

novo  
**holdings**  
Investors in life science

Novo Holdings A/S  
Tuborg Havnevej 19  
DK-2900 Hellerup  
CVR 24257630



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annual report

21



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Management's statement  
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### On the cover

**BBI Solutions** (left) has been serving the global diagnostics industry for over 50 years and is the world's largest independent producer of immuno-diagnostics reagents. The company was acquired by Novo Holdings in 2021.

**Oxford Biomedica** (centre) is a leading, fully integrated cell and gene therapy group. Oxford Biomedica has been part of Novo Holdings' portfolio since 2019.  
*Photo by Philip Gatward*

**Biomason** (right) is the only company in the world that produces cement commercially using biological processes. Novo Holdings invested in Biomason in 2019.

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Our ambition is to be recognized by our stakeholders as an exceptional enterprise that delivers outstanding results.



## Investing for the health of people and our planet

# Letter from the Chair and the CEO

At Novo Holdings, we've made it our responsibility to support research and investments to help change the lives of people and improve the health of our planet. We invest in cutting edge biological research, which is the foundation for new, innovative treatments for patients with unmet medical needs. Biology can also be harnessed to drive the green transition of industry and agriculture. Bioindustrial solutions will help curb climate change, and we are committed to supporting new and growing companies in this field – like 21st.BIO, a new bioindustrial scale-up company founded with a mission to advance the green transition in food, materials and agricultural industries globally (see Novo Seeds, page 25).

### Societal impact highlights

In June 2021, the Board approved an updated company vision for Novo Holdings:

***We aspire to be a leading global responsible investor delivering attractive long-term returns and positive societal impact.***

Furthermore, we selected six distinctive societal impact objectives aligned with the United Nations Sustainable Development Goals (SDGs) that we will pursue even more vigorously through our investments in the years to come (see Our commitment to responsible investing, pages 32-39).

### Investment Portfolio highlights

Our Investment Portfolio comprises Life Science Investments (Novo Seeds, Novo Growth, Novo Ventures and Principal Investments, totalling 52% of the portfolio) and Capital Investments (48% of the portfolio).

Novo Seeds invested DKK 572 million in 2021, including investments into six new companies. A key highlight of the year was the NASDAQ IPO of IO Biotech at a valuation of around USD 390 million (DKK 2.6 billion). Copenhagen-based IO Biotech, a clinical-stage biopharmaceutical company developing novel, immune-modulating anti-cancer therapies, was seeded by Novo Seeds in 2014 with an initial investment of approximately DKK 4 million (see Novo Seeds, page 25).

Novo Growth invested DKK 1.7 billion in 2021, taking its total portfolio to 21 companies. In just a few years, Novo Growth has emerged as a leading life

science growth equity investor and has a portfolio of companies in sectors ranging from bioindustrials to diagnostics and gene therapy. This year saw the IPO of Exscientia, a pharimatech company we invested in during 2020, at a valuation of around USD 2.6 billion (DKK 17 billion) (see Novo Growth, page 21). Exscientia is a clinical stage company using artificial intelligence (AI) to design medicines.

During 2021, Novo Ventures had a high level of activity and invested DKK 3.2 billion. We executed 46 investments, and among our exits were 8 IPOs (see Novo Ventures, page 24). This year we also invested in our first Asia-based company, namely Hummingbird Biosciences an innovative clinical-stage biotech company.

Principal Investments experienced a high conversion rate in 2021 in private investing and deployed DKK 9 billion of capital, including the private majority investments into Altasciences (Canada) and BBI (UK), and the private minority investments into Availity (US) and Esco (Singapore) (see Principal Investments, page 20).

Our non-life science investment team, Novo Capital Investors, closed the year with DKK 88 billion of assets under management and generated a return of 17%. Key highlights of the year include commitments of around DKK 3 billion by our new Real Assets team, including the investment in the Copenhagen land plot

### Financial highlights summary

Novo Holdings realised record Income and Investment Returns of DKK 37 billion in 2021, up from DKK 29 billion in 2020. This result is well balanced and based on a strong performance from both the Novo Group companies and our Investment Portfolio, with the latter generating a very satisfactory return of 15% for the year. Novo Holdings closed the year with a record DKK 697 billion in total assets, up from DKK 457 billion in 2020, with the Investment Portfolio alone increasing to a record DKK 182 billion, up from DKK 150 billion in 2020.



Jernbanebyen, a strategic renewable partnership with European Energy and our first real estate investments in the US (see Novo Capital Investors, page 28).

At the end of 2021, the Life Science Investment Portfolio generated a 10-year average return of 17%, while the Capital Investments Portfolio generated a 10-year average return of 10%. The total Novo Holdings Investment Portfolio 10-year average return stands at 14%. We are pleased to be delivering on our key objective of generating attractive long-term returns on the assets of the Novo Nordisk Foundation.

**Strategic highlights**

During 2021, we continued the geographical expansion of our Life Science Investment teams into Asia, including preparations for the opening of an office in Shanghai, China, and we recruited four additional investment professionals to our US Principal Investments team.

As part of our efforts to ensure a diversified investment portfolio, the Novo Capital Investors team continued to grow our Real Assets Portfolio (see page 28).

In March 2021, the Board of Directors was joined by Henrik Poulsen, who has brought extensive executive and board experience as well as financial expertise. We would like to thank Carsten Stendevad, who stepped down from the Board of Directors in November 2021, for his contributions to the Board.

In conclusion, 2021 has been a strong year for Novo Holdings. In addition to a very satisfactory financial performance, we reached important strategic milestones as well as notable accomplishments with societal impact.

The purpose of the investments of Novo Holdings is both to grow the assets of the Novo Nordisk Foundation and to deliver a return that can be distributed for scientific, social and humanitarian purposes to improve the lives of people and the sustainability of society. We are proud of the accomplishments of our teams toward this goal and extend our gratitude to all of our colleagues for their outstanding commitment and efforts.

**Lars Rebien Sørensen**  
Chair of the Board

**Kasim Kutay**  
Chief Executive Officer

**Strategic objectives**



**Strong owner of Novo Nordisk and Novozymes**

- Secure a set minimum level of ownership
- Ensure a set liquidity reserve to provide financial support if ever required



**Generate attractive returns**

- Deliver long-term attractive returns
- Provide excess returns to set benchmarks




**Promote better health, sustainability and welfare**

- Invest in and build the Nordic biotech industry
- Make life science investments that improve lives and support biosustainability
- Manage impact investments



## Purpose, Vision and Guiding Principles

# Our Fundamentals and Novo Group structure

 **Purpose** ".. to enable and make a positive and growing impact on health, science and society."



### The Novo Holdings way - Our values

	<p><b>Performance</b></p>		<p><b>Respect</b></p>		<p><b>Responsibility</b></p>
<ul style="list-style-type: none"> <li>• We strive to deliver outstanding long-term results</li> <li>• Vision, collaboration and diversity are key to our performance</li> </ul>		<ul style="list-style-type: none"> <li>• We conduct ourselves with integrity and transparency</li> <li>• We build long-term relationships based on trust and respect</li> </ul>		<ul style="list-style-type: none"> <li>• Sustainability is integral to our business</li> <li>• Learning is key to our organization</li> </ul>	



**Values-driven**

Novo Holdings is a values-driven company striving for 'high performance with respect and responsibility', as anchored in the Novo Holdings Way. We frequently communicate and discuss the values of our company and integrate them into how we operate and conduct investment decisions.



**Ambitious strategy**

During 2021, we executed on a number of important strategic initiatives:

- *Establish Principal Investments in the US.* With the opening of offices for Novo Ventures in San Francisco in 2009 and in Boston in 2015, we took our first steps to establishing a presence in the US. In 2021, we further expanded our presence in the US with the recruitment of an additional four colleagues for the Principal Investments team.
- *Establish presence in Asia.* Geographical expansion into key life sciences markets is an important part of our strategy, and during 2021 we recruited an additional three colleagues to our Singapore office.
- *Expand capabilities in Novo Capital Investors.* By way of diversification, we will increase exposure to the Real Assets segment, as well as within Private Equity and Venture Capital. In support of this, we recruited one investment professional in 2021.
- *Increase exposure to Bioindustrials.* We invested substantially in the bioindustrial sector during 2021, adding eight new investments and we plan to continue to grow this part of our portfolio during 2022.
- *Increase exposure to Digital Health and Artificial Intelligence.* Sourcing for Digital Health and AI opportunities has been part of our agenda over the past three years, with successful investments into companies like Tempus, Exscientia and MDLive.

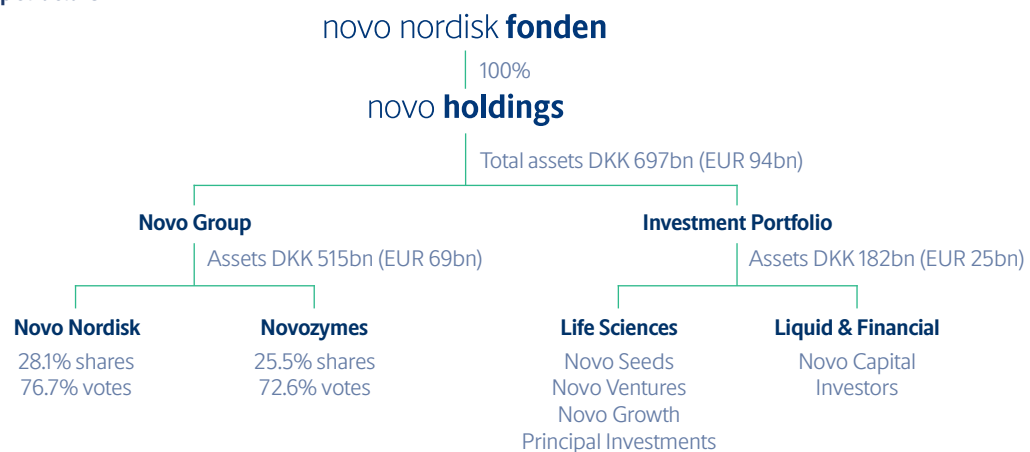


**Operational Excellence**

Launched at the beginning of 2017, our Operational Excellence programme has progressed, with the specific aim of improving our key processes and systems.

Over the past few years we have developed our IT systems platform and applications, e.g. by implementing systems like SimCorp Dimension, PowerBI, Salesforce and iLevel, with a focus on ensuring that our investment processes are supported by leading IT systems. Furthermore, we upgraded our ERP system during 2021.

**Overview of the Novo Group structure**



# Novo Holdings at a glance



Global employees



Portfolio companies



Total investment assets




\*The offices in US, UK and Asia are separate entities that provide certain consultancy services to Novo Holdings A/S, mainly within the areas of identifying and analysing various investment opportunities among life sciences companies in the US, UK and Asia as well as certain follow-up activities related thereto, such as board memberships, financial control and reporting efforts.



12%

Total 5-year average return  
on the Investment Portfolio

DKK  
182  
(EUR 25bn)  bn

Investment Portfolio

DKK  
14  
(EUR 2bn)  bn


Deployed into life sciences in 2021

15%

Return on Life Science Investments in 2021

17%

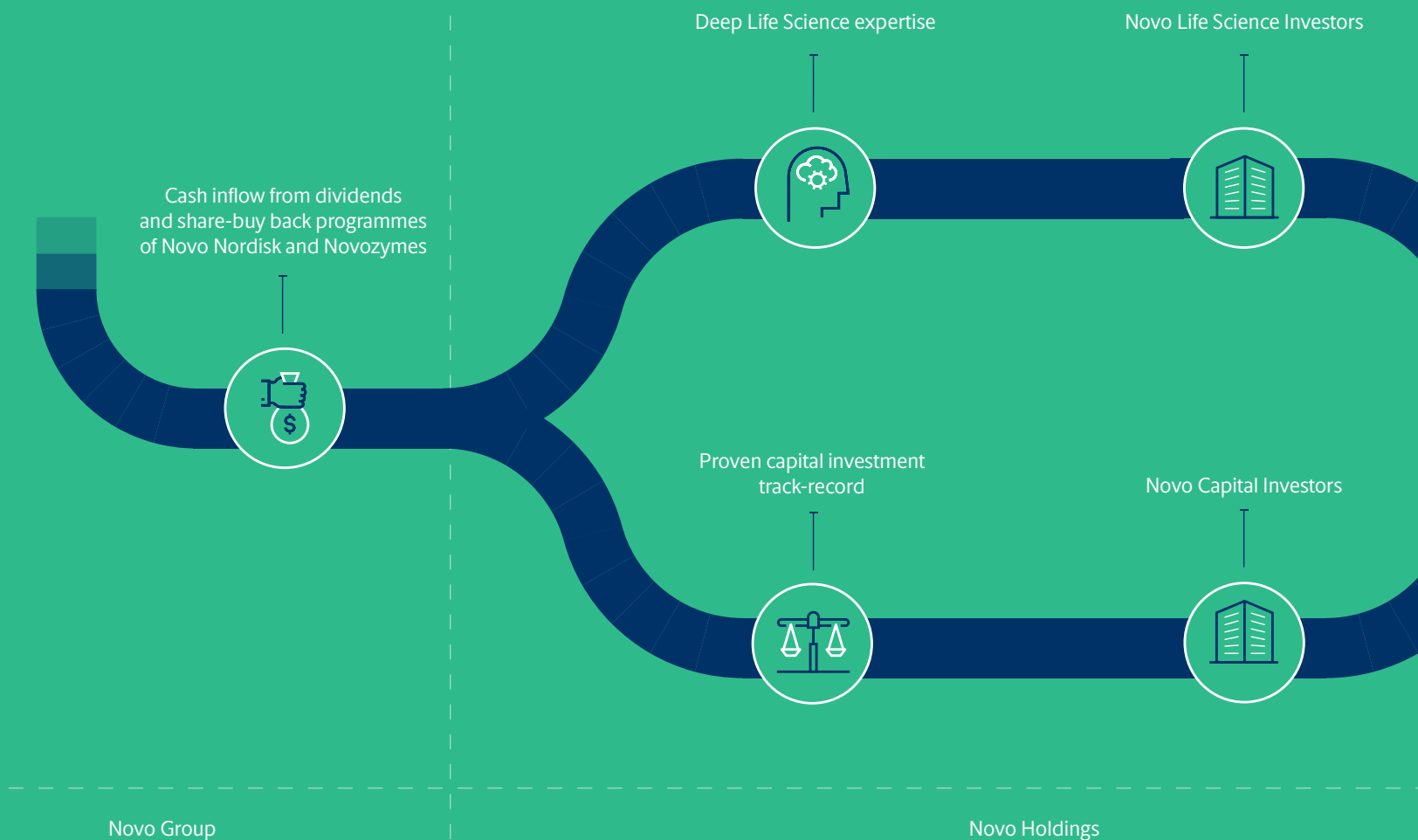
Return on Capital Investments in 2021

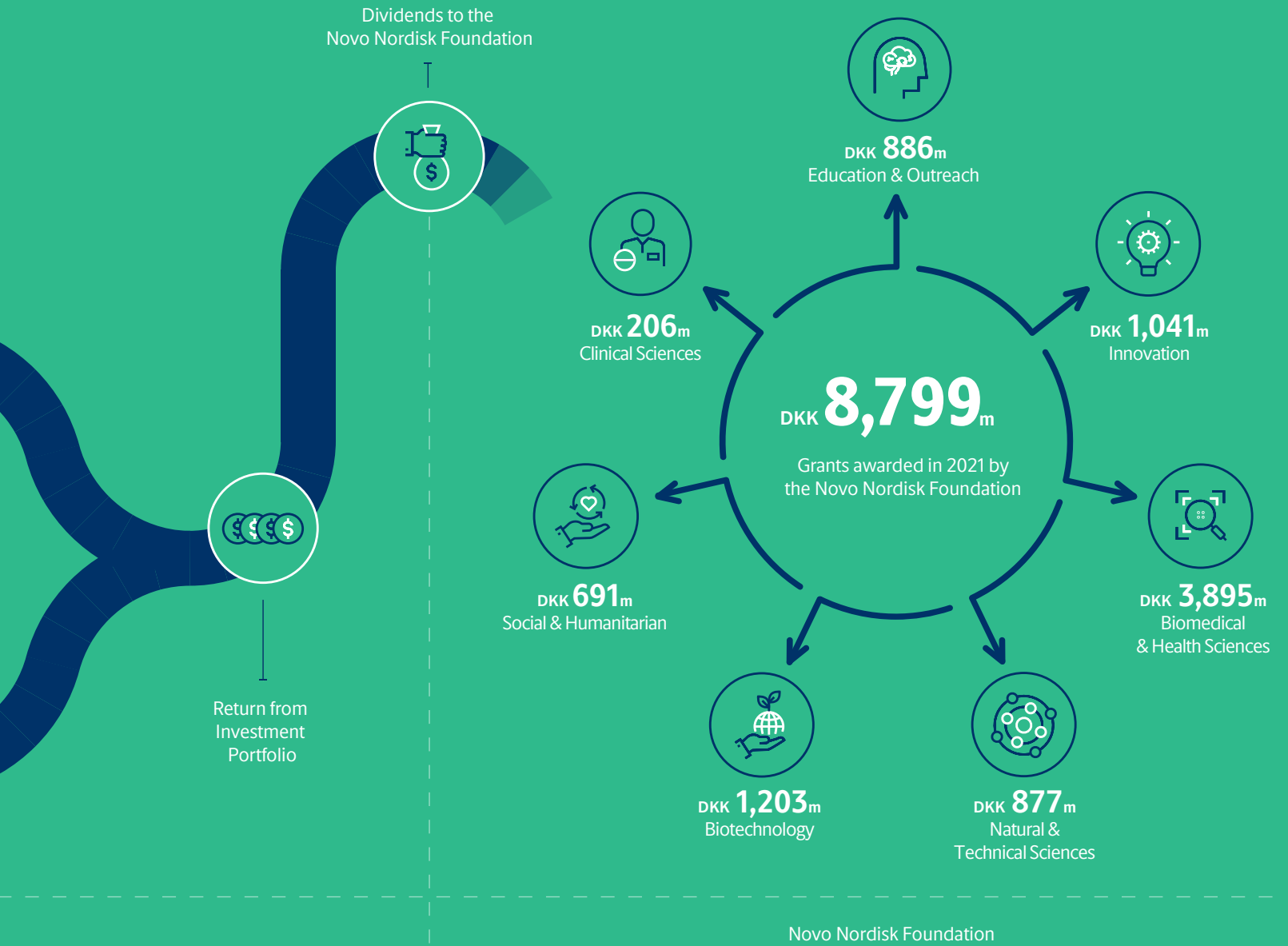
DKK  
37  
(EUR 5bn)  bn

Total Income and Return in 2021

# Our business model

Novo Holdings is a holding and investment company wholly owned by the Novo Nordisk Foundation. Our objective is to meet the Novo Nordisk Foundation's strategic and commercial goals, which requires us to make investments with a view to long-term returns.







