## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

Report on Form 6-K dated August 23, 2023

Commission File Number: 1-13546

## **STMicroelectronics N.V.**

(Name of Registrant)

WTC Schiphol Airport Schiphol Boulevard 265 1118 BH Schiphol Airport The Netherlands (Address of Principal Executive Offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F:

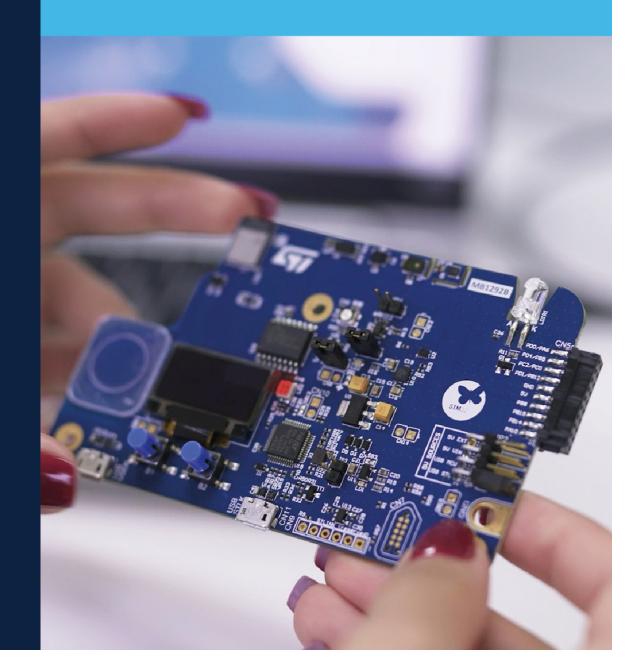
Form 20-F 🖂

Form 40-F 🗆

Enclosure: A press release dated August 23, 2023 announcing that STMicroelectronics has posted its IFRS 2023 Semi Annual Accounts, and the STMicroelectronics N.V. Semi Annual IFRS Report 2023.



# STMicroelectronics N.V. Semi Annual Report 2023



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## 1. Corporate overview

## 1.1. History and development of STMicroelectronics

STMicroelectronics N.V. ("ST" or "the Company") was formed and incorporated in 1987 as a result of the combination of the semiconductor business of SGS Microelettronica (then owned by Società Finanziaria Telefonica (S.T.E.T.), an Italian corporation) and the non-military business of Thomson Semiconducteurs (then owned by the former Thomson-CSF, now Thales, a French corporation). We completed our initial public offering in December 1994 with simultaneous listings on the Bourse de Paris (now known as "Euronext Paris") and the New York Stock Exchange ("NYSE"). In 1998, we also listed our shares on the Borsa Italiana S.p.A. ("Borsa Italiana").

We operated as SGS-Thomson Microelectronics N.V. until May 1998, when we changed our name to STMicroelectronics N.V. We are organized under the laws of The Netherlands, with our corporate legal seat in Amsterdam, The Netherlands, and our head offices at WTC Schiphol Airport, Schiphol Boulevard 265, 1118 BH Schiphol, The Netherlands. Our telephone number there is +31-20-654-3210. Our headquarters and operational offices are managed through our wholly owned subsidiary, STMicroelectronics International N.V., and are located at 39 Chemin du Champ des Filles, 1228 Planles-Ouates, Geneva, Switzerland. Our main telephone number there is +41-22-929-2929. Our agent for service of process in the United States related to our registration under the U.S. Securities Exchange Act of 1934, as amended, is Corporation Service Company, 80 State Street, Albany, New York, 12207. Our operations are also conducted through our various subsidiaries, which are organized and operated according to the laws of their country of incorporation, and consolidated by the Company.

## 1.2. Strategy and objectives

At ST, we are over 50,000 creators and makers of semiconductor technologies mastering the semiconductor supply chain with state-of-the-art manufacturing facilities. As an integrated device manufacturer, we work with more than 200,000 customers and thousands of partners to design and build products, solutions, and ecosystems that address their challenges and opportunities, and the need to support a more sustainable world. Our technologies enable smarter mobility, more efficient power and energy management, and the wide-scale deployment of internet of things ("IoT") and connectivity. We are committed to achieving our goal to become carbon neutral on scope 1 and 2 and partially scope 3 by 2027.

Our strategy focuses on long-term value creation for the Company and its affiliated enterprises and takes into account the short-, medium- and longer-term evolution of the markets we serve and the environment and opportunities we see. It stems from key long-term enablers: Smart Mobility, where we provide innovative solutions to help our customers make driving safer, greener and more connected for everyone; Power & Energy: our technology and solutions enable customers to increase energy efficiency everywhere and support the use of renewable energy sources; IoT and connectivity supporting the proliferation of smart, connected IoT devices with products, solutions and ecosystems to make development fast and easy for our customers.

We are focused on application areas which are expected to experience solid growth rates driven by broad, long-term trends in electronic systems. These trends require enablers such as autonomous systems, robotics, securely connected machines and personal devices, digitalization and electrification of automobiles and infrastructure, advanced communications equipment and networks and more power efficient systems. These enablers drive in turn the demand for the electronic components we develop and manufacture.

We are a global semiconductor company that designs, develops, manufactures and markets a broad range of products used in a wide variety of applications for the four end-markets we address: automotive, industrial, personal electronics and communications equipment, computers and peripherals. For the automotive and industrial markets we address a wide customer base, particularly in industrial, with a broad and deep product portfolio. In personal electronics and communications equipment, computers and peripherals we have a selective approach both in terms of the customers we serve, as well as in the technologies and products we offer, while leveraging our broad portfolio to address high-volume applications.



## **1.3.** Organizational structure

We are organized in a matrix structure with geographic regions interacting with product lines, both supported by shared technology and manufacturing operations and by central functions, designed to enable us to be closer to our customers and to facilitate communication among the research and development ("R&D"), production, marketing and sales organizations.

While STMicroelectronics N.V. is our parent company, we conduct our global business through STMicroelectronics International N.V. and also conduct our operations through service activities from our subsidiaries. We provide certain administrative, human resources, legal, treasury, strategy, manufacturing, marketing, insurance and other overhead services to our consolidated subsidiaries pursuant to service agreements for which we recover the cost.

## **1.4.** Products and activities

Our diverse product portfolio includes discrete and general purpose components, application-specific integrated circuits ("ASICs"), full-custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital and mixed-signal applications. It benefits from a unique, strong foundation of proprietary and differentiated leading-edge technologies.

We use all of the prevalent function-oriented process technologies, including complementary metal-on silicon oxide semiconductors ("CMOS"), bipolar and non-volatile memory technologies. In addition, by combining basic processes, we have developed advanced systems-oriented technologies that enable us to produce differentiated and application-specific products, including fully depleted silicon-on-insulator ("FD-SOI") technology offering superior performance and power efficiency compared to bulk CMOS, bipolar CMOS ("Bi-CMOS") and radio frequency silicon-on-insulator ("RF-SOI") for mixed-signal and high-frequency applications, as well as a combination of Bipolar, CMOS and DMOS, vertically integrated power ("VIPower"), and intelligent integrated gallium nitride (STi2GaN) technologies for smart power applications, Power MOSFET, silicon carbide ("SiC") and gallium nitride ("GaN") for high-efficiency systems, Micro-Electro-Mechanical Systems ("MEMS") technologies for sensors and actuators, embedded memory technologies for our microcontrollers and differentiated optical sensing technologies for our optical sensing solutions.

Our operating segments are as follows:

- Automotive and Discrete Group (ADG), comprised of dedicated automotive integrated circuits ("ICs"), and discrete and power transistor products.
- Analog, MEMS and Sensors Group (AMS), comprised of analog, smart power, MEMS sensors and actuators, and optical sensing solutions.
- Microcontrollers and Digital ICs Group (MDG), comprised of general-purpose microcontrollers and microprocessors, connected security products (e.g. embedded secured elements and NFC readers), memories (e.g. serial and page EEPROM) and RF and Communications products.

For the computation of the segments' internal financial measurements, we use certain internal rules of allocation for the costs not directly chargeable to the segments, including cost of sales, selling, general and administrative ("SG&A") expenses and a part of research and development ("R&D") expenses. In compliance with our internal policies, certain costs are not allocated to the segments, but reported in "Others". Net revenues of "Others" include revenues from sales assembly services and other revenues. Operating income (loss) of Others includes items such as unused capacity charges, including reduced manufacturing activity due to COVID-19 and incidents leading to power outage, impairment, restructuring charges and other related closure costs, management reorganization expenses, start-up and phase-out costs of certain manufacturing facilities, and other unallocated expenses such as: strategic or special R&D programs, certain corporate-level operating expenses, patent claims and litigations, and other costs that are not allocated to product groups, as well as operating earnings of other products. In addition, depreciation and amortization expense is part of the manufacturing costs allocated to the segments and is neither identified as part of the inventory variation nor as part of the unused capacity charges; therefore, it cannot be isolated in cost of sales. Finally, public grants are allocated to our segments proportionally to the incurred expenses on the sponsored projects.

Wafer costs are allocated to the segments based on actual cost. From time to time, with respect to specific technologies, wafer costs are allocated to segments based on market price.



## 1.5. Sales, Marketing and Distribution

Our sales and marketing organization is organized by a combination of regional and key account coverage with the primary objective of accelerating sales growth and gaining market share. Emphasis is placed on strengthening the development of our global and major local accounts; boosting demand creation through an enhanced focus on geographical and key account coverage with strong technical and application expertise, supported in the mass market by our distribution channel and local initiatives; and establishing regional sales and marketing teams that are fully aligned with our strategic end-markets: automotive, industrial, personal electronics and communications equipment, computers and peripherals.

We have four regional sales organizations reporting to a global head of Sales & Marketing: Americas, APeC (Asia Pacific excluding China), China and EMEA. Our regional sales organizations have a similar structure to enhance global coordination and go-to-market activities. The sales and marketing teams are strongly focused on profitable revenue growth and business performance as well as on fostering demand creation, expanding the customer base, maximizing market share, developing new product roadmaps and providing the best technical and application support in the field for our customers. The sales and marketing activities are supported by sales engineers, system marketing, product marketing, application labs, field application engineers and quality engineers.

We engage distributors and sales representatives to distribute and promote our products around the world. Typically, distributors handle a wide variety of products, including those that compete with ours. Our distributors have a dual role, in that they assist in fulfilling the demand of our customers by servicing their orders, while also supporting the creation of product demand and business development. Most of our sales to distributors are made under specific agreements allowing for price protection and stock rotation for unsold merchandise. Sales representatives, on the other hand, generally do not offer products that compete directly with our products, but may carry complementary items manufactured by others. Sales representatives do not maintain a product inventory and their customers place large quantity orders directly with us and are referred to distributors for smaller orders.

## **1.6.** Research & Development

Since our formation, we have maintained a solid commitment to innovation because we believe that market driven R&D based on leading-edge products and technologies is critical to our success. We devote significant effort to R&D because we believe such investment can be leveraged into competitive advantages: in 2022 about 17.6% of our employees worked in R&D on product design/development and technology.

New developments in semiconductor technology can make end products significantly cheaper, smaller, faster, more reliable and embedded than their predecessors, with differentiated functionalities. They can enable significant value creation opportunities with their timely appearance on the market. Our innovations in semiconductor technology as well as in hardware and software contribute to the creation of successful products that generate value for us and our customers. Our complete design platforms, including a large selection of intellectual property ("IP") and silicon-proven models and design rules, enable the fast development of products designed to meet customer expectations in terms of reliability, quality, competitiveness in price and time-to-market. Through our R&D efforts, we contribute to making our customers' products more efficient, more appealing, more reliable and safer.

Our technology R&D strategy is based on the development of differentiated technologies, allowing for a unique offer in terms of new products and enabling new applications opportunities. We draw on a rich pool of chip fabrication technologies, including advanced CMOS, FD-SOI, RF-SOI, optical sensing, embedded non-volatile memories, mixed-signal, analog, MEMS, smart power, SiC and GaN processes. This is well embedded in our strong packaging technologies portfolio such as high pin count ball grid array ("BGA") packages, Wafer level packaging, highly integrated sensor packages and leadframe package power products. We combine both front-end and back-end manufacturing and technology R&D under the same organization to ensure a smooth flow of information between our R&D and manufacturing organizations. We leverage significant synergies and shared activities between our product groups to cross-fertilize them. We also use silicon foundries, especially for some advanced CMOS nodes that we do not plan to manufacture nor develop internally.

We have advanced R&D and innovation centers which offer us a significant advantage in quickly and cost effectively introducing products. Furthermore, we have established a strong culture of partnerships and through the years have created a network of strategic collaborations with key customers, suppliers, competitors, and leading universities and research institutes around the world.

We also play leadership roles in numerous projects running under the Information Society Technologies programs of the European Union ("EU"). We also participate in certain R&D programs established by the EU, individual countries and local authorities in Europe (primarily in France and Italy).



## 1.7. Sustainability

Sustainability has been a guiding principle at ST for nearly 30 years. We believe that our commitment to a sustainable culture is good for people, the planet, business, and society at large. Our ambition is to create sustainable technology in a sustainable way for a sustainable world, providing long-term value for all our stakeholders.

Sustainability is embedded in all our activities. We implement programs to manage our impacts, opportunities, and risks at each step of our value chain. We create technologies that enable responsible applications for safer, greener and smarter living. We put people first by prioritizing health, safety and wellbeing and we are committed to human rights and community empowerment. We are committed to minimize our impact on the environment by striving to reduce our emissions and energy consumption as well as addressing water and waste related challenges. We create profitable growth, managing risks and increasing long-term value for all our stakeholders. Our full approach is detailed in our sustainability charter (available on www.st.com/SustainabilityCharter).

At the heart of our strategy is a strong focus on identifying topics that matter to our business and stakeholders. We carry out a materiality exercise every three years followed by an annual review with stakeholders. These assessments allow us to prioritize and focus on the relevant topics and address these in our strategy, programs and objectives.

We have currently identified the following various material topics: health and safety, greenhouse gas emissions, water efficiency, ethics, and labor and human rights. In addition, we continue to focus on important topics including energy efficiency, water recycling, waste recycling, talent attraction and engagement, diversity, equity and inclusion as well as corporate social responsibility in our supply chain. For each material topic, we have defined a specific ambition and a long-term goal.

