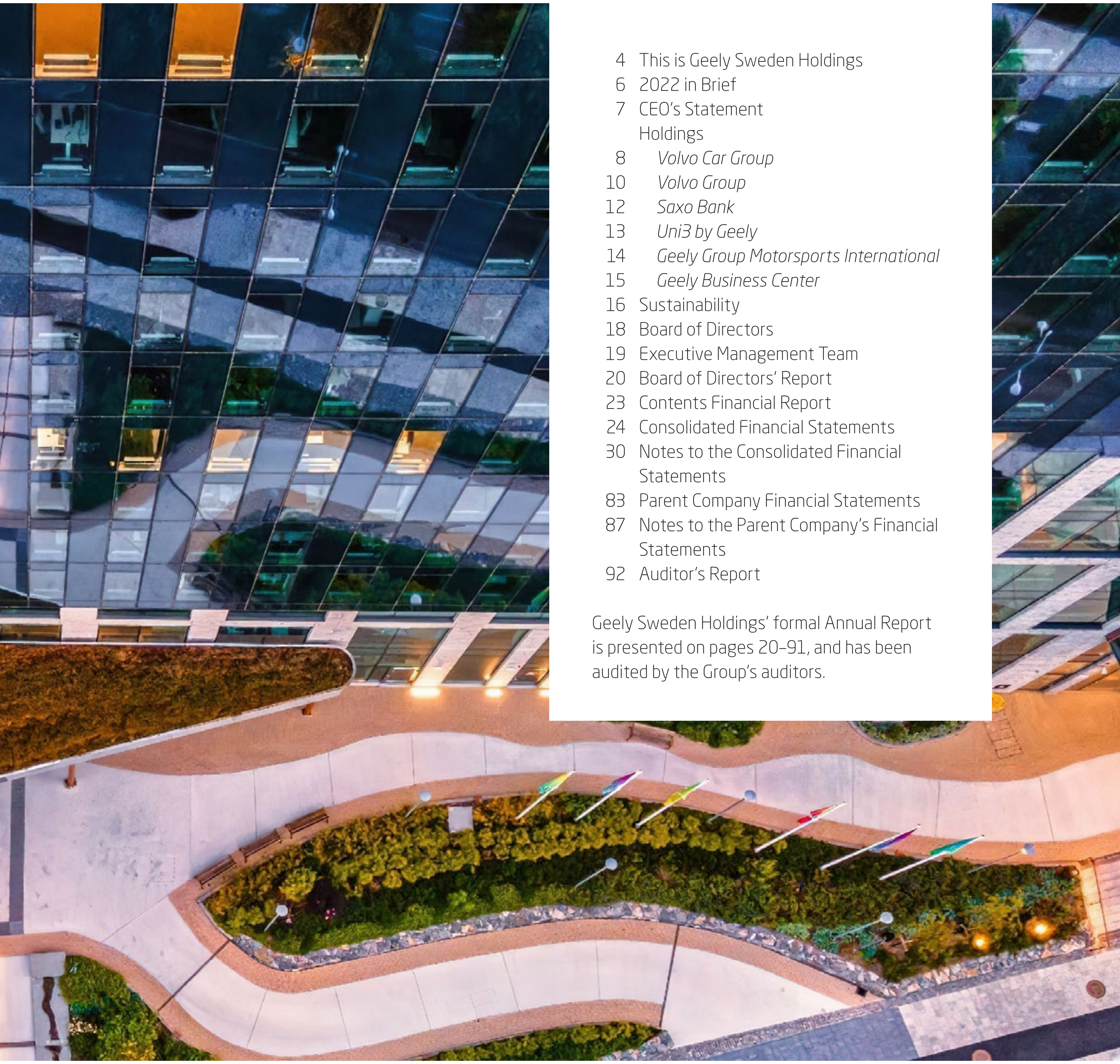

GEELY SWEDEN HOLDINGS AB
ANNUAL REPORT 2022

With strong focus on mobility, technology development and new business models



Geely Sweden Holdings' formal Annual Report is presented on pages 20–91, and has been audited by the Group's auditors.

This is Geely Sweden Holdings

Geely Sweden Holdings AB (Geely Sweden) is a holding company that owns shares in a portfolio of companies and oversees these investments on behalf of its shareholders. The companies in Geely Sweden's portfolio are primarily based in Europe and focus on the mobility technology and financial sectors.

Geely Sweden's ultimate owner is Zhejiang Geely Holdings (Geely Group), one of China's leading privately owned industrial conglomerates headquartered in Hangzhou, China.

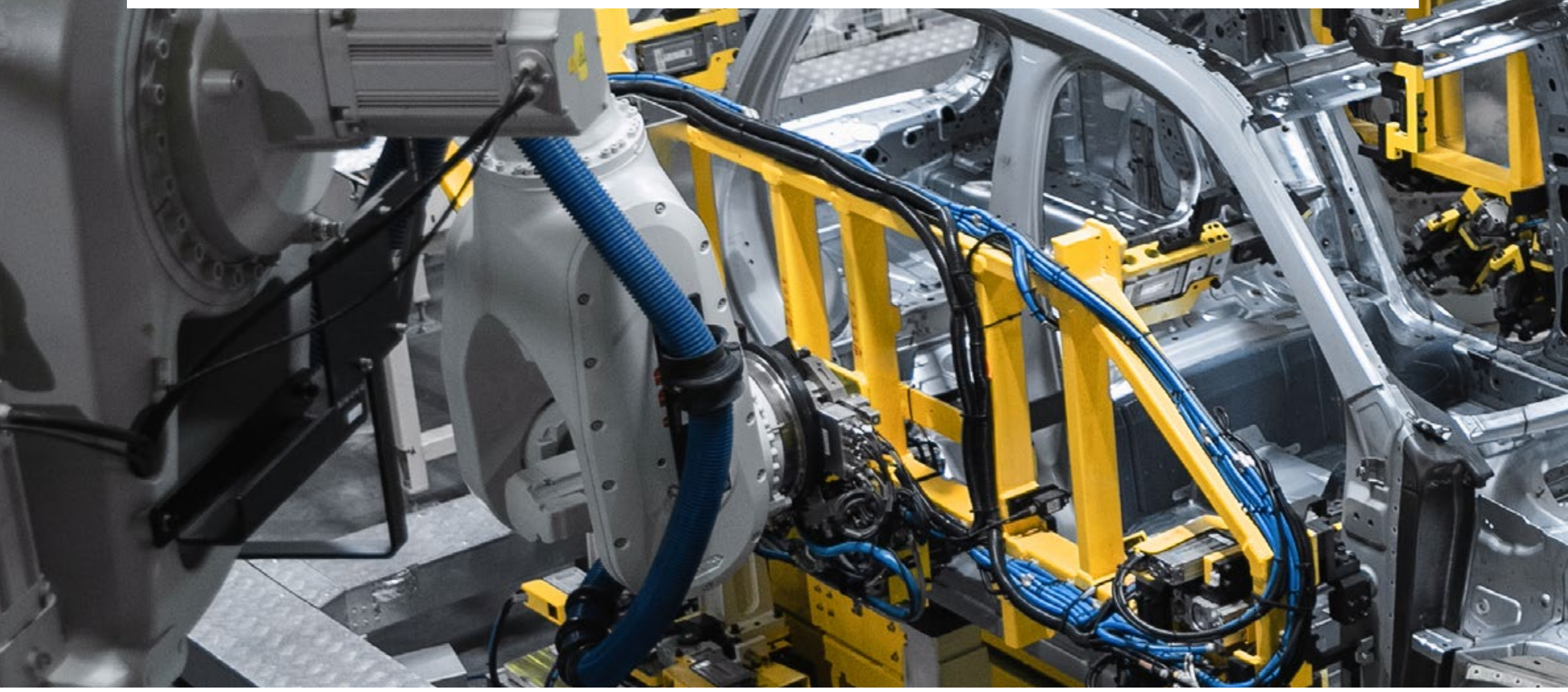
Geely Group was founded in 1986 by the Chairman of the Board, Eric Li. In 1997, Geely Group entered the automotive industry and has since focused on the development and manufacturing of vehicles, mainly passenger and commercial vehicles. Geely Group continues to grow through technological innovation and talent development and has successfully transformed into a diversified automotive investment group focused on clean technologies, automation, mobility services and digital connectivity.

Geely Group has established R&D and design centres in locations such as Shanghai, Hangzhou, Ningbo, Gothenburg, Coventry, California and Frankfurt, and has more than 20,000 R&D and design employees and over 14,000 innovation patents. Geely Group operates world-class vehicle and powertrain manufacturing plants in China, the US, the UK, Sweden, Belgium and Malaysia. It has a worldwide sales and service network of more than 4,000 branches.

Geely Group is the lead shareholder in Volvo Cars, Polestar, PROTON in Malaysia, Lotus and LEVC in the UK and is a long-term investor in, for example, Volvo Group, Mercedes-Benz, Aston Martin and Saxo Bank.

Since 2012 Geely Group has ranked among the Fortune Global 500 for 11 consecutive years (ranked 229th in 2022) with total assets in excess of USD 75 billion and more than 120,000 global employees. Geely ranked among Brand Finance's Top 10 Most Valuable Auto Portfolio Brands 2022 – the only Chinese auto group on the list.

Geely Sweden's operating model focuses on being an active and supportive owner that facilitates the vision of one Geely ecosystem across geographies to create synergies and build portfolio value by providing; (i) access to Geely Group's leading network of industry and sector expertise; (ii) access to Geely Group's global portfolio of brands, technologies, customers and suppliers; (iii) inroads into strategic development projects within Geely Group; (iv) propelled market entry/growth in Asia; and (v) stability from an owner with a long-term perspective.



Strategic ambition

Mission

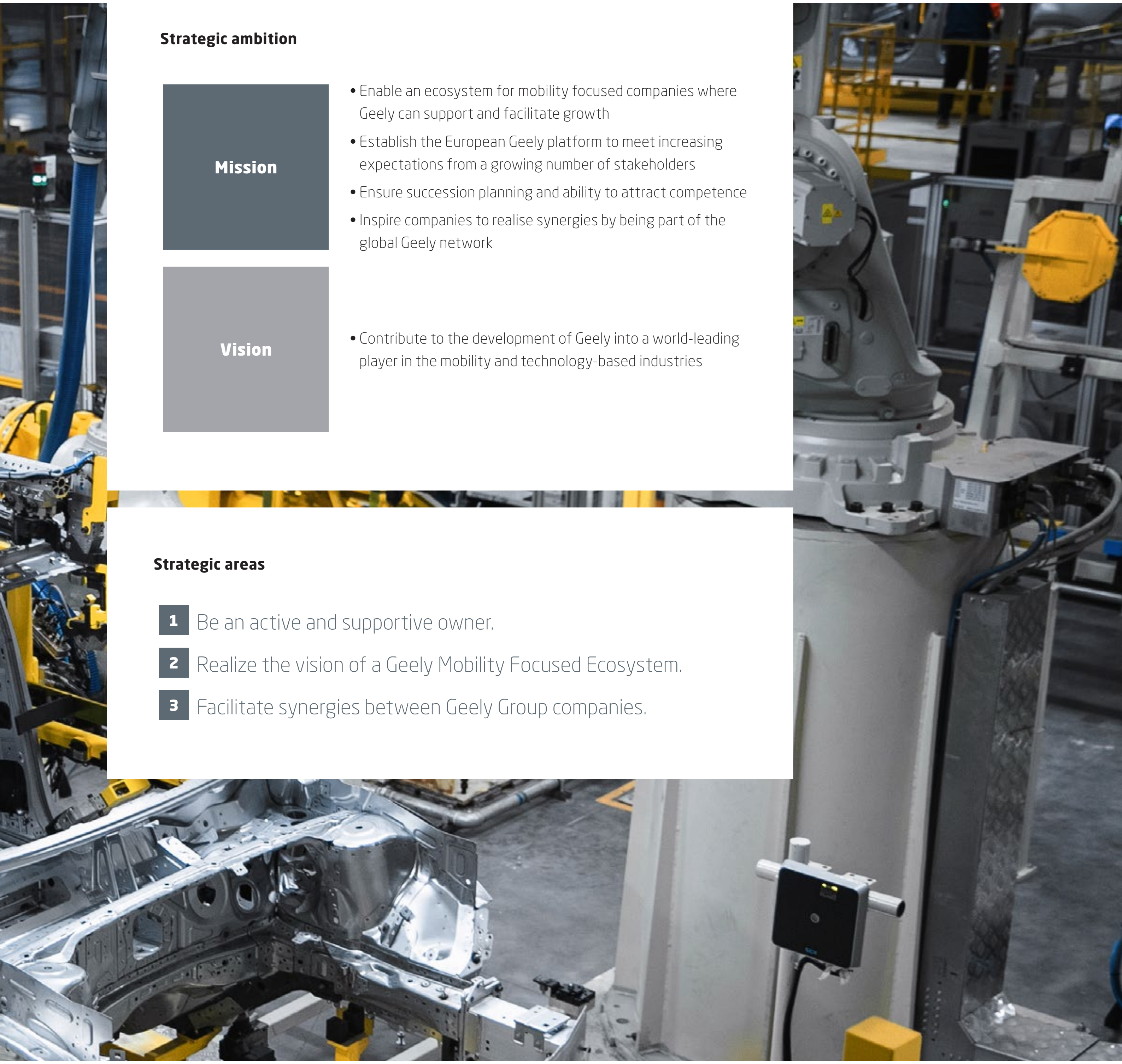
- Enable an ecosystem for mobility focused companies where Geely can support and facilitate growth
- Establish the European Geely platform to meet increasing expectations from a growing number of stakeholders
- Ensure succession planning and ability to attract competence
- Inspire companies to realise synergies by being part of the global Geely network

Vision

- Contribute to the development of Geely into a world-leading player in the mobility and technology-based industries

Strategic areas

1. Be an active and supportive owner.
2. Realize the vision of a Geely Mobility Focused Ecosystem.
3. Facilitate synergies between Geely Group companies.



2022 in Brief

- Volvo Cars revenues increased by 17% to an all-time high of SEK 330bn (282), despite supply constraints, logistics issues and COVID-related lockdowns throughout the year
- Volvo Cars presented its long anticipated new, fully electric Volvo EX90 – the start of a new era for Volvo Cars. The EX90 is a true seven-seater, all-electric SUV that further raises Volvo Cars standards in safety and a more sustainable lifestyle. The Volvo EX90 has an invisible shield of safety enabled by Volvo Cars' latest sensing technology, inside and outside. State-of-the art sensors such as cameras, radars and lidar are connected to the car's high-performance core computers, where NVIDIA DRIVE runs Volvo Cars' in-house software to create a real-time, 360-degree view of the world
- Polestar, the Swedish electric performance car brand, began trading at the Nasdaq stock exchange in New York City under the ticker 'PSNY' on 24 June
- Volvo Group showcased its new zero-emissions truck that is run on fuel cells powered by hydrogen that has an operational range comparable to many diesel trucks – up to 1,000 km – and a refuelling time of less than 15 minutes
- At the Uni3 by Geely campus in Gothenburg, the five existing buildings were completed and the campus is now in full operation. A sixth building was decided during the year to be built in cooperation with Fastighets AB Balder and is expected to be completed by mid-2024
- Saxo Bank reached a new record of more than 820,000 clients worldwide and over USD 90 billion in client assets
- Geely Sweden continued to develop its organisation to further support the growth of Geely Group and its companies

Revenue

MSEK 330,674

Operating income

MSEK 22,679

CEO's Statement

After yet another turbulent year behind us with continued production constraints and increased raw material costs, Geely Sweden can still conclude a successful 2022 where we have further strengthened our position and where the well-known brands in our portfolio have achieved multiple significant milestones.

Market, especially on the supply side, continued to be challenging in 2022 with both Volvo Cars and Volvo Group facing production constraints as well as increased raw material costs. Despite this, Volvo Cars managed to increase its full-year revenues by 17% to an all-time high of SEK 330 bn, while AB Volvo grew its full-year revenues by 27% to SEK 474 bn and with its Board of Directors proposing a total dividend of SEK 14 per share.

Not only has 2022 been a financially successful year for our portfolio brands, but also operationally. Volvo Cars presented its long anticipated, fully electric, Volvo EX90, an all-electric SUV that further raises Volvo Cars standards in safety and a more sustainable lifestyle. Volvo Group showcased its new zero-emissions truck that is run on fuel cells powered by hydrogen and that has an operational range comparable to many diesel trucks – up to 1,000 km. Geely's campus at Lindholmen in Gothenburg, Uni3 by Geely, saw the completion of its existing five buildings and is now in full operation, including the hotel operated by Nordic Choice, and the decision was taken to start the construction of a sixth building at the campus. Our shared competence and service centre, Geely Business Center, that was created in 2021, continued to expand in its offering of business services and expertise to Geely Group companies in areas such as IT, finance, legal, HR and PR & communication.

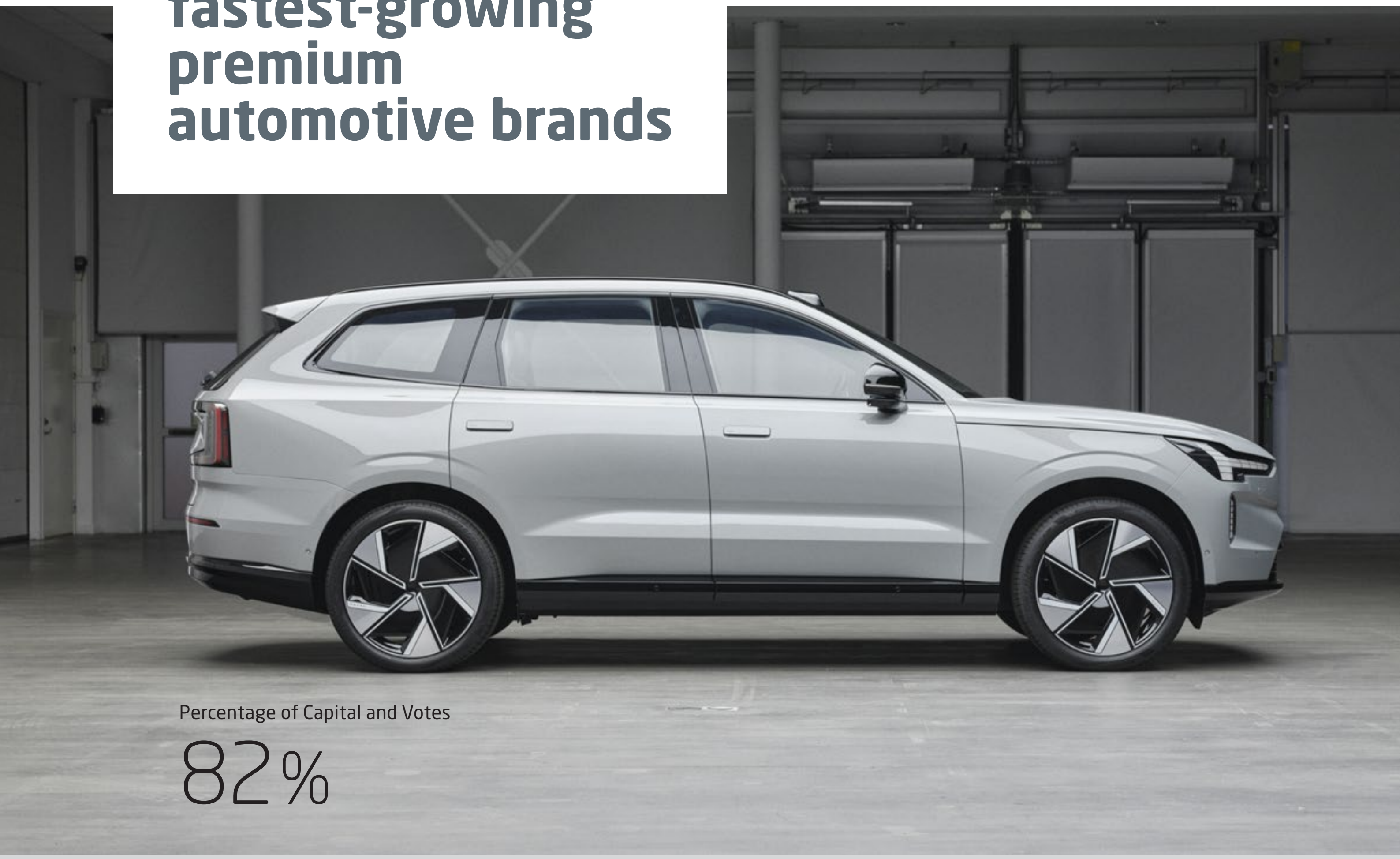
Geely's vision and mission remains to become a smart e-mobility technology enterprise and energy service provider with global competitiveness and influence. We continue to focus on research and development, collaboration across brands, and investments and capital market projects, all while having a firm focus on being a responsible global corporate citizen.

In the year ahead we must continue to be confident and ambitious, champion collaboration and drive forwards the industries we operate in. We look all forward to this new year and the opportunities we shall meet.

Hans Oscarsson
Chief Executive Officer
Geely Sweden Holdings AB

Volvo Car Group

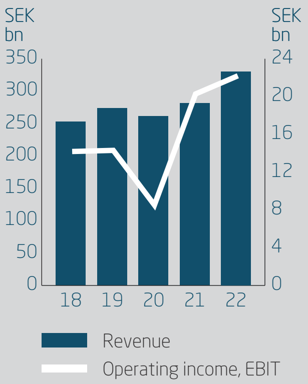
One of the world's fastest-growing premium automotive brands



Percentage of Capital and Votes

82%

Revenue and operating income



Key ratios, MSEK	**2022**	2021	2020	2019	2018
Revenue	330,145	282,045	262,833	274,117	252,653
Operating income, EBIT	22,332	20,275	8,516	14,303	14,185
Net income	17,003	14,177	7,788	9,603	9,781
Equity ratio %	35.4	33.5	26.8	26.2	29.0
Operating and investing cash flow	–6,059	–4,885	13,282	11,573	4,705

Volvo Cars is one of the world's fastest-growing premium automotive brands, providing its customers with the freedom to move in a personal, sustainable and safe way. Its unique structure and focused strategy make it one of the fastest transformers in the global automotive industry, with mid-decade ambitions dedicated to electrification, sustainability and digitisation.

Founded and headquartered in Gothenburg, Sweden, in 1927, over the course of its history, Volvo Cars has been a global force for automotive safety and innovation. Volvo Cars has been credited with a number of industry-leading innovations that are now standard in cars across the world, such as the three-point safety belt, the side impact protection system, side impact airbags and autonomous emergency braking.

Volvo Cars is focused on the design, engineering, manufacturing, distribution and sale of premium passenger cars, with a particular emphasis on sustainability, fully electric cars and direct consumer relations, including subscription and other new mobility services.

In 2022 Volvo Cars sold 615,000 cars in over 100 countries, of which around 79% consists of XC Series models (SUVs), around 13% of S Series models (sedans) and around 8% of V Series models (wagons).

Volvo cars are marketed and sold online in selected markets through the Volvo Cars online store and in physical stores through around 2,300 retail partners. With its global headquarters in Gothenburg (Sweden) and regional headquarters in Shanghai (China) and Mahwah (New Jersey, United States), the Volvo Cars core markets are Europe, China and the United States.

Volvo Cars has been listed on Nasdaq Stockholm since October 2021. In June 2022, Polestar, the Swedish electric performance car brand partly owned by Volvo Cars, was listed on Nasdaq New York.

Mid-decade Ambitions

- 1.2 million cars
- 8–10% EBIT margin
- 40% CO_2 reduction per car from 2018
- 50% fully electric sales
- 50% in-house software
- 50% online sales

Volvo Group

A global group with strong market positions

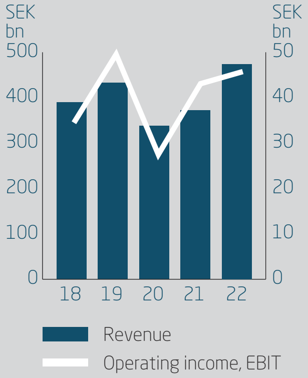
Percentage of Capital

8.2%

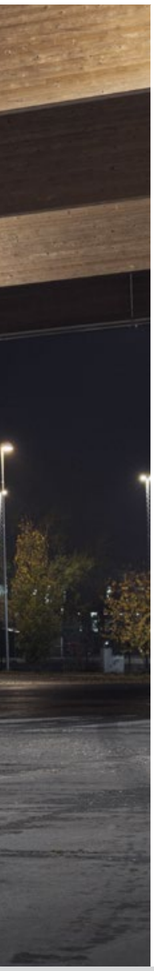
Percentage of Votes

16.0%

Revenue and operating income



Key ratios, MSEK	**2022**	2021	2020	2019	2018
Revenue	473,479	372,216	338,446	431,980	390,834
Operating income, EBIT	45,712	43,074	27,484	49,531	34,478
Net income	32,969	33,243	20,074	36,495	25,363
Equity ratio %	26.4	27.9	29.0	27.0	26.5
Operating and investing cash flow	11,758	32,158	20,669	24,857	17,389



Volvo Group offers transport and infrastructure solutions for trucks, buses, construction equipment, power solutions for marine and industrial applications, financing and services that increase customers' uptime and productivity. Founded in 1927, Volvo Group is committed to shaping the future landscape of sustainable transport and infrastructure solutions. Volvo Group headquartered in Gothenburg, Sweden, employs more than 100,000 people and serves customers in almost 190 markets. The shares are listed on Nasdaq Stockholm.

Volvo Group's products contribute to efficient transport and infrastructure solutions and maximise customer uptime. Volvo Group drives the development of electrified vehicles and machines, as well as automated solutions for the benefit of customers, society and the environment. The sale of vehicles and machines creates a population of products, thereby driving spare parts sales and service revenue.

In addition to vehicles and machines, Volvo Group's offering includes various types of services, such as financing, insurance, rental, spare parts, repairs, preventive maintenance, service agreements and assistance. The range and flexibility of the offering enables solutions to be tailor-made to maximise customer uptime and productivity. The service business helps to balance the fluctuation in new product sales and improve profitability over the business cycle. Growing the service business is a prioritised area.

Thanks to competitive product programmes, strong dealers with extensive service networks and increasingly complete offerings, Volvo Group has established leading positions globally. Volvo Group is one of the world's largest manufacturers of heavy commercial vehicles, construction equipment, buses and heavy-duty combustion engines, and is a leading supplier of marine and industrial engines. These positions enable economies of scale to be achieved in product development, production, purchasing and financial services.

Volvo Group's brand portfolio consists of Volvo, Volvo Penta, Rokbak, Renault Trucks, Prevost, Nova Bus, Mack and Arquus. Volvo Group has alliances and joint ventures with the SDLG, Eicher and Dongfeng Trucks, as well as cellcentric. By offering products and services under various brands, Volvo Group addresses many different customer and market segments in mature and growth markets.

Volvo Group Brands

VOLVO · VOLVO PENTA · ROKBAK · RENAULT TRUCKS · PREVOST · NOVABUS · MACK · ARQUUS

Joint Ventures and Strategic Alliances

SDLG · EICHER · DONGFENG Trucks · cellcentric

Saxo Bank

A leading fintech specialist that helps companies and investors connect to global capital markets

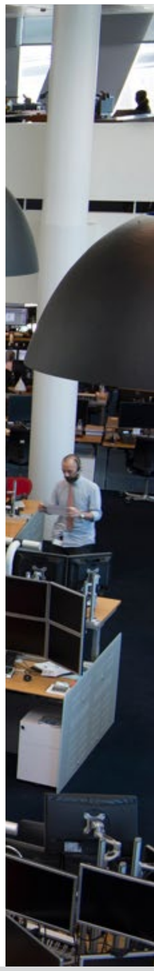
Percentage of Capital and Votes

24,9%

Saxo Bank (Saxo) is a leading fintech specialist that connects people to investment opportunities in global capital markets. As a provider of multi-asset trading and investment, Saxo's vision is to enable people to fulfil their financial aspirations and make an impact. Saxo's user-friendly and personalised platform experience gives investors exactly what they need, when they need it – whether they want to actively trade on global markets or invest in their future.

Founded in 1992, Saxo was one of the first financial institutions to develop an online trading platform to provide private investors with the same tools and market access as professional traders, large institutions and fund managers. Saxo combines an agile fintech mindset with 30 years of experience and a track record in global capital markets to deliver a state-of-the-art experience to clients. The Saxo Bank Group holds four banking licences and is well regulated globally. Saxo offers clients around the world broad access to global capital markets across asset classes, where they can trade more than 65,000 instruments in 26 languages from a single account. The Saxo Bank Group also partners with more than 200 financial institutions to boost the investment experience they can offer their clients via its open banking technology.

Headquartered in Copenhagen, Saxo's client assets total more than USD 90 billion and the company has more than 2,500 financial and technology professionals in financial centres around the world including London, Singapore, Amsterdam, Shanghai, Hong Kong, Paris, Zurich, Dubai and Tokyo.



Key ratios, MDKK	2022	2021	2020	2019	2018
Operating income, EBIT	4,435	4,492	4,316	2,611	2,786
Profit before tax	949	1,031	1,080	109	1,029
Net income	711	755	750	40	963
Equity ratio %	7.9	7.9	9.4	9.5	16.1
Operating and investing cash flow	–13,339	4,630	5,122	23,941	–2,086

820,000
Clients worldwide

90+ billion
USD client assets

270,000
Daily executed trades

30 years
Experience in the industry

Uni3 by Geely

A home for innovators

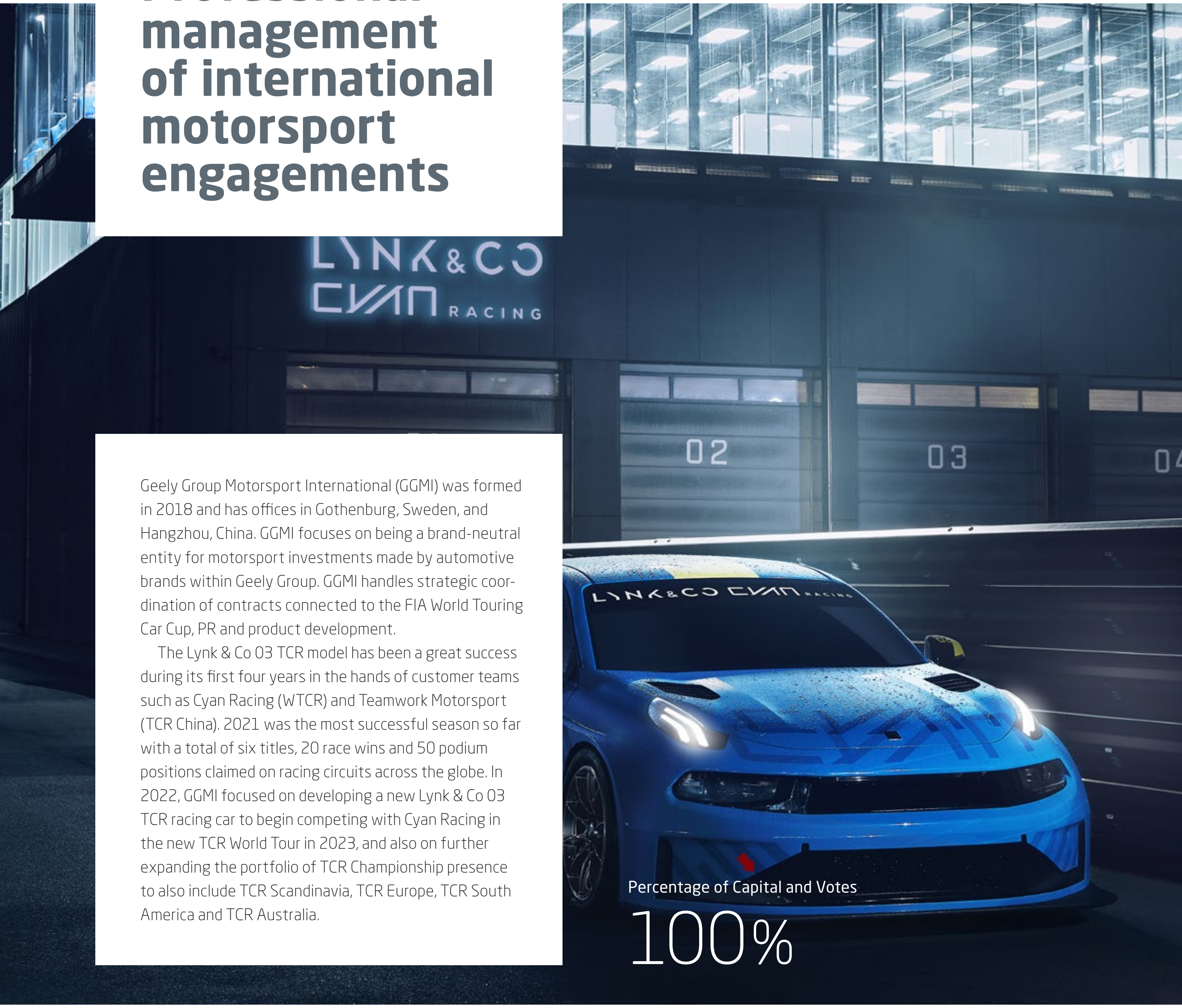
'Uni3 by Geely' is the name of the 120,000 square metre campus that Geely is building in Lindholmen, Gothenburg. Lindholmen is the centre of the West Sweden innovation cluster and Geely's Swedish investments have made a significant contribution there. In 2022 the five existing buildings were completed and the campus is now in full operation. Notably, it houses a co-working office, conference centre and exhibition space for commercial use by external customers. A Lynk & Co showroom, offices and a design centre for the brands Lynk & Co and Zeekr make up the automotive portion of the campus. Other companies present at Uni3 as tenants include United Space, Toyota Material Handling, SINIX, Compass Group, Nordic Choice, EcarX and Geely Sweden among others. In 2022 the campus announced the addition of a sixth and final building that will be completed and in operation by mid-2024 and co-owned with Fastighets AB Balder in a joint venture. The over 100 resident companies of the campus enjoy creative environments, shops, food, gym and various office services.

Percentage of Capital and Votes

100%

Geely Group Motorsports International

Professional management of international motorsport engagements



Geely Group Motorsport International (GGMI) was formed in 2018 and has offices in Gothenburg, Sweden, and Hangzhou, China. GGMI focuses on being a brand-neutral entity for motorsport investments made by automotive brands within Geely Group. GGMI handles strategic coordination of contracts connected to the FIA World Touring Car Cup, PR and product development.