# 2021 performance highlights

## Allocation and returns by asset category, investment area and Novo Group

Assets	Allocation		Returns		
	DKKbn	Share of	2021	5Y Rolling	10Y Rolling
By asset category					
Diversified Growth Assets	152	83%	17.0%	13.4%	16.3%
Macroeconomic Risk Hedges	30	17%	7.5%	4.3%	3.4%
<b>Investment Portfolio by asset category</b>	<b>182</b>	<b>100%</b>	<b>15.5%</b>	<b>12.0%</b>	<b>14.0%</b>
By investment area					
Life Science Investments	94	52%	14.6%	13.9%	17.0%
Capital Investments	88	48%	16.6%	9.3%	10.4%
<b>Investment Portfolio by investment area</b>	<b>182</b>	<b>100%</b>	<b>15.5%</b>	<b>12.0%</b>	<b>14.0%</b>
Novo Group					
Novo Nordisk A/S	476	92%	75.6%	26.6%	21.3%
Novozymes A/S	39	8%	55.8%	18.9%	13.1%
<b>Novo Group</b>	<b>515</b>	<b>100%</b>	<b>74.0%</b>	<b>25.8%</b>	<b>20.5%</b>

## Allocation and returns of invested portfolio by asset class

Asset class	Allocation		Returns		
	DKKbn	Share of	2021	5Y Rolling	10Y Rolling
Asset category and asset class					
<b>Diversified Growth Assets</b>	<b>152</b>	<b>83%</b>	<b>17.0%</b>	<b>13.4%</b>	<b>16.3%</b>
Public Equity	80	44%	12.5%	12.0%	17.3%
Private Equity	42	23%	35.7%	19.1%	14.1%
Venture Capital	17	9%	7.6%	17.5%	29.7%
Credit	13	7%	9.9%	5.5%	7.9%
<b>Macroeconomic Risk Hedges</b>	<b>30</b>	<b>17%</b>	<b>7.5%</b>	<b>4.3%</b>	<b>3.4%</b>
Real Assets	8	5%	37.4%	19.7%	15.1%
Bonds & Cash	22	12%	0.5%	0.7%	1.1%
<b>Investment Portfolio</b>	<b>182</b>	<b>100%</b>	<b>15.5%</b>	<b>12.0%</b>	<b>14.0%</b>

**Five-year summary**

DKK billion	2021	2020	2019	2018	2017
<b>Income statement</b>					
Income from Novo Group companies	14	13	11	11	6
Return from Life Science Investments	12	11	7	2	11
Return from Capital Investments	12	5	8	-1	3
Operating profit	37	29	26	11	20
Net profit for the year	33	25	23	12	19
<b>Balance sheet</b>					
Equity	159	131	114	97	86
Total assets	187	156	132	110	100
Total assets at market value*	697	457	411	331	358
<b>Key ratios</b>					
Equity ratio	85%	84%	87%	88%	86%
Number of full-time employees**	89	78	68	68	51

\* Total investments at market value include Novo Group companies with A and B shares of the companies valued using the quoted B-price at closing 31 December of the respective year.

\*\* Calculation based on the ATP-method.

**Returns**

All returns are in DKK and reflect total returns, excluding internal costs. Return from Novo Group companies (Novo Nordisk and Novozymes) is measured as total returns with both A and B shares in the above table, valued using the quoted B share price at closing 31 December 2021. Returns on Life Science Investments are calculated on an Internal Rate of Return (IRR), based on the book value at the end of the measurement period and cash flows within the measurement period compared with the book value at the beginning of the measurement period. Capital Investments' returns and Investment Portfolio returns are based on Time Weighted Returns (TWR). Whereas asset category returns are based on TWR, the underlying returns by asset class reflect a mix of IRR and TWR, with Private Equity, Venture Capital and Real Assets being measured by IRR and the remaining asset classes based on TWR.



We aim to make responsible investments and have a strong preference for companies and assets that strive to improve sustainability and the health and well-being of people.



# Investment strategy

As mandated by the Novo Nordisk Foundation, it is the strategic objective of Novo Holdings to be a strong owner of Novo Nordisk and Novozymes, to generate attractive returns on the Novo Nordisk Foundation's investable capital and to invest in and promote better health, sustainability and welfare.

We operationalise our asset allocation through a deliberate life science-focused investment strategy complemented by a broadly diversified global cross-industry financial portfolio. By the end of 2021, 52% of the Investment Portfolio is allocated to Life Science Investment areas and 48% allocated to the Capital Investments area, which is within our long-term strategic direction of deploying 50-60% of the Investment Portfolio in the life sciences sector.

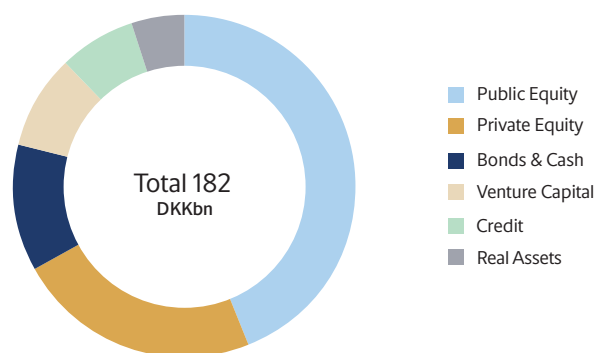
During 2021, complying with the risk tolerance set by the Novo Nordisk Foundation, balancing risk and returns with the projected grant payouts of the Foundation, we continued the implementation of our investment strategy towards 2023. The strategy entails increased diversification of our Investment Portfolio over the coming years, largely achieved by further diversification of our portfolio of financial assets into real assets, private equity (non-life science) and technology venture capital and by broadening our approach for investments within the life sciences sector, across asset classes as well as geographically.

By end of 2021, the total Investment Portfolio is valued at DKK 182 billion and is predominantly allocated towards equity, with public equity representing 44% and private equity representing 23% of the Investment Portfolio, respectively. Our bond and cash portfolio represents 12% of the Investment Portfolio, venture capital represents 9%, credits 7% and real assets 5%.

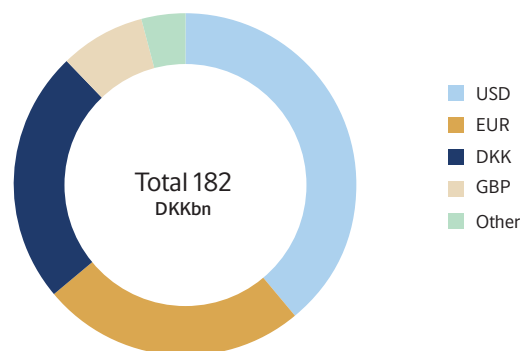
As a consequence of our strategic direction and the associated investments and divestments conducted throughout 2021, we have slightly lowered our exposure to venture capital and increased exposure to real assets. Combined, we have further diversified the Investment Portfolio during 2021, leading to a relatively lower risk profile when compared to the beginning of the year.

The geographical representation of the Investment Portfolio is largely unchanged compared to the beginning of the year, with around 39% of the portfolio exposed to USD, 25% to EUR, and 24% exposed to DKK.

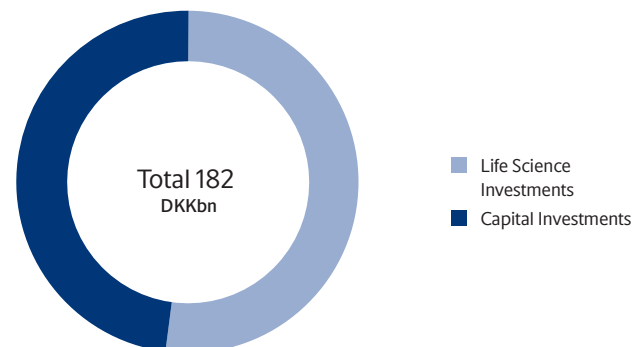
Investment Portfolio split by asset class, end of 2021



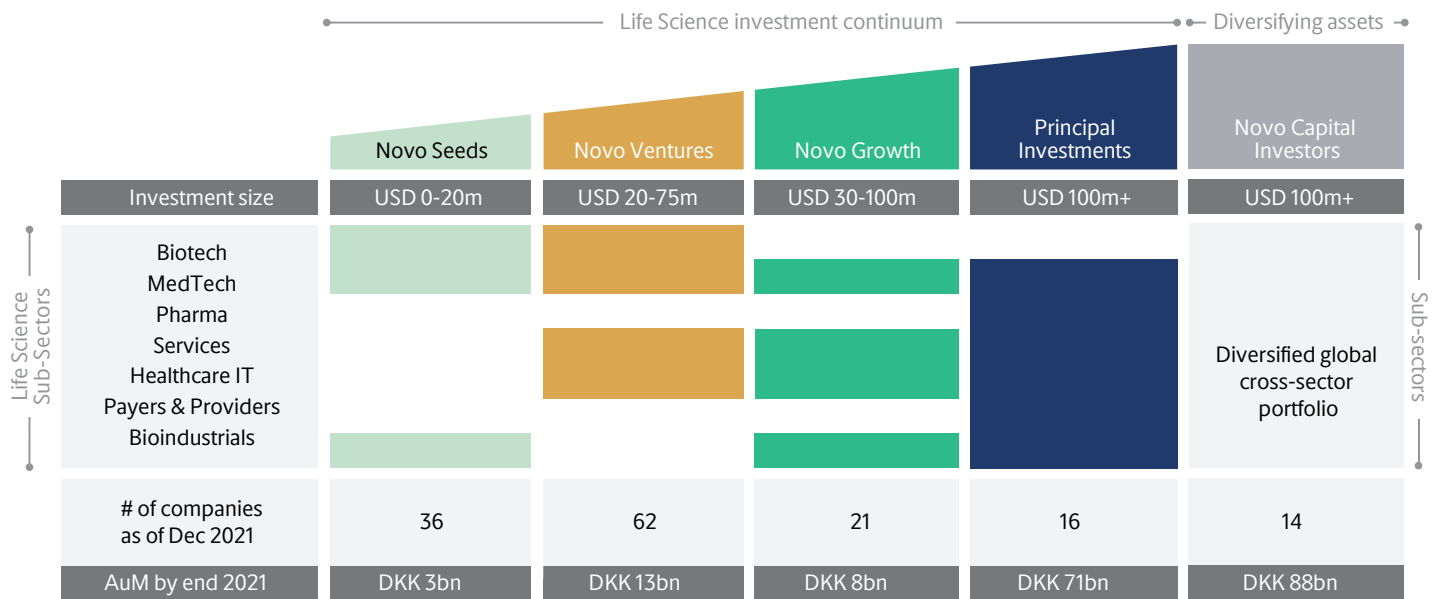
Investment Portfolio split by currency, end of 2021



Investment Portfolio split by Life Science Investments and Capital Investments, end of 2021



Capital deployment through five dedicated investment teams



Since the inception of Novo Holdings in 1999, we have focused on investing into the life sciences sector. Initially spearheaded by Novo Ventures, this focus and effort has developed further, adding Novo Seeds, Principal Investments as well as Novo Growth, which means that today we invest across the full continuum of the life sciences sector, from local early start-ups to global well-established corporates. During 2021, we increased our presence in Asia by adding three colleagues, complementing and further diversifying our Life Science Investment Portfolio outside of Europe and the US.

Our strategic focus on life sciences originates from the DNA of the Novo Group family, and after more than 20 years we continue to find exposure to the life sciences sector very attractive, as it is supported by a number of highly attractive underlying fundamentals.

We complement our investment focus with our Novo Capital Investors team, providing global exposure outside the life sciences sector. In line with our Strategy 2023, we are in the process of expanding and further diversifying our efforts within Capital Investments.

In support of this, we have established dedicated resources focusing on private equity (non-life science), venture capital (non-life science), real assets and credits, and increased our efforts for management of public equity in-house.



# Principal Investments

Principal Investments was established in 2013 and operates out of Denmark (Copenhagen), with offices in the UK (London) and the US (Boston). In addition, Novo Holdings' Asia investment team – based in Singapore – works in close collaboration with our teams in Europe and the US. Principal Investments invests in leading, well-established, growth-oriented healthcare and life science companies. Investments are made in privately owned and publicly listed companies with a mix of control, co-control and minority positions.

During 2021, there was a high activity level and Principal Investments deployed a total of DKK 9.0 billion (USD 1.3 billion) into new investments. Especially in the private market, activity level was high and Principal Investments made four new platform investments:

- Control investment in the Canadian contract research organisation Altasciences
- Control investment in the UK life sciences tools and diagnostics company BBI
- Minority investment in the US healthcare IT company Availity
- Minority investment in the Singaporean life science tools company Esco Lifesciences Group.

At the end of December 2021, Principal Investments signed two additional private investments – both of which are expected to close in the first quarter of 2022:

- Control investment in the US tech-enabled biopharma commercialisation services company Medical Knowledge Group
- Control investment in the US blow-fill-seal contract manufacturing organisation The Ritedose Corporation

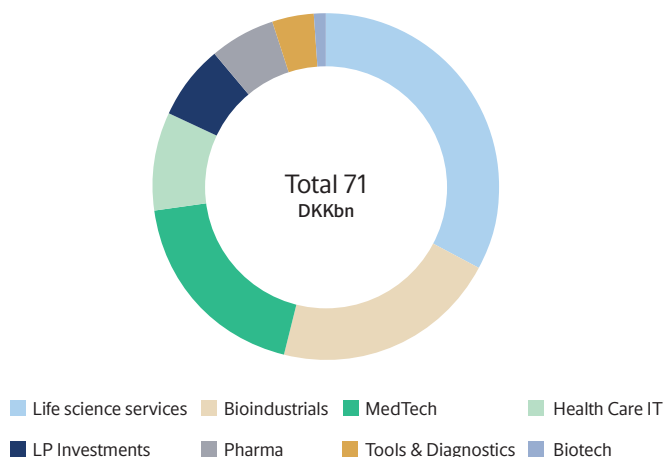
In addition to the private investments, Principal Investments also deployed DKK 1.1 billion (USD 150 million) into a leading listed US medtech company, during 2021.

Principal Investment's add-on investment into one of our private US portfolio companies, Clario (formerly known as eResearch Technology Inc.), which was announced in 2020, closed in the second quarter of 2021. This add-on investment occurred in connection with the financing of the merger with Bioclinica.