We are included in several sustainability indices, such as Dow Jones Sustainability Index World and Europe, FTSE4Good, Solactive Global and Europe CSR index, EuroNext VIGEO Europe 120, Eurozone 120 and Benelux 120, CAC 40 ESG, MIB ESG, Vérité40 and Bloomberg Gender Equality index. We received an A score for CDP Water security and a B score for CDP Climate Change. We also received a AAA rating from MSCI and a Prime status from ISS ESG corporate rating. In addition, as a member of the Responsible Business Alliance ("RBA"), we participate in the collective efforts of the industry to find solutions to our global sustainability challenges.

We have been a signatory of the UN Global Compact since 2000. Our sustainability programs are aligned with its ten principles and contribute to 11 of the 17 UN Sustainable Development Goals ("SDG").

Further information on ST's Sustainability approach can be found in our annual report for the year ended December 31, 2022, filed with the Dutch Authority for the Financial Markets on March 23, 2023 and adopted by our Annual General Meeting of Shareholders on May 24, 2023 and in our sustainability report we publish each year and which is available at: https://sustainabilityreports.st.com/sr23/.



## 2. Report of the Managing Board

## 2.1. Business overview

Our total available market is defined as "TAM", while our serviceable available market is defined as "SAM" and represents the market for products sold by us (i.e., TAM excluding major devices such as microprocessors, dynamic random-access memories ("DRAM") and flash memories, optoelectronics devices other than optical sensors, video processing and wireless application specific products, such as baseband and application processors).

Based on the data published by World Semiconductor Trade Statistics ("WSTS"), on a year-over-year basis, semiconductor industry revenues in the first half of 2023 decreased by approximately 19% for our TAM and remained flat for our SAM to reach approximately \$244 billion and \$141 billion, respectively.

Our first half 2023 revenues amounted to \$8,573 million, increasing by 16.1% on a year-over-year basis driven by growth in all product groups except AMS. By product group, ADG revenues increased 38.8%, due to both Automotive and Power Discrete, AMS revenues decreased 8.4% primarily due to MEMS and Analog and MDG revenues increased 13.1% driven by Microcontrollers and RF and Communications subgroup.

Our effective average exchange rate for the first half of 2023 was \$1.07 for €1.00 compared to \$1.13 for €1.00 for the first half of 2022.

Our first half 2023 gross margin reached 47.4% of total revenues, representing an increase of 220 basis points compared to the first half of 2022 mainly due to higher selling prices and a more favorable product mix, partially offset by higher manufacturing costs.

Combined selling, general & administrative ("SG&A") and research & development ("R&D") expenses increased to \$1,754 million for the first half of 2023, compared to \$1,468 million in the first half of 2022, mainly due to higher cost of labor and negative non-recurring non-cash items, partially offset by positive currency effects.

In the first half of 2023, other income and expenses decreased to a net expense of \$8 million, compared to a net income of \$39 million in the first half of 2022, mainly due to higher start-up costs mainly related to our Agrate 300mm fab and lower income from public funding.

Operating profit in the first half of 2023 was \$2,304 million compared to \$1,906 million in the first half of 2022.

Combined finance income and costs resulted in a net cost of \$228 million in the first half of 2023, compared to a net gain of \$329 million in the first half of 2022. The first half of 2023 amount includes a net loss of \$282 million for the fair value adjustment of outstanding convertible bond embedded options (compared to a net gain of \$338 million in the first half of 2022).

Our net profit attributable to the equity holders of the parent company amounted to \$1,726 million for the first half of 2023, equivalent to a Diluted Earnings Per Share of \$1.90, compared to net profit attributable to the equity holders of the parent company of \$1,945 million, equivalent to a Diluted Earnings per Share of \$2.14 for the first half of 2022.

Our Free Cash Flow, a non-GAAP ("Generally Accepted Accounting Principles") measure, was \$416 million in the first half of 2023 compared to \$312 million in the first half of 2022.

## 2.2. Segment information

We design, develop, manufacture and market a broad range of products, including discrete and standard commodity components, application-specific integrated circuits ("ASICs"), full-custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital and mixed-signal applications. In addition, we further participate in the manufacturing value chain of smartcard products, which includes the production and sale of both silicon chips and smartcards.

Our operating segments are as follows:



- Automotive and Discrete Group (ADG), comprised of dedicated automotive integrated circuits ("ICs"), and discrete and power transistor products.
- Analog, MEMS and Sensors Group (AMS), comprised of analog, smart power, MEMS sensors and actuators, and
  optical sensing solutions.
- Microcontrollers and Digital ICs Group (MDG), comprised of general-purpose microcontrollers and microprocessors, connected security products (e.g. embedded secured elements and NFC readers), memories (e.g. serial and page EEPROM) and RF and Communications products.

For the computation of the segments' internal financial measurements, we use certain internal rules of allocation for the costs not directly chargeable to the segments, including cost of sales, SG&A expenses and a part of R&D expenses. In compliance with our internal policies, certain costs are not allocated to the segments, but reported in "Others". Net revenues of "Others" include revenues from sales assembly services and other revenues. Operating income (loss) of "Others" includes items such as unused capacity charges, including reduced manufacturing activity due to COVID-19 and incidents leading to power outage, impairment, restructuring charges and other related closure costs, management reorganization expenses, start-up and phase-out costs of certain manufacturing facilities, and other unallocated expenses such as: strategic or special R&D programs, certain corporate-level operating expenses, patent claims and litigations, and other costs that are not allocated to product groups, as well as operating earnings of other products. In addition, depreciation and amortization expense is part of the manufacturing costs allocated to the segments and is neither identified as part of the inventory variation nor as part of the unused capacity charges; therefore, it cannot be isolated in cost of sales. Finally, public grants are allocated to our segments proportionally to the incurred expenses on the sponsored projects.

Wafer costs are allocated to the segments based on actual cost. From time to time, with respect to specific technologies, wafer costs are allocated to segments based on market price.

Please refer to note 3.6.6 of the Semi Annual Financial Statements for further information.

## 2.3. Liquidity and financial position

During the first half of 2023, our net cash and cash equivalents decreased by \$147 million. We maintain an adequate cash position and a low debt-to-equity ratio to provide us with adequate financial flexibility. As in the past, our cash management policy is to finance our investment needs mainly with net cash generated from operating activities.

The components of our cash flows are set forth below:

	(unaudited)			
	Six-month pe	Six-month period ended		
In millions of U.S. dollars	July 1, 2023	July 2, 2022		
Net cash from operating activities	2,820	2,200		
Net cash used in investing activities	(2,565)	(2,007)		
Net cash used in financing activities	(404)	(385)		
Effect of changes in exchange rates	2	(5)		
Net cash decrease	(147)	(197)		

## Net cash from operating activities

Net cash from operating activities is the sum of (i) net profit adjusted for non-cash items and (ii) changes in net working capital. The net cash from operating activities for the first half of 2023 was \$2,820 million, increasing compared to \$2,200 million in the first half of 2022, mainly due to higher levels of operating profitability.

## Net cash used in investing activities

Investing activities used \$2,565 million of cash in the first half of 2023, compared to \$2,007 million cash used in the first half of 2022, mainly due to increased payments for purchase of tangible assets, net of proceeds from sale and proceeds from capital grants and other contributions, which totaled of \$2,161 million in the first half of 2023 compared to \$1,650 million in the prior-year period, investment in intangible assets of \$211 million, of which the largest part is related to the capitalization of development costs, higher purchases of marketable securities, partially offset by higher net proceeds from short-term deposits. Our net capital expenditures in the first six months of 2023 primarily included investments related to 300mm wafer fabs in Crolles and Agrate, and our silicon carbide activities.



## Net cash used in financing activities

Net cash used in financing activities was \$404 million for the first half of 2023, compared to net cash used of \$385 million in the first half of 2022, and consisted mainly of \$173 million repurchase of common stock, \$105 million of dividends paid to stockholders and \$93 million repayment of financial debt.

## Free cash flow (non-GAAP measure)

Free Cash Flow, a non-GAAP measure, is defined as (i) net cash from operating activities plus, (ii) net cash used in investing activities, excluding payment for purchase of (and proceeds from matured) marketable securities, and net investments in (and proceeds from) short-term deposits, which are considered as temporary financial investments. This definition ultimately results in net cash from operating activities plus payments for purchases (and proceeds from sale) of tangible, intangible and financial assets, proceeds from capital grants and other contributions, and net cash paid for business acquisitions.

We believe Free Cash Flow provides useful information for investors and management because it measures our capacity to generate cash from our operating and investing activities to sustain our operations. Free Cash Flow does not represent total cash flow since it does not include the cash flows from, or used in, financing activities. Free Cash Flow reconciles with the total cash flow and the net cash increase (decrease) by including the payment for purchases of (and proceeds from matured) marketable securities and net investment in (and proceeds from) short-term deposits, the net cash from (used in) financing activities and the effect of changes in exchange rates. Our definition of Free Cash Flow may differ from definitions used by other companies. Our Free Cash Flow is derived from our US GAAP Consolidated Statements of Cash Flows, which differs from our Consolidated Statements of Cash Flows under International Financial Reporting Standards ("IFRS"). A reconciliation with the Consolidated Statements of Cash Flows under IFRS is provided in the table below:

	(unaud	dited)
	Six-month pe	eriod ended
In millions of U.S. dollars	July 1, 2023	July 2, 2022
Net cash from operating activities, as reported under IFRS	2,820	2,200
Excluding US GAAP/IFRS presentation differences:		
Payment for withholding tax on vested shares	7	7
Payment for lease liabilities	(31)	(30)
Net cash from operating activities, as adjusted under IFRS	2,796	2,177
Payment for purchase of tangible assets, net of proceeds from sale and proceeds		
from capital grants and other contributions	(2,161)	(1,650)
Payment for purchase of intangible assets, net of proceeds from sale	(211)	(215)
Payment for purchase of financial assets, net of proceeds from sale	(8)	_
Free Cash Flow (non-GAAP measure)	416	312

(1) Free Cash Flow can also be expressed as Net cash from operating activities and Net cash used in investing activities, as reported under IFRS, excluding cash from (used in) marketable securities and short-term deposits, and payment for business acquisitions, which corresponds to deferred and contingent consideration paid post-acquisition, reported as financing cash outflows under US GAAP.

Our free cash flow was \$416 million for the first half of 2023, compared to \$312 million for the first half of 2022.

## Net Financial Position (non-GAAP measure)

Our Net Financial Position represents the difference between our total liquidity and our total financial debt. Our total liquidity includes cash and cash equivalents, short-term deposits and quoted debt securities; our total financial debt includes interest-bearing loans and borrowings, including current portion, as represented in our consolidated statement of financial position. Net Financial Position is a non-GAAP measure but we believe it provides useful information for investors and management because it gives evidence of our global position either in terms of net indebtedness or net cash by measuring our capital resources based on cash and cash equivalents, short-term deposits and quoted debt securities and the total level of our financial debt. Our definition of Net Financial Position is derived from our U.S. GAAP Consolidated Balance Sheets, which differs from the Consolidated Statements of Financial Position under IFRS. A reconciliation with the Consolidated Statements of Financial Position under IFRS is provided in the table below:



	(unaudited)	
In millions of U.S. dollars	July 1, 2023	December 31, 2022
Cash and cash equivalents	3,111	3,258
Short-term deposits	106	581
Government bonds issued by the U.S. Treasury	1,346	679
Total liquidity	4,563	4,518
Interest-bearing loans and borrowings – current portion	(894)	(885)
Interest-bearing loans and borrowings	(1,617)	(1,687)
Total financial debt, as reported under IFRS	(2,511)	(2,572)
U.S. GAAP/IFRS differences	(138)	(145)
Total financial debt, as reported under US GAAP	(2,649)	(2,717)
Net financial position (non-GAAP measure)	1,914	1,801

Our Net Financial Position as of July 1, 2023 was a net cash position of \$1,914 million, increasing compared to the net cash position of \$1,801 million as of December 31, 2022.

As of July 1, 2023, our financial debt was \$2,511 million, composed of (i) \$894 million of current portion of interestbearing loans and borrowings and (ii) \$1,617 million of long-term debt. The breakdown of our total financial debt included: (i) \$1,420 million in senior unsecured convertible bonds issued in 2020, (ii) \$777 million in European Investment Bank loans (the "EIB loans"), (iii) \$310 million in the Cassa Depositi e Prestiti SpA loans (the "CDP SpA loans") and (iv) \$4 million in loans from other programs.

The EIB loans are comprised of three long-term amortizing credit facilities as part of public funding programs. The first, signed in August 2017, is a €500 million loan, in relation to R&D and capital expenditures in the European Union, fully drawn in Euros, of which \$325 million was outstanding as of July 1, 2023. The second one, signed in 2020, is a €500 million credit facility agreement with EIB to support R&D and capital expenditure programs in Italy and France. The amount was fully drawn in Euros representing \$452 million outstanding as of July 1, 2023. In 2022, the Group signed a third long-term amortizing credit facility with EIB of €600 million, out of which, no amount had been drawn as of July 1, 2023.

The CDP SpA loans are comprised of two long-term credit facilities. The first, signed in 2021, is a €150 million loan, fully drawn in Euros, of which \$109 million were outstanding as of July 1, 2023. The second one, signed in 2022, is a €200 million loan, fully drawn in Euros, of which \$201 million was outstanding as of July 1, 2023.

On August 4, 2020, we issued \$1.5 billion principal amount dual tranche senior unsecured convertible bonds (Tranche A for \$750 million and Tranche B for \$750 million), due 2025 and 2027, respectively. Tranche A bonds were issued at 105.8% as zero-coupon bonds and Tranche B bonds were issued at 104.5% as zero-coupon bonds. The conversion price at issuance was \$43.62 for Tranche A equivalent to a 47.5% conversion premium and \$45.10 for Tranche B, equivalent to a 52.5% conversion premium. These conversion features correspond to an equivalent of 4,585 shares per each Tranche A bond \$200,000 par value and an equivalent of 4,435 shares per each Tranche B bond \$200,000 par value. The bonds are convertible by the bondholders or are callable by us upon certain conditions, on a net-share settlement basis, except if we elect a full-cash or full-share conversion as an alternative settlement. The net proceeds from the bond offering were \$1,567 million, after deducting issuance costs paid by the Company.