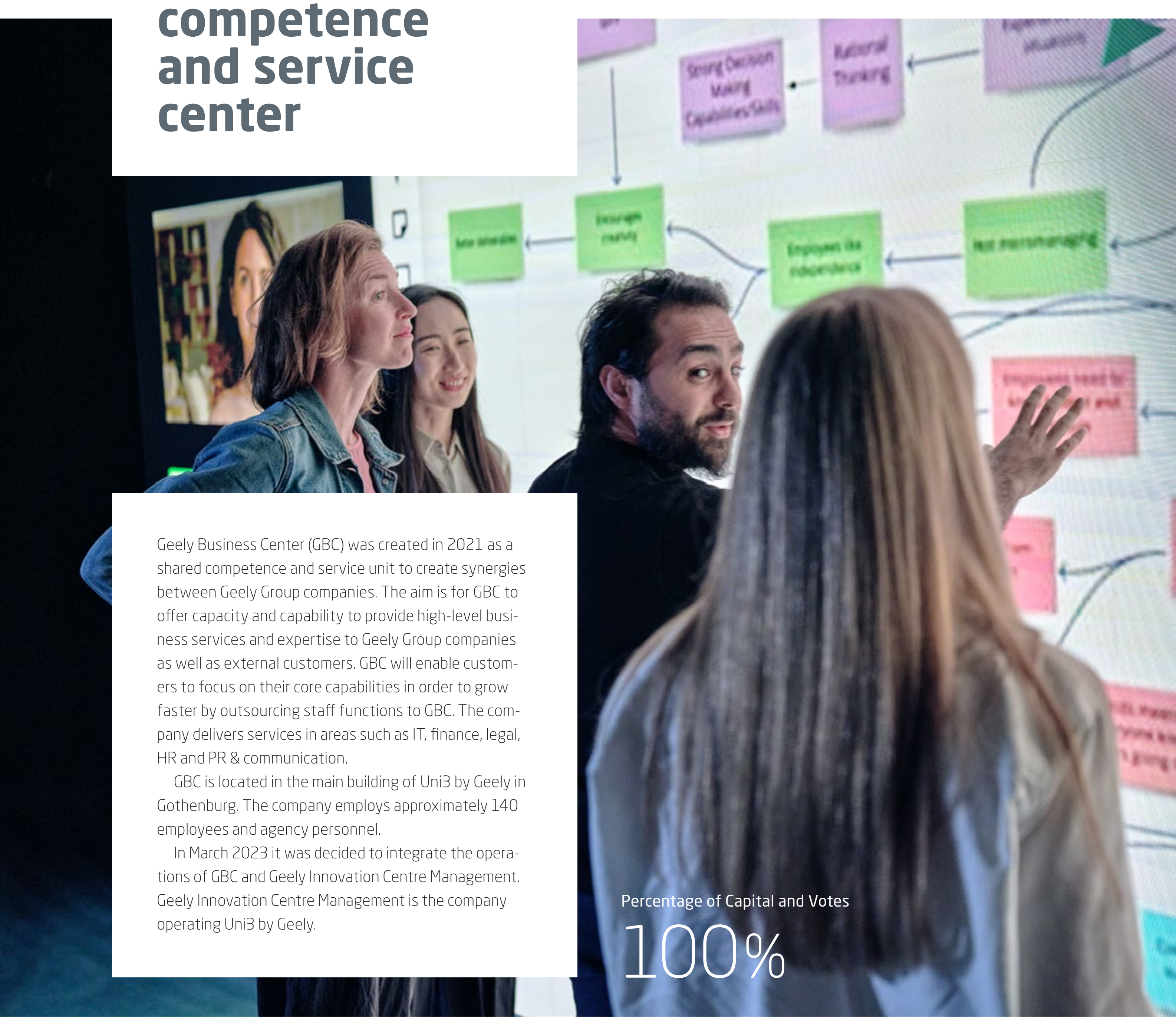
The Lynk & Co 03 TCR model has been a great success during its first four years in the hands of customer teams such as Cyan Racing (WTCR) and Teamwork Motorsport (TCR China). 2021 was the most successful season so far with a total of six titles, 20 race wins and 50 podium positions claimed on racing circuits across the globe. In 2022, GGMI focused on developing a new Lynk & Co 03 TCR racing car to begin competing with Cyan Racing in the new TCR World Tour in 2023, and also on further expanding the portfolio of TCR Championship presence to also include TCR Scandinavia, TCR Europe, TCR South America and TCR Australia.

Percentage of Capital and Votes

100%

Geely Business Center

A shared competence and service center



Geely Business Center (GBC) was created in 2021 as a shared competence and service unit to create synergies between Geely Group companies. The aim is for GBC to offer capacity and capability to provide high-level business services and expertise to Geely Group companies as well as external customers. GBC will enable customers to focus on their core capabilities in order to grow faster by outsourcing staff functions to GBC. The company delivers services in areas such as IT, finance, legal, HR and PR & communication.

GBC is located in the main building of Uni3 by Geely in Gothenburg. The company employs approximately 140 employees and agency personnel.

In March 2023 it was decided to integrate the operations of GBC and Geely Innovation Centre Management. Geely Innovation Centre Management is the company operating Uni3 by Geely.

Percentage of Capital and Votes

100%

Sustainability

Geely Sweden works actively to contribute to the development of a resource saving and environmentally sound society. We acknowledge that we, as a world, need to reduce emissions and practise energy conservation while taking action to ensure sustainable development.

Geely Sweden's ambition is to create long-term value through active ownership in its portfolio companies with a sustainability focused mindset at the very core. To prosper and succeed in the long term, it will be important for Geely Sweden and our portfolio companies to adhere to and actively participate in driving the global ESG agenda and set high ambitions to benefit the communities in which we live and operate.

In December 2022, Geely Group became a partner of the leading collaborative platform Drive Sustainability, facilitated by CSR Europe, where Geely will work with the other 11 Original Equipment Manufacturers – BMW Group, Daimler Truck, Ford, Honda, Jaguar Land Rover, Mercedes-Benz, Scania, Toyota, Volkswagen, Volvo Car and Volvo Group – to lead the transformation towards a circular and sustainable automotive value chain.

For Geely Sweden, part of being an active owner is having a continual dialogue with our key stakeholders – not only with portfolio company management teams, but also with fellow shareholders, employees, customers, government agencies, legislative bodies and non-governmental organisations. Our model involves encouraging stakeholders to set ambitious sustainability targets and push Geely Group companies to align their strategic development with important international standards to future-proof competitive business models. Examples of these standards include the UN Sustainable Development Goals, OECD Guidelines for Multinational Enterprises and UN Guiding Principles on Business and Human Rights. We also work actively to ensure that portfolio companies adhere to our corporate values and ethical guidelines.

In January 2022, Geely Group joined the United Nations Global Compact, giving Geely Sweden a firm vision and targets to work towards. As a signatory and participant in the UNGC initiative, Geely has committed itself to upholding the 10 principles of the Compact covering human rights, labour, the environment, and anti-corruption, as well as contributing to the 17 UN Sustainable Development Goals in its strategies and operations. To align with these commitments, the Geely Group announced in June 2022 that it is aiming to achieve carbon neutrality across its entire value chain by 2045. Individual businesses and brands within Geely Group have also formulated their own carbon neutrality strategies and goals with step-by-step roadmaps. For example, Volvo Cars has announced its goals of achieving carbon neutrality by 2040, climate neutral manufacturing and operations by 2025, and becoming a 100% BEV (battery electric vehicle) company by 2030 (for further information - see Volvo Car Group Annual and Sustainability Report 2022). Polestar has announced its goal of introducing a fully carbon-neutral automotive product and eliminating carbon emissions from its supply chain and production by 2030.

Geely Sweden places great emphasis on sustainability within our own operations as well. We firmly believe in leading by example, and the primary focus within our organisation is being a responsible employer that rejects all forms of discrimination and believes that diversity enhances knowledge, dynamism and the quality of our work.

Board of Directors

Eric Li (Li Shufu)

Chair
Since: 2010
Born: 1963
Education: MSc in Mechanical Engineering, BSc in Management Engineering

Other assignments
Founder and Chair of the Board Zhejiang Geely Holding Group Co. Ltd.; Member of the Board of other entities within the Zhejiang Geely Holding Group; Chair of the Board Volvo Car AB (publ.).

Previous positions
CEO Zhejiang Geely Holding Group Co. Ltd.

Daniel Li (Li Donghui)

Member of the Board
Member of the Audit Committee
Since: 2012
Born: 1970
Education: MBA, MSc in Management Engineering

Other assignments
Member of the Board and CEO Zhejiang Geely Holding Group Co. Ltd.; Chair of the Board Lotus Group International Limited; Vice Chair of the Board Geely Automobile Holdings Ltd.; Member of the Board Volvo Car AB (publ.), Polestar Automotive Holding UK Plc, Saxo Bank A/S, Proton Holdings Berhad, YTO Express (International) Holdings Ltd.

Previous positions
Executive Vice President and CFO Geely Holding Group; Director certain subsidiaries in Geely: Geely Automobile Holdings Ltd., Geely Holdings Group Ltd.; Independent Director China CYTS Tours Holding Co. Ltd.; CFO and Vice President Liugong Machinery; Executive Director Geely Automobile Holdings Ltd.; Managing Director and several other senior positions at Cummins; CFO and other senior positions at BMW Brilliance Automotive; Senior positions at ASIMCO Braking System, Danfoss Tianjin.

Lone Fønss Schrøder

Member of the Board
Member of the Audit Committee
Since: 2019
Born: 1960
Education: Master of Laws, MSc in Economics and Business Administration

Other assignments
Vice Chair of the Board and Chair of the Audit Committee, Volvo Car AB (publ.); Vice Chair of the Board and Chair of the Audit Committee Akastor ASA; Member of the Board Aker Solutions ASA and Aker Horizons ASA; Member of the supervisory Board INGKA Holding BV and Ikano Bank AB (IKEA Group); Member of the Global advisory Board of ServiceNow, Inc.

Previous positions
Several senior management positions at A.P. Moller-Maersk A/S; CEO Concordium AG; President and CEO Wallenius Lines, Member of the Board of a.m.o Handelsbanken, Saxo Bank, Vattenfall, Eukor, Yara and Queen's Gambit Growth Capital.

Hans Oscarsson

Member of the Board and CEO
Member of the Audit Committee
Since: 2019
Born: 1965
Education: MSc in Business Administration

Other assignments Chair of the Board Geely Business Center AB and Geely Innovation Centre AB; Member of the Board Geely Group Motorsports International AB.

Previous positions
Board member Volvo Car Corporation, Polestar Holding, Mobility and Zenuity; CFO and SVP Finance, Volvo Car AB (publ.); leading positions within finance at Volvo Car AB (publ).

Executive Management Team

Hans Oscarsson
CEO

Lise-Lotte Hallbäck
Finance

Stefan Lundin
Public Relations and Communications

Peter Lundin
Legal

Björn Sällström
Human Resources

Board of Directors' Report

The Group

Geely Sweden Holdings AB holds shares in its subsidiaries. Geely Sweden Holdings AB and its subsidiaries are jointly referred to as "the Group". The Group operates indirectly in the automotive industry, mainly as majority owner of Volvo Car AB (publ.). The Group owns and operates property. Other Group operations are a shared competence and service center providing finance and HR services as well as other services to group companies and external customers, and a motorsport company. The Group has individual holdings in AB Volvo and Saxo Bank A/S. There are seven entities in the Group with main purpose to hold and finance the Group investments.

Registered in Gothenburg, Geely Sweden Holdings AB is a wholly owned subsidiary of Shanghai Geely Zhaoyuan International Investment Co., Ltd., registered in Shanghai, China, with ultimate majority ownership held by Zhejiang Geely Holding Group Co., Ltd., registered in Hangzhou, China.

Industrial operation

Despite an encouraging quarter four, the global passenger car market continued to be impacted by supply constraints in 2022. China and Europe declined by 3 per cent and 5 per cent respectively. The US declined by 8 per cent. Since 2020, global automotive production has been at sub-optimised levels, not fully meeting customer demand due to production constraints. 2022 marked as the third year of production constraints due to continued semi-conductor shortages and the Covid-19 restrictions in China. The strong demand in combination with supply limitations, continued to support positive price realisations and mix effects. 2022 was also a year of record growth in electrified cars. The development, fuelled by EV incentives and tax benefits, was mainly from increasing customer demand.

Revenue of Volvo Car Group increased by 17.1 per cent to MSEK 330,145 (282,045). Operating income increased to MSEK 22,332 (20,275).

Real estate

"Uni3 by Geely" is the name of the 120,000 square metre campus that the Group is building in Lindholmen, Gothenburg. Lindholmen is the centre of the West Sweden innovation cluster and the Group's Swedish investments have made a significant contribution. In 2022, the five existing buildings were completed and the campus is now in full operation. Notably, it houses a co-working office, conference centre and exhibition space for commercial use by external customers. A Lynk & Co showroom, offices and a design centre for the brands Lynk & Co and Zeekr, make up the automotive portion of the campus. Other companies present at Uni3 as tenants include United Space, Toyota Materal handling, SINIX, Compass Group, Nordic Choice, EcarX and Geely Sweden. In 2022, the campus announced the addition of a sixth and final building that will be completed and in operation by mid-2024 and co-owned with Fastighets AB Balder in a joint venture. The over 100 resident companies of the campus enjoy creative environments, shops, food, gym and various other office services.

Shared competence and service center

Geely Business Center AB was created in 2021 as a shared competence and service unit to create synergies between the Geely Group companies. The aim is for Geely Business Center AB to offer capacity and capability to provide high-level business services and expertise to Geely Group companies as well as to external customers. The shared competence and service center will enable customers to focus on their core capabilities in order to grow faster by outsourcing staff functions to the center. The company delivers services in areas such as IT, finance, legal, HR and PR & communication.

Geely Business Center AB is located in the building of Uni3 by Geely in Gothenburg. The company employs approximately 140 employees and consultants.

In March 2023, it was decided to integrate the operations of Geely Business Center AB and Geely Innovation Centre Management AB. Geely Innovation Centre Management AB is the company operating Uni3 by Geely.

Motorsport

Geely Group Motorsport International AB was formed in 2018 and has offices in Gothenburg, Sweden, and Hangzhou, China. The company focuses on being a brand-neutral entity for motorsport investments made by automotive brands within the Geely Group. Geely Group Motorsport International AB handles strategic coordination of contracts connected to the FIA World Touring Car Cup, PR and product development

Individual holdings

Saxo Bank

While the previous couple of years were extraordinary in their own right, 2022 was a year with both geopolitical and market events that were both devastating and remarkable. 2022 marked an end to the negative inter-

Geely Sweden Holdings Group

Key ratios, MSEK	**Full year 2022**	Full year 2021	Full year 2020	Full year 2019	Full year 2018
Revenue	330,674	281,974	262,890	274,149	252,653
Operating income, EBIT	22,679	20,853	8,719	13,371	14,679
Net Income	17,261	17,634	7,247	9,244	10,731
EBITDA	38,825	35,895	23,183	28,919	27,892
Operating and investing cash flow	–6,817	8,003	8,658	9,615	–34,276
EBIT margin, %	6.9	7.4	3.3	4.9	5.8
EBITDA margin, %	11.7	12.7	8.8	10.5	11.0
Equity ratio, %	34.6	34.0	24.0	21.6	21.4
Net cash	7,272	16,588	–5,446	–12,665	–18,608

See definitions of Key Ratios in page 81.

est rate environment, a resurgence of inflation in the Western world, heightened geopolitical tensions, war in Europe and an energy and climate crisis.

All these macro factors impacted Saxo Bank's 2022 results. On the positive side, rising interest rates contributed to a higher interest income, while declining stock markets meant investors acting more cautiously, dampening revenue growth. Over the course of 2022, Saxo Bank achieved a major milestone when finalising the migration of the BinckBank clients to Saxo's platforms and has further expanded many platform features, content, product lines and services to provide a more comprehensive an intuitive client experience.

Operating income amounted to MDKK 4,435 (4,492), corresponding to a –1.3 per cent decrease.

Volvo Group

For the Volvo Group, 2022 was a year with a strong increase in net sales and improved operating income despite the challenges created by geopolitical turmoil, supply chain constraints and high inflationary pressure. Both vehicle and service volumes grew significantly compared with the preceding year.

Net sales increased by 27.2 per cent to MSEK 473,479 (372,216). The operating income amounted to MSEK 45,712 (43,074).

Net income and financial position

Income before tax for the Group amounted to MSEK 21,478 (22,129). Net income amounted to MSEK 17,261 (17,634). Cash and cash equivalents for the Group amounted to MSEK 67,409 (63,277). Interest-bearing liabilities not including provisions for employee benefits amounted to MSEK 34,238 (32,307). The total borrowings amounted to MSEK 63,552 (54,685) and include liabilities to credit institutions and bond liabilities. Equity share of total assets amounted to 35 (34) per cent.

Investments

In 2022 the Group made investments in intangible assets amounting to MSEK 19,126 (11,991). Investments in tangible assets amounted to MSEK 17,576 (15,753).

Financing

In 2022, a MEUR 2,700 credit facility was signed, replacing facilities that were signed in 2018 and 2019 which have been repaid in advance.

Employees

In 2022, the Group employed 44,857 (42,811) full-time employees (FTEs). Information on salaries and other remuneration is presented in Note 8 – Employees and remuneration.

Significant events during the year

Covid-19

The Covid-19 pandemic continued to have an impact on people's lives around the world. In China, varieties of lockdowns were in place during the year impacting production, sales and supply chain. The lifted Covid-19 restrictions in China since December, have had a positive impact on the production run rate.

The war in Ukraine

In February the war in Ukraine started and it continues still, having a negative impact on Europe as well as increasing the risks of the global economy. The war has led to accelerating increases of the cost of raw materials, energy and freights. This has further increased inflationary pressures in the global economy and worsened already strechted global supply chains. The risk for further disruption to Russian gas flows have also increased. Given that many automotive parts suppliers rely on natural gas, a decreased supply may cause disruption to these supply chains.

Global shortage of semi-conductors

The global shortage of semi-conductors led to temporary production halts in some of the Group's manufacturing plants, all different in duration and extent. The production halts resulted in loss of production volumes. However, high demand, global shortage with extremely low inventory levels and the ability to adjust production plans had positive effects on revenue and profitability.

Uni3 by Geely

The 120,000 square metre campus "Uni3 by Geely" the Group is building in Lindholmen, Gothenburg, saw the completion of the existing five buildings and the campus is now in full operation. The campus also announced the addition of a sixth and final building which will be completed and in operation by mid 2024 and co-owned with Fastighets AB Balder in a joint venture.

Sale of the Chinese Internal Combustion Engine (ICE) operations

In January, the Group finalized the separation of its ICE operations and sold the 50 per cent owned subsidiary Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd. to its associate company Zhejiang Aurobay Powertrain Co., Ltd.

Volvo Cars and Northvolt to build a battery plant in Gothenburg, Sweden

In February, Volvo Cars and Northvolt announced the decision to build a battery manufacturing plant in Gothenburg, Sweden. The production is estimated to commence its operations in 2025 creating up to 3,000 jobs.

Listing of Polestar

On 24 June, Polestar was listed on Nasdaq New York through the special purpose acquisition company (SPAC) Gores Guggenheim.

Financial support to Polestar

In November, Volvo Cars signed a facility agreement with Polestar with the intention of providing them with a credit facility of MUSD 800. Polestar will be able to draw funds from the credit facility during a 18-month period. Any drawn funds (total loan) will be repaid by May 2024.

The Board's work

The Board of Directors of Geely Sweden Holdings AB has four members including the CEO. There are no deputy members. All board members are elected for a one-year term. With the exception of the CEO, no board member works in an operational capacity within the Group. The General Counsel of the Group serves as secretary for the Board.

At the Annual General Meeting in year 2022, Eric Li (Li Shufu) was elected Chairman of the Board.

The Board shall annually adopt rules of procedure that govern the structure and content of board meetings, matters to be addressed during these meetings, the division of duties between the Board and the CEO and any other relevant issues. The CEO instructions describe his duties and reporting obligations to the Board. The Board has held 12 meetings including the statutory meeting.

Issues addressed by the Board include strategic changes in the share portfolio, acquisition and sale of subsidiaries, the Company's risk exposure, budgets and forecasts for the subsidiaries and financial monitoring of the business.

The Audit Committee normally meets before Board Meetings.

Policy for remuneration and employment for CEO

The Board has decided on a policy for remuneration for the CEO in accordance with decisions taken at the Annual General Meeting (AGM). More information is presented in Note 8 – Employees and remuneration.

Risks and uncertainties

Through its operations, the Group is exposed to various risks and uncertainties that could, in varying degrees, have a negative effect on income and financial position. These risks and uncertainties are continuously monitored by Geely Sweden Holdings in order to mitigate their effect on the Group's operation.

The most relevant risks and uncertainties are presented below:

Market shift and consumer behaviour in Electrification transformation

As the customers move towards electric vehicles, there is uncertainty on the pace of consumer acceptance, market by market. The move from internal combustion engine vehicles to electric vehicles is dependent on factors like range, charging experience and pricing.

Ensuring a sustainable transformation

The global risk of climate change generates public expectation on accelerating speed of sustainability transformation. This is a risk if the Group is not able to proactively adapt business plans and transition of its business, including the complex value chain, potentially risking negative brand reputation and loss of sales.

Battery supply chain

The battery technology shift and the increased capacity requirement in combination with a volatile supply chain and potential raw material limitations is a risk to the electrification strategy.

Cyber security

With the automotive industries continued shift toward connected cars, autonomous drive, vehicle electrification, and smart mobility, cyber security has risen in importance.

Compliance risks

New or changing laws, regulations and government policies will affect our business. The number and extent of legal and regulatory requirements affecting our business are expected to increase in the future.

Financial risk

A description of financial instruments and management of financial risk is presented in Note 20 – Financial Risks and Financial Instruments.

Parent company

Income before tax for the parent company amounted to MSEK 662 (8,526). The equity ratio amounted to 97 (92) per cent.

Significant events after the reporting period

Sale of Geely Innovation Centre 6 AB

The sale of Geely Innovation Centre 6 AB, the company building the sixth and last building on Uni3 by Geely campus, was completed on January 13, 2023. The company was sold to E3 Fastighetsutveckling AB, a joint venture owned by the Group and Fastighets AB Balder in equal parts.

Consolidation of Geely Business Center AB and Geely Innovation Centre Management AB

On 22 March 2023, the Board of Directors of Geely Business Center AB took the decision to enable a consoldiation of the Geely Business Center AB and Geely Innovation Centre Management AB to further enhance overall effectiveness and customer service of the two organisations.

Dividend AB Volvo

On 4 April 2023, the Annual General Meeting for AB Volvo, in accordance with the Board of Directors' proposal, resolved an ordinary dividend of SEK 7 per share and an extra dividend of SEK 7 per share which was paid to the shareholders on 13 April 2023, resulting in a total dividend for the Group of MSEK 2,341.

Executive Management Team

Peter Wikström, Chief Operating Officer and Head of Business Development and Investments, has pursued new career opportunities, effective April 30, 2023.

On June 1, 2023, Per Ansgar joined Geely Sweden Holdings AB as Chief Financial Officer. Per has a long history of different finance positions in Volvo Cars Group, the most recent as Deputy Chief Financial Officer at Volvo Cars.

Environment

The Group's major impact on environmental sustainability is through its portfolio companies' business activities. The Group has a longstanding commitment to be a responsible company with a clear focus on sustainable development. This commitment is, for example, described in the annual reports prepared by Volvo Cars and Volvo Group in line with international reporting guidelines set out in the Global Reporting Initiative (GRI), UN Global Compacts 10 principles and Sustainable Development Goals (SDGs). Volvo Group and Volvo Cars have also committed to TCFD and Science Based Targets going forward. All businesses have permits to regulate the environmental impact of their operations. Continuous reporting on this impact is carried out according to guidelines and requirements issued by local and national environmental authorities.

Proposed distribution of non-restricted equity:

Share premium reserve	SEK	6,509,200,000
Other contributed capital	SEK	3,693,131,899
Retained earnings carried forward	SEK	22,426,849,105
Net income for the year	SEK	662,389,058
At the disposal of the AGM	**SEK**	**33,291,570,062**

The Board proposes the following allocation of funds:

Carried forward	SEK	33,291,570,062
Total	**SEK**	**33,291,570,062**

Contents Financial Report

Consolidated Income Statements

MSEK	Note	2022	2021[1]
Revenue	2	330,674	281,974
Cost of sales	3	–269,101	–220,337
Gross income		**61,573**	**61,637**
Research and development expenses	3, 14	–11,666	–12,775
Selling expenses	3	–21,022	–18,844
Administrative expenses	3	–12,227	–10,251
Other operating income and expenses	6	1,526	1,606
Share of income in joint ventures and associates	12	4,496	–520
Operating income	4, 5, 7, 8, 9, 10	**22,679**	**20,853**
Interest income and similar credits[2]		961	643
Interest expenses and similar charges[2]		–1,349	–2,000
Other financial income and expenses[2]	11	–813	2,633
Income before tax		**21,478**	**22,129**
Income tax	13	–4,217	–4,495
Net income		**17,261**	**17,634**
Net income attributable to			
Owners of the parent company		13,028	15,805
Non-controlling interests		4,233	1,829
		17,261	**17,634**

1) In 2022, there has been a change in the elimination of internal profit related to sale of digital services within the Group. This change has resulted in a decrease of cost of sales, research and development expenses and selling expenses against an increase of administrative expenses. The figures for 2021 have been adjusted accordingly. The reclassification has no impact on EBIT.
2) In 2022, the Group changed the presentation of Other operating income and Other operating expenses as well as Financial income and Financial expenses. See Note 6 – Other operating income and expenses, and Note 11 – Financial income and expenses, for further information.

INCOME AND RESULT

Revenue increased by 17.3 per cent to SEK 330.7 (282.2) bn, supported by mix effects, price development effects, contract manufacturing, and the foreign exchange rate effect including hedges. Wholesale volumes decreased by 3.5 per cent to 631.7 (654.4) thousand cars, mainly affected by the supply chain constraints.

Gross income amounted to SEK 61.6 (61.3) bn, resulting in a gross margin of 18.6 (21.7) per cent with a decrease mainly due to increased raw material prices and logistics costs as well as higher cost for spot purchasing of semiconductors but also effects from contract manufacturing with a somewhat lower margin than wholesale. The gross margin was supported by positive mix effects and strong price realisation as well as positive foreign exchange rate effect including hedges.

Operating Income (EBIT) increased to SEK 22.7 (20.9) bn, resulting in an EBIT margin of 6.9 (7.6) per cent supported by the de-SPAC listing of Polestar in second quarter with a net effect amounting to SEK 5.9 bn. However, comparable figures was also supported by the valuation effect from the private placement in Polestar of SEK 2.0 bn and the dividend from Zenuity of SEK 1.2 bn. Excluding share of income in joint ventures and associates, EBIT decreased to SEK 18.2 (21.4) bn, corresponding to a margin of 5.5 (7.6) per cent. The exchange rate effects including hedges had a positive effect in EBIT of SEK 0.8 bn.

Net financial items amounted to SEK –1.2 (1.3) bn mainly driven by net effect of decreased dividends received foreign exchange differences on loans. The effective tax rate decreased to 19.6 (20.3) per cent. Net income was SEK 17.3 (17.6) bn and was in relation to revenue 5.2 (6.3) per cent.

Research and development spending, SEKbn	2022	2021
Research and development spending	–22,3	–19,0
Capitalised development costs	15,2	10,8
Amortisation and depreciation of research and development[1]	–4,6	–4,6
Research and development expenses	**-11,7**	**-12,8**

Consolidated Comprehensive Income

MSEK	2022	2021
Net income	17,261	17,634
Other comprehensive income		
Items that will not be reclassified subsequently to income statement:		
Change in fair value of other long-term securities holdings	–2,951	2,770
Remeasurements of provisions for post-employment benefits	4,560	3,123
Tax on items that will not be reclassified to income statement	–998	–669
Items that may be reclassified subsequently to income statement:		
Translation difference on foreign operations	3,870	4,531
Translation difference of hedge instruments of net investments in foreign operations	–710	–265
Change in fair value of cash flow hedge related to currency and commodity price risks	2,289	–2,314
Tax on items that may be reclassified to income statement	–319	526
Other comprehensive income, net of income tax	**5,741**	**7,702**
Total comprehensive income	**23,002**	**25,336**
Total comprehensive income attributable to		
Owners of the parent company	17,105	22,202
Non-controlling interests	5,897	3,134
	23,002	**25,336**

NET FINANCIAL POSITION AND LIQUIDITY

Total cash and cash equivalents, including marketable securities, decreased to SEK 70.8 (71.3) bn. Net cash decreased to SEK 7.3 (16.6) bn. Liquidity amounted to SEK 87.5 (884.7) bn, including undrawn credit facilities of SEK 16.7 (13.4) bn.

Cash flow from operating activities was positive and amounted to SEK 33.0 (33.2) bn, mainly due to positive effects from price development and salesmix. Working capital was positive and amounted to SEK 6.6 (2.4) bn. The Group continued to invest in the transformation into a fully electric car company and cash flow from investing activities amounted to SEK –39.5 (–25.2) bn.

Cash flow from financing activities amounted to SEK 7.7 (–11.2) bn, mainly related to change in marketable securities and increase in borrowings.

EQUITY

Total equity increased to SEK 133.0 (113.1) bn, resulting in an equity ratio of 34.6 (33.9) per cent. The change is mainly attributable to the positive net income of SEK 17.3 bn and positive effect in other comprehensive income of SEK 5.7 bn, offset by divestment of non-controlling interest SEK –1.2, divestment under common control SEK –1.0 bn, dividend to non-controlling interest SEK –0.8 bn and dividend to the parent company shareholders SEK –0.2 bn. The change in other comprehensive income is related to a positive foreign exchange translation effect, including hedges of net investments in foreign operations of SEK 3.3 bn (net of tax) and remeasurements of provisions for post-employment benefits of SEK 3.6 bn (net of tax) and change in cash flow hedge reserve from unrealised hedge contracts of SEK 1.8 (net of tax). The change in value of cash flow hedge is mainly due to contract prices being higher than the market prices. In addition, the revaluation of the investment in AB Volvo shares had a negative effect of SEK –3.0 bn.

Consolidated Balance Sheets

MSEK	Note	Dec 31, 2022	Dec 31, 2021
ASSETS			
Non-current assets			
Intangible assets	14	57,064	43,748
Tangible assets[1)]	7, 15	79,784	74,394
Investment property	16	537	—
Investments in joint ventures and associates	12	21,317	11,865
Other long-term securities holdings	19	36,727	37,089
Deferred tax assets	13	9,133	7,367
Other non-current interest-bearing receivables		3,354	5,046
Derivative assets, non-current	19	1,128	169
Other non-current assets	17	10,074	4,997
Total non-current assets		**219,118**	**184,675**
Current assets			
Inventories	18	46,954	36,562
Accounts receivable	4, 19	25,498	18,438
Current tax assets		1,772	879
Derivative assets, current	20	1,769	824
Other current assets [1)]	19	17,868	11,176
Marketable securities	21	3,415	7,996
Cash and cash equivalents	21	67,409	63,277
Assets held for sale	33	111	9,936
Total current assets		**164,796**	**149,088**
TOTAL ASSETS		**383,914**	**333,763**
EQUITY & LIABILITIES			
Equity	22		
Equity attributable to owners of the parent company[1)]		109,108	92,539
Non-controlling interests[1)]		23,843	20,559
Total equity		**132,951**	**113,098**
Non-current liabilities			
Provisions for post-employment benefits	23	6,883	11,961
Deferred tax liabilities	13	5,384	1,947
Other non-current provisions	24	8,422	8,647
Liabilities to credit institutions	20	25,192	18,581
Bonds, non-current	20	27,315	22,378
Non-current contract liabilities to customers	25	7,144	6,967
Other non-current interest-bearing liabilities	7	4,845	5,509
Derivative liabilities, non-current	20	2,052	1,609
Other non-current liabilities	4, 26	4,726	6,039
Total non-current liabilities		**91,963**	**83,638**
Current liabilities			
Current provisions	24	9,051	8,607
Liabilities to credit institutions	20	9,046	13,726
Bonds, current	20	2,000	—
Current contract liabilities to customers	25	26,094	22,929
Accounts payable	4	69,108	48,191
Current tax liabilities		1,566	1,404
Other current interest-bearing liabilities	7	1,500	1,462
Derivative liabilities, current	20	1,809	2,312
Other current liabilities	27	38,791	34,087
Liabilities held for sale	33	35	4,309
Total current liabilities		**159,000**	**137,027**
TOTAL EQUITY & LIABILITIES		**383,914**	**333,763**

1) Adjustments have been made to the prior period presented. For further information, see Note 10 – Government Grants.

Changes in Consolidated Equity

MSEK	Share capital[1]	Share premium	Other contributed capital	Currency translation reserve	Other reserves	Retained earnings	Attributable to owners of the parent	Non-controlling interests	Total
Balance at January 1, 2021 (as previously reported)	**–**	**11,497**	**7,993**	**-1,319**	**1,596**	**42,030**	**61,797**	**12,309**	**74,106**
Correction of prior period error[2]	–	–	–	6	–	–198	–192	–274	–466
Balance at 1 January 2021 (restated)	**–**	**11,497**	**7,993**	**-1,313**	**1,596**	**41,832**	**61,605**	**12,035**	**73,640**
Net income	**–**	**–**	**–**	**–**	**–**	**15,805**	**15,805**	**1,829**	**17,634**
Other comprehensive income									
Change in fair value of other long-term securities holdings[3]	–	–	–	–	2,770	–	2,770	–	2,770
Remeasurements of provisions for post-employment benefits	–	–	–	–	–	3,022	3,022	101	3,123
Translation difference on foreign operations	–	–	–	3,030	–	–	3,030	1,501	4,531
Translation difference of hedge instruments, net investments in foreign operations	–	–	–	–225	–	–	–225	–40	–265
Change in fair value of cash flow hedge related to currency and commodity price risks	–	–	–	–	–2,343	–	–2,343	–297	–2,640
Currency and commodity risk hedge contracts recycled to income statement	–	–	–	–	328	–	328	–2	326
Tax attributable to items recognised in other comprehensive income	–	–	–	46	414	–645	–185	42	–143
Other comprehensive income	**–**	**–**	**–**	**2,851**	**1,169**	**2,377**	**6,397**	**1,305**	**7,702**
Total comprehensive income	**–**	**–**	**–**	**2,851**	**1,169**	**18,182**	**22,202**	**3,134**	**25,336**
Transactions with owners									
New share issue in Volvo Car AB	–	–	–	–	–	4,279	4,279	15,462	19,741
Divestment of shares in Volvo Car AB	–	–	–	–	–	2,686	2,686	299	2,985
Divestment of non-controlling interests	–	–	–	–	–	163	163	–229	–66
Transactions with non-controlling interests	–	–	–	–	–	1,716	1,716	–1,716	–
Business combination under common control[5]	–	–	–	–	–	67	67	15	82
Capital contribution from non-controlling interests[4]	–	–	–	–	–	–	–	1,267	1,267
Dividend to shareholders[6]	–	–	–	–	–	–179	–179	–9,708	–9,887
Transactions with owners	**–**	**–**	**–**	**–**	**–**	**8,732**	**8,732**	**5,390**	**14,122**
Balance at December 31, 2021	**–**	**11,497**	**7,993**	**1,538**	**2,765**	**68,746**	**92,539**	**20,559**	**113,098**

1) Share capital amounted to SEK 100,000 (100,000).
2) Adjustments have been made to the prior period presented. For further information, see Note 10 – Government Grants.
3) For further information, see Note 20 – Financial risks and financial instruments.
4) For further information, see Note 22 – Equity.
5) For further information, see Note 12 – Investments in joint venture and associates.
6) For further information, see Note 4 – Related parties.

