Annual Report 2022

Excellence beyond Manufacturing

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»At Aenova, we are committed to our customers and to patients around the world every day. As a contract developer and manufacturer behind the major international pharmaceutical and healthcare brands, we always produce for the health and well-being of patients and people worldwide. Our mission is to fulfill this task with the highest quality and delivery reliability at competitive prices, in line with our motto ‘Excellence beyond Manufacturing’.«

Preface

Dear Readers,

I am delighted to share the Aenova 2022 Annual Report with you.

After a year of unprecedented challenges during the Covid-19 pandemic and nationwide lockdowns, it could have seemed that 2022 was to become a year of gradual return to normal. We all know now that with the invasion of Russia in the Ukraine, the ensuing energy crisis, supply chain disruptions and the return of cost inflation on levels not experienced in several decades, 2022 turned out to bring its own challenges about. Such macroeconomic factors put businesses to the test, and it brings to the forefront how resilient our business model was and is. For our over 400 customers, over 3,000 products and over 25,000 SKUs, we continued to deliver under strenuous supply chain conditions, found alternative routes of supply or increased safety stock levels to continue delivery and get products to patients and health care providers. As inflation continued to soar, we asked all of our customers for price increases to collaboratively share the cost burden, never with the objective to enrich ourselves, but purely with a view to safeguard the business for the long term. In order to avoid future surprises of price increases, we proposed new pricing mechanisms to all of our customers, which put pricing on a fair, transparent and equitable basis. But more importantly stayed the course of our strategy. We continued to expand our capacities to allow for future growth and continue to grow our technology offering to increase our competitiveness in the market. We inaugurated a full new aseptic manufacturing facility for high-speed PFS and vial filling including large molecule fill and finish. Our new high-speed, large volume solid plant expansion in Tittmoning went online, and we continued to build our expansions in Kirchberg for softgel capsule packaging. We made good progress in Carugate building a high-speed liquids and semi-solid manufacturing or in Regensburg establishing a future high-potent manufacturing to come online in 2024 and 2025 respectively. This strategy of capacity expansion and capability extension through the introduction of new technologies and superior development service offering continues to serve us very well. Financially, perimeter adjusted for the closure in 2023 of the site in Wolfratshausen[1], for the first time ever, we grew the business double-digit on the top-line, while adjusted Ebitda only declined by 2% vs previous year. Order book continued to expand to all-time highs, such that growth accelerated in Q3 and Q4 of 2022 and is expected to deliver a very strong 2023. With this background, and healthy financials we will continue to be able to live up to our first core value, “Customers and patients first”.

My admiration and gratitude goes to over 4,100 colleagues at Aenova, who have worked under economic uncertainty or social constraints under lockdown for two years now, and have never deviated from our mission.

Finally, a massive thank you to our customers, who continue to entrust us with their existing and new products, as well as suppliers, service providers and all other stakeholders who continue to make the Aenova Group fantastic place to work.

Jan Kengelbach
CEO Aenova Group

1 Numbers are shown including Wolfratshausen to compare to 2021

Dear Readers,

The Aenova Group achieved its strategic goals in what was a difficult year for the economy as a whole. The challenges in energy supply and supply chains were enormous in 2022 and yet the Aenova Group was able to remain able to deliver and meet customer demand. For a few years now, we have put in place a growth strategy to deal with increased customer demand from existing and new customers, and it is rewarding to see that despite all macroeconomic headwinds, the business has started to deliver double digit growth rates. More importantly, it continues to show its resilience in the face of these challenges. While adjusted Ebitda has not grown over the last two years, it has almost stayed at pre-pandemic levels, which is a remarkable achievement in this context[1].

The outlook for the Aenova Group is very promising and an incredibly strong order book bodes very well for the near-term future. The above-mentioned growth strategy of expanding manufacturing capacities, R&D services and new capabilities paired with solid financials, make Aenova a very attractive service provider and competitive player in the CDMO market.

At the same time, Aenova has made impressive strides as an employer of choice. New HR processes have been put in place and internal communication improved, strengthening Aenova as a group and making it an attractive employer. Many initiatives in 2022 targeted the core Aenova values “Everyone matters” and “Stronger as a group”. This is recognized by our colleagues, but also potential new recruits as well as the general press.

As in previous years, I would like to express my sincere thanks to the over 4,100 employees, who all – each in his or her own place – make a contribution to serving our customers. And ultimately to help patients around the world.

Dr. Ewald Walgenbach
Chairman of the Supervisory Board

1 Perimeter adjusted for the closure of the site in Wolfratshausen

The Year in Brief

Excellence beyond Manufacturing

2022 was the first post-Covid pandemic year and also the year the war in Ukraine broke out.

The Aenova Group was able to keep our supply chains robust to serve rebounding customer demand. Our employees worked tirelessly to ensure deliveries to our customers under much more difficult circumstances.

While the robustness of the operations and the ability of our colleagues were challenged by external factors, we were for the most part able to live up to our corporate motto “Excellence beyond Manufacturing”. In this very special macro-economic environment, we continued to execute our strategy consisting of a comprehensive performance improvement approach along the dimensions of operational excellence, commercial excellence and organizational excellence to achieve highest customer satisfaction and best possible outcome for patients.

Our strategy rests on our first and key focused value: “Customers and patients first”.

Operational Excellence

While on-time delivery rates inevitably had to decline as a result of complex supply chains, we were able to maintain our very good quality rate.

Commercial Excellence

We enhanced our sales team with the addition of Neil Jones, our new Chief Commercial Officer, who has refreshed our Commercial Strategy for the Group. This includes the introduction of a dedicated team, focused on relationship management and communication with our customers. This team will act as the customer’s advocate within the sites and be the link between Business Development and Operations, allowing Business Development to focus on new business opportunities. In addition, we have listened to the feedback from our customers, with the creation of an index-based pricing mechanism to put pricing adjustments on a transparent and fair basis.

The year 2022 was characterized by strong performance from our sales division, which recorded a 7.5% increase in revenue. This success is reflected in a year-on-year increase from EUR 697 m to EUR 749 m. Our stronger focus on development services resulted in a 20% increase in the number of new molecules being worked on by our development teams. Finally, our order book for the coming years is stronger than ever, as reflected in a 22% growth over the previous year.

Organizational Excellence

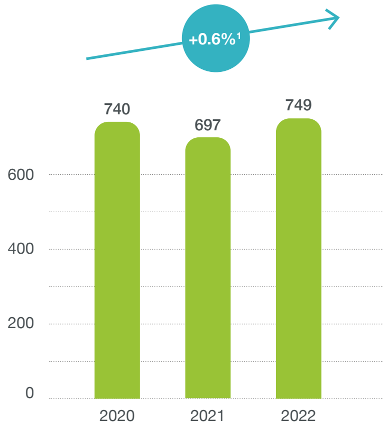
We further empowered our organization to become an employer of choice with our new HR cluster structure, the introduction of people development and performance management processes for all colleagues at Aenova as well as a large number of initiatives to increase loyalty, retention and motivation.

€97m
Adj. EBITDA

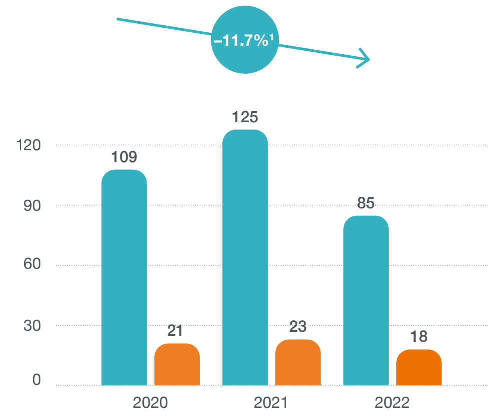
€749 m
Net Sales 2022

+22%
Order book

Sales development
in € m



Peak sales & win rate
in € m, %



In 2022, we achieved the following key milestones

+ Despite an increased revenue by +7.5% from EUR 697 m to EUR 749 m, our EBITDA declined from EUR 107 m to EUR 97 m by 9%. Future perimeter adjusted for the closure of our site in Wolfratshausen, the business grew by 10% from EUR 651 m to EUR 714 m, while EBITDA declined by 2% from EUR 104 m to EUR 102 m.

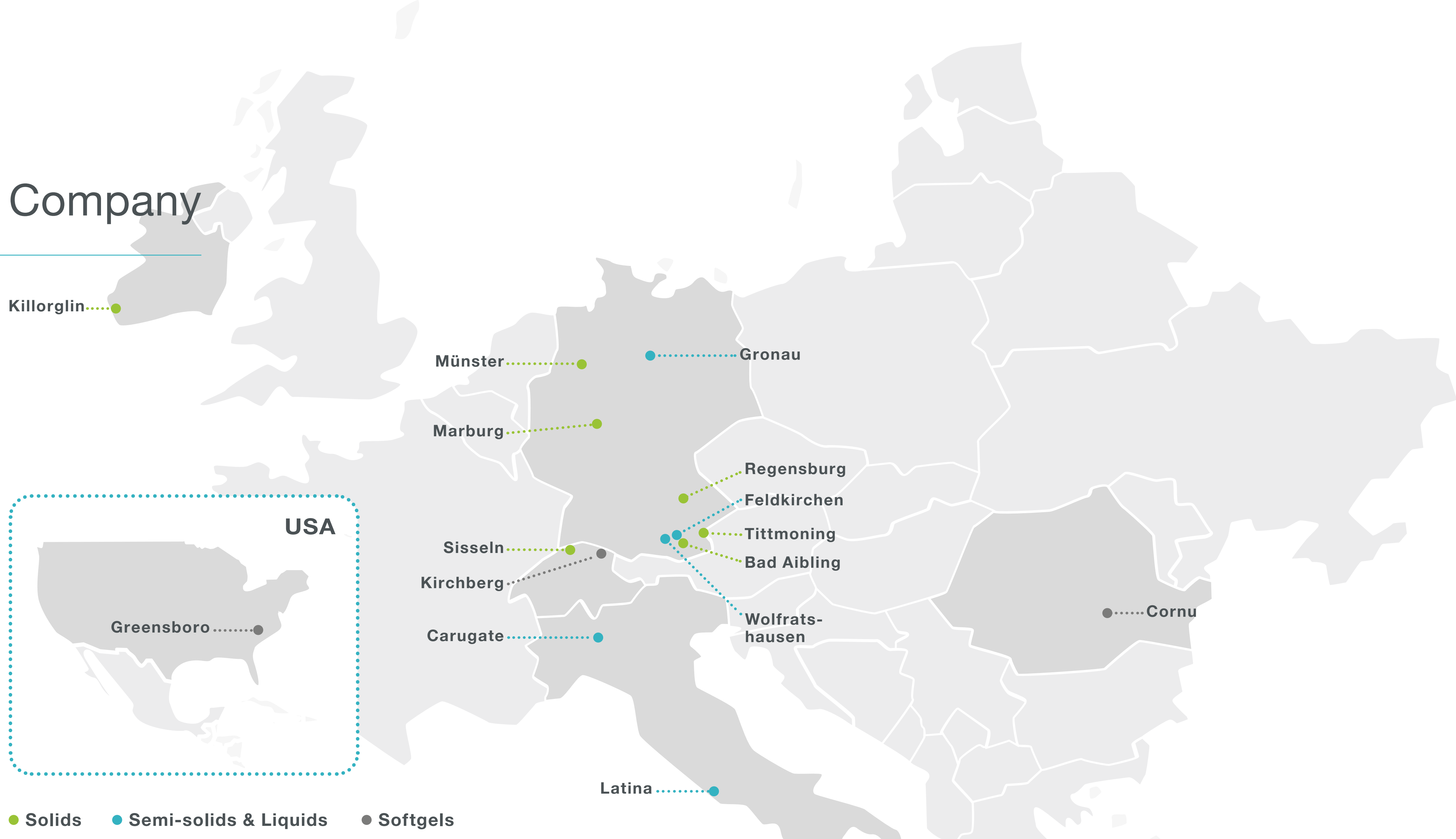
+ We made very meaningful progress in capabilities with our “differentiation through innovative technology” strategy on our way to position Aenova as a global leading small molecules and innovator CDMO champion including fill and finish of large molecules with steadily growing success. Details are shown on the Business Unit pages.

+ Within Aenova’s major strategic and investment plan 2020–2025, the next expansion steps in development, capacity expansion and capability extension and sustainability were implemented or completed in a large number of sites:

- Expansion of **production capacity for solid dosage forms at the Tittmoning** site to up to 10 billion tablets per year. The new production building with an investment sum of EUR 35 m covering more than 3,100 square meters was commissioned in the fall of 2021 and was already operating at a high capacity in 2022.
- Massive expansion of **capacities for solids production in the area of high potent, cytotoxic products** (up to OEB 5) at the Regensburg site with an overall invest of EUR 25 m. The foundation stone for the new building was laid in the first quarter of 2022, and GMP-compliant production is planned for 2024.
- Massive further activities were initiated around the substantial **expansion of sterile production** at the Latina site until 2025: qualification of second F&F sterile line, packaging line for prefilled syringes (PFS), capacity expansion for intramammary syringes for Animal Health, expansion penicillin solids and preparing Annex 1 readiness.
- Modernisation and **capacity expansion** at the Carugate site until 2024 with a **new high-speed liquids and tube lines** with a capacity of more than 10 million units per year, as well as a new high-speed tube line, a new turbo emulsifier and a new warehouse with an investment of EUR 10 m.
- Continuous **expansion of the sustainability strategy** with new photovoltaic plants at several sites.

1 The number of the arrow represents CAGR 2020-2022.

Company



Capacity

22 bn tablets/capsules

1.4 bn blisters

11 bn softgel capsules

220 m semi-solids/liquids

220 m sterile liquids (vials, ampoules, syringes)

Global reach
15 manufacturing sites worldwide, delivering into 80+ countries

Manufacturing Footprint
14 EU sites,
1 US site,
11 sites Pharma FDA approved,
2 sites Food FDA

Product Types
Rx (originator and generics products), OTC, Food supplements, Medical devices, Cosmetics, Animal health

Net Sales 2022
€ 749 m

Employees
~ 4,100

Aenova at a glance

The Aenova Group is a leading global contract manufacturer and development services provider for the pharmaceutical and healthcare industry. Our services include end-to-end manufacturing and development of all dosage forms and potency levels (ranging from nutraceuticals to high-potency) out of 15 sites in Europe and the US.

With our comprehensive know-how, many years of experience, well-trained staff of c. 4,100 employees, innovative technologies and highest quality standards we are a reliable, long-term partner to pharmaceutical and consumer health care customers around the world, both in the human and veterinary healthcare market.

Aenova is the #1 CDMO in Europe for solid dosage forms, #2 globally for softgel capsules, #1 in Europe in semi-solid dosage forms and among the top 3 globally in veterinary products in addition to a leading position in sterile manufacturing.
Aenova services over 400 customers including 7 of the top 10 human health pharmaceutical companies and 7 of the top 10 animal health companies. Aenova enjoys a strong and loyal customer base, with the average customer relationship tenure among the top 20 customers of c. 25 years.

Aenova was created 2008, as a merger of pharmaceutical companies Dragenopharm and Swiss Caps, forming the nucleus of the Group. In 2012, the Temmler Group was acquired, and at the beginning of 2014 Haupt Pharma Group was added. Since 2012, Aenova has been owned by the private equity company BC Partners.


GEA
SERVOLIFT

Portfolio & Structure

Full-service CDMO for all customer needs

As a "one-stop shop" Aenova offers end to end full CDMO services of all dosage forms and manufacturing technologies from development, clinical trial supply to commercial, small and large volume manufacturing until packaging services. The offering includes small and large molecules.

With its Business Unit (BU) structure, Aenova supports its customers with the added value of all of our 15 manufacturing sites with value-adding synergy effects.

With a strong Development and Manufacturing Science & Technology team Aenova provides cross-divisional support in the areas of drug product development, analytical development, clinical trial supply management, regulatory support and technical transfer.

BU Solids
All key solid dosage forms and technologies incl. anti-infectives, hormones & high potent APIs. Packaging

BU Semi-solids & Liquids
Sterile & non-sterile technologies incl. oral and topical liquids, creams, ointments, vials, ampoules, lyophilized vials, sterile powder for injections, prefilled-syringes

BU Softgel Capsules
Pharmaceutical (incl. high potent APIs) and OTC products, VegaGels® and neutraceuticals

Net sales split per Business Unit

- Solids 54%
- Semi-solids & Liquids 31%
- Softgel Capsules 15%

Reasons why customers are choosing Aenova

1 One-stop Shop
2 Competitive
3 Industry Consolidator
4 Experience and Quality
5 Reliable Partnership

Specialized Centers of Excellence for best service experience

Aenova is a one-stop shop for the whole life cycle of the product from development, scalable to commercial production. Our 15 sites are specialized by dosage form and technology offering to best meet customer needs in terms of innovative technologies, accelerated time to market and most cost efficient manufacturing.

15 high quality manufacturing sites, delivering into **80+** countries

7 development centers with **170+** scientists and analysts

Differentiated technologies for innovative products

We are expanding into new technologies and innovative solutions to enable novel drug therapy. In this way, we are meeting the increased demand for special products. In 2022 these innovative technologies have come to life with client projects.

- Dry powder inhalation
- Capsule microdosing
- Encapsulated mini tablet systems
- Multiple unit pellet system
- Hot melt extrusion
- Lyophilization / Co-precipitation
- Micronization / Particle design
- Soft gelatin capsules

Business Unit Solids

Premier provider of all conventional and specialty dosage forms from development to commercial production

Aenova's largest Business Unit is the BU Solids with EUR 423 m annual sales, around 1,900 FTE, 7 manufacturing sites, 4 development centers of excellence, a capacity of over 22 bn tablets and hard capsules, – covering all key solid dosage forms and technologies including anti-infectives, hormones and high potent APIs.

Aenova is the ideal partner for development and production of virtually all types of solid dosage forms and APIs up to OEB 5.

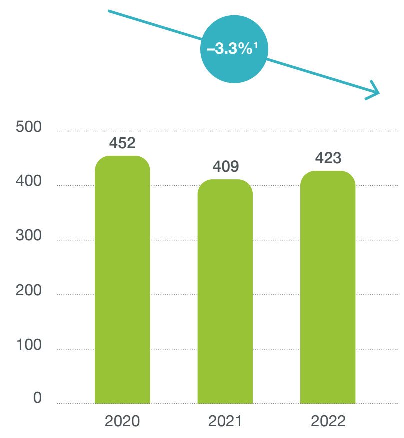
Full-service manufacturing and supply-chain services are integrated with development, technical transfer and analytical services.

Within the BU Solids Aenova offers to its customers a wide range of innovative technology platforms in which we have made great progress in 2022, e.g.

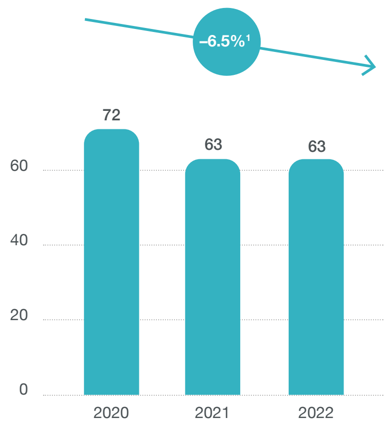
- Dry Powder Inhaler (DPI) and low-dosed capsule filling
- Encapsulated mini tablets systems (EMTS)
- Multiple unit pellet systems (MUPS)
- Hot melt extrusion (HMT)
- Lyophilization / Co-precipitation
- Micronization / Particle design

These technologies help to overcome the challenges of bioavailability and solubility of certain active ingredients. This is not only important for new chemical entities (NCE), but also makes drugs more patient-friendly. Aenova is thus positioning itself as the partner of choice for its customers in development and commercial production.

Sales development
in € m



Adj. EBITDA
in € m



1 The number of the arrow represents CAGR 2020-2022.

Key Events 2022

Revenue increased by 3,4% from EUR 409 m to EUR 423 m, while EBITDA stayed flat at EUR 63 m.

In the Solids business unit, we have reached key milestones in 2022, which are aimed at capacity expansions as well as manufacturing capabilities. Above all, we continued to successfully expand our innovative technologies approach enabling innovative medicines and technologies.

Our key strategic projects continued to progress according to plan. Above all, we have started operations with the EUR 35 m, 3.5 bn tablet capacity expansion in our high volume plant in Tittmoning and continued to ramping up volumes.

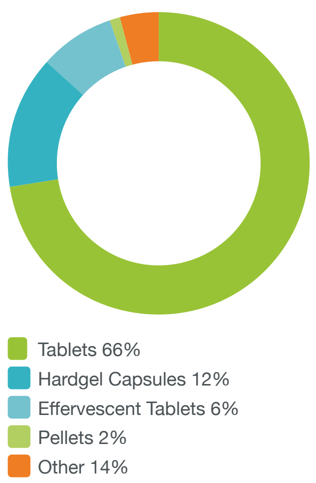
At our Regensburg site we laid the foundation stone of the overall EUR 25 m expansion into a new cytotoxic building, which will be opened in 2023. We also commissioned a new capsule filling line there, which enables a maximum output of 200,000 capsules per hour.

We finalized our dry powder inhaler platform in Münster and expanded our micro-encapsulation technology platform.

Within our "Fit4Future"-project in Bad Aibling we installed a new blister line and increased efficiency. We set the kick-off for effervescent tablet manufacturing platform.

In Sisseln our new development pilot plant went live and we strengthened the role of the site as Aenova's innovation center (e.g. for hot melt extrusion, particulate systems). Furthermore, we launched high speed packaging and automation at Sisseln.

Net split per product type



Business Unit Semi-solids & Liquids

#1 in Europe for semi-solids with market leading capabilities in sterile and non-sterile liquids

The Business Unit Semi-solids & Liquids with EUR 243 m annual sales and round 1,600 FTE comprises 5 manufacturing sites and 2 development centers. The portfolio encompasses sterile dosage forms (liquid vials, ampoules, pre-filled syringes, lyophilized vials and aseptic filling of powders, including fill & finish of biologics and of oncology products) as well as non-sterile liquids (oral, nasal, topical) and semi-solids (cream and ointments in tubes, jars and sachets, suppositories).

Semi-solids & non-sterile liquids

Aenova has extensive expertise and state-of-the-art development laboratories and production facilities to develop and commercially manufacture semi-solid products and non-sterile liquids.

From topical formulation, oral liquid, vaginal or rectal dosage forms, Aenova can offer a broad range of solutions that will meet the needs of our customer's pharmaceutical product, medical device or cosmetic product.

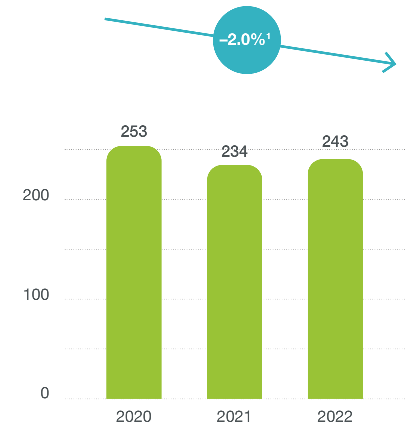
Sterile technologies

Aenova is striving to be a premier solution partner for sterile dosage forms expanding into biologics fill & finish and vaccines with 4 FDA approved facilities offering high quality injectables for human health and animal health products.

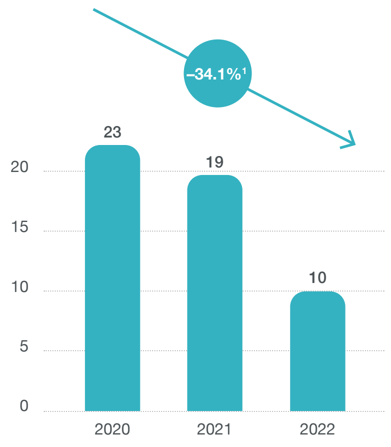
Our sterile services include specialized capabilities for:

- Beta-lactam antibiotics (penicillins, cephalosporins)
- Intra-mammary syringes for animal health products
- Cytotoxics
- Fill & finish of biologics into vials and pre-filled syringes

Sales development
in € m



Adj. EBITDA
in € m



1 The number of the arrow represents CAGR 2020-2022.

Key Events 2022

For the BU Semi-solids & Liquids, 2022 was not without challenges, especially at the Wolfratshausen and Gronau sites, while Latina, Feldkirchen and Carugate continued to deliver on their strategic plan.

Unfortunately, prevailing quality issues at our site in Wolfratshausen and the subsequent remediation led to a quasi four-month standstill of aseptic production. Thanks to a massive effort of the site team, advisors and corporate colleagues, quality remediation work was completed in record time and GMP compliance ascertainted. Nonetheless, in light of the low profitability of the site, and the impending investments under annex 1 regulations, the difficult decision was made to close the site by the end of 2023. In Gronau, the same decision was made for the aseptic manufacturing, as again, investments in annex 1 did not prove to have a reasonable payback.

Revenue increased by 3.8% from EUR 234 m to EUR 243 m, EBITDA declinded by 47.4% from EUR 19 m to EUR 10 m.

At our Latina site we significantly expanded our key capacities in sterile fill and finish (F&F) capacity with the finalizing of the new Fill&Finish area and its successful inspection by the Italian authorities. Furthermore we kicked off the project to extend capacities for intramammary syringes at the Latina site (capacity will to come live in 2023).

At our Carugate site we completed the installation of a new high speed non-sterile liquid line for oral/topical liquids. Also we started capacity increase for compounding with a new 5,000l turbo emulsifier as well as the building of a new warehouse.

Net split per product type

Business Unit Softgel Capsules

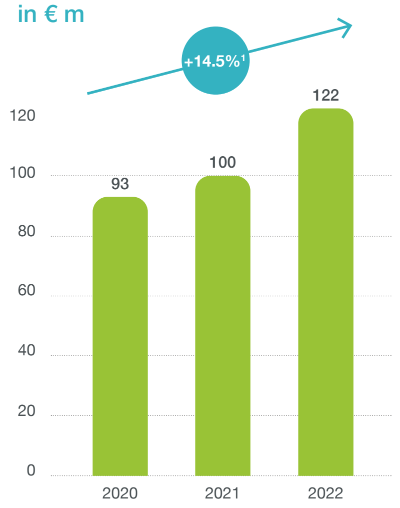
#2 globally for soft gels with a focus on "high-end" pharma and "one-stop shop" softgel capsules

The Business Unit Softgel Capsules with EUR 122 m annual sales, over 500 FTE, 2 soft capsule sites and around 11 bn installed capacity drives a dual strategy with a Romanian site for nutraceuticals & OTC and a Swiss site for pharmaceutical products. According to our "one-stop shop" strategy the BU Softgel Capsules offers all technologies around softgel capsules incl. VegaGels®, blister and bottle packaging, serialization, laser & ink printing, film coating and analytic services.