Our long-term debt contains standard conditions but does not impose minimum financial ratios. We had unutilized committed medium-term credit facilities with core relationship banks totaling \$1,346 million as of July 1, 2023.

Our current ratings with the three major rating agencies that report on us on a solicited basis, are as follows: Standard & Poor's ("S&P"): BBB with positive outlook; Moody's Investors Service ("Moody's"): Baa2 with positive outlook; Fitch Ratings ("Fitch"): BBB with stable outlook.



## 2.4. Business and financial outlook

Our policy is to modulate our capital spending according to the evolution of the semiconductor market and our financial performance. For 2023, we plan to invest about \$4.0 billion in capital expenditures mainly to increase our 300mm wafer fabs and silicon carbide manufacturing capacity including, for silicon carbide, our substrate initiative.

A large portion of capital expenditures will be devoted to support capacity additions and mix change in our manufacturing footprint, in particular for our wafer fabs: (i) the ramp-up of our new 300mm wafer fab in Agrate, Italy, to support mixed signal technologies and then phase-in smart power technologies and embedded-non-volatile memory at a later stage; (ii) digital 300mm in Crolles, France, to extend the cleanroom and support production ramp-up of our main runner technologies; (iii) certain selected programs of capacity growth in some of our most advanced 200mm fabs, including the analog 200mm fab in Singapore; (iv) increase capacity for silicon carbide products in our Catania and Singapore fabs; and (v) ramping a new integrated silicon carbide substrate manufacturing facility for the production in volume of 150mm, moving to 200mm in the future, silicon carbide epitaxial substrates. The most important 2023 capital investments for our back-end facilities will be: (i) capacity growth on certain package families, including the SiC technology and automotive related packages, (ii) the new generation of Intelligent Power Modules for Automotive and Industrial applications, and (iii) specific investments in innovative assembly processes and test operations.

The remaining part of our capital investment plan covers the overall maintenance and efficiency improvements of our manufacturing operations and infrastructure, R&D activities, laboratories as well as the execution of our carbon neutrality programs.

We will continue to invest to support revenues growth and new products introduction, taking into consideration factors such as trends in the semiconductor industry, capacity utilization and our goal to become carbon neutral on scope 1 and 2 and partially scope 3 by 2027. We expect to need significant financial resources in the coming years for capital expenditures and for our investments in manufacturing and R&D. We plan to fund our capital requirements with cash provided by operating activities, available funds and support from third parties, and may have recourse to borrowings under available credit lines and, to the extent necessary or attractive based on market conditions prevailing at the time, the issuance of debt, convertible bonds or additional equity securities. A substantial deterioration of our economic results, and consequently of our profitability, could generate a deterioration of the cash generated by our operating activities. Therefore, there can be no assurance that, in future periods, we will generate the same level of cash as in prior years to fund our capital expenditure plans for expanding/upgrading our production facilities, our working capital requirements, our R&D and manufacturing costs.

We believe that we have the financial resources needed to meet our currently projected business requirements for the next twelve months, including capital expenditures for our manufacturing activities, working capital requirements, approved dividend payments, share buy-backs as part of our current repurchase program and the repayment of our debt in line with maturity dates.

We will now drive the Group based on a plan for 2023 revenues of \$17.4 billion, plus or minus \$150 million.

## 2.5. Other developments

During the quarter, Orio Bellezza, President, Quality, Manufacturing, Technology and Supply Chain, and member of ST's Executive Committee, announced his retirement from the Company. Mr. Bellezza will remain Managing Director of the Company's Italian subsidiary until the expiration of his mandate. Fabio Gualandris, ST's Executive Vice President, Head of Back-End Manufacturing & Technology, and Deputy to Mr. Bellezza, was appointed President, Quality, Manufacturing and Technology. Following our CEO's proposal, ST's Supervisory Board approved the appointment of Mr. Gualandris to the Company's Executive Committee.

On June 7, we signed an agreement with Sanan Optoelectronics, a market leader in compound semiconductors in China, to create a new 200mm silicon carbide ("SiC") device manufacturing Joint Venture ("JV") in Chongqing, China. This JV will support rising demand for the ST's SiC devices in China for car electrification and industrial power and energy applications. Sanan will build separately a 200mm SiC substrate manufacturing facility to fulfill the JV's needs.

On June 5, we announced the conclusion of the agreement with GlobalFoundries, to create a new 300mm, jointly operated, high-volume semiconductor manufacturing facility in Crolles, France.

On May 24, following the conclusion of our Annual General Meeting of Shareholders ("AGM"), our Supervisory Board announced that it had appointed Mr. Nicolas Dufourcq as the Chairman, and Mr. Maurizio Tamagnini as the Vice-Chairman, of the Supervisory Board, respectively, for a 3-year term to expire at the end of the 2026 AGM.



On May 24, we held our AGM in Schiphol, the Netherlands. The proposed resolutions, all approved by the Shareholders, were:

- The adoption of the Company's Statutory Annual Accounts for the year ended December 31, 2022, prepared in accordance with International Financial Reporting Standards (IFRS) and filed with the Netherlands Authority for the Financial Markets (AFM) on March 23, 2023;
- The distribution of a cash dividend of \$0.24 per outstanding share of the Company's common stock to be distributed in quarterly installments of \$0.06 in each of the second, third and fourth quarters of 2023 and first quarter of 2024;
- The reappointment, for a three-year term expiring at the 2026 AGM, of Mr. Frédéric Sanchez and Mr. Maurizio Tamagnini, as members of the Supervisory Board;
- The reappointment, for a two-year term expiring at the 2025 AGM, of Ms. Ana de Pro Gonzalo, as member of the Supervisory Board;
- The reappointment, for a one-year term expiring at the 2024 AGM, of Mr. Yann Delabrière, as member of the Supervisory Board;
- The appointment of Mr. Paolo Visca, as member of the Supervisory Board, for a three-year term expiring at the 2026 AGM, in replacement of Mr. Alessandro Rivera whose mandate will expire at the end of the 2023 AGM;
- The appointment of Ms. Hélène Vletter-van Dort, as member of the Supervisory Board, for a two-year term expiring at the end of the 2025 AGM, in replacement of Ms. Heleen Kersten whose mandate will expire at the end of the 2023 AGM;
- The approval of the stock-based portion of the compensation of the President and CEO;
- The authorization to the Managing Board, until the end of the 2024 AGM, to repurchase shares, subject to the approval of the Supervisory Board;
- The delegation to the Supervisory Board of the authority to issue new common shares, to grant rights to subscribe for such shares, and to limit and/or exclude existing shareholders' pre-emptive rights on common shares, until the end of the 2024 AGM;
- The discharge of the sole member of the Managing Board; and
- The discharge of the members of the Supervisory Board.

On April 20, 2023, we published our 2023 Sustainability Report detailing 2022 performance, strategy and ongoing action plans.

On April 13, we signed a multi-year agreement with ZF to supply a volume of double-digit millions of silicon carbide devices to be integrated in ZF's new modular inverter architecture going into series production in 2025.

## 2.6. Related party transactions

Please refer to note 3.6.20 of the Semi Annual Financial Statements.

## 2.7. Financial Risk Management

We are exposed to changes in financial market conditions in the normal course of business due to our operations in different foreign currencies and its ongoing investing and financing activities. Our activities expose us to a variety of financial risks: market risk (including foreign exchange risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk. Our risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on our financial performance. We use derivative financial instruments to hedge certain risk exposures. See note 3.6.9.4 of the Semi Annual Financial Statements for further information.

Financial risk management is carried out by our central treasury department ("Corporate Treasury"). Additionally, a treasury committee, chaired by our Chief Financial Officer, steers treasury activities and ensures compliance with corporate policies. Treasury activities are thus regulated by our policies, which define procedures, objectives and



controls. The policies focus on the management of financial risk in terms of exposure to market risk, credit risk and liquidity risk. Treasury controls are subject to internal audits. Most treasury activities are centralized, with any local treasury activities subject to oversight from Corporate Treasury. Corporate Treasury identifies, evaluates and hedges financial risks in close cooperation with the Company's subsidiaries. It provides written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, price risk, credit risk, use of derivative financial instruments, and investments of excess liquidity. The majority of cash and cash equivalents is held in U.S. dollars and Euros and is placed with financial institutions rated at least a single "A" long term rating from two of the major rating agencies, meaning at least A3 from Moody's and A- from S&P or Fitch, or better. These ratings are closely and continuously monitored in order to manage exposure to the counterparty's risk. Hedging transactions are performed only to hedge exposures deriving from operating, investing and financing activities conducted in the normal course of business.

The Semi Annual Financial Statements do not include all financial risk management information and disclosures required in the annual financial statements; they should be read in conjunction with our annual consolidated financial statements as of December 31, 2022. There have been no changes in the risk management department or in any risk management policies during the first half of 2023.

## Foreign exchange risk

We conduct our business globally in various major international currencies. As a result, we are exposed to adverse movements in foreign currency exchange rates, primarily regarding the Euro. Foreign exchange risk mainly arises from recognized assets and liabilities at our subsidiaries and future commercial transactions.

#### Cash flow and fair value interest rate risk

Our interest rate risk arises from long-term borrowings. Borrowings issued at variable rates expose us to cash flow interest rate risk. Borrowings issued at fixed rates expose us to fair value interest rate risk.

#### Price risk

As part of its on-going investing activities, we may be exposed to quoted security price risk for investments measured at fair value, as described in Note 3.6.9. As of July 1, 2023 and December 31, 2022 we did not hold any significant investments in quoted equity securities.

The measurement for accounting purposes of the embedded derivative instruments of the senior unsecured convertible bonds issued on August 4, 2020 is dependent on various factors including the performance of STMicroelectronics ordinary shares. With respect to the valuation of the embedded issuer's call options as of July 1, 2023, if the price of the Company's ordinary shares, as measured on the New York Stock Exchange, with other valuation inputs remaining equal, increased by 10%, the value of the embedded call options would increase by \$12 million (first half of 2022: increase of \$5 million), whereas for a decrease of 10% in the share price, the value of the embedded call options would decrease by \$12 million (first half of 2022: decrease of \$5 million). With respect to the valuation of the embedded bondholders' conversion options as of July 1, 2023, if the price of the Company's ordinary shares, as measured on the New York stock exchange, with other valuation inputs remaining equal, increased by 10%, the value of the embedded conversion options would increase by \$140 million (first half of 2022: increase of \$5 million). With respect to the value of the embedded conversion options would increase by \$140 million (first half of 2022: increase of \$53 million), whereas for a decrease of 10% in the share price, the value of the embedded conversion options would increase by \$140 million (first half of 2022: increase of \$53 million), whereas for a decrease of 10% in the share price, the value of the embedded conversion options would decrease by \$131 million (first half of 2022: decrease of \$48 million). Details of the sensitivity of the other valuation factors, more specifically implied volatility, are presented in Note 3.6.9.5.

## Credit risk

We select banks and/or financial institutions based on the criteria of long-term rating from at least two major Rating Agencies and keeping a maximum outstanding amount per instrument with each bank not to exceed 20% of the total. For derivative financial instruments, management has established limits so that, at any time, the fair value of contracts outstanding is not concentrated with any individual counterparty.

We monitor the creditworthiness of our customers to which we grant credit terms in the normal course of business. If certain customers are independently rated, these ratings are used. Otherwise, if there is no independent rating, risk control assesses the credit quality of the customer, considering its financial position, past experience and other factors. Individual risk limits are set based on internal and external ratings in accordance with limits set by management. The utilization of credit limits is regularly monitored.



## Liquidity risk

Prudent liquidity risk management includes maintaining sufficient cash and cash equivalents, short-term deposits and marketable securities, the availability of funding from committed credit facilities and the ability to close out market positions. Our objective is to maintain an adequate cash position and a low debt-to-equity ratio to ensure adequate financial flexibility. Our liquidity management policy is to finance our investments with net cash provided from operating activities.

## 2.8. Business risk information

Our risk appetite depends on the nature of risks. We determine, on a regular basis, the amount of risk we are willing to eliminate, mitigate, pursue or retain, depending on associated expected rewards, opportunities and cost of risk optimization.

Below is a list of the main risk factors related to the semiconductor industry and specifically related to our operations, which may affect our result and performance and the ability of management to predict the future:

- Changes in global trade policies, including the adoption and expansion of tariffs and trade barriers, that could affect the macro-economic environment and adversely impact the demand for our products;
- Uncertain macro-economic and industry trends (such as inflation and fluctuations in supply chains), which may impact production capacity and end-market demand for our products;
- Customer demand that differs from projections;
- The ability to design, manufacture and sell innovative products in a rapidly changing technological environment;
- Changes in economic, social, public health, labor, political, or infrastructure conditions in the locations where we, our customers, or our suppliers operate, including as a result of macroeconomic or regional events, geopolitical and military conflicts (including the ongoing conflict between Russia and Ukraine), social unrest, labor actions, or terrorist activities;
- Unanticipated events or circumstances, which may impact our ability to execute our plans and/or meet the objectives of our R&D and manufacturing programs, which benefit from public funding;
- Financial difficulties with any of our major distributors or significant curtailment of purchases by key customers;
- The loading, product mix, and manufacturing performance of our production facilities and/or our required volume to fulfill capacity reserved with suppliers or third party manufacturing providers;
- Availability and costs of equipment, raw materials, utilities, third-party manufacturing services and technology, or other supplies required by our operations (including increasing costs resulting from inflation);
- The functionalities and performance of our information technology ("IT") systems, which are subject to
  cybersecurity threats and which support our critical operational activities including manufacturing, finance and
  sales, and any breaches of our IT systems or those of our customers, suppliers, partners and providers of thirdparty licensed technology;
- Theft, loss, or misuse of personal data about our employees, customers, or other third parties, and breaches of data privacy legislation;
- The impact of intellectual property claims by our competitors or other third parties, and our ability to obtain required licenses on reasonable terms and conditions;
- Changes in our overall tax position as a result of changes in tax rules, new or revised legislation, the outcome of
  tax audits or changes in international tax treaties which may impact our results of operations as well as our
  ability to accurately estimate tax credits, benefits, deductions and provisions and to realize deferred tax assets;
- Variations in the foreign exchange markets and, more particularly, the U.S. dollar exchange rate as compared to the Euro and the other major currencies we use for our operations;



- The outcome of ongoing litigation as well as the impact of any new litigation to which we may become a defendant;
- Product liability or warranty claims, claims based on epidemic or delivery failure, or other claims relating to our products, or recalls by our customers for products containing our parts;
- Natural events such as severe weather, earthquakes, tsunamis, volcano eruptions or other acts of nature, the effects of climate change, health risks and epidemics or pandemics such as the COVID-19 pandemic in locations where we, our customers or our suppliers operate;
- Increased regulation and initiatives in our industry, including those concerning climate change and sustainability matters and our goal to become carbon neutral on scope 1 and 2 and partially scope 3 by 2027;
- Potential loss of key employees and potential inability to recruit and retain qualified employees as a result of epidemics or pandemics such as the COVID-19 pandemic, remote-working arrangements and the corresponding limitation on social and professional interaction;
- The duration and the severity of the global outbreak of COVID-19 may continue to negatively impact the global economy in a significant manner for an extended period of time, and also could materially adversely affect our business and operating results;
- Industry changes resulting from vertical and horizontal consolidation among our suppliers, competitors, and customers; and
- The ability to successfully ramp up new programs that could be impacted by factors beyond our control, including the availability of critical third party components and performance of subcontractors in line with our expectations.

