG and IDN made in the fiscal year 2019/2020 in accordance the regulations of the joint venture agreement between tk IS AG and IDN (cf. Note 11).

Leases in the statement of cash flows

In the statement of cash flows, the interest component of the leases carried in the balance sheet is shown under operating cash flows. The repayment component of leases is shown under cash flows from financing activities. In the year ended September 30, 2022, the total cash outflows of the group as a lessee in the statement of cash flows amounted to € 3,187 thousand (September 30, 2021: € 2,663 thousand, September 30, 2020: € 2,673 thousand). Expenses from short-term leases and from leases for low-value assets are shown under cash flows from operating activities (cf. Note 17).

31 Subsequent events

Economic conditions, market and business

Global economic activity is experiencing a continuing slowdown, with inflation higher than seen in several decades. The slowdown is significantly affected through the cost-of-living crisis, tightening financial conditions, Russia's invasion of Ukraine, and the lingering COVID-19 pandemic. The Federal Reserve and European Central Bank raise interest rates to fight inflation. In October, interest rates have been increased by 0.75 percentage points and further increases by 0.5 percentage point were announced in December. At Nucera market and economic conditions are monitored constantly to assess potential implications on the business, however the Groups considers its actual measures in place to address such risks as appropriate.

Other subsequent events

The Group is in the process to prolong its service level agreements with tk Group regarding general and administrative services such as tax, legal, controlling, accounting, accounting, IT or insurance, operational functions such as construction management, engineering, project management, quality management and R&D. The majority of such agreements between Nucera as client and tk Group companies as the service providers have been prolonged or are in the final stage of the prolongation process (with mostly the countersignature from the service provider pending) with effect to October 1st, 2022.

In October 2022, members of the Supervisory Board agreed to waive their compensation for the financial year 2021/22. This resulted in a reversal of provision in the amount of €345 thousand through profit or loss.

Dortmund, January 9, 2023

thyssenkrupp nucera Management AG, General Partner of thyssenkrupp nucera AG & Co. KGaA

Management Board

Dr. Werner Ponikwar	Denis Krude	Dr. Arno Pfannschmidt	Fulvio Federico