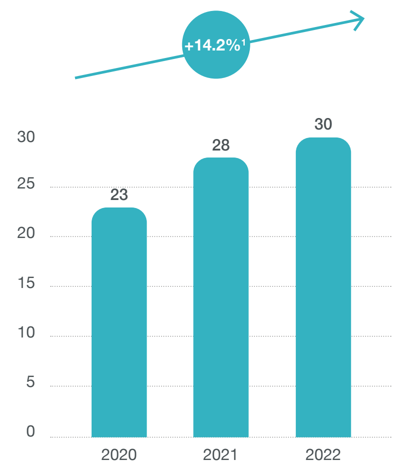
With development and manufacturing capacities including high potent active pharmaceutical drugs at our Center of Excellence in Kirchberg/Switzerland and OTC and consumer healthcare products at our manufacturing site in Cornu/Romania, Aenova offers a complete service for softgel capsules in any formulation and any capsule design, color and size, also in vegetarian and vegan form.

Another part of our Business Unit Softgel Capsules is our Greensboro/USA site. As a strategic distribution hub for our European customers, we are serving the US and Canadian market and customers out of this site with bulk and bottle and blister packed products. There we have over 15 years of expertise in packaging fulfilling the US-FDA requirements not only for soft gel products.

Sales development
in € m



Adj. EBITDA
in € m



1 The number of the arrow represents CAGR 2020-2022.

Key Events 2022

For the BU Softgel Capsules, 2022 was another strong year. Revenue increased by 22.0% from EUR 100 m to EUR 122 m, while EBITDA expanded from EUR 28 m to EUR 30 m or 7.1%.

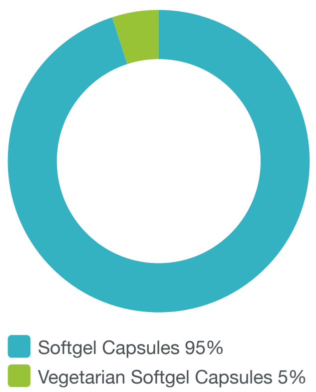
At our site in Kirchberg, the preparatory work for the installation of a state-of-the-art blister line equipped with special features was completed. In addition, we have installed photovoltaic systems and charging stations for electric cars.

At our site in Cornu, we were able to complete the evaluation of a gummy production line, which will be online in 2024. With the production offer in the area of gummies, we will then achieve a new unique selling proposition on the market.

At our site in Greensboro, the completely renovated production area for the filling of Rx products into bottles was put into operation.

We were also able to implement our strategy of strengthening innovative technologies and the development area in the Softgel Capsules BU in partnership with Microcaps, an award-winning start-up with a patented high-precision microencapsulation platform.

Net split per product type



aenova

Development Services

Full service for development and technology transfers across the entire product life cycle

Our range of development services stands out in three main respects:

1. Co-location of development and commercial supply
2. Fully integrated GMP development units
3. Tailor-made flexible solutions

We offer our service from

7 Development Centers of Excellence

covering all dosage forms

Key Figures 2022

- > **210** Technology Transfers
- ~ **100** Development Projects
- > **160** Product Lifecycle Management Projects
- > **170** Development & Tech Transfer FTEs

We know that quality, speed to market and on-time delivery are key to success of our clients. Our systematic processes for development and technology transfer projects ensure that we reliably deliver impeccable quality, on time.

The integration and close alignment of Development & TechTransfer Services with our commercial network allows us to provide a "one-stop shop" experience and a seamless transition of projects from development to commercial scale. With this we offer highest standards in project timelines, risk control and resource efficiency.

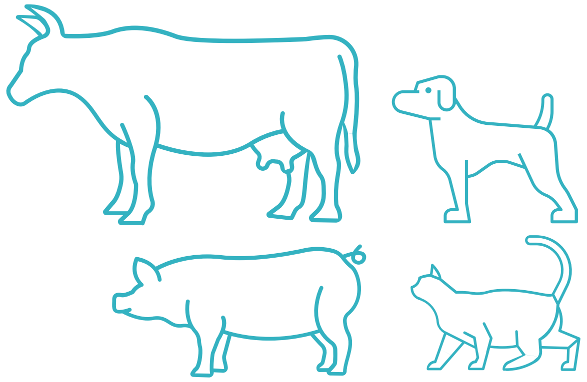
As a service provider for innovative medicines, we are constantly expanding into new technologies and innovative formulation platforms. In this way, we are meeting the increased demand in the fields of high-potent APIs, dry powder inhalation / low-dosed capsule filling, controlled release, bioavailability enhancement.

15 sites with Technology Services on site

for seamless tech transfer and product life-cycle management

Animal Health

Farm and companion animals



One of the leading Animal Health CDMOs

Aenova is one of the world's leading CDMOs for animal health. With 9 manufacturing sites approved for veterinary products, we offer end to end services from development to packaging for wide variety of pharmaceuticals for companion and farm animals.

In the farm animal sector, our capabilities for antibiotics in pre-filled syringes in addition to a wide variety of dosage forms are unparalleled.

In the area of companion animals, we have unique capabilities for anti-parasitic products and offer dosage forms for the treatment of different acute and chronic diseases: pain, dermatology, infections and others.

Main therapeutic areas we offer:
- Anti-infectives
- Parasiticides
- Hormones
- Food supplements
- Conventional APIs
- Biologics

Our sites of course work in compliance with cGMPs, they are EU certified and approved by the US FDA.

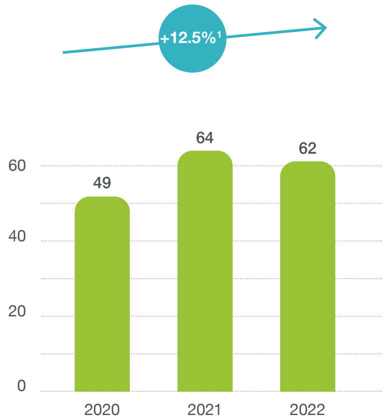
Our animal health business stays nearly as strong as previous year.

Revenue declined by 3.1% from EUR 64 m to EUR 62 m.

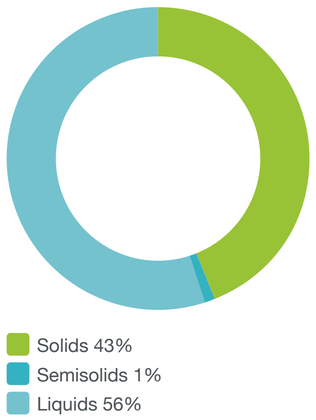
Key Figures 2022

- CDMO partner of almost all top 20 animal health companies worldwide
- Global market coverage of all main countries (US, EMEA, LATAM, Asia, RoW)
- Manufacturing capabilities for almost all dosage forms for animal health
- 9 manufacturing sites for animal health

Sales development
in € m



Animal Health sales per dosage form
in %



1 The number of the arrow represents CAGR 2020-2022.

Human Resources

4,100
employees

Our employees are our greatest asset

Aenova employs around 4,100 people from 60 nations who give their best every day to ensure the safe supply of important and sometimes life-saving medicines to patients worldwide.

47%
women

53%
men

60
nations

Excellent know-how, experience and utmost commitment

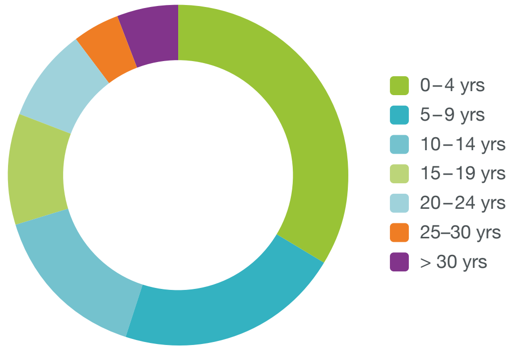
Our employees are distinguished by many years of experience in their work environment and are highly trained experts in their field. The successful mix of different age groups and professional backgrounds brings together great experience, creative spirit and agility.
More than 170 employees in our Aenova network are sientists or analysts with excellent scientific training and experience. In addition, Aenova is a training company and thus actively engages in the vocational training of the next generation of professionals. In this area, we regularly receive annual awards from local chambers of commerce for outstanding training results.

charta der vielfalt UNTERZEICHNET

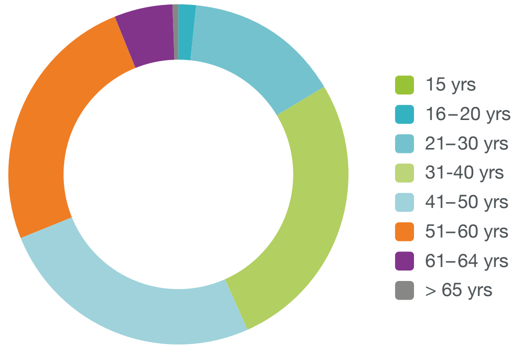
Aenova participates Diversity Charter

The diversity of society is increasingly shaping the world of work. Companies can only be successful today if they recognize, promote and know how to take advantage of this diversity. After all, the different skills and talents of all employees opens up opportunities for innovative and creative solutions. Aenova is participant of the "Diversity Charter", a voluntary commitment to diversity.

Years of Service by Age group



Age structure



Our main achievements

In 2022, we have further developed the Aenova corporate culture, e.g. by deeper embedding the corporate values and the set-up of new HR processes. This includes huge improvements regarding internal communication, e.g. with the new internal Aenova staff newspaper "Beyond Manufacturing" and the conception of a new Aenova Corporate Intranet.

This also includes

- Building internal recruiting capacity for active sourcing and developing an external talent pipeline
- Introduction of skills/competencies assessments in recruitment processes
- Structured approach to reducing absenteeism
- Conception of a corporate health care system and the development of a new employer brand
- Introduction of a feedback/target process, including training of managers
- Initial pilot testing of a future talent/succession management process
- Co-design of the introduction of group-wide salary bands

Corporate Social Responsibility

Responsible and sustainable

At Aenova, Corporate Social Responsibility (CSR) is an integral component on our journey to achieve our claim "Excellence beyond Manufacturing". We are operating on a global scale, and as a global corporate citizen in the healthcare manufacturing industry, we are aware that our operations impact ecosystems, communities and workplaces, marketplaces, and supply chains alike. We therefore strive to operate in a sustainable, compliant, and socially responsible manner. At Aenova, we strive to be a better corporate citizen, a better employer and a better company every day.

Aenova is Participant of UN Global Compact
Aenova supports the principles and goals of United Nations Global Compact, to which more than 19.000 companies worldwide already belong.

The CSR policy of Aenova is based on our support for the 10 UN Guiding Principles for Human Rights, Labour Standards, Environment and Anti-Corruption and the 17 Sustainable Development Goals (SDGs).

Joint Aenova donation of

100.000 €

for Ukraine

Two weeks after the start of the terrible war in Ukraine, Aenova has launched an in-house donation portal. Aenova employees quickly donated EUR 50,000, which Aenova doubled to EUR 100,000 in line with Aenova's "Stronger as a group" value. The joint donation went to the official donation portal "Deutschland hilft", which supports the most important aid organizations working in Ukraine.

Silver medal in EcoVadis sustainability rating

Aenova achieved silver status the 2022 EcoVadis sustainability rating. This documents the Aenova Group's continuous improvement of its sustainability in the categories "environment", "labor and human rights", "ethics" and "sustainable procurement". With a percentile of 84, Aenova is among the top 25 percent of companies assessed by EcoVadis.

Our commitment consists of:

Health and safety

- We are continually investing in relevant certificates.
- We permanently drive initiatives, amongst them behavior-based safety, holistic risk management, root cause analysis and hazards identification.
- We monitor the full compliance status of our sites by means of internal corporate HSES audits.
- We regularly trained key documents relevant for e.g. workplace risk assessment, occupational health, explosion protection.
- As a positive proof of our actions, we went from LTIR (Lost Time Injury Rate) of 2 in 2020, 1,3 in 2021 to 1,2 in 2022.

Workplace

- We do not tolerate any form of discrimination based on gender, race, origin or any other personal characteristics.
- We guarantee equal opportunities to all applicants and employees for their career path within Aenova.
- Diversity is our daily normal: employees from 60 nations are working at Aenova.

Environment

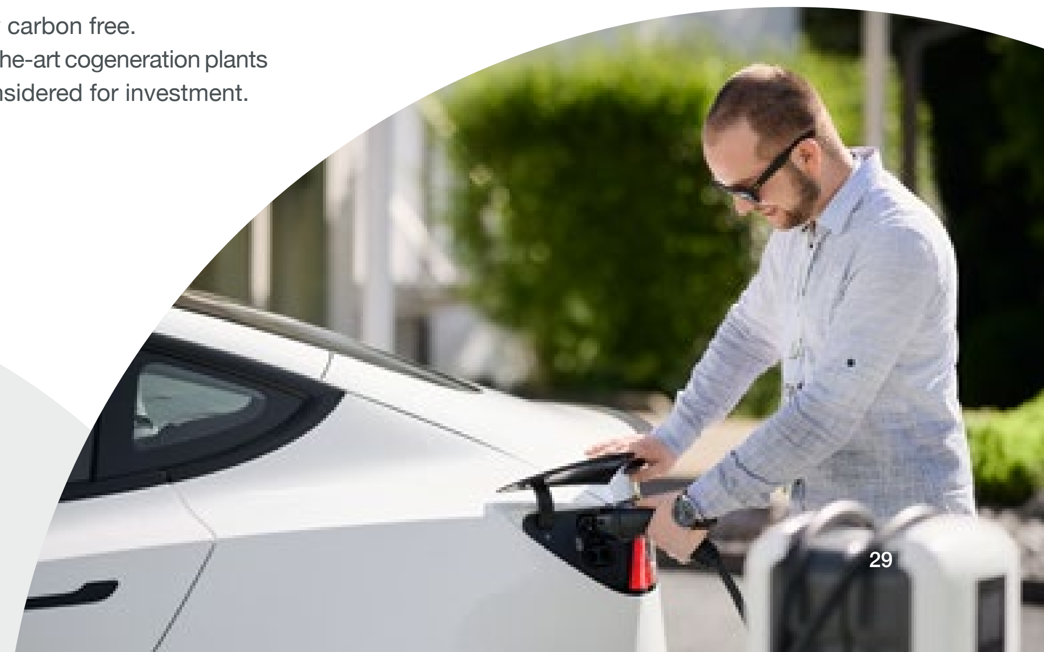
- We continuously reduce our industrial emissions, whether it be in the form of solids, liquids or gases.
- In 2022, we fine-tuned greenhouse gas emissions scope 1, 2 and even 3.
- Many Aenova sites are certified in ISO 14001 (environment) and ISO 50001 (energy).
- We use hydropower energy and renewable energy generation with solar panels on sites on our path to "carbon neutrality".
- 1 Aenova site is already fully carbon free.
- 4 Aenova sites have state-of-the-art cogeneration plants with further plants being considered for investment.
- 4 Aenova sites are equipped with solar panels, expansion at further locations is upcoming.
- 2 Aenova sites put e-car charging stations in place so far.
- 5 Aenova sites provide biological or physiochemical wastewater treatment.
- Periodic on-site energy audits regularly identify further potential for optimization.

Sustainability

- We are member of MSC (Marine Stewardship Council).
- We are continuously tracking environmental data via Ecodesk for key clients.
- PSCI (Pharmaceutical Supply Chain Initiative) readiness is shown by client audits.
- PIE (pharmaceuticals in the environment) assessment by some key clients led to very positive result and acceptance.
- We regularly report and monitor ESG-relevant KPIs internally.
- We work with holistic and systematic quality management systems.

Community Engagement

- As a global company with a large number of local production sites, we want to make our commitment felt locally. Most of our sites make a significant contribution to local social engagement, e.g. for the Caritas social warehouse or local "Tafeln", cooperation with workshops for the disabled, scientific institutions and sports clubs. As Aenova Group, we support this diversity of social commitment.



Our Management

CEO Aenova Group
Jan Kengelbach
Experience and Education Previously CFO at Aenova. Partner with BC Partners in London, the private equity-led majority shareholder of the Aenova Group. Director at AlixPartners. Managing Director and CFO of the Byrd Hoffman Water Mill Foundation. Strategy consultant with McKinsey & Co. Engineering Science master's degree, Mechanical Engineering master's degree, MBA, Certified Restructuring and Insolvency Advisor (CIRA).

CFO Aenova Group
Ralf Schuler
Experience and Education CFO of SURTECO SE's paper business unit. Various management positions within Elster Group, most recently as Executive Vice President Finance & Administration in charge of the international gas measurement and control business. Managing Director of Elster GmbH. B.A. (Hons), Master's degree.

SVP BU Softgel Capsules, Managing Director Site Cornu
Michael Ammann
Experience and Education Various managerial positions at Swiss Caps since 1997, one of the core cells of the Aenova Group. During his various activities in the food and pharmaceutical sector, he has gained the necessary knowledge for solid dosage forms and packaging and can also refer to extensive international experience. He has headed the Cornu site in Romania since 2009. Dipl.-Ing. with further qualifications in the fields of industrial engineering and SME management.

SVP Corporate HR
Tim Bauer
Experience and Education Various international managerial HR positions in production companies. MD HR with Schwarz Produktion. Vice President Human Resources with Vetter Pharma. Director Management and Organizational Development at Sky Deutschland. Leading project manager at Kienbaum Management Consultants. Master's Degree in Industrial and Organizational Psychology.

SVP BU Solids, General Manager
Christine Beck
Experience and Education Responsible positions in the pharmaceutical and healthcare industries as well as in the food and chemical industry. Head of Global Supply Chain in the food industry. Management of a large chemical production plant. Master's degree in mechanical engineering, certified SAP consultant.

SVP BU Semi-solids & Liquids, General Manager
Florent Bordet
Experience and Education Responsible positions in R&D, Manufacturing, Technical Operations, Site Management and Business Transformation at Catalent. Vice President Operations at Famar. Pharmacist, Master's Degree in Industrial Pharmacy.

SVP Global Quality
Dr. Macniell Esua
Experience and Education Various management positions in multinational companies in the pharmaceutical industry, including quality assurance, quality control, manufacturing, pharmaceutical development and global compliance management. Chief Compliance Officer of the Corden Pharma Group. Doctorate in pharmacy, Auditor, qualified as a QP under Art. 22 d. 75/319 EEC.

Chief Commercial Officer
Neil Jones
Experience and Education CEO and CBO at VMIC, Director Business Development Europe at Catalent Pharma, different roles at Patheon. Bachelor of Science in Chemistry, Post Graduate Certificate in Management.

Key Financials

Dear Readers,

The financial year 2022 has brought a pleasing recovery of customer demand reflecting positively in our order book which grew to a record high in the second half of the year.

On the other hand, industry-wide macro challenges occurred as a result of Covid-19 disruptions and the war in Ukraine. Highly agile supply chain management, operational excellence initiatives as well as new capacity in previously constrained areas helped us navigate these for the most part. In spite of these measures as well as substantial inventory cushions we put in place to secure on-time supply of products to customers and patients, however, desired lead times could not always be maintained. This limited a further increase of output. Overall, Aenova Group realized a sales growth of 7.5% to EUR 749.2 m.

At the same time, unprecedented cost inflation in respect of energy and all major categories of materials which kicked in after the beginning of the Ukraine war put significant pressure on our margins. Even tight cost management otherwise, combined with price increases which we were able to pass on to our customers mainly in the second half of the year did not compensate the negative EBITDA impact in full.

Whereas the divestment of a minority stake in a logistics company as well as the sale of a property had contributed positively to EBITDA in 2021, no major effects of this nature were recorded in 2022. In addition, extraordinary costs were incurred to remedy operational issues which occurred in one of our plants in 2022. In total, reported EBITDA declined from EUR 110.0 m in FY 2021 to EUR 86.6 m in 2022.

On a like-for-like perimeter, adjusted EBITDA amounted to EUR 97.0 m, EUR 9.6 m below prior year's reference value. Perimeter adjusted, i.e. excluding the Wolfratshausen plant which is going to be closed based on a decision taken in March 2023, adjusted EBITDA reduced less significantly from EUR 104.0 m to EUR 101.8 m (–2.2%).

Amortization of intangibles and right-of-use assets amounted to EUR 82.0 m in 2022, compared to EUR 58.6 m in the prior year. The increase is related to a EUR 27.2 m impairment loss on the goodwill of our SEL business unit which resulted mainly from a significant increase in the average cost of capital to determine the fair value of this cash generating unit (CGU).

Our 2022 financial result was EUR –50.1 m , compared to EUR –26.2 m in the prior year. This was driven by a one-time effect in 2021 related to a book value adjustment (EUR +20.5 m) as a result of the mid-year modification of our financing, as well as an expense related to the valuation of the derivatives embedded in our loan agreement as of 31st December 2022 (EUR –5.8 m) compared to a corresponding gain (EUR +5.9 m) in 2021.

2022 Consolidated Net Income amounted to EUR –45.6 m (2021: EUR 15.6 m).

The group achieved a cash flow from operating activities of EUR 50.7 m in 2022. The reduction versus prior year (EUR 82.0 m) resulted mainly from an increase of Working Capital. As a result of strong revenues towards the end of the year trade receivables increased significantly (EUR –12.3 m). The increase of inventory (EUR –29.2 m) was only partially compensated by an increase of trade payables (EUR +23.5 m). Income taxes paid (EUR –15.0 m) were affected by unplanned income taxes paid to the Romanian authorities (EUR –9.0 m) based on a claim which resulted in double taxation. An appeal procedure is under way and it is assumed that a refund will be made once this is concluded.

Investing cash flow of EUR –36.2 m (2021: EUR –38.8 m) was focussed on our growth platforms, e.g. further build-out of our high volume PFS/vial offering in Latina, the HPAPI expansion in Regensburg, implementation of packaging capacity in Kirchberg or the expansion of liquids capacity in Carugate.

Considering cash flow from financing activities of EUR –47.6 m (2021: EUR –40.2 m), total cash flow amounted to EUR –33.1 m (2021: EUR 3.0 m). Liquidity remained at a solid level of EUR 70.5 m as of the balance sheet data, including an undrawn revolving credit facility of EUR 50 m.

Notwithstanding the short-term EBITDA and cash impacts, the business has proven its resilience in a very challenging economic environment. Our people have worked relentlessly towards finding solutions to satisfy our customers and robust processes have been implemented to come out of a difficult year stronger. Considering the full year impact of the late 2022 price adjustments, new index-based pricing mechanisms being introduced in 2023 and the very solid order book, our outlook for 2023 is very positive. The group's liquidity situation is expected to remain stable. Additional capacity coming online in 2023 will further support our mid- and long-term growth.

Ralf Schuler
CFO Aenova Group

Consolidated Financial Statements of Apollo 5 GmbH

for the period January 1 to December 31, 2022

For computational reasons, rounding differences of one unit (KEUR, %, etc.) may occur in the tables.

The statements are prepared and certified in German. The English version is for translation purpose only.