## 2.9. Auditor's involvement

The Interim Condensed Consolidated Financial Statements and Interim Report of the Managing Board have not been audited or reviewed by an external auditor.

This report of the Managing Board is dated August 23, 2023.



# **3.** Interim Condensed Consolidated Financial Statements ("Semi Annual Financial Statements")

The Semi Annual Financial Statements of the Group for the six months ended July 1, 2023, as presented by the Managing Board, have not been audited or reviewed by an external auditor.

## **3.1.**Consolidated income statement

	_	(unaud	ited)
		Six-month pe	riod ended
In millions of U.S. dollars, except per share amounts	Notes	July 1, 2023	July 2, 2022
Sales		8,561	7,370
Other revenues		12	13
Total revenues	3.6.5	8,573	7,383
Cost of sales	3.6.16	(4,507)	(4,048)
Gross profit		4,066	3,335
Selling, general and administrative expenses	3.6.16	(827)	(706)
Research and development expenses	3.6.16	(927)	(762)
Other income	3.6.17	68	114
Other expenses	3.6.17	(76)	(75)
Operating profit		2,304	1,906
Finance income	3.6.18	122	349
Finance costs	3.6.18	(350)	(20)
Profit before income tax		2,076	2,235
Income tax expense		(346)	(289)
Net profit		1,730	1,946
Attributable to:			
The equity holders of the parent		1,726	1,945
Noncontrolling interests		4	1
Net profit		1,730	1,946
Earnings per share attributable to the equity holders of the parent			
Earnings per share (Basic)	3.6.19	1.91	2.15
Earnings per share (Diluted)	3.6.19	1.90	2.14



## 3.2. Consolidated statement of comprehensive income

	(unaudited)	
	Six-month pe	eriod ended
In millions of U.S. dollars	July 1, 2023	July 2, 2022
Net profit	1,730	1,946
Other comprehensive income, net of tax:		
Items that will not be reclassified to profit or loss		
Re-measurements of employee benefit obligations	3	116
Income tax effect	(3)	(27)
Re-measurements of employee benefit obligations, net of tax	-	89
Total items that will not be reclassified to profit or loss	_	89
Items that may be subsequently reclassified to profit or loss		
Exchange differences on translation of foreign operations	61	(210)
Cash flow hedges	(15)	(69)
Income tax effect	2	8
Net movement on cash flow hedges	(13)	(61)
Changes in fair value of debt instruments at FVOCI <sup>(1)</sup>	(6)	(1)
Income tax effect	1	_
Net changes in fair value of debt instruments at FVOCI(1)	(5)	(1)
Total items that may be subsequently reclassified to profit or loss	43	(272)
Other comprehensive income, net of tax	43	(183)
Total comprehensive income, net of tax	1,773	1,763
Attributable to:		
The equity holders of the parent	1,769	1,762
Noncontrolling interests	4	1
Total comprehensive income, net of tax	1,773	1,763

<sup>(1)</sup> FVOCI: Fair Value through Other Comprehensive Income



## 3.3. Consolidated statement of financial position

		(unaudited)	(audited)
In millions of U.S. dollars	Notes	July 1, 2023	December 31, 2022
Non-current assets			
Property, plant and equipment	3.6.7	9,354	8,272
Goodwill	3.6.8	279	279
Intangible assets	3.6.7	1,419	1,465
Other non-current financial assets	3.6.9.1	86	69
Deferred tax assets		456	471
Other non-current assets		527	613
Total non-current assets		12,121	11,169
Current assets			
Inventories	3.6.11	3,047	2,583
Trade accounts receivable		1,984	1,970
Other current financial assets	3.6.9.1	1,399	748
Other receivables and assets	3.6.12	1,189	678
Short-term deposits		106	581
Cash and cash equivalents	3.6.13	3,111	3,258
Total current assets		10,836	9,818
Total assets		22,957	20,987
Equity			
Equity attributable to the equity holders of the parent		14,942	13,440
Noncontrolling interest		68	64
Total equity	3.6.14	15,010	13,504
Non-current liabilities			
Interest-bearing loans and borrowings	3.6.9.3	1,617	1,687
Other non-current financial liabilities	3.6.9.2	547	377
Employee benefits		431	417
Deferred tax liabilities		159	139
Other non-current liabilities		149	197
Total non-current liabilities		2,903	2,817
Current liabilities			
Interest-bearing loans and borrowings – current portion	3.6.9.3	894	885
Trade accounts payable		1,990	2,122
Other payables and accrued liabilities	3.6.15	698	511
Employee benefits – current portion		851	844
Current provisions		5	5
Other current financial liabilities	3.6.9.2	358	204
Income tax payable		248	95
Total current liabilities		5,044	4,666
Total equity and liabilities		22,957	20,987



## 3.4. Consolidated statement of changes in equity

For the six-month period ended July 1, 2023

						Equity attributable		
	Ordinary	Capital	Treasury	Other	Retained	to the equity holders of	Non controlling	Total
In millions of U.S. dollars	shares	surplus	shares	reserves	earnings	the parent	interest	Total equity
As of January 1, 2023 (audited)	1,157	2,283	(268)	1,901	8,367	13,440	64	13,504
Net profit	_	—	—	—	1,726	1,726	4	1,730
Other comprehensive income, net of tax	_	_	_	43	_	43	_	43
Total comprehensive income	_	—	—	43	1,726	1,769	4	1,773
Transfer of cash flow hedge reserve to inventories	_	_	_	2	_	2	_	2
Repurchase of common stock	—	—	(173)	—	—	(173)	—	(173)
Employee share award scheme, net of tax	_	_	200	122	(200)	122	_	122
Dividends		_	_	—	(218)	(218)	_	(218)
As of July 1, 2023 (unaudited)	1,157	2,283	(241)	2,068	9,675	14,942	68	15,010



## For the six-month period ended July 2, 2022

						Equity attributable to the equity	Non	
	Ordinary	Capital	Treasury	Other	Retained	holders of	controlling	Total
In millions of U.S. dollars	shares	surplus	shares	reserves	earnings	the parent	interests	equity
As of January 1, 2022 (audited)	1,157	2,283	(200)	1,738	4,539	9,517	64	9,581
Net profit	—	—	—	_	1,945	1,945	1	1,946
Other comprehensive income, net of tax	_	—	—	(183)	_	(183)	—	(183)
Total comprehensive income	_	_	_	(183)	1,945	1,762	1	1,763
Transfer of cash flow hedge reserve to inventories	_	—	—	7	_	7	—	7
Repurchase of common stock	_	—	(173)	_	_	(173)	—	(173)
Employee share award scheme, net of tax	_	_	224	96	(224)	96	—	96
Dividends	_	_	_	—	(217)	(217)	_	(217)
As of July 2, 2022 (unaudited)	1,157	2,283	(149)	1,658	6,043	10,992	65	11,057



## 3.5. Consolidated statement of cash flows

		(unauc	
		Six-month pe	
In millions of U.S. dollars	Note	July 1, 2023	July 2, 2022
Cash flows from operating activities			
Net profit		1,730	1,946
Items to reconcile net profit and cash flows from operating activities:			
Depreciation and amortization		901	719
Interest and amortization of issuance costs on convertible bonds		12	12
Change in fair value of embedded non-equity derivative instruments		283	(337
Share-based compensation		112	104
Other non-cash items		(63)	(41)
Deferred income tax		60	88
Impairment losses		97	32
Changes in net working capital:			
Movement of trade receivables, net		(27)	(338
Movement of inventories, net		(437)	(399)
Movement of trade payables		(79)	191
Movement of other assets and liabilities, net		257	278
Interests paid		(13)	(4
Interests received		88	7
Income tax paid		(101)	(58
Net cash from operating activities		2,820	2,200
Cash flows used in investing activities			
Payment for purchase of tangible assets		(2,204)	(1,656
Proceeds from capital grants and other contributions		37	4
Proceeds from sale of tangible assets		6	2
Payment for purchase of marketable securities		(660)	(229
Net proceeds from (investments in) short-term deposits		475	102
Payment for purchase of intangible assets		(211)	(215
Payment for purchase of financial assets		(8)	· _
Payment for business acquisitions, net of cash acquired			(15
Net cash used in investing activities		(2,565)	(2,007
Cash flows from (used in) financing activities		())	()
Repayment of interest-bearing loans and borrowings		(93)	(79
Payment for lease liabilities		(33)	(30
Repurchase of ordinary shares		(173)	(173
Dividends paid to equity holders of the parent Company		(175)	(1/3
Net cash used in financing activities		(404)	(105
Effect of changes in exchange rates		(404)	(585
Net cash decrease		(147)	(197
Cash and cash equivalents at beginning of the period		3,258	3,225
cush and cush equivalents at beginning of the period	3.6.13	3,238	3,028



## 3.6. Notes to the consolidated financial statements

## **3.6.1.** Corporate information

STMicroelectronics N.V. ("the Company"), with Commercial Register No. 33194537 and RSIN 008751171, is organized under the laws of the Netherlands with its corporate legal seat in Amsterdam, the Netherlands, and head offices at WTC Schiphol Airport, Schiphol Boulevard 265, 1118 BH Schiphol, the Netherlands. Headquarters and operational offices are managed through STMicroelectronics International N.V., a wholly owned subsidiary of STMicroelectronics N.V., and are located at 39, Chemin du Champ des Filles, 1228 Plan-les-Ouates, Geneva, Switzerland.

The Group is a global semiconductor group of companies that designs, develops, manufactures and markets a broad range of products, including discrete and general purpose components, application-specific integrated circuits ("ASICs"), full-custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital and mixed-signal applications. In addition, the Group participates in the manufacturing value chain of smartcard products, which includes the production and sale of both silicon chips and smartcards.

The Group's products are used in a wide variety of applications for the four end-markets the Group addresses: automotive, industrial, personal electronics and communications equipment, computers and peripherals. For the automotive and industrial markets, the Group addresses a wide customer base, particularly in industrial, with a broad and deep product portfolio. In personal electronics and communications equipment, computers and peripherals, the Group has a selective approach both in terms of the customers the Group serves, as well as in the technologies and products it offers.

The Company is a publicly traded company, listed on the New York Stock Exchange, on Euronext Paris and on the Borsa Italiana.

These unaudited Semi Annual Financial Statements were approved by ST's Supervisory Board on August 23, 2023.

## **3.6.2.** Basis of preparation

These unaudited Semi Annual Financial Statements for the six-month period ended July 1, 2023 have been prepared in accordance with IAS 34 Interim Financial Reporting, as adopted by the European Union.

The unaudited Semi Annual Financial Statements do not include all the information and disclosures required in the annual financial statements. They should be read in conjunction with the annual financial statements for the year ended December 31, 2022, prepared in accordance with International Financial Reporting Standards ("IFRS"), as adopted in the European Union, filed with the Dutch Authority for the Financial Markets on March 23, 2023 and adopted by our Annual General Meeting of Shareholders on May 24, 2023.

## 3.6.3. Significant accounting policies

The accounting policies adopted are consistent with those followed in the preparation of the Group's annual financial statements for the year ended December 31, 2022. The following new or amended standards were effective and adopted on January 1, 2023, with no material effect on the Group's consolidated financial statements.

**Amendments to IAS 1, Presentation of Financial Statements and IFRS Practice Statement 2:** Disclosure of Accounting Policies: the amendments require entities to disclose their material accounting policy information rather than their significant accounting policies. The narrow-scope amendments to IAS 1 have not generated any significant modification to the Group's disclosures related to its consolidated accounting policies.

Amendments to IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates: the amendments introduce the definition of accounting estimates (defined as monetary amounts in financial statements that are subject to measurement uncertainty) and clarify the distinction between changes in accounting estimates and changes in accounting policies. The Group adopted these amendments on January 1, 2023, with no material impact upon adoption.

Amendments to IAS 12, Income Taxes: Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction: the amendments require the recognition of deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences. The Group adopted the amended standard on January 1, 2023 and recognized a \$51 million deferred tax asset and a \$50 million deferred tax liability for all temporary differences arising from lease rights-of-use assets and the corresponding lease financial liabilities, reported as a net \$1 million deferred tax asset against retained earnings on the consolidated statement of financial position. The impact of first adoption being not significant, no further disclosures were provided in the consolidated financial statements for the period ended July 1, 2023.



Additionally, IFRS 17: Insurance Contracts, including Amendments to IFRS 17 Insurance contracts: Initial Application of IFRS 17 and IFRS 9 – Comparative information did not have any material impact on the accounting policies, financial position or performance of the Group for the period ended July 1, 2023.

Standards and amended standards issued but not yet effective up to the date of issuance of these unaudited Semi Annul Financial Statements are listed below. The detailed descriptions of new or amended standards and interpretations issued are those that the Group reasonably expects to have an impact on disclosures, financial position or performance when applied at a future date. The Group intends to adopt these standards when they become effective.