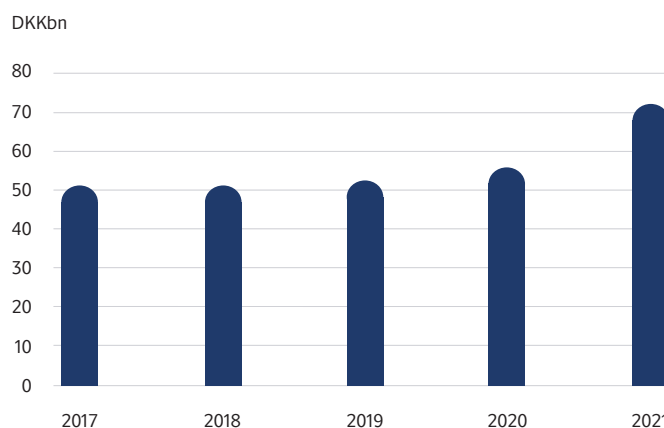
From an exit perspective, in 2021 Principal Investments completed a partial sell-down in our European portfolio company Synlab in connection with its IPO and a subsequent block trade. Furthermore, one of our US public investments was fully divested during the year following very strong company performance, and a second US public investment was partially divested. Monetisations during the year generated proceeds of DKK 3 billion.

At the end of 2021, there were 16 companies in the Principal Investments portfolio (excluding signed but not yet closed transactions), with eight companies having headquarters in Europe, seven in North America and one in Asia. Of the 16 portfolio companies, nine are privately held and seven are publicly listed. Our sector exposure is spread across life sciences and healthcare with the largest allocation in bioindustrials, medtech and life science services. The Principal Investments portfolio was valued at DKK 71 billion at the end of 2021, compared to DKK 56 billion at the end of 2020, driven by new investments (partly offset by monetisation) as well as an increase in the valuation of our exiting portfolio.

Principal Investment Portfolio by sub-sectors, end of 2021



Principal Investments Portfolio 2017–2021



# Novo Growth

Novo Growth was established in 2019 and operates out of the US (San Francisco) with a global mandate. It targets highly innovative, scalable life science companies that have recently reached, or are close to reaching, the commercial stage with strong long-term potential. Novo Growth focuses on companies that are more established than those targeted by Novo Ventures and that are growing faster than those typically targeted by Principal Investments.

Novo Growth differentiates itself by leveraging Novo Holdings’ deep focus on life sciences in combination with its flexible investment horizon and ability to deploy significant capital. Our approach focuses on specific investment ecosystems within four industry areas where we have in-house expertise: life science tools and diagnostics; technology within life sciences; industrial biotechnology; and complex manufacturing and supply chain.

Over the year, Novo Growth observed a strong flow of high-quality investment opportunities and a broadly supportive backdrop for the continued growth of our portfolio companies. This was balanced by rapidly increasing valuation expectations, intensifying competition from other capital providers and volatile market conditions.

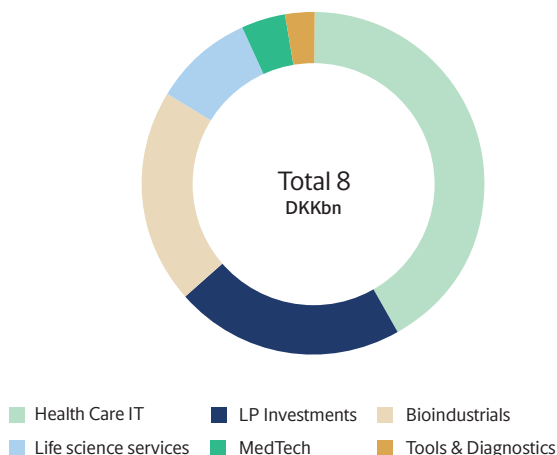
During 2021, Novo Growth completed 11 new direct investments and four follow-on investments, deploying DKK 1.7 billion. Notable investments

include the acquisition of significant minority positions in Genomatica and Verana Health in the US, Quanta Dialysis Technologies in the UK, and Doctor Anywhere and Halodoc in the Asia Pacific region. We also made investments in several existing portfolio companies, including Exscientia, Mission Bio and Vestaron. Monetisations during the year generated proceeds of DKK 0.7 billion.

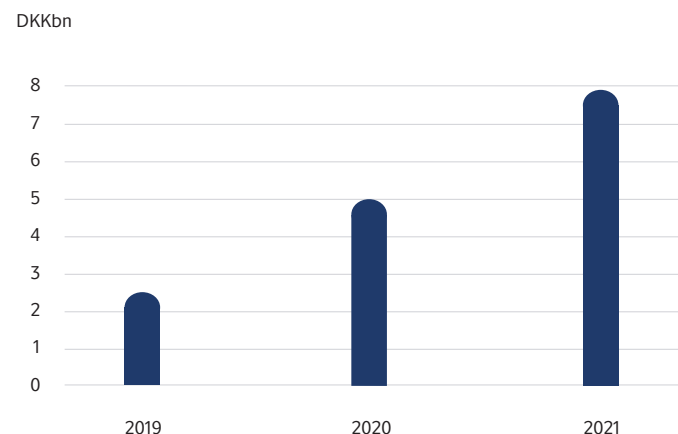
At the end of 2021, the Novo Growth portfolio comprised minority positions in 21 companies, 11 of which are based in the US, seven in Europe and three in the Asia Pacific region. Two companies within our portfolio are publicly traded, including Exscientia, which had its IPO on NASDAQ in October 2021, while the remainder are private. Novo Growth’s portfolio is diversified and broadly balanced across the sub-sectors in which we invest.

Including our limited partnership positions in external fund managers, the value of the Novo Growth portfolio reached DKK 7.9 billion at the end of 2021, compared to DKK 5.1 billion at the end of 2020. This was driven by increases in the valuations of some of our existing investments as well as new investments made during the year, balanced by monetisations of positions within our portfolio.

Novo Growth Investment Portfolio by sub-sectors, end of 2021



Novo Growth Investment Portfolio, 2019-2021



## Acquisition of Altasciences

# A match made in Canada

**Novo Holdings acquired Altasciences in early 2021, and already within the first year of investment, the partnership resulted in three add on acquisitions - and superior performance delivered by Altasciences.**

Getting a new drug to the market is a lengthy and complicated process. On average, the process from discovery to commercialisation takes about 15 years. The work that goes into clinical trials and regulatory administration is especially costly and time consuming, and an increasing number of small and medium-sized pharmaceutical companies therefore outsource these functions to external experts – such as Altasciences – a Canadian contract research company acquired by Novo Holdings in 2021.

“The acquisition of Altasciences is testament to our strategic focus on accelerating investment activities in and exposure to the world’s largest life science market – the United States. We believe that Altasciences is a uniquely positioned service platform in the drug development value chain – a core investment vertical for Principal Investments, in which we draw on extensive institutional knowledge,” says Christoffer Söderberg, Managing Partner, Principal Investments, Novo Holdings.

### Promising portfolio partnerships

Altasciences’ full-service solutions include preclinical safety testing, clinical pharmacology and proof of concept, bioanalysis, programme management, medical writing and biostatistics, which can all be customised to fit specific requirements. These services can help pharmaceutical companies get their products to patients more rapidly.

“A key part of our mission is to contribute to bringing novel medicines to the market, which makes Altasciences a very good fit with our portfolio,” says Abhijeet Lele, Senior Partner and Head of the US Principal Investments team at Novo Holdings.

“We already hold several companies within pharmaceutical outsourcing, and especially within clinical research, but Altasciences operates within preclinical and early clinical development, and we did not have existing investments there. Further, Altasciences’ customers are primarily small biotech companies;

we have a large portfolio of these and anticipate that this could lead to interesting partnerships.”

Before its acquisition by Novo Holdings, Altasciences had been controlled by two separate private equity firms since 1990. For Chris Perkin, CEO of Altasciences since 2010, the new owner constellation is a great match for the company, mainly for two reasons.



Christoffer Söderberg



Abhijeet Lele

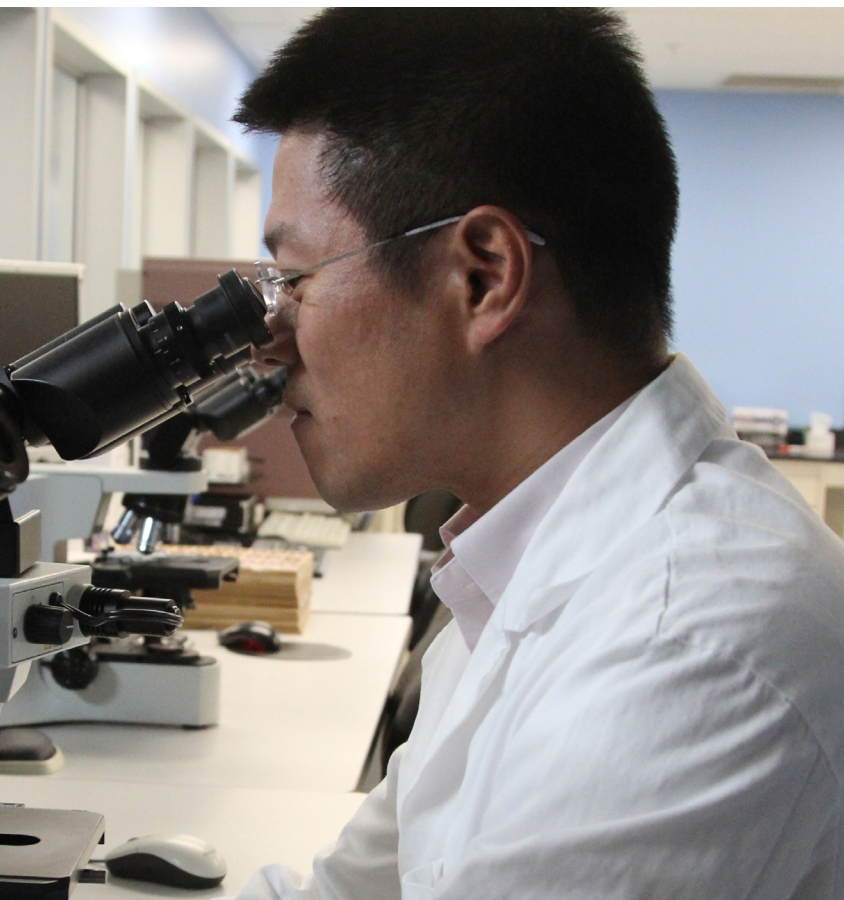


Chris Perkin



“With Novo Holdings on board, we are very well positioned to grow the company because we get the advantages of private equity combined with the benefit of a strategic long-term perspective. Understanding the time frame for the ROI on infrastructure is extremely important, and Novo Holdings understands this. It is a mature company with a strategic vision,” Chris Perkin says.

Regarding the strategic vision, Novo Holdings sees great growth opportunities for Altasciences in both Europe and North America. North America is especially promising because most of the early-stage biotech market and potential core customers are there.



In addition, Novo Holdings and Altasciences will be pursuing growth through acquisitions. Three major deals have already been completed within the first year of the Novo Holdings ownership, all operating within preclinical and early clinical development. However, in the longer term, Altasciences could be expanding its range of services into earlier stages of the drug development process, including drug discovery related activities through to lead candidate selection.

#### **A shared mission**

According to CEO Chris Perkin, the first year with Novo Holdings on board has been characterised by very high activity, and very strong performance. “We have had strong growth in 2021, far above any other year. One reason is the relaxation of some aspects of the COVID-19 pandemic, which was challenging for supply chains. But now we are in a very different situation: we have opened our doors to many new clients and entered many new markets. We have also initiated several infrastructure projects and drawn up new construction plans for some of our sites.”

Looking ahead to 2022, there are no indications that the high activity levels will tail off – quite the contrary. However, in addition to the commercial activities, Chris Perkin and his team will be working diligently to integrate the hundreds of new employees who have joined or will be joining Altasciences as part of the new acquisitions.

According to Abhijeet Lele, major acquisitions often result in mass layoffs, but not in this case:

“We are looking for companies to which we can add capabilities, and this means people. This is why the cultural fit of the companies is so important,” he says.

Cultural fit is also high on the agenda at Altasciences. In fact, Altasciences and Novo Holdings share many common features in terms of culture and values. Both companies are strongly mission-driven and share an overall purpose by working constantly to help bring new therapies to patients who need them.

“The employees at Altasciences are not just here for the job. They are here because they are making a difference. We are working for the greater good – that is why we are here,” Chris Perkin says.

# Novo Ventures

Novo Ventures was established in 2000 and operates out of Denmark, with offices in the US (San Francisco and Boston) and the UK (London). It is one of the largest and most active international life science-focused venture investors with a diversified portfolio of private and public investments.

Novo Ventures currently invests in novel science and technology across three life science sectors: biotechnology, medical technology and digital health. Within those sectors, we invest in private, early science start-ups through to publicly traded, commercial stage opportunities. We have a positive track record of investing in and enabling the advancement of science and medicine for the benefit of society, with a global portfolio of companies located in the US, Europe and Asia.

During 2021, Novo Ventures executed 46 investments. We deployed DKK 3.2 billion during the year. Investment highlights include:

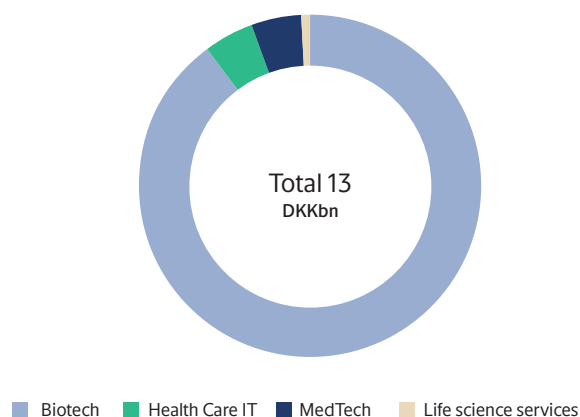
- Verve Therapeutics, a gene editing company hoping to lower LDL cholesterol for familial hypercholesterolemia and one of the first in vivo gene editing therapies to begin clinical trials
- Hummingbird Biosciences, a company using a systems biology approach to antibody discovery and development, and our first venture portfolio company with headquarters in Asia
- Numab Therapeutics, a next generation antibody fragment platform company whose lead programme has the potential to become new standard of care in immune checkpoint therapy
- Noom, a leading, high growth, global digital health platform

Despite volatile market conditions, 2021 was another active year for the life sciences IPO market. During the year, 8 Novo Ventures portfolio companies executed IPOs, raising over DKK 1.3 billion to help fund their businesses.

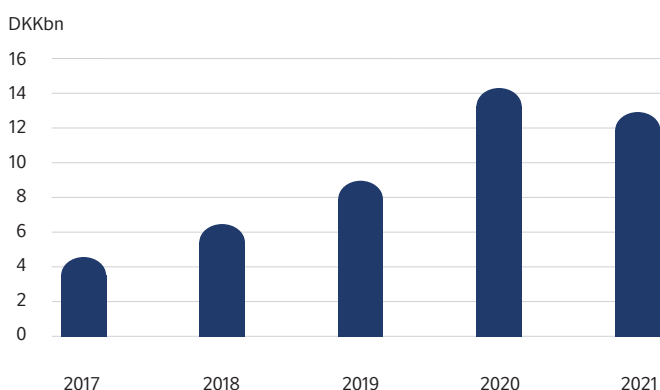
Novo Ventures sold 23 of its portfolio companies during 2021, including eight private companies and 15 publicly traded companies, for a total of DKK 3.7 billion. The top three transactions in terms of realised proceeds were Unchained Labs' sale to the Carlyle Group, NBE Therapeutics' sale to Boehringer Ingelheim, and MDLive's sale to Cigna. In addition, Novo Ventures realised DKK 1.3 billion in proceeds from the sale of publicly traded stock. In terms of exit proceeds, 2021 was a record year for us with over DKK 5.0 billion realised, compared to DKK 2.3 billion in 2020.

At the end of 2021, the Novo Ventures portfolio included 62 companies and was valued at DKK 12.8 billion, compared to DKK 14.0 billion in 2020. The portfolio is split between private (62%) and public (38%) companies. On the sub-sector level, 90% of the portfolio was represented by biotechnology investments and 9% were medical technology and digital health investments. Based on geography, 85% of the portfolio value was in US-based companies with the remainder being European and Asian companies.

Novo Ventures Investment Portfolio by sub-sectors, end of 2021



Novo Ventures Investment Portfolio 2017–2021





# Novo Seeds

Established in 2007, Novo Seeds operates out of Denmark with the mission to identify, build and invest in Nordic life science start-up companies based on breakthrough innovations. Novo Seeds is a key player in building a sustainable Nordic ecosystem by attracting capital, global talent and strong science to the region.