Cont.,Changes in Consolidated Equity

MSEK	Share capital[1]	Share premium	Other contributed capital	Currency translation reserve	Other reserves	Retained earnings	Attributable to owners of the parent	Non-controlling interests	**Total**
Balance at January 1, 2022 (as previously reported)	**–**	**11,497**	**7,993**	**1,532**	**2,765**	**68,944**	**92,731**	**20,833**	**113,564**
Correction of prior period error[2]	—	—	—	6	—	–198	–192	–274	–466
Effect of hyperinflation[3]	—	—	—	—	—	40	40	9	49
Balance at 1 January 2022 (restated)	**–**	**11,497**	**7,993**	**1,538**	**2,765**	**68,786**	**92,579**	**20,568**	**113,147**
Net income	**–**	**–**	**–**	**–**	**–**	**13,028**	**13,028**	**4,233**	**17,261**
Other comprehensive income									
Change in fair value of other long-term securities holdings[4]	—	—	—	—	–2,951	—	–2,951	—	–2,951
Remeasurements of provisions for post-employment benefits	—	—	—	—	—	3,739	3,739	821	4,560
Translation difference on foreign operations	—	—	—	3,198	—	—	3,198	672	3,870
Translation difference of hedge instruments of net investments in foreign operations	—	—	—	–582	—	—	–582	–128	–710
Change in fair value of cash flow hedge related to currency and commodity price risks	—	—	—	—	1,724	—	1,724	565	2,289
Currency and commodity risk hedge contracts recycled to income statement	—	—	—	—	—	—	—	—	—
Tax attributable to items recognised in other comprehensive income	—	—	—	121	–353	–819	–1,051	–267	–1,317
Other comprehensive income	**–**	**–**	**–**	**2,737**	**-1,580**	**2,921**	**4,078**	**1,664**	**5,742**
Total comprehensive income				**2,737**	**-1,580**	**15,948**	**17,105**	**5,897**	**23,002**
Transactions with owners									
Capital contribution from non-controlling interests[5]	—	—	—	—	—	—	—	17	17
Transactions with non-controlling interests	—	—	—	—	—	30	30	–30	—
Divestment of non-controlling interests[5]	—	—	—	—	—	–626	–626	–570	–1,196
Divestment under common control[6]	—	—	—	—	—	219	219	–1,197	–978
New issue	—	–1	—	—	—	—	–1	0	–1
Share-based payments	—	—	—	—	—	20	20	4	24
Dividend to shareholders[7]	—	—	—	—	—	–218	–218	–846	–1,064
Transactions with owners	**–**	**-1**	**–**	**–**	**–**	**-575**	**-576**	**-2,622**	**-3,197**
Balance at December 31, 2022	**–**	**11,496**	**7,993**	**4,275**	**1,185**	**84,159**	**109,108**	**23,843**	**132,951**

1) Share capital amounted to SEK 100,000 (100,000).
2) Adjustments have been made to the prior period presented. For further information, see Note 10 – Government Grants
3) For further information, see Note 1 – General information for financial reporting in Geely Sweden Holdings Group.
4) For further information, see Note 20 – Financial risks and financial instruments.
5) For further information, see Note 22 – Equity and Note 8 – Participation in subsidiaries (Parent company).
6) For further information, see Note 31 – Business combinations and divestments..
7) For further information, see Note 22 – Equity and Note 4 – Related parties.

Consolidated Statement of Cash Flows

MSEK	Note	2022	2021
OPERATING ACTIVITIES			
Operating income		22,679	20,853
Depreciation and amortisation of non-current assets	9	16,146	15,043
Dividends received from joint ventures and associates	12	72	1,991
Interest and similar items received		1,058	655
Interest and similar items paid		–1,903	–1,762
Other financial items		446	–1,465
Income tax paid		–4,258	–3,670
Adjustments for items not affecting cash flow	30	–7,775	–836
		26,465	**30,809**
Movements in working capital			
Change in inventories		–7,392	3,687
Change in accounts receivable		–1,028	2,893
Change in accounts payable		18,839	–3,460
Change in provisions		–4,641	–1,127
Change in contract liabilities to customers		5,941	2,239
Change in other working capital assets/liabilities		–5,135	–1,853
Cash flow from movements in working capital		**6,584**	**2,379**
Cash flow from operating activities		**33,049**	**33,188**
INVESTING ACTIVITIES			
Investments in shares and participations	12, 31	–7,532	–11,670
Capital repayments from shares and participations			132
Repayment of loans from affiliated companies		–6,108	—
Disposals of shares and participations		4,581	6,243
Dividends received from investments in other long-term securities holdings		2,174	4,098
Investments in intangible assets		–18,309	–11,814
Investments in tangible assets		–14,020	–12,148
Disposal of tangible assets		162	123
Other		–400	–149
Cash flow from investing activities		**-39,452**	**-25,185**
Cash flow from operating and investing activities		**-6,403**	**8,003**
FINANCING ACTIVITIES			
Proceeds from credit institutions		28,702	1,579
Proceeds from bond issuance	20	5,260	—
New share issue		—	20,807
Capital contribution from Non-controlling interest		—	360
Repayment of bond		—	–10,199
Repayment of liabilities to credit institutions		–29,475	–13,811
Repayment of interest-bearing liabilities		–1,711	–1,450
Dividend paid to shareholders and/or Non-controlling interest	4	–847	–9,887
Investments in marketable securities	21	–21,127	–15,015
Matured marketable securities		26,157	15,475
Other[1]		729	906
Cash flow from financing activities		**7,688**	**-11,235**
Cash flow for the year		**1,285**	**-3,232**
Cash and cash equivalents at beginning of year		**63,277**	**62,003**
Exchange difference on cash and cash equivalents		2,847	4,506
Cash and cash equivalents at end of year	21	**67,409**	**63,277**

1) Other is attributable to realised result from financial instruments SEK 1,058 (947) m and change in other non-current liabilitities of SEK –332 (–42) m.

Notes to the Consolidated Financial Statements

All amounts are in MSEK unless otherwise stated.
Amounts in brackets refer to the preceding year.

1 General information on financial reporting within Geely Sweden Holdings Group

Basis of preparation

The consolidated financial statements of Geely Sweden Holdings AB have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), as adopted by the European Union and the Swedish Annual Accounts Act. In addition, RFR 1 Supplementary Rules for Groups has been applied, a standard issued by the Swedish Financial Reporting Board. RFR 1 specifies mandatory additions to the IFRS disclosure requirements in accordance with the Swedish Annual Accounts Act. Group companies apply the same accounting principles, irrespective of national legislation, as defined in the Group accounting directives and they have been applied consistently for all periods, unless otherwise stated.

Preparation of the financial statements in accordance with IFRS requires the Company's Executive Management and the Board of Directors to make estimations and judgements that affect the value of the reported assets, liabilities, income and expenses. Estimates and judgements will impact the values of assets and liabilities. The actual outcome (value) may differ from these estimates and judgements and corrections may be necessary to make. Therefore, the estimates and judgements are reviewed on a regular basis. Changes are recognised in the period of the change and in future periods if the change affects both.

All accounting policies considered material to the Group are described in conjunction with each note. When a new accounting policy has been implemented or when there has been changes in disclosures this is described as part of the relevant note.

The estimates and judgements that are deemed to be the most important for an understanding of he Group's financial reports within each area, taking into account the degree of materiality and uncertainty, are presented as part of each applicable note.

In order to avoid duplication of information, cross-references have been made between different parts of the annual report.

New accounting principles

New accounting principles 2022

IASB has published amendments to standards that were endorsed by EU, effective after 1 January 2022. These additions have not had any significant impact on the financial statements.

New accounting principles 2023

IASB has published amendments to standards that were endorsed by EU, effective after 1 January 2023. None of these are expected to have a material effect on the financial statements.

Basis of consolidation

The consolidated accounts include Geely Sweden Holdings AB and its subsidiaries. Subsidiaries are all entities over which the Group has control. The Group controls an entity when exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

All wholly-owned subsidiaries and certain companies owned to 50 per cent, mainly in China, are consolidated, see Note 8 – Participation in subsidiaries (parent company). Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

Climate change

Being an automotive industry actor, the Group acknowledges the global threat of climate change and global warming, particularly the importance of our own contribution to prevent global climate action failure and fulfilment of the Paris Agreement. The Group continuously evaluates how climate change transitional and physical risks affects our business strategy and operations as sustainability is deeply integrated in our business model. We have set the ambition to become a climate neutral company by 2040 and our current climate action emission reduction targets for 2030 are in line with a well below 2-degree scenario as verified by the Science-Based Targets initiative (SBTi). A key enabler is our strategic objective to become a 100 per cent BEV company by 2030. All types of strategic decisions including investment decisions are taken in the context of fulfilling these ambitions and targets

In preparing the consolidated financial statements the potential impact of climate change, future regulatory changes and our transition towards becoming a 100 per cent BEV company by 2030 has been, as far as possible, incorporated as part of the critical accounting estimates and judgements made in the consolidated financial statements. Areas that have been especially considered are the potential impact on the value of non-current assets, future cash flows and emission credits.

Our ambitions and targets are part of Management's business plan and climate related risks are thus also included in the identification of future cash flows to be used when calculating different assets and or cash generating units' recoverable values, including the impairment tests of goodwill and intangible assets with indefinite useful lives. Furthermore, the Group regularly assesses the useful lives of non-current, non-financial assets which also take into consideration said factors. As an effect, the useful life of our ICE related assets are aligned with our objective to become a 100 per cent BEV company by 2030. Changing regulations and changes in environmental policies are continuously monitored and any obligations are recognised accordingly. In respect to this, during the year the Group has recognised in revenue, income from government grants relating to emission credits earned during the period for exceeding the emission targets in certain markets. For more information, see section Emission credits in Note 2 - Revenue.

Foreign currency

The primary economic environment is the one in which a group company primarily generates and spends cash. Normally the functional currency is the currency of the country where the company is located. The Group's and Geely Sweden Holdings AB presentation currency is Swedish krona (SEK).

Assets and liabilities denominated in foreign currencies other than the functional currency are translated to the functional currency using the balance sheet closing rate. Exchange rate differences are recognised in the income statement.

Exchange rate differences on operating assets and liabilities are recognised in other operating income and expenses, while exchange rate differences arising on financial assets and liabilities are recognised in financial income and expenses.

When preparing the consolidated financial statements, items in the income statements of foreign subsidiaries are translated to SEK using monthly average exchange rates. Balance sheet items are translated into SEK using exchange rates at year-end (closing rate). Exchange rate differences arising on translation are recognised in other comprehensive income and accumulated in equity. The accumulated translation differences related to subsidiaries, joint ventures or associates are reversed to the income statement as a part of the gain/loss arising from disposal of such a company.

The main exchange rates applied are presented in the table below:

The main exchange rates applied are presented in the table below:

		Average rate		Close rate	
Country	Currency	**2022**	2021	**2022**	2021
China	CNY	1.50	1.32	1.51	1.43
Euro zone	EUR	10.58	10.13	11.12	10.29
United Kingdom	GBP	12.44	11.74	12.56	12.26
United States	USD	10.05	8.53	10.40	9.07
Japan	JPY	0.08	0.08	0.08	0.08

Hyperinflation

In determining hyperinflationary economies, data published by the International Monetary Fund (IMF) and other relevant sources are considered alongside the indicators in IAS 29. From the second quarter 2022, Turkey was deemed to be a hyperinflationary economy and as a consequence IAS 29 has been applied to the Group's Turkish business since 1 January 2022.

To reflect changes in purchasing power at the balance sheet date, the carrying amounts of non-monetary assets and liabilities, shareholders' equity and comprehensive income at subsidiaries in hyperinflationary economies are restated in terms of the measuring unit current at the balance sheet date. These are indexed using a general price index in accordance with IAS 29. The Turkish subsidiary's financial statements are based on a historical cost approach and have been restated retrospectively in order to reflect the current purchasing power of their functional currency, the Turkish lira. Pursuant to IAS 21 paragraph 42, the comparative amounts of the previous reporting period were not restated. The restatements have been made based on the Consumer Price Index (CPI) which on 31 December 2022, have increased by 156 per cent and 64 per cent on a 3-year and 12-month cumulative rate respectively. The application of the standard does not have a material effect on the Group's profitability, liquidity and overall financial position.

Classification of current and non-current assets and liabilities

An asset is classified as current when it is held primarily for the purpose of trading, is expected to be realised within twelve months after the balance sheet date or consists of cash or cash equivalents, provided it is not subject to any restrictions. All other assets are classified as non-current. A liability is classified as current when it is held primarily for the purpose of trading or is expected to be settled within twelve months after the balance sheet date and the Group does not have the right to defer settlement of the liability for at least twelve months after the balance sheet date. All other liabilities are classified as non-current.

When the criteria for being classified as a non-current asset held for sale are fulfilled and the asset or disposal group are of significant value, the asset or disposal group and the related liabilities are recognised on a separate line in the balance sheet, see Note 33 - Assets and liabilities held for sale.

2 Revenue

ACCOUNTING PRINCIPLES

Revenue is recognised when the customer obtains control of a delivered good or service, and thus has the ability to direct the use and obtain the benefits from the goods or services. Revenue could either be recognised at a point in time or over time depending on the applied business model. The sale of goods or services will sometimes give rise to recognition of contract liabilities to customers. These liabilities are recognised when the Group is obligated to transfer goods or services for which consideration is already received. Contract liabilities to customers include sales generated obligations, deferred revenue from service contracts, sales with repurchase commitments and residual value guarantees as well as advance payments from customers.

Revenue from sale of goods

Revenue is recognised when the customer has gained control over the goods according to agreed contract terms. If the customer contracts include variable considerations or consideration payables the revenue recognised will be affected. If a variable consideration or a consideration payable, e.g., a volume discount or incentive programme, is paid out at a later point in time then the revenue for the good or service is recognised, the value is estimated and recognised as a contract liability.

Revenue from sale of a vehicle to a customer, where there is a residual value guarantee issued to an independent financing provider, is recognised at the time of sale, less an amount corresponding to the estimated residual value risk. The estimated residual value risk remaining in the Group is recognised as a contract liability, see Note 25 – Current and non-current contract liabilities to customers. Revenue is only recognised provided that transfer of control over the vehicle can be confirmed.

Revenue from sale of a vehicle to a customer combined with a repurchase commitment (the right or obligation (put option) to buy back the car) is recognised over the contract period as if it were an operating lease contract. This is based on the fact that the customer has not obtained the control of the vehicle. Based on historical experience a majority of customers use the put option at the end of the contract period. During the contract period the cars are recognised on the balance sheet and are depreciated to the estimated residual value, see Note 9 – Depreciation and amortisation. The useful life of the asset and the corresponding residual value is monitored closely and changed, if necessary, see Note 18 – Inventories and Note 15 – Tangible assets. Liabilities related to repurchase commitments are recognised as other non-current and other current liabilities, see Note 26 – Other non-current liabilities and Note 27 – Other current liabilities. Deferred revenue related to sale with repurchase commitments are recognised as current and non-current contract liabilities to customers, see Note 25 – Current and non-current contract liabilities to customers.

Revenue from sale of services

The Group sells services in the form of for example maintenance contracts and extended warranties to customers. Revenue from these sales is deferred and recognised on a straight-line basis over the contract period. The deferred revenue is recognised as contract liabilities to customers, since the customer's payment is made before the service is performed. When an extended warranty contract is included in the sales price of the car, and the inclusion in the contract is assessed to be common practice in the market, such extended warranty costs is recognised as a provision. Where an extended warranty is included in the sale of a car and the offer goes beyond common practice in the market, it is instead accounted for as a separate performance obligation; a stand-alone selling price is identified, and revenue is recognised on a straight-line basis over the contract period. The stand-alone selling price is not directly observable, why the price in general is estimated based on expected cost plus a reasonable margin.

Revenue from subscription, leasing and rental business

Revenue from subscription, leasing and rental business is recognised as revenue on a straight-line basis over the contract period. Revenue related to an operating lease arrangement is recognised on a straight-line basis over the leasing period.

Revenue from sale of licences

Revenue from the sale of licences is recognised at a point in time or over time, depending on whether the sold licence gives the customer a right to use or a right to access the underlying asset. The Group sells both types of licences and revenue is therefore recognised in accordance with the substance of the relevant agreement. Income from sold licences related to intellectual property (IP) and other developed technology is classified as revenue.

Emission credits

The Group recognises in revenue, income from government grants relating to emission credits earned during the period for exceeding the emission targets in certain markets when the credits can be sold or consumed in the future and a fair value for the credits received can be determined. The earned credits are classified as inventories until they are either sold to a third-party or consumed in the Group's operations. See Note 10 – Government Grants and Note 18 – Inventories for more information.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Variable consideration

The inherent risk with regard to different forms of variable considerations is the probability of a reversal of revenue in future periods. As a consequence, the Group uses either the expected value method or the most likely amount as appropriate when assessing the variable sales price. Revenue is recognised when it is highly probable that a revenue reversal in future periods will not occur. Estimates and judgements initially made are updated continuously at each reporting period.

Volume discounts

Cars may be sold with volume discounts based on aggregate sales over a 3–12 months period. Revenue from these sales is recognised based on the price specified in the contract, adjusted for volume discounts for the wholesales period. Accumulated historical experience is used to estimate and calculate the total discount. A contract liability is recognised for expected volume discounts to customers in relation to sales made.

Residual value guarantees

The Group is exposed to residual value risks, meaning that there is a potential loss for the Group if the future market value of a used car is lower than the guaranteed value of the car according to the contract. This potential negative effect is recognised as a contract liability and the future market value of cars is monitored individually on a continuing basis with a special emphasis on residual value of internal combustion engine vehicles in line with the market shifting towards electric vehicles. An estimate is made based on evaluating recent car auction values, future price deterioration due to expected change of market conditions, vehicle quality data and repair and reconditioning costs etc.

Repurchase Commitments

Cars sold with a repurchase obligation are recognised in the balance sheet as assets under operating leases or inventories depending on the contract period. During the contract period there is risk for a potential loss for the Group if the estimated value of the car is lower than the market value at the time. The potential negative effect is recognised as an increased depreciation or an impairment of the car. An estimate of the value of the car is therefore made based on recent car auction values, future price deterioration due to expected change of market conditions, vehicle quality data and repair and reconditioning costs etc. The value of the car in the balance sheet is adjusted if necessary.

Consideration payables

When the customer as part of a sale transaction will receive cash or goods with a monetary value, revenue will be recognised net of the consideration paid to the customer.

Revenue allocated to geographical regions:	**2022**	**2021**
China	71,012	63,575
US	62,070	52,019
Europe	144,588	120,903
of which Sweden	*45,360*	*28,116*
of which Germany	*19,015*	*16,823*
of which United Kingdom	*16,159*	*15,610*
Other markets	53,004	45,477
of which Japan	*8,339*	*7,477*
of which South Korea	*6,024*	*5,893*
Total	**330,674**	**281,974**

Revenue allocated to category:	**2022**	**2021**
Sales of new cars	252,747	218,371
Sales of used cars	16,405	21,096
Sales of parts and accessories	30,778	25,983
Revenue from subscription, leasing and rental business	4,473	3,497
Sales of licences and royalties	887	2,670
Contract manufacturing	20,288	1,627
Emissions credits	505	—
Other revenue	4,591	8,730
Total	**330,674**	**281,974**

Revenue recognised in relation to contract liabilities to customers

For revenue recognised in the current reporting period in relation to opening balance of contract liabilities see Note 25 – Current and non-current contract liabilities to customers. The majority of the Group´s contract liabilities are classified as current and will most likely be recognised as revenue during the coming year.

3 Expenses by nature

	2022	2021
Material cost incl. freight, distribution and warranty	–234,752	–187,435
Personnel	–37,665	–37,884
Amortisation/depreciation	–16,146	–15,043
Other	–25,452	–21,845
Total	**-314,015**	**-262,207**

The amounts presented as Personnel have been reduced by capitalised salary costs related to product development. Received government grants (see Note 10 – Government grants) have reduced the amounts presented as Personnel and Other.

4 Related parties

ACCOUNTING PRINCIPLES

The Group has a close collaboration with its related parties. The main part of the transactions relates to sale of cars, components, licences and technology. Related parties include companies outside the Group, but within the Geely sphere of companies as well as other companies, such as associates and joint ventures. All transactions with related parties are performed at arm's length.

Significant transactions and agreements with Related parties during the year

- In January, Volvo Cars and Northvolt jointly established NOVO Energy AB and its subsidiaries NOVO Energy R&D AB and NOVO Energy Production AB with the aim to accelerate the development and production of sustainable batteries. Volvo Cars and Northvolt will jointly invest in a new R&D centre and a battery manufacturing plant in Gothenburg. The gigafactory is planned to commence its operations in 2025. During 2022, capital contributions amounting to SEK 158 m has been paid from Volvo Cars to NOVO Energy AB.
- On 31 January, Volvo Cars finalised the separation of its combustion engine operations and the control of the 50 per cent owned subsidiary Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd was transferred to the acquirer, the newly established associated company Zhejiang Aurobay Powertrain Co., Ltd (Aurobay), China, for further information see Note 31 - Business Combinations and Divestments. During 2022, Volvo Cars (China) Investment Co., Ltd has made share capital and other capital contribution of SEK 1,696 m to Aurobay.
- In August, Aurobay acquired 100 per cent of the shares in Powertrain Engineering Sweden AB (PES) and Powertrain Engineering Sweden Real Estate AB from the Geely Sweden Holdings AB.
- In November, Volvo Cars (China) Investment Co., Ltd and Zhejiang Geely Chantou Holding Co., Ltd signed an equity transfer agreement regarding Aurobay. The divestment transaction was closed on 30 December and Volvo Cars (China) Investment Co., Ltd entire shareholding of 33 per cent in Aurobay was transferred to the acquirer Zhejiang Geely Chantou Holding Co., Ltd. The consideration amounted to SEK 1,528 m.
- As of 24 June, the Polestar Group was listed on the Nasdaq Stock Exchange in New York in a de-SPAC process through a merger with the SPAC company Gores Guggenheim. The listing transactions had several financial effects for Volvo Cars. For further information, see Note 12 - Investments in joint ventures and associates.
- In November, Volvo Cars signed a facility agreement with Polestar with the intention of providing them with a credit facility of USD 800 m. Polestar will be able to draw funds from the credit facility during a 18-month period. Any drawn funds (total loan) will be repaid by May 2024. The loan also includes an option for Volvo Cars to convert the loan to equity, if Polestar during the period chooses to finance the operations by issuing new shares. The potential conversion is also limited due to Volvo Cars' ownership in Polestar not being able to equal or exceed 50 per cent. The convertible bond will be recognised as a long-term security holding or as an other current asset in the balance sheet depending on when Polestar draws funds. The bond will be valued measured at fair value through income statement taking into consideration the conversion mechanism of the instrument.
- Polestar Automotive Holding Ltd (Hong Kong) made a contribution in kind to its shareholders regarding its shares in Polestar Automotive Holding UK PLC.
- In December, Volvo Cars acquired the remaining 13.5 per cent of the shares in Zenseact AB from ECARX Technology Ltd and is now a wholly-owned company to Volvo Cars. Purchase consideration amounted to SEK 1,196 m.

Events with Related parties after the balance sheet date

- On 6 January 2023, the Group, through one of its wholly- owned subsidiaries, Asia Euro Automobile Manufacturing (Taizhou) Co., Ltd. acquired 100 per cent of the shares in Taizhou Luqiao Jijin Automobile Manufacturing Co., Ltd. The acquired company owns land and building related to the manufacturing plant in Luqiao, Taizhou, China. The purchase consideration amounted to SEK 2,865 m.

Tables of transactions with Related Parties

The information presented below includes all assets and liabilities regarding related parties. All assets and liabilities are current except non-current assets of SEK 966 (5,196) m. For further details refer to section Specification of transactions with Related Parties.

	Sales of goods, services and other		Purchases of goods, services and other	
	2022	2021	**2022**	2021
Related companies[1) 2) 3)]	25,540	7,007	–20,324	–7,589
Associated companies and joint ventures	1,627	1,448	–2,701	–1,815

	Receivables		Payables	
	31 Dec 2022	31 Dec 2021	**31 Dec 2022**	31 Dec 2021
Related companies[1)]	28,557	18,630	13,972	3,881
Associated companies and joint ventures	1,377	991	466	499

1) Related companies are companies within the Geely sphere of companies. Joint ventures within the Geely sphere are presented as Related companies. For joint ventures and associated companies see Note 12 – Investments in joint ventures and associates.
2) Increase in 2022 compared to previous year is mainly related to acquisition of the Taizhou plant and contract manufacturing.
3) Increase in 2022 compared to previous year is mainly related to the separation of ICE powertrain operations.

Specification of transactions with Related Parties

The Polestar Group

The Group recognised revenue from the Polestar Group of SEK 21,837 (3,967) m. The increase in revenue was mainly related to sale of Polestar cars from the Taizhou plant acquired in December 2021, technology licences and development of technology as well as revenue related to sale of other services.

Zhangjiakou Aurobay Powertrain Manufacturing Co., Ltd

The Zhangjiakou plant is since 31 January 2022 a related party to the Group. The purchase of combustion engines amounted to SEK –6,956 m and has mainly been recognised as cost of sales.

Powertrain Engineering Sweden AB (PES)

Powertrain Engineering Sweden AB (PES) is, with effect from 1 August 2022, a related party to the Group.

Zhejiang Liankong Technology Co., Ltd and Zhejiang Ji Run Auto Co., Ltd

The purchase of research and development services from Zhejiang Liankong Technology Co., Ltd and Zhejiang Ji Run Auto Co., Ltd amounted to SEK –1,885 m and the entire amount has been capitalised as intangible assets.

Ningbo Fuhong Auto Sales Co., Ltd

Total revenue from sales of cars to Ningbo Fuhong Auto Sales Co., Ltd amounted to SEK 1,545 (969) m.

Ningbo Geely Automobile Research&Develepment Co., Ltd

The purchase of research and development services from Ningbo Geely Automobile Research&Develepment Co., Ltd amounted to SEK –1,358 (–938) m, which mainly has been capitalised as intangible assets.

Viridi E-Mobility Technology (Ningbo) Co., Ltd

The purchases of batteries from Viridi E-Mobility Technology (Ningbo) Co., Ltd amounted to SEK –1,553 m and has been recognised as cost of sales.

Zhejiang Geely Holding Group Co., Ltd

Total dividend of SEK 1 064 (9,691) m was distributed to the shareholder Zhejiang Geely Holding Group Co., Ltd, whereof SEK 218 (-) m from Geely Sweden Holdings AB, SEK 840 (9,199) m from the 50 per cent owned subsidiary Daqing Volvo Car Manufacturing Co., Ltd, SEK 6 (–) m from the 50 per cent owned subsidiary Shanghai Volvo Car Research and Development Co., Ltd and SEK — (492) m from the divested, previously 50 per cent owned, subsidiary Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd.

Other transactions

The Group has issued long-term and short-term loans to Geely International (Hong Kong) Ltd. of USD 746 (83) m. The loans to Geely International (Hong Kong) Ltd. are guaranteed by Zhejiang Geely Holding Group Co. Ltd. The Group has short-term loans from Geely Financial Denmark A/S of EUR 47 (14) m.

The Group does not engage in any transactions with Board members or senior executives except ordinary remunerations for services and the share-based programme as described in Note 8 - Employees and remuneration.

5 Audit fees

	2022	2021
Deloitte		
Audit fees	–52	–45
Audit-related fees	–3	–15
Tax services	–2	–1
Other services	–6	–5
Total	**-63**	**-66**

Audit fees involve audit of the Annual Report, interim report and the administration by the Board of Directors and the Managing Directors. The audit also includes advice and assistance as a result of the observations made in connection with the audit.

Audit-related fees refer to other assignments to ensure quality in the financial statements including consultations on reporting requirements and internal control.

Tax services include tax-related advisory.

All other work performed by the auditor is defined as **other services**.

6 Other operating income and expenses

In 2022, the Group has changed the presentation of Other operating income and Other operating expenses in the Consolidated Income Statements. Other operating income and Other operating expenses are presented net on one line item. Presented in the previous manner, Other operating income and Other operating expenses in 2022 would amount to SEK 3,236 m and SEK –1,710 m respectively for the Group. Items presented within the line item are consistent with what has been previously disclosed in the Annual Report 2021, Note 6 – Other operating income and expenses.

	2022	2021
Other operating income		
Foreign exchange rate gains[1)]	807	1,618
Sold services	858	1,107
Government grants	231	86
Other	1,340	1,302
Total	**3,236**	**4,113**

	2022	2021
Other operating expenses		
Amortisation and depreciation of intangible and tangible assets	–31	–388
Foreign exchange rate loss[2)]	–2	–
Property tax	–132	–124
Other	–1,545	–1,995
Total	**-1,710**	**-2,507**

1) The gross foreign exchange rate gain on operating assets and liabilities amounted to SEK 2,671 (1,950) m.
2) The gross foreign exchange rate loss on operating assets and liabilities amounted to SEK –1,866 (–332) m.

7 Leasing

ACCOUNTING POLICIES

The Group as a lessee

At the lease commencement date, a right-of-use asset and a lease liability are recognised on the balance sheet. The lease liability is initially measured at an amount equal to the present value of the future lease payments under the lease contract. Lease payments included in the measurement of the lease liability comprise of fixed lease payments including in-substance fixed payments, variable lease payments that depend on an index or a rate, amounts expected to be payable under a residual value guarantee and payments related to options that the Group is reasonably certain to exercise. The lease payments are discounted using the interest rate implicit in the lease if this can be readily determined. In cases where the interest rate is not implicit in the lease, the Group generally has used the incremental borrowing rate.

The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and the estimate of costs to dismantle and remove the underlying asset or the site on which it is located, less any lease incentives received. The asset is subsequently depreciated on a straight-line basis from the commencement date to the earlier of the end of the useful life of the underlying asset or the end of the lease term. For more information regarding deprecation see Note 9 – Depreciation and amortisation. The right-of-use asset is reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The Group applies the recognition exemptions regarding short-term leases and leases where the underlying asset is of low value. Hence, payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in the income statement. Short-term leases are leases with a lease term of 12 months or less and low value assets are defined as asset classes that are typically of low value, for example small IT equipment (cellphones, laptops, computers, printers) and office furniture. Non-lease components are included in the measurement of the lease liability for all asset classes.

In the balance sheet, lease liabilities are presented as Other non-current and current interest-bearing liabilities. The asset is presented as a right of use asset, see Note 15 – Tangible assets. In the income statement, depreciation of the right-of-use asset is presented on the same line item/items with similar expenses. Interest expense on the lease liability is presented as part of finance expenses. In the statement of cash flows, amortisation on the lease liability is presented as a cash flow from financing activities. Payments of interest as well as payments for short-term leases and leases of low value are presented as cash flow from operating activities.

The Group as a lessor

When the Group is a lessor the accounting treatment differs based on the classification into operating and finance leases. The classification is made on the basis of the distribution of risks and rewards incidental to ownership of the lease asset. If they are transferred to the lessee, it is classified as a finance lease or if it remains with the Group it is classified as an operating lease.

The Group is acting as a manufacturer finance lessor in a few cases. In these cases, revenue is recognised at fair value of the underlying asset or the present value of the lease payments if it is lower. Cost of sales is recognised corresponding to the carrying amount of the underlying asset less the present value of any unguaranteed residual values.

When accounting for other finance leases, the lease asset is derecognised, and instead a receivable is recognised in the amount of the net investment in the lease, corresponding to the present value of the lease payments less any unguaranteed residual values. Any initial direct costs are included in the net investment in the lease. Income is recognised over the lease term using the effective interest rate.

Sale transactions including repurchase commitments are recognised as operating leases. Operating lease contracts with a maturity less or equal to 12 months are recognised as inventory, see Note 18 – Inventories. Operating lease contracts with a maturity more than 12 months are recognised as an asset under operating lease, see Note 15 – Tangible assets. These operating leases are mainly related to vehicles sold with repurchase commitments and contracts under the name of Care by Volvo. In sales with repurchase commitments, the difference between the original sales price and the repurchase price is recognised in the income statement as revenue on a straight-line basis over the lease term, see Note 2 – Revenue. The remaining lease revenue yet to be recognised is presented as part of current and non-current contract liabilities to customers in the balance sheet, see Note 25 – Current and non-current contract liabilities to customers. The repurchase obligation is considered to be a financial liability and is classified as non-current or current liabilities, see Note 26 – Other non-current liabilities and see Note 27 – Other current liabilities.

Sub-leases and sale and leaseback transactions are not considered material for the Group.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Complex contracts requires the Group to make judgemental decisions when determining the lease term for contracts, especially for the leasing of buildings. Factors included in the determination of the lease term are if the Group, as a lessee, has made investments to improve the asset or tailored it for our special needs and/or the importance of the underlying asset to the Group's operations.

Lease term

When determining the lease term, management is considering all facts and circumstances that create an economic incentive to exercise an extension option, or not to exercise a termination option in addition to the non-cancellable lease term. In determining the lease term, those options are only considered if they are reasonably certain. The assessment is reviewed if a significant event or a significant change in circumstances occurs that may affect the assessment.

Discount rate

When determining the discount rate, the Group uses an applicable industrial yield curve and takes into consideration for example credit risk, adjustment for currency, lease term and economic environment.

The Group as lessee

The Group mainly leases buildings and other items such as IT-equipment and production equipment.

Right-of-use asset	Buildings and land	Machinery and equipment	**Total**
Acquisition cost			
Balance at 1 January 2021	6,900	1,108	**8,008**
Additions	1,273	123	**1,396**
Acquired through business combinations	1,230	1	**1,231**
Divestments and disposals	–353	–264	**-617**
Reclassifications	3	–	**3**
Effect of foreign currency exchange rate differences	299	17	**316**
Balance at 31 December 2021	**9,352**	**985**	**10,337**
Additions	889	99	**988**
Divested through business combinations	–248	–	**-248**
Divestments and disposals	–358	–166	**-524**
Reclassifications	35	–	**35**
Effect of foreign currency exchange rate differences	311	27	**338**
Balance at 31 December 2022	**9,981**	**945**	**10,926**
Accumulated depreciation			
Balance at 1 January 2021	–1,748	–292	**-2,040**
Depreciation expense	–1,138	–249	**-1,387**
Acquired through business combinations	–92	–	**-92**
Divestments and disposals	25	77	**102**
Reclassifications	2	11	**13**
Effect of foreign currency exchange rate differences	–2	9	**7**
Balance at 31 December 2021	**-2,953**	**-444**	**-3,397**
Depreciation expense	–1,401	–179	**-1,580**
Divested through business combinations	36	–	**36**
Divestments and disposals	257	85	**342**
Reclassifications	–5	–	**-5**
Effect of foreign currency exchange rate differences	–104	–13	**-117**
Balance at 31 December 2022	**-4,170**	**-551**	**-4,721**
Net balance at 31 December 2021	**6,399**	**541**	**6,940**
Net balance at 31 December 2022	**5,811**	**394**	**6,205**

Lease liabilities	**2022**	2021
Non-current lease liabilities	4,845	5,509
Current lease liabilities	1,515	1,477

The maturity analysis of lease liabilities is presented in Note 20 – Financial risks and financial instruments.