**Amendments to IAS 1, Presentation of Financial Statements:** the amendments specify the requirements for classifying liabilities as current or non-current by clarifying the requirements of IAS 1 when an entity expects to refinance or roll over an obligation under an existing loan facility. The amendments also have implications on the requirements related to covenant breaches. The amendments clarify: what is meant by a right to defer settlement; that a right to defer must exist at the end of the reporting period and that the classification is not affected by the likelihood that an entity will exercise its deferral right and that only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification. IAS 1, as amended, has not been endorsed by the European Union yet. The Group will apply these amendments when effective. The presentation on the consolidated statement of financial position of the convertible bonds issued by the Company is in the scope of the amended guidance, which is not expected to have a significant impact upon adoption.

**Amendments to IAS 12, Income Taxes:** International Tax Reform - Pillar Two Model Rules: in response to the accounting complexities arising from the international tax reform initiative initiated by the Organization for Economic Cooperation and Development (OECD) through the implementation of the Base Erosion and Profit Sharing (BEPS) 2.0 framework, the amendments to IAS 12 provide a temporary mandatory exception from accounting for deferred tax that arises from legislation implementing the "global anti-base erosion" (GloBE) model rules (including top-up tax). The temporary exception is effective as of May 23, 2023 and applies retrospectively. In addition, the amendments require new disclosures for reporting periods ending on or after December 31, 2023. IAS 12, as amended, has not been endorsed by the European Union yet. The Group will apply the amendments when effective and is currently reviewing the disclosure requirements to be included in the consolidated financial statements for the year ending December 31, 2023.

The following amendments to existing standards are not expected to have a material impact on the accounting policies, financial position or performance of the Group:

- Amendments to IAS 7: Statement of Cash Flows and IFRS 7 Financial Instruments: Disclosures: Supplier Finance Arrangements
- Amendments to IFRS 16: Leases: Lease Liability in a Sale and Leaseback

## 3.6.4. Critical accounting estimates and judgements

In preparing these unaudited Semi Annual Financial Statements, management has made estimates and judgements that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expenses. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under current circumstances. Actual results may differ from those estimates.

Estimates and assumptions used in these unaudited Semi Annual Financial Statements are consistent with those applied in the preparation of the Group's annual financial statements for the year ended December 31, 2022. The Group operated in the first half of 2023 with solid fundamentals and a strong capital structure, despite recent macroeconomic factors such as inflationary trends or geopolitical uncertainties, which may have a direct impact on the Group's forwardlooking growth and financial outlook. There are no conditions and events which raise substantial doubt about the Group's ability to continue as a going concern, in light with: its current financial condition, including its liquidity sources; its obligations – due or anticipated; the funds necessary to maintain the Group's operations and other conditions and events, if any.

These uncertainties have been factored in the critical accounting estimates and judgements made in preparing these unaudited Semi Annual Financial Statements, on the basis of all reasonable and supportable forecast of future conditions. However, the impact on future economic performance cannot be fully determined and is closely monitored on an ongoing basis by means of different scenarios. No events or changes in circumstances have indicated in the first half of 2023 that the carrying amount of major tangible assets, including lease right-of-use assets, might not be recoverable or that useful lives might not be appropriate. The Group also reviewed the recoverability of its tangible and intangible assets, including capitalized development costs. On the latter, the Group recorded a total impairment charge of \$46 million in



the first half of 2023. Refer to note 3.6.7 for further details on amounts capitalized, amortized and impaired during the period.

There is no major contingency to be reported as of July 1, 2023. The tax loss carryforwards capitalized as deferred tax assets are deemed recoverable in all major tax jurisdictions. To consider any potentially increased risk of default on accounts receivable, the Group adjusted the expected credit loss assumptions to reflect current conditions, reasonable and supportable forecast of future conditions and how current macroeconomic uncertainties may impact customers' and other debtors' future credit quality. This reassessment did not have any material effect on the expected credit loss allowances reported by the Group on its major categories of financial assets as of July 1, 2023.

These assessments are highly dependent on the evolution of global market trends and are closely monitored.

## 3.6.5. Revenues

#### 3.6.5.1. Nature of goods and services

The Group designs, develops, manufactures and markets a broad range of products, including discrete and standard commodity components, application-specific integrated circuits ("ASICs"), full custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital and mixed-signal applications. In addition, the Group participates in the manufacturing value chain of smartcard products, which includes the production and sale of both silicon chips and smartcards.

The principal activities – separated by operating segments – from which the Group generates its revenues are described in note 3.6.6.

Other revenues consist of license revenue, service revenue related to transferring licenses, patent royalty income, sale of scrap materials and manufacturing by-products.

While the majority of the Group's sales agreements contain standard terms and conditions, the Group may, from time to time, enter into agreements that contain multiple performance obligations or terms and conditions. Those agreements concern principally the revenues from services, where the performance obligation is satisfied over time. The objective when allocating the transaction price is to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods or services to the customer.

## **3.6.5.2.** Revenue recognition and disaggregation

The Group recognizes revenue from products sold to a customer, including distributors, when it satisfies a performance obligation at a point in time by transferring control over a product to the customer. This usually occurs at the time of shipment. The performance obligations linked to the sale of goods contracts have the original expected length of less than one year. The transaction price is determined based on the contract terms, adjusted for price protection if applicable. The revenues from services are usually linked to performance obligations transferred over time and are recognized in line with the contract terms.

The Group has signed several multi-annual capacity reservation and volume commitment arrangements with certain customers. These agreements constitute a binding commitment for the customers to purchase and for the Group to supply allocated committed volumes in exchange for additional consideration. The consideration related to commitment fees is reported as revenues from sale of products as it is usually based on delivered quantities.

The payment terms typically range between 30 and 90 days.

The following table presents the Group's consolidated total revenues disaggregated by geographical region of shipment, nature and market channel.



	(unaud	lited)
	Six-month pe	riod ended
In millions of U.S. dollars	July 1, 2023	July 2, 2022
Total revenues by geographical region of shipment <sup>(1)</sup>		
EMEA	2,430	1,617
Americas	1,385	1,055
Asia Pacific	4,758	4,711
Total revenues	8,573	7,383
Total revenues by nature		
Revenues from sale of products	8,476	7,312
Revenues from sale of services	85	58
Other revenues	12	13
Total revenues	8,573	7,383
Total revenues by market channel <sup>(2)</sup>		
Original Equipment Manufacturers ("OEM")	5,490	4,836
Distribution	3,083	2,547
Total revenues	8,573	7,383

(1) Total revenues by geographical region of shipment are classified by location of customer invoiced or reclassified by shipment destination in line with customer demand. For example, products ordered by U.S.-based companies to be invoiced to Asia Pacific affiliates are classified as Asia Pacific revenues. Furthermore, the Group, among the different periods, may be affected by shifts in shipments from one location to another, as requested by customers.

(2) Original Equipment Manufacturers ("OEM") are the end-customers to which the Group provides direct marketing application engineering support, while Distribution refers to the distributors and representatives that the Group engages to distribute its products around the world.

## 3.6.6. Segment information

The Group designs, develops, manufactures and markets a broad range of products, including discrete and standard commodity components, application-specific integrated circuits ("ASICs"), full-custom devices and semi-custom devices and application-specific standard products ("ASSPs") for analog, digital and mixed-signal applications. In addition, we further participate in the manufacturing value chain of smartcard products, which includes the production and sale of both silicon chips and smartcards.

The Group's operating segments are as follows:

- Automotive and Discrete Group (ADG), comprised of dedicated automotive integrated circuits ("ICs"), and discrete and power transistor products.
- Analog, MEMS and Sensors Group (AMS), comprised of analog, smart power, MEMS sensors and actuators, and optical sensing solutions.
- *Microcontrollers and Digital ICs Group (MDG),* comprised of general-purpose microcontrollers and microprocessors, connected security products (e.g. embedded secured elements and NFC readers), memories (e.g. serial and page EEPROM) and RF and Communications products.

For the computation of the segments' internal financial measurements, the Group uses certain internal rules of allocation for the costs not directly chargeable to the segments, including cost of sales, SG&A expenses, and a part of R&D expenses. In compliance with the Group's internal policies certain costs are not allocated to the segments, but reported in "Others". Net revenues of "Others" include revenues from sales assembly services and other revenues. Operating profit (loss) of Others includes items such as unused capacity charges, including reduced manufacturing activity due to COVID-19 and incidents leading to power outage, impairment, restructuring charges, and other related closure costs, management reorganization expenses, start-up and phase-out costs of certain manufacturing facilities, and other unallocated income (expenses) such as: strategic or special R&D programs, certain corporate-level operating expenses, patent claims and litigations, and other costs that are not allocated to product groups, as well as operating earnings of other products. In addition, depreciation and amortization expense is part of the manufacturing costs allocated to the



segments and is neither identified as part of the inventory variation nor as part of the unused capacity charges; therefore, it cannot be isolated in cost of sales. Finally, public grants are allocated to the Group's segments proportionally to the incurred expenses on the sponsored projects.

Wafer costs are allocated to the segments based on actual cost. From time to time, with respect to specific technologies, wafer costs are allocated to segments based on market price.

The following tables present the Group's consolidated total revenues and consolidated operating income by operating segment.

Total revenues by operating segment:

	(unaud	lited)		
	Six-month pe	Six-month period ended		
In millions of U.S. dollars	July 1, 2023	July 2, 2022		
ADG	3,763	2,710		
AMS	2,008	2,192		
MDG	2,794	2,471		
Total revenues of operating segments	8,565	7,373		
Others	8	10		
Consolidated total revenues	8,573	7,383		

Operating profit by operating segment:

	(unaudited)	
	Six-month period ended	
In millions of U.S. dollars	July 1, 2023	July 2, 2022
ADG	1,201	595
AMS	357	514
MDG	1,000	832
Sub-total operating profit of operating segments	2,558	1,941
Impairment loss in intangible assets acquired through business contributions	(36)	-
Start Up and phase out costs	(67)	—
Unused capacity charges	(16)	(22)
Contingent consideration fair value remeasurement	5	2
Other unallocated manufacturing results	(61)	(50)
Gain on sale of non-current assets	4	2
Strategic and other R&D programs and other non-allocated provisions <sup>1</sup>	(40)	8
IFRS/U.S. GAAP Adjustments <sup>2</sup> :		
Net impact of capitalized development costs	3	47
Derivative instruments not designated as hedge instruments under IFRS	(4)	(28)
IFRIC 21 adjustment on levies	(6)	(4)
Employee benefits adjustments	(20)	26
Asset acquisition tax incentives	(19)	(20)
IFRS 16 adjustment on lease expenses	3	4
Total operating profit	2,304	1,906

(1) Includes unallocated income and expenses such as certain corporate-level operating expenses and other income (costs) that are not allocated to the product segments.

(2) The operating profit allocated by operating segments as reported in the above table is based on the Group's primary financial reporting framework (U.S. GAAP) and reflects the way the Chief Operating Decision Maker ("CODM") monitors the operating performance of each segment.



## 3.6.7. Property, plant and equipment, and intangible assets

Changes in the net carrying amount of property, plant and equipment, and intangible assets are detailed as follows:

In millions of U.S. dollars	Property, plant and equipment	Intangible assets
Net book value as of January 1, 2023	8,272	1,465
Additions	2,157	194
Capital grants and other contributions	(363)	-
Impairment / Write-Offs	(24)	(89)
Depreciation and amortization	(750)	(151)
Foreign currency translation	62	_
Net book value as of July 1, 2023 (unaudited)	9,354	1,419

In the second quarter of 2023, the Group signed a frame agreement with the European and French authorities for a public funding program associated with the capacity expansion in one of its manufacturing facilities in France. The Group reported \$363 million capital grants as a reduction of "Property, plant and equipment, net" on the consolidated statement of financial position as of July 1, 2023, out of which \$312 million as part of this public funding program. No significant income was recognized as compensation of depreciation expense for the first six months of 2023.

The impairment and write-offs for the first half of 2023 amounted to \$113 million (first half 2022: \$32 million), primarily relate to \$46 million write-off of the capitalized development costs related to certain businesses and related projects that were cancelled and \$36 million impairment loss on intangible assets acquired through business combinations.

Property, plant and equipment include lease right-of-use assets. Refer to note 3.6.10 for more details on leases.

## 3.6.8. Goodwill

Goodwill allocated to operating segments and changes in the carrying amount of goodwill were as follows:

In millions of U.S. dollars	ADG	AMS	MDG	Total
As of January 1, 2023	74	2	203	279
Foreign currency translation	(2)	—	2	_
As of July 1, 2023 (unaudited)	72	2	205	279



## 3.6.9. Other financial assets and financial liabilities

## 3.6.9.1. Other financial assets

	(unaudited)	
In millions of U.S. dollars	July 1, 2023	December 31, 2022
Other financial assets (including derivatives)		
Other financial assets		
Quoted debt securities at FVOCI <sup>(1)</sup>	1,346	679
Unquoted equity securities at FVOCI <sup>(1)</sup>	20	10
Quoted equity securities at FVPL <sup>(2)</sup>	13	12
Other trading financial assets at FVPL <sup>(2)</sup>	16	14
Total other financial assets	1,395	715
Current	1,346	679
Non-current	49	36
Derivative financial instruments		
Cash flow hedges		
Foreign exchange forward contracts	15	30
Currency collars	6	8
Derivatives not designated as hedges		
Foreign exchange forward contracts	8	25
Currency collars	4	6
Embedded call option - Senior unsecured convertible bonds issued on August 4, 2020 (Tranche A)	28	13
Embedded call option - Senior unsecured convertible bonds issued on August 4, 2020 (Tranche B)	29	20
Total derivatives financial instruments	90	102
Current	53	69
Non-current	37	33
Total other financial assets (including derivatives)	1,485	817
Total current	1,399	748
Total non-current	86	69

(1) FVOCI: Fair Value through Other Comprehensive Income

(2) FVPL: Fair Value through P&L



In millions of U.S. dollars	Jan 1, 2023	Change in fair value included in OCI*	Change in fair value included in income statement	Increase	Accretion	(unaudited) July 1, 2023
Government bonds issued by the U.S.						
Treasury	679	(6)	_	660	13	1,346
Quoted equity instruments at FVPL	12	_	1	_	_	13
Sub-total Quoted debt and equity						
securities	691	(6)	1	660	13	1,359
Unquoted equity securities at FVOCI	10	_	_	10	_	20
Other trading financial assets at FVPL	14	_	2	_	_	16
Total other financial assets (excluding						
derivatives)	715	(6)	3	670	13	1,395

Movement in other financial assets (excluding derivatives) recorded in the first half of 2023 are summarized as follows:

\*OCI: Other comprehensive income

#### Investments held in debt securities

As of July 1, 2023, the Group held \$1,346 million of U.S. Treasury debt securities. The debt securities have an average rating of Aaa/AA+/AAA from Moody's, S&P and Fitch, respectively and an average maturity of 1.9 years. The debt securities were reported as current assets on the line "Other current financial assets" on the consolidated statement of financial position as of July 1, 2023, since they represented investments of funds available for current operations.