Consolidated Statement of Comprehensive Income

KEUR	Note	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Revenues	5.1	749,158	696,833
Changes in inventories of finished and unfinished goods		2,471	-341
Other operating income	5.2	8,822	23,709
Cost of materials	5.3	-284,153	-252,465
Personnel expenses	5.4	-272,154	-262,565
Other operating expenses	5.5	-117,539	-95,205
Earnings before interest, tax, depreciation and amortisation (EBITDA)		**86,605**	**109,968**
Depreciation and amortisation expense	6.1, 6.2, 6.3	-82,034	-58,593
Earnings before interest and taxes (EBIT)		**4,571**	**51,375**
Financial income	5.6	80	27,132
Financial expenses	5.7	-50,214	-53,366
Earnings before income taxes (EBT)		**-45,563**	**25,140**
Income taxes	5.8	-618	-9,580
LOSS OF THE YEAR / NET INCOME		**-46,181**	**15,561**
Other comprehensive income			
Items that will never be reclassified to profit or loss			
Remeasurements of defined benefit plans, net of tax	6.10	16,664	5,922
		16,664	5,922
Items that may subsequently be reclassified to profit or loss			
Currency translation of foreign subsidiaries	6.9	2,023	-262
		2,023	-262
Other comprehensive income, net of tax		**18,687**	**5,660**
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD		**-27,494**	**21,221**

Consolidated Statement of Financial Positions

ASSETS

KEUR	Note	Dec. 31, 2022	Dec. 31, 2021
Intangible assets	6.1	268,069	301,062
Property, plant and equipment	6.2	243,581	245,303
Right-of-use assets	6.3	72,016	65,710
Other non-current financial assets	6.6	5,390	11,235
Other non-current assets	6.7	15,350	607
Deferred tax assets	5.8	52,551	56,381
Non-current assets		**656,957**	**680,298**
Inventories	6.4	81,729	52,249
Trade receivables	6.5	39,998	27,601
Contract assets	5.1	69,549	65,050
Income tax assets	5.8	1,012	1,961
Other current financial assets	6.6	13,270	8,780
Other current assets	6.7	16,063	14,220
Cash and cash equivalents	6.8	20,671	53,474
Current assets		**242,293**	**223,335**
Total assets		**899,250**	**903,633**

EQUITY & LIABILITIES

KEUR	Note	Dec. 31, 2022	Dec. 31, 2021
Share capital	6.9	25	25
Capital reserves	6.9	555,455	555,455
Accumulated loss	6.9	-572,395	-526,215
Other components of equity	6.9	8,542	-10,144
Equity		**-8,372**	**19,122**
Provisions for pensions and similar obligations	6.10	40,246	59,471
Other non-current provisions	6.11	835	800
Non-current financial liabilities	6.12	606,408	595,061
Other non-current liabilities	6.13	19,776	15,431
Deferred tax liabilities	5.8	73,741	80,636
Non-current liabilities		**741,006**	**751,399**
Trade payables		92,605	68,979
Income tax liabilities	5.8	8,133	6,056
Current provisions	6.11	3,162	3,807
Current financial liabilities	6.12	24,582	24,082
Other current liabilities	6.13	38,134	30,188
Current liabilities		**166,616**	**133,113**
Total equity and liabilities		**899,250**	**903,633**

Consolidated Statement of Cashflows

KEUR	Note	2022	2021
Net loss/income of the year		-46,181	15,561
Depreciation and amortisation/Write-ups	6.1, 6.2, 6.3	82,034	58,593
Income taxes	5.8	618	9,580
Financial result	5.6, 5.7	50,134	26,235
Changes in trade receivables	6.5	-12,281	5,848
Changes in contract assets	5.1	-4,296	-5,978
Changes in inventories	6.6	-29,240	-3,740
Changes in trade payables		23,498	8,135
Changes in provisions	6.10, 6.11	838	-6,275
Changes in other assets	6.6, 6.7	-12,030	5,362
Changes in other liabilities	6.13	12,596	-9,595
Income from the disposal of financial assets	5.2	-	-6,466
Income/expense from sale of property, plant and equipment and intangible assets	5.2, 5.5	-102	-4,259
Income taxes paid/received	5.8	-14,937	-11,014
Cashflow from operating activities		**50,651**	**81,985**
Acquisition of intangible assets	6.1	-1,712	-1,270
Acquisition of property, plant and equipment	6.2	-39,120	-55,491
Proceeds from the sale of property, plant and equipment and intangible assets	5.2, 5.5, 6.1, 6.2	4,636	11,317
Proceeds/payments from the issuance of loans	6.12	1	-184
Interest and dividend received	5.6	27	47
Proceeds from/payments for financial assets	5.2, 5.5, 6.6	-2	6,765
Cash flow from investing activities		**-36,170**	**-38,816**
Proceeds from borrowings	6.12	3,000	32,882
Proceeds from capital increases	6.9	-	-
Repayment of loans	6.12	-4,981	-4,677
Transaction costs related to loans	6.12	-	-1,888
Acquisition of non-controlling interests		-	-246
Payments for leasing liabilities	5.7, 6.12	-11,568	-10,808
Interest paid	5.7	-34,005	-55,452
Cash flow from financing activities		**-47,554**	**-40,189**
Change in cash and cash equivalents		**-33,073**	**2,980**
Cash and cash equivalents at the beginning of the period		**53,475**	**50,357**
Change in cash and cash equivalents	6.8	-33,073	2,980
Effect of foreign exchange rates on cash and cash equivalents		269	138
Cash and cash equivalents at the end of the period		**20,671**	**53,475**

Consolidated Statement of Changes in Equity

KEUR	Share capital	Capital reserves	Accumu-lated loss	Currency translation	Re-measure-ments	Total
As of Jan. 01, 2021	**25**	**555,455**	**-541,936**	**-3,556**	**-12,249**	**-2,260**
Net income	-	-	15,561	-	-	15,561
Other comprehensive income, net of tax	-	-	-	-262	5,922	5,660
Total comprehensive income	***-***	***-***	***15,561***	***-262***	***5,922***	***21,221***
Capital contribution shareholders	-	-	-	-	-	-
Transactions with minority shareholders	-	-	154	-	-	154
Other changes	-	-	6	-	-	6
As of Dec. 31, 2021	**25**	**555,455**	**-526,215**	**-3,818**	**-6,326**	**19,121**
As of Jan. 01, 2022	**25**	**555,455**	**-526,215**	**-3,818**	**-6,326**	**19,121**
Net loss	-	-	-46,181	-	-	-46,181
Other comprehensive income, net of tax	-	-	-	2,023	16,664	18,687
Total comprehensive income	***-***	***-***	***-46,181***	***2,023***	***16,664***	***-27,494***
Capital contribution shareholders	-	-	-	-	-	-
Transactions with minority shareholders	-	-	-	-	-	-
Other changes	-	-	-	-	-	-
As of Dec. 31, 2022	**25**	**555,455**	**-572,395**	**-1,795**	**10,337**	**-8,373**

Notes to the consolidated financial statements

1. Information about the company

The consolidated financial statements of the Company as of December 31, 2022, include Apollo 5 GmbH and its subsidiaries (collectively referred to as "AENOVA", the "Group" or the "AENOVA-Group"). Apollo 5 GmbH ("the Company") is a limited liability company under German law with its registered office at Berger Straße 8-10, 82319 Starnberg, Germany. Apollo 5 GmbH is registered in the commercial register of the local court of Munich under number HRB 199543.

The parent company of Apollo 5 GmbH is Apollo 8 GmbH, Starnberg, Germany. Apollo 8 GmbH is registered in the Commercial Register of the Local Court of Munich under number HRB 200075. The principal shareholder of Apollo 8 GmbH is Apollo 11 S.à r.l., Luxembourg. The ultimate controlling company is the fund BC European Capital IX, Guernsey, United Kingdom. The parent company, which prepares the consolidated financial statements for the largest and also smallest group of companies, is Apollo 8 GmbH, Starnberg, Germany (prev. year Apollo 11 S.à r.l.). These consolidated financial statements will be published in the Company Register.

The AENOVA Group is one of the world's largest pharmaceutical contract manufacturers in terms of development, production and marketing of medicinal products and food supplements. AENOVA operates a total of 15 production sites in six countries.

2. Basis of the preparation of consolidated financial statements

The consolidated financial statements were prepared in accordance with § 315e of the German Commercial Code (HGB) and with all International Financial Reporting Standards (IFRS) as applicable in the European Union (EU) at the time the financial statements were prepared, as well as in accordance with the publications of the International Financial Reporting Interpretations Committee (IFRIC).

The consolidated statement of comprehensive income has been prepared using the nature of expense method.

The consolidated financial statements are prepared in euros, which is the functional currency of the Group. Unless otherwise stated, all values are rounded up or down to the nearest thousand euros (KEUR).

These consolidated financial statements were approved and released for publication by management on 26 April 2023.

3. Significant accounting and valuation methods

The specific accounting policies, as described below, have been consistently applied to all periods and dates presented in these consolidated financial statements by the entities included in the consolidated financial statements.

3.1 Consolidation principles

The consolidated financial statements include all subsidiaries that are directly or indirectly controlled by Apollo 5 GmbH. The company obtains control if it can exercise control over the investee, is exposed to variable returns from its involvement with the investee and can affect the amount of those returns through its power over the investee. Intercompany profits and losses, expenses, and income as well as intercompany receivables and liabilities are eliminated while preparing the consolidated financial statements.

3.2 Scope of consolidation

In addition to Apollo 5 GmbH, the consolidated financial statements as of December 31, 2022, include a total of 22 subsidiaries (2021: 24 subsidiaries).

As of December 31, 2022, the following companies are included in the consolidated financial statements by way of full consolidation:

AENOVA-Group companies	Shareholding in % Dec. 31, 2022	Shareholding in % Dec. 31, 2021
Apollo 5 GmbH Starnberg, Germany	Parent Company	Parent Company
Aenova Holding GmbH Starnberg, Germany	100%	100%
Dragenopharm Apotheker Püschl GmbH Tittmoning, Germany	100%	100%
Swiss Caps Holding (Luxembourg) S.à r.l. Luxembourg, Luxembourg	100%	100%
Swiss Caps AG Kirchberg, Switzerland	100%	100%
Swiss Caps (UK) Ltd. (in 2022 closure) Doncaster, United Kingdom	0%	100%
Aenova France SAS (in 2022 merger to Swiss Caps AG) Paris, France	0%	100%
Swiss Caps GmbH Bad Aibling, Germany	100%	100%
Aenova North America Inc. Greensboro, USA	100%	100%
Swiss Caps Romania S.R.L. Cornu, Romania	100%	100%
Temmler Pharma GmbH Marburg, Germany	100%	100%
Aenova IP GmbH Marburg, Germany	100%	100%
Temmler Ireland Ltd. Killorglin, Ireland	100%	100%
Temmler Property Ireland Ltd. Killorglin, Ireland	100%	100%
Temmler Italia S.r.l. Carugate, Italy	100%	100%
C.P.M. ContractPharma GmbH Feldkirchen, Germany	100%	100%
SwissCo Services AG Sisseln, Switzerland	100%	100%
Haupt Pharma Amareg GmbH Regensburg, Germany	100%	100%
Aenova Sales International GmbH Starnberg, Germany	100%	100%
Haupt Pharma Münster GmbH Münster, Germany	100%	100%
Haupt Pharma Wülfing GmbH Gronau, Germany	100%	100%
Haupt Pharma Wolfratshausen GmbH Wolfratshausen, Germany	100%	100%
CleanLog GmbH Gronau, Germany	100%	100%
Haupt Pharma Latina S.r.l. Latina, Italy	100%	100%
Contract Packaging Resources Inc. Greensboro, USA	100%	100%

Aenova France SAS was merged into Swiss Caps Ltd. with effect from January 1, 2022. Swiss Caps (UK) Ltd. was closed and deconsolidated in 2022.

For Aenova Holding GmbH, Aenova Sales International GmbH, Aenova IP GmbH, Dragenopharm Apotheker Püschl GmbH, Swiss Caps GmbH, Temmler Pharma GmbH, Haupt Pharma Amareg GmbH, Haupt Pharma Münster GmbH, Haupt Pharma Wolfratshausen GmbH, Haupt Pharma Wülfing GmbH and C.P.M. ContractPharma GmbH, the exemption provisions of Section 264 (3) of the German Commercial Code (HGB) were used for the annual financial statements as of December 31, 2022. For Temmler Ireland Limited, the exemption provisions of Section 357 of the Irish Companies Act 2014 were also used for the annual financial statements as of December 31, 2022.

3.3 New accounting standards

Accounting standards applied for the first time

The following standards and interpretations issued by the IASB and adopted by the EU were applied for the first time in financial year 2022:

Standard	Title	First time adoption
Amendments to IFRS 16	Covid-19-Related Rent Concessions beyond 30 June 2021	Apr. 1, 2021
Amendments to IFRS 3	Reference to the Conceptual Framework	Jan. 1, 2022
Amendments to IAS 16	Proceeds before Intended Use	Jan. 1, 2022
Amendments to IAS 37	Onerous Contracts — Cost of Fulfilling a Contract	Jan. 1, 2022
Annual IFRS Improvements	2018-2020 Cycle	Jan. 1, 2022

The amendments to existing IFRS standards listed in the table had no impact on the consolidated financial statements.

The following amendments issued by the IASB and endorsed by the EU are not yet mandatory, but have been applied early by AENOVA:

Standard	Title	First time adoption
Amendments to IAS 1 and Practice Statement 2	Disclosure of Accounting Policies	Jan. 1, 2023
Amendments to IAS 8	Definition of Accounting Estimates	Jan. 1, 2023

Amendment to IAS 1 Disclosures on Accounting Policies

The amendment to IAS 1 requires that only material accounting policies are disclosed in the notes. To be material, the accounting policy must be related to material transactions or other events and there must be a reason for the disclosure. A reason may be, for example, that the accounting method has been changed, it is an accounting option, the method is complex or involves significant judgements, or it has been developed in accordance with IAS 8.10-11. In the future, entity shall disclose company-specific rather than standardized accounting policies. Aenova has adjusted the notes on accounting policies accordingly.

Amendment to IAS 8 Definition of accounting estimates

The amendment to IAS 8 had no effect on the consolidated financial statements.

Newly issued but not yet applied accounting standards

The following accounting standards and amendments issued by the IASB and endorsed by the EU are not yet effective and have not yet been applied early by AENOVA:

Standard	Title	First time adoption
IFRS 17	Insurance Contracts	Jan. 1, 2023
Amendments to IFRS 17	Insurance Contracts	Jan. 1, 2023
Amendments to IAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction	Jan. 1, 2023

The newly issued but not yet effective accounting standards and amendments listed in the table are not expected to have a material impact on the consolidated financial statements.

3.4 Foreign currency translation

Foreign currency transactions

Transactions denominated in currencies other than the functional currency are recorded at the exchange rate on the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated into the functional currency at the closing rate. Gains and losses from these foreign currency valuations are recognized in the profit or loss.

Non-monetary assets and liabilities are carried at historical exchange rates.

Group companies

Assets and liabilities of Group companies whose functional currency is not the euro are translated into euro using the exchange rate at the balance sheet date. The income statements of the foreign currency companies in the Group are translated at the average exchange rate for the reporting period. All resulting foreign currency differences are recognized in a separate item within other components of equity.

3.5 Accounting estimates

General

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgements, assumptions and estimates that affect the reported amounts of assets and liabilities, income and expenses and contingent liabilities. Actual results may differ from these estimates. The assumptions underlying the estimates are reviewed regularly. Changes in estimates are recognized in the period in which the change in assumptions occurs and in future periods affected.

Business combinations

In the context of business combinations, estimates are made when measuring the fair values of the acquired assets, liabilities, and contingent liabilities. In principle, the fair values are determined based on the forecast of future cash flows.

Impairment of goodwill

Goodwill is tested for impairment annually and whenever there is an indication that it may be impaired.

Goodwill must be allocated to the respective cash-generating units ("CGUs") or groups of CGUs for which a positive synergy effect is expected. This allocation is made at the lowest level at which goodwill is monitored for internal management purposes. The definition of CGUs or groups of CGUs within the Group to which goodwill is allocated, as well as the allocation of goodwill acquired in business combinations to CGUs or groups of CGUs, is subject to assumptions and estimates by management.

The carrying amount of the CGUs is compared with the recoverable amount of the CGUs as part of the impairment tests. An impairment loss on goodwill is recognized if the carrying amount of the CGU including the related goodwill exceeds the recoverable amount of the CGU. The recoverable amount is defined as the higher of the fair value less costs to sell and the value in use. The key assumptions on which the value in use calculation is based include estimated growth rates and weighted average cost of capital. The projections of future cash flows consider past experience and are based on management's best estimate of future developments. For the most important assumptions regarding the fair value, we refer to section 6.1.

The discount rates reflect current market assessments of the time value of money and the specific risks attributable to each of the cash-generating units. The calculation of the discount rate considers the risk-free interest rate, a corresponding company-specific risk and borrowing costs.

Economic useful lives of property, plant and equipment and intangible assets

The economic useful lives of non-current assets are based on management estimates. The Group reviews the estimated useful lives of property, plant and equipment and intangible assets at the end of each financial year.

Transaction costs

Transaction costs from the refinancing of the Group are recognized as expenses, with the exception of costs that are directly attributable to the borrowing. These items carried as liabilities are released to income pro rata over the term of the loans in accordance with the effective interest method.

Income taxes

The company and its subsidiaries are subject to regular tax audits. Tax calculations as well as tax-relevant transactions are coordinated with the locally responsible tax authorities. As the outcome of these tax audits is uncertain, an assessment is made by the management of the amount of provisions required, both for actual and deferred taxes on income, with the involvement of external advisors and based on the status of discussions with the respective tax authority.

Deferred tax assets

In determining deferred tax assets, estimates must be made about future taxable income and the dates at which the deferred tax assets can be realized. As future business developments are uncertain and partly beyond management's control, the assumptions to be made in connection with the determination of deferred tax assets are subject to considerable uncertainty.

AENOVA has deferred tax assets for loss carryforwards, among other things. They are recognized for all existing tax loss carryforwards to the extent that it is probable that future taxable income or deferred tax liabilities will be available so that the loss carryforwards can actually be used.

Pensions and similar obligations

The cost of defined benefit pension plans is based on actuarial valuations. Actuarial valuations include estimates and assumptions about discount rates, future salary increases, mortality rates and future pension increases. Due to the long-term nature of these plans, these estimates and assumptions are subject to certain uncertainties.

Other provisions

Other provisions are recognized when it is probable that economic, legal or environmental obligations will result in a future outflow of resources embodying economic benefits, the amount of which can be reliably estimated. The estimation of future costs is subject to various uncertainties, in particular legal uncertainties regarding applicable laws and regulations as well as uncertainties regarding actual conditions in different countries and locations. Costs are estimated based on past experience in similar cases, expert opinions, current costs and new developments that have an impact on costs. Changes in these estimates could have an impact on the Group's future results.

Fair value of financial assets and liabilities

Trade receivables, other current financial assets, cash and cash equivalents, trade payables, current liabilities to banks, current lease liabilities and other current liabilities generally have remaining terms of less than one year. The carrying amounts less allowances approximate the fair values.

The fair value of non-current liabilities to banks and non-current liabilities to related parties is determined using discounted future interest and principal payments.

There are two Management Participation Programmes (MEP) at AENOVA. For details see section 11. The fair value measurement of the old MEP was determined in 2020 within the framework of a mathematical model using a Monte Carlo simulation. The volatility underlying the model was derived from comparable listed companies ("peer group"). The risk-free interest rate corresponded to that of a German government bond with an equivalent maturity. The purchase price of the shares for the new MEP was derived from the fair value of the shares at the relevant issue date.

3.6 Revenues

Revenue is measured based on the consideration specified in a contract with a customer. AENOVA recognizes revenue when it transfers control of a good or service to a customer.

Manufacturing of pharmaceutical products - Revenue recognition over a period of time

Revenues and the associated costs are recognized over a certain period of time, i.e. before the goods or services are collected or accepted by the customer. The prerequisites for this are that AENOVA manufactures pharmaceutical products in accordance with the customer's specifications, that there are no alternative uses for AENOVA and that AENOVA has a payment claim for reimbursement of the costs incurred to date, including an appropriate margin, in the event of termination by the customer. Invoices shall be issued in accordance with the contractual agreements. Services already rendered that have not been invoiced are recognized as contract assets. Advance payments received are presented as contract liabilities. The stage of completion is determined on the basis of the cost-to-cost method.

Manufacturing of pharmaceutical products - revenue recognition at a point in time

For all other manufacturing orders, customers obtain control over the pharmaceutical products in accordance with the contractually agreed Incoterms. At this point, invoices are issued, and sales are recognized.

Rendering of services

Revenue from rendering of services relates primarily to analytical services, contract development and product transfers. The customer controls all work in progress during the rendering of services. Revenue and related costs are recognized over a period of time. The stage of completion, according to which revenue is recognized, is determined on the basis of contractually agreed milestones after acceptance by the customer. The determination of the stage of completion is thus an output-oriented method. Invoices are issued according to milestones. Advance payments received are accounted as contract liabilities.

3.7 Intangible assets

Acquired intangible assets are recognized at cost or, if acquired in a business combination, at fair value. They are amortised on a straight-line basis over their useful economic life.

Economic useful life	in years
Licences, patents, trademarks and other rights	4 - 30
Development costs	8
Software	4 - 5
Customer contracts and customer relationships	5 - 17
Other intangible assets	3 -12

Goodwill represents the excess of the cost of a business combination over the Group's interest in the fair value of the identifiable assets, liabilities and contingent liabilities acquired. Goodwill is not amortised but tested for impairment at least annually (see section 3.5).

3.8 Property, plant and equipment

Property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. If individual components of an asset with a significant acquisition value have different useful lives in relation to the total value of the asset, these components are accounted for and depreciated separately (component approach). AENOVA applies the straight-line depreciation method.

Economic useful life	in years
Buildings	6 - 50
Plant and machinery	2 - 20
IT equipment	3 - 6
Office equipment and furniture	3 - 20
Other property, plant and equipment	0 - 6

3.9 Impairment of intangible assets and property, plant and equipment

AENOVA tests property, plant and equipment as well as intangible assets with a limited useful life for impairment if there are indications of a possible impairment. In addition, an impairment test is carried out at least once a year for intangible assets not yet ready for use. If the recoverable amount of an asset is lower than its carrying amount, an impairment loss is recognized immediately in profit or loss.

3.10 Inventories

Inventories are measured at the lower of acquisition or production cost and net realisable value. The moving average price method is used as the consumption method. Cost includes all costs of acquisition incurred in bringing the inventories to their present location and condition. Production costs include, in addition to direct costs, appropriate portions of the necessary fixed and variable material and production overheads, insofar as they are incurred in connection with the production process.

The net realisable value is the estimated selling price in the ordinary course of business less estimated costs of completion and selling expenses.

3.11 Income taxes

The income tax expense or income represents the sum of actual and deferred tax expense or income. The current tax expense is determined on the basis of the taxable income for the respective year. Taxable income differs from profit before income taxes as reported in the income statement because it excludes expenses and income that are taxable or deductible in prior or subsequent years or never. The Group's liability for current tax expense is calculated using tax rates enacted or substantively enacted by the balance sheet date.

Actual income taxes are calculated based on the respective national tax results and regulations for the year. In addition, the actual taxes reported in the financial year also include adjustment amounts with regard to any tax payments or refunds due for years not yet finally assessed but excluding interest payments or interest refunds and penalties on tax arrears. Tax liabilities are recognized in the event that amounts recognized in the tax returns are unlikely to be realised (uncertain tax positions). The amount is determined from the best possible estimate of the expected tax payment (expected value or most probable value of the tax uncertainty). Tax receivables from uncertain tax positions are recognized in the balance sheet if it is probable that they can be realised. Only if a tax loss carryforward or an unused tax credit exists, no tax liability or tax asset is recognized for these uncertain tax positions, but instead the deferred tax asset is adjusted for the unused tax loss carryforwards and tax credits.

Deferred tax is the expected tax charge or benefit arising from differences between the carrying amounts of assets and liabilities in the tax accounts of individual companies and their carrying amounts in the IFRS consolidated financial statements. Deferred tax is not recognized for the following temporary differences: initial recognition of assets or liabilities in a transaction that is not a business combination and that does not give rise to a gain or loss under IFRS or for tax purposes, and differences arising on investments in subsidiaries to the extent that it is probable that they will not reverse in the foreseeable future. In addition, no deferred taxes are formed on temporary differences when goodwill is recognized for the first time.

Deferred tax is calculated using the tax rate expected to apply when the temporary differences reverse, based on laws enacted or substantively enacted at the reporting date. Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax liabilities and assets and they relate to taxes levied by the same taxation authority on the same taxable entity or on different taxable entities that intend to settle their tax liabilities and assets together or whose tax liabilities and assets will be settled simultaneously.

Deferred tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred tax assets are reviewed at each balance sheet date and reduced by the amount for which it appears unlikely that a corresponding tax asset can be utilised.

Changes in deferred taxes are recognized as tax income or - expense in the income statement unless they relate to items recognized in other comprehensive income or directly in equity, in which case the deferred taxes are also presented in other comprehensive income or directly in equity.

3.12 Financial instruments

Trade receivables are recognized from the time at which they arose. All other financial assets and liabilities are recognized for the first time at the time when AENOVA becomes a contracting party according to the contractual agreements of the financial instrument.

Trade receivables without a significant financing component are initially measured at transaction price. All other financial instruments are measured at fair value. For an item not measured at FVTPL (fair value through profit and loss), transaction costs directly attributable to its acquisition or issue are added or deducted.

Financial assets are divided into the following classes based on their contractual cash flow characteristics and the business model in which they are held:

- at amortised cost (AC)
- FVOCI debt instruments (investments in debt instruments measured at fair value with changes through other comprehensive income)
- FVOCI equity instruments (equity instruments measured at fair value with changes through other comprehensive income)
- FVTPL

Trade payables and other non-derivative financial liabilities are measured after initial recognition at amortised cost (financial liabilities at amortised cost, FLAC) using the effective interest method. Financial liabilities are derecognized after they are discharged, cancelled or expire.

Derivative financial instruments can be embedded in other contracts, resulting in a hybrid financial instrument. If IFRS 9 requires an embedded derivative to be separated, it is accounted for separately from the host contract and measured at fair value. If no separation is required under IFRS 9, the hybrid instrument is accounted for in its entirety based on the classification of the host contract.

3.13 Financial income and financial expenses

Financial income includes interest income on invested capital, changes in the fair value of derivative financial instruments and foreign exchange gains. Interest income is recognized in profit or loss when it is earned using the effective interest method.

Financial expenses include interest expenses on loans, the effect of compounding provisions, changes in the fair value of derivative financial instruments, impairment of financial assets and foreign exchange losses. Borrowing costs are generally recognized in profit or loss using the effective interest method.

3.14 Impairment of financial assets

AENOVA considers a financial asset to be uncollectible if it is unlikely that the debtor will be able to pay its credit obligations in full. AENOVA makes value adjustments in the amount in which no payment is expected to be received.

For expected credit losses on trade receivables and contract assets, AENOVA calculates the default credit risk based on the amount of the expected credit loss over the total term. Expected credit losses over the term are expected credit losses resulting from all possible default events during the expected life of the financial instrument. The Group uses an impairment matrix for this purpose.

The following table provides information on the estimated default risk and expected credit losses for trade receivables and contract assets:

KEUR	Minimum loss rate		Maximum loss rate		Gross amount not adjusted individually		Expected credit losses	
	2022	2021	2022	2021	2022	2021	2022	2021
Not overdue	0%	0%	0%	2%	100,360	85,293	-116	-253
1-30 days overdue	0%	0%	6%	30%	7,054	6,521	-104	-134
31-90 days overdue	0%	0%	40%	42%	1,297	954	-24	-121
More than 90 days	0%	0%	90%	69%	1,140	441	-59	-51
Total					**109,851**	**93,209**	**-303**	**-558**

The Group applies the exemption of IFRS 9 for other financial assets and for cash and cash equivalents, as these have a low risk of default.

All impairments are recognized in profit or loss regardless of classification.

3.15 Provisions for pensions and similar obligations

The Group maintains various pension plans. These plans are generally funded by payments to external entities (trustee-administered funds, insurance companies, pension and benefit funds). The Group has both defined benefit and defined contribution plans.

The pension provision is determined annually by independent experts using the projected unit credit method, considering expected future salary and pension trends for each defined benefit pension plan separately.

The already earned entitlement is discounted to the present value. This is done using interest rates derived from yields on senior, fixed-rate corporate bonds of the currency in which the pension benefit is to be paid and their remaining term, which approximates the term of the obligation until payment. The fair value of the related plan assets is deducted from the gross pension obligation. This results in the net liability to be recognized.

The Company determines the net interest expense (income) by multiplying the net liability at the beginning of the period by the interest rate used to discount the gross defined benefit obligation at the beginning of the period, considering payments and contributions made during the year. Actuarial gains and losses resulting from experience adjustments and changes in actuarial assumptions, as well as the difference between the actual return on plan assets and the typical return assumed at the beginning of the period, are recognized in other components of equity in the period in which they occur. Past service cost is recognized immediately in profit or loss. If the present value of a defined benefit obligation changes as a result of a plan amendment or curtailment, the Company recognizes the resulting effects as past service cost in profit or loss for the period.