Amounts recognised in income statement	2022	2021
Deprecation expenses on right-of-use assets	–1,580	–1,387
Interest expense on lease liabilities	–220	–215
Expense relating to short-term leases	–177	–134
Expense relating to leases of low value assets	–58	–72
Expense relating to variable lease payments not included in the measurement of the lease liability	–44	–45
Income from sub-leasing right-of-use assets	172	159

The total cash outflow for leases amounts to SEK 1,907 (1,694) m. The amount include payments for lease agreements recognised as liabilities, variable payments, short-term payments and payments for leases of low value.

The Group as lessor

Operating lease contracts mainly relate to vehicles sold with repurchase commitments and contracts under the name of Care by Volvo.

Operating leases contracts

The table contains a maturity analysis of lease payments and the total of undiscounted lease payments that will be received after the balance sheet date.

Future lease income of operating lease contracts, undiscounted	2022	2021
No later than 1 year	2,089	1,678
Later than 1 year but no later than 2 years	1,146	747
Later than 2 year but no later than 3 years	360	75
Later than 3 year but no later than 4 years	39	21
Later than 4 year but no later than 5 years	21	17
Later than 5 years	77	86
Total	**3,732**	**2,624**

Finance lease contracts

The Group acts as a lessor in finance leasing arrangements for cars in China as well as a manufacturing finance lessor.

Amounts receivable under finance leases	2022	2021
No later than 1 year	1,109	154
Later than 1 year but no later than 2 years	1,355	282
Later than 2 year but no later than 3 years	810	199
Later than 3 year but no later than 4 years	618	40
Later than 4 year but no later than 5 years	448	19
Later than 5 years		—
Undiscounted lease payments	**4,340**	**694**
Less unearned finance income	335	37
Net investment in the lease	**4,005**	**657**

The following table presents the amounts included in income statement.

	2022	2021
Finance income on the net investment in finance leases	189	7

8 Employees and remuneration

ACCOUNTING POLICIES

Incentive programmes

The Group manages in total five different global incentive programmes, whereof two are short-term and three are long-term. In addition, the long term Polestar share-based programme was terminated during the year:

Short-term

- The Short-Term Variable Pay Programme for Senior Leaders (STVP for Senior Leaders)
- The Volvo Bonus programme

Long-term

- The Long-Term Variable Pay (LTVP) programme
- The Performance share programme (PSP)
- The Employee share matching programme (ESMP)
- The Polestar share-based programme

The design and pay-out of all programmes are subject to approval of the Board of Directors. Certain decisions related to the share-based programmes are subject to decision by the Annual General Meeting.

Short-term incentive programmes

For the short-term incentive programmes a liability is recognised if all prerequisites are met and the cost is recognised as an operating expense.

Long-term incentive programmes

Cash-settled long-term programmes

The fair value of the cash-settled programme is determined at the grant date, revalued at each balance sheet date, and is recognised as an operating expense during the vesting period and as a corresponding liability. An assessment whether the terms for allotment will be fulfilled is made continuously. Based on such assessment, the expense might be adjusted.

Share-based long-term programmes

The fair value of the share-based programmes are based on the share price reduced by dividends connected with the share during the vesting period. Additional social expenses are reported as a liability, revalued at each balance sheet date.

The aim of these share-based programmes is to generate engagement and commitment to the organisation on a long-term basis. The PSP is entirely equity-settled while the ESMP programme contains both equity-settled and cash-settled components. For components of the programmes that are equity-settled, the total compensation expense is based on the fair value at the grant-date together with consideration of any relevant performance conditions and is recognised over the relevant service period, with a corresponding increase in equity. All share-based payment programmes with employees have a service component while one has performance components as well. The amount recognised as an expense is adjusted to consider the total number of awards for which the relevant non-market performance conditions and service conditions are expected to be met, the result is that the amount ultimately recognised is based on the actual number of awards that meet the relevant service and non-market performance conditions at the vesting date. For share-based payment transactions with non-vesting conditions, the grant-date fair value is adjusted to reflect these conditions.

For components of the ESMP that are cash-settled, the liability is valued based on the fair value of the liability and is revalued at the end of each reporting period, with any changes in fair value recognised in the income statement for the period.

Polestar programme

During the year the Polestar programme, a share-based incentive programme was terminated. The programme was cash-settled based on the participants option to receive cash at fair value for the shares under certain circumstances and during predetermined periods. Based on this a liability was recognised in Volvo Car Group´s balance sheet.

Average number of employees by region:	**2022**	Of whom women	2021	Of whom women
Sweden	23,048	27%	24,630	27%
Nordic countries other than Sweden	715	40%	641	35%
Belgium	5,142	14%	4,749	14%
Europe other than the Nordic countries and Belgium	1,584	33%	1,452	36%
North and South America	2,229	33%	1,876	35%
China	11,006	16%	8,422	16%
Asia other than China	1,032	22%	937	20%
Other countries	101	40%	104	40%
Total[1)]	**44,857**	**23%**	**42,811**	**24%**

Number of board members and senior executives[2)]	**Dec 31, 2022** Board members (Chief Executive Officers and senior executives)	Of whom women	Dec 31, 2021 Board members (Chief Executive Officers and senior executives)	Of whom women
Parent company	4 (5)	25% (20%)	4 (5)	25% (20%)
Subsidiaries	122 (287)	21% (31%)	175 (476)	20% (26%)
Total	**126 (292)**	**21% (31%)**	**179 (481)**	**20% (26%)**

Salaries and other remuneration	2022 Wages and salaries, other remuneration	2022 Social security expenses (of which pension expenses)	2021 Wages and salaries, other remuneration	2021 Social security expenses (of which pension expenses)
Parent company	31	17 (7)	25	15 (7)
Subsidiaries	25,593	9,949 (4,884)	23,302	9,606 (4,841)
Total	**25,624**	**9,966 (4,891)**	**23,327**	**9,621 (4,848)**

1) The FTE number in 2021 and 2022 reflects temporary layoffs.

2) Senior executives are defined as key personnel within the subsidiaries.

Compensation to Board members

In accordance with the decision at the Annual General Meeting, remuneration was paid to the Board of Directors of Geely Sweden Holdings AB as specified below.

	2022	2021
Board member	Ordinary remuneration, TSEK	Ordinary remuneration, TSEK
Eric Li (Li Shufu), Chairman	–	–
Daniel Li (Li Donghui)	–	–
Hans Oscarsson	–	–
L one Fønss Schrøder	500	–
Total	**500**	–

Terms of employment and remuneration to the CEO

The Board has determined the remuneration principles for the CEO. The CEO is entitled to remuneration consisting of fixed annual salary, STVP for Senior Leaders, LTVP and other benefits such as company car and insurance. The CEO has a defined benefit pension plan.

The notice period for the CEO is 12 months if the CEO resigns and 12 months in the case of termination by Geely Sweden Holdings AB. Furthermore the CEO is, in the case of termination by Geely Sweden Holdings AB, entitled to severance pay based on the fixed salary for a period of maximum 12 months.

Remuneration to Executive Management Team

The Board has determined the remuneration to the Executive Management Team (EMT). Geely Sweden Holdings AB's EM, is entitled to remuneration consisting of fixed annual salary, STVP for Senior Leaders and other benefits such as company car and insurancee.

Members of EMT employed in Sweden are covered by the ITP pension plan. For members of EMT employed outside of Sweden, pension terms and conditions vary, depending on the country of employment

Other long-term benefits

Apart from the remuneration accounted for under Incentive programmes, the CEO in Geely Sweden Holdings AB does not have any other long-term benefits.

Incentive programmes

Short-term incentive programmes

Volvo Bonus - (Volvo Cars)

The Volvo Bonus programme includes all Volvo Car employees, except those who participates in the STVP for Senior Leaders. The purpose of the Volvo Bonus is to strengthen global alignment among employees around Volvo Car Group's vision, objectives and strategies and to encourage all employees to achieve and exceed the business plan targets. The qualifier for the Volvo Bonus is that the Volvo Car Group profit target (EBIT) is reached. In order for the Volvo Bonus to be paid out at all, a minimum acceptable performance regarding EBIT needs to be met. This is called the threshold level and the remaining two levels (target and maximum) increase the bonus paid out in relation to increased performance. The pay-out is capped at 200 per cent of the so-called target bonus. Depending on the employee's position, the employee is eligible for a certain target level that can be either a fixed amount or a percentage of the employee´s annual base salary. To be eligible for pay-out, the employee must remain within Volvo Car Group at the pay-out date. The remuneration is paid in cash.

STVP for Senior Leaders - (Geely Sweden Holdings and Volvo Cars)

The STVP for Senior Leaders is an incentive programme for the CEO, EMT and certain senior executives. The purpose of the STVP for Senior Leaders is to support the corporate strategy and the transformation of Geely Sweden Holdings Group and Volvo Cars. To reach maximum pay-out a number of performance targets must be reached. Targets include Volvo Car Group profit target (EBIT), but also other targets related to quality and transformation activities. A threshold, target and maximum level is set for each performance indicator. In order for any STVP to be paid out in respect of each performance indicator, the threshold level needs to be met. If the higher target or maximum level is reached, the pay-out related to the relevant performance indicator will increase with linear pay-outs for performance between levels. The amount subject to payment for each level of performance is a percentage of the employee's annual base salary, with a cap on the maximum amount payable when reaching or exceeding the maximum level of all performance indicators. The pay-out is capped at 200 per cent of the so-called target award. The target award is a percentage of the employee's annual base salary on 31 December at the end of each performance year. To be eligible for pay-out, the employee must remain within Volvo Car Group on the pay-out date. The remuneration is paid in cash.

Liability and cost

The cost for the Volvo Bonus and STVP programmes amounted to SEK 1,229 (2,432) m including social security expenses.

Long-term incentive programmes

LTVP - (Geely Sweden Holdings and Volvo Cars)

The purpose of the LTVP-programme is to (i) strengthen the alignment of key people around Volvo Car Group's vision, objectives, strategies and business plan, (ii) improve Volvo Car Group's ability to attract and retain key people with key competencies, and (iii) reward potential future contribution in relation to increased shareholder value. The pay-out for the LTVP-programmes depends on the development of the market value of Volvo Car Group as well as satisfaction of certain financial performance factors related to profit (EBIT) and revenue growth measured over the term of the programme, as established by the Board of Directors. A threshold and a maximum level is set for each performance factor. In order for any LTVP to be paid out in respect of each performance factor, the threshold level needs to be met. If the higher maximum level is reached , the pay-out related to the relevant performance condition will increase with linear pay-outs for performance between the levels.

Depending on the participant's position they receive a LTVP bonus award equivalent to a certain percentage of their annual base salary. Each LTVP award has a vesting period of three years and is paid out in cash. The cash amount paid depends on the valuation of Volvo Cars on the vesting date, three years after grant and the achievement of financial performance factors.

The programmes are capped to a maximum of 300 per cent of the value of the award at grant. To be eligible for pay-out, the employee must remain within Volvo Car Group (and not be under notice of termination) on the pay-out date.

There will be no new LTVP since it has been replaced by the PSP.

Liability and cost

The cost for the LTVP-programme amounted to SEK 93 (73) m including social security expenses. The total liability amounted to SEK 122 (139) m.

Share-based incentive programmes

Performance Share Plan (PSP) - (Volvo Cars)

At the Annual General Meeting 2022 of the subsidiary Volvo Car AB (publ.), the shareholders adopted the PSP, with a purpose to create a long-term focus amongst the participants on reaching Volvo Car Group´s long-term ambitions, as well as to facilitate recruitment and retention of employees with key competencies. Each PSP participant will at commencement of the program, free of charge receive a conditional award of Performance Shares (a "PSP Award"). The PSP award will amount to the number of Performance Shares the value of which corresponds to a percentage (ranged between 30–50 per cent) of each participants gross annual fixed salary. The share price used to calculate the PSP Award value was the volume-weighted average price paid for the Volvo Car AB (publ.) class B share during a period of 30 trading days in connection with the commencement of the vesting period.

The number of Performance Shares allocated to the participants after expiration of the three year vesting period may amount to between 0 and 200 per cent of the PSP award, depending on the satisfaction of four performance conditions;

- average operating margin during financial years 2022–2024 (weight 40 per cent)
- average revenue growth during financial years 2022–2024 (weight 40 per cent)
- reduction of CO_2 emissions per car sold (average CO_2 emissions per car sold in 2018 compared to the average CO_2 emissions per car sold in 2024) (weight 10 per cent)
- gender diversity (portion of non-male participants) in the STVP program as of 31 December 2024 (weight 10 per cent)

The performance conditions include a minimum level which must be exceeded in order for any Performance Shares to be allocated at all. Should the minimum level be exceeded but the maximum level not reached, a proportionate number of Performance Shares will be allocated.

The PSP program shall comprise a maximum of 9,886,909 class B shares in Volvo Car AB (publ.).

Allocation of Performance Shares is also conditional upon the participants retaining the employment within the Volvo Car Group over the entire vesting period.

The total value of the Performance Shares at the end of the Vesting Period may not exceed 400 per cent of the PSP Award value and the number of Performance Shares allotted may be reduced accordingly. Should there be a decline in the price of the Volvo Car AB (publ.) class B share such that the number of Performance Shares subject to allocation exceeds the maximum number of Performance Shares, the number of Performance Shares allocated to the participants will be reduced proportionately.

The Board of Directors is entitled to reduce the number of Performance Shares subject to allocation or, wholly or partially, terminate the PSP programme in advance if significant changes in the Group or in the market occur which, in the opinion of the Board of Directors, would result in a situation where the conditions for allocation of Performance Shares become unreasonable.

The fair value of the Volvo Car AB (publ.) class B share at grant date is calculated as the market value of the share excluding the present value of expected dividend payments for the next three years and amounted to SEK 75.26.

Liability and cost

The total cost for the PSP programme amounted to SEK 24 (—) m of which SEK 18 (—) m is equity-settled and SEK 6 (—) m is cash-settled. SEK 4(—) m is related to social security expenses. Of the total expenses SEK 5 (—) m is related to the CEO and SEK 6 (—) m to other members of EMT. The total liability amounted to SEK 6 (—) m.

Employee Share Matching Plan (ESMP) - (Volvo Cars)

The purpose of the ESMP is to create engagement, commitment and motivation for the entire permanent workforce of Volvo Car Group, excluding the members of PSP. To participate in the program, the participants must make own investments in class B shares in Volvo Car AB (publ.) (Investment shares), up to an aggregate value for each participant at the time of the investment of no more than SEK 10 000.

For each Investment share, the participants will be entitled to allocation of one Matching Share free of charge after the expiration of the two-year vesting period.

Allocation of Matching Shares is conditional upon the participant retaining the employment within the Volvo Car Group over the entire vesting period and that the participant has retained the investment shares purchased.

The ESMP shall comprise a maximum of 7,832,000 class B shares in Volvo Car AB (publ.). Should there be a decline in the price of the Volvo Car AB (publ.) class B share such that the number of Matching Shares subject to allocation exceeds the maximum number of Matching Shares, the number of Matching Shares allocated to the participants will be reduced proportionately.

The Board of Directors is entitled to reduce the number of Matching Shares subject to allocation or, wholly or partially, terminate the ESMP programme in advance if significant changes in the Group or in the market occur which, in the opinion of the Board of Directors, would result in a situation where the conditions for allocation of Matching Shares become unreasonable.

The fair value of the Volvo Car AB (publ.) class B share at grant date is calculated as the market value of the share excluding the present value of expected dividend payments for the next two years and amounted to SEK 44.34 and SEK 50.71, dependent on the date the Matching Share was granted.

When the employee receives the Matching Shares, it is normally seen as a taxable benefit. Volvo Cars has therefore decided to contribute with an additional cash sum corresponding to a general tax level for each country. The contribution is calculated on a general level and is not individually set.

Since this part of the programme meets the description of a cash-settled share-based payment transaction, a liability will be recorded and remeasured to fair value at the end of each reporting period.

Liability and cost

The total cost for the ESMP programme amounted to SEK 23 (—) m of which SEK 7 (—) m is equity-settled and SEK 16 (—) m is cash- settled. SEK 7 (—) m is related to social security expenses. The total liability amounted to SEK 16 (—) m.

Polestar programme - (Volvo Cars)

During 2019, Volvo Car AB (publ.), through its subsidiary Volvo Car Corporation launched a share-based incentive programme to certain members of the executive management of Volvo Car Group, Polestar Group and Polestar Board. Each participant was offered to purchase shares in Volvo Car Group´s subsidiary PSINV AB, which in turn owned shares in Volvo Car Group´s joint venture Polestar Automotive Holding Ltd and hence the participants were indirectly minority owners of the Polestar Group. The investment was made at fair market value in accordance with an external valuation. In case a participant was no longer employed, and during other specified certain predetermined periods, the participants (i.e the shareholders) had an option to sell the shares at fair market value to Volvo Cars and at the same time Volvo Cars had an option to repurchase the shares from the participants. At the time of the initial transaction, the fair value of each share was determined to SEK 1,000. At the closing of the programme, 38,125 shares had been acquired by the participants, which corresponds to an indirect ownership in the Polestar Group of 0.16 per cent.

TSEK	Number of shares	Assessed fair market value
At the beginning of the year	38,125	260,970
Change in valuation	—	62,749
Repurchased during the year	–38,125	–323,719
At the end of the year	**—**	**—**

As the accounting was made at fair value, there was no difference between book value and fair value. The fair value was based on a valuation by an external party.

Specification of repurchased shares	Number of shares
Former CEO in Volvo Car Group	12,500
Current and former members of EMT in Volvo Car Group	8,375
Members of Polestar Board and management	17,250
Total	**38,125**

Outstanding number of shares at the beginning of the year	PSP 2022	ESMP 2022
Outstanding number of shares at the beginning of the year	—	—
Granted shares during the year	1,337,549	1,636,146
Forfeited during the year	–5,532	–3,544
Outstanding number of shares at the end of the year	**1,332,017**	**1,632,602**

In June 2022 the Polestar Group was listed on the Nasdaq Stock Exchange in a de-SPAC process through a merger with the SPAC company Gores Guggenheim. In accordance with the terms of the investment programme, Volvo Car Corporation was then obliged to repurchase the participants shares in PSINV AB. Each participant was then obliged to reinvest the net proceeds received (repurchase amount less an amount corresponding to the effective tax rate on capital gains in the participants jurisdiction) in shares in Polestar Automotive Holding UK PLC directly on the open market. The purchased shares were subject to a 180 days' lock-up period.

For further information – see Volvo Car Group Annual and Sustainability Report 2022 – Note 8 – Employees and remuneration.

Compensation for the Executive Management Team (EMT), TSEK	2022			2021		
	Salary[3)]	Variable pay	Social security expenses (of which pension expenses)	Salary[3)]	Variable pay	Social security expenses (of which pension expenses)
Hans Oscarsson, CEO of Geely Sweden Holdings AB	3,436	2,856	3,214 (1,237)	3,543	2,942	3,179 (1,117)
Other members of EMT[4)]	6,583	798	4,677 (2,358)	6,444	2,311	7,109 (4,279)
Total	**10,019**	**3,654**	**7,891 (3,595)**	**9,987**	**5,253**	**10,288 (5,396)**

3) Includes benefits such as healthcare and company car.
4) The EMT of Geely Sweden Holdings AB consists of five members and the CEO. The EMT includes two external consultants whose invoiced fees of SEK 1,232 (1,674) t are included in administration expenses but are not included in the table above.

9 Depreciation and amortisation

ACCOUNTING PRINCIPLES

Amortisation methods for intangible assets

Intangible assets with finite useful lives are amortised on a straight-line basis over their respective expected useful lives. The amortisation period for contractual rights such as licences does not exceed the contract period. All intangible assets are considered to have a finite useful life, with the exception of goodwill and trademarks. Trademarks are assumed to have indefinite useful lives since Volvo Car Group has the right and the intention to continue to use the trademarks for the foreseeable future, while generating net positive cash flows for Volvo Car Group. An intangible asset with an indefinite useful life is not amortised. The following useful lives are applied to intangible assets with finite useful lives:

Dealer network	30 years
Software	3–8 years
Product development	3–10 years
Patents, licences and similar rights	3–10 years

Amortisation is included in cost of sales, research and development expenses as well as selling or administrative expenses depending on in what way the assets have been used.

Depreciation methods for tangible assets

Tangible assets are systematically depreciated over the expected useful life of the asset. Each part of a tangible assets, with a cost that is significant in relation to the total cost of the item, is depreciated separately when the useful life for the part differs from the useful life of the other parts of the item. Land is assumed to have an indefinite useful life and is not depreciated.

Vehicles sold combined with a repurchase commitment are depreciated evenly over their respective useful lives. They are depreciated from their original acquisition cost to their expected residual value, being the estimated net realisable value, at the end of the lease term. If the market value of these vehicles is lower than the originally set residual value, the depreciation is accelerated over the remaining contract period.

The following useful lives are applied in Volvo Car Group:

Buildings	14.5–75 years
Land improvements	30 years
Machinery	8–30 years
Equipment	3–20 years

Depreciation is included in cost of sales, research and development expenses as well as selling or administrative expenses depending on how the assets have been used.

Impairment of assets

The carrying amount of tangible and intangible assets with finite useful lives are tested whenever events or changes in circumstances indicate that the value of the asset will not be recovered. Intangible assets that have an indefinite useful life as well as assets that are not yet available for use are not subject for amortisation and are tested for impairment at least annually or whenever there is an indication that the value will not be recoverable. Assets may sometimes be grouped into cash-generating units for the purpose of testing impairment.

When performing an impairment test, the asset's or cash-generated unit's recoverable amount is calculated. The recoverable amount is the higher of an asset's or cash-generated unit's fair value less costs to sell and its value in use. Value in use is defined as the present value of the future cash flows expected to be derived from an asset or cash-generated unit. If the recoverable amount is lower than the carrying value, an impairment loss is recognised. Previously recognised impairment losses are reversed, with the exception of goodwill, if reasons for the previously made impairment no longer exist. An impairment loss is reversed only to the extent that the asset's or cash-generated unit's carrying amount after reversal does not exceed the carrying amount, net of amortisation, which would have been recognised if no impairment loss had been recognised.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The useful life of an intangible asset is to a large extent based on historical experience, expected application as well as other individual characteristics of the asset. The useful lives of the assets are regularly assessed and adjusted if necessary.

To test an asset or a cash-generating unit for impairment several estimates need to be performed, as described in this note as well as in Note 14 – Intangible assets, Note 15 – Tangible assets and Note 16 - Investment property.

Operating income includes depreciation and amortisation as specified below:	2022	2021
Software	–470	–367
Product development	–4,579	–4,607
Other intangible assets	–786	–792
Buildings and land improvements	–1,137	–929
Machinery and equipment	–6,861	–6,399
Right of use asset[1)]	–1,580	–1,387
Assets under operating leases	–733	–562
Total	**-16,146**	**-15,043**

Depreciation and amortisation according to plan by function:	2022	2021
Cost of sales	–8,349	–7,492
Research and development expenses	–5,722	–5,238
Selling expenses	–1,028	–778
Administrative expenses	–1,016	–1,147
Other income and expense	–31	–388
Total	**-16,146**	**-15,043**

1) Depreciation of Right of use assets amounted to SEK –1,580 (–1,387) m, whereof SEK –1,401 (–1,165) m is related to Buildings and land, and SEK –179 (–222) m is related to Machinery and equipment.

10 Government grants

ACCOUNTING PRINCIPLES

Government grants are recognised in the financial statements in accordance with their purpose, either as a reduction of expense or as a reduction of the carrying amount of the asset. Government grants recognised for as a cost reduction, are recognised in the same periods as the expenses for which the grant was intended to compensate for has occurred. Government grants related to acquiring assets are deducted from the carrying amount of the asset and are recognised in the income statement over the life of a depreciable asset as a reduced depreciation expense. In cases where the received government grant is not intended to compensate for any expenses or the acquisition of assets, the grant is classified by the nature of the income, either as other income or revenue. Government grants for future expenses are recognised as deferred income.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

A government grant is recognised when there is reasonable assurance that Volvo Car Group will comply with the conditions attached to the grant and that the grant will be received. Judgement includes assessing if Volvo Car Group is in compliance with the prerequisites in the contract or not and if there is a potential risk of repayment if these prerequisites are breached during the contract period. As of today, Volvo Car Group's assessment is that there are no government grants received where there is a risk of material repayments, however a previously recognised grant that has not been paid out has been reversed as further described below.

Volvo Car Group receives grants from several parties, mainly from the Swedish, American, Chinese and Belgian Governments as well as from the European Union. In 2022 the government grants received amounted to SEK 409 (472) m and the government grants realised in the income statement amounted to SEK 868 (355) m. Grants relating to earned emission credits amounted to SEK 505 (—) m. Non-monetary government grants have been received in China, mainly in the form of rent-free office and factory premises, and in the US in the form of reduced lease fees related to office premises and the manufacturing site.

Correction of prior period error

A prior period error was identified with regards to the recognition of a government grant in China. Since the error occurred before 2021, the correction effects the opening balances of 2021. The below tables show the amounts of the correction for each financial statement line item affected for each prior period presented. There is no material impact on the Group's financial statements for the year ended 31 December 2021. The adjustments for 2020 presented below do however impact the outgoing balances of 2021 presented in the Consolidated Balance Sheets.

Consolidated Balance Sheets

31 December 2020	Previously reported	Adjustments[1]	Restated
Tangible assets[2]	64,165	512	64,677
Total non-current assets	**165,832**	**512**	**166,344**
Other current assets[3]	12,792	–978	11,814
Total current assets	**142,630**	**-978**	**141,652**
Total assets	**308,462**	**-466**	**307,996**
Equity attributable to owners of the parent company	61,797	–192	61,605
Non-controlling interests	12,309	–274	12,035
Total equity	**74,106**	**-466**	**73,640**
Total equity and liabilities	**308,462**	**-466**	**307,996**

Consolidated Income Statements

31 December 2020	Previously reported	Adjustments	Restated
Cost of sales	–216,825	–67	–216,892
Gross income	46,065	–67	45,998
Selling expenses	–15,733	–387	–16,120
Administrative expenses	–8,694	–26	–8,720
Operating income	**8,719**	**-480**	**8,239**
Income before tax	**8,936**	**-480**	**8,456**
Net income	**7,247**	**-480**	**6,767**
Attributable to owners of the parent company	5,294	–198	5,096
Non-controlling interests	1,953	–282	1,671

1) Difference between the total adjustment of SEK 480 m affecting Net income and the total adjustment of SEK 466 m affecting Total equity is a foreign exchange rate effect.
2) From 2021, Assets held under operating leases are reported as a part of Tangible assets (previously called Property, plant and equipment).
3) In annual report 2020, total amount of SEK 13,510 m was recognised as Other current assets, including Current derivative assets.

11 Financial income and expenses

ACCOUNTING PRINCIPLES

Financial income consist of interest income on interest-bearing assets in accordance to the effective interest method, fair value changes on equity holdings and fair value changes on financial derivatives and received dividends. Information with regards to the classification of financial instruments, see Note 20– Financial risks and financial instruments.

Financial expenses mainly consist of interest expenses and changes related to measurement to fair value on equity holdings and financial derivatives. Information of the classification of financial instruments, see Note 20 – Financial risks and financial instruments.

In 2022, the Group has changed the presentation of Financial income and Financial expenses in the Consolidated Income Statements.Financial income and Financial expenses are presented as Interest income and similar credits, Interest expenses and similar charges and Other financial income and expenses. Presented in the previous manner, Financial income and Financial expenses in 2022 would amount to SEK 3,317 m and SEK –4,338 m respectively.

	2022	2021
Net foreign exchange rate gain/loss on financing activities	–1,289	224
Dividens received	2,174	4,098
Fair value through profit and loss[1)]	–1,205	–823
Expenses for credit facilities	–127	–276
Interest effect from the measurement of repurchase obligations	–235	–158
Other financial income	2	166
Other financial expenses	–133	–349
Total	**–813**	**2,633**

1) Mainly fair value changes related to shares, warrants and earn-out shares in Luminar.

12 Investments in joint ventures and associates

ACCOUNTING PRINCIPLES

Joint ventures refer to joint arrangements whereby the Group together with one or more parties have joint control and rights to the net assets of the arrangements.

Associated companies are companies in which the Group has a significant but not controlling influence, which generally is when Volvo Car Group holds between 20 and 50 per cent of the shares, but it also includes investments with less participation if significant influence is proven based on other facts and circumstances.

Investments in joint ventures and associated companies are recognised in accordance with the equity method and are initially valued at acquisition cost. Volvo Car Group's share of post-acquisition profit or loss is recognised in the income statement, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income, with a corresponding adjustment to the carrying amount of the investment. When Volvo Car Group's share of losses in an associate or joint venture equals or exceeds its interest in the associate or joint venture, Volvo Cars does not recognise further losses unless it has a legal or constructive obligations in relation to the associate or joint venture.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The critical judgement in terms of associates refer to situations where the Group has got a voting power of less than 20 per cent but based on other facts and circumstances could have significant influence over a company. This could be based on the content of a shareholder agreement, evaluation of the entitys financing structure, or other market-based assumptions and other relationship-based facts. The judgement that is made is whether Volvo Car Group based on these identified facts and circumstances could conclude on having significant influence. Currently the Group do not recognise any associate with a voting power of less than 20 per cent.

In terms of a joint venture the judgement is whether joint control really exists when other facts and circumstances are taken into consideration.

Geely Financials Denmark

Geely Financials Denmark A/S is a financial holding company, whose primary purpose is to invest in shares in other companies. At 31 December 2022, the investment in shares in Saxo Bank A/S, 50.89%, is the sole investment made by the Company.

Lynk & Co Investment Co., Ltd

The joint venture company Lynk & Co Investment Co., Ltd is an establishment between Volvo Cars (China) Investment Co., Ltd, (30 per cent), Zhejiang Jirun Automobile Co., Ltd (50 per cent) and Zhejiang Haoqing Automobile Manufacturing Co., Ltd (20 per cent). The principal activity of the Lynk & Co Investment Co., Ltd is to engage in the manufacturing and sale of vehicles under the "Lynk & Co" brand, and support after-sale services relating thereto.

Polestar Automotive Holding Group

In 2020, the joint venture company Polestar Automotive Holding Ltd was established between Volvo Car Group's wholly-owned subsidary Snita Holding B.V. 50 per cent shareholding and PSD Investment Ltd. In November 2020, Snita Holding B.V. sold 0.86 per cent of its shares in Polestar Automotive Holding Ltd to PSINV AB, another subsidiary within Volvo Car Group.

In March 2021, Polestar Automotive Holding Group raised external capital from long-term financial investors. The private placement was conducted through newly issued shares and diluted Volvo Cars ownership in Polestar. The valuation effects in connection with the transaction amounted to SEK 2,039 m and were recognised as income from shares in joint ventures and associates. In July 2021, PSD Investment Ltd sold 7.3 per cent of its shares to Volvo Cars, which increased Volvo Cars share in Polestar from 46.1 per cent to 49.5 per cent following an investment of SEK 2,068 m.

In June 2022, Polestar's wholly-owned subsidiary Polestar Automotive Holding UK PLC was listed on the Nasdaq Stock Exchange in New York in a de-SPAC process through a merger with the SPAC company Gores Guggenheim and Polestar Automotive Holding UK PLC became the new parent company of the Polestar Group. The transaction broadened Polestar's ownership base and in total raised approximately USD 890 m in external capital, of which Volvo Cars invested USD 11 m (SEK 113 m).

The listing transactions had several financial effects for Volvo Cars. In connection with the listing, Volvo Cars ownership was diluted due to external funds raised by Polestar in the listing process. The dilution effect amounted to SEK 4,023 m and were recognised as income in shares in oint ventures and associates.

As part of the listing process, Polestar also issued earn-out rights to its shareholders. The value of Volvo Car Group's portion of the earn-out rights, which have been calculated in accordance with a Monte Carlo simulation methodology, has been accounted for as a deemed dividend from Polestar, increasing financial assets, and decreasing the carrying amount of the shares in Polestar. As of 31 December, these earn-out rights have been revalued to market value. The part of the earn-out rights value exceeding the carrying amount of Polestar is accounted for in the income statement as share of income in joint ventures and associates. The earn-out rights can be converted to common shares in Polestar Automotive Holding UK PLC after a minimum of 180 days after the listing process. The conversion is subject to the Polestar share price at Nasdaq stock exchange. There are five thresholds where the earn-outs will be converted at a price of USD 13, USD 15.50, USD 18, USD 20.50 and USD 23, respectively, with 20 per cent of the earn-out rights being converted at each threshold.

Directly after the listing, Volvo Cars invested in convertible preference shares issued by Polestar for a total value of SEK 5,988 m (USD 589 m). The convertible preference shares have been converted into common shares in Polestar Automotive Holding UK PLC.

Polestar is after the listing transactions accounted for as an associate instead of a joint venture.

In October 2022, the former parent company, Polestar Automotive Holding Ltd entered into liquadation. In November 2022, PSINV AB sold all of its shares in Polestar Holding Automotive Ltd to Snita Holding B.V. In December 2022, Polestar Automotive Holding Ltd made an interim distribution of its shareholding in Polestar Automotive Holding UK PLC to its shareholders and also sold redeemable preference shares in Polestar Automotive Holding UK PLC to Snita Holding B.V. Thereafter Snita Holding B.V. sold its entire shareholding in Polestar Automotive Holding Ltd to PSD Investment Ltd.

At year end 2022, Volvo Car Group, through its subsidiary Snita Holding B.V., have shareholding of 48.3 per cent in Polestar Automotive Holding UK PLC, and is together with the other main owner PSD Investment Ltd, still considered to have significant influence over the Polestar Group based on, among other factors, ownership and board composition.

As of 31 December 2022, our fair value of the Polestar Group, listed on the Nasdaq Stock Exchange in New York (ticker symbol: PSNY), was SEK 56,251 m based on the quoted market price.

Volvofinans Bank AB

Volvofinans Bank AB is a joint venture between Volvo Car Corporation and AB Volverkinvest. In Sweden, Volvofinans Bank AB is the leading bank within vechicle financing services.

Other companies

In 2021, the company Zhejiang Aurobay Powertrain Co., Ltd. (Aurobay) was established as an associate between Volvo Cars (China) Investment Co., Ltd (33 per cent) and Zhejiang Geely Chantou Holding Co., Ltd (67 per cent).

In January 2022, the associated company Aurobay aquired the 50 per cent owned subsidiary Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd from Volvo Cars (China) Investment Co., Ltd. For further information, see Note 31 – Business Combinations and divestments. In August 2022, Aurobay also acquired the wholly-owned subsidiary Powertrain Engineering Sweden AB and its subsidiary Powertrain Engineering Sweden Real Estate AB from Geely Sweden Holdings AB.

In December, Zhejiang Geely Chantou Holding Co., Ltd and Volvo Cars (China) Investment Co. Ltd entered into an agreement, where Zhejiang Geely Chantou Holding Co., Ltd acquired the remaining 33 per cent of Zhejiang Aurobay Powertrain Co., Ltd. (Aurobay) from Volvo Cars (China) Investment Co., Ltd. The consideration amounted to SEK 1,528 m.