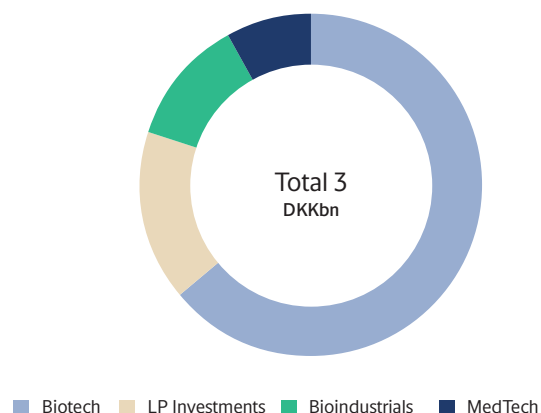
Novo Seeds invests across four different areas: biotech, bioindustrials, fund investments and the REPAIR Impact Fund aimed at investing in novel antibiotics. Our core focus is biotech and bioindustrials, where we source globally and build locally.

During 2021, Novo Seeds portfolio companies raised a record DKK 3.6 billion (USD 550 million) from international VCs and led three of the largest Series A financings in Europe in companies that we established:

- Muna Therapeutics closed a DKK 480 million (USD 73 million) Series A financing to develop first in class small molecules for neurodegenerative diseases.
- Hemab secured DKK 361 (USD 55 million) million to develop its pipeline of bispecific and monoclonal antibodies for preventive therapy of life-threatening rare bleeding disorders.
- Oncology company ADCendo closed a DKK 379 million (EUR 51 million) Series A financing to develop specific cell-targeted antibody therapeutics for cancer treatment.

With continuous backing from Novo Seeds, IO Biotech, an immuno-oncology company we incubated, closed a DKK 945 million (EUR 127) million Series B financing in the spring, which was followed by a successful NASDAQ IPO in November 2021, generating proceeds of DKK 755 million (USD 115 million).

Novo Seeds Investment Portfolio by sub-sectors, end of 2021



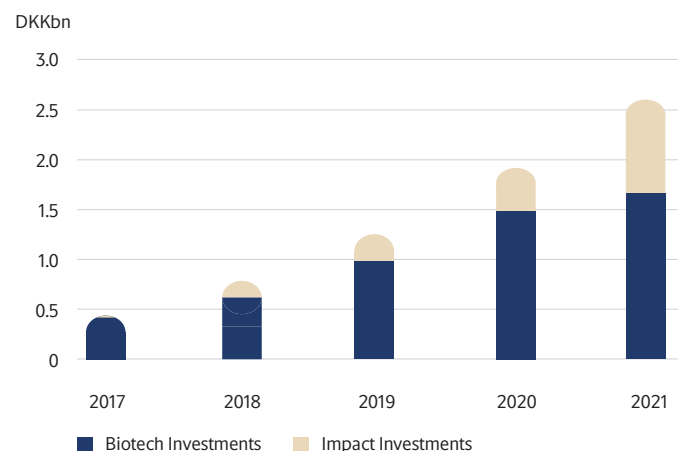
Novo Seeds also completed the trade sale of women's health company Forendo Pharma to Organon with a total deal value of DKK 6 billion (USD 945 million).

Within bioindustrials, Novo Seeds completed two new investments during 2021, namely 21st Bio, the bioindustrial contract development and manufacturing company (CDMO) based on technology from Novozymes, and Bactolife, which develops products for precision engineering of microbiomes to eliminate the virulence of gastrointestinal pathogens.

The REPAIR (Replenishing and Enabling the Pipeline for Anti-Infective Resistance) Impact Fund was launched by Novo Holdings in 2018 with the aim of advancing early novel anti-infective programmes. The REPAIR Impact Fund has undertaken a dual strategy of both investment and policy advocacy, and is supportive of a change in reimbursement, where access is paid for via a subscription model as opposed to the current model focusing on volume of use. The REPAIR Impact Fund has invested in nine companies. In addition, Novo Holdings is also an investor in the AMR Action Fund.

By the end of 2021, the Novo Seeds biotech portfolio consisted of 36 companies, including four new companies that were incubated in 2021. The portfolio largely consists of private investments, valued at DKK 3 billion at the end of 2021, compared to DKK 2 billion at the end of 2020. The portfolio is predominantly exposed to the biotech and medtech sub-segments of the life sciences industry. The REPAIR is valued at DKK 309 million at the end of 2021, compared to DKK 272 million at the end of 2020.

Novo Seeds Investment Portfolio 2017–2021





## Novo Holdings Asia

# Next stop China

**With four investments in Asia-based companies, 2021 was a busy first year for Novo Holdings Asia. Amit Kakar, Senior Partner and Head of Novo Holdings Asia, reflects on a productive 2021 and sheds light on the ambitions for 2022, which include a new China platform and an increased focus on the bioindustrial vertical.**

**Headquartered in Singapore, Novo Holdings Asia has been operational since January 2021. What were the priorities for the first year in business?**

"I joined Novo Holdings in August 2020, and right from the get-go our priority was spending time with the team in Denmark to fully understand the ethos, values and culture of the Novo Family and bring those values to the new office in Singapore. The first task was to hire the initial team, and then we officially opened our doors in January 2021. To build momentum and establish our brand name in the region, we pursued a four-pillar strategy. First, we started engaging with the media and attending conferences or webinars to build our brand equity. Second, we started to actively invest, thereby demonstrating that we are committed to establishing ourselves in this ecosystem. Third, we have built and still are proactively building high-quality relations with key stakeholders on the ground, including strategic investors and funds where we have LP positions to collaborate on identifying and pursuing co-investment opportunities. Finally, we prioritised working closely with our communication team to generate awareness about our activities. All these actions have given us a jump start, and we are now working on how to leverage our best practices as we expand our investment activities in China and India."

**What were the highlights of 2021 from an investment perspective?**

"By the end of 2021, we had completed four investments in Southeast Asia and one LP position in a bioindustrial-focused fund. Novo Holdings' investments in Asia cover the Venture, Growth Equity and Principal Investments spaces. Although we are excited about all our investments, I would like to highlight our investment in the Singapore-headquartered company Hummingbird Bioscience.

This investment demonstrates collaboration between our US Venture team, which has been tracking the company for several years, and our Asia team which, with the advantage of being on the ground, could form a relationship with the company and its executives and thus move the investment forward. At the time



Amit Kakar

we invested, the company was looking to raise funds for an Investigational New Drug (IND) Application in the US. The Hummingbird Bioscience case clearly demonstrates how important it is to be present locally to build relationships with companies and existing investors.

Two other interesting investments to highlight are Halodoc and Doctor Anywhere, both in the digital health and telemedicine space and addressing Southeast Asia's dire need for accessible and affordable healthcare. Halodoc focuses on Indonesia, with a population of 300 million and an urgent need for new, innovative solutions to create better access to affordable healthcare. In general, digital healthcare and telehealth are core investment themes for Novo Holdings in Southeast Asia that we follow with great interest."

**Most of Novo Holdings investments in Asia have so far been in healthcare companies. What industries will be represented in the portfolio moving forward?**

"Bioindustrials as a theme will play an increasing role across the region, and we will be looking for opportunities in Southeast Asia, China and India. We have made our first investment as an LP in a strategic fund in this space and will now continue to build on this momentum. The bioindustrials area includes several subsectors, such as food, agriculture, energy and biomaterials, so we must do our thematic investment mapping carefully to ensure that we are investing in areas in which we have the core expertise. A theme that we are especially excited about within bioindustry is alternative protein. Singapore is on a rapid trajectory towards becoming the capital of the alternative protein source industry, and we are following several investment opportunities with keen interest.

Another focus area is the healthcare provider space such as specialty hospitals and diagnostic services. This area has been growing across Southeast Asia and India, where many patients are paying for healthcare out of pocket because they lack health insurance and therefore seek timely and affordable high-quality healthcare."



**In 2022, Novo Holdings Asia will open an office in Shanghai. What are the aspirations for Novo Holdings' presence in China?**

"Novo Holdings is a long-term investor, and this perspective fits well with where China is heading. In fact, China represents the largest opportunity for us in Asia. However, being embedded in the investment ecosystem requires being on the ground. The same goes for the companies we invest in: If they want to play a role in China, they need to be local and they need to set up manufacturing there. Navigating the regulatory environment is quite complex and requires local talent, so right now we are in the process of hiring the right team for this purpose.

In addition, China now strongly emphasises deep science and innovation, which is aligned with our way of thinking. Until recently, the focus in China was on in-licensing of innovation and technologies, but that is changing. Now, China is moving in a direction that entails developing new technologies and fostering innovation."

**What particular investment themes will drive Novo Holdings in China?**

"The Chinese government has declared that it wants the country to be carbon neutral by 2050. To achieve this goal, the government will spend significant resources and capital to drive the country in a more sustainable direction and to make the economy more circular. Health and environment will be at the very core of this transition and will affect how we will invest. Our approach will be to observe how the government is investing to drive the green transition and largely follow this path. Further, we will be looking into the spaces in which we positively know that we can leverage our existing knowledge and expertise. These verticals include, but are not limited to, outsourced pharma services such as CDMOs, CROs and innovative biotech and biopharma. The areas of diagnostics and life science tools are also attractive as investment themes for us in China."

**Investment snapshot from Asia**

Esco Lifesciences Group

In May 2021, Novo Holdings co-led with Vivo Capital the over-subscribed USD 200 million Series A and crossover round in Esco Lifesciences Group. Esco Lifesciences is a world-leading life science company with a diversified portfolio and sales in more than 100 countries.

As a manufacturer of life science tools, biopharma equipment and IVF medical devices, Esco offers tailored solutions that fit the needs of laboratories in various industries. The Company continually innovates its products to help clinical and industrial laboratories achieve successful conclusions in research and development, quality control and analysis.

Esco provides equipment to help pharmaceutical companies make their products safer and more cost-effective. Further, with the increasing demand for the IVF industry, Esco has developed efficient ART equipment to enable equitable access to infertility care.

Providing a continuum of services to existing life sciences clients and ecosystem, Esco Aster bridges the "valley of death" by providing contract process development with standardised platforms that enable fellow scientists to translate their benchwork into life-saving diagnostics, medicines, therapies, cosmeceuticals and cellular agriculture.

Headquartered in Singapore, Esco has an extensive sales network and direct sales and service offices in more than 20 countries. Esco has eight manufacturing and R&D hubs in the United States, the European Union, the United Kingdom, China, Singapore and Indonesia. The Company employs more than 1,600 people worldwide.

# Novo Capital Investors

Novo Capital Investors was established in 2005 and operates out of Copenhagen with a global mandate. Novo Capital Investors manages Novo Holdings' non-life science investments and invests in public equities, credits, bonds, real assets, private equity and venture capital. As of 2021, approximately 46% of the portfolio is managed by external managers and 54% is managed internally. In addition to generating attractive returns, we help the Novo Nordisk Foundation diversify its asset base and ensure that it has access to liquidity, since the majority of Novo Capital Investors' portfolio can be converted into cash within a short timeframe.

During 2021, Novo Capital Investors increased its allocation to real assets, private equity and venture capital and further established the team structure to drive these efforts.

Novo Capital Investors made significant progress within all our areas during 2021. In real assets, we made total commitments of around DKK 3 billion to new investments, including the investment in the Copenhagen land plot Jernbanebyen, a strategic renewable partnership with European Energy and our first real estate investments in the US. In private equity, we committed DKK 4 billion spread across 14 funds, predominately within venture and growth equity. In both the direct equity and direct credit strategy, we continued to make selective high conviction investments while

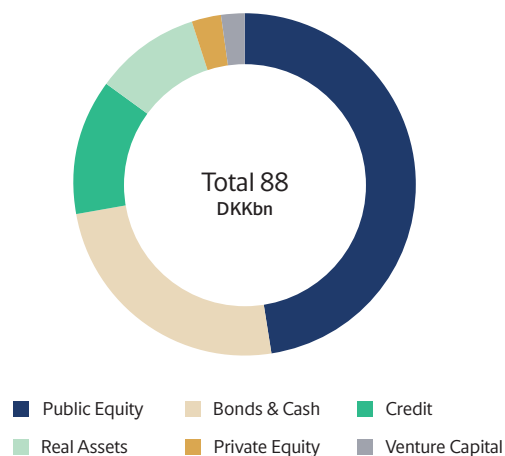
broadening our coverage. In externally managed public equities and credits, we continued to build on our relationships with our existing partners and established two new partnerships.

By the end of 2021, Novo Capital Investors managed a total portfolio of DKK 88 billion (48% of the total Novo Holdings Investment Portfolio), driven by accumulated profits and inflows from the Novo Group partly countered by outflows to the Novo Nordisk Foundation. This increase of DKK 15 billion relative to the end of 2020 was primarily driven by returns generated by capital investments over the year as well as inflow of capital from Novo Nordisk and Novozymes.

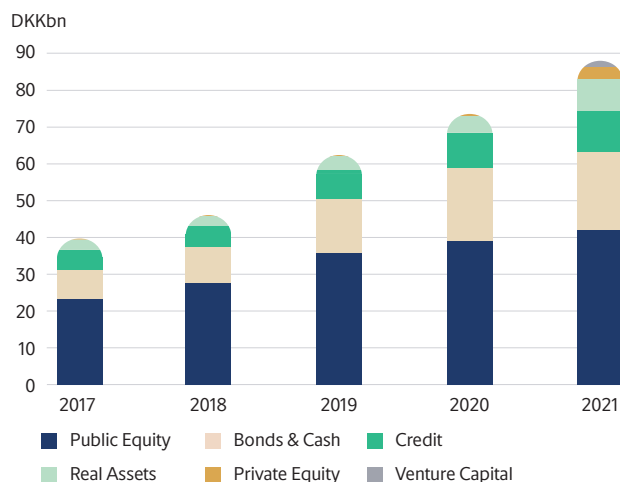
At year end, the Novo Capital Investors portfolio comprised 33% externally managed equities; 18% internally managed equities; 8% externally managed credits; 4% internally managed credits; 25% bonds and cash; 10% real assets; and 2% private equity and venture.

Novo Capital Investors portfolio generated a return of 17% and a profit of DKK 12 billion in 2021, which is on par compared to an asset-class-weighted benchmark return of 17%. This compares to a return of 8% and a profit of DKK 5 billion in 2020.

Capital Investment Portfolio by asset class, end of 2021

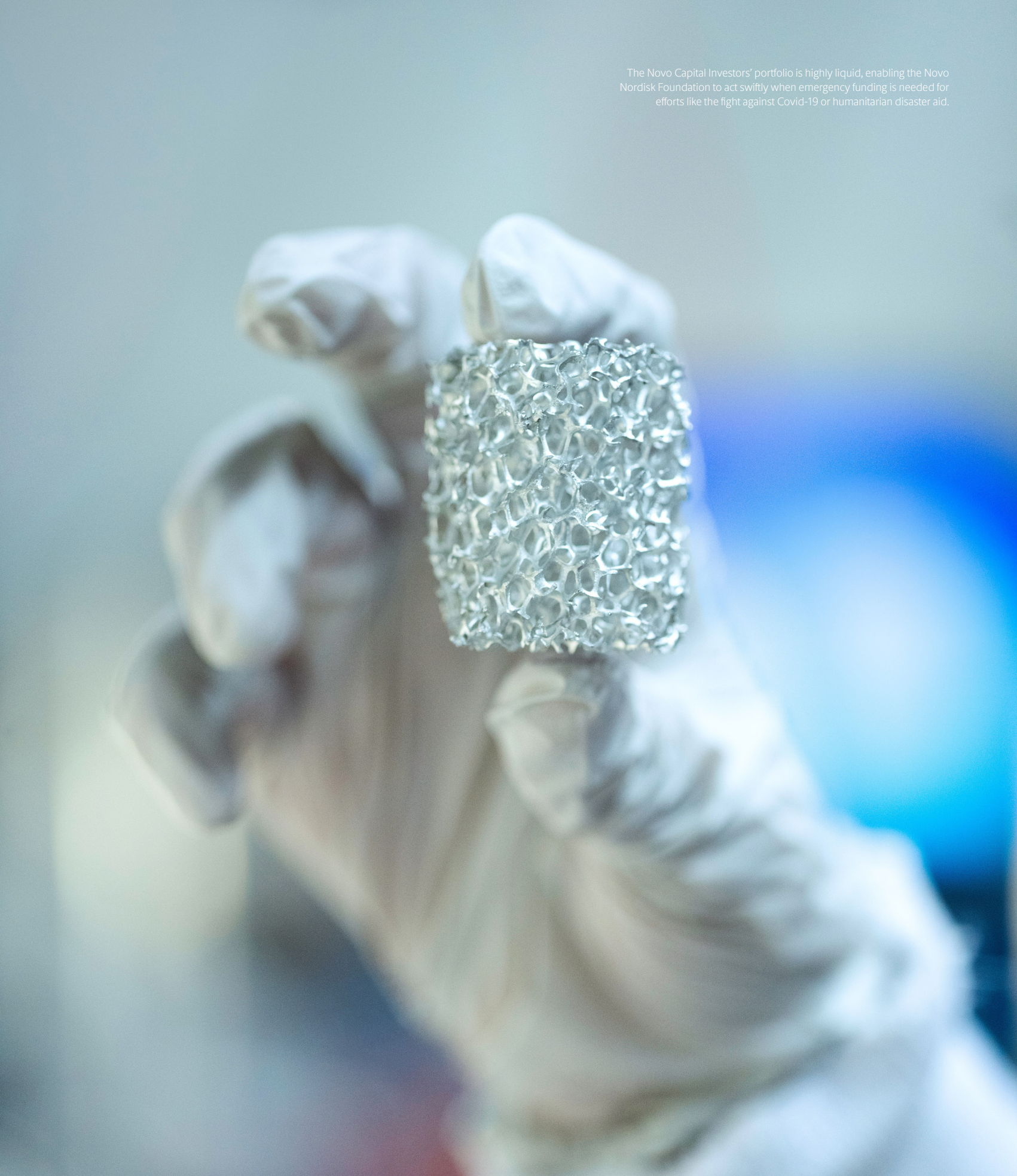


Capital Investment Portfolio 2017–2021





The Novo Capital Investors' portfolio is highly liquid, enabling the Novo Nordisk Foundation to act swiftly when emergency funding is needed for efforts like the fight against Covid-19 or humanitarian disaster aid.