Amounts payable under defined contribution plans are expensed and recognized as personnel expense when the obligation to pay the amounts arises.

3.16 Leases

If the underlying asset is not of low value, AENOVA recognizes a right-of-use asset and a lease liability at the commitment date as lessee for leases with a term of more than twelve months. Short-term leases and leases of low value are recognized as an expense over the lease term. AENOVA accounts for lease and non-lease components as a single lease component.

Right-of-use assets are initially measured at the fair value of the leasing liability plus initial direct costs and lease payments made at or before the inception of the lease.

Subsequent measurement of the rights of use is at cost less accumulated depreciation and impairment losses. Effects from the revaluation of lease liabilities are taken into account. Rights of use are amortised on a straight-line basis over the lease term. If ownership of the leased asset is transferred to the Group at the end of the lease term or the exercise of a purchase option is reasonably certain, depreciation is determined based on the expected useful life of the leased asset. The expected useful lives are determined in accordance with the guidelines for property, plant and equipment.

Lease liabilities are initially measured at the present value of the lease payments to be made over the lease term, discounted using the incremental borrowing rate. Lease liabilities are subsequently measured at amortised cost using the effective interest method. They are adjusted in the event of changes or revaluations of the lease.

To determine its incremental borrowing rate, the Group obtains interest rates from various external financial sources and makes adjustments to reflect lease terms.

3.17 Cash and cash equivalents

Cash and cash equivalents include cash on hand and bank balances with a term of up to three months.

99% of the liquid assets are with banks and credit institutions with a Moody's rating of Baa1 or better. Included in this 99% are at least 51% that are rated A1 or higher.

4. Financial risk management

AENOVA is exposed to financial risks. These can be divided into three areas:

- Credit default risk
- Liquidity risk
- Market risk (foreign currency risk, interest rate risk)

Group risk management focuses on unforeseeable events in the financial markets and tries to minimise adverse effects on the Group result.

The overall responsibility for establishing and monitoring a Group-wide risk management lies with the Executive Board. Risk management is carried out by defined responsible persons within the Corporate Accounting, Corporate Controlling and Treasury departments according to defined guidelines approved by the Executive Board. Risk identification, assessment and hedging are carried out in close cooperation and coordination with the operative business units.

This section provides information on risk positions, risk management objectives, methods and processes to measure and manage risk, and capital management.

The credit agreements of the AENOVA Group contain financial covenants. AENOVA continuously monitors compliance with these key figures based on forecasts and simulations. All covenants were complied with in the reporting year with sufficient headroom.

4.1 Credit default risk

Default risk is the risk of financial loss if a customer or business partner is unable to meet its contractual obligations in respect of a financial instrument. It arises mainly from the Group's trade receivables from customers.

The carrying amount of financial assets corresponds to the maximum default risk.

KEUR	Dec. 31, 2022	Dec. 31, 2021
Trade receivables and contract assets	109,548	92,651
Cash and cash equivalents	20,671	53,474
Other financial assets	18,660	20,015
Maximum default risk	**148,879**	**166,140**

The default risk is analysed and monitored by a central unit (credit risk management). The outstanding amounts are analysed and evaluated on a weekly basis. In addition, measures are determined with the responsible customer managers. In the case of new business relationships, the individual company is responsible for analysing the default risks to determine risk-adequate payment and delivery conditions. The central credit risk management checks and approves the conditions on a case-by-case basis, if possible, taking into account the assessment of external and independent rating agencies.

External customer ratings are used if available. If these are not available, an internal risk assessment is carried out based on a qualitative analysis of the customer, empirical values and other criteria. There were no significant risk concentrations in the reporting period, as the total portfolio of receivables was distributed over a sufficiently high number of individual customers from different countries.

Goods are sold with retention of title clauses so that AENOVA has a secured claim in the event of default.

Loss rates are calculated based on actual credit losses over the last three years. These rates have been multiplied by scaling factors, where necessary, to reflect differences between economic conditions at the time the historical data was collected, current conditions and the Group's view of economic conditions over the expected life of the receivables.

The maximum period to be considered in estimating expected credit losses is the maximum contractual period during which the Group is exposed to credit risk.

4.2 Liquidity risk

Liquidity risk describes the risk that AENOVA will not be able to meet its financial obligations, such as the repayment of financial debts or the settlement of liabilities to suppliers when they fall due. As part of its liquidity management, Treasury ensures that sufficient liquid funds are always available to meet payment obligations on time under both normal and more difficult conditions without having to incur unacceptable losses or the risk of damage to its reputation. This does not include the possible impact of extraordinary events, such as natural disasters, which cannot be reliably planned.

A liquidity forecast is prepared for the purpose of short and medium-term liquidity management. This is prepared by the Group companies. The consolidation and evaluation take place at the level of AENOVA Holding GmbH. The liquidity forecast takes into account AENOVA's financing plans (interest and redemption payments), compliance with certain financial covenants, compliance with internal targets for balance sheet ratios and - where applicable - external regulatory or statutory requirements.

AENOVA uses the liquidity forecast to track the main payment movements and ensure sufficient liquidity in the AENOVA Group. Furthermore, the Group uses the monthly balance sheets, profit and loss accounts, working capital planning and investment reports to monitor medium and long-term liquidity.

In addition to effectively managing liquidity and working capital, the Group mitigates liquidity risk through a revolving loan.

Most of the liabilities are fixed with regard to the repayment date. The risk concentration is mainly with UniCredit Bank AG, Munich. Due to the sufficient liquidity available and the existing credit lines, AENOVA is exposed to a moderate concentration of risk.

The contractually agreed future cash outflows of the recognized financial liabilities are shown undiscounted in the following table. This includes interest and principal payments. Cash outflows from financial liabilities that are repayable on demand are shown at the earliest possible repayment date. Payments whose amount depends on a variable interest rate are presented at the market conditions on the balance sheet date. As of December 31, 2022, it is not foreseeable that the cash outflows could arise significantly earlier or at a significantly different amount.

	< 1 year		1 - 5 years		> 5 years	
KEUR	2022	2021	2022	2021	2022	2021
Trade payables	92,502	68,881	64	61	40	37
Bank loans	1,967	2,971	568,880	568,887	118	1,088
Leasing liabilities	14,256	14,067	38,048	35,073	66,021	57,134
Interest for bank loans*	28,951	25,916	75,978	93,817	1	17
	137,676	**111,836**	**682,970**	**697,838**	**66,179**	**58,276**

* Including interest payments until maturity of the total bank loans. Previous year values adjusted.

4.3 Market risk

Foreign currency risk

Foreign currency risks result from operating activities as well as investments in foreign business operations. The foreign currency risk of individual subsidiaries is managed and optimised on the basis of the respective functional currency.

The Group management has established guidelines according to which the individual companies must hedge against foreign currency risks. Individual companies that carry out significant transactions in currencies other than their functional currency are obliged to hedge against significant foreign currency risks with the involvement of Treasury. The hedging is mainly done by holding foreign currencies. The operating units are prohibited from entering into derivatives or borrowing or investing funds in foreign currencies for speculative reasons.

Foreign currency cash flows are analysed on an ongoing basis and can, if necessary, be hedged through forward transactions such as currency options or forward transactions in order to avoid currency losses. Payment overhangs from sales transactions are offset by natural hedging through the management of incoming and outgoing payments in the respective currency (natural hedge strategy).

The risk from currency fluctuations is currently classified as low and is therefore not part of the regular reporting to the management.

Interest rate risk

AENOVA's interest rate risk arises from the long-term, variable-interest loans. By borrowing at variable interest rates, the Group is subject to a cash flow interest rate risk. By borrowing at fixed interest rates, the Group is subject to a fair value interest rate risk.

The Group analyses its interest rate risks on a dynamic basis. Based on the different scenarios, the Group can manage its cash flow interest rate risk through interest rate caps. By entering into an interest rate cap, the reference interest rate is limited by a cap.

AENOVA is exposed to interest rate risks related to the syndicated loan due to bank loans with variable interest rates. The interest rates consist of a fixed margin and a variable interest component based on EURIBOR (1, 2, 3 or 6 months). The variable component has a floor of 0.00%, so that if EURIBOR is less than 0.00%, the margin plus 0.00% is applied as variable interest. The nominal amount of the long-term bank loans with a variable interest rate is KEUR 565,000 as of December 31, 2022. Currently, AENOVA does not use any interest rate hedging instruments. Although AENOVA considers a further increase in EURIBOR to be probable, the company does not see a clear short-term benefit from the use of interest rate hedging instruments in view of the high hedging costs.

The following sensitivity analysis shows the effects of changes in the market interest rate of 100 basis points as at the reporting date on the consolidated result before tax, as well as on equity. The analysis is based on the following assumptions:

- Changes in the market interest rates of all non-derivative financial instruments with fixed interest rates, which are carried at amortised cost, are not part of the interest rate risk.
- Changes in market interest rates affect the interest income or interest expense of non-derivative variable-rate financial instruments whose interest payments have not been hedged within a hedging relationship. Therefore, these are included in the calculation of the sensitivities of the effects on the result before tax.
- All other variables, especially foreign currency rates, remain constant.

KEUR **Scenario 1: increase in interest rate structure by 100 basis points**	**2022**	**2021**
Effect on earnings before income taxes	-3,998	-2,367
Effect on equity	-3,998	-2,020

KEUR **Scenario 2: decrease in interest rate structure by 100 basis points**	**2022**	**2021**
Effect on earnings before income taxes	1,366	-
Effect on equity	1,366	-

5. Notes to the consolidated statement of comprehensive income

5.1 Revenues

The following tables show revenue from contracts with customers by major dosage forms and development and licensing activities. They are also broken down by the time of revenue recognition and by region.

Jan. 1 - Dec. 31, 2022 KEUR	**Sale of goods**	**Rendering of Service**	**Total**
Solids (SOL)	412,209	-	412,209
Semi-solids and liquids (SEL)	130,637	-	130,637
Soft gelatine capsules (SGC)	140,342	-	140,342
Services & Other	-	65,970	65,970
Revenues	**683,189**	**65,970**	**749,158**

Jan. 1 - Dec. 31, 2021 KEUR	**Sale of goods**	**Rendering of Service**	**Total**
Solids (SOL)	395,935	-	395,935
Semi-solids and liquids (SEL)	123,689	-	123,689
Soft gelatine capsules (SGC)	117,526	-	117,526
Services & Other	-	59,683	59,683
Revenues	**637,152**	**59,683**	**696,833**

KEUR	**Jan. 1 - Dec. 31, 2022**	**Jan. 1 - Dec. 31, 2021**
Revenue transferred to customers over time	717,702	666,415
Revenue transferred to customers at a point in time	31,456	30,418
Time of revenue recognition	**749,158**	**696,833**

KEUR	**Jan. 1 - Dec. 31, 2022**	**Jan. 1 - Dec. 31, 2021**
Germany	296,017	279,408
Rest of Europe	364,453	332,294
North America	49,381	44,711
Rest of world	39,307	40,420
Revenues	**749,158**	**696,833**

The following table provides information on contract assets and liabilities from contracts with customers:

KEUR	**Jan. 1 - Dec. 31, 2022**	**Jan. 1 - Dec. 31, 2021**
Contract assets	69,549	65,050
Contract liabilities	27,136	19,772
Revenue recognised from contract liabilities at the beginning of the period	3,644	2,123

The contract assets mainly relate to claims of the Group for consideration for services from the contract manufacturing of medicinal products that have been completed but not yet invoiced as of the reporting date. The contract assets are reclassified to the position "trade receivables" as soon as the rights become unconditional. This usually occurs when the customer is invoiced.

Contract liabilities mainly relate to investment grants received from customers for the acquisition of machines and tools to produce medicinal products and are recognized as revenue over a certain period of time. The increase is mainly due to investment grants in the financial year, but also to higher advance payments for products.

5.2 Other operating income

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Own work capitalised	1,918	2,155
Release of provisions recognised in previous periods	730	3,140
Reversal of bad debt allowance recognised in previous periods	364	802
Reimbursements	355	315
Income from subleasing of right-of-use assets	365	359
Gain on disposal of tangible and intangible assets	369	4,853
Income from investment grants	465	839
Other miscellaneous operating income	4,256	11,247
Other operating income	**8,822**	**23,709**

Own work capitalised largely relate to own work in connection with the installation and conversion of property, plant and equipment as well as in connection with software implementations. Income from the reversal of provisions mainly relates to warranty provisions. Other miscellaneous operating income includes income from the release of accrued liabilities in the amount of KEUR 1,415.

5.3 Cost of materials

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Cost of raw materials and supplies	-268,540	-237,896
Cost of purchased services and subcontracting	-15,614	-14,568
Cost of materials	**-284,153**	**-252,465**

5.4 Personnel expenses

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Wages and salaries	-206,498	-202,172
thereof termination benefits	*-2,136*	*-2,363*
Expenses for temporary workers	-15,523	-11,913
Other personnel expenses	-8,036	-7,533
Social security, post-employment and welfare costs	-42,097	-40,947
thereof pension costs for defined benefit plans	*-3,076*	*-3,195*
thereof pension costs for defined contribution plans	*-16,337*	*-15,412*
thereof social security expenses	*-22,684*	*-22,340*
Personnel expenses	**-272,154**	**-262,565**

The expenses for defined contribution plans mainly include the employer's contribution to the statutory pension insurance.

The average number of employees in the 2022 financial year was 4,063 (2021: 4,155), including 2,537 (2021: 2,529) employees in the production, 701 (2021: 710) employees in the quality and 825 (2021: 915) employees in other areas.

5.5 Other operating expenses

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Plant and machinery expenses	-67,781	-50,847
Legal and other advisory	-7,311	-6,425
Expenses for leasing	-2,050	-2,081
thereof lease expense for short-term leases	*-1,337*	*-1,665*
thereof lease expense for low-value leases	*-593*	*-390*
Expenses for production and office facilities	-3,889	-3,870
Distribution costs	-5,415	-5,404
Administration expenses	-1,630	-1,810
Insurance expenses	-2,241	-2,107
Travelling expenses	-1,212	-511
Marketing and advertising expenses	-1,207	-789
Loss on disposal of assets	-155	-581
Warranty expenses	-866	-250
Licences, commissions and patents	-179	-55
Impairment loss on trade receivables and contract assets	-371	-524
Other material overhead costs	-14,479	-13,167
Other miscellaneous operating expenses	-8,752	-6,784
Other operating expenses	**-117,539**	**-95,205**

Plant and machinery expenses mainly include costs for the operation and maintenance of the production facilities. Energy costs included here are the main driver of the increase compared to the previous year.

Legal and consulting expenses include costs for tax advice and auditing, as well as consulting expenses in connection with strategic projects.

Other material overheads essentially include consumables for laboratory and analytical activities, packaging materials for freight, work clothes as well as material costs that are not listed in the BOMs.

5.6 Financial income

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Foreign exchange gains	-	717
Interest income	80	47
Other financial income	-	26,368
Financial income	**80**	**27,132**

The other financial income in 2021 results from the mid-2021 modification of the Group financing and the associated remeasurement (KEUR 20,488) as well as the income from the valuation of derivatives (KEUR 5,880).

5.7 Financial expenses

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Interest expenses on FLAC	-35,696	-43,653
Interest expenses from leasing contracts	-4,893	-4,434
Interest expenses on defined benefit plans	-531	-478
Other interest expenses	-1,143	-718
Foreign exchange losses	-530	-
Other financial expenses	-7,422	-4,083
Financial expenses	**-50,214**	**-53,366**

Interest expenses for financial liabilities measured at amortised cost are mainly attributable to interest expenses in connection with the bank loans. In 2022, they amount to KEUR -27,282 (2021:

KEUR -32,295) and mainly include interest expenses to lenders. In addition, there are interest expenses from the compounding of bank loans in the amount of KEUR -7,455 (2021: KEUR -11,089), which are measured using the effective interest method.

Other financial expenses mainly include expenses from the valuation of derivatives in the amount of KEUR -5,846 (previous year: income of KEUR 5,880). For further information, please refer to section 8.

5.8 Income taxes

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Current taxes	-8,589	-4,779
Deferred taxes	7,972	-4,801
Income taxes	**-618**	**-9,580**

In Germany, current taxes on distributed and retained profits are calculated based on a uniform corporate income tax rate of 15% and a solidarity surcharge of 5.5%. In addition to corporate income tax, trade tax is levied on profits earned in Germany. An average tax rate of 13.57% (2021: 13.51%) is calculated for trade tax, resulting in a total domestic tax rate of 29.4%. This is used for the valuation of domestic deferred taxes.

The tax result achieved by foreign subsidiaries is determined based on the respective national tax law and taxed at the tax rate applicable in the country of domicile. The tax rates applied range from 12.50% to 28.82%.

The following table presents the reconciliation between the expected income tax expense and the income tax expense recognized. The tax rate of 29.40% (2021: 29.34%) applied in the reconciliation is the total domestic tax rate.

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Earnings before income taxes (EBT)	**-45,563**	**25,140**
Expected tax rate	29.40%	29.34%
Expected income taxes	**13,395**	**-7,376**
Tax effects resulting from:		
Changes of tax rates	120	203
Effects of tax rate differences	5,305	5,810
Non-taxable dividend income	-	978
Non tax-deductible interest expenses	-6,578	-8,393
Other non-taxable items	1,080	1,312
Other non tax-deductible items	-9,325	-439
Other additions / deductions (trade tax)	-1,149	-1,028
Non-recognition of deferred tax assets on tax losses brought forward	-	-18
Adjustment of deferred tax assets recognized in the previuos year on tax loss carryforwards	-1,984	243
Adjustment of deferred taxes from previous years	1,357	-2,048
Income offset against tax loss not recognised as deferred tax assets	36	-
Effects of income taxes relating to previous periods	-3,047	1,370
Other effects	172	-194
Income taxes	**-618**	**-9,580**
Effective income tax rate	-1.36%	38.10%

The reduction of deferred tax assets on tax losses carried forward in the previous year in the amount of KEUR 1,984 mainly relates to Apollo 5 GmbH and Swiss Caps Holding S.à r.l. (2021: increase of KEUR 243). There was no recognition of other losses, as the usability of the loss carryforwards is not considered probable due to a multi-year tax planning. The tax loss carryforwards in Germany can be used indefinitely in terms of their amount and the ability to carry them forward, taking into account the minimum taxation. In Luxembourg, the tax loss carryforwards can be used indefinitely and without restriction. In other countries, on the other hand, losses can only be carried forward for a certain period of time (e. g. Switzerland: seven years; USA: 20 years).

Tax loss carryforwards and tax credits amount to KEUR 145,138 as of December 31, 2022 (2021: KEUR 152,395).

Deferred tax assets of KEUR 5,407 (2021: KEUR 4,672) were recognized on these to the extent that sufficient taxable temporary differences exist or to the extent that utilisation is probable based on business expectations. Deferred tax assets were recognized on tax assets of Haupt Pharma Latina S.r.l. and Temmler Italia S.r.l.. No deferred tax assets were recognized on interest carryforwards of KEUR 388,814 (in 2021: KEUR 366,450). The interest carryforwards result from non-deductible interest expenses for bank and shareholder loans due to § 4h EStG ("Zinsschranke"). No interest carryforwards were recognized because the financing structure and the multi-year corporate planning make it unlikely that the interest carryforwards can be used.

Deferred tax assets and liabilities were created on temporary differences for the following balance sheet items:

KEUR	Jan. 1, 2022	Recognized in			Dec. 31, 2022		
	Net	Profit or Loss	Currency translation	other comprehensive income	Net	Deferred tax asset	Deferred tax liability
Share-based payments	-	-	-	-	-	-	-
Tax loss carryforward	4,672	738	-4	-	5,407	5,407	-0
Non-current assets	**-25,755**	**-7,386**	**-56**	**-**	**-33,197**	**4,372**	**-37,569**
Intangible assets	-11,024	2,342	-	-	-8,683	393	-9,075
Property, plant and equipment	-1,017	533	-56	-	-539	3,972	-4,511
Right-of-use assets	-18,573	-1,585	-	-	-20,159	7	-20,165
Other non-current financial assets	-3,716	-47	-	-	-3,763	1	-3,764
Other non-current assets	8,575	-8,629	-	-	-54	-	-54
Current assets	**-19,502**	**11,320**	**-28**	**-**	**-8,210**	**14,600**	**-22,810**
Inventories	10,829	1,073	9	-	11,911	11,911	-0
Trade receivables	-10,114	9,781	-	-	-333	23	-356
Contract assets	-15,961	-1,939	-37	-	-17,937	-	-17,937
Other current financial assets	-2,634	2,290	-	-	-344	242	-586
Other current assets	-1,622	115	-	-	-1,507	2,425	-3,932
Non-current liabilities	**17,061**	**3,635**	**30**	**-4,845**	**15,883**	**23,204**	**-7,320**
Provision for pensions	8,834	-383	35	-4,845	3,641	6,730	-3,089
Other non-current provisions	-12	58	-4	-	42	122	-79
Non-current financial liabilities	7,454	4,718	-	-	12,172	16,296	-4,124
Other non-current liabilities	786	-758	-	-	28	56	-28
Current liabilities	**-730**	**-336**	**-7**	**-**	**-1,072**	**4,969**	**-6,041**
Trade payables	243	-1,501	-	-	-1,257	1	-1,258
Current provisions	-762	-206	-6	-	-973	52	-1,025
Current financial liabilities	-2,029	117	-	-	-1,912	1,846	-3,758
Other current liabilities	1,816	1,253	-	-	3,070	3,070	-0
Total	**-24,254**	**7,972**	**-62**	**-4,845**	**-21,190**	**52,551**	**-73,741**

Deferred tax liabilities (previous year: deferred tax assets) include deferred taxes on actuarial gains and losses of KEUR -2,960 (2021: KEUR 1,888) recognized directly in equity. Deferred tax assets are recognized to the extent that there are sufficient taxable temporary differences or to the extent that it is sufficiently probable that a positive taxable result will be generated in the future. The Group has recognized deferred tax assets of KEUR 52,551 (2021: KEUR 56,381) for the financial years 2023 to 2027. If legally permissible, deferred tax assets are offset against deferred tax liabilities.

In total, there are temporary differences in connection with shares in subsidiaries amounting to KEUR 1,895 (2021: KEUR 1,401), for which no deferred tax liabilities were recognized, as the temporary differences are not expected to be realised in the foreseeable future.

6. Notes to the consolidated statement of financial positions

6.1 Intangible assets

KEUR	Goodwill	Licences, patents, trademarks and other rights	Development costs	Software	Customer contracts and relation-ships	Other intangible assets	Total
Cost							
As of Jan. 01, 2022	**280,089**	**22,229**	**26,967**	**65,584**	**239,797**	**105,826**	**740,491**
Additions	-	184	-	1,455	-	73	1,712
Transfers	-	479	-	2,104	-	-	2,583
Disposals	-	-2,176	-13,503	-137	-1,397	-64,154	-81,368
Currency translation	-	0	-	18	-	30	48
As of Dec. 31, 2022	**280,089**	**20,716**	**13,464**	**69,024**	**238,400**	**41,774**	**663,466**
Acc. amortisation and impairment							
As of Jan. 01, 2022	**-11,449**	**-20,705**	**-23,782**	**-62,266**	**-220,956**	**-100,271**	**-439,429**
Additions (amortisation)	-	-361	-1,177	-2,625	-3,102	-2,689	-9,955
Impairment losses	-27,158	-228	-14	-	-	-	-27,400
Transfers	-	86	-3	-6	-	-	76
Disposals	-	2,176	13,517	137	1,397	64,154	81,382
Currency translation	-	-33	1	-12	-	-30	-74
As of Dec. 31, 2022	**-38,607**	**-19,065**	**-11,458**	**-64,772**	**-222,661**	**-38,836**	**-395,399**
Carrying amount Jan. 01, 2022	**268,640**	**1,525**	**3,185**	**3,318**	**18,841**	**5,554**	**301,062**
Carrying amount Dec. 31, 2022	**241,482**	**1,650**	**2,008**	**4,253**	**15,739**	**2,938**	**268,069**

KEUR	Goodwill	Licences, patents, trademarks and other rights	Development costs	Software	Customer contracts and relation-ships	Other intangible assets	Total
Cost							
At Jan. 1, 2021	**280,089**	**22,940**	**37,689**	**64,875**	**239,797**	**105,912**	**751,301**
Additions	-	296	-	920	-	54	1,270
Transfers	-	-	-	289	-	-	289
Disposals	-	-1,007	-10,722	-514	-	-	-12,243
Currency translation	-	-	-	15	-	-140	-126
At Dec. 31, 2021	**280,089**	**22,229**	**26,967**	**65,584**	**239,797**	**105,826**	**740,491**
Acc. amortisation and impairment							
At Jan. 1, 2021	**-11,449**	**-21,413**	**-33,304**	**-59,557**	**-210,247**	**-97,747**	**-433,716**
Additions (amortisation)	-	-299	-1,200	-3,211	-10,709	-2,665	-18,084
Impairment losses	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-
Disposals	-	1,007	10,722	512	-	-	12,241
Currency translation	-	-	-	-10	-	140	130
At Dec. 31, 2021	**-11,449**	**-20,705**	**-23,782**	**-62,266**	**-220,956**	**-100,271**	**-439,429**
Carrying amount Jan. 01, 2021	**268,640**	**1,527**	**4,385**	**5,319**	**29,549**	**8,165**	**317,586**
Carrying amount Dec. 31, 2021	**268,640**	**1,525**	**3,185**	**3,318**	**18,841**	**5,554**	**301,062**

Intangible assets mainly comprise customer bases that were capitalised as part of the acquisition of the AENOVA group of companies. The acquired customer bases can be categorised according to different types of customers. As of the balance sheet date, the carrying amounts reported under customer contracts and relationships and the remaining useful lives of the customer bases are as follows:

KEUR	Dec. 31, 2022	Dec. 31, 2021
Customer base - Contract Manufacturing Organisation	15,739	18,701
Customer base - Licenses	-	140
Customer base	**15,739**	**18,841**

Remaining useful lifes in years	Dec. 31, 2022	Dec. 31, 2021
Customer base - Contract Manufacturing Organisation	6.2	7.1
Customer base - Licenses	-	1.0

For impairment testing, goodwill is allocated to cash-generating units (CGUs). These are represented by the Group's three business segments, which are also the lowest level at which goodwill is monitored for management purposes. Goodwill is allocated as follows:

KEUR	2022	2021
CGU Solids (SOL)	158,777	158,777
CGU Semi-solids and liquids (SEL)	55,383	55,383
thereof impairment	-27,158	-
CGU Soft gelatine capsules (SGC)	54,479	54,479
Goodwill	**241,482**	**268,640**

The value in use was calculated on the basis of future cash flows. These are derived from the 2023 - 2027 planning approved by the management. The planning is based on the development of sales volumes in the individual markets, expected new products and empirical values. After the 2027 financial year, constant growth rates are assumed for the development of the planned turnover and EBITDA. The respective growth rate of 1% does not exceed the average expected long-term inflation rate and was also used to determine the terminal value.