Marketable securities totaling \$750 million at principal amount were transferred to financial institutions as part of shortterm securities lending transactions, in compliance with corporate policies. The Group, acting as the securities lender, does not hold any collateral in this unsecured securities lending transaction. The Group retains effective control on the transferred securities.

The Group applies a forward-looking expected credit loss (ECL) approach on all debt financial assets not held at FVPL. For debt securities at FVOCI, the ECL is based on a 12-month expected credit loss basis. The 12-month ECL is the portion of lifetime ECLs that results from default events on a financial instrument that are possible within 12 months after the reporting date. Since the Group's quoted debt instruments at FVOCI comprise solely U.S. Treasury debt securities, the Group has considered that the ECLs on these investments are insignificant.

## Investments held in equity securities

As of July 1, 2023, the Group also had investments in quoted equity securities for an aggregate value of \$13 million, measured at FVPL (December 31, 2022: \$12 million).

As of July 1, 2023, the Group also reported other trading financial assets for an aggregate value of \$16 million (December 31, 2022: \$14 million).

The Group irrevocably elected to measure at FVOCI unquoted equity securities for an aggregate value of \$20 million (December 31, 2022: \$10 million). Since these are strategic investments, the Group considers this classification, which implies that changes in fair value are not subsequently recycled to earnings, to be more relevant.

#### Short-term deposits

To optimize the return yield on its short-term investments, the Group invested \$106 million of available cash in short-term deposits as of July 1, 2023 and \$581 million as of December 31, 2022. These short-term deposits have a maturity beyond three months and no significant risk of changes in fair value. They are reported in "Short-term deposits" in the consolidated statement of financial position.



## 3.6.9.2. Other financial liabilities

	(unaudited)	
In millions of U.S. dollars	July 1, 2023	December 31, 2022
Lease financial liabilities	275	250
Deferred and contingent consideration on business acquisitions	26	31
Derivative financial instruments		
Cash flow hedges		
Foreign exchange forward contracts	14	17
Currency collars	2	6
Derivatives not designated as hedges		
Foreign exchange forward contracts	19	12
Currency collars	2	4
Embedded conversion option - Senior unsecured convertible bonds issued on August 4, 2020 (Tranche A)	258	110
Embedded conversion option - Senior unsecured convertible bonds issued on August 4, 2020 (Tranche B)	309	151
Total other financial liabilities (including derivatives)	905	581
Total current	358	204
Total non-current	547	377

Refer to notes 3.6.9.3 and 3.6.9.5 for further explanations on other types of financial liabilities. Refer to note 3.6.10 for further explanations on lease liabilities.

## 3.6.9.3. Interest-bearing loans and borrowings

	(unaudited)		
In millions of U.S. dollars	July 1, 2023	December 31, 2022	
Funding program loans from European Investment Bank ("EIB"):			
4.20% due 2028, floating interest rate at Euribor + 0.589%	166	163	
3.42% due 2029, floating interest rate at Euribor + 0.564%	159	183	
3.64% due 2031, floating interest rate at Euribor + 0.583%	291	322	
3.43% due 2031, floating interest rate at Euribor + 0.660%	161	159	
Credit Facility from Cassa Depositi e Prestiti SpA ("CDP SpA"):			
4.45% due 2027, floating interest rate at Euribor + 0.690%	109	120	
3.90% due 2028, floating interest rate at Euribor + 0.550%	100	107	
4.20% due 2029, floating interest rate at Euribor + 0.850%	101	107	
Dual tranche senior unsecured convertible bonds:			
Zero-coupon, due 2025 (Tranche A)	724	717	
Zero-coupon, due 2027 (Tranche B)	696	690	
Other funding program loans:			
0.31% (weighted average), due 2023-2028, fixed interest rate	4	4	
Total interest-bearing loans and borrowings	2,511	2,572	
Total current	894	885	
Total non-current	1,617	1,687	

On August 4, 2020, the Company issued \$1,500 million principal amount dual tranche senior unsecured convertible bonds (Tranche A for \$750 million and Tranche B for \$750 million), due 2025 and 2027, respectively. Tranche A bonds were issued at 105.8% as zero-coupon bonds while Tranche B bonds were issued at 104.5% as zero-coupon bonds. The conversion price at issuance was \$43.62 for Tranche A equivalent to a 47.5% conversion premium and \$45.10 for Tranche



B, equivalent to a 52.5% conversion premium. These conversion features correspond to an equivalent of 4,585 shares per each Tranche A bond \$200,000 par value and an equivalent of 4,435 shares per each Tranche B bond \$200,000 par value. The bonds are convertible by the bondholders or are callable by the issuer upon certain conditions, on a net-share settlement basis, except if the issuer elects a full-cash or full-share conversion as an alternative settlement. The net proceeds from the bond offering were \$1,567 million, after deducting issuance costs payable by the Group.

The issuer's call option and the holder's conversion option have been identified as embedded non-equity derivative instruments, resulting in the recognition of the options separately from the debt host contract. Upon initial recognition, the derivatives were measured at fair value based on the income approach, the debt being determined as a residual amount of the \$1.5 billion total proceeds. The value of the issuer's call option was deemed to be nil at initial recognition. The value of the holder's conversion option was estimated at \$219 million at issuance date, which determined the initial recognition of the liability component at \$1,358 million before allocation of issuance costs. The fair value measurement of the embedded derivative instruments corresponded to a Level 3 fair value hierarchy measurement, which is further described in note 3.6.9.5. The Group elected to allocate issuance costs, totaling \$10 million, to the debt component. The debt was subsequently measured at amortized cost using the effective interest method.

The embedded derivatives are measured at fair value through profit and loss, with the changes in fair value being immediately reported in earnings. The value of the conversion options (Tranche A and Tranche B) was \$567 million as of July 1, 2023 (\$261 million as of December 31, 2022), which generated a change in fair value of \$306 million reported on the line "Finance cost" on the consolidated income statement for the first half of 2023. The value of the issuer's call options of Tranche A and Tranche B was \$57 million as of July 1, 2023 (\$33 million as of December 31, 2022).

Up until August 2023 for Tranche A and August 2024 for Tranche B, the bonds can be converted by the bondholders with a contingent feature of 130% of the conversion price, measured at quarter-end for the following quarter. After that date, the bondholders will have full conversion rights.

Up until August 2023 for Tranche A and August 2024 for Tranche B, the Company cannot exercise its call rights. After that date, the bonds are callable by the Company with a 130% contingent feature, with the exercise of its call rights being preceded by the release, by the Company, of an Optional Redemption Notice.

As of July 1, 2023, the Company stock price exceeded the conversion price of the senior unsecured convertible bonds. However, the 130% stock price contingent feature was not met.

The Company's long-term debt contains standard conditions but does not impose minimum financial ratios. The Company had unutilized committed medium-term credit facilities with core relationship banks totaling \$1,346 million as of July 1, 2023.

The EIB loans are comprised of three long-term amortizing credit facilities as part of public funding programs. The first, signed in August 2017, is a €500 million loan, in relation to R&D and capital expenditures in the European Union, fully drawn in Euros, of which \$325 million was outstanding as of July 1, 2023. The second one, signed in 2020, is a €500 million credit facility agreement with EIB to support R&D and capital expenditure programs in Italy and France. The amount was fully drawn in Euros representing \$452 million outstanding as of July 1, 2023. In 2022, the Company signed a third long-term amortizing credit facility with EIB of €600 million, out of which, no amount had been drawn as of July 1, 2023.

The CDP SpA loans are comprised of two long-term credit facilities. The first, signed in 2021, is a €150 million loan, fully drawn in Euros, of which \$109 million were outstanding as of July 1, 2023. The second one, signed in 2022, is a €200 million loan, fully drawn in Euros, of which \$201 million was outstanding as of July 1, 2023.

## 3.6.9.4. Hedging activities and derivatives

## Derivative instruments not designated as hedges

The Group conducts its business on a global basis in various major international currencies. As a result, the Group is exposed to adverse movements in foreign currency exchange rates, primarily with respect to the Euro. Foreign exchange risk mainly arises from future commercial transactions and recognized assets and liabilities at the Group's subsidiaries. The Group enters into currency forward contracts to reduce its exposure to changes in exchange rates and the associated risk arising from the denomination of certain assets and liabilities in foreign currencies at the Group's subsidiaries. These instruments do not qualify as hedging instruments and are marked-to-market at each period-end with the associated changes in fair value recognized in "Other income" or "Other expenses" in the consolidated income statement.

To reduce its exposure to U.S. dollar exchange rate fluctuations, the Group also hedges certain Euro-denominated forecasted transactions that cover at reporting date a large part of its R&D and SG&A expenses through the use of



currency forward contracts and currency options, including collars. These instruments do not qualify as hedging instruments and are marked-to-market at each period-end with the associated changes in fair value recognized in "Other income" or "Other expenses" in the consolidated income statement.

The principal currencies covered at the end of the first six-month period ended July 1, 2023, are the Euro, the Singapore dollar, the China Yuan Renminbi, the Japanese yen, the Moroccan dirham, the Indian rupee, the Malaysian ringgit, the Philippines peso, the Swiss franc, the Swedish krona, the Taiwan dollar and the South Korean won.

#### Derivative instruments designated as cash flow hedges

To reduce its exposure to U.S. dollar exchange rate fluctuations, the Group hedges certain Euro-denominated forecasted transactions that cover at reporting date a portion of its front-end manufacturing costs of semi-finished goods through the use of currency forward contracts and currency options, including collars. The Group also hedges certain manufacturing transactions denominated in Singapore dollars.

The principles regulating the hedging strategy for derivatives designated as cash flow hedge is to hedge up to 70% of the total forecasted transactions of the following quarter for these manufacturing costs. In order to follow a dynamic hedge strategy, the Group may change the percentage of the designated hedged item within the limit of 100% of the forecasted transaction. The maximum length of time over which the Group could hedge its exposure to the variability of cash flows for forecasted transactions is 24 months.

The derivative instruments designated as cash flow hedges are reflected at fair value in the consolidated statement of financial position. The unrealized gain or loss from the effective portion of the hedge is reported in other comprehensive income and is reclassified into earnings in the same period in which the hedged transaction affects earnings, and within the same consolidated income statement line item as the impact of the hedged transaction.

As of July 1, 2023, the Group had the following outstanding derivative instruments that were entered into to hedge Eurodenominated and Singapore-Dollar-denominated forecasted transactions:

	forecasted m	nt for hedge on anufacturing nsactions
	In millions of Euros	In millions of Singapore Dollars
Forward contracts	1,009	248
Currency collars	730	_

As of July 2, 2022, the Group had the following outstanding derivative instruments that were entered into to hedge Eurodenominated and Singapore-Dollar-denominated forecasted transactions:

	forecasted n	unt for hedge on nanufacturing Insactions
	In millions of Euros	In millions of Singapore Dollars
Forward contracts	986	218
Currency collars	832	_

## Cash flow and fair value interest rate risk

The Group's interest rate risk arises from long-term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk. Borrowings issued at fixed rates expose the Group to fair value interest rate risk.

The Group analyzes its interest rate exposure on a dynamic basis. Various scenarios are simulated taking into consideration refinancing, renewal of existing positions, alternative financing and hedging. The Group invests primarily on a short-term basis and as such its liquidity is invested in floating interest rate instruments. As a consequence, the Group is



exposed to interest rate risk due to potential mismatch between the return on its short-term floating interest rate investments and the portion of its long-term debt issued at fixed rate.

## Offsetting financial assets and financial liabilities

The Group entered into currency collars as combinations of two options, which are reported, for accounting purposes, on a net basis. The fair value of these collars represented as of July 1, 2023 assets for a net amount of \$10 million (composed of \$12 million asset net of a \$2 million liability) and liabilities for a net amount of \$4 million (a gross amount of \$1 million asset net of a \$5 million liability). In addition, the Group entered into other derivative instruments, primarily forward contracts, which are governed by standard International Swaps and Derivatives Association ("ISDA") agreements and are compliant with Protocols of the European Market Infrastructure Regulation ("EMIR"), which are not offset in the statement of financial position and representing total assets of \$24 million and liabilities of \$33 million as of July 1, 2023.

## 3.6.9.5. Fair values

Set out below is a comparison by class of the carrying amounts and fair value of the Group's financial instruments that are carried in the financial statements.

	Carrying amount		Fair value		
	(unaudited)	December 31,	(unaudited)	December 31,	
In millions of U.S. dollars	July 1, 2023	2022	July 1, 2023	2022	
Financial assets					
Short-term deposits	106	581	106	581	
Trade accounts receivables	1,984	1,970	1,984	1,970	
Other receivables and assets	1,189	678	1,189	678	
Quoted financial instruments	1,375	705	1,375	705	
Unquoted equity securities	20	10	20	10	
Embedded call option - Senior unsecured convertible bonds issued on August 4, 2020 (Tranche A)	28	13	28	13	
Embedded call option - Senior unsecured convertible bonds issued on August 4, 2020 (Tranche B)	29	20	29	20	
Other financial assets	33	69	33	69	
Cash equivalents <sup>(1)</sup>	2,812	2,996	2,812	2,996	
Financial liabilities	,	,	,	,	
Interest-bearing loans and borrowings					
(excluding senior unsecured convertible bonds)	1,091	1,165	1,091	1,165	
Senior unsecured convertible bonds issued on August 4, 2020 <sup>(2)</sup>	1,420	1,407	1,818	1,561	
Embedded conversion option - Senior unsecured convertible bonds issued on August 4, 2020 (Tranche A)	258	110	_	_	
Embedded conversion option - Senior unsecured convertible bonds issued on August 4, 2020 (Tranche B)	309	151	_	_	
Contingent consideration on business acquisitions	26	31	26	31	
Trade accounts payable	1,990	2,122	1,990	2,122	
Other payables and accrued liabilities	698	511	698	511	
Other financial liabilities	37	39	37	39	

(1) Cash equivalents primarily correspond to deposits at call with banks.