A person wearing a blue lab coat, a blue hairnet, and a face mask is working in a laboratory. They are standing in front of a piece of equipment, possibly a biosafety cabinet, which has a control panel with a dial and buttons. The background is a clean, white laboratory environment.

“

The Novo Holdings ethos is expressed by the Novo Holdings Way, and its cornerstones are **Performance, Respect** and **Responsibility**. Our teams lived up to this ethos in an exemplary manner in 2021 by delivering a very satisfactory performance under challenging circumstances.”

- Kasim Kutay, CEO

# People and organisation

## Attracting, developing and retaining high performing talent

Our people constitute our most important asset, and our ability to attract, develop and retain high performing talent is key to delivering strong results. We aim to offer a special and attractive employer value proposition, with a competitive compensation package and opportunities for continuous development and career advancement.

Through our learning programme – the Novo Academy – we strive to ensure that our colleagues are always at the forefront of their fields by offering them a broad range of targeted learning opportunities, e.g. business school programmes, board training and individual coaching. The development activities offered are continually expanded, based on the business and development needs of our employees.

## Globalisation

In line with our strategic direction, we continue to grow and globalise our efforts. In 2021, we opened our first Asia office with headquarters in Singapore, led by Dr. Amit Kakar. In 2022, we are hoping to further expand our presence in the region by establishing an office in Shanghai, China.

## Impact of the Covid-19 pandemic

2021 has to a great extent been impacted by Covid-19. In Novo Holdings, numerous initiatives have been taken to create a safe environment and to ensure that employees and our society in general see us as a responsible employer that prioritises the safety and well-being of our employees and their families.

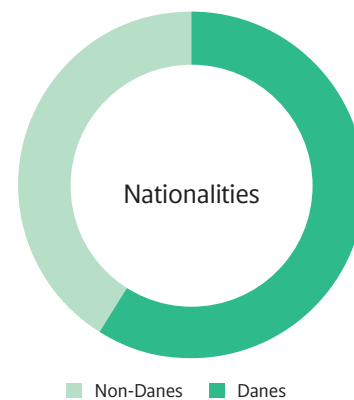
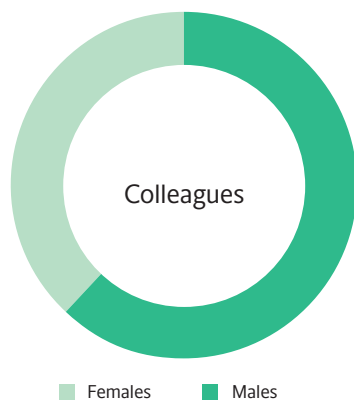
Novo Holdings is a global organisation, and collaboration and knowledge-sharing are core to our culture. This has been a key focus area for us in 2021, especially because many new colleagues have joined the company during 2020-2021 in all our different locations.

## To support high performance we strive for diversity

Diversity and inclusion are closely linked to the core values of Novo Holdings, and it is our overall aim to create and sustain an environment that actively embraces diversity and inclusion. In 2021, we continued to increase diversity and inclusion at Novo Holdings, and several initiatives have been taken in this regard, e.g. structuring a more flexible workplace and improving our parental leave conditions to become market-leading in all the locations we operate in.

Novo Holdings Investment Group\* employed 111 people by the end of 2021. Our colleagues represent 16 nationalities and comprise a wide range of experience and educational backgrounds. During 2021, we welcomed 18 new colleagues to the organisation. 37% of our colleagues are female and 63% are male, with a 14% female/86% male gender split among management positions by the end of 2021\*\*.

For our statements on corporate social responsibility and gender diversity cf. section 99a and 99b of the Danish Financial Statements Act, we refer to Annex A of the Novo Nordisk Foundation's (CVR: 10 58 29 89) Annual report: [Annual report](#)



\*The Novo Holdings Investment Group consists of Novo Holdings A/S as well as the separate entities Novo Holdings Equity (US), Inc., USA, Novo Ventures (US), Inc., and Novo Holdings Equity Asia Pte. Ltd., Singapore providing certain consultancy services to Novo Holdings A/S.

\*\* The numbers reflect our level 1, which comprises the Partner/Director level and above.



# Our commitment to responsible investing

We aspire to become catalysts of change by investing in companies that – like Novo Holdings – believe that there are achievable solutions to the pressing challenges facing both humankind and our planet. Our commitment is simple: to have our investments make a positive difference to the world, now and perhaps even more importantly, well into the future. As long-term investors, we are responsible for our own business practices, and have an obligation for the practices, conduct and actions of the companies in which we invest. We therefore work proactively with our portfolio companies to set a higher standard when it comes to sustainable business practices to minimise risks and capture opportunities. Our focus on combining positive social impact with strong financial returns reinforces the role our Novo heritage plays in our investment ethos and our strong, continuing ties to the culture of our owner, the Novo Nordisk Foundation.

## Societal Impact

As a leading life sciences investor, we have a unique opportunity to drive positive societal change. We have a strong preference for investing in companies and assets that can improve the health of society and champion sustainable consumption and production. This is firmly reflected in our life sciences-focused investment strategy, which shows that 52% of our investment portfolio in 2021 was allocated to the healthcare or the bioindustrial sectors. A key strategic objective for us is to support innovation that has potential to generate attractive long-term returns. We do this by investing in companies that are recognised as being at the leading edge among their peers in terms of the development and implementation of new technologies as well as in their general approach to achieving their ambitions.

We have identified three focus areas of societal impact that are particularly important to us. We believe these are the areas where we can most leverage what makes Novo Holdings an impactful investor for societal good: our strong legacy, our mission, our life sciences focus, our network and our market-leading expertise.

The framework we use in establishing our impact focus areas is based on the United Nations Sustainable Development Goals (SDGs). We believe this ensures that our activities are truly anchored in what needs to be done to meet the critical needs of society and the planet.

We believe that we are uniquely positioned to invest and deliver considerable positive societal impact within the following areas:

## 3 GOOD HEALTH AND WELL-BEING



### Goal

Ensure healthy lives and ensure well-being for all at all ages

### Novo Holdings' focus

Provide more people with better treatments to improve health in society

## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



### Goal

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

### Novo Holdings' focus

Develop technology, research, and innovation to benefit people and upgrade society

## 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



### Goal

Ensure sustainable consumption and production patterns

### Novo Holdings' focus

Develop solutions enabling the transition to a more efficient use of natural resources

The above reflects Novo Holdings' priorities when deciding on what to invest in. We have established three further focus areas based on three additional SDGs (page 48), which we believe embody our standards as a responsible owner. These are closely aligned with our values of Performance, Respect and Responsibility, and they reinforce our ability to ensure our investments are working for the greater good.

2021  
highlights

Provide more people with better treatments to improve health in society

DKK **78** bn invested in healthcare companies by the end of 2021 through direct investments in 117 companies

“ With over fifty percent of our investment portfolio dedicated to the life sciences sector, we are in a special position. We have an obligation to harness the power of biotechnology to target some of the world’s most pressing issues, including the urgency of the green transition and meeting unmet medical needs.”

- Kasim Kutay, CEO



Develop technology, research, and innovation to benefit people and upgrade society

Novo Holdings portfolio companies had **258** patents related to medicines and therapeutics granted and 287 active clinical trials<sup>1</sup>

Develop solutions that enable the transition to a more efficient use of natural resources

DKK **17** bn invested in bioindustrial companies harnessing the power of biology at scale to create sustainable solutions through investments in 18 companies

<sup>1</sup> For the financial year 2020. Source: The Novo Nordisk Foundation Annual Impact Report 2020

**8 DECENT WORK AND ECONOMIC GROWTH****Issue**

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

**Novo Holdings' focus**

Build safe workplaces and resilient companies

**10 REDUCED INEQUALITIES****Issue**

Reduce inequality within and among countries

**Novo Holdings' focus**

Develop business leadership to increase company diversity and inclusion

**13 CLIMATE ACTION****Issue**

Take urgent action to combat climate change and its impacts

**Novo Holdings' focus**

Accelerate the transition to a low-carbon society

Measuring our progress on societal impact and our responsible investments approach is complex due to the diversity of our Investment Portfolio that extends across sectors, asset classes and company maturities (from start-ups to established companies). As a starting point, we are defining metrics connected to our six societal impact focus areas. The metrics will help us track how ESG practices of our portfolio companies are progressing (e.g. gender diversity, CO<sub>2</sub> emissions or employee engagement). Further, we will develop metrics connected to how we invest for positive outcomes (e.g. how many people get access to medical consultation). We plan to do the first round of measures and establish our baselines during 2022 and work to evolve our approach.

**Responsible investment approach**

As a sizeable investor with a global footprint, we take our responsibility as an investor seriously. We integrate environmental, social and governance (ESG) aspects as well as societal impact into our investment processes, which is further underpinned by our commitment to the UN-supported Principles for Responsible Investment (UNPRI) and anchored in Novo Holdings' Responsible Investments Policy.

We invest into the full spectrum of companies from start-ups to established businesses, both within and outside of the life sciences

sectors, and across multiple asset classes. We continuously work to improve our approach to meaningfully capture ESG-related risks and opportunities for sustainable value creation throughout the diversified spectrum of investments. Our investment teams are experts both in their sectors and in the companies in which we invest. As a result, they are committed to spearheading our ESG integration and engagement efforts by ensuring that risks are well managed and that ESG aspects become value creation drivers with the aim of futureproofing the businesses we are investing in.

**Pre-investment phase**

To assess the long-term sustainable value creation and to mitigate risks affiliated with potential investments, we analyse the societal impact potential of our investments as well as material ESG-related risks during our due diligence process. We favour investments with direct, positive societal impact through products and services and companies where ESG-related risks are embedded in robust policies, management, governance and transparency. As part of our due diligence, we screen potential investments according to widely accepted international standards, such as the UN Global Compact, as well as adhering to our exclusion principles to conclude on the eligibility of the company for potential investment. We exclude investments in certain industries, such as weapons in breach of UN treaties or conventions, tobacco, adult entertainment, gambling, predatory lending, fossil fuels and palm oil.

**Ownership phase**

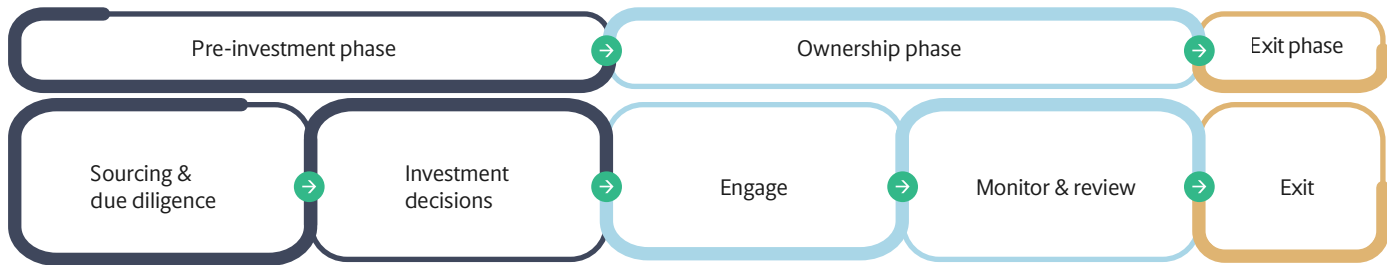
We work closely with our portfolio companies, as our investment comes with an engaged and supportive approach for companies, its board and management to realise their full potential. We review on an ongoing basis the ESG practices of our investments, and we view our board positions and dialogue with management as critical means of encouraging companies' own societal impact and ESG-related initiatives with the aim to futureproof businesses. At a minimum, we aim to engage through Annual General Meetings, exercising our voting rights.

**Exit phase**

As a responsible investor, Novo Holdings works towards enhancing and adding transparency to our investments' ESG and societal impact profile and progress when exiting a company. This enables potential investors to assess relevant information related to a company's potential ESG risks and opportunities in the process.



We have tailored our responsible investments processes to the individual investment teams and asset classes, but the following is a generalised illustration of how we work:



**Investment snapshots:**

**3 GOOD HEALTH AND WELL-BEING**



**Halodoc**

In April 2021, Novo Holdings announced that it had joined the USD 80 million Series C financing in Halodoc. Halodoc is an Indonesia-based digital healthcare platform that includes a mobile app and a website. The platform enables its users across Indonesia, where healthcare access remains limited, to have live consultations with more than 20,000 licensed doctors at any time, regardless of where in the country they live. In 2020, Halodoc launched an appointment service that connects over 2,000 providers, from hospitals to clinics to laboratories, with patients in over 180 cities across the highly populous country. The funds of the Series C financing enable Halodoc to deepen its penetration in key healthcare verticals across Indonesia, improving patient experiences with technology-based solutions for the country's most pressing healthcare problems.



**12 RESPONSIBLE CONSUMPTION AND PRODUCTION**



**Genomatica**

In July 2021, Novo Holdings added bioengineering company Genomatica to the portfolio in a USD 118 million Series C financing. Genomatica's technology enables brands and suppliers to deliver more sustainable everyday products by using chemicals derived from renewable, plant-derived feedstocks, rather than fossil fuels, with up to 93% lower greenhouse gas emissions. Today, the company has commercial solutions within plastics and cosmetics and have several new products in the pipeline. Genomatica has signed a number of significant partnerships, amongst others with Cargill and Lululemon. The Series C financing enables Genomatica to accelerate the global commercialisation and expansion of sustainable materials with the potential to reduce greenhouse gases by 100 million tons per year.



### Pushing the green transition through long-term investments

Today, it is widely documented that climate change has become one of the biggest challenges facing the world, in large part caused by the use of fossil fuels, deforestation and livestock farming. If left to continue, the consequences for people and society will be dire. Therefore, Novo Holdings and the Novo Nordisk Foundation have embarked on a joint journey to make biotechnology a force for green transformation of industry and agriculture.

From decades of experience, we know that the road from a promising discovery in a lab to a product that benefits all of society is a long and challenging one. The funding ecosystem for bioindustrial products is small and typically has a short investment horizon, which many struggle to see beyond. The infrastructure needed to help companies upscale

and launch promising bioindustrial inventions without having to invest in costly manufacturing assets is undeveloped. Regulatory approval processes are often not well suited for handling bioindustrial applications. And in some cases, skepticism from certain segments of the public about new industrial or agricultural biotechnology halts or slows down its advancement.

Despite these multifaceted challenges, Novo Holdings constantly works to identify opportunities, create value and invest in the potential we see, all with an eye to accelerating the impact bioindustrial companies can have in addressing global challenges. We do this, all the while prioritising commercially sustainable business models to generate attractive returns. This is achieved through leveraging our industry expertise and applying a flexible, long-term investment approach.

### Partnerships

Together with other investors and institutions, we work to contribute to developing the area of responsible investments. Among our main joint objectives, we wish to promote transparency and sustainability standards in companies and in the financial markets.



#### UNPRI

We support the UNPRI, the UN-backed association targeting the investment community, offering guidance and principles for responsible investing. We are actively working towards meeting the UNPRI's six principles for responsible investments.



#### UN Global Compact

Novo Holdings participates in the United Nations Global Compact which is the world's largest corporate sustainability initiative. By participating, we wish to demonstrate our commitment to advancing the Ten Principles of the Global Compact on Human Rights, Labour, Environment and Anti-Corruption in our policies and business operations. We further commit to demonstrating how we work to advance the SDGs.