The discounting and planning are based on the following fundamental assumptions:

	2022	2021
Discount rate (pre-tax)		
CGU Solids (SOL)	12.3%	9.3%
CGU Semi-solids and liquids (SEL)	15.3%	10.9%
CGU Soft gelatine capsules (SGC)	10.4%	8.1%
Planned EBITDA growth (average of next five (in prev. year three) years)		
CGU Solids (SOL)	9.0%	11.0%
CGU Semi-solids and liquids (SEL)	86.4%	28.2%
CGU Soft gelatine capsules (SGC)	10.4%	8.2%
Sustainable growth rate (terminal value)		
all CGUs	1.0%	1.0%

KEUR	2022	2021
Recoverable amount CGU Solids (SOL)	556,693	649,449
Recoverable amount CGU Semi-solids and liquids (SEL)	137,248	208,997
Recoverable amount CGU Soft gelatine capsules (SGC)	252,733	277,968

The recoverable amount of the CGUs SOL and SGC is based on their value in use and significantly exceeds the carrying amount. For an impairment to arise, the key assumptions would have to be changed to a significant extent, which the management does not consider probable.

The recoverable amount of the CGU SEL is based on the fair value less costs to sell (prev. year: value in use), which was determined by weighting different approaches (net present value method & multiples). The carrying amount of the CGU SEL exceeds the recoverable amount as of the balance sheet date, so that an impairment loss of KEUR 27,158 (2021: KEUR 0) was recognized. The impairment loss is primarily due to the massive increase in discount rates. Furthermore, the EBITDA planning shows slightly reduced values compared to the previous year. The impairment loss was fully allocated to goodwill and recognized in depreciation, amortisation and impairment. Any unfavourable change in assumptions would lead to a further impairment. In contrast, more favourable assumptions would lead to a lower impairment.

Further fundamental assumptions for the determination of the fair value:

CGU SEL	2022
EBITDA Multiple	11.6
Adjusted EBITDA LTM (last twelve months)	18,667
Costs to sell	3%

6.2 Property, plant and equipment

KEUR	Land and buildings	Construction in progress	Plant and machinery	IT equipment	Other property, plant and equipment	Total
Cost						
As of Jan. 01, 2022	**187,958**	**32,828**	**390,381**	**23,234**	**4,713**	**639,113**
Additions	4,394	19,364	13,760	1,241	361	39,120
Transfers	7,029	-19,987	12,910	694	30	677
Disposals	-1	-1,246	-7,262	-186	-100	-8,794
Currency translation	770	67	1,138	131	48	2,154
As of Dec. 31, 2022	**200,151**	**31,026**	**410,927**	**25,114**	**5,052**	**672,271**
Acc. depreciation and impairment						
As of Jan. 01, 2022	**-100,076**	**-791**	**-271,209**	**-17,442**	**-4,292**	**-393,810**
Additions (depreciation)	-6,588	-	-22,084	-1,865	-353	-30,890
Impairment losses/reversals	-	-	-3,670	4	-	-3,666
Transfers	-958	-	-1,964	-306	-26	-3,254
Disposals	0	294	3,666	185	100	4,245
Currency translation	-398	-	-793	-81	-43	-1,315
As of Dec. 31, 2022	**-108,019**	**-497**	**-296,055**	**-19,505**	**-4,615**	**-428,690**
Carrying amount Jan. 01, 2022	**87,882**	**32,037**	**119,171**	**5,792**	**420**	**245,303**
Carrying amount Dec. 31, 2022	**92,132**	**30,529**	**114,873**	**5,610**	**437**	**243,580**

KEUR	Land and buildings	Construction in progress	Plant and machinery	IT equipment	Other property, plant and equipment	Total
Cost						
At Jan. 1, 2021	**192,231**	**25,203**	**371,811**	**21,887**	**4,554**	**615,685**
Additions	3,427	25,183	24,814	1,765	419	55,608
Transfers	3,695	-14,453	10,339	279	23	-117
Disposals	-11,875	-3,124	-17,472	-789	-337	-33,597
Currency translation	480	19	888	92	54	1,534
At Dec. 31, 2021	**187,958**	**32,828**	**390,381**	**23,234**	**4,713**	**639,113**
Acc. depreciation and impairment						
At Jan. 1, 2021	**-102,458**	**-493**	**-262,775**	**-16,377**	**-4,192**	**-386,295**
Additions (depreciation)	-7,072	-	-22,118	-1,790	-387	-31,367
Impairment losses	-421	-317	-664	-	-	-1,401
Transfers	-91	-	-82	-	1	-172
Disposals	10,308	18	15,093	785	337	26,541
Currency translation	-342	-	-663	-60	-51	-1,117
At Dec. 31, 2021	**-100,076**	**-791**	**-271,209**	**-17,442**	**-4,292**	**-393,810**
Carrying amount Jan. 01, 2021	**89,773**	**24,710**	**109,037**	**5,510**	**361**	**229,391**
Carrying amount Dec. 31, 2021	**87,882**	**32,037**	**119,171**	**5,792**	**420**	**245,303**

Impairment losses of KEUR 3,670 (2021: KEUR 1,402) were recognized on property, plant and equipment in the financial year.

For the 2023 financial year, investments of KEUR 18,234 (2022: KEUR 14,231) are contractually agreed.

6.3 Right-of-use assets

KEUR	Land and buildings	Plant and machinery	IT and office equipment	Other right-of-use assets	Prepay-ments	Total
Cost						
As of Jan. 01, 2022	**69,736**	**23,421**	**188**	**3,339**	**602**	**97,286**
Additions	7,668	8,002	111	713	-	16,493
Transfers	77	-	-	-	-77	-
Disposals	-4,010	-165	-123	-572	-	-4,871
Currency translation	52	-0	-0	19	-	71
As of Dec. 31, 2022	**73,523**	**31,257**	**176**	**3,498**	**525**	**108,979**
Acc. depreciation and impairment						
As of Jan. 01, 2022	**-24,920**	**-4,962**	**-131**	**-1,559**	**-**	**-31,572**
Additions (depreciation)	-4,832	-3,141	-53	-877	-	-8,905
Impairment losses	-756	-406	-	-108	-	-1,270
Transfers	-	-	-	-	-	-
Disposals	4,011	143	120	559	-	4,832
Currency translation	-43	1	-0	-5	-	-48
As of Dec. 31, 2022	**-26,541**	**-8,366**	**-65**	**-1,991**	**-**	**-36,962**
Carrying amount Jan. 01, 2022	**44,816**	**18,459**	**54**	**1,780**	**602**	**65,710**
Carrying amount Dec. 31, 2022	**46,981**	**22,892**	**111**	**1,507**	**525**	**72,016**

KEUR	Land and buildings	Plant and machinery	IT and office equipment	Other right-of-use assets	Prepay-ments	Total
Cost						
At Jan. 1, 2021	**54,016**	**17,409**	**271**	**2,767**	**-**	**74,463**
Additions	16,175	10,623	5	860	602	28,264
Transfers	-	-	-	-	-	-
Disposals	-528	-4,560	-86	-302	-	-5,475
Currency translation	74	-51	-2	13	-	34
At Dec. 31, 2021	**69,736**	**23,421**	**188**	**3,339**	**602**	**97,286**
Acc. depreciation and impairment						
At Jan. 1, 2021	**-20,345**	**-4,865**	**-156**	**-999**	**-**	**-26,365**
Additions (depreciation)	-4,661	-1,926	-61	-823	-	-7,471
Impairment losses	-264	-1	-	-	-	-266
Transfers	-	-	-	-	-	-
Disposals	403	1,817	86	269	-	2,574
Currency translation	-53	13	1	-6	-	-45
At Dec. 31, 2021	**-24,920**	**-4,962**	**-131**	**-1,559**	**-**	**-31,572**
Carrying amount Jan. 01, 2021	**33,671**	**12,543**	**115**	**1,769**	**-**	**48,098**
Carrying amount Dec. 31, 2021	**44,816**	**18,459**	**57**	**1,780**	**602**	**65,710**

6.4 Inventories

KEUR	Dec. 31, 2022	Dec. 31, 2021
Raw materials and supplies	75,340	48,331
Unfinished products	3,356	2,863
Finished products	3,033	1,055
Inventories	**81,729**	**52,249**

Impairments on gross inventories, e. g. due to marketability write-downs or quality defects, amount to KEUR 8,308 (2021: KEUR 7,708).

In 2022, inventories amounting to KEUR 284,153 (2021: KEUR 252,465) were expensed.

The increase in raw materials is mainly due to inflation, the increase of safety stocks to cushion disrupted supply chains and the good order situation.

6.5 Trade receivables

Seven German, two Italian and two Swiss production sites have concluded silent factoring agreements. The contracts stipulate that certain parts of the trade receivables are to be sold. Furthermore, the contracts stipulate that the del credere risk is transferred to the factoring companies. A certain portion of the sold receivables is retained by the factoring companies to finance sales deductions and is thus not refinanced. This amount was recognized as other financial assets.

In Germany, the existing contracts at four sites run until mid-June 2024 and can be terminated by either party until mid-March 2024. Otherwise, they are tacitly extended. At the other three locations, the contracts are concluded for an indefinite period. There are termination options on both sides with a notice period of 6 months to the end of the month.

At the Italian sites, the contract has no expiry date and can be terminated at any time.

At the sites in Switzerland, the contracts run until the end of January 2024 with a notice period of six months or until the end of 2024 and can be terminated with a notice period of six months.

Purchased receivables amount to KEUR 81,023 (2021: KEUR 60,021).

KEUR	Dec. 31, 2022	Dec. 31, 2021
Trade receivables, gross	40,453	28,366
Expected credit losses	-454	-765
Trade receivables, net	**39,998**	**27,601**

The average payment term of customers is 39 days.

KEUR	Dec. 31, 2022	Dec. 31, 2021
Impaired trade receivables	151	207
Neither overdue nor impaired trade receivables	30,811	20,243
Overdue less than 30 days, not impaired	7,054	6,521
Overdue between 31 and 90 days, not impaired	1,297	954
Overdue more than 90 days, not impaired	1,140	441
Trade receivables, gross	**40,453**	**28,366**

The following table shows the development of expected credit losses on trade receivables:

KEUR	Dec. 31, 2022	Dec. 31, 2021
Expected credit losses at beginning of period	765	1,869
Other additions	109	41
Reversal	-379	-846
Utilisations	-41	-298
Currency translation	-	-1
Expected credit losses at the end of the period	**454**	**765**

The development of expected credit losses for assets valued at FVOCI was as follows during the year:

KEUR	Dec. 31, 2022	Dec. 31, 2021
Balance at beginning of period	**506**	**1,258**
Net revaluation of expected credit losses	-230	-752
Balance at end of period	**276**	**506**

The decrease in impairment losses in 2022 is mainly due to the Group-wide receivables management that has been pushed for several years.

6.6 Other financial assets

KEUR	Dec. 31, 2022	Dec. 31, 2021
Other loans and receivables	96	94
Non-current loans to related parties	1,000	1,000
Non-current derivatives with positive market values	4,294	10,140
Other non-current financial assets	**5,390**	**11,235**

For the development of derivatives, please refer to section 8.

KEUR	Dec. 31, 2022	Dec. 31, 2021
Other receivables from third party	13,200	8,708
Short-term loans to employees	70	72
Other current financial assets	**13,270**	**8,780**

The other receivables from third parties consist entirely of receivables from various factoring companies.

6.7 Other assets

KEUR	Dec. 31, 2022	Dec. 31, 2021
Other non-current assets	5,910	607
Non-current income tax assets	9,440	-
Other non-current assets	**15,350**	**607**

Other non-current assets mainly include KEUR 3,113 of plan assets from defined benefit pension plans and KEUR 2,282 of receivables from government grants.

Non-current income tax assets comprise the expected refund based on the double taxation agreement between Switzerland and Romania. Unplanned income taxes were paid to Romanian tax authorities in 2022. An appeal against this measure, which leads to double taxation, is pending in Romania. It can be assumed that the proceedings will be successfully concluded and that the sum will flow back.

KEUR	Dec. 31, 2022	Dec. 31, 2021
VAT refund claims	6,567	6,172
Prepayments to third party	605	176
Other current non-financial assets	8,891	7,872
Other current assets	**16,063**	**14,220**

The increase in other current assets is due to an increase in prepaid expenses.

6.8 Cash and cash equivalents

KEUR	Dec. 31, 2022	Dec. 31, 2021
Cash at bank	20,646	53,456
Cash on hand	25	18
Cash and cash equivalents	**20,671**	**53,474**

Cash and cash equivalents earn interest at variable rates on demand deposits. Short-term deposits are made for varying periods of time, ranging from one day to three months, depending on the immediate cash requirements.

6.9 Equity

For a detailed presentation of the development of equity, please refer to the consolidated statement of changes in equity.

The subscribed capital of Apollo 5 GmbH amounts to KEUR 25 as of the balance sheet date and is held in full by Apollo 8 GmbH. The subscribed capital is fully paid in as of December 31, 2022. It consists of one share with a nominal value of KEUR 25.

Capital reserves include reserves from share-based payments. For further details, please refer to section 11.

The other components of equity include:

- Currency differences: The reserve for currency differences serves to record differences from the translation of the financial statements of foreign subsidiaries.
- Remeasurements of defined benefit obligations: The actuarial gains/losses relate to defined benefit obligations and include deferred taxes on them. Deferred taxes on actuarial gains/losses recognized in other comprehensive income for 2022 cumulatively amount to KEUR -2,986 (2021: KEUR 1,859).
- Effects from previous years from the first-time application of IFRS 9, IFRS 15 and IFRS 16 in the amount of KEUR 6,804. This includes deferred taxes in the amount of KEUR -2,349.

6.10 Provisions for pensions and similar obligations

KEUR	Dec. 31, 2022	Dec. 31, 2021
Provisions for defined benefit obligations	35,539	54,255
Provisions for supplementary pension benefits Italy	2,193	2,510
Provisions for jubilees and sabbaticals	2,514	2,706
Provision for pensions and similar obligations	**40,246**	**59,471**

Provisions for defined benefit obligations

The Group has various post-employment benefit plans in place in various Group companies, which include a wide range of arrangements for post-employment benefits. Beneficiaries of these commitments are mainly employees or their survivors in Germany, Switzerland and Ireland. The benefit plans include 2,103 (2021: 2,140) beneficiaries, of which 1,242 (2021: 1,315) are active employees, 520 (2021: 484) are former employees with vested rights and 341 (2021: 341) are retirees and survivors.

There are various defined benefit plans in Germany. A defined benefit plan grants beneficiaries a certain percentage of their last salary when they reach the age of 65, depending on their years of pensionable service. Under another defined benefit plan, beneficiaries are entitled to benefits upon reaching the age of 65, the amount of which depends on the length of service. In the form of direct commitments, eligible employees are entitled to pension benefits upon reaching the age of 65 within the framework of deferred compensation.

In Germany, the regulatory framework is provided by the Occupational Pensions Act. Accordingly, the pension adjustment obligation for pension commitments is based on inflation expectations, unless the commitment provides for a fixed annual adjustment.

In Switzerland, there are various defined contribution plans with a guaranteed interest rate, which provide for both statutory and voluntary benefits in the event of retirement. The annual contributions are determined based on salary and paid to a collective foundation. The payments are reinsured by an insurance company that bears the risk of default. If the insurance contract is terminated by the pension fund or the insurance company, the employer must make the restructuring contributions. Consequently, the plans are classified as defined benefit plans in the Group.

At the time of retirement, the accrued contributions including the return are converted into an annuity by means of conversion factors, which is paid out to the beneficiary. Part or all the benefit can also be drawn by the insured person in the form of a lump-sum payment. The Board of Trustees of the collective foundation, which is made up of equal numbers of employer and employee representatives, reviews the management and administration of the pension plans organised in the collective foundation.

The regulatory framework in Switzerland is provided by the Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans (BVG).

The defined benefit plans in Ireland are closed to new entrants. The benefit at retirement, which is paid in the form of an annuity, is dependent on final salary and length of service. The statutory framework is provided by the Pensions Act. The pension plans are subject to a minimum funding requirement, which is set and monitored by the Pensions Regulator.

The amounts recognized in the balance sheet as of December 31, 2022, are as follows:

KEUR	Dec. 31, 2022	Dec. 31, 2021
Fair value of plan assets	**61,602**	**63,665**
Switzerland	*33,692*	*31,972*
Ireland	*14,755*	*18,383*
Germany	*13,155*	*13,310*
Present value of DBO	**94,028**	**117,920**
Switzerland	*38,465*	*43,216*
Ireland	*11,642*	*18,345*
Romania	*78*	*81*
Germany	*43,842*	*56,278*
Net defined benefit liability	**32,426**	**54,255**

The table below shows the reconciliation of the opening balance to the closing balance for the net defined benefit liability and its components:

KEUR	Defined benefit obligation		Fair value of plan asset		Net defined benefit liability	
	2022	2021	2022	2021	2022	2021
As of January 1	**117,920**	**123,828**	**63,665**	**61,239**	**54,255**	**62,589**
Profit and loss						
Current service cost	2,720	3,107	-	-	2,720	3,107
Past service cost	0	-1,174	-	-	-	-1,174
Interest income/expense	1,017	826	487	348	531	478
Administration expenses	0	-	-151	-138	151	138
	3,737	**2,758**	**336**	**210**	**3,402**	**2,548**
Other comprehensive income						
Return on plan asset, exluding amounts recognised as interest income/expense	-	-	-3,124	168	3,124	-168
Actuarial gains/losses from:						
- change in demographic assumptions	-	-2,677	-	-	-	-2,677
- change in financial assumptions	-25,080	-2,057	-	-	-25,080	-2,057
- experience-based adjustments	708	-2,290	-	-	708	-2,290
	-24,372	**-7,024**	**-3,124**	**168**	**-21,248**	**-7,192**
Other						
Exchange differences	1,984	1,877	1,575	1,393	410	484
Contributions (employer)	-	-	2,949	2,806	-2,949	-2,806
Contributions (employee)	1,714	1,570	1,714	1,570	-	-
Benefit payments	-6,956	-5,131	-5,512	-3,717	-1,443	-1,414
Effects from transfers	-	41	-	-4	-	45
	-3,257	**-1,643**	**725**	**2,048**	**-3,982**	**-3,690**
As of December 31	**94,027**	**117,920**	**61,601**	**63,665**	**32,426**	**54,255**

The weighted average term of the defined benefit obligation as of December 31, 2022, is 10 years (previous year: 13 years).

As of December 31, 2022, KEUR 29,637 (2021: KEUR 39,008) of the defined benefit obligation relates to plans that are not funded by plan assets and KEUR 64,390 (2021: KEUR 78,911) of the defined benefit obligation relates to plans that are funded in whole or in part by plan assets.

The plan assets in Switzerland held by the collective foundation consist exclusively of assets from insurance contracts with a life insurance company. The plan assets in Ireland are managed by a pension trust, which is legally independent, and are mainly invested in shares and bonds. The plan assets in Germany consist of reinsurance policies taken out to secure the commitments and assets paid into a pension fund.

The fair value of plan assets is composed of the following categories:

	Dec. 31, 2022	Dec. 31, 2021
Equity instruments	5%	6%
Debt instruments	9%	12%
Real estate	1%	2%
Cash	1%	1%
Assets held by insurance company, Germany	21%	21%
Assets held by insurance company, Switzerland	55%	50%
Other assets	8%	9%
Total	**100%**	**100%**

There are market price quotations on active markets for all equity and debt capital instruments as well as real estate and other assets.

The expected employer contributions for 2023 are expected to amount to KEUR 3,123.

The per country weighted average of the underlying actuarial assumptions can be presented as follows:

	December 31, 2022			December 31, 2021		
	Switzerland	Germany	Ireland	Switzerland	Germany	Ireland
Discount rate	2.15%	4.17%	4.17%	0.35%	1.17%	1.17%
Salary increase	1.75%	1.00%	3.90%	1.00%	1.00%	2.00%
Pension increase	0.00%	2.00%	0.00%	0.00%	1.70%	0.00%

The biometric calculation basis used in Germany was the Heubeck 2018 G mortality tables, in Switzerland the BVG2020 GT and in Ireland the ILT15.

An increase or decrease in the key actuarial assumptions by 0.25 percentage points would have the following percentage effects on the present value of the pension obligations:

	Impact on defined benefit obligation 2022		Impact on defined benefit obligation 2021	
Change in assumption	**0,25%**	**-0,25%**	**0,25%**	**-0,25%**
Discount rate	-2,5%	2,6%	-3,2%	3,4%
Salary growth rate	0,3%	-0,4%	0,5%	-0,5%
Pensions growth rate	1,4%	-0,8%	1,7%	-1,1%

A change in life expectancy of +1 year would increase the defined benefit obligation by 1.85% (2021: 2.6%), a change in life expectancy of - 1 year would decrease the obligation by -1.89% (2021: 2.6%).

The sensitivity analyses are based on the change of one actuarial assumption while all other assumptions remain constant. The sensitivities were determined in the same way as the DBO as of December 31, 2022. If several assumptions change simultaneously, the resulting effect does not necessarily correspond to the sum of the individual effects. The effects of the individual changes in assumptions are not linear.

Provisions for supplementary pension benefits Italy

Provisions for supplementary pension entitlements in Italy include provisions in connection with the "trattamento di fine rapporto" at the two sites in Italy. This is a legal obligation for companies in Italy, according to which employees are entitled to a severance payment upon termination of employment.

Provisions for service anniversaries and sabbaticals

Employees of individual subsidiaries in Switzerland and Germany are entitled to anniversary bonuses and sabbaticals. The provisions were calculated in accordance with IAS 19 using the projected unit credit method. The same mortality tables were used as a biometric basis for calculation as for the pension commitments. The weighted discount rate to be applied was 3.0% in 2022 (2021: 1.0%).

6.11 Other provisions

	Current provisions for					
KEUR	Warranty	Litigations	Restructu-ring	Customer bonus	Other	Total
As of Jan. 01, 2022	**1,914**	**132**	**1,042**	**117**	**602**	**3,807**
Additions	1,009	50	634	61	1,796	3,549
Utilisation	-773	-	-767	-	-2,000	-3,541
Reversal	-583	-34	-63	-0	-27	-707
Transfers	-	-85	-83	-	200	32
Currency translation	11	1	2	-	6	21
As of Dec. 31, 2022	**1,578**	**64**	**765**	**177**	**577**	**3,162**

	Non-current provisions for					
KEUR	Warranty	Litigations	Restructu-ring	Customer bonus	Other	Total
As of Jan. 01, 2022	**-**	**-**	**107**	**-**	**693**	**800**
Additions	-	-	-	-	101	101
Utilisation	-	-	-	-	-14	-14
Reversal	-	-	-21	-	-2	-22
Transfers	-	-	-35	-	-	-35
Currency translation	-	-	4	-	1	6
As of Dec. 31, 2022	**-**	**-**	**55**	**-**	**779**	**835**

All provisions are based, among other things, on discretionary powers, assumptions, past experience and estimates that are subject to certain uncertainties (regarding the amount and timing of utilisation). The valuation and accounting of the individual provisions are made according to the estimates of the management based on past experience.

Warranties

The calculation of the provision is based on both historical experience and expectations of future failures of the products sold within the warranty period. The provisions for warranties mainly relate to products sold in the financial years 2021 and especially in 2022. The Group expects to utilise most of the provisions in 2023.

Litigations

The provision for litigation costs of KEUR 64 (2021: KEUR 132) mainly relates to risks in connection with ongoing legal cases. The Group expects to utilise most of the provisions in 2023.

Restructuring

The restructuring provisions of KEUR 820 (2021: KEUR 1,149) mainly relate to expenses for termination agreements and severance payments. The main payments, which were determined within the framework of individual agreements, are to be paid in 2023.

Customer bonuses

The provisions for customer bonuses relate to outstanding invoices in the amount of KEUR 177 (2021: KEUR 117). The utilisation will occur in 2023.

Miscellaneous other provisions

Current miscellaneous other provisions of KEUR 577 (2021: KEUR 602) include various items of low value. Non-current miscellaneous other provisions in the amount of KEUR 779 (2021: KEUR 693) mainly relate to restoration obligations.

6.12 Financial liabilities

KEUR	Dec. 31, 2022	Dec. 31, 2021
Non-current bank loans	541,849	535,371
Non-current leasing liabilities	64,558	59,689
Non-current financial liabilities	**606,408**	**595,061**

KEUR	Dec. 31, 2022	Dec. 31, 2021
Current bank loans	1,967	2,971
Current accrued interest	12,878	11,512
Current leasing liabilities	9,737	9,598
Current financial liabilities	**24,582**	**24,082**

KEUR	Year of maturity	Nominal value		Carrying amount	
		Dec 31, 2022	Dec 31, 2021	Dec 31, 2022	Dec 31, 2021
First Lien	2026	565,000	565,000	537,851	530,396
Revolving Credit Facility	2024	-	-	-	-
Other	various	5,965	7,947	5,965	7,947
Total		**570,965**	**572,947**	**543,817**	**538,343**

The "First Lien" loan has a nominal amount of KEUR 565,000 at a base rate of 4.50% plus EURIBOR (1, 2, 3 or 6 months) as at the reporting date. If the EURIBOR falls below 0.00%, 0.00% is applied. The difference between the nominal amounts and the carrying amounts results from the application of the effective interest method in accordance with IFRS 9.

The credit line of the revolving loan amounts to KEUR 50,000. As of December 31, 2022, this was only utilised in the form of guarantees in the amount of KEUR 166 (2021: KEUR 466).