In January 2022, the joint venture company NOVO Energy AB was established between Volvo Car Corporation and Northvolt AB. The purpose of the joint venture is to develop and produce more sustainable batteries to power the next generation of pure electric Volvo and Polestar cars. For further information, see Note 4 – Related Parties.

	2022	2021
Share of income in joint ventures	573	–521
Share of income in associates	3,923	1
Total	**4,496**	**–520**

Share of income in joint ventures and associates is specified below:	2022	2021
Volvofinans Bank AB	431	269
Zenuity AB	—	1,175
Lynk & Co Investment Co., Ltd	30	305
Polestar Group	4,151	–2,397
Geely Financials Denmark A/S	53	193
Other companies	–169	–65
Total	**4,496**	**–520**

Investments in joint ventures and associates	**Dec 31, 2022**	**Dec 31, 2021**
At beginning of the year/acquired acquisition value	11,865	17,055
Share of net income	4,496	–520
Investment in Saxo Geely Tech Holding A/S	225	152
Investment in NOVO Energy	163	—
Investment in Zenuity AB	3	—
Investment in Volvo Car Financial Services UK Ltd	185	—
Investment in Polestar Automotive Holding Ltd	—	2,068
Investment in Polestar Automotive Holding UK PLC	6,101	—
Investment in Zhejiang Aurobay Powertrain Co., Ltd	1,696	—
Disposal in Geely Financials Denmark A/S	—	–3,341
Divestment of shares in Zhejiang Aurobay Powertrain Co., Ltd	–1,528	—
Reversal internal profit elimination	–335	–310
Reclassification from joint venture to subsidiary	—	–1,882
Reclassification from joint venture to other longterm securities holdings	–7,998	—
Revaluation of earn-out rights in Polestar Automotive UK PLC	5,146	—
Capital repayment V2 Plug-In Hybrid Vehicle Partnership HB	—	–132
Dividends	–72	–1,991
Translation difference	1,370	766
Total	**21,317**	**11,865**

The Group's carrying amount in joint ventures and associates:	Corp. ID no.	Country of incorporation	% interest held	**Dec 31, 2022**	Dec 31, 2021
Joint ventures					
Geely Financials Denmark A/S	38976176	Denmark	49	4,509	3,809
Saxo Geely Tech Holding A/S	15731249	Denmark	50	1,209	1,125
NOVO Energy AB	559344-2600	Sweden	50	131	—
Volvo Trademark Holding AB	556567-0428	Sweden	50	10	6
Volvofinans Bank AB	556069-0967	Sweden	50	3,176	2,811
VH Systems AB	556820-9455	Sweden	50	38	37
Zenuity AB	559073-6871	Sweden	50	—	—
World of Volvo AB	559233-9849	Sweden	50	105	114
VCFS Germany GmbH	HRB 85091	Germany	50	3	2
VCIS Germany GmbH	HRB 86800	Germany	50	8	6
Volvo Car Financial Services UK Ltd	12718441	United Kingdom	50	642	370
Polestar Automotive Holding Ltd	2942747	Hong Kong, China	50	—	106
GV Automobile Technology (Ningbo) Co., Ltd	91330201MA2AGKLQ8E	China	50	39	36
Lynk & Co Investment Co., Ltd	91330200MA2AF25Y7B	China	30	3,643	3,418
Associated companies					
VCC Tjänstebilar KB	969673-1950	Sweden	50	5	3
VCC Försäljnings KB	969712-0153	Sweden	50	1	1
Volvohandelns PV Försäljnings KB	916839-7009	Sweden	50	2	2
Volvohandelns PV Försäljnings AB	556430-4748	Sweden	50	13	12
Polestar Automotive Holding UK PLC	13624182	United Kingdom	48	7,775	—
Zhejiang Aurobay Powertrain Co., Ltd	91330200MA2KP5DK52	China	33	—	—
Trio Bilservice AB	556199-1059	Sweden	33	1	1
Göteborgs Tekniska College AB	556570-6768	Sweden	26	6	5
Leiebilservice AS	879 548 632	Norway	20	1	1
Carrying amount, participations in joint ventures and associates				**21,317**	**11,865**

The share of voting power corresponds to holdings in per cent as per above. For practical reasons, some of the joint ventures and associates are included in the consolidated financial statements with a certain time lag, normally one month.

The following tables present summarised financial information for the Group's material joint ventures and associates.

	Geely Financials Denmark A/S		Lynk & Co Investment Group[1)]		Polestar Automotive Holding Group[2)]		Volvofinans Bank AB[3)]	
Summarised balance sheets	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Percentage voting/ownership	49	49	30	30	48	50	50	50
Non-current assets	8,985	8,233	21,739	19,901	18,826	13,628	37,800	38,799
Cash and cash equivalents	248	9	2,858	2,419	10,095	6,863	3,530	2,262
Other current assets	43	154	20,135	13,241	11,904	8,586	4,649	3,995
Total assets	**9,276**	**8,396**	**44,732**	**35,561**	**40,825**	**29,077**	**45,979**	**45,056**
Equity	9,232	8,243	12,101	11,354	–1,096	931	5,601	4,870
Non-current liabilities	—	—	5,782	5,513	8,244	1,324	37,677	37,661
Current liabilities	44	153	26,849	18,694	33,677	26,822	2,701	2,525
Total equity and liabilities	**9,276**	**8,396**	**44,732**	**35,561**	**40,825**	**29,077**	**45,979**	**45,056**

	Geely Financials Denmark A/S		Lynk & Co Investment Group[1)]		Polestar Automotive Holding Group[2)]		Volvofinans Bank AB[3)]	
Summarised income statements	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Revenue	—	—	37,966	40,036	24,723	11,721	5,340	5,164
Depreciation and amortisation	—	—	–4,177	–3,087	–1,452	–2,039	–10	–9
Interest income	7	—	68	60	50	12	—	—
Interest expense	—	–4	–117	–90	–735	–382	—	—
Profit/loss from continuing operations	297	390	33	836	–4,416	–8,758	460	414
Profit (loss) for the year	**297**	**390**	**33**	**836**	**–4,416**	**-8,758**	**460**	**414**
Other comprehensive income for the year	**19**	**28**	**27**	**23**	**81**	**-302**	**–**	**–**
Total comprehensive income for the year	**316**	**418**	**60**	**859**	**–4,335**	**-9,060**	**460**	**414**
Dividends received from joint ventures during the year	—	—	—	703	—	—	65	107

Reconcilation of the summarised financial information presented on the carrying amount of participations in joint ventures.

	Geely Financials Denmark A/S		Lynk & Co Investment Group[1)]		Polestar Automotive Holding Group[2)]		Volvofinans Bank AB[3)]	
Reconciliation of summarised financial information	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Net asset of the joint venture	9,232	8,243	12,101	11,354	–1,096	931	5,601	4,870
Proportion of the Group's ownership in the joint venture	49%	49%	30%	30%	48%	50%	50%	50%
Adjustment for call option	—	—	—	—	—	—	—	—
Adjustments for differences in accounting principles	—	—	—	—	—	—	—	—
Goodwill	—	—	—	—	—	—	376	376
Adjustments for Common control transaction	29	27	11	11	20	17	—	—
Elimination of intra-group profit	–365	–338	—	—	—	—	—	—
Capital injection from investors other than the Group	9	11	—	—	–764	–145	—	—
Polestar listing	—	—	—	—	8,970	—	—	—
Revaluation of earn-outs rights	—	—	—	—	–173	—	—	—
Equity-settled share-based payment	—	—	—	—	–41	—	—	—
Net foreign exchange rate effect	313	70	—	1	292	–226	—	—
Carrying amount of the Group´s participations in joint ventures	**4,509**	**3,809**	**3,643**	**3,418**	**7,775**	**106**	**3,176**	**2,811**

1) Volvo Car Group's equity share in Lynk & Co Investment Group is included with a time lag of a month, and a forecast for December
2) Volvo Car Group's equity share in Polestar Automotive Holding is included with a time lag of a quarter and a forecast for the last quarter
3) Volvo Car Group's equity share in Volvofinans Bank AB is included with a time lag of a quarter.
4) Equity and non-current liabilities are adjusted with the portion of untaxed reserves where appropriate.

Significant restrictions

For the Chinese joint venture companies, there are some restrictions on the Group's ability to access cash.

13 Taxes

ACCOUNTING PRINCIPLES

Income taxes

The Group's tax expense consists of current tax including withholding tax on licence sales to China and deferred tax. Taxes are recognised in the income statement except when the underlying transaction is recognised directly in equity or other comprehensive income, whereupon related taxation is also recognised in equity or other comprehensive income.

Current tax is tax that must be paid or will be received for the current year. Current tax also includes adjustments to current tax attributable to previous periods. Deferred tax is calculated according to the balance sheet method for all temporary differences, with the exception of goodwill, that arise between the tax value and the carrying amount of assets and liabilities.

Deferred tax assets and liabilities are measured at the nominal amount and at the tax rates that are expected to be applied when the asset is realised or the liability is settled, using the tax rates and tax rules that have been enacted or substantively enacted at the balance sheet date.

Deferred tax assets relating to deductible temporary differences and loss carry-forwards are recognised to the extent it is probable that they will be utilised in the future. Deferred tax assets and deferred tax liabilities are offset when they are attributable to the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis and the affected company has a legally adopted right to offset tax assets against tax liabilities.

Tax laws in Sweden and in certain other countries allow companies to defer tax payments through allocation to untaxed reserves. These items are treated as temporary differences in the consolidated balance sheet where the untaxed reserves are divided between deferred tax liability and equity. In the consolidated income statement an allocation to, or withdrawal from, untaxed reserves is divided between deferred taxes and net income for the year.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Deferred tax assets

The recognition of deferred tax assets requires assumptions to be made with regard to the level of future taxable income and the timing of recovery of deferred tax assets. These assumptions take into consideration forecasted taxable income. The measurement of deferred tax assets is subject to uncertainty and the actual result may diverge from judgements due to future changes in business climate, altered tax laws etc. An assessment is made at each closing date of the likelihood that the deferred tax asset will be utilised. If needed the carrying amount of the deferred tax asset will be altered. The judgements that have been made may affect net income both positively and negatively.

Income tax recognised in income statement	**2022**	**2021**
Current income tax for the year	–3,287	–2,807
Current income tax for previous years	179	–615
Deferred taxes	–677	–1,428
Withholding taxes[1)]	–561	–96
Other taxes	129	451
Total	**–4,217**	**–4,495**

1) Witholding tax on royalties and licence sales, mainly to China.

Information regarding current year tax expense compared to tax expense based on the applicable Swedish tax rate	**2022**	**2021**
Income before tax for the year	21,478	22,129
Tax according to applicable Swedish tax rate, 20.6% (20.6%)	–4,425	–4,559
Operating income/costs, non-taxable	189	–107
Witholding taxes	–561	–96
Other taxes, non-taxable	129	451
Capital gains or losses, non-taxable	1,098	521
Effect of different tax rates	–290	–195
Tax effect on deferred tax due to change of tax rate	–27	–
Non recognised deferred tax asset on tax losses carry forward	–42	–353
Remeasurements of previously non-recognised deferred tax on tax losses	246	–
Revaluation of previously non-valued losses and other temporary differences	–177	–190
Other	–357	33
Total	**–4,217**	**–4,495**

Income tax recognised in other comprehensive income	2022	2021
Deferred tax		
Tax effects on cash flow hedge reserve	466	–472
Tax effect of remeasurement of provisions for post-employment benefits	998	669
Tax effects on translation difference of hedge instruments for net investments in foreign operations	–147	–54
Total	**1,317**	**143**

Specification of deferred tax assets	Dec 31, 2022	Dec 31, 2021
Goodwill arising from the purchase of the net assets of a business	103	102
Provision for employee benefits	828	2,306
Unutilised tax loss carry-forwards	6,978	5,588
Accruals	6,260	4,659
Reserve for unrealised income in inventory	1,633	1,016
Provision for warranty	1,355	1,370
Fair value of financial instruments	5	517
Other temporary differences	1,872	2,338
Total deferred tax assets	**19,034**	**17,896**
Netting of assets/liabilities	–9,901	–10,529
Total deferred tax assets, net	**9,133**	**7,367**

Specification of deferred tax liabilities	Dec 31, 2022	Dec 31, 2021
Fixed assets	12,402	9,655
Untaxed reserves	52	21
Auto lease portfolio	2,650	2,326
Fair value of financial instruments	—	—
Other temporary differences	181	474
Total deferred tax liabilities	**15,285**	**12,467**
Netting of assets/liabilities	–9,901	–10,529
Total deferred tax liabilities, net	**5,384**	**1,947**

Deferred tax assets and deferred tax liabilities are offset when the item relates to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realise the assets and settle the liabilities simultaneously.

Deferred tax assets are only recognised in countries where Volvo Car Group expects to be able to generate corresponding taxable income in the future to benefit from tax reductions.

Significant tax loss carry-forwards are related to countries with long or indefinite periods of utilisation, mainly Sweden and the US. Of the total SEK 6,976 (5,488) m recognised deferred tax assets related to tax loss carry-forwards, SEK 6,150 (4,540) m relates to Sweden with indefinite periods of utilisation. SEK 274 (667) m relates to US where tax loss carry-forwards are expected to be utilised before expiration date. The assessement is that Volvo Car Group will be able to generate sufficient income in the coming years to also utilise the remaining part of the recognised amounts.

Deferred tax that may arise on distribution of remaining unrestricted earnings of foreign subsidiaries has not been booked, hence they can be distributed free of tax or Volvo Car Group may consider them permanently reinvested in the subsidiaries.

Changes in deferred tax assets and liabilities during the reporting period	Dec 31, 2022	Dec 31, 2021
Net book value of deferred taxes at January 1	5,420	6,432
Deferred tax income/expense recognised through income statement	–677	–1,428
Change in deferred taxes recognised directly in other comprehensive income	–1,317	–143
Reclassifications[2]	—	–119
Business combinations	—	25
Exchange rate impact	323	653
Net book value of deferred taxes at December 31	**3,749**	**5,420**

2) SEK — (–40) m of deferred tax assets and SEK — (233) m of deferred tax liabilites have been reclassified to assets and liabilities held for sale. For more information, see Note 33 – Assets and liabilities held for sale.

Deferred tax assets regarding tax loss carry-forwards are reported to the extent that realisation of the related tax benefit through future taxable profits is probable also when considering the period during which these can be utilised, as described below.

As of 31 December 2022, the recognised tax loss carry-forwards amounted to SEK 33,203 (26,384) m. The tax value of these tax loss carry-forwards is reported as an asset. The final years in which the recognised loss carry-forwards can be utilised are shown in the following table.

Tax-loss carry-forwards; year of expiration	Dec 31, 2022	Dec 31, 2021
Due date		
2023	—	—
2024	—	—
2025	—	—
2026	82	8
2027	937	559
2028–	32,184	25,817
Total	**33,203**	**26,384**

14 Intangible assets

ACCOUNTING PRINCIPLES

An intangible asset is recognised when it is identifiable, the Group controls the asset, it is expected and probable to generate future economic benefits and the cost can be measured reliably. Intangible assets consist of internally developed products, licences and patents, trademarks, goodwill, dealer network and investments in IT-systems and software.

Both acquired and internally generated intangible assets are recognised at acquisition cost, less accumulated amortisation and any impairment loss (with the exception of goodwill and trademark). Goodwill and trademark are recognised at fair value at the date of the acquisition less any accumulated impairment losses.

Subsequent expenditure on intangible assets increases the cost only if it gives rise to future economic benefit. All other subsequent expenditures are expensed in the period in which they are incurred.

Product development

The Group's research and development activities are divided into a concept phase and a product development phase. Costs incurred during the concept phase are normally research costs for developing new products at an early stage, where the outcome of the project is still uncertain and where for example different options and alternatives are still evaluated. Research costs during the concept phase are expensed as incurred.

When a research and development project has developed to the extent that there is a definable future product that is assessed to generate future economic benefits, the project is considered to be in the development phase. Costs for development of new products, production systems and software are recognised as an asset if certain conditions are met. The cost of an internally generated intangible asset comprises of all expenditures that can be directly attributed to the development phase and that serve to create, produce and prepare the asset for use. All other development costs are expensed as incurred.

Development costs incurred by the Group that are contractually shared with other parties and where the Group remains in control of a share of the developed product, either through a licence or through ownership of patents, are recognised as intangible assets, reflecting the relevant proportion of the Group interests.

The Group incurs development costs on behalf of other parties. In cases where the developed technology is sold and therefore not controlled by the Group, the costs are expensed as cost of sales at the time of the sale. These costs are also used to measure development progress for revenue recognition for the sold technology, licences or Intellectual Property. See Note 2 – Revenue for further information.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Intangible assets with a definite useful life are amortised on a straight-line basis over their estimated useful lives. Management regularly reassesses the useful life of all significant assets. If circumstances change such that the estimated useful life has to be revised, additional amortisation could be the result in future periods. Assets with definite useful lives are only tested for impairment if there are any indications of impairment. Intangible assets with indefinite useful lives, i.e. trademark, goodiwll, and other intangible assets not yet ready for use, are tested for impairment annually or when there are any indications of impairment.

An impairment test is made by calculating the asset or assets recoverable amount. If the recoverable amount is less than the carrying value, the asset is written down to its recoverable value. The recoverable value in the form of value in use, is based on discounted cash flows, where certain estimations must be made regarding future cash flows, required return on investments and other adequate assumptions.is. The estimated future cash flows are based on assumptions that represent management's best estimate of the economic conditions that will exist during the asset's remaining useful life and are based on internal business plans or forecasts. Future cash flows are determined on the basis of long-term planning, which is approved by Management and which is valid at the date of preparation of the impairment test and this planning is based on expectations regarding future market share, market growth as well as the products' profitability.

	Product development[1]	Software	Assets under construction[2]	Trademark and goodwill[3]	Other intangible assets[4]	Total
Acquisition cost						
Balance at 1 January 2021	46,655	3,945	6,957	4,205	6,617	**68,379**
Additions	2,123	563	9,054	—	251	**11,991**
Acquired through business combinations	—	19	—	245	—	**264**
Divestments and disposals	–38	–121	–84	—	–96	**-339**
Reclassifications[5) 6)]	2,501	–186	–2,786	—	1,356	**885**
Effect of foreign currency exchange rate differences	—	–62	17	1	168	**124**
Balance at 31 December 2021	**51,241**	**4,158**	**13,158**	**4,451**	**8,296**	**81,304**
Additions	847	2,988	15,275	—	16	**19,126**
Divested through business combinations	—	–131	—	–95	–103	**-329**
Divestments and disposals	–9,107	–73	—	–6	–41	**-9,227**
Reclassifications	1,832	–925	–714	—	7	**200**
Effect of foreign currency exchange rate differences	—	2	6	—	111	**119**
Balance at 31 December 2022	**44,813**	**6,018**	**27,725**	**4,350**	**8,286**	**91,192**
Accumulated amortisation and impairment						
Balance at 1 January 2021	–25,761	–2,048	—	–4	–3,332	**-31,145**
Amortisation expense	–4,607	–367	—	—	–792	**-5,766**
Acquired through business combinations	—	–5	—	—	—	**-5**
Divestments and disposals	—	99	—	–2	30	**127**
Reclassifications[5) 6)]	—	–54	—	—	–609	**-663**
Effect of foreign currency exchange rate differences	—	60	—	—	–164	**-104**
Balance at 31 December 2021	**-30,368**	**-2,315**	**–**	**-6**	**-4,867**	**-37,556**
Amortisation expense	–4,579	–470	—	—	–786	**-5,835**
Divested through business combinations	—	83	—	—	63	**146**
Divestments and disposals	9,282	46	—	6	9	**9,343**
Reclassifications	—	–84	—	—	–64	**-148**
Effect of foreign currency exchange rate differences	—	20	—	—	–98	**-78**
Balance at 31 December 2022	**-25,665**	**-2,720**	**–**	**–**	**-5,743**	**-34,128**
Net balance at 31 December 2021	**20,873**	**1,843**	**13,158**	**4,445**	**3,429**	**43,748**
Net balance at 31 December 2022	**19,148**	**3,298**	**27,725**	**4,350**	**2,543**	**57,064**

1) The Group has capitalised borrowing costs related to product development of SEK 418 (199) m. A capitalisation rate of 2.4 (2.2) per cent was used to determine the amount of borrowing costs eligible for capitalisation.
2) Reclassifications mainly from capitalised product development and software.
3) Of the total Net balance at 31 December 2022, Goodwill amounted to SEK 752 (847) m.
4) Other intangible assets refers to licences, dealer network and patents.
5) Other intangible assets includes a patent, since during 2021 the joint venture company V2 Plug-In-Hybrid was reclassified to a wholly-owned subsidiary. Gross value SEK 580m and accumulated amortisation SEK –580 m.
6) Gross intangible assets of SEK – (–341) m and depreciation of SEK – (203) m with a net value of SEK – (–138) m have been reclassified to assets held for sale. For more information, see Note 33 – Assets and liabilities held for sale.

Since the majority of the intangible assets with indefinite useful lives in Geely Sweden Holdings (99.5 per cent) are derived from Volvo Car Group, impairment tests have been carried out at Volvo Car Group level. When performing impairment tests by calculating the asset of assets recoverable amount based on discounted cash-flows, Volvo Car Group constitutes one singe cash generating unit. Assumptions of future market share, market growth and the Volvo Car Group expected performance in this environment, are the basis for the valuation.

Management's business plan for 2023–2026 is used as a basis for the calculation. In the model, the Group is expected to maintain stable efficiency over time and the estimates for the cash flows following the end of the planning period are based on the same growth rate and cash flow as for the last year in the calculation onwards in perpetuity. The business plan is an integral part of the Group's financial planning process and represents management's best estimate of the economic conditions that will exist during the asset's remaining lifetime. The business plan process is based on the historic and current financial performance and financial position of the company, i.e., assumptions for margin development, fixed cost and new investments are based on current year financials and balanced towards what is containable given the projection of exogenous factors. Exogenous factors as industry and segment volumes, exchange rates, raw material etc. are based on external assessments from analyst companies and banks. In 2022, the discounted cash flow exceeded the carrying amount and no impairment loss was recognised. A sensitivity test has been performed whether a negative adjustment of one percentage point to the margin or in the discount rate would result in impairment. The discount rate before tax was 12.3 (11.0) per cent. No impairment loss was recognised as a result of performed test.

For further information – see note 15 Intangible assets in Volvo Car Group Annual and Sustainability Report 2022.

15 Tangible assets

ACCOUNTING PRINCIPLES

A tangible asset is recognised when it is controlled by the Group, it is expected to generate future economic benefits and is measurable. Tangible assets are recognised at acquisition cost, less accumulated depreciation and potential impairment loss. The cost of the asset includes expenditures that can be directly attributed to the acquisition and bringing the asset in place for its intended use. Borrowing costs are sometimes included in the acquisition cost of an asset if it takes more than 12 months to get it ready for its intended use or sale.

Repair and maintenance expenditures are recognised in the income statement during the period in which they incur.

	Buildings and land[1) 2) 3) 7) 8)]	Machinery and equipment[1) 2) 3) 4)]	Construction in progress[7)]	Right of use assets[5)]	Assets under operating leases[1) 6)]	Total
Acquisition cost						
Balance at 1 January 2021	24,545	101,922	4,210	8,008	4,891	**143,576**
Additions	1,684	3,910	3,016	1,396	5,747	**15,753**
Acquired through business combinations	534	4,186	13	1,231	562	**6,526**
Divestments and disposals	–1,243	–10,896	–83	–617	–13	**-12,852**
Reclassifications	533	8,562	–2,010	3	–2,682	**4,406**
Effect of foreign currency exchange rate differences	997	2,419	53	316	89	**3,874**
Balance at 31 December 2021	**27,050**	**110,103**	**5,199**	**10,337**	**8,594**	**161,283**
Additions	1,367	2,879	5,207	988	7,135	**17,576**
Divested through business combinations	–595	–3,793	–30	–248	–30	**-4,696**
Divestments and disposals	–351	–2,541	–46	–524	–24	**-3,486**
Reclassifications	937	5,151	–2,747	35	–3,582	**-206**
Effect of foreign currency exchange rate differences	1,315	2,852	230	338	279	**5,014**
Balance at 31 December 2022	**29,723**	**114,651**	**7,813**	**10,926**	**12,374**	**175,487**
Accumulated depreciation and impairment						
Balance at 1 January 2021	–10,819	–65,639	—	–2,040	–401	**-78,899**
Depreciation expense	–929	–6,399	—	–1,387	–562	**-9,277**
Acquired through business combinations	-97	–984	—	–92	–107	**-1,280**
Divestments and disposals	800	6,332	—	102	1	**7,235**
Reclassifications	–46	–3,852	—	13	452	**-3,433**
Effect of foreign currency exchange rate differences	–213	–1,023	—	7	–6	**-1,235**
Balance at 31 December 2021	**-11,304**	**-71,565**	**–**	**-3,397**	**-623**	**-86,889**
Depreciation expense	–1,128	–6,865	—	–1,580	–733	**-10,306**
Divested through business combinations	198	1,101	—	36	7	**1,342**
Divestments and disposals	324	1,994	—	342	2	**2,662**
Reclassifications	–130	–1,061	—	–5	556	**-640**
Effect of foreign currency exchange rate differences	–409	–1,325	—	–117	–21	**-1,872**
Balance at 31 December 2022	**-12,449**	**-77,721**	—	**-4,721**	**-812**	**-95,703**
Net balance at 31 December 2021	**15,746**	**38,538**	**5,199**	**6,940**	**7,973**	**74,394**
Net balance at 31 December 2022	**17,274**	**36,930**	**7,813**	**6,205**	**11,562**	**79,784**

1) Includes impairment losses of SEK –29 (–89) m.
2) The Group has no mortgages in Buildings and land or Machinery and equipment. For further information regarding pledged assets, see Note 28 – Pledged assets.
3) The Group has capitalised borrowing costs related to Machinery and equipment amounted to SEK 0.6 (2) m.
4) Adjustments have been made to the prior period presented. For more information, see Note 10 – Government grants.
5) For information regarding Right of use assets, see Note 7 – Leasing.
6) Assets under operating leases mainly relate to vehicles sold with repurchase commitments and contracts under the name of Care by Volvo.
7) Gross tangible assets of SEK –92 (–12,448) m and depreciation of SEK – (5,010) m with a net value of SEK –92 (–7,438) m have been reclassified to assets held for sale. For more information, see Note 33 – Assets and liabilities held for sale.
8) SEK 540 (—) m of the recognised acquistion cost has been reclassified to investment property. For more information, see Note 16 – Investment property.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Tangible assets are depreciated on a straight-line basis over their estimated useful lives. Management regularly reassesses the useful life of all significant assets. If circumstances change such that the estimated useful life has to be revised, it could mean additional depreciation in future periods.

The carrying amounts of non-current tangible assets are tested for impairment if there are indicators of a decline in value with regards to future economic benefits related to the asset. Impairment is recognised if the carrying value of the asset exceeds the recoverable amount. The recoverable amount is the higher of the net selling price and its value in use. For these calculations, certain estimations must be made with regards to future cash flows, required return on investments and other adequate assumptions. The estimated future cash flows are based on assumptions that represent management's best estimate of the economic conditions that will exist during the asset's remaining useful life and are based on internal business plans or forecasts. Future cash flows are determined on the basis of long-term planning, which is approved by Management and which is valid at the date of preparation of the impairment test. This planning is based on expectations regarding future market share, the market growth as well as the products' profitability.

16 Investment property

ACCOUNTING PRINCIPLES

Investment property is property leased to tenants according to operational lease agreements with the Group being the lessee . Investment property is recognised at acquisition cost, less accumulated depreciation and potential impairment loss. Value-adding additional expenditures are capitalised. All other additional expenditures are recognised in the income statement in the period in which they incur. Repair and maintenance expenditures are recognised in the income statement in the period they incur.

Investment property rental income is recognised in the income statement according to the rental contract terms.

The criteria used to distinguish investment property from owner occupied property is based on useage but also whether ancillary services are significant. When the services provided are more significant the property is classifed as owner occupied property.

	Property owned by the Group
Acquisition cost	
Balance at 1 January 2022	–
Reclassifications	540
Balance at 31 December 2022	**540**
Accumulated depreciation and impairment	
Balance at 1 January 2022	–
Depreciation expense	-3
Balance at 31 December 2022	**-3**
Net balance at 31 December 2021	**–**
Net balance at 31 December 2022	**537**

Investment property - impact on profit for the period	2022
Rental income	2
Direct costs of investment property that generated rental income during the period (operating and maintenance costs, real estate taxes and ground rents)	-2
Direct costs of investment property that did not generated rental income during the period (operating and maintenance costs, real estate taxes and ground rents)	–

Information on investment property fair value

Accumulated fair value	Dec 31 2022
At beginning of the year	–
At end of the year	550

There are no restrictions relating to income or proceeds from disposal nor any significant contractual obligations.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Investment property is depreciated on a straight-line basis over the estimated useful life. Management regularly reassesses the useful lives of the assets. If circumstances change so that the estimated useful lives have to be revised, it could mean additional depreciation in future periods.

In case of any indication of long-term decline of the investment property fair value, an impairment assessment is conducted. An impairment is recognised when the book value of the asset exceeds the asset fair value. The fair valuation is carried out by an external, independent real estate appraiser with relevant and professional qualifications. The appraiser has knowledge about the location and category of the property subject to the fair valuation.

17 Other non-current assets

	Dec 31, 2022	Dec 31, 2021
Restricted cash	292	271
Endowment insurance for pensions	352	395
Rental deposition	90	56
Other non-current assets	9,340	4,275

18 Inventories

ACCOUNTING PRINCIPLES

Inventories consist of raw material, consumables and supplies, emission credits, semi-manufactured goods, work in progress, finished goods and goods for resale. Assets held under operating lease, with a maturity less or equal to 12 months, are also recognised as inventory. Inventories are measured at the lower of cost and net realisable value. Cost of inventories comprise of all costs of purchase, production charges and other expenditures incurred in bringing the inventories to their present location and condition. The initial value of emission credit inventories is based on the fair value on the date they are earned.

The cost of inventories of similar assets is established using the first-in, first-out method (FIFO). Net realisable value is calculated as the selling price in the ordinary course of business less estimated costs of completion and selling costs. For groups of similar products, a group valuation method is applied. Physical stock counts are carried out annually or more often where appropriate in order to verify the records.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Inventories are measured at the lower of cost and their net realisable value. Net realisable value is based on the most reliable evidence of the amount Volvo Car Group expects to realise from vehicles and components on future sales trends or needs (for components) and takes into account items that are wholly or partially obsolete. A future unexpected decline in market conditions could result in an adjustment in future expected sales, requirements and in estimated selling prices assumptions, which may require an adjustment to the carrying amount of inventories.

	Dec 31, 2022	Dec 31, 2021
Raw materials and consumables	135	189
Work in progress	13,502	10,731
Current assets held under operating lease	4,226	6,147
Finished goods and goods for resale	28,586	19,495
Emissions credits	505	—
Total	**46,954**	**36,562**
Of which value adjustment reserve:	–554	–713

The cost of inventories recognised as an expense and included in cost of sales amounted to SEK 257,747 (215,791) m. Current assets held under operating lease refers to a sale of vehicles combined with a repurchase commitment with a maturity less or equal to 12 months.

19 Accounts receivable and other current assets

ACCOUNTING PRINCIPLES

Accounts receivables are recognised at amortised cost. An allowance for expected credit loss is recognised when the receivable is initially recognised. The recognised allowance for credit losses consists of incurred as well as of expected credit losses. A credit loss has been incurred when there has been an event that has triggered the customers inability to pay. The expected credit loss allowance is based on a multiplier consisting of average historical write-offs and forward-looking macroeconomic data. In these cases, there has not yet been any events incurred showing any inability to pay.

If it has been determined that an accounts receivable is uncollectible, it will be written off and removed. It usually means that collection has been unsuccessful and an entity has no reasonable expectations of recovering the contractual cash flows on the receivable in its entirety or a portion thereof.

	31 Dec 2022	31 Dec 2021
Accounts receivable, non-group companies	8,890	6,395
Accounts receivable, related companies	16,608	12,043
VAT receivables	3,196	2,400
Prepaid expenses and accrued income	5,970	4,440
Other financial receivables	376	203
Restricted cash	736	4
Other receivables[1)2)]	7,589	4,129
Total[3)]	**43,365**	**29,614**

1) Whereof interest-bearing receivables amounted to SEK 4,260 (57) m.
2) Adjustments have been made to the prior period presented. For more information, see Note 10 - Government grants.
3) SEK 16 (57) m of recognised other current assets have been reclassified to assets helld for sale. For more information, see Note 33 - Assets and liabilities held for sale.

Accounts receivable amounted to SEK 25,498 (18,438) m including a credit loss allowance of SEK 128 (127) m of which SEK 43 (34) m is related to allowance for expected credit losses. As of 31 December 2022 the total credit loss allowance amounted to 0.50 (0.68) per cent of total accounts receivable.

The size and geographical spread of the accounts receivable are closely linked to the distribution of the Group sales. Apart from receivables against Polestar, the accounts receivable do not contain any significant concentration of credit risk to individual customers or markets.

Change in loss allowance for accounts receivable is as follows:	2022	2021
Balance at 1 January	127	113
Additions	40	53
Reversals	–28	–18
Write-offs	–14	–23
Translation difference	3	2
Balance at 31 December	**128**	**127**

Aging analysis of accounts receivable and accounts receivables from related companies	Not due	1-30 days overdue	30-90 days overdue	>90 days overdue	Total
2022					
Accounts receivable gross	24,502	488	-121	757	25,626
Loss allowance	–93	—	–4	–31	-128
Accounts receivable net	**24,409**	**488**	**-125**	**726**	**25,498**
2021					
Accounts receivable gross	17,496	135	31	903	18,565
Loss allowance	–77	—	–5	–45	-127
Accounts receivable net	**17,419**	**135**	**26**	**858**	**18,438**

20 Financial risks and financial instruments

ACCOUNTING PRINCIPLES

Financial instruments recognition and derecognition

Financial instruments are any form of contract that gives rise to a financial asset in one company and a financial liability or equity instrument in another company. Financial assets and liabilities are recognised in the balance sheet when the Group becomes a party to the contractual terms and conditions, namely at the transaction date.

Financial assets are initially recognised at fair value plus transaction costs, except for financial assets carried at fair value through the income statement. In this case transaction costs are expensed in the income statement as financial expenses. Financial assets in form of time deposits and commercial paper with a maturity less than three months from the purchase date are recognised as cash and cash equivalent, otherwise they are recognised as marketable securities.

Financial liabilities are initially recognised at fair value less transaction costs, except for those financial liabilities carried at fair value through the income statement. In this case transaction costs are expensed in the income statement as financial expenses.

A financial instrument is classified as a non-current asset or liability when the maturity is more than twelve months, and as a current asset or liability when the maturity is less than twelve months.

Derivatives with positive fair values, the accumulated unrealised gains, are recognised as non-current or current derivative assets depending on the time to maturity. Derivatives with negative fair values, the accumulated unrealised losses, are recognised as non-current or current derivative liabilities depending on the time to maturity. Derivatives include forwards, options, warrants, earn-out rights and swaps.