#### Active owners

Novo Holdings is a member of Active Owners Denmark, the trade association for a wide range of investors in Denmark. Active Owners Denmark works to make Denmark an even more attractive place to invest, both nationally and globally. Active Owners Denmark promotes investing in the ecological transition in Denmark with a goal to contributing to making the country climate neutral.





18°

Temperature

82%

Humidity

# Our approach to responsible tax

At Novo Holdings, we see it as an integral part of being a responsible long-term investor to conduct our tax affairs in a robust and transparent manner. Our commitment and diligence towards tax affairs are stated in our Tax Policy, which governs all taxes paid by Novo Holdings and applies to both direct and indirect investments. The Tax Policy was launched in 2020 and has been set by our Board of Directors. We review the Tax Policy annually to continually improve our conduct and to act in compliance with the latest regulations. Our ambition is to fulfil our stakeholders' expectations towards Novo Holdings as a responsible investor and to be aligned with the tax policy approach adopted by some of the largest Danish pension funds.

The overall purpose of our Tax Policy is to disclose how Novo Holdings views and manages taxation and how we consider tax risks from an overall perspective. Further, the Tax Policy discloses our requirements and expectations towards external managers and co-investors.

Whereas our Tax Policy applies to unlisted companies, we are exploring the possibilities of applying a responsible approach to taxation for listed companies. Due to limited transparency of publicly listed information, this

area poses several challenges. Our current process includes a tax screening of our existing listed portfolio companies, which entails high-level analysis of the effective tax rate of the company or group and analysis of tax-related risks. We have an active dialogue with other institutional investors about how to approach this area and will be working towards finding a solution that enables us to assess and influence listed companies towards a more responsible approach on tax, when relevant.

## Signatory to the Danish Tax Code of Conduct

In late 2020, Novo Holdings joined the Danish Tax Code of Conduct, initially adopted by several of the major Danish pension funds and subsequently joined by other large institutional investors. It covers six areas and outlines the expectations for external asset managers and investors.



The six areas cover:

1. Investors' expectations towards external managers
2. Tax planning, defining which tax structures and transactions can and cannot be accepted
3. Country restrictions
4. Investments in developing countries
5. Transparency and dialogue
6. Future developments

By signing the Tax Code of Conduct, we are joining forces with other large investors to establish – and adhere to – tax practices that are in accordance with the OECD tax initiatives. We find that taking an active stand against aggressive tax planning and pledging to increase tax transparency, which are among the key points of the Tax Code of Conduct, are essential steps towards achieving the SDGs.

## Tax - a rapidly evolving area

Since we launched the Novo Holdings Tax Policy in May 2020, we have been monitoring our existing tax processes closely, since we are on a constant mission to improve our conduct within the rapidly evolving area of taxation.

### Main objectives of the Novo Holdings Tax Policy

The purpose of the Tax Policy is to maintain a responsible and robust tax approach with the following main objectives:

1. Mitigating tax risks by taking tax decisions on a transparent and informed basis
2. Ensuring best effort to be in compliance with fiscal laws and regulations
3. Striving to avoid any controversy with tax authorities in the jurisdictions where business is carried out and where investments are made and where controversy is inevitable to ensure collaborative interaction with tax authorities
4. Only engaging in investment structures that are driven by commercial considerations and supported by economic substance which is not artificial (position on tax planning).
5. Being transparent about our approach to tax
6. Ensuring that investments are made in a responsible manner, as reflected in explicit expectations for business partners and portfolio companies



The implementation of our Tax Policy principles has been positively received internally and externally. As our Tax Policy states, we do not accept or tolerate aggressive tax planning. Consequently, our Tax Policy process has helped us to identify investment cases that did not fully comply with our standards. Through direct and fruitful dialogues, we have been able to influence the investment cases in question and thereby ensure change of conduct in our investments.

Our main conclusions from our first years with the Novo Holdings Tax Policy are that clear principles, increased transparency and proactive dialogue with the companies in which we have invested is the way forward towards higher tax standards and better practice.

Although we can confidently say that our Tax Policy has passed the initial litmus test for responsible tax conduct at Novo Holdings, we will continue to develop our Tax Policy and internal tax processes, continually trying to raise the bar for the responsible tax agenda.

#### Tax process for investment

Novo Holdings takes an active approach to handling potential tax risks by identifying tax risks when entering new investments. New private investments are carefully assessed according to our processes and principles to make informed tax decisions in which tax risks are assessed and mitigated and to ensure that Novo Holdings does not engage in aggressive tax structures.

Examples of tax practices which have been avoided because they are misaligned with the Tax Policy:

1. Investment structure in a US partnership where offshore entities were contemplated for investments in Brazil and other countries in Latin America, with the purpose of avoiding taxation of capital gains
2. Investment structures with offshore intermediary holding entities used for the purpose of obtaining treaty benefits which could not have been achieved by investing directly into the target jurisdiction
3. Investment structures with intermediary holding entities with no or limited substance
4. Investment structures using holding entities in blacklisted jurisdictions

Illustration of the general tax process for investment:

#### 1. Due diligence

Identify and quantify the tax-related risks of the investment target



#### 2. Structuring

Determine the best investment structure for Novo Holdings and ensure compliance with our tax planning principles



#### 3. Negotiation

Ensure that our requirements on tax are reflected in the contractual basis for the investment



#### 4. Implementation

Ensure that the investment structure is implemented correctly and registered in our asset register



#### 5. Asset management

Handling of applicable tax filings or reporting and monitoring of tax risks and alignment of our tax policy

Novo Holdings will ensure that a tax technical assessment is made and, if deemed appropriate by the Novo Holdings Tax Team, obtain an external opinion for all major transactions for which obtaining a firm tax position is necessary. For example, this could be relevant in situations in which there is uncertainty about how to interpret or apply the tax legislation or if the investment is particularly significant financially. We will only adopt a tax position if we are able to explain it and prepared to defend it.

Furthermore, Novo Holdings is monitoring changes in tax rules and tax practices that may influence Novo Holdings' tax position in relation to our investments. This implies that Novo Holdings will monitor the tax risk in major jurisdictions where investments are conducted.

# Financial performance 2021 and outlook for 2022

Supported by the general market recovery following the start of the Covid-19 vaccine programmes, we are very satisfied to have delivered a 15% return on the Investment Portfolio during 2021, corresponding to returns of DKK 24 billion. As long-term investors, we are also satisfied with our 5- and 10-year trailing returns, at 12% and 14%, respectively

The financial year was particularly active in terms of private equity deal flow within Principal Investments, but generally we observed a high activity level across all Investment Teams. Combined, the private equity portfolio delivered a return of 36% in 2021 against benchmarks of 28%. Several portfolio companies performed well, amongst others, the Canadian based contract research company Altasciences, which we acquired in early 2021 (see acquisition of Altasciences, pages 24-25), Clario, a leading provider of clinical technology services to the global biopharma industry as well as WCG Clinical, a leading service and technology provider for those who perform clinical trials and Envirotainer, a leading global provider of mission critical, proprietary temperature-controlled supply chain solutions to biopharma.

Our public equity portfolio performed well, however there was variation among the companies. For example, Chr. Hansen, a Danish global bioscience company developing sustainable solutions for various industries, declined 16%, whereas Evotec, a drug discovery and development company headquartered in Hamburg, Germany, increased by 40%. Thus, our portfolio of public equity returned 13% during 2021. This can be compared to the global stock market, where MSCI World and MSCI World Health Care, both in DKK, increased by 31% and 29%, respectively, during 2021.

Our venture capital exposure developed favourably with a return of 8%; however, below MSCI World Healthcare. This was driven by the public venture capital portfolio (by end of 2021 contributing 38% of our venture capital portfolio), where more of our portfolio companies in the second half of 2021 declined in the very volatile stock market.

The private venture capital portfolio (by end of 2021 contributing 62% of our venture capital portfolio) is ahead of benchmarks.

The relatively low interest rate environment continues to pose challenges

when it comes to identifying attractive returns on our bond portfolio. Despite this, we deliberately, as a measure of balancing our equity and venture exposure, allocated sizeable capital to this asset class. The bond portfolio provided a return of 0.5% during 2021, with comparable portfolios providing a negative return of -0.7%.

During 2021, our exposure to the credit asset class provided a return of 10% which is above comparable portfolios. As we are in the process of significantly increasing our exposure towards real assets, our exposure increased to 5% of the total Investment Portfolio and delivered a return of 37%, significantly above the MSCI Europe Real Estate.

In addition to a return from the Investment Portfolio of DKK 24 billion, we received record high income from the Novo Group companies of DKK 14 billion, derived from dividends and from participation in the share buy-back programmes of the companies, such that the total income and return during the year amounted to a record high of DKK 37 billion.

As announced in January 2014, Novo Holdings has informed Novo Nordisk that it intends to consider its participation in the Novo Nordisk share repurchase programme on a case-by-case basis. In 2021, we participated in the share buy-back programme of Novo Nordisk and Novozymes, and through this recorded an income of DKK 7 billion in addition to dividend income of DKK 7 billion, together representing the recorded income of DKK 14 billion.

By the end of 2021, our Investment Portfolio and total investment assets are recorded at DKK 182 billion and DKK 697 billion, respectively, with both representing the highest value for Novo Holdings since the inception of the company in 1999.

## **Development in costs and operating profit**

As per our strategic direction and associated operating model, we continued to expand our organisation over the course of 2021, bringing the number of total employees for the group to 111 by the end of the year. Operating a people business, this development was a key driver

### Total investment assets



in the development of our total costs, recorded at DKK 643 million in 2021, representing a 26% growth compared to 2020 and 0.35% of the Investment Portfolio by the end of 2021.

During 2021, we experienced a relatively high level of activity and associated investment costs. Activities were seen across the life science investment areas, with costs stemming from deal activity related to private and public equity, adding to the cost growth over 2020, being still impacted by the Covid-19 crisis, we experienced less travel activities and events during the year, with costs only slightly increasing relative to 2020.

Income from the Novo Group companies and returns on our Investment Portfolio amounted to DKK 37 billion during 2021, and less costs of DKK 643 million, operating profit was realised at DKK 37 billion, ahead of the record year 2020, and above expectations for 2021 as we entered the year. Net profit for the year amounted to DKK 33 billion.

### Outlook for 2022

We continue to develop the business according to our strategic direction, providing increased diversification geographically and across asset classes. Life science remains our focus, and we expect to increase exposure to companies that develop products and services which benefit people's lives as well as contribute to sustainable consumption and production.

For 2022, Novo Holdings has informed Novo Nordisk that it plans to participate in its share buy-back programme. Novo Holdings currently intends to maintain its ownership of around 28% of Novo Nordisk's share capital. Furthermore, Novo Holdings plans to participate in the share repurchase programme of Novozymes.

As we continue to develop the company by building in-house long-term sustainable competences, among other things by increasing our presence in the US and Asia, and as we foresee increased deal-related activity, we expect our operating costs for 2022 to grow at a higher level than observed in 2021. Returns from the Investment Portfolio depends to a large extent on the development in the capital markets, and Novo Holdings expects to deliver returns on par with capital markets. Combined with the expected income from the Novo Group companies as described above, our expectations are to deliver positive income and return as well as operating profit in 2022; however, at a lower level than 2021 given the very favourable market development during 2021.

## Business and financial risk








As a global, leading life science investor present in Denmark, the US, the UK and Singapore, complemented by a broad-based financial portfolio allocated across multiple asset classes, including public and private equity, venture capital and real assets, risks present themselves in many shapes and forms. They range from operational business risks associated with how we operate the company, financial risks associated with the composition of the portfolio of assets under management, to more longer-term strategic risks associated with our deliberate asset allocation strategy.

Risk management is an integral part of how we operate our business on a daily basis. From an operational risk perspective, we have a deliberate focus on risk perspectives during due diligence and investment decisions as well as through our asset management, and we provide ambitious standards for how we apply and manage our financial, legal and IT support. Further, we continuously monitor our financial risks based on external standardized systems, applying SimCorp Dimension through PowerBI, to ensure that various pre-defined risk tolerance levels are adhered to and that these develop in line with the strategic direction set.

Deliberately managing such risks in a systematic way is key in order for us to create and protect the values of Novo Holdings in the short, medium and long term. To monitor and manage these risks, we apply a defined process for identifying, monitoring, mitigating and reporting risks. Risks are identified, assessed and sought mitigated through a dedicated process, led by Finance, with support from investment areas as well as business support specialists. The dedicated Risk Management and Allocation Committee meets on a quarterly basis to discuss key strategic risks as well as potential adjustments to the asset allocation towards our set strategic direction. Furthermore, in case of a capital market downturn, it is the responsibility of the committee to discuss the situation and provide an assessment of how to manage the portfolio under the given circumstances.

A consolidated overview of risks is presented to the Board for approval once yearly as an integral part of the annual strategy review, applying scenario and risk-thinking exercises as part of our annual strategic planning process. Among other things, these include analyses of market dynamics as well as socioeconomic and political developments that present risks or opportunities for our business. We complement the annual consolidated risk overview to the Board with quarterly updates on financial risks as well as ad hoc reporting on operational risks.

The seven key business and financial risks identified by the end of 2021, and their potential impact:

Risk	Potential impact		
	Value of Investment Portfolio	Monetary loss	Reputational
 Global recession	√		
 Capital market downturn	√		
 Life sciences sector downturn	√		
 Attraction and retention		√	
 Financial fraud and IT security breaches		√	√
 Legal risks		√	√
 Global expansion		√	√

Further insights on identified key risks and how we mitigate these are presented on the following pages.



What is the risk?	What is the impact?	What actions are being taken?
<p> <b>Global recession</b></p> <p>The unprecedented level of monetary easing that has taken place as a result of the Covid-19 crisis has allowed for a recovery in 2021. However, we always 'stress test' our Investment Portfolio to take into account a global recession scenario.</p>	<p>A global recession would have significant negative impact on the value of the Investment Portfolio. Our relatively large exposure towards the life sciences sector would be expected to provide for some resilience during periods of recession, as based on historical experience. Furthermore, with the benefit of income from the Novo Group companies, we would expect to be able to conduct our business within our set risk tolerances reaching Investment Portfolio valuation parity, compared to start of recession, within a five-year period.</p>	<p>In the event of a global recession, we have established pre-defined risk tolerance levels to manage towards and combined with relative high liquidity reserves, we foresee that in such a scenario the Novo Nordisk Foundation can continue its grant-giving strategy uninterrupted. Further, we have established a pre-defined agenda for how to manage our diversified Investment Portfolio, including approaches to rebalance the Investment Portfolio and to identify potential investment opportunities</p>
<p> <b>Capital market downturn</b></p> <p>A capital markets downturn is often referred to as a contraction of the equity market, from peak to trough, of more than 20%. The most recent experience of such downturn was in March 2020, as the Covid-19 crisis led to a capital market downturn of more than 30% and also geopolitical events could have a significant impact on capital markets. The Investment Portfolio, valued at DKK 182 million by end 2021, is exposed to the development of the capital markets with about 70% of capital being directly allocated to publicly listed entities.</p>	<p>A capital market downturn, as experienced during the Covid-19 crisis in March 2020, has a direct negative impact to the value of the Investment Portfolio and the expected returns of Novo Holdings.</p>	<p>The continued diversification of the Investment Portfolio, e.g. by increasing the exposure to asset classes of macroeconomic risk hedges as well as private equity and venture capital, provides for some protection in case of a capital market downturn. From a risk management perspective, we have developed a pre-defined agenda for how to manage through a capital market downturn and combined with relative high liquidity reserves, we foresee that in such a scenario the Novo Nordisk Foundation can continue its grant-giving strategy uninterrupted.</p>

What is the risk?	What is the impact?	What actions are being taken?
 <b>Life sciences sector downturn</b>		
<p>As a leading life sciences-focused investor, about 50-60% of our Investment Portfolio is allocated to the life sciences sector and, in addition, our ownership of the Novo Group companies also counts as exposure to the life sciences sector (to learn more about these risks, please refer to the Annual Reports of Novo Nordisk and Novozymes).</p>	<p>The impact of a general life sciences downturn would have a substantial negative impact on the value of the Investment Portfolio. We find a scenario of a general sectorial downturn less likely, given broad variations of sub-sectors and companies in the sector. A general downturn would also be expected to provide for investment opportunities, applying the deep-sector experience and individual company insights of Novo Holdings. As we assess the impact of such life science sector downturn for Novo Holdings, we note that with the relatively high liquidity reserves, we foresee that in such a scenario the Novo Nordisk Foundation can continue its grant-giving strategy uninterrupted.</p>	<p>As part of our life sciences focus strategy, we deliberately apply diversification into different sub-sectors and companies as a means to seek different types of life science exposure. Further, as a way of diversifying, we invest across the life science continuum and in different geographies and, we deliberately invest into innovative companies. We envision that such innovative companies could be more resilient in case of a life science sector downturn. In case of a life science sector downturn, we have established a pre-defined agenda for how to manage our diversified Investment Portfolio, including approaches to rebalance the Investment Portfolio and to identify potential investment opportunities.</p>
 <b>Attraction and retention risk</b>		
<p>Attraction, mainly in the US, has previously been an issue. During the last two years we have, nevertheless, managed to recruit a head of Principal Investments US as well as five additional employees. However, key positions are still expected to be difficult to fill in case we experience attrition. Retention has increasingly become challenging, and during 2021 we faced higher attrition rates than historically, both in the US as well as in Copenhagen.</p>	<p>We have been able to manage attraction and the increased attrition rates up until now but is a focus area for mitigation. Attracting and retaining the right talent is business critical to our success, where inability to fill out critical roles with a specific set of capabilities or experience needed, will likely jeopardise our business success.</p>	<p>Establishment of the Remuneration Committee in January 2019, the Nomination Committee in June 2019 and maintaining our yearly Organisational Review will provide the basis for discussing our attraction and retention of talent. This includes dedicated succession overviews and identification of critical employees and roles.</p>