Certain business shares have been pledged and guarantees issued to secure the banks' claims.

6.13 Other liabilities

KEUR	Dec. 31, 2022	Dec. 31, 2021
Non-current contract liabilities	16,017	15,060
Miscellaneous other non-current liabilities	3,759	371
Other non-current liabilities	**19,776**	**15,431**

Other non-current liabilities mainly include deferrals of government grants for investments.

KEUR	Dec. 31, 2022	Dec. 31, 2021
Personnel liabilities	20,408	19,284
Social security liabilities	3,187	3,171
Contract liabilities	11,118	4,712
Value-added tax liabilities	859	1,428
Miscellaneous other non-financial liabilities	2,561	1,593
Other current liabilities	**38,134**	**30,188**

7. Disclosures on leases

The Group rents land and buildings, production facilities and other machinery, motor vehicles and office and business equipment.

The term of the lease agreements in the land and buildings asset class is typically up to twenty years. The Group has no purchase option on land and buildings and there is no automatic transfer of ownership. AENOVA leases buildings for both administrative and production purposes. Some lease agreements provide for additional rental payments based on changes in local price indices.

Leasing agreements for production facilities usually have a contractual term between one and ten years.

In addition, the Group leases IT equipment with contractual terms ranging from one year to five years. Some of these leases are either short-term or of low-value. Neither rights of use nor lease liabilities were recognized for the short-term or low-value leases.

Some leases contain renewal options that are exercisable during the non-cancellable lease term. The Group considers the inclusion of renewal options when entering into new leases to ensure operational flexibility. An assessment is made at the commitment date as to whether the exercise of a renewal option is reasonably certain. For production facilities and buildings with termination options of three or six months, AENOVA assumes a lease term that depends on long-term planning and considers whether the exercise of an option to extend the lease is reasonably certain. For leasing facilities used for administrative purposes (e. g. buildings or rented flats), AENOVA assumes a non-cancellable lease term of three or six months. Accordingly, such leases are treated as short-term leases and AENOVA does not recognise a right of use or a lease liabilities in the consolidated statement of financial position.

The Group re-determines at the end of each financial year whether the exercise of a renewal option is reasonably certain if a significant event or change in circumstances within its control occurs.

At the end of the reporting period, AENOVA entered into leases that will not be recognized in the balance sheet until 2023. The initial value of the gross lease liabilities from these contracts amounts to KEUR 25,250 (2021: KEUR 27,897).

The Group sub-leases some commercial properties. From the lessor's perspective, all leases are classified as operating leases. The following table presents a maturity analysis of the lease receivables and shows the undiscounted lease payments to be received after the balance sheet date.

KEUR	Dec. 31, 2022	Dec. 31, 2021
Due within 1 year	340	334
Due 1 - 5 years	1,198	994
Due after 5 years	356	592
Lease payments (gross)	**1,894**	**1,920**

8. Disclosures on financial instruments

KEUR	Dec. 31, 2022	Dec. 31, 2021
Loans and receivables at amortised cost (AC)	-143	-288
Financial instruments at fair value through profit or loss (FVTPL)	-5,846	5,861
Debt instruments at fair value through other comprehensive income (FVOCI)	-889	-71
Financial liabilities measured at amortised cost (FLAC)	-35,696	-23,146
Net result from financial instruments	**-42,573**	**-17,644**

The result from financial liabilities measured at amortised cost mainly includes interest expenses for bank loans of KEUR -27,282 (2021: KEUR -32,295) and interest expenses from compounding of bank loans measured using the effective interest method of KEUR -7,455 (2021: KEUR -11,089).

KEUR	Bank liabilities		Lease liabilities	
	2022	2021	2022	2021
Balance at beginning of period	**538,343**	**535,753**	**69,288**	**51,868**
Cash Flow	-1,981	28,205	-11,198	-8,541
Currency translation	-	-3	119	123
New lease agreements	-	-	16,236	26,102
Valuation effect	7,455	-15,273	-	-
Other	-	-10,340	-149	-265
Balance at end of period	**543,817**	**538,343**	**74,296**	**69,288**

The valuation effects result from the application of the effective interest method.

The following table presents the carrying amount and fair value of the financial instruments included in the individual balance sheet items by class as well as by measurement category:

	Carrying amount	Valuation according to IFRS 9					Fair value	Fair value hierarchy level	
KEUR	Dec. 31, 2022	AC	FVTPL	FVOCI	FLAC	IFRS 16	Dec. 31, 2022	Level 2	Level 3
Financial assets									
Trade receivables	39,998	2,978	-	37,021	-	-	39,998	37,021	-
Factoring receivables	13,200	-	-	13,200	-	-	13,200	13,200	-
Derivative financial assets	4,294	-	4,294	-	-	-	4,294	-	4,294
Cash and cash equivalents	20,671	20,671	-	-	-	-	20,671	-	-
Other financial assets	1,166	1,166	-	-	-	-	1,166	-	-
Financial liabilities									
Trade payables	92,605	-	-	-	92,605	-	92,605	-	-
Bank liabilities	543,817	-	-	-	543,817	-	530,600	530,600	-
Leasing liabilities	74,296	-	-	-	-	74,296	-	-	-
Accrued interest	12,878	-	-	-	12,878	-	12,878	-	-
Financial assets	**79,329**	**24,814**	**4,294**	**50,221**	**-**	**-**	**79,329**	**50,221**	**4,294**
Financial liabilities	**723,595**	**-**	**-**	**-**	**649,300**	**74,296**	**636,083**	**530,600**	**-**

	Carrying amount	Valuation according to IFRS 9					Fair value	Fair value hierarchy level	
KEUR	Dec. 31, 2021	AC	FVTPL	FVOCI	FLAC	IFRS 16	Dec. 31, 2021	Level 2	Level 3
Financial assets									
Trade receivables	27,601	1,737	-	25,865	-	-	27,601	25,865	-
Factoring receivables	8,708	-	-	8,708	-	-	8,708	8,708	-
Derivative financial assets	10,140	-	10,140	-	-	-	10,140	-	10,140
Cash and cash equivalents	53,474	53,474	-	-	-	-	53,474	-	-
Other financial assets	1,166	1,166	-	-	-	-	1,166	-	-
Financial liabilities									
Trade payables	68,979	-	-	-	68,979	-	68,979	-	-
Bank liabilities	538,343	-	-	-	538,343	-	555,478	555,478	-
Leasing liabilities	69,288	-	-	-	-	69,288	-	-	-
Accrued interest	11,512	-	-	-	11,512	-	11,512	-	-
Financial assets	**101,090**	**56,377**	**10,140**	**34,573**	**-**	**-**	**101,090**	**34,573**	**10,140**
Financial liabilities	**688,122**	**-**	**-**	**-**	**618,834**	**69,288**	**635,969**	**555,478**	**-**

Due to the short maturities of cash and cash equivalents, trade receivables and payables as well as current other assets and liabilities, it is assumed for these items that the fair values correspond to the carrying amounts.

The fair values of the non-current financial instruments are determined as the present values of the expected future cash flows. Market interest rates for the corresponding maturities are used for discounting. To determine the fair value of trade receivables (FVOCI) and receivables from factoring companies, it is assumed that the fair value corresponds to the nominal value.

In determining the fair value of an asset or liability, the Group uses observable market data as far as possible. Based on the inputs used in the valuation techniques, the fair values are categorised into different levels in the fair value hierarchy:

- **Level 1:** Quoted prices (unadjusted) in active markets for identical assets and liabilities.
- **Level 2:** Valuation parameters that are not the quoted prices considered in Level 1 but are observable for the asset or liability either directly (as a price) or indirectly (as a derivative of prices).
- **Level 3:** Valuation parameters for assets or liabilities that are not based on observable market data.

Where necessary, a reclassification is made between the individual levels at the end of the reporting period. No reclassifications were made in the past financial year.

The table below shows the reconciliation of the opening to the closing balance for level 3 fair values:

KEUR	31.12.2022	31.12.2021
Balance at beginning of period	**10,140**	**4,279**
Unrealised increase in fair value recognised in profit or loss	-	5,861
Unrealised decrease in fair value recognised in profit or loss	-5,846	-
Balance at end of period	**4,294**	**10,140**

The First Lien financing agreement and the derivatives embedded in it are a compound financial instrument with several embedded options. The latter are to be allocated to fair value level 3 as derivatives subject to separation with a total carrying amount of KEUR 4,294 (2021: KEUR 10,140).

The options, which can be exercised by Aenova at any time, on the one hand allow for the early redemption of the loan liabilities at fixed exercise prices and on the other hand provide for an interest floor of 0.00%. These embedded options are considered as a derivative for accounting purposes. No observable market prices are available for the embedded options at the reporting date. These options are valued using a Hull-White model. EUR swap interest rates and credit default swap rates of comparable companies on the reporting date and historical credit default swap volatilities are used as significant input factors.

At the current reporting date, interest rates of 2.75% (2021: -0.55%), credit default swap rates of 510 basis points (2021: 444 basis points) and credit default swap volatilities of 1.06% (2021: 1.92%) were used.

The values used represent the best estimate in each case according to our assessment. If other values had been used for the interest rates, credit default swap rates and credit default swap volatilities, different fair values would have been calculated. These hypothetical deviations (sensitivities) are shown in the table below. In the reporting period, a net result (expense) of KEUR -5,846 (2021: KEUR 5,861) was recognized in the financial result for the options held at the reporting date as part of the level 3 measurement. For the development of the carrying amounts in the reporting period, please refer to the table above. The changes in value recognized in profit or loss in the reporting period were essentially due to movements in credit default swap rates.

The table below shows the results of a sensitivity analysis for carrying amounts of financial assets allocated to level 3 depending on the unobservable input parameters:

KEUR	31.12.2022	31.12.2021
EUR swap rates + 50 basis points	60	3,693
EUR swap rates - 50 basis points	-102	-3,777
Credit default swap rates + 50 basis points	-1,778	-4,100
Credit default swap rates - 50 basis points	2,500	5,171
Historical credit default swap volatilities + 10%	592	873
Historical credit default swap volatilities -10 %	-670	-1,025

9. Contingent liabilities

As of December 31, 2022, AENOVA has liability risks from guarantees in the amount of KEUR 2,029 (2021: KEUR 2,159). A claim is considered possible but not probable, which is why no provision is recognized. It is not possible to estimate the likely amount or the time of utilisation. Furthermore, there is a latent risk that not all obligations for pensions and similar obligations earned in the past have been recognized. A sufficiently reliable estimate of the probability of occurrence and the amount of any existing obligations is not possible.

10. Related party transactions

In accordance with IAS 24, related parties are parties that directly or indirectly exercise control over the entity or can exercise significant influence over the entity.

Parent company and ultimate parent company

As at the reporting date, there are outstanding receivables from the parent companies or the ultimate parent company in the amount of KEUR 42 (2021: KEUR 42) and loan receivables in the amount of KEUR 1,000 (2021: KEUR 1,000).

Key management personnel

The management of Apollo 5 GmbH and the Supervisory Board of Apollo 5 GmbH constitute related parties in accordance with IAS 24 as members of the highest management and supervisory level of the AENOVA Group.

Executive board	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Jan Kengelbach	Managing Director	Managing Director
Ralf Schuler	Managing Director	Managing Director

Supervisory board	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Dr. Ewald Walgenbach	Chairman	Chairman
Peter Winkelmann	Deputy chairman	Deputy chairman
Giuliano Bidoli	Member	Member
Moritz Elfers	Member	Member
Maximilian Kastka	Member	Member
Pierre Stemper	Member	Member
Jan-Felix Stolz	Member (until June 2022)	Member
Daniel Fuchs	Member (since June 2022)	-
Gerd Hammerl	Member	Member
Claudia Langhammer	Member	Member
Bernd Schmider	Member	Member
Heike Tietze	Member	Member
Thomas Volgger	Member	Member

The total remuneration for the Executive Board in 2022 of KEUR 1,926 relates in full to fixed and variable short-term benefits (2021: KEUR 1,253), of which KEUR 51 relates to pension costs (2021: KEUR 53).

The total remuneration of the Supervisory Board amounted to KEUR 66 in 2022 (2021: KEUR 72).

Other related parties

Other related parties are close relatives of key management personnel and entities that are controlled by or exercise significant influence over other related parties. Companies that exercise control or significant influence over related parties are also considered related parties.

In the 2022 financial year, AENOVA sold goods and services in the amount of KEUR 2,918 (2021: KEUR 6,940) to and acquired goods and services in the amount of KEUR 6,216 (2021: KEUR 5,905) from other related companies. As at the reporting date, there are outstanding receivables from related parties of KEUR 948 (2021: KEUR 117) and outstanding liabilities of KEUR 1,093 (2021: KEUR 530).

11. Share-based payments

The managing directors and selected executives of the AENOVA Group hold shares in Apollo 11 S.à r.l. via two management KGs. The management participation programmes are a programme launched in 2014 (old MEP) and one from 2020 (new MEP). The management KGs hold shares in Apollo 11 S.à r.l., which in turn holds all shares in the AENOVA Group. The shares are granted by Apollo Warehouse S.à r.l. and Apollo Warehouse 2 S.à r.l. respectively as fulfilling companies.

Apollo 11 S.à r.l. and the AENOVA Group are under common control, as the person who controls Apollo 11 also controls Apollo 5 GmbH. The fulfilling companies Apollo Warehouse S.à r.l. and Apollo Warehouse 2 S.à r.l. are shareholders in Apollo 11 S.à r.l. via the KG shares. Thus, from the perspective of the receiving company, the management participation programmes are within the scope of IFRS 2.

These are equity-settled share-based payments, as the companies grant shares to the managers at an agreed price. These transactions are measured at fair value at the grant date. As the receiving company (Apollo 5 GmbH) has no obligation to settle, the remuneration is accounted for as equity-settled in the capital reserve as a contribution from shareholders.

In the event of a participant leaving the Aenova Group, so-called "leaver" conditions exist. The form in which these are to be applied depends on the type of exit. These conditions determine the contractually agreed buy-back price of the shares. According to these mechanisms, the price is determined in a range between the originally paid-in capital and the market value of the shares to be repurchased.

As the purchase price of the shares for the new MEP is derived from the fair value of the shares at the grant date, no benefit was granted to the recipients. The grant date fair value (GDFV) is therefore zero.

For the old MEP, an exit bonus is generally granted if the amount of the exit proceeds exceeds an agreed minimum threshold. The exit can take place either via an IPO or a sale of the AENOVA Group.

The amount of the compensation depends on the amount of the exit proceeds less related costs as well as the amount of the participation of the respective beneficiary. The fair value was measured using various assumptions based on an option pricing model. Specific exit clauses apply in the event of an employee's premature departure. These specify the criteria for the creation of an entitlement and the amount of the exit bonus. The vesting period of the management programme is 4 years.

The valuation of the benefit was carried out using company valuations of the AENOVA Group, the basis of which was the corporate planning approved by the management. The exit bonus was valued using a Monte Carlo simulation.

At the beginning of 2018, the old MEP was modified by lowering the multipliers that determine the threshold and the amount of the exit bonus. This increased the fair value of the shares. All shares in the old MEP were fully vested as at 31 December 2018.

In connection with the introduction of the new employee participation programme in the 2020 financial year, participants in the existing programme were offered the opportunity to sell their participation and any remaining bonus entitlements. Partial use was made of this. Those who accepted the offer received corresponding payouts from Apollo 11 S.à r.l.

In the 2022 financial year, two stakeholders left the new MEP. There was one addition to the new MEP. This did not have any accounting impact on the consolidated financial statements.

12. Auditor’s fee

KEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Auditing services	550	553
thereof from the previous year	75	109

13. Subsequent events

In March 2023, it was decided to close the Wolfratshausen site as part of a strategic realignment. Part of the product portfolio will be transferred to other production sites to optimise AENOVA's production network. The closure is to be carried out in a socially responsible manner.

Financial effects arise in particular with regard to turnover, costs, property, plant and equipment and provisions. An exact estimate of the financial impact is not possible at this stage. Depreciation of property, plant and equipment is expected to amount to 15-20 MEUR. Regarding expenses from the social plan, Aenova expects an amount of approx. 8 MEUR.

Starnberg, 26 April 2023

Ralf Schuler	Jan Kengelbach
Apollo 5 GmbH Managing Director	Apollo 5 GmbH Managing Director

Group Management Report of Apollo 5 GmbH

for the period January 1 to December 31, 2022

For computational reasons, rounding differences of one unit (KEUR, %, etc.) may occur in the tables.

The management report is prepared and certified in German. The English version is for translation purpose only.

1. Fundamentals about the Group

The AENOVA Group (hereinafter referred to as "AENOVA" or "AENOVA Group") consists of the parent company Apollo 5 GmbH based in Starnberg and 22 subsidiaries. At the end of the fiscal year, AENOVA operated a total of 15 production sites in six countries. The Group is represented in six European countries and the USA. The Group employs around 4,100 people (previous year around 4,200). These consolidated financial statements cover the period from January 1, 2022 to December 31, 2022.

Effective January 1, 2022, the Group company Aenova France SAS, Paris, was merged into Swiss Caps AG. The closure of Swiss Caps (UK) Ltd, Doncaster, took place on July 19, 2022.

1.1 Business model of the Group

The AENOVA Group is one of the world's largest pharmaceutical contract manufacturers for the development, production and marketing of drugs and food supplements. The range of services covers the entire value chain for the development and manufacture of all common dosage forms and product groups for drugs and food supplements. This includes

- **Solids** such as tablets, hard capsules, sherbet
- **Semi-solids and liquids** such as ointments, gels and creams as well as sterile and non-sterile liquids such as tinctures, drops and injectables
- **Soft gelatin capsule**s

The active ingredients processed range from common generic substances such as paracetamol and ibuprofen to special highly potent active substances such as hormones and cytostatics.

AENOVA is a B2B (business to business) service provider with decades of experience and expertise in the pharmaceutical and healthcare sector. The range of products and services is used by originators (developers of patent-protected products), generic companies, and suppliers of nutritional supplements and veterinary products.

The core activities of the Group along the value chain are:

- Innovation and development - development of innovative product ideas, concept and product development, formulation and analytics development, pharmacotherapy, shelf-life testing, regulatory support and market approvals, technology transfer
- Contract manufacturing of tablets - film-coated tablets and coated tablets, effervescent products, hard capsules, soft gelatin capsules, VegaGels® (gelatin-free soft capsules), creams and ointments, suppositories, as well as sterile and non-sterile liquid dosage forms
- Contract packaging - blisters, sleeves, bottles, sachets, cartons, labels, folding boxes, brochures and package inserts
- Quality management - production control and packaging according to international standards (for example cGMP or HACCP) as well as control and release of raw materials and finished products
- Clinical investigational product - bulk manufacturing and procurement of investigational products, primary packaging, blinding and secondary packaging, labeling, controlled storage, distribution, quality planning, quality control and release, project management
- Supply Chain Management - planning, procurement, logistics
- Analytics - testing of Active Pharmaceutical Ingredients (APIs), excipients and finished products, shelf life testing, method development and validation, method transfer, EU approval
- Sales, Customer Support and Consulting - Sales of AENOVA products/technologies and contract manufacturing capabilities, license management, technical advice and support related to manufacturing processes, products, formulation, registrations and communications.

1.2 Goals and strategies

The global healthcare market will continue to grow steadily in the coming years - with growth rates for prescription medicines exceeding 6%, including products already on the market and new developments (products in clinical development).[1] The reasons for this growth include continued innovation in pharmaceutical research, leading to the development of new treatments for previously untreatable diseases, demographic change, increasing health awareness, and growing prosperity in both industrialized countries and emerging markets.[2/3] For 2023, the future development of Covid-19 remains a factor of uncertainty.[4]

In addition, the outsourcing trend is expected to continue in the coming years, combined with further consolidation of production capacities.[5/6] Contract manufacturers are continuing to expand their technological capabilities in order to ideally serve the changing demands of their customers for the development of new drugs.[7]

AENOVA will benefit from this environment as a CDMO (contract development and manufacturing organization), i.e. as a service provider for the development and manufacturing of pharmaceutical and consumer healthcare (CHC) products.

In addition to product quality, the corporate strategy focuses in particular on high customer satisfaction through delivery times in line with the market and high delivery reliability. As a company with a strong European manufacturing network covering the entire range of dosage forms, AENOVA can also benefit from the repatriation (reshoring) of pharmaceutical manufacturing from Asian countries to Europe and North America, which helps to simplify global value chains and secure supply chains.[8/9] This trend, which has been ongoing for a number of years, received widespread attention in 2021 due to the global Covid-19 pandemic and the challenges faced by global supply chains, particularly in 2022, especially in developed countries that will support national pharmaceutical manufacturing through government programs.[10]

Five points form the value proposition of the AENOVA Group:

- **Putting customers and patients first:** As one of the world's largest CDMOs, we are aware of our critical role in the healthcare industry every day. We strive to provide our healthcare customers with products and services of the highest quality, cost efficiency, reliability and timeliness that improve and prolong patients' lives.
- **Everyone counts:** We create a work environment where employee satisfaction, learning and engagement are continuously high and improving. We value the contribution of every team member, encourage our colleagues and share the recognition.

1 Evaluate Pharma, WORLD PREVIEW 2022 Outlook to 2028: Patents and Pricing, October 2022
2 https://www.iqvia.com/newsroom/2023/01/global-market-for-medicines-to-rise-to-19-trillion-by-2027-says-report-from-iqvia-institute, January 2023
3 EvaluatePharma® World Preview 2021, Outlook to 2026, July 2021
4 Evaluate Pharma, WORLD PREVIEW 2022 Outlook to 2028: Patents and Pricing, October 2022
5 PwC, Current trends and strategic options in the pharma CDMO market, November 2019; Bourne Partners, Market insight, Biopharmaceutical CDMOs Analysis, February 2019; https://www.mordorintelligence.com/industry-reports/pharmaceutical-contract-development-and-manufacturing-organization-cdmo-market
6 https://www.prnewswire.com/news-releases/contract-development-and-manufacturing-organization-cdmo-outsourcing-market-size-to-grow-by-usd-84-14-billion-from-2022-to-2027-a-descriptive-analysis-of-customer-landscape-vendor-assessment-and-market-dynamics---technavio-301706937.html
7 https://www.ey.com/en_qa/strategy/how-cdmo-companies-are-leading-innovation-for-pharmaceutical-partners, 2022
8 EY, Re-shoring pharma and medtech manufacturing: playingthe long game, October 2020; National Managing Principal; Yvette Jansen, Manager Life Sciences & Healthcare; Ashley Johnson, Life Sciences Consultant; and Corine Whittick, Life Sciences Consultant at Grant Thornton; The growing benefits to reshoring pharma operations, Lisa Walkush, August 2020.
9 https://www.mckinsey.com/capabilities/operations/our-insights/to-regionalize-or-not-optimizing-north-american-supply-chains, December 2022
10 Politico, Can the coronavirus bring back Europe's pharmaceutical factories?, October 2022

- **Excellence and Reliability:** We strive to be the CDMO of choice for our global customers and an employer of choice for our highly skilled employees, and so we focus on excellence and reliability in everything we do.
- **Better every day:** AENOVA stands for continuous and sustainable improvement. Processes, products and services are subject to a "continuous improvement process". We invest in modern technologies; competencies and know-how are continuously developed.
- **Strong as a group**: Across all AENOVA Group sites, we bundle competencies and work with a strong "One AENOVA" culture. This is how we promote continuous improvement, live team spirit and create added value.

The Group-wide transformation with the aim of achieving profitable growth was continued along the three thrusts of "Operational Excellence, Commercial Excellence and Organizational Excellence. The transformation projects planned at the end of the year are to be completed in 2023.

As part of the "Operational Excellence" program, investments in the Group's range of services at the Latina (sterile liquids, incl. prefilled syringes) and Tittmoning (high-volume solids) sites were completed and the capacity available for customer projects was further increased. The expansion of the competence center for high-potency solids at the Regensburg site continued as planned. In addition, further investments were made in operating equipment to increase quality and productivity and provide capacity for projects won. Overall, AENOVA's investment program continued to be implemented with investments in property, plant and equipment as well as in right of use amounting to MEUR 55.6 (includes additions to property, plant and equipment as well as to right of use).

In the area of "Commercial Excellence," the content focus was on the development of a new index-based pricing model, which will be implemented with effect from the following year.

In the area of Organizational Excellence, numerous projects from 2021 were continued, such as the implementation of the compliance strategy in the area of supplier management. In addition, various HR processes were improved, including the expansion of the onboarding process and the development of an employer value proposition.

Pharma: Originators and Generics, OTC

AENOVA supports its customers in the development and manufacturing of products, both originator and generic, whether prescription or over-the-counter (OTC).

Research-based pharmaceutical companies are increasingly focusing on their core competencies of innovative research and development as well as marketing and sales. Production, especially after the expiration of patents, is seen less and less as a strategic core competence by research-based pharmaceutical companies. In addition, there is the increasing importance of so-called virtual pharmaceutical companies, including biotech startups, which focus exclusively on the discovery and development of new drugs, but leave the manufacturing to external partners. Already today, more newly approved drugs are developed by virtual pharma companies/small biotechs than by the leading pharma companies. These trends are expected to intensify in the future.[11/12]

AENOVA is a competent partner in this area, especially because large pharmaceutical companies are also increasingly focusing on manufacturing costs. With increasing cost pressure, outsourcing measures to CDMOs are becoming more common. With the growing complexity of dosage forms - including new modalities such as those used in Covid-19 vaccines - the need for complex manufacturing services is

11 PharmaTimes Media Ltd, Dr Tony Flinn, The rise of virtual pharma, February 2019; Drug Discovery World (DDW), Dr Stephen Naylor and Dr Kirkwood A. Pritchard Jr, The Reality of Virtual Pharmaceutical Companies, August 2019; EY, Externalizing pharma innovation is the winning strategy, 2019; EY, Externalizing pharma innovation is the winning strategy, 2019.
12 https://www.mckinsey.com/industries/life-sciences/our-insights/a-new-portfolio-model-for-biotech

increasing. Both in terms of development and technical capabilities, the Group's offering was expanded in 2022 to further strengthen the company's position.

In general, the generics industry also continues to be characterized by stable volumes, but also by higher price sensitivity, particularly in the commodity segment. Large companies will outsource large parts of their production in this segment and concentrate their own value creation on more differentiable products and services.