(2) The carrying amount of the senior unsecured convertible bonds issued on August 4, 2020 and outstanding as of July 1, 2023 and December 31, 2022 corresponds to the liability component only, since, at initial recognition, an amount of \$219 million was separately recognized as embedded derivative financial instruments. The fair value of \$1,818 million and \$1,561 million as of July 1, 2023 and December 31, 2022 respectively reflects the market price of the convertible bonds traded on the Frankfurt bond market. It consequently embeds the three components of the convertible bonds (debt host contract, bondholders' conversion option and issuer's soft call).

The fair value of financial assets and liabilities are included at the price at which the instrument could be sold in an orderly transaction between market participants at the measurement date. The following methods and assumptions were used to estimate fair value:

- For trade accounts receivable, cash equivalents, short-term deposits, trade accounts payable, other payables and accrued liabilities, the carrying amounts reflected in the consolidated financial statements are reasonable estimates of fair value due to the relatively short period of time between the origination of the instruments and their expected realization.
- Other receivables and assets approximate their carrying amounts due either to their short-term maturities or to the fact that they are recorded at their net present value.
- Financial investments (debt and equity securities):
  - The fair value of quoted debt and equity securities is determined based on quoted market prices for identical instruments.
  - The fair value of unquoted equity securities is based on the valuation of the underlying instruments on a new round of third-party financing or upon liquidation.
- The fair value of interest-bearing loans and borrowings but excluding senior unsecured convertible bonds, is determined by estimating future cash flows on a borrowing-by-borrowing basis and discounting these future cash flows using the Group's incremental borrowing rates for similar types of arrangements.
- The dual tranche senior unsecured convertible bonds issued on August 4, 2020 and outstanding as of July 1, 2023 and December 31, 2022 have been trading on the open market segment on the Frankfurt Stock Exchange since issuance. The fair value of these instruments is the observable price of the bonds on that market.
- The fair value of derivative instruments is determined based upon quoted market prices for similar instruments.
- The bondholders' conversion options embedded in the senior unsecured convertible bonds issued on August 4, 2020 amounted to \$567 million as of July 1, 2023 and \$261 million as of December 31, 2022. The issuer's call options of the senior unsecured convertible bonds issued on August 4 amounted to \$57 million as of July 1, 2023 and \$33 million as of December 31, 2022. These embedded derivative instruments were measured at fair value based on the income approach using Bloomberg's option pricing model, which can be assimilated to a Black & Scholes model for pricing stock options. This model was elected as the best indication of fair value since it maximized the use of observable market-based inputs.

## Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities.
- Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly.
- Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

As of July 1, 2023, the Group held the following financial instruments measured at fair value:



In millions of U.S. dollars	(unaudited) July 1, 2023	Level 1	Level 2	Level 3
Assets measured at fair value				
Financial assets at FVPL				
Trading derivatives				
Foreign exchange forward contracts	8	—	8	_
Currency collars	4	_	4	_
Quoted equity securities at FVPL	13	13	—	_
Other trading financial assets at FVPL	16	16	—	_
Embedded call options	57	_	—	57
Cash flow hedges				
Foreign exchange forward contracts	15	_	15	_
Currency collars	6	—	6	—
Unquoted equity securities measured at FVOCI	20	_	_	20
Short-term deposits	106	106	_	_
Total assets	245	135	33	77
Liabilities measured at fair value				
Trading derivatives				
Foreign exchange forward contracts	19	—	19	_
Currency collars	2	—	2	_
Cash flow hedges				
Foreign exchange forward contracts	14	_	14	_
Currency collars	2	—	2	—
Embedded conversion options	567	_		567
Contingent consideration on business acquisitions	26	_	_	26
Total liabilities	630	_	37	593

During the reporting period ending July 1, 2023, there was no transfer between Level 1 and Level 2 fair value measurements, and no transfer into and out of Level 3 fair value measurements.

## Financial instruments in Level 1

The fair value of financial instruments traded in active markets is based on quoted market prices at reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Group is the current bid price. These instruments are included in Level 1.

## Financial instruments in Level 2

The fair value of financial instruments that are not traded in active markets (for example over the counter derivatives) is determined by using valuation techniques. These valuation techniques maximize the use of observable market data when available and rely as little as possible on entity's specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2. If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3. Specific valuation techniques used to value financial instruments include:

• Quoted market prices or dealer's quotes for similar instruments;



• The fair value of foreign exchange forward contracts when determined using forward exchange rates at the balance sheet date, with the resulting value discounted back to present value.

#### Financial instruments in Level 3

For financial assets (liabilities) measured at fair value using significant unobservable inputs (Level 3), the reconciliation between January 1, 2023 and July 1, 2023 is presented as follows:

In millions of U.S. dollars	Fair value measurements using significant unobservable inputs (Level 3)
As of January 1, 2023	(249)
Change in fair value of the embedded conversion option of the senior unsecured convertible bonds issued on August 4, 2020 (Tranche A and Tranche B) Note 3.6.18	(306)
Change in fair value of the embedded call option of the senior unsecured convertible bonds issued on August 4, 2020 (Tranche A and Tranche B) Note 3.6.18	24
Change in fair value of the contingent consideration on business acquisitions	5
Purchase of equity securities at FVOCI	10
As of July 1, 2023 (unaudited)	(516)
Amount of total unrealized losses included in income statement attributable to assets (liabilities) still held at the reporting date for the half of 2023	(277)

For financial assets (liabilities) measured at fair value using significant unobservable inputs (Level 3), the reconciliation between January 1, 2022 and July 2, 2022 is presented as follows:

In millions of U.S. dollars	Fair value measurements using significant unobservable inputs (Level 3)
As of January 1, 2022	(577)
Change in fair value of the embedded conversion option of the senior unsecured convertible bonds issued on August 4, 2020 (Tranche A and Tranche B) Note 3.6.18	338
Change in fair value of the contingent consideration on business acquisitions	2
Currency translation adjustment	5
As of July 2, 2022 (unaudited)	(232)
Amount of total unrealized losses included in income statement attributable to assets (liabilities) still held at the reporting date for the half of 2022	

The model used to price the derivative instruments embedded in the senior unsecured convertible bonds issued on August 4, 2020 (Tranche A and Tranche B) included the following inputs:

- The risk-free interest rate for comparable maturities;
- The reference price for the Company's ordinary shares as traded on the New York Stock Exchange;
- The exercise price;
- The dividend expected to be paid on the Company's ordinary shares over the life of the option;
- The volatility of the Company's ordinary shares; and
- The duration of the option.



Implied volatility should be considered an unobservable input due to the lack of market data (stock exchange listing of the bond option) for a time horizon equal to the duration of the option. The figure is, therefore, an assumption based on the volatility implied by the price of the financial instrument, as negotiated at the issue stage, and market volatility for the nearest time horizon.

The prices of the bondholders' conversion options are sensitive to implied volatility. The table below shows a sensitivity analysis of the net carrying amount of the embedded conversion options in relation to a series of changes expressed in percentage point terms of volatility.

Change in volatility of the Company's ordinary shares	-10 p.p.	- 8 p.p.	-5 p.p.	+5 p.p.	+8 p.p.	+10 p.p.
Change in the net carrying amount of the bondholders' conversion option	(90)	(72)	(45)	45	73	91
Net carrying amount of the embedded conversion option	478	496	522	613	640	658

## 3.6.10. Leases

The Group leases land, buildings, cars and certain equipment (including IT equipment) which have remaining lease terms between less than one year and 47 years.

The consolidated statement of financial position shows the following amounts relating to leases:

	(unaudited)	
In millions of U.S. dollars	July 1, 2023	December 31, 2022
Right-of-use assets		
Land	33	34
Buildings	175	149
Machinery and equipment	40	38
Computer and R&D equipment	7	7
Other	14	14
Total	269	242

Additions to the right-of-use assets during the first 6 months of 2023 were \$64 million (2022: \$53 million). Expenses related to short-term and low-value leases were not significant as of July 1, 2023 and July 2, 2022. Interest expense (included in finance cost described in Note 3.6.16) was \$5 million as of July 1, 2023 (2022: \$3 million). Cash outflows, including finance cost for leases totaled \$37 million in the first 6 months of 2023 (2022: \$32 million).

Maturities of lease liabilities are as follows:

	(unaudited)
In millions of U.S. dollars	July 1, 2023
2023	39
2024	59
2025	43
2026	30
2027	45
Thereafter	127
Total future undiscounted cash outflows	343
Effect of discounting	(68)
Total lease liabilities	275



In millions of U.S. dollars	December 31, 2022
2023	65
2024	45
2025	32
2026	24
2027	40
Thereafter	109
Total future undiscounted cash outflows	315
Effect of discounting	(65)
Total lease liabilities	250

The consolidated income statement shows the following amounts relating to leases:

	(unaudited)			
	Six-month period ended			
In millions of U.S. dollars	July 1, 2023 July 2, 2			
Depreciation expense right-of-use assets				
Land	1	1		
Buildings	25	21		
Machinery and equipment	3	0		
Computer and R&D equipment	3	4		
Other	4	4		
Total	36	30		

Reported amounts related to lease arrangements are further described in Note 3.6.9.

# 3.6.11. Inventories

Inventories consisted of the following:

Total	3,047	2,583
Finished products	773	744
Work-in-process	1,956	1,490
Raw materials	318	349
In millions of U.S. dollars	July 1, 2023	December 31, 2022
	(unaudited)	

# 3.6.12. Other receivables and assets

Other receivables and assets consisted of the following:

	(unaudited)	
In millions of U.S. dollars	July 1, 2023	December 31, 2022
Public funding receivables	653	190
Taxes and other goverment receivables	211	270
Advances and prepayments	175	125
Other current assets	150	93
Total	1,189	678



Receivables related to public funding included \$312 million of capital grants associated with the frame agreement signed with the European and French authorities during the first six months of 2023 as part of the capacity expansion project for the 300mm wafer fab in Crolles, France. As of July 1, 2023, other current assets also include \$54 million of contribution from a third party as part of a collaborative agreement associated with the same capital investment project.

Taxes and other government receivables include receivables related to value-added tax, primarily in European tax jurisdictions.

Advances and prepayments include prepaid amounts associated with multi-annual supply and service agreements.

The Group applies a forward-looking expected credit losses model on all financial assets measured at amortized cost, excluding trade accounts receivable. The major portion of other receivables and assets to which this expected credit loss model applies corresponds to government receivables. Due to the short maturity of these receivables and the existing history of zero-default on receivables originated by governments, the expected credit losses were assumed to be not significant as of July 1, 2023 and December 31, 2022. Other current assets are composed of individually insignificant amounts at exposure of default. Consequently, no significant loss allowance was reported on those current assets as of July 1, 2023 and December 31, 2022.

#### 3.6.13. Cash and cash equivalents

Cash and cash equivalents consisted of the following:

	(unaudited)	
In millions of U.S. dollars	July 1, 2023	December 31, 2022
Cash at bank and cash on hand	299	262
Deposits at call with banks	2,812	2,996
Total	3,111	3,258

## 3.6.14. Equity

#### 3.6.14.1. Outstanding shares

The authorized share capital of the Company is  $\leq 1,810$  million consisting of 1,200,000,000 common shares and 540,000,000 preference shares, each with a nominal value of  $\leq 1.04$ . The 540,000,000 preference shares, when issued, will entitle a holder to full voting rights and to a preferential right to dividends and distributions upon liquidation. As of July 1, 2023, the number of shares of share capital issued was 911,281,920 shares (911,281,920 as of December 31, 2022).

The Company is a party to an option agreement regarding the preference shares with Stichting Continuïteit ST (the "Stichting"), entered into on January 22, 2007, with a duration of ten years, which agreement was extended for another ten years in October 2016. The Managing Board and the Supervisory Board, along with the board of the Stichting, have declared that they are jointly of the opinion that the Stichting is independent of the Company. The option agreement provides for the issuance of up to a maximum 540,000,000 preference shares. Any such shares would be issued to the Stichting upon its request and in its sole discretion and upon payment of at least 25% of the par value of the preference shares to be issued. The shares would be issuable in the event of actions which the board of the Stichting determines would be contrary to the Company's interests, shareholders, and other stakeholders and which in the event of a creeping acquisition or offer for the Company's common shares are not supported by the Company's Managing Board and Supervisory Board. The preference shares may remain outstanding for no longer than two years. No preference shares have been issued to date. The effect of the preference shares may be to deter potential acquirers from effecting an unsolicited acquisition resulting in a change of control as well as to create a level-playing field in the event of actions which are considered to be hostile by the Managing Board and the Supervisory Board, as described above, occur and which the board of the Stichting determines to be contrary to the Company's interests, shareholders and the Supervisory Board, as described above, occur and which the board of the Stichting determines to be contrary to the Company's interests, shareholders and other stakeholders.

There were no preference shares issued as of July 1, 2023 and December 31, 2022.

## 3.6.14.2. Treasury shares

As of July 1, 2023, the Company owned 5,806,885 shares classified as treasury stock in the consolidated statement of equity compared to 7,416,157 shares as of December 31, 2022.



The treasury shares have been originally designated for allocation under the Company's share-based remuneration programs of unvested shares. As of July 1, 2023, 79,943,077 of these treasury shares were transferred to employees under the Company's share-based remuneration programs, of which 5,422,862 were transferred in the first six months of 2023.

On July 1, 2021, the Company announced the launch of a share buy-back program of up to \$1,040 million to be executed within a three-year period. During the first six months of 2023, the Company repurchased approximately 3.8 million shares of its share capital for a total of \$173 million.

# 3.6.14.3.Other reserves

Other reserves include the following components as of July 1, 2023 and July 2 2022:

In millions of U.S. dollars	Share-based compensation reserve	Fair value reserve of financial assets at FVOCI	Cash Flow Hedge reserve	Foreign currency translation reserve	Employee benefit plan reserve	Total other reserves
As of January 1, 2022	1,380	(4)	(22)	578	(194)	1,738
Share-based compensation expense for the period	96	_	_	_	_	96
Net movement recognized in the statement of comprehensive income	_	(1)	(61)	(210)	89	(183)
Transfer of cash flow hedge reserve to inventories		_	7	_	_	7
As of July 2, 2022 (unaudited)	1,476	(5)	(76)	368	(105)	1,658
As of January 1, 2023	1,589	(18)	14	432	(116)	1,901
Share-based compensation expense for the period	122	_	_	_	_	122
Net movement recognized in the statement of comprehensive income	_	(5)	(13)	61	_	43
Transfer of cash flow hedge reserve to inventories	_	_	2	_	_	2
As of July 1, 2023 (unaudited)	1,711	(23)	3	493	(116)	2,068

**Share-based compensation reserve:** The share-based compensation reserve is used to recognize the value of the equity-settled share-based payments to employees, including key management personnel, as part of their remuneration.