A financial asset or a portion of a financial asset is derecognised from the balance sheet upon expiry or when all significant risks and benefits linked to the asset have been transferred to a third party. In those cases where the Group concludes that all significant risks and rewards have not been transferred, the portion of the financial assets corresponding to the Group's continuous involvement continues to be recognised. A financial liability or a portion of a financial liability is derecognised when the obligation in the contract has been fulfilled, cancelled, or expired.

Financial Instruments measurement

Fair value is defined as the price that would be received when selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Amortised cost is calculated using the effective interest method, where any premiums or discounts and directly attributable costs and revenue are capitalised over the contract period. Measurement of financial instruments at fair value is based on prevailing market quotations byestimating future cash flows using the relevant forward curve and discounting with the relevant discount curve for the respective derivative and currency. Currency options are measured using the Garman and Kohlhagen model, an adaptation of Black-Scholes model. Unlisted warrants and earn-out rights are measured by using either the Black-Scholes model or Monte Carlo simulation.

The fair value of a financial asset or liability reflects non-performance risk including the counterparty's credit risk for an asset and the Group's own credit risk for a liability. Derivatives with positive fair value and commercial paper are adjusted with the Default Probability derived from the Credit Default Swap curve per counterparty. The same adjustment is made for the derivatives with negative fair value with The Groups own credit risk using the Default Probability of Volvo Car AB credit default swaps.

Financial instruments are divided into three levels depending on the market information available for fair value measurement:

- Level 1: Instruments are measured based on unadjusted quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date.
- Level 2: Instruments are measured based on inputs other than quoted market prices included within Level 1 that are observable for the asset or liability, either directly such as quotations or indirectly such as derived from quotations.
- Level 3: Instruments are measured based on unobservable inputs for the asset or liability.

The majority of financial instruments that the Group holds as of 31 December 2022 are level 2 instruments. The measurement levels are presented in the table financial instruments by category and measurement level in this note.

Classification of financial assets and liabilities

Financial assets and liabilities are measured at amortised cost or fair value depending on their initial classification at recognition. The Group applies different business models for financial instruments.

Financial assets carried at amortised cost

The classification depends on the entity´s applied business model for the management of the respective financial asset and contractual cash flow characteristics. The business model and the contractual cash flow characteristics for these financial assets is to collect the contractual cashflows. The contractual cash flows are solely payment of principal and interest. Financial assets carried at amortised cost include accounts receivables, cash and cash equivalents, time deposits and other financial assets.

Accounts receivables are recognised at the amount expected to be received including allowance for expected credit loss, see note 19 – Account receivables and other current assets.

Financial liabilities carried at amortised cost

Financial liabilities to credit institutions, issued bonds, accounts payable and other financial liabilities are assigned to this category. These liabilities are measured at amortised cost, using the effective interest rate method, where any premiums or discounts and directly attributable transaction costs are capitalised as part of the liability over the contract period. Other financial liabilities are recognised in the balance sheet at fair value less transaction costs and are subsequently measured at amortised cost. In 2019 the Group issued a zero-interest rate exchangeable bond of EUR 400 m with a contract to 2024. The bond contract includes embedded derivatives that have been separated from the host contract as the cash flow from the derivatives is not closely related to the cash flow from the host contract (the bond). The bond was initially measured at fair value and subsequently at amortised cost. The embedded derivatives (options held by both the holder and issuer) are recognised at fair value through the income statement. The bond's initial fair value consists of the difference between the bond's par value and the fair values of the derivatives

Financial assets and liabilities carried at fair value through income statement

Financial assets and liabilities that are held for sale are carried at fair value through the income statement. In the Gropup, this encompasses derivatives, commercial paper, convertible bonds, equity investments, warrants and earn-out rights. Commercial paper are presented in Note 21 – Marketable securities and cash and cash equivalent. For further information about issued warrants related to share-based incentive programme see Note 8 – Employees and remuneration.

Realised and unrealised gains and losses from fluctuation in fair value of these instruments are recognised as operating income or finance net in the income statement, depending on the nature of the underlying contracts.

Equity instruments

Investments in other long-term securities are holdings categorised as level 1 and level 3 financial instruments. The Group includes in the consolidated accounts so-called earn-out rights that will accrue to the Group if a number of criteria have been met during a specific time period in the future. These earn-out rights are categorised as level 3 financial instruments and are measured by using a Monte Carlo simulation. The simulation is based on a volatility of 80 per cent and a risk-free interest rate of 4 per cent. A change in volatility of +/–10 percentage points results in a value range of SEK 2,936–3,484 m. Furthermore, the risk-free interest rate flexed +/–2 percentage points, results in a value range of SEK 3,172–3,308 m with a volatility of 80 per cent. Other substantial level 3 investments consist of unlisted share warrants and earn-out rights in the listed company Luminar Technologies Inc (Luminar). These instruments are measured using the Black-Scholes model based on:

- The probability that the Group will fulfil contractual terms and when in time this will occur.
- The assessed risk-free interest rate which been determined at 4.7 per cent and 4 per cent.
- Volatility of the underlying share price which has been determined at 88,5 per cent.

There are also traditional holdings of equity instruments in Luminar which are categorised as level 1 instruments.

There are also other holdings of non-listed equity instruments that are categorised as level 3 instruments and they are measured at fair value. Volvo Car Tech Fund AB holds the majority of these holdings.

Sensitivity analysis for warrants in Luminar (SEKm)

	Likelihood of triggering event				
Volatility	**-10%**	**-5%**	**0%**	**5%**	**10%**
-10%	89	95	102	108	115
-5%	91	98	105	111	118
94%	94	101	108	114	121
5%	96	103	110	117	124
10%	98	106	113	120	127

Financial assets and liabilities carried at fair value through income statement – designated hedging instrument

Financial instruments carried at fair value through other comprehensive income consist of derivatives, when they are classified as a hedging instruments. Unrealised gains and losses from fluctuations in the fair value of these instruments are recognised in other comprehensive income until the underlying transaction occur. The accumulated gain or loss on these hedging instruments is then recycled to the income statement and is recognised in operating income.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Accounting for financial instruments includes performing certain estimates and judgements, among others:

- **Applied business model with regards to the measurement of interest-bearing instruments:** The main purpose of holding interest-bearing assets is to collect contractual cash flows of principal and interest. Sales of receivables are not performed in that magnitude that the business model could be challenged. A majority of interest-bearing assets including certain convertible bonds, that fulfill the SPPI test, will be measured at amortised cost.

- **Derecognition of receivables:** Invoiced sales are in certain cases subject to contracts for factoring or other financing solutions with a third party namely a bank or a financial institution. If the criteria for derecognition of a receivable are not fulfilled, the receivable remain recognised on the balance sheet.
- **Equity instruments – recognition of fair value changes:** the Group has holdings of listed and unlisted equity instruments as well as unlisted warrants and so called earn-out rights. The main investment in listed equity instruments is in AB Volvo shares. Geely Sweden Holdings initially choose to recognise fair value changes in other comprehensive income as the holdings in AB Volvo is a long-term strategic holding. Other holdings of listed shares are recognised in the financial net. The measurement of the unlisted warrants are made according to the Black-Scholes model and the most relevant judgement to be made is whether the Group will fulfil the vesting criteria and when they would do so, the risk-free interest rate and volatility of the underlying share price.
- **Identification and recognition of embedded derivates:** An assessment is made of whether an embedded derivative is closely related to the host contract. Derivatives that are not embedded need to be separated and recognised on their own merits if the whole financial instrument (bond) is recognised at fair value through the income statement. The embedded derivates constitute level 2 instruments and Geely Sweden Holdings uses an external appraiser to measure the fair value of embedded derivatives.

The table below presents financial instruments by category and measurement level.

		2022-12-31		2021-12-31	
	Measure-ment level	Carrying value	Fair value	Carrying value	Fair value
Financial assets carried at fair value through income statement					
Other long-term securities holdings[1)2)]	1,3	4,353	4,353	1,765	1,765
Outstanding derivatives – for hedging of currency risk	2	315	315	280	280
Outstanding derivatives – for hedging of interest rate risk	2	—	—	6	6
Commercial paper[3)]	2	1,760	1,760	2,692	2,692
		6,428	**6,428**	**4,743**	**4,743**
Financial assets carried at fair value through other comprehensive income					
Other long-term securities holdings	1	32,374	32,374	35,324	35,324
Outstanding derivatives – for hedging of currency risk	2	2,149	2,149	555	555
Outstanding derivatives – for hedging of commodity price risk	2	434	434	152	152
		34,957	**34,957**	**36,031**	**36,031**
Financial assets carried at amortised cost					
Accounts receivables	—	25,366	25,366	18,438	18,438
Other non-current and current financial assets[4)]	—	21,645	21,645	15,763	15,763
Marketable securities[5)]	—	2,965	2,965	6,136	6,136
Cash and cash equivalents	—	66,099	66,099	62,446	62,446
		116,075	**116,075**	**102,783**	**102,783**
Financial liabilities carried at fair value through income statement					
Outstanding derivatives – for hedging of currency risk	2	1,244	1,244	1,445	1,445
Outstanding derivatives – for hedging of interest rate risk	2	599	599	45	45
		1,843	**1,843**	**1,490**	**1,490**
Financial liabilities carried at fair value through other comprehensive income					
Outstanding derivatives – for hedging of currency risk	2	1,816	1,816	2,430	2,430
Outstanding derivatives – for hedging of commodity price risk	2	202	208	1	1
		2,018	**2,018**	**2,431**	**2,431**
Financial liabilities carried at amortised cost					
Trade payable	—	69,109	69,109	48,192	48,192
Non-current and current bonds and liabilities to credit institutions[6)]	—	63,553	62,113	54,683	55,630
Other non-current and current liabilities	—	15,332	15,332	18,847	18,847
		147,994	**146,574**	**121,722**	**122,669**

1) Investments in equity instruments amounted to SEK 4,353 (1,765) m whereof SEK 252 (750) m are holdings categorised as level 1 financial instruments and SEK 4,101 (1,015) m are categorised as level 3 financial instruments.
2) The fair value of the earn-out rights at level 3 category in Polestar Group amounted to SEK 3,225 (—) m. The fair value for unlisted share warrants and earn-out share rights in Luminar at level 3 category amounted to SEK 108 (431) m.
3) Whereof SEK 450 (1,860) m are reported as marketable securities in the balance sheet and SEK 1,310 (832) m are reported as cash and cash equivalents.
4) Adjustments have been made to the prior period presented. For further information see Note 10 - Government Grants.
5) Consisiting mainly of time deposits.
6) The carrying amount of the bonds and liabilities to credit institutions including a fair value adjustment amounting to SEK –287 (—) m, which relates to the fair value hedging.

The table below presents the nominal amounts and fair value of outstanding derivative instruments.

	31 december 2022		31 december 2021	
	Nominal amount	Fair value	Nominal amount	Fair value
Derivative instruments for hedging of currency risk related to financial assets and liabilities				
Foreign exchange swaps and forward contracts				
– receivable position	16,977	292	8,209	63
– payable position	2,522	–1,238	5,191	–1,247
Subtotal		**-946**		**–1,184**
Derivative instruments for hedging of currency risk in future commercial cash flows				
Foreign exchange swaps and forward contracts				
– receivable position	52,809	2,136	30,121	555
– payable position	36,150	–1,815	61,815	–2,430
Currency options				
– receivable position	749	34	3,988	217
– payable position	1,161	–7	4,989	–198
Subtotal		**348**		**–1,856**
Derivative instruments for hedging of interest rate risk				
Interest rate swaps				
– receivable position	—	—	1,029	6
– payable position	11,672	–599	1,544	–19
Subtotal		**-599**		**-13**
Derivative instruments for hedging of commodity price risk				
Forward contracts				
– receivable position	1,327	434	543	152
– payable position	940	–202	40	–1
Subtotal		**232**		**151**
Total		**-965**		**–2,928**

The table below illustrates gains and losses, interest income and expenses that have affected the income statement divided per category of financial instruments.

	2022			2021		
	Gains/ losses[1]	Interest income	Interest expenses[2][3]	Gains/ losses[1]	Interest income	Interest expenses[2][3]
Recognised in operating income						
Financial assets and liabilities carried at fair value through other comprehensive income, recycled to income statement						
Derivative instruments for hedging currency risk and commodity price risk	–3,914	–	–	–2,046	–	–
Financial assets and liabilities carried at fair value through the income statement						
Derivative instruments for hedging currency risk	10	–	–	22	–	–
Financial assets and liabilities carried at amortised cost						
Accounts receivable and trader payable	1,000	–	–	1,581	–	–
Impact on operating income	**-2,904**	**–**	**–**	**-443**	**–**	**–**
Recognised in net finance net						
Financial assets and liabilities carrried at fair value through the income statement						
Equity instruments[4]	–877	–	–	–881	–	–
Commercial paper	–24	12	–	14	–	–
Derivative instruments for hedging of currency risk and interest rate risk	976	–	153	1,590	–	–344
Financial assets and liabilities carried at amortised cost						
Cash and cash equivalents and marketable securities	1,482	703	–19	1,845	474	–
Financial assets and liabilities	–4,046	246	–1,456	–3,508	169	–1,439
Impact on net financial items	**-2,489**	**961**	**-1,322**	**-940**	**643**	**-1,783**

1) The total gain/losses amount excludes gain and losses regarding financial leases amounted to SEK –5 (–12) m.
2) The total interest expenses excludes interest expenses on financial leases amounted to SEK –220 (–215) m.
3) The total interest expenses excludes interest expenses on pensions amounted to SEK –226 (–204) m.
4) The total fair value change of all holdings in Luminar amounted to SEK –822 (–901) m. For further information about issued warrants related to share-based incentive programme see Note 8 – Employees and remuneration.

HEDGE ACCOUNTING

Hedge accounting is applied when derivative instruments are included in a documented hedge relationship. For hedge accounting to be applied, a direct connection between the hedging instrument and the hedged item is required. At the inception of the hedge, the Group documents the relationship between hedging instruments and hedged items, as well as its risk management strategy and objective for undertaking various hedging transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of the hedged items.

Fair value hedge

Hedge accounting can be applied for a financial liability or specified part of a liability, recognised at fair value through the income statement. The criteria for applying fair value hedge accounting is that the designation should eliminate the significant accounting mismatch of having a fixed rate liability carried at amortised cost and a related derivative contract, such as an interest rate swap (IRS) or cross-currency interest rate swaps (XCCY-IRS), which is recognised at fair value through the income statement.

The carrying value of the hedged item, namely a foreign currency fixed rate issued bond or loan is initially recognised at amortised cost. The hedged item is subsequently measured at fair value through the income statement. Changes in fair value of the hedged item and the hedging instrument are both recognised in the income statement and the accounting mismatch is therefore eliminated. Gains and losses related to the interest rate swaps or cross-currency interest rate swaps used in hedging fixed rate borrowings and the changes in the fair value of the hedged fixed rate borrowings attributable to interest rate risk are recognised in the income statement within other financial income and expenses.

If the hedge no longer meets the criteria for hedge accounting, the adjustment to the carrying amount of a hedged item for which the effective interest method is used is accrued to the income statement over the contracts' remaining period to maturity. Ineffectiveness has affected net income for 2022.

Net investment hedge

Hedging of net investments in foreign operations refers to hedges held to reduce the effect of changes in the value of a net investment in a foreign operation due to changes in foreign exchange rates. Net investments in foreign operations consists of the value of the Groups share of the net assets of the foreign subsidiary. The Group hedge the currency risk associated with the translation of the net assets including goodwill in foreign subsidiaries with functional currency EUR and USD.

The Group designates EUR 820m of the EUR debt and USD 160 m of the USD debt as hedging instruments to reduce the translation exposure on net investments in EUR and USD. The hedge reserve with regards to net investment in foreign operations is included in other comprehensive income. In the event of a divestment, the accumulated hedge effect is transferred from the hedge reserve in equity to the income statement as part of the financial income or expenses. No ineffectiveness has affected net income for 2022.

In the table below presents the fair value hedges by maturity date.

	2022						
					Carrying amount		
Maturity date	Nominal amount	Change in fair value, hedged item	Change in fair value, derivatives	Ineffectiveness reflected in income statement	Financial assets	Financial liabilities	Variable benchmark
2024	200	33	–34	–1	—	–34	Euribor 3m
2025	300	68	–66	2	—	–66	Euribor 3m
2027	100	47	–47	—	—	–47	Euribor 3m
2028	200	139	–151	–12	—	–151	Euribor 3m
Total		**287**	**–298**	**–11**	**–**	**–298**	

In the table below the outstandig derivatives within hedge accounting are presented.

	Assets	Liabilities	Net	Tax	Hedge reserve after tax	Recycled from other compre-hensive income	Ineffectiveness reflected in income statement
2022							
Cash flow hedge							
– Currency risk	2,149	–1,816	333	–67	266	1,682	—
– Energy price risk	373	–38	335	–69	266	–102	—
– Raw material price risk	61	–164	–103	21	–82	–23	—
Subtotal	**2,583**	**–2,018**	**565**	**–115**	**450**	**1,557**	—
Net investments hedge							
– Currency risk	—	–1,224	–1,224	252	–972	11	—
Total	**2,583**	**–3,242**	**–659**	**137**	**–522**	**1,568**	—
Fair value hedge through the income statement							
– Interest rate risk	—	–298	–298	—	—	—	–11

	Assets	Liabilities	Net	Tax	Hedge reserve after tax	Recycled from other compre-hensive income	Ineffectiveness reflected in income statement
2021							
Cash flow hedge							
– Currency risk	555	–2,430	–1,875	382	–1,493	326	—
– Energy price risk	128	—	128	–26	102	—	—
– Raw material price risk	24	–1	23	–5	18	—	—
Subtotal	**707**	**–2,431**	**–1,724**	**351**	**–1,373**	**326**	**–**
Net investments hedge							
– Currency risk	—	–514	–514	105	–409	—	—
Total	**707**	**–2,955**	**–2,238**	**456**	**–1,782**	**326**	**–**
Fair value hedge through the income statement							
– Interest rate risk	—	—	—	—	—	—	—

Cash flow hedge

Cash flow hedging refers to the hedging of highly probable forecasted commercial transactions in foreign currencies, expected to occur at various dates during the next 48 months, against currency rate risks. Hedge accounting is also applied for expected future commodity consumption against commodity price risk. To hedge the exposure, the Group uses forward contracts as well as option contracts. In cash flow hedge accounting the changes in fair value of the hedging instruments are recognised in other comprehensive income and accumulated in other reserves in equity. These reserves are recycled to the income statement in the same period as when the hedged forecast transaction affects the income statement. The effect from realised cash flow hedges is classified as Revenue and Cost of sales, respectively, depending on the underlying substance of the transaction.

The hedging relationship is regularly tested up until its maturity date. If the identified relationships are no longer deemed effective, the fluctuation in fair value on the hedging instrument from the last period the instrument was considered effective is recognised in the income statement. If the hedged transaction is no longer expected to occur, the hedge's accumulated changes in value are immediately transferred from other comprehensive income to the income statement and are included in other operating income and expenses.

Prospective effectiveness testing is performed at inception of the hedge and on an aggregated level on a monthly basis. The test is performed by comparing the critical terms, which are nominal amount, timing, and foreign currency, of the hedging instrument and the hedged item. If critical terms match and the credit risk of the counterparty has not changed significantly, the hedge relationship is highly effective. Any ineffectiveness in a hedge relationship is recognised in the income statement. No ineffectiveness has affected net income for 2022.

FINANCIAL RISKS

Financial risks

In its operations, the Group is exposed to various types of financial risks such as currency risk, funding and liquidity risk, interest rate risk, commodity price risk and credit risk. The Group's treasury function is responsible for management and control of these financial risks, it ensures that appropriate financing is in place through capital market transactions, loans and committed credit facilities and manages the Group's liquidity. The management of financial risks is governed by the Group's Financial Policy Framework, which is approved by the Board of Directors and is subject to review every other year or when required. The policy is focused on minimising the effects of fluctuating financial markets on the Group's financial earnings. Policy compliance is reported to the CFO on a monthly basis; policy compliance is also a part of the general treasury reporting to the Bord of Directors. There is an alert function in place safeguarding mandate limits on a daily basis.

Currency risk

Currency exposure arises from production in various countries, it arises from procurement and the mix of sales currencies. Relative changes in currency rates have a direct impact on the Group's operating income, finance net, balance sheet and cash flow statement.

The currency risk is related to:

- Expected future cash flows from sales and purchases made in foreign currencies (transaction risk)
- Changes in value of assets and liabilities denominated in foreign currencies (translation risk)
- Net investments in foreign operations (translation risk)

Transaction exposure risk

The Group's Financial Policy Framework

The currency transaction exposure risk arises from cash flows in functional currencies, namely other currencies than the presentation currency of the Group, which is Swedish krona. Sales in combination with purchases made in other currencies than Swedish krona determine the transaction exposure of the Group.

The policy for management of currency transaction risk states that up to 80 per cent of the future expected cash flows in the coming 24 months and up to 60 per cent of the future expected cash flows in the coming 25 to 48 months can be hedged with adequate financial instruments: options, forwards or combined instruments with maturities matching expected timing of cash flows. Hedging strategies using financial instruments for long-term exposures (over 48 months) require approval by the BoD. The management of currency risk within the above stipulated intervals is delegated by the Board of Directors to Group Treasury via the CFO.

For currency risk management purposes, transaction exposure is expressed in terms of Cash Flow at Risk (CFaR), which is the maximum loss at a 95 per cent confidence level in one year. The CFaR is based on the cash flow forecast, currency exchange rates, market volatility and correlations.

The hedging mandates are proposed by Group Treasury and approved by the CFO and are expressed as a strategic hedge level of CFaR. The strategy allows for mandates to deviate from a benchmark. The deviation mandate is given as a tactical mandate in terms of timing. The hedging mandates are revised at least quarterly.

Status at year end

The total currency inflow and outflow for the Group was distributed according to below table:

	Inflow		Outflow	
	2022	2021	**2022**	2021
CNY	30%	25%	38%	24%
EUR	21%	24%	34%	50%
GBP	6%	6%	1%	1%
JPY	3%	3%	4%	7%
USD	22%	21%	19%	12%
Other	18%	21%	4%	6%

Forward contracts, currency options and foreign currency swaps are used to hedge the currency risk in expected future cash flows from sales and purchases made in foreign currencies. Hedging of the currency risk in the Chinese industrial entities can be made onshore in China.

The CFaR at year end for the cash flows over a one year horison for the Group, excluding hedges, was approximately SEK 9,461 (6,498) m. The table below shows the percentage of the forecasted cash flows that were hedged (expressed both in nominal terms and in CFaR).

	0-12 months		13–24 months		25–48 months	
	2022	2021	**2022**	2021	**2022**	2021
Nominal hedge, %	42	56	15	20	3	–
CFaR hedge %	50	46	25	16	8	–

Translation exposure risk

The Group's Financial Policy Framework

Translation risk in the Group relates to the translation of net investments in foreign operations and translation risk of assets and liabilities in foreign currencies related to the operations. The translation of net investments in foreign operations can generate a positive or negative impact recognised in other comprehensive income. Translation risk of assets and liabilities in foreign currencies related to the operations, as accounts receivable, trade payable and warranty provisions, will generate an impact on the operating income. All translation of financial assets and liabilities are reflected in the finance net.

The translation risk is hedged either by matching the currency composition of debt with the currency composition of assets or via financial derivatives.

Total translation effect of investments in foreign operations was SEK 3,870 (4,531) m. This effect is recognised in other comprehensive income. A ten per cent change in the Swedish krona against major currencies has a net impact on the net investments in the other comprehensive income of approximately SEK 5,590 (3,932) m. Part of the investments in operations in the Eurozone and Americas are hedged with debt instruments. The residual translation risk is part of the strategic risk management and is not hedged with financial instruments.

Status at year end

The table below shows the translation exposure of net investments in foreign operations as of 31 December 2022.

Currency	**Investments in foreign operations (SEKm)**	**Translation exposure**
CNY	29,332	29,332
EUR	30,512	30,512
USD	–10,334	–10,334
JPY	932	932
MYR	1,286	1,286
Other	4,416	4,416
Total	**56,144**	**56,144**

Funding and liquidity risk management

Capital Structure

The Group's Financial Policy Framework stipulates that the capital structure shall reflect a reasonable balance between risks and rewards and

The table below presents cash flow hedge volumes by maturity for the 10 largest exposure currencies, nominal amounts in millions, local currency[1)]

Maturity	AUD	BRL	CAD	EUR	GBP	KRW	NOK	PLN	TRY	USD	Total fair value of outstanding derivatives[2)]
Average hedge rate	6.72	—	7.28	10.53	12.17	0.008	1.06	—	—	10.46	
1–12 months	–532	—	–431	1,874	–989	–279,045	–2,750	—	—	–1,330	–494
13–24 months	–165	—	–160	442	–475	—	–100	—	—	–821	307
25–36 months	—	—	—	—	—	—	—	—	—	–600	409
37–48 months	—	—	—	—	—	—	—	—	—	–420	126

1) The average duration of the portfolio was 12 (eight) months.
2) As of 31 December 2022 the fair value of the outstanding derivatives for hedging of currency price risk in future commercial cash flows amounted to SEK 348 (–1,875) m.

cost of capital. The medium-to-long-term capital structure target for the Group shall be optimised among cost of capital, rating considerations and company specific risk factors. The capital structure shall be analysed on a regular basis. The long-term objective is to have a capital structure that qualifies for and sustains an investment grade rating; the Group's current external rating by Moody's is Ba1 and by Standard & Poor BB+. The equity ratio as per 31 December 2022 is 34.6 (33.9) per cent, whereof shareholders' equity amounted to SEK 132,951 (113,098) m. Adjustments have been made to the prior period presented. For further information see Note 10 – Government grants.

Funding risk management

The Group's Financial Policy Framework

Funding risk is the risk that the Group does not have access to adequate financing on acceptable terms at any given point.

All draw down on new loans is evaluated against future liquidity needs and investment plans. The Group should for the coming 12 months, at any given time, have available committed financing for investments and maturing loans. To limit the risk of refinancing, debt maturing over the next 12 months should not exceed 25 per cent of total debt.

Status at year end

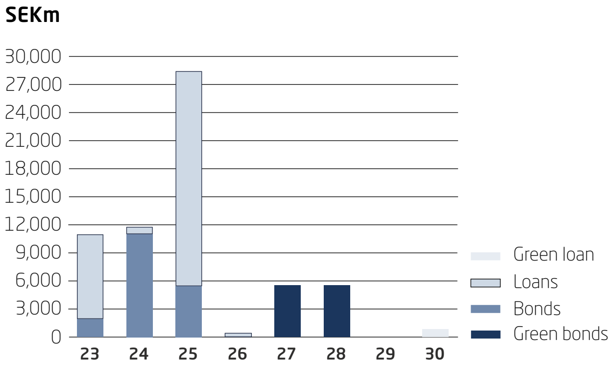
During 2022 the Group issued a 6-year EUR 500 m green bond, as well as entered into a green bank loan of SEK 1,000 m with Svensk Exportkredit. A green loan facility was also signed with the Nordic Investment Bank, amounting to EUR 200 m. The facility with Nordic Investment Bank is not yet drawn upon. Bankloans of SEK 7,781 m are classifed as current liabilites in the financial statement but have been extended by an additional two years in 2023.

As of 31 December 2022 the outstanding debt of bonds and liabilities to credit institutions, excluding lease contracts and transaction costs, in the Group was SEK 64,118 (54,950) m. The remaining credit duration of outstanding debt was 2.7 (2.1) years. At year end, debt maturing over the next 12 months amounted to 5 (23) per cent of total debt.

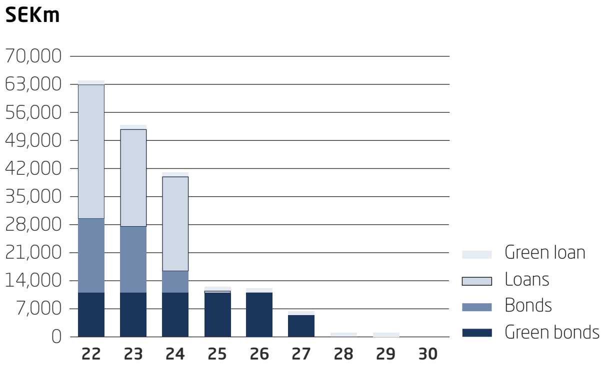
Outstanding debt is presented in the below table.

Funding	Currency	Nominal amount in local currency (million)	SEKm
Bank loan	USD	163	1,699
Bank loan	SEK	1,533	1,533
Bank loan	EUR	2,700	30,012
Green bank loan	SEK	1,000	1,000
Bonds	EUR	1,500	16,673
Bond	SEK	2,000	2,000
Green bonds	EUR	1,000	11,116
Other	PLN	36	85
Total			**64,118**

Bonds and liabilities to credit institutions – amortisation schedule



Outstanding bonds and liabilites to credit institutions (at successive year end)



In relation to all external financing, there are information undertakings and covenants according to Loan Market Association (LMA) and capital market standards. These are monitored and calculated quarterly to fulfil the terms and conditions stated in the financial agreements. Covenants are based on standard measurements such as EBITDA and Net debt. As of 31 December 2022 there is substantial headroom in the fulfilment of all covenants.

Liquidity risk management

The Group's Financial Policy Framework

Liquidity risk is the risk that the Group is unable to meet ongoing financial obligations on time. In order to meet seasonal volatility in cash requirements, the Group shall always have committed credit facilities or cash and marketable securities available corresponding to 15 per cent or more of revenue. The rolling 12 month cash flow forecasts are the basis for the risk assessment of liquidity risk management.

Undrawn committed credit facilities (SEKm):	**31 Dec 2022**	**31 Dec 2021**
– Expiring within one year	2,223	—
– Expiring after one year but within five years	14,451	13,377
Total	**16,674**	**13,377**

Status at year end

As of 31 December 2022, the Group cash and cash equivalent, marketable securities and committed credit facilities amounted to SEK 87,498 (84,650) m, approximately 27 (30) per cent of revenue. The liquidity of the Group is strong considering the maturity profile of the external debt, the balance of cash and cash equivalents, marketable securities and available credit facilities from banks.

The following table presents the maturity structure of the Group's financial assets and liabilities. The figures shown are contractual undiscounted cash flows which the Group is liable to pay or eligible to receive.

	2022				2021			
	Less than 3 months	3 months to 1 year	1-5 years	Over 5 years	Less than 3 months	3 months to 1 year	1-5 years	Over 5 years
Assets								
Other long-term securities holdings[1)]			3,333		—	—	430	
Non-current derivative assets	—	—	1,128	—	—	—	169	—
Other non-current assets	—	—	12,615	179	—	—	8,770	375
Total non-current financial assets	**–**	**–**	**17,076**	**179**	**–**	**–**	**9,369**	**375**
Accounts receivable[2)]	24,536	830	—	—	17,379	1,059	—	—
Current derivative assets	722	1,048	—	—	244	580	—	—
Other current assets[3)]	6,192	2,660	—	—	3,965	2,653	—	—
Marketable securities	3,415	—	—	—	3,864	4,132	—	—
Cash and cash equivalents	67,409	—	—	—	63,277	—	—	—
Total current financial assets	**102,274**	**4,538**	**–**	**–**	**88,729**	**8,424**	—	—
Total financial assets	**102,274**	**4,538**	**17,076**	**179**	**88,729**	**8,424**	**9,369**	**375**
Liabilities								
Bonds, non-current	—	—	21,952	5,363	—	—	17,232	5,145
Liabilities to credit institutions, non-current	—	—	24,196	996	—	—	18,481	99
Non-current derivative liabilities	—	—	1,901	151	—	—	1,590	19
Other non-current interest-bearing liabilities	—	—	3,587	1,258	—	—	3,688	1,821
Other non-current liabilities	—	—	4,723	3	—	—	6,035	5
Total non-current financial liabilities			**56,359**	**7,771**	**–**	**–**	**47,026**	**7,089**
Bonds, current part	2,000	—	—	—	—	—	—	—
Liabilities to credit institutions, current part[4)]	14	9,032	—	—	2	13,723	—	—
Trade payable	63,925	5,184	—	—	44,374	3,817	—	—
Current derivative liabilities	656	1,153	—	—	1,001	1,311	—	—
Other current interest-bearing liabilities	386	1,114	—	—	323	1,154	—	—
Other current liabilities	4,155	6,451	—	—	7,140	5,669	—	—
Total current financial liabilities	**71,136**	**22,934**	**–**	**–**	**52,840**	**25,674**	**–**	**–**
Total financial liabilities	**71,136**	**22,934**	**56,359**	**7,771**	**52,840**	**25,674**	**47,026**	**7,089**

1) Aging of the equity instruments are only covering warrants and earn-out rights.
2) For aging analysis of accounts receivable see Note 19 – Accounts receivable and other current assets.
3) Adjustments have been made to the prior period presented. For further information see Note 10 Government grants.
4) Bank loans of SEK 7,781 m have been extended by an additional two years in 2023.

Interest rate risk management
Changes in interest rates will impact the Group's finance net and the value of financial assets and liabilities. The return on cash and cash equivalents, marketable securities and credit facilities is impacted by changes in interest rates. The exposure can be either direct from interest-bearing debt or indirect through leasing or other financing arrangements.

The Group's Financial Policy Framework
According to the policy, the interest rate risk in the Group's net debt position has a benchmark duration of 12 months. The policy allows for a deviation of –9/+12 months from the benchmark. The interest rate mandate is proposed by Group Treasury and approved by the CFO. The hedging mandate shall be revised at least quarterly.

Status at year end
As of 31 December 2022 the Group's interest-bearing assets consisted of cash in form of cash at bank, short-term deposits and commercial paper. The average interest fixing term on these assets was less than one (one) month. The average interest fixing term on debt was 18 (24) months. At year-end the duration of the net debt position was 17 (23) months. The average cost of borrowing was 2.56 (1.90) per cent.

To manage interest rate risk, the Group uses interest rate swaps.

The table below shows the estimated effect in SEKm of a parallel shift of the interest curves up or down by one per cent (100 basis points) on all exposed external loans and interest rate swaps.

Interest rate sensitivity, effect on Finance Net	2022	2021
Market rate +1%	–426	–253
Market rate –1%	431	253

The impact from cash and cash equivalents, marketable securities and credit facilities is immaterial. The fixed interest period of the asset portfolio is short as it is dominated by bank deposits.

Benchmark rate reform
The interest rate benchmark reform refers to the transition from the existing, traditional interest rate benchmark – Interbank Offered Rates (IBOR) – to new benchmark rates.

The Group is currently exposed to external interest rate risk in EUR, SEK and USD from the EURIBOR, STIBOR and USD LIBOR benchmarks respectively.

Regarding USD denominated exposure, the remaining USD LIBOR benchmark fixings will be discontinued after June 2023 and existing, external floating rate debt in USD will be transitioned to the new risk-free standard, SOFR (Secured Overnight Financing Rate).Work on this transition is at its final stages and the total exposure subject to benchmark transition is USD 164m at year end. The transition of exposure from USD LIBOR to SOFR will not create an adverse interest rate risk effect due to re-structuring of relevant credit risk spreads to align with the pre-existing USD LIBOR base rate benchmark.