AENOVA's goal of growing in this segment will be achieved through, among other things:

- Focusing on core customers and expanding the 'share of wallet', e.g. by covering broader product ranges or additional services
- Acquisition of new strategic customers with special technologies
- Focus on life cycle management
- Focus on acquisitions of products with long-term commitment to the production site.

CHC

This segment comprises the area of pharmaceutical, non-prescription drugs. CHC products are produced to pharmaceutical standards at many AENOVA plants. A sub-segment is the area of food supplements, which is served on the part of AENOVA primarily with soft gelatin capsules from Cornu, Romania.

From Cornu, AENOVA can offer its customers a very wide product range of capsule sizes and suture technologies as well as great experience in active ingredient processing. The company generated further growth in fiscal 2022 with its competitive full-service offering in soft and vegagel capsules, including coating and packaging. AENOVA plans to grow further in this business. In this context, the Group will continue to focus on high-quality VMS (Vitamins, Minerals, Supplements) such as special natural extracts.

Animal Health

In this segment, AENOVA is targeting market leadership in antibiotics and plans to expand this further, e.g. in injectables and antiparasitic agents.

Large global veterinary companies have placed their focus on research and development as well as marketing and sales. AENOVA relies on long-term partnerships here and plans to grow further, especially with the largest suppliers in this segment.

In Europe in particular, smaller, regional companies complement the customer spectrum.

1.3 Research and development

AENOVA provides development services for various dosage forms of pharmaceutical products on behalf of customers. The development services cover all areas of product development, i.e. formulation and process development, analytical method development and drug approval. AENOVA covers a broad portfolio with the development of soft gelatin capsules, solid dosage forms (incl. highly potent APIs and hormones) as well as semi-solid and liquid dosage forms (incl. sterile injectables). However, the Group does not conduct its own research activities for the identification or manufacture of active pharmaceutical ingredients.

Development services are an essential component of the company's value chain. Many years of experience and the broad technology spectrum of the AENOVA network contribute to the range of services in the field of pharmaceutical development and contract manufacturing. Working with customers from the development stage and supporting their projects from clinical trial supply

management through validation, registration and market launch is the basis for a long and trusting relationship. In this context, AENOVA offers a holistic service in clinical development, ranging from the creation of clinical samples to packaging, blinding and transport to the respective study centers.

AENOVA bundles its development offerings in specialized competence centers. The proximity of the development units to commercial production meets the customer's need for holistic service from a single source. AENOVA thus supports the timely implementation of transfer and development projects as well as the smooth ramp-up of commercial production for customers.

AENOVA carried out a total of 312 development and TechTransfer projects at 12 sites in 2022. Of these, 99 were development projects commissioned by customers and were in various stages of implementation (including clinical trial management). Fifteen new projects were started (previous year: 13 new projects), which will be worked on over the next few years.

In the area of Technology Service, 213 (previous year 200) transfer projects were handled throughout the Group in the past fiscal year and 163 (previous year 117) product life cycle management projects were carried out.

2. Economic Report

2.1 Macroeconomic and industry-specific conditions

Economy development

The year 2022 was a year of major economic challenges for Europe and especially Germany and German companies. In addition to inflation, which has already been on the rise since mid-2021, the energy crisis due to the Russian war of aggression on Ukraine has led to heavy burdens for European companies. The inflation rate in Germany reached 10.4%[13] in October 2022, the highest level since the early 1950s[14] . In the EU27 average, inflation reached 11.5%. [15]

In Germany, due to an initial recovery of the economy in the first half of the year, overall GDP growth of 1.9% was realized.[16] Although demand was thus above the level prior to Covid-19 (2019), it fell short of the original expectations from 2021 and the beginning of 2022 (over 4%) for the reasons mentioned above.[17]

In view of the events in 2022, the outlook for 2023 and subsequent years has deteriorated significantly. While institutions such as the European Central Bank expect energy and gas prices to fall in the medium term (2024-2026)[18] , downside risks predominated at the end of 2022. The risks include the possibility of inflation becoming entrenched at a high level, rising interest rates and other geopolitical events.[19]

In the euro area, GDP is expected to recover somewhat more strongly in 2022 at 3.5%, albeit with great heterogeneity between individual countries and industrial sectors.[20] The picture for Switzerland in 2022 was slightly different from that for Germany: with comparatively low inflation of 2.9%, economic growth (GDP) was similarly high at 2.0%.[21]

13 https://www.destatis.de/DE/Presse/Pressemitteilungen/2022/11/PD22_472_611.html
14 https://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/gutachten/jg202223/JG202223_Gesamtausgabe.pdf
15 https://ec.europa.eu/eurostat/databrowser/view/prc_hicp_manr/default/table?lang=en
16 https://www.bundesregierung.de/breg-de/suche/wirtschaft-robust-2022-2157690
17 https://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/gutachten/jg202223/JG202223_Gesamtausgabe.pdf
18 https://www.ecb.europa.eu/pub/projections/html/ecb.projections202212_eurosystemstaff~6c1855c75b.en.html, December 2022
19 https://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/gutachten/jg202223/JG202223_Gesamtausgabe.pdf
20 Euroindicators - Eurostat. Preliminary flash estimate fort he fourth quarter of 2022, January 2023.
21 Swiss Confederation, State Secretariat for Economic Affairs SECO, Economic Forecast 2022, December 2022

A similar picture emerged in the United States: After strong growth in 2021 (5.9%), US GDP is expected to grow by 2.1% in 2022.[22]

Development of the pharmaceutical and consumer healthcare market

While Covid-19 vaccines enabled economies to reopen, new challenges emerged, leading to a degree of instability. The difficult economic environment with ongoing supply chain issues, a tight labor market, currency fluctuations and inflation also weighed on the pharmaceutical industry.

The assumption that the pharmaceutical industry was recession-proof due to the steady demand for drugs is currently being put to the test. Rising operating costs were a significant burden for the industry in 2022.[23]

According to a survey conducted by GlobalData Healthcare at the end of 2022, inflation is the biggest concern for the pharmaceutical industry heading into 2023. According to the survey, drug prices and reimbursement restrictions are the second and the conflict in Ukraine the third biggest obstacles to growth. However, the pharmaceutical industry is also concerned about China, Brexit and the upcoming patent expirations.[24]

Despite all the geopolitical and economic turmoil, Evaluate Pharma, the leading provider of business intelligence for the pharmaceutical industry, forecasts that it will grow by 6% to USD 1.6 trillion by 2028. In particular, the importance of high-priced, biotech products for the industry continues to grow.[25]

Substantial investments in oncology, which will remain the top-selling therapeutic area in the future, mean that relatively new and patent-protected drugs dominate the market. Demand for immunomodulatory agents used in autoimmune diseases is also growing rapidly. Growth in the CNS area is being driven by new multiple sclerosis therapies, among others. Endocrine therapy - which consists mainly of diabetes drugs - has seen the introduction of numerous novel mechanisms in recent years. In contrast, vaccines and the musculoskeletal area are expected to grow the slowest in the coming years.[26]

The consumer health industry has proven to be extremely resilient in recent years. Growth never slowed, even during the height of the pandemic, as categories such as vitamins, minerals and dietary supplements (VMS) made up for the shortfall of the cold/flu and pain categories during times of lockdown and social distancing.[27]

With the return to normalcy since mid-2021, CHC market growth accelerated above pre-pandemic levels. For MAT sales in the second quarter of 2022 (rolling 12-month view), the industry recorded sales growth of +11.3%. In 2022, the positive impact of a pent-up demand from previous years is visible. However, this effect weakened from Q4 2022 onwards.[28]

An average annual growth rate of 6% is forecast for the next 5 years.[29]

22 U.S. Bureau of Economic Analysis (BEA), Gross Domestic Product, Fourth Quarter 2022 and Year 2022 (Advance Estimate), January 2023
23 Inflation, drug pricing and reimbursement constraints will challenge pharma sector - Pharmaceutical Technology (https://www.pharmaceutical-technology.com/comment/inflation-pharmaceutical-sector); January 2023
24 Inflation, drug pricing and reimbursement constraints will challenge pharma sector - Pharmaceutical Technology (https://www.pharmaceutical-technology.com/comment/inflation-pharmaceutical-sector), January 2023
25 Evaluate Pharma, WORLD PREVIEW 2022 Outlook to 2028: Patents and Pricing, October 2022
26 Evaluate Pharma, WORLD PREVIEW 2022 Outlook to 2028: Patents and Pricing, October 2022
27 https://www.iqvia.com/blogs/2022/10/consumer-health-industry-poised-for-further-acceleration-in-the-post-covid-environment
28 https://www.iqvia.com/blogs/2022/10/consumer-health-industry-poised-for-further-acceleration-in-the-post-covid-environment
29 Evaluate Pharma, WORLD PREVIEW 2022 Outlook to 2028: Patents and Pricing, October 2022

Contract development and manufacturing market

In the 2022 financial year, the CDMO industry also felt the effects of the war in Ukraine. Massive increases in energy costs hit the industry hard, with inflation reaching levels not seen in over 30 years.[30]

Increases in the cost of raw and auxiliary materials, packaging materials and services have also significantly increased production costs. Since cost savings and productivity increases alone are not enough to offset the rising input costs, contract manufacturers have also ended up passing on the price increases to their customers.

Contract manufacturers predominantly produce generics, and many products have low margins. In Europe alone, generics account for about 70% of all drugs dispensed, but only 29% of sales.[31] CDMOs face generic companies that are conflicted between cost inflation and price control policies. The generics industry operates in a highly regulated environment where drug prices are often set by national pricing and reimbursement authorities. As a result, generic drug prices cannot be easily increased in the end market. European pharmaceutical companies have already warned that they may stop manufacturing some low-priced generic drugs due to rising costs. Rising energy costs also threaten to undermine recent efforts to boost drug production in Europe and make the continent more self-sufficient after the Covid19 pandemic exposed dependence on overseas suppliers and led to the disruption of some supply routes.[32]

According to Roots Analysis, the FDF segment[33] of the global pharmaceutical contract manufacturing market will reach a sales volume of BUSD 48 by 2030, with an annual growth rate of around 7%.[34] According to the base scenario of Roots Analysis' forecast model, the biopharmaceutical FDF manufacturing market will reach approximately BUSD 10.7 by 2030, at a compound annual growth rate of 9.5%.[35]

These forecasts do not yet include the effects of higher energy and material prices and significantly higher than expected inflation.

On August 25, 2022, the final version of the EU GMP Annex 1 "Manufacture of Sterile Medicinal Products", which had been in preparation for a long time, was published. The update of this European guideline for sterile production makes it necessary for many manufacturing sites in the pharmaceutical industry and contract manufacturers with sterile production such as AENOVA to make adjustments with regard to rooms, technology and processes.[36]

2.2 Business performance

In the financial year 2022, the AENOVA Group achieved sales of MEUR 749.2. Sales were thus significantly above the previous year (MEUR 52.3) and slightly below budget (MEUR-3.2). The target sales were thus missed by only 0.4 %. The increase in sales is due to volume and price effects. The volume-related increase resulted predominantly from the OTC and nutritional supplements businesses. Customers increasingly demanded vitamin products in the wake of the corona pandemic. More than one-fifth of the overall increase in sales can be attributed to this effect. There was also a revival in demand for products in the areas of antibiotics, neuroralgics and postoperative medicines. However, business with diabetes medicines in particular continued to decline.

30 http://www.pharmanetwork.com/magazine/stories/Generic-drug-makers-face-sharp-rises-in-energy-costs.html, September 2022
31 http://www.pharmanetwork.com/magazine/stories/Generic-drug-makers-face-sharp-rises-in-energy-costs.html, September 2022
32 http://www.pharmanetwork.com/magazine/stories/Generic-drug-makers-face-sharp-rises-in-energy-costs.html, September 2022
33 FDF segment = Finished dose segment (pharmaceutical contract manufacturing excl. API manufacturing)
34 Roots Analysis, Pharmaceutical Contract Manufacturing Market (3rd Edition), 2021
35 Roots Analysis, Biopharmaceutical Contract Manufacturing Market (4th Edition), 2021
36 https://health.ec.europa.eu/latest-updates/revision-manufacture-sterile-medicinal-products-2022-08-25_en, August 2022

Apart from the market and business influences mentioned above, there were no significant changes in the product or service portfolio that had an impact on business performance.

In 2022, approximately MEUR 85 of new business (peak sales) could be generated (2021: MEUR 125).

Despite the increase in sales compared to the previous year, EBITDA, at MEUR 86.6, was significantly below the previous year's level (MEUR -23.4). This development is mainly due to the sharp increase in energy and raw material prices during the year, which could only be passed on to customers with a time lag and not yet in full. Added to this were operating problems and temporary production interruptions at one manufacturing site, which led to reduced operating performance and substantial nonrecurring expenses. In a year-on-year comparison, special effects in connection with the sale of an investment and of land and buildings had a positive impact on earnings in 2021. The budgeted EBITDA of MEUR 111.3 for 2022 was missed by MEUR -24.7 or 22.2%.

EBITDA adjusted for special effects of MEUR 10.4 amounted to MEUR 97.0 and was thus below last year's reference value (MEUR -9.6). EBITDA adjusted is also below the budget (MEUR -18.4). Special effects include all non-recurring expenses and income not incurred in the ordinary course of business. These include, for example, restructuring costs as well as the special expenses related to the elimination of production restrictions at the above-mentioned manufacturing site or costs related to Covid-19.

In the financial year 2022, AENOVA generated a consolidated net loss of MEUR 46.2 (previous year: consolidated net income MEUR 15.6).

2.3 Financial and non-financial performance indicators

AENOVA's management steers the AENOVA Group mainly on the basis of sales and EBITDA as well as the following key financial figures:

	2022	2022 budgeted	2021
Gross profit margin in %	62.4%	63.9%	63.7%
Adjusted EBITDA margin in %	12.9%	15.3%	15.3%
Total Cashflow in EUR million	-33.1	8.1	3.0
Days sales outstanding (DSO)	17.6	16.5	14.4
Days payables outstanding (DPO)	104.1	83.9	94.1
Days on hand (DOH)	150.5	132.0	137.8

1) EBITDA[37] -related indicators

- Gross margin[38] : Compared with the previous year, this deteriorated due to cost increases, particularly for raw materials, and the rise in freight costs. It was not possible to pass on cost increases to customers in full. Optimizations in raw material purchasing and the active management of the customer portfolio partially offset negative effects.
- Adjusted EBITDA margin[39] : Despite the increase in sales, margin was significantly reduced compared with the previous year. The main drivers of the margin erosion in the financial year were the almost doubling of expenses for electricity, gas and heating oil compared with the previous year and the cost underabsorption at one site caused by operating performance problems.

37 EBITDA: Earnings before interest, taxes, depreciation, and amortization (incl. amortization of goodwill and investments in affiliated companies)
38 Gross margin: ratio of gross profit (sales less changes in inventories and cost of materials) to sales revenue and changes in inventories
39 Adjusted EBITDA margin: ratio of EBITDA adjusted for special effects to net sales

2) Working Capital/Cash Management[40]

- Total cash flow: AENOVA's total cash flow is used as an indicator for liquidity management. In the financial year, it was burdened by a significant increase in working capital, which led to a reduction in cash and cash equivalents of MEUR 33.1.
- Receivables Management/Days Sales Outstanding (DSO)[41] : The increase of 3.2 days compared with the previous year is mainly due to strong sales at the end of the year and a correspondingly high level of receivables.
- Payables Management/Days Payables Outstanding (DPO)[42] : The increase of 10 days is due to improved payment management and more targeted utilization of payment terms.
- Inventory Turnover/Days On Hand (DOH)[43] : The increase in DOH compared with the previous year is the result of higher inventory levels before the recognition of contract assets in accordance with IFRS 15. Due to partly disrupted supply chains, increased safety stocks were built up during the year in order to maintain delivery capability.

EBITDA-related key figures are determined monthly on the basis of IFRS figures. Working capital and cash management-based key figures are also reported monthly.

2.4 Earnings

The following table contains the consolidated statement of income for fiscal year 2022.

MEUR	**Jan. 1 - Dec. 31, 2022**	**Jan. 1 - Dec. 31, 2021**
Revenues	749.2	696.8
Changes in inventories of finished goods and work in progress	2.5	-0.3
Other operating income	8.8	23.7
Cost of materials	-284.2	-252.5
Personnel expenses	-272.2	-262.6
Other operating expenses	-117.5	-95.2
Earnings before interest, tax, depreciation and amortisation (EBITDA)	**86.6**	**110.0**
Depreciation and amortisation expense	-82.0	-58.6
Earnings before interest and taxes (EBIT)	**4.6**	**51.4**
Financial income	0.1	27.1
Financial expenses	-50.2	-53.4
Earnings before income taxes (EBT)	**-45.6**	**25.1**
Income taxes	-0.6	-9.6
LOSS OF THE YEAR / NET INCOME	**-46.2**	**15.6**
Non-recurring effects	10.4	-3.4
Adjusted EBITDA (before non-recurring)	**97.0**	**106.6**

AENOVA's sales during the financial year amounted to MEUR 749.2, MEUR 52.3 more than in the previous year.

40 The calculation of the key figures in days is made before adjustments to IFRS 9 and 15
41 Days Sales Outstanding (DSO): Ratio of trade accounts receivable to average sales revenue of the last three months multiplied by 30 days.
42 Days Payables Outstanding (DPO): Ratio of trade payables (adjusted for CAPEX accounts payable) to average cost of materials and inventory changes over the last three months multiplied by 30 days.
43 Days on hand (DOH): Ratio of inventories to average cost of materials and changes in inventories over the past three months multiplied by 30 days.

Sales were generated in the following regions:

MEUR	Jan. 1 - Dec. 31, 2022	Jan. 1 - Dec. 31, 2021
Germany	296.0	279.4
Rest of Europe	364.5	332.3
North America	49.4	44.7
Rest of world	39.3	40.4
Revenues	**749.2**	**696.8**

Sales increases were mainly realized in Germany and the rest of Europe, while business volumes in the rest of the world decreased slightly. The increase in Germany resulted from strong growth with several top customers. In percentage terms, the strongest sales growth was achieved in the rest of Europe, with the highest increases in Western Europe. North America also showed significant growth across a broad customer base, albeit at a lower level. The order backlog at the end of the fiscal year, at MEUR 469, shows a significant improvement compared to the previous year (MEUR 358).

Other operating income, which decreased significantly compared to last year, amounted to MEUR 8.8 (previous year: MEUR 23.7). This comprises capitalized services, mainly in connection with ERP implementations, and the reversal of provisions formed in previous periods. The decrease compared to the previous year is mainly due to special effects in the previous year, such as the sale of property, plant and equipment (MEUR 0.4; previous year MEUR 4.9), income from the reversal of provisions (MEUR 0.7, previous year MEUR 3.1), and other operating income (MEUR 4.3; previous year MEUR 11.2), which in the previous year included the income from the sale of an investment (MEUR 6.5).

Cost of materials amounted to MEUR 284.2 (previous year: MEUR 252.5) and mainly includes expenses for the consumption of raw materials and supplies (MEUR 268.5; previous year: MEUR 237.9). The increase is due to the higher production volume and thincrease in material prices as a result of the Russian-Ukrainian conflict.

Personnel expenses amounted to MEUR 272.2 (previous year: MEUR 262.6), with a personnel cost ratio of 36.2% in relation to total output[44] (previous year: 37.7%). Price increases in sales had a positive effect on the personnel cost ratio.

Other operating expenses increased by MEUR 22.3 to MEUR 117.5 compared to the previous year, mainly in the area of energy costs and other costs. The largest single items within other operating expenses are energy costs (MEUR 36.7, previous year MEUR 22.3) as well as repair and maintenance expenses (MEUR 22.7, previous year MEUR 21.4), overhead material (MEUR 14.5, previous year MEUR 13.2), and IT (MEUR 8.3, previous year MEUR 7.1).

Amortization of intangible assets, depreciation of property, plant and equipment, and amortization of right of use in the financial year amounted to MEUR 82.0, which is significantly above the level of the previous year (MEUR 58.6). Of the amortization, MEUR 27.2 relates to an impairment loss recognized in the financial year on the goodwill allocated to the SEL business unit. The goodwill impairment loss resulted mainly from a significant increase in the average cost of capital used to determine the fair value and a slightly reduced EBITDA plan compared to the previous year. Another MEUR 34.6 related to depreciation of acquired assets and MEUR 10.2 to right of use from leasing contracts.

Amortization of intangible assets of MEUR 10.0 decreased significantly compared to the previous year, as in particular amortization of assets capitalized in the course of business acquisitions expired.

The net financial result of the business year amounted to MEUR -50.1 compared to MEUR -26.2 in the previous year. This deterioration resulted in particular from a one-time effect in 2021 due to the mid-year modification of the financing and a related book value adjustment (MEUR 20.5), as well as an expense from the valuation of the derivatives embedded in the loan agreement as of the balance sheet date (MEUR 5.8). Further explanations on the financing structure are given in Chapter 2.7.

44 Sales plus changes in inventories

The tax result of MEUR -2.9 consists entirely of current tax expenses. The reduction compared to the previous year's reference value (MEUR -9.6) is due to the significantly lower pre-tax result both in terms of actual taxation and deferred taxes resulting from temporary differences.

Overall, the earnings situation in 2022 was significantly impacted, in particular by the macroeconomic environment. On the one hand, the company was able to pass on cost increases in part to customers and realize selective volume increases, so that sales increased compared to the previous year. However, earnings were significantly burdened both by the considerable increase in raw material and energy costs and by the output restrictions as well as special expenses incurred in this context at one of the Group's sites, resulting in a reduction of EBITDA by 21.2% (MEUR -23.4) compared to the previous year. Due to the increased interest rate level, the change in fair value of the derivatives embedded in the credit agreement as of the balance sheet date, amounting to MEUR 5.8, had a negative impact on the financial result, so that the company reported a net loss of MEUR -17.4 in the reporting year.

2.5 Financial position

Cash and cash equivalents amounted to MEUR 20.7 at the reporting date (previous year: MEUR 53.5). They consisted almost entirely of balances with banks. Within cash and cash equivalents, the following developments occurred:

- Cash inflow from operating activities (minus taxes paid on income) amounted to MEUR 50.7 (previous year: MEUR 82.0). This was driven by a significant increase in working capital[45] during the fiscal year. In particular, the increase in inventories and trade receivable had a negative effect. This effect was only partially offset by increased trade payable at the end of the fiscal year. Unplanned income taxes of MEUR 9.0 paid to the Romanian tax authorities at Swiss Caps AG additionally affected the cash flow. A national appeal procedure is pending in Romania against this measure, which leads to double taxation. It is assumed that this will be successfully concluded and that a refund will be made.
- Net cash used in investing activities (MEUR -36.2, previous year MEUR -38.8) mainly reflects investments in property, plant, and equipment (MEUR -39.1) as well as proceeds from the sale of property, plant, and equipment (MEUR 4.6). In addition to maintenance expenses, investments related in particular to strategic investments for the expansion and modernization of various production sites, especially Latina and Regensburg. Investments were made in building and machinery capacity as well as in IT systems. Asset disposals mainly related to the resale of new equipment to lessors.
- Cash outflow from financing activities of MEUR -47.6 (previous year MEUR -40.2) mainly resulted from interest paid (MEUR -34.0), as well as from the settlement of lease liabilities (MEUR -11.6).

With regard to the capital structure, refer to sections 2.6 and 2.7.

45 Working capital: balance of trade receivables/payables, contract assets and inventories

2.6 Net assets position

The following overview shows the net assets as of the reporting date:

ASSETS

MEUR	Dec. 31, 2022	Dec. 31, 2021
Intangible assets	268.1	301.1
Property, plant and equipment	243.6	245.3
Right-of-use assets	72.0	65.7
Other non-current financial assets	5.4	11.2
Other non-current assets	15.4	0.6
Deferred tax assets	52.6	56.4
Non-current assets	**657.0**	**680.3**
Inventories	81.7	52.2
Trade receivables	40.0	27.6
Contract assets	69.5	65.0
Income tax assets	1.0	2.0
Other current financial assets	13.3	8.8
Other current assets	16.1	14.2
Cash and cash equivalents	20.7	53.5
Current assets	**242.3**	**223.3**
Total assets	**899.2**	**903.6**

EQUITY & LIABILITIES

MEUR	Dec. 31, 2022	Dec. 31, 2021
Share capital	0.0	0.0
Capital reserves	555.5	555.5
Accumulated loss	-572.4	-526.2
Other components of equity	8.5	-10.1
Equity	**-8.4**	**19.1**
Provisions for pensions and similar obligations	40.2	59.5
Other non-current provisions	0.8	0.8
Non-current financial liabilities	606.4	595.1
Other non-current liabilities	19.8	15.4
Deferred tax liabilities	73.7	80.6
Non-current liabilities	**741.0**	**751.4**
Trade payables	92.6	69.0
Income tax liabilities	8.1	6.1
Current provisions	3.2	3.8
Current financial liabilities	24.6	24.1
Other current liabilities	38.1	30.2
Current liabilities	**166.6**	**133.1**
Total equity and liabilities	**899.2**	**903.6**

Total investments in acquired assets during the business year of MEUR 40.8 comprise investments in land and buildings (MEUR 4.4), plant and machinery (MEUR 13.8), assets under construction incl. advance payments (MEUR 19.4), IT equipment incl. software (MEUR 2.7), and other (MEUR 0.6). Approximately two thirds of the investments were related to strategic projects. Investments in right of use amounted to MEUR 16.5. Of this, MEUR 7.7 related to land and buildings, and MEUR 8.0 to plant and machinery.

Intangible assets consist mainly of goodwill of MEUR 241.5 (previous year: 268.6) and customer contracts and relationships of MEUR 15.7 (previous year: MEUR 18.8). The decrease in customer

contracts and- relationships was due to scheduled amortization. The decrease in goodwill results from the impairment of goodwill allocated to the SEL business unit.

The increase in other non-current assets is mainly due to the recognition of an expected tax refund and interest according to the double taxation agreement between Switzerland and Romania (MEUR 9.4).