#### Statements on data ethics cf. section 99d of the Danish Financial Statements Act

To cope with the challenges that arise from the fast-moving technological development, along with evolving risks and benefits from large scale data use, Novo Holdings has in 2021 developed a policy on how to use and handle data in an ethical way. The policy is based on five principles for how to handle data in an ethical way including the respect for the privacy of employees and prioritizing of openness and transparency in the ongoing challenges that handling both personal data and non-identifiable data entails. Read more in our [Policy on data ethic](#)

What is the risk?	What is the impact?	What actions are being taken?
 <b>Financial fraud and IT security breaches</b>		
<p>As an asset manager, we rely on strong financial and IT processes as a foundation for efficient investment processes and asset management. Further, it is essential that these processes are robust and provide protection for potential external or internal fraud and cyber attacks, as a means to avoid loss of capital or data and to avoid disruption of our business.</p>	<p>Aside from the potential monetary loss caused by fraud or loss of data and business disruption in case of cyber attacks, such events will damage the reputation of Novo Holdings as a professional and reliable business partner.</p>	<p>We continue strengthening our financial controls by building and documenting key processes and by employing dedicated resources to manage these. This includes automated payment processes as well as deploying callbacks to prevent fraudulent activities in our investment processes. Further, we continuously strengthen our IT security with a deliberate focus on IT behavior as well as infrastructure. In support of this, we conduct annual reviews and audits of our financial controls and our IT security efforts.</p>
 <b>Legal risks</b>		
<p>Our investment and operational activities give rise to numerous potential legal risks, including – but not limited to – claims resulting from breach of contract, general litigation risk, directors liability, breach of local law or regulations, fraud and criminal liability.</p>	<p>We invest in companies located in many different jurisdictions and across a broad set of asset classes, which entails legal risks that, if not known, understood and mitigated, can lead to financial loss for Novo Holdings. Further, certain legal risks could also impact the reputation of Novo Holdings as a reliable, trusted and professional business partner.</p>	<p>We have implemented operating procedures to ensure Novo Holdings adheres to regulatory and legal requirements in all key processes, supported by involvement of internal finance, legal and tax resources throughout the investment processes. Further, we have established a thorough insurance programme, including insurance of property damage, public liability insurance, directors and officer's liability insurance, employee practice liability and workers compensation.</p>
 <b>Global expansion</b>		
<p>Geographical expansion, especially into the US and Asia, is an important part of our strategy of enhancing our position as a leading global life science investor. Several risks need to be managed in this context, including complexity related to tax and banking in the new business environment, as well as compliance risks, to mention some.</p>	<p>As we aim to expand our geographical presence, the impact of not conducting ourselves in line with all appropriate procedures can lead to monetary loss for Novo Holdings, as well as impact to the reputation of Novo Holdings as a reliable, trusted and professional business partner. Further, our ability to attract and retain key employees can be at risk.</p>	<p>As we expand our geographical footprint, we consider carefully the regulatory environment to ensure compliance and to ensure a robust foundation for operation, building on experiences from establishing our presence in the US and knowledge from our network. In addition, we welcome new employees through a dedicated on-boarding programme, often including a period at our headquarters in Denmark, as a way of becoming familiar with our processes and culture.</p>







Novo Holdings has a substantial portfolio of industrial biotech companies providing sustainable solutions within areas including agriculture and food production.

# Corporate governance

## Corporate governance codes and practices

Compliance	Governance structure			Assurance
Danish and foreign laws and regulations	The Novo Nordisk Foundation			Audit of Annual Report
	Board of Directors			
Corporate governance standards	Chairmanship	Nomination Committee	Remuneration Committee	
	Executive Management			Internal controls
	Leadership Team			
Novo Holdings Way	Organisation			

### Shareholder

Novo Holdings is a holding and investment company wholly owned by the Novo Nordisk Foundation and established in 1999 with the purpose of managing the assets of the Novo Nordisk Foundation.

### Chairmanship

The Chairmanship consists of the Chair and the Vice Chair, both of whom are elected directly by the shareholder at the general meetings. At the Annual General Meeting in 2021, Lars Rebien Sørensen was re-elected as Chair and Steen Riisgaard was reelected as Vice Chair. The Chairmanship assists the Board of Directors in the planning of Board meetings, employment of Executive Management and other assignments as decided by the Board.

During 2021, the Chairmanship spent considerable time on our responsible investments strategy and organisational development planning, including succession.

### Nomination Committee

The Nomination Committee is a board committee mandated by Novo Holdings' Board to oversee the composition of the boards of directors in the key companies in Novo Holdings' Investment Portfolio, and to review and endorse board succession candidates for board members nominated by Novo Holdings to serve on these boards.

The Nomination Committee is appointed by Novo Holdings' Board and consists of Chair Lars Rebien Sørensen and Vice Chair Steen Riisgaard. During 2021, the Nomination Committee focused particularly on the desired competences to be represented on the boards of key companies within the

Novo Holdings Investment Portfolio and reviewed and discussed the long-term succession planning related to these.

### Remuneration Committee

The Remuneration Committee is a board committee mandated by the Novo Holdings' Board and assists the board with oversight of the remuneration policy as well as the actual remuneration of board members, board committees, Executive Management and Leadership Team.

The Remuneration Committee is appointed by the Board and consists of Chair Lars Rebien Sørensen, Vice Chair Steen Riisgaard and Board member Viviane Monges.

In 2021, the Remuneration Committee focused particularly on reviewing structure and levels of our remuneration framework, adjustments to base salary, the short-term bonus programmes and the long-term incentive programmes.

### Assurance

The Financial Statements in the Annual Report are audited by an independent audit firm elected at the Annual General Meeting. As a part of their audit they evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management. Furthermore they obtain an understanding of the internal controls relevant to the audit.



# Board of Directors and Leadership Team

## Board of Directors

The Board of Directors oversees and guides Novo Holdings in realising its mission to be a supportive owner of the Novo Group companies and to make a growing and positive impact on health, science and society by generating attractive long-term returns on the assets of the Novo Nordisk Foundation.

The Board of Directors sets the strategic direction, decides on key priorities, including organisational development and budget allocation, approves specific

investment proposals and is responsible for the overall risk management of Novo Holdings. During 2021, the Board of Directors met five times with a participation rate of 99%, against 100% in 2020. Elected once annually at the Annual General Meeting, the Board of Directors is comprised of seven members, including the Chair and the Vice Chair, and represents a broad range of relevant industry, investment and life science capabilities.



**Lars Rebien Sørensen, Chair**

Year joined  
Board: 2017

## Education

MSc in Forestry from the Copenhagen Royal Veterinary and Agricultural University and a BSc in International Economics from Copenhagen Business School.

## Background

Lars Rebien Sørensen has over 35 years of general management experience in the pharmaceutical industry. He joined the Novozymes A/S (then Novo Nordisk A/S, Enzymes Division) Marketing team in 1982. Over the years he held various global positions across the Middle East and the United States. In 1994, he was appointed a member of the corporate management team and assumed responsibility for the Novozymes A/S Healthcare Business. In November 2000, he became President and CEO of Novo Nordisk A/S, a position he held until December 2016.

## Board positions and other management duties

- Chair of the Board, Novo Nordisk Foundation, Denmark
- Chair of the Board, Ferring Pharmaceuticals, Switzerland
- Chair of the Advisory Board, Axcel Management A/S, Denmark
- Board Member, Thermo Fischer Scientific Inc., United States
- Board Member, Essity AB, Sweden
- Board Member, Jungbunzlauer Suisse AG, Switzerland
- Adjunct Professor, the University of Copenhagen's School of Life Sciences (appointed in 2007)
- Adjunct Professor, the Center for Corporate Governance at Copenhagen Business School (appointed in 2018)



**Steen Riisgaard, Vice Chair**

Year joined  
Board: 2013

## Education

MSc in Microbiology from the University of Copenhagen. He is a Research Fellow at Statens Serum Institute (SSI) and a Research Microbiologist at Foss Electric, Denmark.

Steen Riisgaard has over 35 years of experience in industrial biotechnology. He joined the Novozymes A/S (then Novo Nordisk A/S, Enzymes Division) Research & Development team in 1979. In 1982, he moved to Tokyo to start up a new Enzymes Research & Development unit in the Novo Nordisk subsidiary, Novo Industry Japan Ltd. He returned to Denmark in 1985 and held a number of different positions in the company until 1989 when he was promoted to Corporate Executive Vice President of the Enzymes Business. In 2000, Steen Riisgaard became the President and CEO of Novozymes A/S, from the demerger from Novo Nordisk A/S, and served in that position until April 2013.

- Chair of the Board, New Xellia Group A/S, Denmark
- Chair of the Board, Lactobio A/S, Denmark
- Vice Chair of the Board, Villum Foundation, Denmark
- Board member, Novo Nordisk Foundation, Denmark
- Board member, Corbion N.V., the Netherlands



**Francis Cuss,**  
**Board member,**

Year joined  
Board: 2017

#### Education

BA in Natural Sciences, MB, BChir and MA from Cambridge University. He is a Fellow of the Royal College of Physicians and of the Faculty of Pharmaceutical Medicine

#### Background

Francis Cuss has over 35 years of clinical experience across the pharmaceutical industry. In 1986 he started at GlaxoSmithKline plc (then Glaxo Inc.), UK and United States, as a Director in Pulmonary Clinical Research. From 1989, Francis Cuss worked at the Schering-Plough Research Institute where he held several positions in Discovery and Development, eventually becoming Senior Vice President of Early Clinical Research & Experimental Medicine. Francis Cuss joined Bristol-Myers Squibb Research & Development in 2003, first working as Senior Vice President of Discovery and later as Senior Vice President for all of Research and Early Development. In 2010, he joined the company's senior management team. In 2013, he was appointed Executive Vice President, Chief Scientific Officer and Head of Research & Development at Bristol-Myers Squibb Company, retiring in 2017.

#### Board positions and other management duties

- Chair and Board Member, the Board of Trustees for Montclair State University in New Jersey, United States
- Board Member, Rubius Therapeutics Inc., United States
- Board Member, Glympse Bio, United States



**Viviane Monges,**  
**Board member,**

Year joined  
Board: 2018

#### Education

MBA, Ecole Supérieure de Commerce de Paris

Viviane Monges has over 30 years of financial management experience predominantly in the pharmaceutical industry. She joined Wyeth Pharmaceuticals Inc. in 1997 and held several leadership roles, including CFO of the Europe Region unit and CFO of the Global Pharma Business unit. From 2006 to 2010, Viviane Monges was with Novartis A/G as Europe CFO and then as Global Division CFO of the OTC Division. In 2010, she joined Galderma S.A., a multinational dermatology company as Group CFO, which was later acquired by Nestlé S.A. Then from 2015 and onwards, Viviane Monges served as CFO of the Nestlé Business Excellence Division.

- Board Member and Audit Committee Member, Union Chimique Belge Biopharmaceutical Company S.A. (UCB), Belgium
- Board Member and Audit Committee Member, ADC Therapeutics, Switzerland
- Board Member and Chair of the Audit Committee, DBV Technologies, France
- Board Member and Chair of the Audit Committee, Pharvaris, the Netherlands
- Chair of the Supervisory Board, EUROAPI, France



**Henrik Poulsen,**  
**Board member,**

Year joined  
Board: 2021

#### Education

MSc in Finance & Accounting and a BSc in International Business from Aarhus School of Business, Denmark.

In the period 1999-2006, Henrik Poulsen held various executive roles with LEGO, rising to become Executive Vice President of Markets & Products. From 2007-2008, Henrik Poulsen served as Operating Executive of Capstone, Kohlberg Kravis Roberts & Co. in the UK. In 2008, Henrik Poulsen was appointed as CEO and President of the Danish telecommunication company TDC Group. From 2012-2020, Henrik Poulsen served as CEO and President of Ørsted A/S, a global leader in renewable energy.

- Chair of the Board, Faerch Group A/S, Denmark
- Deputy Chair of the Board and Transaction Committee Member, ISS A/S, Denmark
- Deputy Chair of the Board and Audit, Nomination and Remuneration Committee Member, Carlsberg A/S, Denmark
- Board Member and Audit Committee Member, Novo Nordisk A/S, Denmark
- Board Member, Ørsted A/S, Denmark
- Supervisory Board Member, Bertelsmann SE & Co. KGaA, Germany
- Senior Advisor, A.P. Møller Holding, Denmark





**Jeppe Christiansen,**  
Board member

Year joined  
Board: 2009

#### Education

MSc in Economics from the University of Copenhagen.

#### Background

Jeppe Christiansen has over 35 years of experience in fund and investment management across the financial industry. From 1986 to 1988, Jeppe Christiansen worked as an economist in Sparekassen SDS. He joined LD Pensions in 1988 where he became Head of Fund Management and later transitioned to Executive Vice President, responsible for investments. From 1998 to 2004, Jeppe Christiansen was Executive Director in Danske Bank with responsibility for group equity business and corporate international banking. From 2004 and until 1 April 2009, he was CEO of Lønmodtagernes Dyrtidsfond (LD). In 2005, Jeppe Christiansen established Maj Invest and has been CEO of the Maj Invest group since the establishment.

#### Board positions and other management duties

- CEO, Maj Invest Holding A/S and executive director in two wholly owned subsidiaries, Denmark
- Chair of the Board, Haldor Topsøe A/S, Denmark
- Chair of the Board, EMLIKA Holding ApS, and two wholly owned subsidiaries of the latter company, Denmark
- Chair of the Board, JEKC Holding ApS, Denmark
- Vice Chair of the Board and Chair of the Remuneration Committee, Novo Nordisk A/S, Denmark
- Board Member, KIRKBI A/S, Denmark
- Board Member, Pluto Naturfonden, Denmark
- Board Member, Randers Regnskov, Denmark
- Board Member, BellaBeat Inc., United States
- Member of the Board of Governors, Det Kgl. Vajsenhus, Denmark
- Adjunct Professor of Finance, Copenhagen Business School, Denmark



**Jean-Luc Butel,**  
Board member

Year joined  
Board: 2017

#### Education

BA in International Affairs from George Washington University and an MBA in International Management from Thunderbird's School of Global Management.

Jean-Luc Butel has over 35 years of international business development experience across the healthcare industry. He joined Johnson & Johnson Medical in 1984. In 1991, he joined Becton Dickinson & Company as President Japan and then became President Worldwide Consumer Healthcare. From 1999 to 2003, Jean-Luc Butel was President of Johnson & Johnson Independence Technology (IT). He joined Medtronic in 2003, where he served as Senior Vice President and was later appointed Executive Vice President and President, International. In 2012, Jean-Luc Butel joined Baxter International Inc. as the Corporate Vice President and President, International. From 2015 to 2017, he was a Senior Advisor for McKinsey & Company's Healthcare Systems & Services.

- Advisor, Novo Holdings A/S Advisory Group (NAG), Denmark.
- Board Member and Nominating Committee Member, Takeda Pharmaceutical Co. Ltd, Japan
- Board Member, Rani therapeutics, United States
- Board Member, Jana Care, United States
- Board Member and Investment Committee Member, SGInnovate, Singapore
- Board Member, National Medical Research Council, Singapore

### Executive Management and Leadership Team

Executive management consist of the CEO and CFO. The Leadership Team of Novo Holdings is composed of the CEO, the CFO, the Managing Partners of the Investment Areas as well as the Head of People & Organisation and the General Counsel.

The Leadership Team provides leadership across the organisation in support of the overall direction set by the Board of Directors. Executive Management is responsible for the daily management of Novo Holdings' operations and provides recommendations to the Board of Directors with respect to investments, strategic direction, organisational development and financial planning.