For EUR and SEK there is no expected change in related floating benchmarks and thus cash flow risk is not affected. The related benchmarks are currently not scheduled for termination and will therefore continue to dictate interest cash flows for floating assets, liabilities and derivatives in these currencies. The Group expects continued 100 percent effectiveness of related hedges and no net interest impact.

Commodity price risk management
Commodity price risk is the risk that the cost of materials could increase as a result of rising commodity prices in the global markets. Changes in commodity prices impact the Group's cash flow and earnings.

Strategic commodity price risk arises from the procurement mix of commodities and is primarily managed through contracts with suppliers using clauses or similar constructions and fixed prices with suppliers.

The Group's Financial Policy Framework
Forecasted cash flows for the purchasing of commodities for the coming 48 months can be hedged up to 70 per cent with adequate financial instruments. The hedging mandates are proposed by Group Treasury and approved by the CFO. Hedging mandates shall be revised at least quarterly.

Status at year end
Raw materials
The Group manages the risk of changes in raw material prices in highly probable forecasted consumption with forwards and futures contracts. In 2022, the Group incurred costs for raw materials of approximately SEK 33,544 (32,450) m. A ten per cent change in the prices of raw materials has an impact on operating income of approximately SEK 2,002 (1,399) m.

Electricity

Volvo Cars manages the changes in prices for electricity by using forward contracts. The hedging is performed for electricity usage in the European factories and is managed under an advisory contract. The highly probable forecast transactions in electricity purchase volume for the coming 48 months are hedged.

A ten per cent change in the electricity spot price has an impact on the income statement of SEK 94 (42) m.

Credit risk management

The Group's credit risk can be divided into financial credit risk and commercial credit risk. These risks are described in the following sections.

Financial counterparty credit risk

The Group's Financial Policy Framework

Credit risk on financial transactions is the risk that the Group will incur losses as a result of non-payment by counterparties related to the the Group's bank accounts, investments of cash surplus, bank deposits or derivative transactions. All investments must meet the requirements of low credit risk, high liquidity and the exposure with any single counterparty is limited. All counterparties used for investments and derivative transactions shall have credit rating A- or better from one of the well-established credit rating institutions and ISDA agreements are required for counterparties with which derivative contracts are traded. Limits are established according to counterparty credit rating and limit usage is monitored for the Group's treasury counterparties and deposits are diversified between relationship banks. Subsidiary bank balances are diversified in order to limit credit risk.

Status at year end

As of 31 December 2022, the maximum amount exposed to financial credit risk amounts to SEK 73,721 (72,266) m. This encompasses cash and cash equivalents SEK 67,409 (63,277) m, marketable securities SEK 3,415 (7,996) m and fair value of outstanding derivative assets SEK 2,897 (993) m. The maximum amount exposed to credit risk for financial instruments is best represented by their fair values, see table Financial instruments by category and measurement level in this note.

The Group applies the general model for assessing impairment reserve regarding time deposits recognised at amortised cost. The assessment is based on the counterparty´s credit rating, on the estimated exposure at default, probability of default and on the loss given default. The impairment assessment in relation to time deposits is considered immaterial.

Derivative contracts are subject to master netting agreements (ISDA). No collateral has been received or posted.

The table below shows derivatives covered by master netting agreements (ISDA).

Outstanding net position for derivative instruments	Gross	Offset in Balance sheet	Net in Balance sheet	Master netting agreements	Net position
31 December 2022					
Derivative assets	2,897	—	2,897	–1,693	1,204
Derivative liabilities	3,861	—	3,861	–1,693	2,168
31 December 2021					
Derivative assets	993	—	993	–838	155
Derivative liabilities	3,922	—	3,922	–838	3,084

Market risk

The value of the shares in AB Volvo is continuously affected by market risk. As a consequence of its strategic value fair value, changes are recognised in other comprehensive income.

Commercial credit risk

The commercial credit risk arises from accounts receivables. For the risk in customer and dealer financing, the objective is to have a sound and balanced credit portfolio and to engage in credit monitoring by means of detailed procedures which include follow-up and repossession. In cases where the credit risk is considered unsatisfactory a letter of credit or other instruments are used. The maximum amount exposed to commercial credit risk is the carrying amount of accounts receivables, see table for Financial instruments by category and measurement level in this note. For quantification of credit risk in accounts receivable refer to Note 19 – Accounts receivable and other current assets.

21 Marketable securities and cash and cash equivalents

ACCOUNTING PRINCIPLES

Marketable securities

Marketable securities are financial instruments that can be immediatly converted into cash. The maturity tends to be less than one year. In Volvo Cars, marketable securities comprise of commercial paper and time deposits with a term of more than three months from acquisition date.

Cash and cash equivalents

Cash and cash equivalents consist of cash and bank balances as well as short-term interest-bearing investments in the form of commercial paper and time deposits with a maturity of three months from the date of acquisition and are subject to an insignificant risk of fluctuations in value.

Marketable securities	Dec 31, 2022	Dec 31, 2021
Commercial papers	450	1,860
Time deposits in banks	2,965	6,136
Total	**3,415**	**7,996**

Cash and cash equivalents	Dec 31, 2022	Dec 31, 2021
Cash in banks	42,860	40,222
Time deposits in banks	23,239	22,223
Commercial papers	1,310	832
Total[1]	**67,409**	**63,277**

1) SEK – (951) m have been reclassified to asset held for sale. For more information, see Note 33 – Assets and liabilities held for sale.

Cash and Cash equivalents includes SEK 6,991 (3,881) m where limitations exist, mainly liquid funds in certain countries where exchange controls or other legal restrictions apply. It is not possible to immediately use the liquid funds in other parts of the Group, however there is normally no limitation for use in the Group's operation in the respective country.

22 Equity

ACCOUNTING PRINCIPLES

Equity

An equity instrument is any contract that constitutes a residual interest in the net assets of an entity. The subsidiary Volvo Car AB (publ.) had issued preference shares recognised as equity instruments but during October 2021 these preference shares were redeemed. Preference shares are equity instruments as long as fundamental criteria for classification as equity are met. Preference shares have a preferential status compared to common shares, in terms of priority in receiving dividends and prioritising to net assets in case of a liquidation. However, preference shares are subordinated to financial liabilities.

Share-based payments

Equity-settled share-based payments in connection with employee incentive plans are recognised in equity. See Note 8 – Employees and remuneration for more information.

Group contributions and unconditional shareholders' contributions

Distributed group contributions to the main owner are recognised in equity, along with the tax effect. Group contributions received from the main owner and the tax effect on these contributions are recognised in equity in accordance with the principles for shareholders' contributions.

Unconditional shareholders' contributions received from the main owner are recognised in equity.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The subsidiary Volvo Car AB (publ.) had issued convertible preference shares and during October 2021 Volvo Car AB (publ.) exercised its call option and the preference shares were redeemed. Based on the fact, there were no unconditional obligation for Volvo Car AB (publ.) to make any payments to the investors during the contract period, hence the instruments were classified as equity instruments.

The preference shares constituted equity instruments, since payment of dividends was subject to a decision by a general meeting of the shareholders and a possible redemption (exercising of an embedded call option) of preference shares is on Volvo Car AB's (publ.) initiative. Thus, it is discretionary for the company whether payment of dividends or redemption of these preference shares occurs, and consequently no contractual obligation exists to pay out funds. When the conversion of preference shares into ordinary shares occurred, the conversion ratio on Volvo Car Group level was fixed. The conversion of preference shares to ordinary shares was subject to a decision by the Volvo Car AB (publ.) annual general meeting.

The share capital consists of 100,000 common shares with a par value of SEK 1. Each share carries one vote, and entitles the holder to a dividend that is determined in due course. All issued shares are fully paid for.

The share premium relates to issue in kind attributable to Zhejiang Geely Holding Group Co., Ltd's acquisition in year 2010. The share premium also includes capital received (reduced by transaction costs) in excess of par value of issued capital in the subsidiary Volvo Car AB (publ.).

Other contributed capital consists of an unconditional shareholders' contribution from Shanghai Geely Zhaoyuan International Investment Co., Ltd.

The currency translation reserve comprises exchange rate differences of hedge instruments of net investments in foreign operations and exchange rate differences resulting from the translation of financial statements of foreign operations that have prepared their financial statements in a currency other than the Group's reporting currency. The parent company and the Group present their financial reports in SEK.

The other reserve consists of the change in fair value of cash flow hedging instruments in cases where hedge accounting is applied and the change in fair value of other long-term securitites holdings (holdings in AB Volvo shares). For further incomation, see Note 20 - Financial risks and financial intsruments..

Retained earnings comprises net income for the year and preceding years as well as remeasurements of post-employment benefits and equity-settled share-based payments. Retained earnings also include the effects of business combinations under common control within the Geely group, transactions with non-controlling interests and dividend to shareholders.

Non-controlling interests mainly refers to the share of equity that belongs to Zhejiang Geely Holding Group Co., Ltd without a controlling influence. The Group holds 50 per cent of the equity in the following companies; Daqing Volvo Car Manufacturing Co., Ltd, Shanghai Volvo Car Research and Development Co., Ltd and up until end of January 2022, Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd and has the decision-making power over the operation. In the consolidated financial statements, these companies are classified as subsidiaries and fully consolidated with a non-controlling interest of 50 per cent.

In January 2022, the Group divested its 50 per cent shareholding in Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd, resulting in a divestment of non-controlling interest of SEK –1,245 m. For further information, see Note 31 - Business combinations and divestments.

The non-controlling interest decreased during the year 2022 due to dividend paid of SEK 840 (9,199) m from Daqing Volvo Car Manufacturing Co., Ltd, SEK 6 (—) m from Shanghai Volvo Car Reasearch and Development Co., Ltd and SEK — (492) m from Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd to its shareholder Zhejiang Geely Holding Group Co., Ltd.

In July 2022, the Group acquired the 21 per cent non-controlling interest in PSINV AB, resulting in a divestment of non-controlling interest of SEK –37 m. In December 2022, 13.5 per cent non-controlling interest in Zenseact AB was acquired by the Group, resulting in a divestment of non-controlling interest of SEK –432 m.

The non-controlling interest increased through a capital contribution to HaleyTek AB of SEK 17 (360) m from ECARX Technology Co., Ltd and through a direct share issue in Zenseact AB of SEK — (907) m to ECARX Technology Co., Ltd.

In September 2021, the wholly-owned subsidiary Volvo Car Retail AB acquired the 50 per cent non-controlling interest in Bra Bil Sverige AB, resulting in a divestment of non-controlling interests of SEK –228 m. In year 2021 Bra Bil Sverige AB paid dividend of SEK 17 m to its shareholders.

At year end 2022, non-controlling interests amounted to SEK 23,843 (20,599[1)]) m.

Total equity consists of the equity attributable to the owners of the parent company and non-controlling interests. At year-end 2022, the total equity amounted to SEK 132,951(113,098)[1)] m.

1) Adjustments have been made to the prior period presented. For further information, see Note 10 – Government grants.

23 Post-employment benefits

ACCOUNTING PRINCIPLES

Pension benefits

The Group has various schemes for post-employment benefits, mainly relating to pension plans. Other benefits can in some locations include disability, life insurance and health benefits. Pension plans are classified either as defined contribution plans or defined benefit plans. The Group has both defined contribution plans and defined benefit plans for qualifying employees in some subsidiaries and the largest plans are in Sweden and Belgium.

Under a defined contribution plan, the Group pays fixed contributions into a separate external legal entity and will have no legal obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits. The contributions are recognised as employee benefit expenses in the income statement when earned by the employee. Some defined contribution plans combine the promise to make periodic payments with a promise of a guaranteed minimum return on investments. Such plans are accounted for as defined benefit plans.

A defined benefit plan is a pension plan that defines the amount of post-employment benefits an employee will receive upon retirement, usually dependent on one or more factors such as age, years of service and compensation. For funded defined benefits plans, plan assets have been separated, with the majority invested in pension foundations. The net pension provision or asset recognised in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets.

The calculation of the present value of defined benefit pension obligations is performed according to the Projected Unit Credit method. The calculation is performed by independent actuaries. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds, or when these are not available, government bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability. The discount rate for the Swedish pension obligation is determined by reference to mortgage bonds. The most important actuarial assumptions are stated below.

Actuarial gains and losses arising from changes in actuarial assumptions and adjustments based on experience are charged or credited to other consolidated comprehensive income in the period in which they arise. Past service costs are recognised immediately in the income statement when the settlement occurs.

The net interest cost is calculated by applying the discount rate to the net balance of the defined benefit obligation and the fair value of plan assets.

Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits at the earlier of the following dates: (a) when the Group can no longer withdraw the offer of those benefits and (b) when the Group recognises costs for a restructuring that involves payment of termination benefits.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The value of defined benefit obligations is determined through actuarial calculations performed by independent actuaries. The calculations are based on different assumptions and estimates, for instance with regards to the discount rate, future salary increases, inflation, mortality rates and demographic conditions. Changes in these assumptions affect the calculated value of the post-employee benefits obligations. The discount rate, which is the most critical assumption, is based on market return on high-quality corporate or government bonds that are denominated in the currency in which the benefits will be paid and with maturities corresponding to the related pension liability. The discount rate for the Swedish pension obligation is determined by reference to mortgage bonds. A decrease in the discount rate increases the present value of post-employee benefits obligations while an increase in the discount rate has the opposite effect.

Description of the substantial pension schemes within the Group is presented below.

Sweden

In Sweden, the Group has seven retirement plans of which four are funded. The largest plan overall is the Swedish ITP 2 plan which is a collectively agreed pension plan for white collar employees. ITP 2 is a final salary-based plan. The Group's defined benefit plans are secured in three ways: as a provision in the balance sheet, assets held in separate pension funds or funded through insurance payments. The "funded through insurance payments" plans are defined benefit plans accounted for as defined contribution plans. In Sweden, these plans are secured with the mutual insurance company Alecta.

The portion secured through insurance with Alecta refers to a defined benefit plan that comprises several employers and is reported according to a pronouncement by the Swedish Financial Reporting Board, UFR 10. For 2022, the Group did not have access to the information to report its proportionate share of the plan's obligations, assets under management and cost, that would make it possible to report this plan as a defined benefit plan. The Group estimates payments of premiums of about SEK 152 m to Alecta in 2023. The Group's share of the total saving premiums for ITP2 in Alecta as at 31 December 2022 amounted to 0.29 (0.32) per cent and the Group's share of the total number of active policy holders amounted to 1.43 (1.42) per cent.

The collective consolidation level comprises the market value of Alecta's assets as a percentage of the insurance obligations calculated in accordance with Alecta's actuarial methods and assumptions, which do not conform to IAS 19. The collective funding ratio is normally allowed to vary between 125 and 175 per cent. If the consolidation level falls short or exceeds the normal interval one measure may be to increase the contract price for new subscriptions and expanding existing benefits or introduce premium reductions. At year end 2022, the consolidation level amounted to 172 (172) per cent.

In case local legal requirements exist, funded or unfunded plans are credit insured with an external party.

Belgium

In Belgium, the Group has three retirement – indemnity plans which are all funded. All three are based on the Collective Labour Agreement applicable to the company. The pension plan for white collar employees and the closed plan for blue collar employees who were in service before 2009 are defined benefit plans. The benefits are based on the final salary and seniority within the company. The pension plan for blue collars who are in service as from 2009 is a cash balance plan. The pension obligations are secured through a transfer of the required funds to a separate pension fund. The funding of the obligations under these defined benefit and cash balance plans is fully externalised through a number of pension funds and through insurance contracts.

In Belgium, the Group also has early retirement arrangements (termination benefits – bridge plans) as well as seniority premiums (other long-term benefits). The early retirement arrangements are unfunded and the seniority premiums are funded.

Summary of provision for post-employment benefits

The provision for post-employment benefits have been recognised in the balance sheet as follows:

	Dec 31, 2022	Dec 31, 2021
Post-employment benefits	6,883	11,961
Other provisions (Note 24)	352	395
Closing balance	**7,235**	**12,356**

The tables below show the Group's provision for post employment benefits, the assumptions used to calculate the value of these provisions and the plan assets related to these provisions, as well as the amounts recognised in the income statement. The Group's reported pension provision amounts to SEK 7,235 (12,356) m in total, which includes endowment insurances and similar undertakings amounting to SEK 352 (395) m in respect of defined premium pension plans in Sweden.

Financial year ending on	Total **Dec 31, 2022**	of which Sweden **Dec 31, 2022**	of which Belgium **Dec 31, 2022**	Total Dec 31, 2021	of which Sweden Dec 31, 2021	of which Belgium Dec 31, 2021
Amounts recognised in the statement of financial position						
Defined benefit obligation	22,221	15,341	4,049	28,167	19,891	4,266
Fair value of plan assets	15,338	9,913	3,432	16,206	9,760	3,379
Funded status	**6,883**	**5,428**	**617**	**11,961**	**10,131**	**887**
Net provision (asset) as recorded in the balance sheets	**6,883**	**5,428**	**617**	**11,961**	**10,131**	**887**
Principal actuarial assumptions						
Weighted average assumptions to determine benefit obligations						
Discount rate, %	4.07	3.95	4.12	1.84	2.00	1.10
Rate of salary increase, %	3.34	3.40	3.16	3.10	3.15	2.91
Rate of price inflation, %	2.08	2.00	2.00	1.88	1.75	1.75
Rate of pension indexation, %	2.07	2.00	N/A	1.89	1.75	N/A

The actuarial assumptions are the most significant assumptions applied when calculating the value of a defined benefit pension plan. The Group determines the discount rate based on AA-rated corporate bonds and mortgage bonds that match the duration of the obligations. If no such corporate bonds and mortgage bonds are available, government bonds are used.

Inflation assumptions are based on a combination of central banks targets, implicit market expectations and long-term analyst forecasts.

Assumptions regarding future mortality are set based on actuarial advice in accordance with published statistics and experience in each territory. Mortality assumptions for Sweden are based on the DUS21 (white collar) mortality study, and the DUS21 (white collar) mortality table is generational. Mortality assumptions in Belgium are not as significant, since there are lump sum payments .

The actuarial assumptions are reviewed annually by the Group and modified when deemed appropriate to do so.

	Total	of which Sweden	of which Belgium	Total	of which Sweden	of which Belgium
Financial year ending on	**Dec 31, 2022**	**Dec 31, 2022**	**Dec 31, 2022**	Dec 31, 2021	Dec 31, 2021	Dec 31, 2021
Change in defined benefit obligation						
Defined benefit obligation at end of prior year	28,167	19,891	4,266	29,093	20,912	4,297
Service cost	747	518	166	1,103	867	176
Interest expense	512	394	46	389	304	31
Cash flows	–753	–357	–138	–566	–326	–89
Increase due to effect of business combination	—	—	—	201	201	—
Remeasurements	–6,965	–5,105	–606	–2,479	–2,067	–261
Effect of changes in foreign exchange rates	513	—	315	426	—	112
Defined benefit obligation at end of year	**22,221**	**15,341**	**4,049**	**28,167**	**19,891**	**4,266**
Change in fair value of plan assets						
Fair value of plan assets at end of prior year	16,206	9,760	3,379	14,906	9,239	3,116
Interest income	303	205	38	198	134	24
Cash flows	882	1,000	62	98	91	83
Remeasurements	–2,443	–1,052	–308	652	296	70
Effect of changes in foreign exchange rates	390	—	261	352	—	86
Fair value of plan assets at end of year	**15,338**	**9,913**	**3,432**	**16,206**	**9,760**	**3,379**
Components of defined pension cost						
Service cost	747	518	166	1,103	867	176
Net interest cost	209	189	7	191	170	7
Remeasurements of Other long term benefits	41	—	41	–3	—	–3
Administrative expenses and taxes	24	—	21	24	—	21
Total pension cost for defined benefit plans	**1,021**	**707**	**235**	**1,315**	**1,037**	**201**
Pension cost for defined contribution plans	3,768	3,041	342	3,423	2,866	268
Total pension cost recognised in P&L	**4,789**	**3,748**	**577**	**4,738**	**3,903**	**469**
Remeasurements (recognised in other comprehensive income)	–4,560	–4,053	–337	–3,123	–2,363	–331
Effect of changes in demographic assumptions	378	379	—	–4	—	—
Effect of changes in financial assumptions	–8,079	–5,638	–1,066	–2,087	–1,814	–164
Effect of experience adjustments	695	154	420	–384	–253	–94
Return on plan assets (excluding interest income)	2,446	1,052	309	–648	–296	–73
Total defined benefit cost recognised in P&L and OCI	**-3,539**	**-3,346**	**-102**	**-1,808**	**-1,326**	**-130**

Financial year ending on	Total Dec 31, 2022	of which Sweden Dec 31, 2022	of which Belgium Dec 31, 2022	Total Dec 31, 2021	of which Sweden Dec 31, 2021	of which Belgium Dec 31, 2021
Net defined benefit provision (asset) reconciliation						
Net defined benefit provision (asset)	11,961	10,131	887	14,187	11,673	1,181
Defined benefit cost included in the income statement	1,021	707	235	1,315	1,037	201
Total remeasurements included in OCI	–4,560	–4,053	–337	–3,123	–2,363	–331
Effect of business combinations	—	—	—	201	201	—
Cash flows	–1,661	–1,357	–222	–692	–417	–190
Employer contributions	–1,225	–1,000	–184	–293	–91	–159
Employer direct benefit payments	–436	–357	–38	–399	–326	–31
Effect of changes in foreign exchange rates	122	—	54	73	—	26
Net defined benefit provision (asset) as of end of year	**6,883**	**5,428**	**617**	**11,961**	**10,131**	**887**
Defined benefit obligation by participant status						
Actives	11,189	7,174	3,325	15,538	11,139	3,521
Vested deferreds	4,928	3,533	532	6,356	4,350	569
Retirees	6,104	4,634	192	6,273	4,402	176
Total	**22,221**	**15,341**	**4,049**	**28,167**	**19,891**	**4,266**

Plan assets

Fair value of plan assets	2022	2021	Of which with a quoted market price 2022	2021
Cash and cash equivalents	331	511	113	260
Equity instruments	1,034	2,172	664	1,208
Debt instruments	7,000	7,387	6,429	6,206
Real estate	577	11	13	11
Investment funds	4,306	4,247	4,306	4,244
Other	2,090	1,878	1,860	1,811
Total	**15,338**	**16,206**	**13,385**	**13,740**

Responsibility for the management of several pension plans rest with the Group and therefore pension trusts have been set up in different countries. The assets are held by long-term employee benefit trusts that are legally separated from the Group.

The assets are available to fund employee benefits only. Sweden, Belgium and United Kingdom have the largest pension trusts. The assets of the pension trusts are managed in accordance with a capital preservation strategy where the risk exposure is adjusted accordingly. The investment strategies are long term and the distribution of assets ensures that investment portfolios are well diversified. The capital is managed in accordance with the investment policies of each pension trust. Continuous monitoring is performed by the trustees to ensure that capital is allocated and managed according to the investment policies. In Sweden the minimum funding level is decided by PRI Pensionsgaranti.

The actual return on plan assets amounts to SEK –2,140 (851) m.

Risks

There are mainly three categories of risks related to defined benefit obligations and pension plans. The first category relates to risks affecting the actual pension payments. Increased longevity and inflation of salary and pensions are the principal risks that may increase the future pension payments and hence, increase the pension obligation. The second category relates to investment return. Pension plan assets are invested in a variety of financial instruments and are exposed to market fluctuations. Poor investment return may reduce the value of investments and render them insufficient to cover future pension payments. The final category relates to the discount rate used for measuring the obligation and the plan assets. The discount rate used for measuring the present value of the obligation may fluctuate which impacts the valuation of the defined benefit obligation. The discount rate also impacts the value of the interest income and expense that is reported in the financial items and the service cost. The risk related to pension obligations, i.e. mortality exposure, discount rate and inflation, are monitored on an ongoing basis.

Sensitivity analysis on defined benefit obligation	Sweden	Belgium
Discount rate +0.5%	–1,383	–147
Discount rate –0.5%	1,534	160
Inflation rate +0.5 %	1,534	108
Inflation rate –0.5%	–1,383	–102

The weighted average duration of the obligation is 19 years for Sweden and 7.6 years for Belgium.

24 Current and other non-current provisions

ACCOUNTING PRINCIPLES

Provisions

Provisions are recognised in the balance sheet when a legal or constructive obligation exists as a result of a past event, and it is deemed more likely than not that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are typically settled within 2–3 years.

Warranties

Warranty provisions include Volvo Car Group's cost of satisfying the customers with specific contractual warranties, as well as other costs not covered by standard contractual commitments. All warranty provisions are recognised at the sale of the vehicles or spare parts. The initial calculations of the reserves are based on historical warranty statistics considering known quality improvements, costs for remedy of defaults etc. The warranty provision booked at point of sale is adjusted as campaign decisions for specific quality problems are made. On a quarterly basis the provisions are adjusted to reflect latest available data such as actual spend, exchange rates, discount rates etc. The provisions are reduced by virtually certain warranty reimbursements from suppliers. Generally warranty provisions are settled within 2–4 years, provisions for battery warranties are typically settled within 8 years.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Provisions

The amount recognised as provision is the best estimate of the expenditure required to settle the present obligation at the balance sheet date. Provisions are regularly reviewed and adjusted as further information becomes available or circumstances change. If the effect of the time value of money is material, non-current provisions are recognised at present value by discounting the expected future cash flows at a pre-tax rate reflecting current market assessments of the time value of money. The discount rate does not reflect such risks that are taken into consideration in the estimated future cash flow. Revisions of estimated cash flows (both amount and likelihood) are recognised as operating cost. Changes to present value due to the passage of time and revisions of discount rates to reflect prevailing current market conditions are recognised as a financial cost.

There is always a risk for changing governmental regulations and changes in environmental policies affecting our business as well as accounting estimates and judgements related to climate regulation. Based on our performance to date, current product and volume plans and current knowledge of global emissions regulations, the Group does not foresee any significant financial risks or judgmental accounting issues short to mid-term related to not meeting global, regional or national CO_2 emissions regulations.

Warranties

The recognition and measurement of provisions for product warranties is generally connected with estimates. Estimated costs for product warranties are charged to cost of sales when the products are sold. Estimated warranty costs include contractual warranty, warranty campaigns (recalls and buy-backs) and coverage in excess of contractual warranty or campaigns, which is accepted as a matter of policy or normal practice in order to maintain a good business relation with the customer. Warranty provisions are estimated based on historical claims statistics and the warranty period. Quality index improvements based on historical patterns have been reflected in all categories of warranty. Refunds from suppliers that decrease the Group's warranty costs are recognised to the extent these are considered to be virtually certain, based on historical experience. This year supplier recovery provisions amount to SEK 1,853 m.

	Warranties	Other provisions	**Total**
Balance at 1 January 2021	**12,022**	**4,688**	**16,710**
Provided for during the year[1)]	7,067	7,058	**14,125**
Utilised during the year[1)]	–6,171	–5,672	**-11,843**
Reversal of unutilised amounts	–2,495	–89	**-2,584**
Translation differences and other	664	182	**846**
Balance at 31 December 2021	**11,087**	**6,167**	**17,254**
Of which current[2)]	3,615	4,992	**8,607**
Of which non-current[2)]	7,472	1,175	**8,647**

	Warranties	Other provisions	Total
Balance at 1 January 2022	**11,087**	**6,167**	**17,254**
Provided for during the year	9,378	5,414	**14,792**
Utilised during the year	–6,917	–5,630	**-12,547**
Reversal of unutilised amounts	–2,796	–171	**-2,967**
Translation differences and other	742	199	**941**
Balance at 31 December 2022	**11,494**	**5,979**	**17,473**
Of which current	4,224	4,827	**9,051**
Of which non-current	7,270	1,152	**8,422**

1) The 2021 figures have been adjusted to reflect reclassifications of items within the warranty provision, this reclassification has no impact on the opening or ending balances.
2) SEK – (182) m of recognised current provisions and SEK – (82) m of recognised non-current provisions have been reclassified as liabilities held for sale. For more information, see Note 33 – Assets and liabilities held for sale.

25 Current and non-current contract liabilities to customers

ACCOUNTING PRINCIPLES

Contract liabilities to customers are obligations related to contracts with customers. The amounts include transactions where the Group either:

- Has an obligation to transfer goods or services to the customer for which the Group has received consideration (or an amount of consideration is due) from the customer. This applies to sales with repurchase commitment (recognised as an operating lease), sales related to extended service as well as advance payments from customers.
- Has transferred goods or services to the customer but a variable consideration or a consideration payable, such as a discount, is not yet to be paid out or settled by the Group.

The contract liability is derecognised, and revenue is recognised, when the goods or service is transferred to the customer and the performance obligation is satisfied. The contract liability is derecognised against cash and cash equivalent when it pays out or settles the variable consideration or consideration payable.

	Sales generated obligations	Deferred revenue - extended service business	Deferred revenue - sale with repurchase commitment	Advance payments from customers	Total
Balance at 1 January 2021	**18,360**	**4,780**	**1,720**	**2,612**	**27,472**
Provided for during the year	44,684	3,559	4,903	100,065	**153,211**
Utilised during the year	–45,654	–2,720	–5,151	–99,446	**-152,971**
Translation differences and other	1,613	335	63	173	**2,184**
Balance at 31 December 2021	**19,003**	**5,954**	**1,535**	**3,404**	**29,896**
Of which current	15,995	2,248	1,284	3,402	22,929
Of which non-current	3,008	3,706	251	2	6,967
Balance at 1 January 2022	**19,003**	**5,954**	**1,535**	**3,404**	**29,896**
Provided for during the year	46,022	7,175	1,272	101,438	**155,907**
Utilised during the year	-45,457	-6,030	-1,403	-101,965	**-154,855**
Translation differences and other	1,563	525	8	194	**2,290**
Balance at 31 December 2022	**21,131**	**7,624**	**1,412**	**3,071**	**33,238**
Of which current	19,199	2,620	1,205	3,070	26,094
Of which non-current	1,932	5,004	207	1	7,144

Sales generated obligations

Sales generated obligations refer to all variable marketing programmes not effectuated on the balance sheet date, including discounts and residual value guarantees.

Deferred revenue - extended service business

The Group offers on some markets service contracts to customers, normally referred to as Extended Service Business where the customer signs up for regular services paid for upfront.

Deferred revenue – sale with repurchase commitment

Deferred revenue – sale with repurchase commitment, is recognised as an operating lease contract, where the revenue is recognised over the contract period.

Advance payments from customers

Advance payments from customers refer to payments related to customer contracts where the Group has received a payment in advance of transfer of control over the product or service.

26 Other non-current liabilities

	31 Dec 2022	31 Dec 2021
Liabilities related to repurchase commitments	695	1,354
Other liabilities[1) 2)]	4,031	4,685
Total	**4,726**	**6,039**

1) The internal profit elimination related to sale of licences and technology to Polestar amounted to SEK 2,365 (2,596) m.
2) SEK – (518) m of recognised Other non-current liabilites have been reclassified to liabilities held for sale. For more information, see Note 33 – Assets and liabilities held for sale.

27 Other current liabilities

	31 Dec 2022	31 Dec 2021
Accrued expenses and prepaid income[1)]	18,624	13,292
Liabilities related to repurchase commitments	6,042	7,754
Personnel related liabilities[1)]	6,770	6,173
VAT liabilities	3,431	3,018
Other liabilities	3,924	3,850
Total	**38,791**	**34,087**

1) SEK 15 (109) m of recognised Other current liabilities have been reclassified to liabilities held for sale. For more information, see Note 33 - Assets and liabilities held for sale.

28 Pledged assets

	31 Dec 2022	31 Dec 2021
Shares in subsidiaries[1)]	93	8,263
Restricted cash	1,028	141
Inventory	332	303
Floating charges	108	253
Other pledged assets	399	788
Total	**1,960**	**9,748**

1) Geely Sweden Holdings AB has pledged the shares in subsidiaries Geely Sweden Financials AB and Geely Sweden Investment AB (p.y.) for external bank loans. The value of the share pledge on consolidated group level has been assessed at SEK 93 (8,263) m.

29 Contingent liabilities

ACCOUNTING PRINCIPLES

When a possible obligation does not meet the criteria for recognition as a liability it may be disclosed as a contingent liability. These possible obligations derive from past events and their existence will be confirmed only when one or several uncertain future events, which are not entirely within the Group's control, take place or fail to take place. A contingent liability could also exist for a present obligation, due to a past event, where an outflow of resources is less likely (<50 per cent) or when the amount of the obligation cannot be reliably measured.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Legal proceedings

Companies within the Group may at times be involved in legal proceedings. Such proceedings may cover a range of issues in various jurisdictions. These include, but are not limited to, commercial disputes such as alleged breach of contract, insufficient supplies of goods or services, product liability, patent infringement or infringement of other intangible rights. Issues raised are often of a difficult and complex nature and often legally complicated. It is therefore difficult to predict the final outcome of such matters. Companies within the Group work closely with legal advisors and other experts in the various matters in each jurisdiction. A provision is made when it is determined that an adverse outcome is more likely than not and the amount of the loss can be reliably estimated. In instances where these criteria are not met, a contingent liability has been disclosed provided the risk qualifies as a contingent liability.

Other processes

The Group is also, like other global companies, from time to time involved in processes that vary in scope and are at various stages with regards to, for instance, import duties and transfer prices. These processes are evaluated regularly and provisions are made when it is more likely than not that additional fees must be paid and the outcome can be reliably estimated. If it is not probable that the additional fees will be paid but the risk is more than remote, such amounts are disclosed as contingent liabilities.

	31 Dec 2022	31 Dec 2021
Guarantees to insurance company FPG	224	180
Other claims[1)]	21	21
Guarantee commitments	482	365
Other contingent liabilities[2)]	466	358
Total	**1,193**	**924**

1) In addition to the contingent liabilities related to other claims there is also tax related contingent asset amounting to SEK 71 (53) m.
2) Apart from the above contingent liabilities, there are other commitments and guarantees that are not recognised since the likelihood of an outflow of resources is very low.