Current assets amounted to MEUR 242.3 as of the reporting date (previous year MEUR 223.3). The increase is mainly due to the build-up of inventories (MEUR 81.7, previous year MEUR 52.2) to mitigate the effects of disrupted supply chains, and to the clearly positive development of sales in the fourth quarter, which led to an increase in trade receivables (MEUR 40.0, previous year MEUR 27.6) as of the balance sheet date. Other components of the balance sheet item are contract assets (MEUR 69.5, previous year MEUR 65.0), and cash and cash equivalents (MEUR 20.7, previous year MEUR 53.5). The factoring ratio of 67 % was 1 percentage point above the previous year's level.

As of the balance sheet date, equity consisted of subscribed capital of KEUR 25 (previous year: KEUR 25), additional paid-in capital of MEUR 555.5 (previous year: MEUR 555.5), accumulated deficit of MEUR 572.4 (previous year: MEUR 526.2), and other components of MEUR 8.5 (previous year: MEUR -10.1). The accumulated deficit includes the Group's net loss of MEUR 46.2 (previous year: net income of MEUR 15.6).

The change in other components of equity is mainly due to the positive effects from the revaluation of pension provisions, net of deferred taxes, amounting to MEUR 16.7. In particular, the Group's net loss for the year resulted in negative equity of MEUR 8.4 (previous year: positive equity MEUR 19.1).

Non-current liabilities amounted to MEUR 752 as of the balance sheet date (previous year: MEUR 751.4). They mainly consisted of non-current financial liabilities of 606.4 (previous year: MEUR 595.1).

Other significant items within non-current liabilities were pension provisions (MEUR 40.2, previous year MEUR 59.5), which decreased by MEUR 19.2 mainly due to the actuarial revaluation of assumptions and experience adjustments, and deferred tax liabilities (MEUR 84.7, previous year MEUR 80.6).

Current liabilities amounted to MEUR 166.6 as of the reporting date (previous year: MEUR 133.1). Trade payables increased from MEUR 69 to MEUR 92.6 due to the targeted utilization of individual payment terms, thus accounting for most of the increase.

Overall, the net assets position developed negatively in the past fiscal year. This is mainly due to the impairment of goodwill allocated to the SEL business unit.

2.7 Financing structure

In July 2021, the First Lien loan was increased by MEUR 125 to MEUR 565 as part of a modification of the existing financing. At the same time, the interest rate was reduced by 50 basis points and the term was extended by one additional year until March 6, 2026. The high-interest payment-in-kind loan ("Second Lien") in the total amount of MEUR 117.7 was fully repaid in July 2021.

UniCredit Bank AG, London, continued to act as agent for the First Lien. As of June 22, 2022, UniCredit Bank AG, Munich, assumed the function as agent. Lucid Agency and Trustee Services Limited, London, renamed Kroll Agency and Trustee Services Limited, London, on March 31, 2022, continued to act as security agent.

The First Lien loan had a nominal amount of MEUR 565 at the balance sheet date 2022 with a base interest rate of 4.5% plus EURIBOR (1, 2, 3 or 6 months). If the EURIBOR had been below 0%, 0% would have been applied. The term of the bullet loan ends on March 6, 2026.

In addition, the AENOVA Group has a credit line available in the form of a revolving loan in the amount of MEUR 50. As of December 31, 2022, this was only utilized in the form of guarantees in the amount of MEUR 0.2. The term of the loan extends until September 6, 2024.

2.8 Personnel and social responsibility

The AENOVA Group employed an average of 4,063 employees in the past fiscal year (2021: 4,155 employees). A Group-wide feedback and targets process is in place. The aim of this instrument is to enable open dialog between managers and employees and to develop the latter in line with requirements. In addition, a Group-wide compensation model has been introduced which includes financial indicators as well as other target figures.

Further measures were implemented in the area of ESG, so that the AENOVA Group achieved the Ecovadis Silver award. Further improvements are being worked on continuously.

As a participant in the UN Global Compact network, the AENOVA Group demonstrates the importance of human rights, labor standards and environmental protection in the company's medium- to long-term orientation.

Diversity will continue to be a focus at the AENOVA Group. The AENOVA Group is a signatory and active participant in the "Diversity Charter".

In order to create a common corporate culture and thus further increase employee identification with the company, the corporate values were communicated and anchored throughout the AENOVA Group. This seemed particularly important after longer periods of activity in the home office during the Covid pandemic. Employees at all Group sites have participated in workshops about corporate values. In addition, management training was carried out for the lowest management level throughout the AENOVA Group with the aim of increasing employee satisfaction through better leadership. Value-oriented aspects were also included as a fixed component of the AENOVA Group's reporting.

The AENOVA Group also fulfills its social responsibility with a consistently high level of commitment to the training of young people. For years, the company has enabled young people to train as pharmacists, chemical laboratory assistants, machine and plant operators, warehouse logistics specialists, IT specialists, industrial mechanics, office clerks, industrial clerks and others, thereby also making a significant contribution to securing young talent internally. In 2022, over 100 apprentices were employed in the Group.

In addition, the AENOVA Group is always involved in social activities. This includes, among other things, cooperation with a facility for the disabled, which promotes the inclusion of disabled colleagues, as well as several fundraising campaigns for the victims of the Ukraine war and for local food banks.

2.9 Overall statement

The AENOVA group is solidly financed for the coming years, in particular thanks to the financing modification already implemented in 2021. However, business performance in the reporting year was below expectations as the significant cost increases in particular from materials and energy could not yet be passed on in full. In addition, operational problems at one of the Group's sites led to sales shortfalls and special charges which impacted earnings. Furthermore, the impairment of goodwill allocated to the SEL business unit also had a negative impact on earnings. Another reason for the significant year-on-year deterioration in net financial expense, is the absence of positive nonrecurring effects in the prior year from the carrying value adjustment of the financing and a valuation adjustment to the derivatives embedded in the loan agreement necessitated by the rise in interest rates. As a result, the AENOVA Group reports a net loss of MEUR 46.2 for the financial year 2022 (previous year: net income MEUR 15.6). The continued optimization measures and those newly initiated in 2023 are designed for the long term and will continue to have a positive impact on future results.

3. Opportunity and risk report

AENOVA's operating processes are geared to identifying short- and medium-term risks and opportunities so that in the event of risks, timely countermeasures can be taken or opportunities exploited. As part of groupwide risk management, each site is required to identify and assess risks, communicate them and develop measures to manage them.

Appointments are set with responsible employees from various areas of the company (Development, Sales, Manufacturing and Quality, SCM, Finance, IT and HR) to coordinate risks across divisions and decide on measures.

As a result, decision papers are prepared and made available to the AENOVA management. These documents are discussed and approved by the extended AENOVA management. No risks threatening the existence of the company have been identified. The overall picture of the risk situation is assessed by management as low to moderate.

3.1 Risks from Covid-19 pandemic and war in Ukraine

The year 2022 was again characterized by the foothills of the global corona pandemic and by Russia's war against Ukraine, which began in February 2022. The order situation was basically positive, particularly in the first quarter. Demand initially weakened in the middle of the year, but then picked up again in the second half. In the fourth quarter in particular, sales recovered as a result of the price increases, improved demand and increased output at the plants.

The preventive measures developed in close cooperation between all functions have proved consistently effective. Production stoppages due to supply bottlenecks for raw and auxiliary materials and packaging materials were largely bridged in the first half of the year. Interruptions to production due to corona-related illnesses were avoided. Both the war in Ukraine and the aftermath of the Covid-19 pandemic had a negative impact on the reliability of the supply chains. The measures taken, e.g. the deliberate increase in safety stocks as well as short-term rescheduling of production and additional shifts, prevented a serious impact on patient care. In addition, increased efforts were made together with customers to establish alternative suppliers for critical materials. Although not all originally promised delivery dates could be met, AENOVA made an important contribution to supplying the market with medicines even in times of crisis.

Based on the experience with Covid-19 and the sufficient immunization achieved in the population, in the opinion of management there is a low to moderate risk overall of future impairment due to a new wave of infection. The risk of supply disruptions due to the war in Ukraine is also considered to be low to moderate.

3.2 Competition

Competition in the contract manufacturing sector remains intense. As the cost of developing and bringing new drugs to market continues to rise, more and more companies are turning to CDMOs for help in manage the complex and expensive process of drug development. This is particularly happening in submarkets that are under intense cost pressure, such as generics and dietary supplements, but also in areas of very high demand (including vaccines).

The healthcare market remains a growth market despite the macroeconomic difficulties (including the corona crisis and the war between Russia and Ukraine). One of the main factors behind this is the steadily increasing demand for pharmaceuticals, due among other things to a growing population, an aging society and numerous innovations leading to better treatment of diseases. As one of Europe's largest contract developers and manufacturers for the pharmaceutical and healthcare industry (CDMO), the Aenova Group plays an important role in supplying customers and ultimately patients worldwide with life-saving or life-enhancing medicines.

On the other hand, the manufacturing industry faced major challenges due to the war between Russia and Ukraine, the pandemic, and inflation. CDMOs came under pressure in 2022 from a massive increase in input costs: prices for raw materials (active ingredients, excipients, packaging materials), production support materials, as well as professional services (laboratories, cleaning services) rose significantly, often by double-digit percentages. The most pronounced increase was in energy costs, ranging from 100% to 500% depending on the country. In addition, bottlenecks in global supply chains, including for plant, machinery and spare parts, made it difficult to supply patients with medicines on time.

To meet these challenges, the following measures have been taken in the AENOVA Group:

1. Optimization of procurement and planning processes, also by strengthening procurement and supply chain management resources
2. Accelerated qualification of secondary suppliers for critical materials.
3. Cross-qualification and international exchange of employees in order to be able to react flexibly to peaks in demand
4. Rapid price adjustments, especially to take account of rising energy and material costs
5. Redesign of customer contracts and implementation of an index-based price adjustment mechanism to reduce costly negotiations.

Thanks to the measures taken, the Group has emerged stronger from the past few months. Work on stabilizing delivery performance is continuing with high priority. Overall, the chances of winning new business and further market share are rated as medium to good due to the good positioning of the AENOVA Group on the market. This assumption is underlined not least by a good order situation for 2023. The risks of sales losses jeopardizing the company's substance are still considered low due to the high regulatory requirements in connection with possible product transfers to market competitors and the costs associated with the qualification of new manufacturers. On the other hand, it cannot be ruled out that customers operating in price-limited markets may in individual cases discontinue the sale of certain low-margin products or purchase them from low-cost sources instead of Western Europe.

3.3 Insourcing

As a contract manufacturer, AENOVA is exposed to the risk that customers use their own production capacities (insourcing) or build up capacities and withdraw production volumes from AENOVA. Outsourcing of vaccine production forced by internal bottlenecks in the context of Covid-19 has raised the status and profile of CDMOs that were previously more dependent on older products and generics. The general drive by customers to lean on the production side and focus on development and commercialization continues. This presents itself as a medium-high opportunity for AENOVA: overall, the CDMO market is expected to grow faster than the pharmaceutical end market over the next 5 years, driven by stronger outsourcing compared to insourcing.[46]

AENOVA also counters the insourcing risk with a high level of service, from development services and on-time production to logistics, via a competitive cost structure and consistently good quality. In conjunction with the breadth of the service offering, particularly in AENOVA's fill & finish area, these factors strengthen customer loyalty in an environment in which customers' interest in stable partnerships with strategic CDMO partners is steadily increasing.

In addition, insourcing activities are associated with switching barriers. Should individual customers nevertheless insource parts of the portfolio, AENOVA can prepare itself accordingly and respond with

46 PwC, Current trends and strategic options in the pharma CDMO market, November 2019

production changes due to the necessary lead times, at least in the more heavily regulated pharma segment. The risks from insourcing are therefore considered low overall.

3.4 Procurement/price risk

The global procurement of raw materials and the associated market effects, especially in the development of material prices and material availability, harbor both opportunities and risks for AENOVA.

Capacity bottlenecks for specific raw materials, energy price increases and rising transport costs can cause large fluctuations in procurement prices, which can negatively impact the development of margins. This applies both to chemical substances such as vitamins, but also to a particular extent to biological materials such as plant extracts, the availability of which is strongly influenced by climate and harvesting conditions, and also in the packaging materials sector for some input materials such as special films, glass, etc.

AENOVA's central, globally operating strategic purchasing department defines strategic commodity groups, thus bundling requirements and deriving specific purchasing strategies. In this way, the AENOVA Group, as a leading European contract manufacturer, strengthens its position on the procurement market with access to attractive conditions and delivery terms.

In order to minimize risks, the procurement market is permanently monitored by Strategic Purchasing; negotiations with suppliers are conducted on this basis. The aim is to establish alternative suppliers for key raw materials in order to avoid dependencies and potential supply bottlenecks. In addition, strategic purchasing provides cross-site support for plant scheduling.

Critical materials are ordered at an early stage in close coordination with customers. Demand-based, scalable contracts flanked by procurement via distributors and selective use of air freight transport also help to cushion any supply bottlenecks that arise. The volatile market situation and the associated supply risks for materials from China and India nevertheless continue to exist at present.

AENOVA is in intensive contact with suppliers and customers and is generally well positioned to ensure timely deliveries at coordinated prices. Where cost increases cannot be averted, particularly in the materials area, these are passed on to customers appropriately.

The risk of production shutdowns or production delays due to restricted material availability is essentially shaped by exogenous influences, the effects of which AENOVA attempts to minimize through the measures defined above. In view of the defined measures, management classifies the risk in the area of procurement/price risk as moderate.

3.5 Market/demand

In the medium and long term, the AENOVA Group faces a continued positive market trend and growing demand for CDMO services due to the rising global population, improved insurance coverage in developing countries and the aging society in industrialized countries. In addition, an increasing willingness to outsource can be observed among pharmaceutical companies, both as a means of shortening time-to-market and saving costs, reducing complexity and reallocating internal resources.

Aenova, as one of the few CDMO platforms worldwide offering almost all dosage forms (one-stop-shop) and a wide range of innovative technologies, is very well positioned to participate in this positive market trend. With recent strategic investments in fill & finish PFS capacity as well as capacity expansions elsewhere, AENOVA is well positioned to benefit from the growing demand.

The Ukraine war, the Covid-19 pandemic, political changes such as Brexit, and inflation have created extreme challenges for the manufacturing industry. AENOVA expects continued difficulties in the supply of input materials and energy costs at a high level in 2023. Whether and to what extent the current very positive order situation will prove sustainable remains to be seen. It is currently assumed that, in view of the existing supply bottlenecks, customers are attempting to secure their supply chains and in some cases also increase their safety stocks in order to become more independent of short-term order fluctuations. This is likely to be a factor also contributing to the very high order backlog of the AENOVA Group at the beginning of fiscal 2023. When the supply situation eases, the order ranges are expected to reduce again to a normal level. Management classifies the risk of a generally negative demand trend as low.

3.6 Political decisions

Against the background of the costs of the Covid-19 pandemic, considerable pressure on costs in the healthcare system can also be expected globally in the future. Price targets for new - and above all for already approved - medicines and tender procedures for generics are just a few examples of this trend. On the other hand, there are constantly increasing regulatory requirements, e.g. in the area of sterile production, or the demand for supply chain transparency. On the one hand, risks arise for AENOVA in this environment. However, due to its size, financial clout combined with a broadly diversified range of products and services, steadily increasing cost efficiency and a scalable organization, there are also opportunities for the AENOVA Group.

The war in Ukraine started by Russia on February 24, 2022 had only a minor direct impact on Group sales, as the direct and indirect sales with destination Russia and Ukraine identifiable for AENOVA accounted for only 2% of the Group's budgeted sales. As almost all business is euro-based via Western European customers, i.e. indirectly, there is no currency risk and only a minor payment risk. There are no trade sanctions on pharmaceutical products, but it cannot be ruled out that AENOVA customers will further reduce their business in these countries. Although AENOVA does not purchase materials directly from Russia or Ukraine, increased energy costs and material shortages in various areas have had an impact on procurement prices, particularly for packaging materials. Immediate measures taken in the spring and summer of 2022 enabled the resulting cost increases to be largely passed on to customers. For 2023 AENOVA has price-hedged most of its energy requirements. The cost increases for both materials and energy since summer 2022 will largely be passed on to customers under a renegotiated price mechanism, so the impact on Group earnings is expected to be limited.

There were significant disturbance for vegetable oils supply required for production, as these are largely produced in Russia and Ukraine. Supply bottlenecks were largely overcome.

In the future, it is possible that material deliveries, particularly for raw materials from the Asian region, could become more difficult, e.g. due to restrictions on air freight routes. This risk is countered by forward-looking planning and close coordination with customers and suppliers on the subject of material availability.

An expansion of the conflict to other countries is not currently assumed. Overall, the risk in connection with the war between Russia and Ukraine is assessed as medium for AENOVA's business. AENOVA is also monitoring the development of tensions between China and the USA as well as Taiwan. Currently, an escalation is not assumed.

Significant further political changes which could have an impact on AENOVA's business are not currently expected. Management therefore currently classifies the opportunities and risks from political decisions as moderate.

3.7 Interest rate and currency risks

Due to its business activities, AENOVA is generally exposed to interest rate and currency risk. Group-wide risk management focuses on unforeseeable events on the financial markets and attempts to minimize adverse effects on the Group's earnings. The variable interest components of the long-term

loans had a floor of 0% in 2022. If inflation were to rise, hedging instruments could be used. Due to the high costs required to place an interest rate cap, Aenova has decided not to use hedging in 2022. AENOVA sees itself exposed to medium risk in the short term and low risk in the medium term.

AENOVA is exposed to foreign currency risks as the invoicing currency and the currency in which contract costs are incurred are in some cases not the same. For most transactions there is a natural currency hedge, for example the US subsidiary acts in the American market as both buyer and seller. In Switzerland, a significant proportion of purchases and sales are made in AENOVA's functional currency, the euro. This reduces the currency risks to which AENOVA is exposed. Foreign currency risks are analyzed and assessed on an ongoing basis in order to take timely currency hedging measures and reduce this risk.

Risk management is carried out by AENOVA in accordance with defined requirements with the aim of minimizing the risk of earnings fluctuations. Corporate Treasury identifies, evaluates and addresses risks in close cooperation with the operating business units and strategic purchasing.

Management currently classifies the risks from interest rate and currency fluctuations as moderate.

3.8 Liquidity and default risks

Liquidity risk describes the risk that AENOVA will not be able to meet its financial obligations as they fall due. These include in particular the repayment of financial debt and the settlement of liabilities to suppliers and employees. As part of its liquidity management, the Group ensures that sufficient cash and cash equivalents are always available.

A liquidity forecast is prepared for the purpose of short- and medium-term liquidity management. This takes into account expected cash inflows, AENOVA's financing plans (interest payments), existing and expected liabilities and payment obligations, necessary investments and compliance with certain financial covenants.

The liquidity forecast for fiscal 2023 depends heavily on the premises underlying the planning calculation: The planned increase in sales is based on volume growth and price adjustments. The gross margin will remain largely constant. Other operating expenses will increase at a lower rate than sales growth.

Personnel expenses are expected to increase, mainly as a result of collective bargaining effects and other salary adjustments, but also due to selective staff increases in areas with volume growth and competence development. The use of lean tools was further advanced in 2022, and productivity-enhancing investments were also made. The planning assumptions for the 2023 financial year provide for further optimization measures.

AENOVA uses the liquidity forecast to track the main cash flows and ensure sufficient liquidity in the AENOVA Group. Furthermore, the Group uses the monthly balance sheets, income statements, working capital plans and investment applications to monitor medium and long-term liquidity.

In addition to the effective management of liquidity and working capital, the Group reduces liquidity risk by a revolving loan from UniCredit Bank AG, London, in the amount of MEUR 50.0. As of December 31, 2022, this was only utilized in the form of guarantees amounting to MEUR 0.2.

Management considers the liquidity risk to be low.

3.9 Compliance with financial covenants

Under the credit agreements in force as of the reporting date, AENOVA is required to comply with financial covenants and to review them separately if the utilization of the revolving credit facility (RCF) exceeds the threshold of 40%. In fiscal year 2022, a review of the financial covenants was consistently not required.

If key planning assumptions do not materialize, there is a risk that AENOVA will not achieve the forecasts or simulations and thus possibly not meet the financial covenants. A breach of the covenants would result in the bank loans being called in or the banks exercising their right of termination. AENOVA monitors compliance with the conditional financial covenants under the RCF on an ongoing basis using forecasts and simulations.

In the opinion of management, there is only a low risk of non-compliance with the financial covenants due to the monitoring measures carried out.

4. Forecast Report

The planning on which the forecast report is based was adopted at the end of 2022. Due to the improvement in the order situation over the past few months, the management has not adjusted the planning assumptions for 2023 at the time of preparation, despite the continuing uncertainties regarding future developments with regard to the Russia-Ukraine war.

Management expects sales of MEUR 808.7 for the financial year 2023. AENOVA expects that the reduction of inventories in the distribution stages in 2022 will lead to stronger demand in 2023, especially for diabetes, vitamin and antibacterial preparations.

With high vaccination rates and reduced protective measures in many countries, AENOVA expects end-customer demand to at least normalize to pre-Covid-19 levels. Growth is expected to continue to increase in subsequent years with improved earnings and liquidity. Energy prices are expected to normalize, albeit at a higher level than in the past.

This assessment is based in particular on the expected developments in the pharmaceutical and consumer healthcare markets, on the pipeline of business already won, on energy prices already corrected compared to the 2022 high, and on the strategic projects and optimization measures launched by the Group in fiscal years 2019 to 2022.

In the pharmaceutical market, volumes and market shares of generic products are expected to continue to increase in the coming years due to the expiration of essential patents. At the same time, intense competition in the generics segment is expected to continue. The research-based pharmaceutical companies continue to focus on their core competencies of research and development as well as marketing and sales. The trend towards outsourcing is continuing, and in addition the consolidation of the supplier base observed in previous years will continue. Particularly with regard to a fast and reliable supply of medicines to the population, AENOVA sees an increasing trend towards short response times and scalability in the supply chain.

The Consumer Healthcare sector is influenced by different market trends. Saturated OTC markets such as Germany are seeing a slight decline in OTC business via pharmacies, but on the other hand growth in more favorable distribution channels.

Service providers for the pharmaceutical industry must be cost-competitive, opportunities for differentiation arise from high delivery reliability and a comprehensive range of services that includes development services and logistics in addition to the production of various dosage forms. At the same time, the continuously increasing regulatory requirements must be met and a continuously high quality standard must be ensured.

AENOVA has defined strategic initiatives and introduced measures to position itself in line with market conditions and thus be optimally positioned for the future:

- Expansion of the product range / differentiation

  AENOVA's core business comprises the development and production of pharmaceutical products and dietary supplements in modern oral dosage forms, such as soft gelatin and hard capsules, tablets, effervescent tablets, as well as sterile (and non-sterile) liquids and udder injectors. AENOVA offers a comprehensive portfolio of services including development, raw material sourcing, production, analysis, packaging and logistics services.

  The product range has been and will be expanded in a market-oriented manner through the expansion of existing sites, in particular the significant capacity expansions at the Solida sites in Tittmoning (high volume) and Regensburg (high potent), the development of end-to-end capacities including packaging and coating, also in line with pharmaceutical standards, at the soft gelatine site in Cornu, investments in the animal health sector and in filling capacity for (Covid-19) vaccines and prefilled syringes in Latina.

- Comprehensive focus on service excellence, quality and cost management

  As part of the AENOVA strategy, a strong customer and patient focus in conjunction with the aspect of service excellence represents an important cornerstone. The targeted delivery performance could not be maintained at the good level of the previous year mainly due to external influences in fiscal year 2022. However, as part of comprehensive measures to optimize supply chain management, the AENOVA Group is focusing on raising delivery reliability back to the level expected by customers in 2023 despite the difficult macro environment. The main goal is to ensure reliable patient care.

  In the area of quality management, improvements are implemented on a regular basis, taking into account the increasing quality requirements of regulators and customers.

  In 2022 AENOVA further optimized its personnel structure for the future. In addition, programs to further develop the sales and manufacturing organization have contributed to an improvement in the cost structure, but in particular to increased efficiency of the company.

Projected sales of MEUR 808.7 (previous year: MEUR 749.2; +7 %) for the business year 2023 will result in adjusted EBITDA before special effects of MEUR 101.9 (adjusted EBITDA-margin 12.6 %) and EBITDA after special effects of MEUR 97.3 [47]. The increase in sales reflects the price increases passed on to customers, as well as the gradual recovery of demand in certain product areas, which were affected by declines due to the Covid-19 pandemic. Before special items, EBITDA therefore increased by 5%. This does not take into account energy cost caps in Germany, Italy and Romania, which were introduced after the plan was drawn up, or a restructuring of the partly unprofitable sterile business.

The planning for 2023 is based exclusively on organic growth.

The continuation of the investment program in the Group will further increase competitiveness. In the planning for 2023, it is consequently assumed that the Group's liquidity position will remain stable.

AENOVA expects the following key figure development for fiscal year 2023:

- Receivables Management/Days Sales Outstanding (DSO)[48] : For fiscal year 2023, AENOVA plans a slight reduction in the DSO value
- Payables Management/Days Payables Outstanding (DPO)[49] : For fiscal 2023, AENOVA plans to significantly reduce DPO
- Inventory Management/Turnover ratio (DOH)[50] : Management expects the ratio to stabilize in fiscal 2023 due to the necessary safety stock

47 After effects of Covid-19 pandemic and other non-recurring costs
48 Days Sales Outstanding (DSO): Ratio of trade accounts receivable to net sales
49 Days Payables Outstanding (DPO): Ratio of trade accounts payable (adjusted for CAPEX accounts payable) and average cost of materials including changes in inventories.
50 Inventory turnover: ratio of inventories to average cost of materials including changes in inventories.

- Total cash flow: For the financial year 2023, AENOVA expects a slightly negative total cash flow before acquisitions in the low single-digit range. A stable liquidity situation is assumed in 2023

The financing of AENOVA is secured on the basis of the modification of the financing in July 2021 and the earnings and financial planning prepared by the management.

The estimates in this report are based on the current state of knowledge and the information available at the time of preparation. Due to uncertainties inherent in all planning, actual developments may differ from current estimates.

The risks arising from the current war situation between Russia and Ukraine, a possible escalation, a dispute between the USA and China or a possible further Covid-19 wave cannot be assessed in concrete terms. However, management has taken extensive measures to protect the health of employees and maintain production. The duration of the war in Ukraine and further political developments in the region with their global economic consequences cannot be predicted. Overall, there are no discernible risks that could jeopardize the continued existence of the Group.

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