*Fair value reserve of financial assets at FVOCI:* This reserve records fair value changes on debt and equity securities measured at FVOCI.

*Cash Flow hedge reserve:* The cash flow hedge reserve contains the effective portion of the cash flow hedge relationship outstanding as of reporting date.

**Foreign currency translation reserve:** The foreign currency translation reserve is used to record exchange differences from the translation of the financial statements for subsidiaries whose functional currency is different from the U.S. dollar reporting currency.

*Employee benefit plan reserve:* The employee benefit plan reserve is used to recognize the actuarial gains and losses and past service cost of post-employment pension plans.



## 3.6.14.4. Dividends

The Annual General Meeting of Shareholders ("AGM") held on May 25, 2023, authorized the distribution of a cash dividend of \$0.24 per outstanding share of the Company's common stock, to be distributed in quarterly installments of \$0.06 in each of the second, third and fourth quarters of 2023 and first quarter of 2024. An amount of \$45 million corresponding to the first installment was paid during the first half of 2023. The remaining portion of the first installment and the \$0.18 per share cash dividend corresponding to the last three installments totaled \$173 million and are reported in the line "Other payables and accrued liabilities" in the consolidated statement of financial position as of July 1, 2023.

The AGM held on May 25, 2022, authorized the distribution of a cash dividend of \$0.24 per outstanding share of the Company's common stock, to be distributed in quarterly installments of \$0.06 in each of the second, third and fourth quarters of 2022, and first quarter of 2023. The amounts of \$55 million for the first installment, \$54 million for the second installment, and \$48 million for the third installment were paid in 2022. An amount of \$6 million corresponding to the remaining portion of the third installment and \$54 million corresponding to the fourth installment were paid in the first six months of 2023.

The AGM held on May 27, 2021, authorized the distribution of a cash dividend of \$0.24 per outstanding share of the Company's common stock, to be distributed in quarterly installments of \$0.06 in each of the second, third and fourth quarters of 2021, and first quarter of 2022. The amounts of \$54 million for the first installment, \$55 million for the second installment, and \$54 million for the third installment were paid as of December 31, 2021. An amount of \$55 million corresponding to the fourth installment was paid in 2022.

## 3.6.15. Other payables and accrued liabilities

Other payables and accrued liabilities consisted of the following:

	(unaudited)	
In millions of U.S. dollars	July 1, 2023	December 31, 2022
Dividend due to shareholders	173	60
Taxes other than income taxes	105	68
Advances from customers	228	225
Advances from grants	35	37
Royalties	31	32
Other accrued liabilities	126	89
Total	698	511

Advances from customers are primarily related to multi-annual capacity reservation and volume commitment agreements signed in 2022 and 2023 with certain customers. Some of these arrangements include take-or-pay clauses, according to which the Group is entitled to receive the full amount of the contractual commitment fees in case of non-compliant orders from those customers. Certain agreements include penalties in case the Group is not able to fulfill its contractual obligations. No significant provision for those penalties was reported on the consolidated statement of financial position as of July 1, 2023.



# **3.6.16.** Expenses by nature

Expenses recorded as cost of sales, R&D and SG&A are detailed as follows:

Expenses recorded as cost of sales, R&D and SOAA are detailed as follows.	, .	
_	(unaud	
	Six-month per	riod ended
In millions of U.S. dollars	July 1, 2023	July 2, 2022
Depreciation and amortization	901	719
Employee benefit expenses	2,058	1,863
Purchase of materials	1,653	1,508
Power and gas	304	208
Freight	86	103
Purchase of subcontracting services	1,297	1,203
Changes in inventories	(437)	(399)
Transportation	52	24
Impairment charge	97	32
Royalties and patents	59	57
Advertising costs	11	8
Other expenses	180	190
Total cost of sales, selling, general and administrative, and research and		
development	6,261	5,516

Employee benefit expenses are detailed as follows:

	(unaud	(unaudited)	
	Six-month pe	eriod ended	
In millions of U.S. dollars	July 1, 2023	July 2, 2022	
Wages and salaries	1,541	1,438	
Payroll taxes and other social contribution charges	333	260	
Share-based compensation expense	112	104	
Pensions and other long-term benefits expense	72	61	
Total employee benefit expenses	2,058	1,863	
Of which included in:			
Cost of sales	881	823	
Selling, general and administrative	566	493	
Research and development	611	547	

# 3.6.17. Other income / expenses

Other income consisted of the following:

	(unauc	(unaudited)	
	Six-month pe	eriod ended	
In millions of U.S. dollars	July 1, 2023	July 2, 2022	
R&D funding	52	102	
Foreign exchange forward contracts and other currency derivatives	11	10	
Gain on sale of non-current assets	5	2	
Total other income	68	114	



Other expenses consisted of the following:

	(unaudited) Six-month period ended	
In millions of U.S. dollars	July 1, 2023	July 2, 2022
Net foreign exchange loss	(2)	(3)
Foreign exchange forward contracts and other currency derivatives	—	(57)
Start-up and phase-out costs	(67)	(1)
Patent costs	(5)	(4)
Sanitation and other costs incurred to prevent the spread of COVID-19	_	(8)
Other expenses	(2)	(2)
Total other expenses	(76)	(75)

The Group receives significant public funding from governmental agencies in several jurisdictions.

Foreign exchange gains (losses), net of foreign exchange forward contracts and other currency derivatives, represent the portion of exchange rate changes on transactions denominated in currencies other than an entity's functional currency and the changes in fair value of derivative instruments which are not designated as hedge, as described in Note 3.6.9.4.

Start-up costs represent costs incurred in the ramp-up phase of the Group's newly integrated manufacturing facilities. Phase-out costs are costs incurred during the closing stage of a Group's manufacturing facility.

Patent costs mainly include legal and attorney fees and payment for claims, patent pre-litigation consultancy and legal fees. They are reported net of settlements, if any, which primarily include reimbursements of prior patent litigation costs.

COVID-19 incremental costs are mainly composed of incremental expenses primarily related to sanitary measures undertaken to protect employees. Starting January 1, 2023, the Group no longer reports Covid-19 related expenses as a component of the line "Other expenses" in the consolidated income statement.

# 3.6.18. Finance income /costs

Total finance income consisted of the following:

	(unaudited) Six-month period ended	
In millions of U.S. dollars	July 1, 2023	July 2, 2022
Change in fair value of the call option of Tranche A convertible bonds issued on August 4, 2020	15	_
Change in fair value of the call option of Tranche B convertible bonds issued on August 4, 2020	9	_
Change in fair value of the conversion option of Tranche A convertible bonds issued on August 4, 2020	_	173
Change in fair value of the conversion option of Tranche B convertible bonds issued on August 4, 2020	_	165
Interest income on quoted debt securities	2	1
Other finance income	96	10
Total finance income	122	349

As of July 1, 2023, the Group total financial resources, including cash and cash equivalents, marketable securities and short-term deposits generated an average annual interest rate of 4.77% as compared to 1.63% as of July 2,2022.



Total finance costs consisted of the following:

	(unau	dited)
	Six-month p	eriod ended
In millions of U.S. dollars	July 1, 2023	July 2, 2022
Interest and amortization of issuance costs on convertible bonds	12	12
Change in fair value of the conversion option of Tranche A convertible bonds issued on August 4, 2020	148	_
Change in fair value of the conversion option of Tranche B convertible bonds issued on August 4, 2020	158	_
Interests on lease liabilities	5	3
Interests on long-term loans and borrowings	23	2
Bank charges and commissions	2	1
Other finance expense	2	2
Total finance costs	350	20

# 3.6.19. Earnings per share

For the six-month periods ended July 1, 2023 and July 2 2022, respectively, Earnings Per Share ("EPS") were calculated as follows:

	(unaud	(unaudited)	
	Six-month pe	eriod ended	
In millions of U.S. dollars, except earnings per share amounts	July 1, 2023	July 2, 2022	
Basic EPS			
Net profit attributable to the equity holder of the parent	1,726	1,945	
Weighted average shares outstanding	902,573,767	905,212,243	
Basic EPS	1.91	2.15	
Diluted EPS			
Net profit attributable to the equity holder of the parent	1,726	1,945	
Weighted average shares outstanding	902,573,767	905,212,243	
Dilutive effect of stock awards	4,944,927	5,120,339	
Number of shares used for diluted EPS	907,518,694	910,332,582	
Diluted EPS	1.90	2.14	

There was no dilutive effect of the senior unsecured convertible bonds issued on August 4, 2020 in the first six months of 2023 diluted Earnings per Share since the conversion options were in the money but below the 130% stock price contingent feature.

## 3.6.20. Related-party transactions

The below table summarizes transactions incurred in the first six months of 2023 and 2022 with companies for which certain members of the Group's management perform similar policymaking functions. These include, but are not limited to: Orange and Idemia France. Each of the aforementioned arrangements and transactions is negotiated without the personal involvement of the Supervisory Board members and are made in line with market practices and conditions.



	(unaudited) Six-month period ended	
In millions of U.S. dollars	July 1, 2023	July 2, 2022
Sales of goods and services to entities controlled by key management personnel	12	6
Purchases of goods and services from entities controlled by key management personnel	(11)	(12)
Accounts receivable from entities controlled by key management personnel	5	2
Accounts payable from entities controlled by key management personnel	(1)	(1)

# 3.6.21. Contingencies, claims and legal proceedings

The Group is subject to possible loss contingencies arising in the ordinary course of business. These include but are not limited to: product liability claims and/or warranty cost on the products of the Group, contractual disputes, indemnification claims, claims for unauthorized use of third-party intellectual property, employee grievances, anti-trust, anti-corruption, competition, other compliance regulations, tax claims beyond assessed uncertain tax positions, environmental damages as well as claims arising out of theft, loss, or misuse of personal data. In determining loss contingencies, the Group considers the likelihood of impairing an asset or the occurrence of a liability at the date of the consolidated financial statements as well as the ability to reasonably estimate the amount of such loss. The Group records a provision for a loss contingency when information available before the consolidated financial statements are issued or are available to be issued indicates that it is probable that an asset has been impaired or a liability has been incurred at the date of the consolidated financial statements and when the amount of loss can be reasonably estimated. The Group regularly re-evaluates claims to determine whether provisions need to be readjusted based on the most current information available to the Group. Changes in these evaluations could result in an adverse material impact on the Group's results of operations, cash flows or its financial position for the period in which they occur.

The Group has received and may in the future receive communications alleging possible infringements of third-party patents or other third-party intellectual property rights. Furthermore, the Group from time to time enters into discussions regarding a broad patent cross license arrangement with other industry participants. There is no assurance that such discussions may be brought to a successful conclusion and result in the intended agreement. The Group may become involved in costly litigation brought against the Group regarding patents, mask works, copyrights, trademarks or trade secrets. In the event that the outcome of any litigation would be unfavorable to the Group, the Group may be required to take a license to third party patents and/or other IP rights at economically unfavorable terms and conditions, and possibly pay damages for prior use and/or face an injunction, all of which individually or in the aggregate could have a material adverse effect on the Group's results of operations, cash flows, financial position and/or ability to compete.

The Group has contractual commitments to various customers which could require the Group to incur costs to repair or replace defective products it supplies to these customers. The duration of these contractual commitments varies and, in certain cases, is indefinite. The Group is otherwise also involved in various lawsuits, claims, inquiries, inspections, investigations and/or proceedings incidental to its business and operations. Such matters, even if not meritorious, could result in the expenditure of significant financial or managerial resources. Any of the foregoing could have a material adverse effect on the Group's results of operations, cash flows or its financial position.

The Group regularly evaluates claims and legal proceedings together with their related probable losses to determine whether they need to be adjusted based on the current information available to the Group. There can be no assurance that its recorded reserves or insurance policies will be sufficient to cover the extent of its potential liabilities. Legal costs associated with claims are expensed as incurred. In the event of litigation which is adversely determined with respect to the Group's interests, or in the event the Group needs to change its evaluation of a potential third-party claim, based on new evidence or communications, a material adverse effect could impact its operations or financial condition at the time it were to materialize.

As of July 1, 2023 and December 31, 2022, provisions for estimated probable losses with respect to claims and legal proceedings were not considered material.



# 4. Sole Member of the Managing Board's statement

The Sole member of the Managing Board hereby declares that, to the best of his knowledge, the Semi Annual Financial Statements, which have been prepared in accordance with IAS 34 Interim Financial Reporting, give a true and fair view of the assets, liabilities, financial position and profit or loss of STMicroelectronics N.V. and the undertakings included in the consolidation as a whole, and the Semi Annual Management Report of the Managing Board gives a true and fair overview of the information required pursuant to section 5:25d, subsection 8 and subsection 9 of the Dutch Financial Markets Supervision Act (Wet op het Financieel toezicht).

Date: August 23, 2023

By: /s/ Jean-Marc Chery

Name: Jean-Marc Chery Title: President and Chief Executive Officer and Sole

Member of the Managing Board



# 5. About STMicroelectronics

At STMicroelectronics N.V. ("ST" or the "Company"), we are over 50,000 creators and makers of semiconductor technologies mastering the semiconductor supply chain with state-of-the-art manufacturing facilities. An integrated device manufacturer, we work with more than 200,000 customers and thousands of partners to design and build products, solutions, and ecosystems that address their challenges and opportunities, and the need to support a more sustainable world. Our technologies enable smarter mobility, more efficient power and energy management, and the wide-scale deployment of the Internet of Things and connectivity. We are committed to achieving our goal to become carbon neutral on scope 1 and 2 and partially scope 3 by 2027.

Further information can be found at www.st.com.



# SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

# STMicroelectronics N.V.

Date: August 23, 2023

By: /s/ Jean-Marc Chery

Name: Jean-Marc Chery

Title: President and Chief Executive Officer and Sole Member of our Managing Board

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