30 Cash flow statements

Adjustments for other non-cash items:	2022	2021
Capital gains/losses on sale of property, plant and equipment and intangible assets	1,142	5,263
Share of income in joint ventures and associates	–4,496	520
Interest effect from measurement of repurchase obligations	–235	–158
Provision for variable pay	1,196	2,239
Provision for repurchase commitments	—	—
Other provisions	1,137	–1,818
Deferred income	–864	–2,779
Reclassification of residual value guarantee	–2,687	–728
Inventory impairment	–159	–149
Elimination of intra-group profit	235	794
IFRS 16 adjustments	–1,594	–890
Assets held for sale	–972	–1,986
IPO transaction costs	—	–210
Other non-cash items	–478	–934
Total	**–7,775**	**–836**

		Cash flows	Non-cash changes					
Change in net cash	**Jan 1, 2021**		Acquisition	Reclassi-fications	Foreign exchange movement	Fair value changes	Other non-cash changes	**Dec 31, 2021**
Cash and cash equivalents	62,003	–2,282	—	–951	4,507	—	—	63,277
Marketable securities	8,087	–460	—	—	354	15	—	7,996
Liabilities to credit institutions (non-current)	–39,331	9,481	—	4,401	–953	—	–90	–26,492
Bonds, non-current[1)]	–24,768	–	—	2,999	–534	—	–75	–22,378
Bonds, current[1)]	–7,047	10,190	—	–2,999	–139	—	–5	—
Other non-current interest-bearing liabilities	–84	84	—	—	—	—	—	—
Liabilities to credit institutions (current)	–4,306	3,082	—	–4,401	–190	—	—	–5,815
Net cash	**–5,446**	**20,095**	**–**	**–951**	**3,045**	**15**	**–170**	**16,588**

Change in net cash	**Jan 1, 2022**							**Dec 31, 2022**
Cash and cash equivalents	63,277	1,284	—	—	2,848	—	—	67,409
Marketable securities	7,996	–5,030	—		473	–24	—	3,415
Liabilities to credit institutions (non-current)	–26,492	3,139	—	179	–1,863	—	–154	–25,192
Bonds, non-current[1)]	–22,378	–5,260	—	1,998	–1,944	—	269	–27,315
Bonds, current[1)]	—	—	—	–1,998	—	—	–2	–2,000
Other non-current interest-bearing liabilities	—	—	—	—	—	—	—	
Liabilities to credit institutions (current)	–5,815	–2,408	—	–179	–628	—	–17	–9,047
Net cash	**16,588**	**–8,275**	**–**	**–**	**–1,115**	**–24**	**96**	**7,271**

1) The bonds are presented above at amortised cost. The fair value risk of the EUR-denominated bonds is hedged and the bonds with fixed interest payments have been swapped into floating interest payments. Part of the bonds is therefore measured at fair value through the income statement and the remaining part is measured at amortised cost. On 31 December 2022, the fair value component amounted to SEK –287 (—) m.

31 Business combinations and divestments

ACCOUNTING PRINCIPLES

In a business combination the Group measures all acquired identifiable assets and liabilities at fair value. Any surplus amount from the purchase price, possible non-controlling interest and fair value of previously held equity interests at the acquisition date compared to the Group's share of acquired net assets is recognised as goodwill. Any deficit amount (bargain purchase), so called negative goodwill, is directly recognised as income in the income statement. In step acquisitions, a business combination occurs only on the date control is achieved. Transactions with non-controlling interest are recognised within equity as long as control of the subsidiary is retained.

All acquisition-related transaction costs are expensed. Companies acquired are consolidated as of the date of acquisition. Companies that have been divested are included in the consolidated financial statements up to and including the date of the divestment.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

One area of critical judgement, relevant to the Group is the one of common control, a situation where there is an acquisition between parties under common control. This means the acquired company has the same ultimate parent as the acquiring company. The standard is silent on the subject and the Group has therefore made a policy choice when it comes to handle common control transactions. The Group has elected to apply predecessor accounting, meaning that the acquirer consolidates the predecessors respective carrying values for assets and liabilities. These are the carrying values that are related to the acquired entity from the consolidated financial statements of the highest entity that has common control, and for which consolidated financial statements are prepared. Any difference between the cost of the combination or the costs of the divestment (i.e. the fair value of the consideration paid or received) and the carrying values for assets and liabilities are recognised directly in equity within retained earnings.

Divestment under common control

Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd.

On 31 December 2021, Volvo Cars (China) Investment Co., Ltd and Zhejiang Geely Holding Group Co., Ltd signed a share transfer agreement with Zhejiang Aurobay Powertrain Co., Ltd. regarding their shareholdings in Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd.

On 31 January 2022, Volvo Car Group finalised the separation of its combustion engine operations and the control of the 50 per cent owned subsidiary Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd. was transferred to the acquirer, the associated company Zhejiang Aurobay Powertrain Co., Ltd (Aurobay), China. Aurobay will be a global supplier of complete powertrain solutions, including next generation combustion engines, transmissions and hybrid solutions.

The divestment is between parties under common control and Volvo Car Group has applied predecessor accounting, see section Critical accounting estimates and judgements.

As part of the divestment, the registered company name has been changed to Zhangjiakou Aurobay Powertrain Manufacturing Co., Ltd.

The Group has consolidated the company until 31 January 2022 when control was ceased. The company was classified as Asset held for sale until the date of the divestment.

	2022
Disposal price	
Disposal consideration	978
Total disposal consideration	**978**
Acquired assets and liabilities at carrying value	
Intangible assets	–88
Tangible assets	–3,108
Deferred tax assets	–41
Inventories	–542
Other current assets	–26
Cash and cash equivalents	–358
Non-controlling interest	1,245
Deferred tax liabilities	107
Other non-current liabilities	56
Trade payables	277
Other current liabilities	1,233
Total carrying value of net assets acquired	**-1,245**
Deficit of consideration paid recognised in Equity	**-267**
Cash effect on business combination	
Consideration received[1)]	958
Less cash and cash equivalents disposed of	–358
Change in cash and cash equivalents due to divestment	**600**

1) Exchange rate difference between acquisition date and payment date of the Purchase price payment.

The total cost of divestment and carrying values have been adopted in January 2023.

Divestment of business

Uppsala Retail business and Real estate companies

On 10 December 2021, the Group's wholly-owned subsidiaries Volvo Personvagnar Norden AB and Volvo Car Retail AB signed an asset and share purchase agreement with an external buyer regarding their shareholdings in Upplands Motor Personvagnar AB and in Upplands Motor Mark KB as well as the entire retail business in Uppsala, near Stockholm, Sweden. The divestment was closed on 1 October 2022. The sold real estate companies own land and buildings in the area of Uppsala.

The divestment is part of the Group's strategic decision to restructure its retail business on the Swedish Market.

The Group has consolidated the wholly-owned subsidiaries until 1 October 2022 when control was ceased.

The disposal consideration received amounted to SEK 236 m and total cash effect from divestment amounted to SEK 235 m. The carrying value of assets and liabilities as at the date of the divestment were SEK 173 m. Gain on sale of operation recognised in income statement amounted to SEK 63 m.

The total cost of divestment and the carrying values have been determined provisionally, thus, the divestment analyses may be subject to adjustment during a twelve months period.

Volvo Car Bern AG

On 29 April 2022, the Group's wholly-owned subsidiary Volvo Car Switzerland AG signed a share transfer agreement with an external buyer regarding their 100 per cent shareholdings in Volvo Car Bern AG. Volvo Car Bern AG is an authorised Volvo dealer in Switzerland. Volvo Car Group has consolidated the company until 29 April 2022 when control was ceased.

The disposal consideration received amounted to SEK 52 m and total cash effect from divestment amounted to SEK 116 m. The carrying value of assets and liabilities as at the date of the divestment were SEK 5 m. Gain on sale of operation recognised in income statement amounted to SEK 47 m. The total cost of divestment and carrying values have been determined provisionally, thus, the divestment analyses may be subject to adjustment during a twelve month period.

Powertrain Engineering Sweden AB

On 31 July 2022, Geely Sweden Holdings AB finalised the separation of its combustion engine operations and the control of the 100 per cent owned subsidiary Powertrain Engineering Sweden AB was transferred to the acquirer, the associated company Zhejiang Aurobay Powertrain Co., Ltd (Aurobay), China. Geely Sweden Holdings AB has consolidated the company until 31 July 2022 when control was ceased. The company was classified as Asset held for sale until the date of the divestment.

	2022
Disposal price	
Disposal consideration	4,581
Total disposal consideration	**4,581**
Acquired assets and liabilities at carrying value	
Intangible assets	–85
Tangible assets	–4,470
Deferred tax assets	–30
Inventories	–294
Other current assets	–1,548
Cash and cash equivalents	–979
Deferred tax liabilities	238
Other provisions	228
Other non-current liabilities	5
Trade payables	1,206
Other current liabilities	1,125
Total carrying value of net assets acquired	**–4,604**
Deficit of consideration paid income statement	**–23**
Cash effect on business combination	
Consideration received	4,581
Less cash and cash equivalents disposed of	–979
Change in cash and cash equivalents due to divestment	**3,602**

Adoption of preliminary acquisition analysis

An acquistion analysis is preliminary until adopted which must take place within twelve months from the acquisition. The preliminary acquisition analysis previously recognised for Volvo Car Real Estate and Assets 7:24 AB , Fastighetsbolag Sörred 8:11 AB and Asia Euro Automobile Manufacturing (Taizhou) Co., Ltd. were adopted in 2022.

Divestment after the balance sheet date

Geely Innoviation Centre 6 AB

In December 2022 Geely Europe Innovation Centre AB signed a share transfer agreement with E3 Fastighetsutveckling AB regarding their shareholding in Geely Innovation Centre 6 AB. On January 13, 2023 the separation was finalized. The purchase consideration amounted to SEK 95 m. The carrying amount of assets and liabilities as at the date of the divestment were SEK 3 m. Surplus of consideration received recognized in income statement amounted to SEK 92 m . At the time of disposal, cash and cash equivalents over which control was lost amounted to SEK 0 m. The total income of divestment and carrying values have been determined provisionally, thus, the divestment analysis may be subject to adjustment during a twelve-month period.

32 Segment reporting

ACCOUNTING PRINCIPLES

An operating segment is defined as a part of the Group for which separate financial information is available and is evaluated regularly by the chief operating decision-maker or decision-making body. A majority of the Group's revenue comes from industrial operations; more specifically the revenue generated by Volvo Car Group. Industrial operations include all activities related to the development, design, manufacturing, assembly and sale of vehicles, as well as the sale of related parts and accessories. In relation to all other operation, industrial operations is the absolute dominant one. As a consequence that the other operations still is under construction (startup) and there is no developed evaluation process based on financial reporting in the sense of the standard the Group is presented as one reporting segment.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

As stated in the Board of Directors Report, the business is divided into three segments. The majority of the business is carried out in the industrial operations segment and therefore the Group has not prepared any segment reporting.

For further information on the geographic spread of revenue, see Note 2 – Revenue. The geographic spread of non-current assets is presented below.

	Sweden	China	Rest of the World
Dec 31, 2022			
Non-current assets	71%	12%	17%
Dec 31, 2021			
Non-current assets	71%	13%	16%

33 Assets and liabilities held for sale

ACCOUNTING PRINCIPLES

For a non-current asset or disposal group to be classified as held for sale it needs to be available for immediate sale in its present condition and the sale needs to be highly probable. For the sale to be highly probable, management needs to be committed to a plan to locate a buyer and sell the non-current asset or disposal group. The sales price has to be reasonable in relation to its current fair value and the sale should be completed within one year from the date of classification.

When the criteria for being classified as a non-current asset or a disposal group held for sale are fulfilled, the asset or disposal group is presented separately in the balance sheet. The related liabilities of a non-current asset or disposal group are also recognised separately in the balance sheet. The asset or disposal group is recognised at the lower end of its carrying amount and fair value after deduction of selling expenses.

As of December 31, 2022, assets and liabilities related to the real estate company Geely Innovation Centre 6 AB were classified as held for sale with a net value of SEK 76 m. The proceeds from the sales are expected to exceed the carrying amount of the net assets in Geely Innovation Centre 6 AB. As of December 31, 2022, there are no indications of impairment. The sale of Geely Innovation Centre 6 AB was completed on January 13, 2023 and the buyer was E3 Fastighetsutveckling AB. See Note 31 – Business combinations and divestments for further information.

The major categories of assets and liabilities classified as held for sale are:

	2022
Tangible assets	92
Current tax assets	3
Other current assets	16
Total assets	**111**
Accounts payable	19
Other current liabilities	16
Total liabilities	**35**

Definitions of Performance Measures

Performance measures disclosed in the Annual Report are those that are deemed to provide the most true and fair as well as relevant view of the Group's financial performance for a reader of the Annual Report.

Gross margin
Gross margin is gross income as a percentage of revenue and represents the percentage of total revenue that the Group retains after deducting direct costs associated with producing the goods and services sold.

EBIT
EBIT refers to earnings before interest and taxes. EBIT is synonymous with operating income, which measures the profit the Group generates from its operations.

EBIT margin
EBIT margin is EBIT as a percentage of revenue and measures the Group's operating efficiency.

EBITDA
EBITDA represents earnings before interest, taxes, depreciations and amortisation, and is another measure of operating performance. It measures the profit the Group generates from its operations excluding the effect of previous periods capitalisation levels.

EBITDA margin
EBITDA margin is EBITDA as a percentage of revenue.

Equity ratio
Total equity divided by total assets, as a measurement of the Group's long-term solvency and financial leverage.

Net cash
Net cash is an indicator of the Group's ability to meet its financial obligations. It is represented by liabilities to credit institutions, bonds and other interest-bearing non-current liabilities.

Liquidity
Liquidity consists of cash and cash equivalents, undrawn credit facilities and marketable securities.

Revenue
Revenue is the sales price for goods or services net of discounts and certain variable marketing expenses.

RECONCILIATION TABLES OF PERFORMANCE MEASURES

Gross Margin	2022	2021
Gross income in % of revenue	**18,6**	**21.7**

EBIT Margin	2022	2021
Operating income (EBIT) in % of revenue	**6,9**	**7.4**

EBITDA/EBITDA Margin	2022	2021
Operating income	22,679	20,853
Depreciation and amortisation of non-current assets	16,146	15,043
EBITDA	**38,825**	**35,896**
EBITDA in % of revenue	**11,7**	**12.7**

Equity ratio	Dec 31, 2022	Dec 31, 2021
Total equity	132,951	113,098
Total assets	383,914	333,763
Equity in % total assets	**34,6**	**33.9**

Net cash	Dec 31, 2022	Dec 31, 2021
Cash and cash equivalents	67,409	63,277
Marketable securities	3,415	7,996
Liabilities to credit institutions (non-current)	–25,192	–26,492
Bonds (non-current)[1)]	–27,315	–22,378
Other interest-bearing liabilities[2)]	—	—
Liabilities to credit institutions (current)	–9,046	–5,815
Bonds (current)1)	–2,000	–
Net cash[2)]	**7,272**	**16,588**

1) Part of the fair value risk of the EUR-denominated bonds is hedged and the bonds with fixed interest payments have been swapped into floating interest payments. Part of the bonds is therefore measured at fair value through the income statement and the remaining part is measured at amortised cost. On 31 December 2022, the fair value component amounted to SEK 940 (1,235) m.
2) The net cash calculation excludes current SEK –1,500 (–1,462) m and non-current SEK –4,845(–5,509) m financial liabilities related to IFRS 16.

Liquidity	Dec 31, 2022	Dec 31, 2021
Cash and cash equivalents	67,409	63,277
Marketable securities	3,415	7,996
Undrawn credit facilities	16,674	13,377
Liquidity	**87,498**	**84,650**

Income Statements and Comprehensive Income – Parent Company

MSEK	Note	2022	2021
Revenue		—	—
Administrative expenses	4	–81	–104
Operating income	3, 5	**-81**	**-104**
Result from participation in subsidiaries	6, 8	156	8,886
Writedown of participation in subsidiaries	8	—	–410
Financial income	6	668	216
Financial expenses	6	–81	–61
Income before tax		**662**	**8,527**
Income tax	7	—	–1
Net income		**662**	**8,526**

Other comprehensive income and Net income are consistent since there are no items in other comprehensive income.

Balance Sheets – Parent Company

MSEK	Note	Dec 31, 2022	Dec 31, 2021
ASSETS			
Non-current assets			
Participation in subsidiaries	8	21,891	26,023
Investments in joint ventures[1]		1,251	1,026
Deferred tax assets	7	–	–
Receivables from group companies	3	2,573	1,795
Total non-current assets		**25,715**	**28,844**
Current assets			
Receivables from group companies	3	7,922	6,277
Other current assets		5	–
Accrued income and prepaid expenses		2	2
Cash and cash equivalents		583	716
Total current assets		**8,512**	**6,995**
TOTAL ASSETS		**34,227**	**35,839**
EQUITY & LIABILITIES			
Equity			
Restricted equity			
Share capital (100,000 shares with par value of SEK		–	–
		–	**–**
Non-restricted equity			
Share premium reserve		6,509	6,509
Other contributed capital		3,693	3,693
Retained earnings		22,427	14,119
Net income		662	8,526
		33,291	**32,847**
Total equity		**33,291**	**32,847**
Non-current liabilities			
Non-current liabilities to group companies	3	124	2,684
Total non-current liabilities		**124**	**2,684**
Current liabilities			
Accounts payable		2	1
Liabilities to group companies	3	777	284
Other current liabilities		4	3
Accrued expenses and prepaid income		29	20
Total current liabilities		**811**	**308**
TOTAL EQUITY & LIABILITIES		**34,227**	**35,839**

1) For further information, see Note 12 – Investments in joint ventures and associates in the consolidated financial statements.

Changes in Equity – Parent Company

	Restricted equity	Non-restricted equity			
MSEK	Share capital[1)]	Share premium reserve	Other contributed capital	Retained earnings	**Total**
Balance at January 1, 2021	**–**	**6,509**	**3,693**	**14,119**	**24,321**
Net income for the year	**–**	**–**	**–**	**8,526**	**8,526**
Balance at December 31, 2021	**–**	**6,509**	**3,693**	**22,645**	**32,847**
Net income for the year	**–**	**–**	**–**	**662**	**662**
Dividend to shareholders				–218	**–218**
Balance at December 31, 2022	**–**	**6,509**	**3,693**	**23,089**	**33,291**

1) Share capital amounts to SEK 100,000 (100,000).

Statement of Cash Flows – Parent Company

MSEK	Note	2022	2021
OPERATING ACTIVITIES			
Operating income		–81	–104
Interest received		145	103
Interest paid		–39	–61
Other financial items		54	47
		79	**-15**
Movements in working capital			
Change in receivables group companies	3	–1,531	–4,810
Change in liabilities group companies	3	251	40
Change in current receivables		–5	3
Change in current liabilities		11	9
Cash flow from movements in working capital		**-1,274**	**–4,758**
Cash flow from operating activities		**-1,195**	**–4,773**
INVESTING ACTIVITIES			
Investment in subsidiaries		–14	–74
Investment in joint ventures		–225	–152
Divestment of subsidiaries		4,581	3,974
Dividend received from subsidiaries		—	410
Dividend to shareholders			
Cash flow from investing activities		**4,342**	**4,158**
Cash flow from operating and investing activities		**3,147**	**-615**
FINANCING ACTIVITIES			
Change of long-term liabilities group companies	3	–2,560	–11
Change of long-term receivables group companies	3	–778	1,254
Cash flow from financing activities		**-3,338**	**1,243**
Cash flow for the year		**-191**	**628**
Cash and cash equivalents at beginning of year		**716**	**22**
Change in cash and cash equivalents due to change in exchange rates		58	66
Cash and cash equivalents at end of year		**583**	**716**

Notes to The Parent Company Financial Statements

All amounts are in MSEK unless otherwise stated.
Amounts in brackets refer to the preceding year.

1 Significant accounting principles

Basis of preparation

The parent company has prepared its financial statements in accordance with the Swedish Annual Accounts Act (1995:1554) and RFR 2, Accounting for Legal entities. According to RFR 2, the parent company shall apply all the international financial Reporting standards endorsed by the EU as far as this is possible within the framework of the Swedish Annual Accounts Act. Changes in RFR 2 applicable to the fiscal year beginning January 1, 2021, have had no material impact on the financial statements of the Parent company.

All specific accounting principles considered material to the Group is described in conjunction with each presented note in the consolidated financial statements. The main deviations between the accounting policies applied by the Group and the parent company are described below.

Shares and participations in Group companies

Shares and participations in Group companies are recognised at cost in the parent company's balance sheet and test for impairment is performed annually. Dividends are recognised in the income statement. All shares and participations are related to business operations and profit and loss from these are reported within operating income.

Transaction costs directly attributable to acquisitions of shares and participations in Group companies are accounted for as an increase in the carrying amount.

Group contributions made to subsidiaries are reported as an increase of investments in these subsidiaries. A review is at the same time made to conclude whether or not there is an impairment risk with regards to the same shares of the subsidiaries having received the group contribution. Tax effect of these group contributions are recognised in the income statement. Group contributions made to parent company are recognised in equity, along with the tax effect. Received group contributions from subsidiaries are recognised as financial income. Tax effect on received group contributions are recognised in the income statement. Received group contributions from parent company are recorded in equity, along with the tax effect.

Made shareholders' contributions are recognised in shares in subsidiaries and as such they are subject to impairment testing.

Financial guarantees

The parent company applies the exception in the application of IFRS 9 which concerns accounting and measurement of financial contracts of guarantee in favour of subsidiaries and associated companies. The parent company recognises the financial contracts of guarantee as contingent liabilities.

Income taxes

Deferred tax liability on untaxed reserves are included in untaxed reserves in the parent company.

Equity

In accordance with the Swedish Annual Accounts Act, equity is split between restricted and non-restricted equity.

2 Critical accounting estimates and judgements

Preparation of the financial statements in accordance with the Swedish Annual Accounts Act (1995:1554) and RFR 2 requires the Company's Executive management and Board of Directors to make estimates and judgements as well as to make assumptions that affect application of the accounting policies and the reported assets, liabilities, income and expenses. Critical accounting estimates and judgements applied by the Group are described in conjunction with applicable note in the consolidated financial statements. None of these critical accounting estimates are applicable to the parent company. Shares and participations in Group companies recognised at cost in the parent company are being tested for impairment annually or if an indication of impairment exists.

3 Related parties

During the year, the parent company entered into the following transactions with related parties:

	Sales of goods, services and other		Purchase of goods, services and other	
	2022	2021	**2022**	2021
Companies within the Geely Sweden Holdings	0%	*0%*	31%	*44%*

	Receivables		Payables	
	Dec 31, 2022	Dec 31, 2021	**Dec 31, 2022**	Dec 31, 2021
Companies within the Geely Sweden Holdings	10,495	*8,072*	901	*2,968*
whereof short-term	*7,922*	*6,277*	*777*	*284*

Business transactions between the parent company and related parties all arise in the normal course of business and are conducted on the basis of arm's length principles. In 2022, Geely Sweden Holdings AB has received dividend from subsidiaries of SEK 436 (6,389) m, whereof SEK 436 (–) m from Geely Sweden Investment AB, SEK – (5,979) m from Volvo Cars AB (publ.) and SEK – (410) m from Powertrain Engineering Sweden AB.

There have not been any transactions with Board Members or senior executives except ordinary remunerations for services. For further information regarding remunerations, see Note 8 – Employees and remuneration in the consolidated financial statements.

4 Audit fees

TSEK	**2022**	2021
Deloitte		
Audit fees	-720	-432
Audit-related fees	-168	-457
Other services	—	-71
Total	**-888**	**-960**

Audit fees involve audit of the Annual Report, financial accounts and the administration by the Board of Directors and the Managing Directors. The audit also includes advice and assistance as a result of the observations made in connection with the audit.

Audit-related fees refer to other assignments to ensure quality in the financial statements including consultations on reporting requirements and internal control.

All other work performed by the auditor is defined as other services.

5 Remuneration to the board of directors

Information on remuneration to Board members by gender is shown in Note 8 – Employees and remuneration, in the consolidated statements.

6 Financial income and expenses

	2022	2021
Financial income		
Dividend from subsidiaries	436	6,389
Capital gain/loss from divestment of shares in subsidiaries	-280	2,497
Foreign exchange gain	523	210
Interest income from subsidiaries	145	104
Total	**824**	**9,200**
Financial expenses		
Interest expenses to subsidiaries	-33	-61
Interest expenses to related parties	-6	—
Foreign exchange loss	-42	-98
Total	**-81**	**-159**

7 Taxes

Income tax recognised in income statement	2022	2021
Tax for the year	–	–1
Total	**–**	**–1**
Information regarding current year tax expense compared to tax expense based on the applicable Swedish tax rate		
Income before tax for the year	662	8,526
Tax according to applicable Swedish tax rate, 20.6% (20.6%)	–136	–1,756
Costs, non-deductable	–60	–85
Tax effect of interest net	22	9
Tax effect of group contributions paid recognised as shares in subsidiaries	84	–
Non-taxable dividends	90	1,316
Non-taxable income	–	515
Total	**–**	**–1**

Deferred tax assets are only recognised to the extent there are taxable temporary differences or other factors that convincingly indicate there will be sufficient future taxable profit. Tax loss-carry forward has an indefinite period of utilisation.

8 Participation in subsidiaries

	Dec 31, 2022	Dec 31, 2021
At beginning of the year/acquired acquisition value	**26,023**	**21,857**
Shareholder's distribution in kind	–	5,979
Write-down	–	–410
Shareholder / group contributions provided	449	74
Divestments	–4,581	–1,477
Total	**21,891**	**26,023**

Directly owned subsidiaries at the end of the reporting period are presented in below table. Indirectly owned subsidiaries are included in each subsidiary's annual report.

Geely Sweden Holding AB's investments in subsidiaries:	Corp. ID no.	Registered office	No. of shares	% interest held	Book value Dec 31, 2022	Book value Dec 31, 2021
Volvo Car AB (publ.)[1)]	556810-8988	Gothenburg/Sweden	2,443,396,227	82	21,072	21,072
Powertrain Engineering Sweden AB	556830-5964	Gothenburg/Sweden	500	100	–	4,581
Geely Business Center AB	559094-6454	Gothenburg/Sweden	500	100	18	4
Geely Europe Innovation Centre AB	559166-5699	Gothenburg/Sweden	100,000	100	118	118
Geely Financials International Ltd.	67898527-000-06-17-4	Hong Kong/China	1,000,000	100	9	9
Geely Group Motorsports International AB	559190-6895	Gothenburg/Sweden	10,000	100	31	31
Geely Sweden Financials Holding AB (publ.)	559179-7799	Gothenburg/Sweden	500	100	8	8
Geely Sweden Financials AB	559168-2157	Gothenburg/Sweden	500	100	25	–
Geely Sweden Finance AB (publ.)	559171-4950	Gothenburg/Sweden	501	100	8	8
Geely Sweden Investment AB	559150-4781	Gothenburg/Sweden	10,000	100	557	147
GSHAB 1 AB	559263-3035	Stockholm/Sweden	50,000	100	45	45
Total					**21,891**	**26,023**

1) For additional information on participation in the subsidiary Volvo Car AB (publ.) See Note 22 – Equity in the consolidated financial statements.

The share of voting power corresponds to holdings in per cent as per above. The countries where the subsidiaries are registered are also where their main operations are carried out.

Significant restrictions

For some subsidiaries there are restrictions on the Group's ability to access or use cash from these subsidiaries, for more information on cash that is not available or with other limitations, see Note 21 – Marketable securities and cash and cash equivalents in the consolidated financial statements.

Change in the Group's ownership interest in a subsidiary

Geely Financials Denmark A/S is a former wholly owned subsidiary in the Group. In September 2018, Geely Financials Denmark A/S acquired 52 per cent of the shares in the Saxo Bank Group. During the fourth quarter 2018, an agreement was signed with Geely Group Ltd., a related party outside the Group, in which 5 per cent of the shares in Geely Financials Denmark A/S was sold together with an option to acquire an additional 46 per cent. Based on the divestment, the option, and other contractual conditions, the Group deems that there is no controlling interest, which is why Geely Financials Denmark A/S, including Saxo Bank, is no longer consolidated within the Group as of September 12, 2018.

In August 2019 the ownership in Saxo Bank was reduced from 52 per cent to 51 per cent following a capital contribution.

In April 2020 Geely Group Ltd exercised its option to acquire an additional 46 per cent of the shares in Geely Financials Denmark A/S. After the transaction, Geely Group Ltd owns 51 per cent of Geely Financials Denmark A/S.

Details of non-wholly owned subsidiaries that have material non-controlling interests

On June 25, 2015 the Group, through one of its wholly owned subsidiaries, Volvo Cars (China) Investment Co., Ltd, acquired an additional 20 per cent in the Group's Chinese joint venture companies. In the consolidated financial statements, these joint venture companies are classified as subsidiaries and fully consolidated with a non-controlling interest of 50 per cent since the Group has the decision-making power over the operations.

Additionally, Daqing Volvo Car Manufacturing Co., Ltd has acquired 100 per cent of the shares in Volvo Car (Asia Pacific) Investment Holding Co., Ltd which holds 100 per cent of Zhongjia Automobile Manufacturing (Chengdu) Co., Ltd and Shanghai Zhawo Auto Sales Co., Ltd.

On 31 January 2022, Volvo Cars (China) Investment Co., Ltd diveste its shareholding in the 50 per cent owned subsidiary Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd and consequently the non-controlling interest ceased, see Note 31 – Business combinations and divestments.

On 30 September 2021, Volvo Car Retail AB acquired the remaining 50 per cent shareholding in Bra Bil Sverige AB and consequently the non-controlling interest ceased.

On 29 October 2021, Volvo Car AB (publ.) listed the company's shares on Nasdaq Stockholm. The principal owner is Geely Sweden Holdings AB, with 82 per cent of the shares (votes and capital). In the consolidated financial statements, Volvo Car AB (publ.) is classified as a subsidiary and fully consolidated with a non-controlling interest of 18 per cent.

The table below shows details of non-wholly owned subsidiaries of the Group that have material non-controlling interests.

	Registered office	% non-controlling interests		Profit allocated to non-controlling interests		Accumulated non-controlling interests	
Legal entity:		**Dec 31, 2022**	Dec 31, 2021	**Dec 31, 2022**	Dec 31, 2021	**Dec 31, 2022**	Dec 31, 2021
Daqing Volvo Car Manufacturing Co., Ltd.[1) 2)]	China	50	50	1,441	1,389	2,908	2,229
Zhangjiakou Volvo Car Engine Manufacturing Co., Ltd.[1)]	China	–	50	62	277	–	1,148
Shanghai Volvo Car Research and Development Co., Ltd.[1)]	China	50	50	–	–	118	116
Bra Bil Sverige AB	Sweden	–	–	–	27	–	–
HaleyTek AB	Sweden	40	40	-52	-20	305	340
PSINV AB	Sweden	–	21	–	–	–	37
Zenseact AB	Sweden	–	15	-25	-42	–	457
Volvo Car AB (publ.)	Sweden	18	18	2,807	195	20,512	16,275
Total non-controlling interests				**4,233**	**1,826**	**23,843**	**20,602**

1) 50 per cent held by Zhejiang Geely Holding Group Co., Ltd, which is the ultimate parent company of the Group.
2) The accumulated non-contolling interest per 31 Dec 2021 has been restated. For further information, see Note 10 – Government Grants.

9 Pledged assets

	Dec 31, 2022	Dec 31, 2021
Shares in subsidiaries[1)]	25	147
Total	**25**	**147**

1) Pledged shares in Geely Sweden Financials AB and Geely Sweden Investment AB (p.y.) for external bank loans.

10 Contingent liabilities

	Dec 31, 2022	Dec 31, 2021
Guarantee commitments[1)]	32,491	2,276
Total	**32,491**	**2,276**

1) In addition to above stated guarantee commitments, Geely Sweden Holdings AB has guarantee commitments related to the external loans in the subsidiaries Geely Sweden Financials AB and Geely Sweden Industry Investment AB (p.y.). As a total, the loans amount to SEK 29,867 (23,949) m. The risk to fulfill any of these guarantee commitments is deemed as very low.

Proposed Distribution of Non-Restricted Equity

The parent company

The following funds are at the disposal of Annual General Meeting (AGM):

Share premium reserve	SEK	6,509,200,000
Other contributed capital	SEK	3,693,131,899
Retained earnings brought forward	SEK	22,426,849,105
Net income for the year	SEK	662,389,058
At the disposal of the AGM	**SEK**	**33,291,570,062**

The Board proposes the following allocations of funds:

Carried forward	SEK	33,291,570,062
Total	**SEK**	**33,291,570,062**

The Board of Directors and the CEO hereby affirm that the consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, IFRS, as adopted by the EU and provide a true and fair view of the Group's financial position and earnings.

The Annual Report has been prepared in accordance with generally accepted accounting principles and provides a fair and true view of the parent company's financial position and earnings. The Board of Directors report for the Group and the parent company provides a true and fair overview of the development of the operations, financial position and earnings of the Group and parent company and describes material risks and uncertainty factors facing the parent company and the companies included in the Group.

Gothenburg, June , 2023

Eric Li (Li Shufu)
Chairman of the Board

Hans Oscarsson
Board member and CEO

Lone Fønss Schrøder
Board member

Daniel Li (Li Donghui)
Board member

Our audit report was submitted on June , 2023
Deloitte AB

Jan Nilsson
Authorized Public Accountant

Auditor's Report

This auditor's report is a translation of the Swedish language original. In the events of any differences between this translation and the Swedish original the latter shall prevail.

To the general meeting of the shareholders of Geely Sweden Holdings AB corporate identity number 556810-9010

Report on the annual accounts and consolidated accounts

Opinions

We have audited the annual accounts and consolidated accounts of Geely Sweden Holdings AB for the financial year 2022-01-01–2022-12-31. The annual accounts and consolidated accounts of the company are included on pages 20–91 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2022 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2022 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the parent company and the group.

Basis for Opinions

We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Other Information than the annual accounts and consolidated accounts

This document also contains other information than the annaul accounts and consolidated accounts and is found on pages 1–19. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, The Board of Directors and the Managing Director are responsible for the assessment of the company's and the group's ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

Auditor's responsibility

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

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual accounts and consolidated accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of the company's internal control relevant to our audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board of Directors and the Managing Director.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting in preparing the annual accounts and consolidated accounts. We also draw a conclusion, based on the audit evidence obtained, as to whether

any material uncertainty exists related to events or conditions that may cast significant doubt on the company's and the group´s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the annual accounts and consolidated accounts or, if such disclosures are inadequate, to modify our opinion about the annual accounts and consolidated accounts. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause a company and a group to cease to continue as a going concern.

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

We must inform the Board of Directors of, among other matters, the planned scope and timing of the audit. We must also inform of significant audit findings during our audit, including any significant deficiencies in internal control that we identified.

Report on other legal and regulatory requirements

Opinions

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Managing Director of Geely Sweden Holdings AB for the financial year 2022-01-01–2022-12-31 and the proposed appropriations of the company's profit or loss.

We recommend to the general meeting of shareholders that the profit to be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

Basis for Opinions

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor's Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Responsibilities of the Board of Directors and the Managing Director

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group's type of operations, size and risks place on the size of the parent company's and the group's equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company's organization and the administration of the company's affairs. This includes among other things continuous assessment of the company's and the group´s financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company's financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors' guidelines and instructions and among other matters take measures that are necessary to fulfill the company's accounting in accordance with law and handle the management of assets in a reassuring manner.

Auditor's responsibility

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company's profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company's profit or loss are not in accordance with the Companies Act.

As part of an audit in accordance with generally accepted auditing standards in Sweden, we exercise professional judgment and maintain professional scepticism throughout the audit. The examination of the administration and the proposed appropriations of the company's profit or loss is based primarily on the audit of the accounts. Additional audit procedures performed are based on our professional judgment with starting point in risk and materiality. This means that we focus the examination on such actions, areas and relationships that are material for the operations and where deviations and violations would have particular importance for the company's situation. We examine and test decisions undertaken, support for decisions, actions taken and other circumstances that are relevant to our opinion concerning discharge from liability. As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss we examined whether the proposal is in accordance with the Companies Act.

Gothenburg, June 2023
Deloitte AB

Signature on Swedish original

Jan Nilsson
Authorized Public Accountant

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