#### **Kasim Kutay, CEO**

- With Novo Holdings since 2016
- 25 years of investment banking experience focused on healthcare, with 7 years at Moelis & Company and 18 years at Morgan Stanley



#### **Petrina Knowles Gjelstrup, SVP, People and Organisation**

- With Novo Holdings since 2019
- Petrina comes from an HR SVP role in Danske Bank and has 17 years of experience in HR in international companies such as A.P. Møller-Mærsk, Carlsberg, TDC and Danske Bank



#### **Nigel Govett, CFO**

- With Novo Holdings since 2022
- 22 years of investment banking experience, including Oman Investment Fund and EQT



#### **Morten Beck Jørgensen, Managing Partner, Novo Capital Investors**

- With Novo Holdings since 2005
- 24 years of investment experience including Nordea Markets and Novo Nordisk



#### **Christoffer Søderberg, Managing Partner, Principal Investments**

- With Novo Holdings since 2016
- Background in consulting (BCG) focusing on private equity clients and investment banking (Carnegie). Also spent a handful of years in the industry working with strategy, M&A and as CFO



#### **Søren Møller, Managing Partner, Novo Seeds**

- With Novo Holdings since 2011
- Before this, Søren was Global Manager of Bioinformatics and Genomics at Novozymes, CSO and VP of R&D at Exiqon and a research scientist at Novo Nordisk



#### **Scott A. Beardsley, Managing Partner, Novo Ventures**

- With Novo Holdings since 2009
- 20 years of investment banking experience including 14 years focused on life sciences with JP Morgan, Piper Jaffray and Montgomery Securities



#### **Barbara Fiorini Due, General Counsel**

- With Novo Holdings since 2020
- 20 years of corporate legal experience from the law firm of Plesner, Genmab and ISS World Services.

### Novo Advisory Group

The purpose of the Novo Advisory Group is to support the assessment of life science investment opportunities and review the Novo Holdings portfolio. The portfolio review includes analysing the performance and strategic

options for each company as well as providing general advice on each company's business plans and M&A opportunities.



#### Per Wold-Olsen, Chairman

- Chairman of the Board of GN Store Nord A/S, Oncopeptides AB and MMV
- Former President and Member of the Executive Committee at Merck & Co.



#### Richard Ridinger

- Chairman, Recipharm; Chairman, Zentiva
- Board member, Fermentis, Brenntag, Evolva and SHL
- Former Chief Executive Officer, Lonza Group



#### Dr. David Martyr

- Chairman, Sebia Diagnostics; Chairman BBI Solutions
- Chairman, Rayner Surgical
- Former CEO, Tecan; VP Danaher (Life Science & Diagnostics), Group President, Leica Microsystems



#### Britt Meelby Jensen

- CEO of Atos Medical AB
- Former President and CEO of Zealand Pharma A/S, CEO of Dako A/S and CVP of Novo Nordisk A/S
- On the Boards of Hempel Foundation and AMBU A/S



#### Walter Wenninger

- 30 years in healthcare, former member of the Bayer Board of Management
- Chairman of the Board of Noxxon Pharma and Board Director at Paion and Recordati



#### Jean-Luc Butel

- Board member of Takeda Pharmaceutical, Rani Therapeutics, SGInnovate, National Medical Research Council
- Former EVP of Medtronic, Baxter and EDB Singapore board member



#### Jean-Luc Belingard

- Non-Independent Director of bioMerieux, Director at LabCorp, Lupin and Pierre Fabre
- Former Chairman & CEO bioMerieux, member of the Corporate Executive Committee at Roche (CEO Roche Diagnostics)



#### Tjerk de Ruiter

- Independent director at NuTek Natural Ingredients and MycoWorks
- Former CEO of Corbion, LS9 and Genencor a division of Danisco



#### Nancy Lurker

- CEO of EyePoint Pharmaceuticals
- Board Director, Aquestive Therapeutics, Altasciences
- Former President, CEO and Board Director for PDI, and CMO at Novartis US



#### Per Löfberg

- Former EVP, CVS Health
- Former President and CEO of Generation Health



#### Peder Holk Nielsen

- Former President and CEO of Novozymes A/S
- Board member warfar and Global Bio Fund



#### Weiming Jiang

- Consultant to CEO Royal DSM
- Former President of DSM China, Group VP
- Former President of Novozymes China, Group VP



#### Bill Burns

- Chair, Molecular Partners; Chair, Vestergaard; Vice Chair, Mesoblast
- Chair, AMR Fund; Trustee, ICR London
- Former CEO, Roche Pharmaceuticals



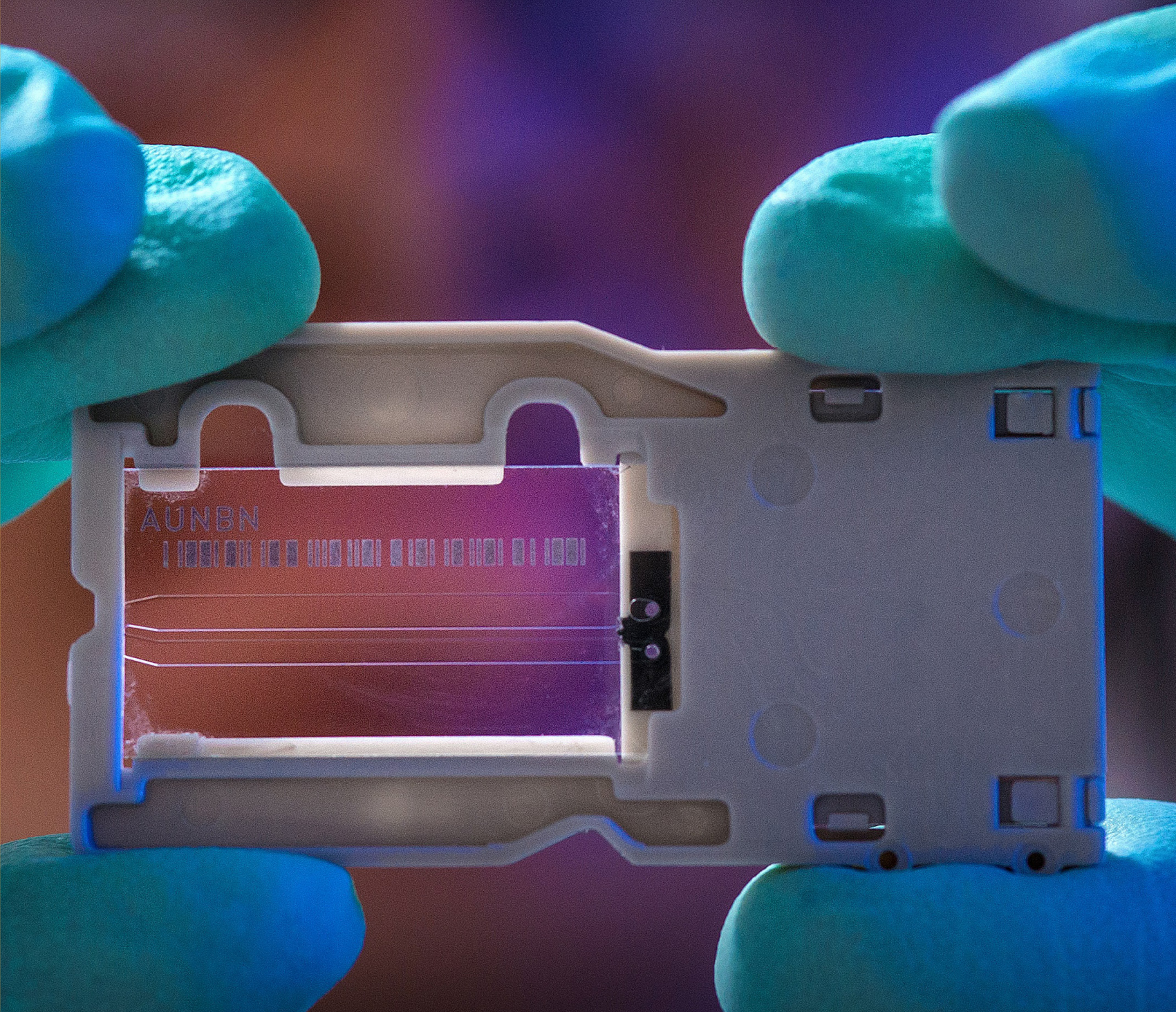
#### Dr Donald A. Deieso

- Board member of WCG Clinical, and Inspire
- Former CEO, Exec Chair and Founder, WCG
- Former Operating Partner & Co-head, Arsenal Capital Partners





Novo Holdings is a long-term investor with approximately half of its portfolio in Life Science Investments and half in Capital Investments.





# Statement of comprehensive income

Year-end 31 December				
DKK million	Note	2021	2020	
Income from Novo Group companies	2.1	13,505	12,585	
Return from Life Science Investments	2.2	11,610	11,166	
Return from Capital Investments	2.2	12,287	5,309	
Costs	2.3, 2.4	-643	-510	
<b>Operating profit</b>		<b>36,759</b>	<b>28,550</b>	
Novo Nordisk Foundation's share of return of joint Investment Portfolio		-3,432	-3,107	
<b>Profit before tax</b>		<b>33,327</b>	<b>25,443</b>	
Income tax expense	2.5	0	0	
<b>Net profit for the year</b>		<b>33,327</b>	<b>25,443</b>	
Other comprehensive income		0	0	
<b>Total comprehensive income</b>		<b>33,327</b>	<b>25,443</b>	

# Balance sheet

Year-end 31 December			
DKK million	Note	2021	2020
<b>Assets</b>			
Novo Group companies	3.2	3,339	3,393
Life Science Investments	4.1, 4.2	94,523	77,554
Capital Investments	4.1, 4.2	88,084	73,576
Property		444	450
Intangible Fixed Assets		0	2
<b>Total non-current assets</b>		<b>186,390</b>	<b>154,975</b>
Investments pending settlement		319	102
Tax receivables		33	98
Other receivables		320	70
Cash at bank		190	336
<b>Total current assets</b>		<b>862</b>	<b>606</b>
<b>Total assets</b>		<b>187,252</b>	<b>155,581</b>
<b>Equity and liabilities</b>			
Share capital	3.1	500	500
Retained earnings		158,161	130,834
<b>Total equity</b>		<b>158,661</b>	<b>131,334</b>
Real estate debt		248	248
Joint Investment Portfolio, Novo Nordisk Foundation		27,291	22,841
Trade payables		154	60
Tax payables		11	0
Investments pending settlement		684	899
Financial Investments liabilities	4.1, 4.2	10	5
Other liabilities		60	115
Other provisions	5.2	133	79
<b>Total current liabilities</b>		<b>28,591</b>	<b>24,247</b>
<b>Total liabilities</b>		<b>28,591</b>	<b>24,247</b>
<b>Total equity and liabilities</b>		<b>187,252</b>	<b>155,581</b>

# Equity statement

## Year-end 31 December

DKK million	Share capital	Retained earnings	Total
<b>2020</b>			
<b>Equity at the beginning of the year</b>	<b>500</b>	<b>113,391</b>	<b>113,891</b>
Net profit for the year	-	25,443	25,443
Dividends paid	-	-8,000	-8,000
<b>Equity at the end of the year</b>	<b>500</b>	<b>130,834</b>	<b>131,334</b>
<b>2021</b>			
<b>Equity at the beginning of the year</b>	<b>500</b>	<b>130,834</b>	<b>131,334</b>
Net profit for the year	-	33,327	33,327
Dividends paid	-	-6,000	-6,000
<b>Equity at the end of the year</b>	<b>500</b>	<b>158,161</b>	<b>158,661</b>



# Cash flow statement

1 January to 31 December

DKK million	2021	2020
Dividends received, Novo Group companies	6,526	6,156
Proceeds from sale of shares in Novo Group companies	7,034	6,501
Divestments of Life Science Investments	8,563	9,049
Investments in Life Science Investments	-14,401	-10,340
Dividends received, Life Science Investments	570	15
Divestments of Capital Investments	40,450	23,818
Investments in Capital Investments	-43,809	-30,322
Dividends received, Capital Investments	152	181
Interest received, Capital Investments	417	377
Financial items	-51	-82
Investments in property	-3	-4
Operating expenses paid	-539	-605
Paid corporation tax	-85	-18
<b>Net cash used in operating activities</b>	<b>4,824</b>	<b>4,726</b>
<b>Cash flows from financing activities</b>		
Dividends paid to Novo Nordisk Foundation	-6,000	-8,000
Contribution from the Novo Nordisk Foundation to the joint Investment Portfolio	6,000	8,000
Repayments to the Novo Nordisk Foundation from the joint Investment Portfolio	-4,970	-4,908
Repayment of real estate debt	0	0
<b>Net cash from financing activities</b>	<b>-4,970</b>	<b>-4,908</b>
Net cash flow	-146	-182
Cash and cash equivalents at the beginning of the year	336	518
<b>Cash and cash equivalents at the end of the year</b>	<b>190</b>	<b>336</b>





Sustainability is integral to our business and we invest in companies that apply biotechnology to drive the green transition forward.



# Notes to the financial statement

## **1. Basis of preparation**

- 1.1 General accounting policies
- 1.2 Significant accounting estimates and judgements
- 1.3 Changes in accounting policies and disclosures
- 1.4 New standards and interpretations not yet implemented

## **2. Results for the year**

- 2.1 Income from Novo Group companies
- 2.2 Return from Investment Portfolio
- 2.3 Employee costs
- 2.4 Costs per area
- 2.5 Income tax

## **3. Capital structure**

- 3.1 Share capital
- 3.2 Investments in Novo Group companies

## **4. Investment Portfolio**

- 4.1 Life Science Investments and Capital Investments
- 4.2 Financial instruments and financial risk management

## **5. Remuneration**

- 5.1 Remuneration to the Board of Directors
- 5.2 Long-term incentive programme

## **6. Other disclosures**

- 6.1 Contractual obligations
- 6.2 Events after the balance sheet date
- 6.3 Financial definitions
- 6.4 Related parties
- 6.5 Group companies

# 1. Basis of preparation

## 1.1 General accounting policies

### Basis of preparation

The separate financial statements for Novo Holdings included in this Annual Report have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and additional requirements of the Danish Financial Statements Act for reporting class C enterprises (Large).

The financial statements are presented in DKK million, unless otherwise stated.

### Principal accounting policies

Novo Holdings' accounting policies are described in each of the individual notes to the financial statements. Accounting policies listed in the table below are regarded as the principal policies applied by the Management.

Note	Area
3.2	Investments in Novo Group companies
4.1	Life Science Investments and Capital Investments

### Applying materiality

The financial statements are a result of processing large numbers of transactions and aggregating those transactions into classes according to their nature or function. The transactions are presented in classes of similar items in the financial statements. If a line item is not individually material, it is aggregated with other items of a similar nature in the financial statements or in the notes. There are substantial disclosure requirements throughout IFRS. Management provides specific disclosures required by IFRS, unless the information is not applicable or considered immaterial to the economic decision-making of the users of these financial statements.

### Translation of foreign currencies

The financial statements are presented in Danish kroner (DKK), which is the company's functional currency and presentation currency.

Transactions in foreign currencies are translated into the functional currency at the exchange rates prevailing on the transaction dates. Foreign exchange gains and losses on completion of these transactions and on the translation

of monetary assets and liabilities in foreign currencies to the exchange rates prevailing on the balance sheet date are recognised in the statement of comprehensive income.

Exchange rate differences arising on the translation of non-monetary items, such as other Capital Investments at fair value recognised in the statement of comprehensive income, are recognised as part of the gain or loss on fair value adjustments.

## 1.2 Significant accounting estimates and judgements

The preparation of financial statements in conformity with generally accepted accounting principles requires Management to make estimates and assumptions that can have a significant effect on the application of policies and reported amounts of assets, liabilities, income, expenses and related disclosures.

Management bases its estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about the reported carrying amounts of assets and liabilities and the reported amounts of revenues and expenses that may not be readily apparent from other sources. Actual results could differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Changes in estimates may be necessary if there are changes in the circumstances on which the estimate was based, or more detailed information becomes available. Such changes are recognised in the period in which the estimate is revised.

The application of the company's accounting policies may require Management to make judgements that can have a significant effect on the amounts recognised in the financial statement. Management's judgement is required in particular when assessing the substance of transactions that have a complicated structure or legal form.

The significant accounting estimates and judgements can potentially significantly impact the consolidated financial statement.



Novo Holdings believes the following to be the significant accounting estimates and related judgements used in the preparation of its financial statement:

Note	Significant accounting estimates and judgements
4.1	Fair value measurement and valuation of unquoted investments

Please refer to the specific note for further information on the key accounting estimates and judgements as well as assumptions applied.

#### Financial assets and liabilities

Financial assets and liabilities measured at fair value can be categorised using the fair value measurement hierarchy.

Depending on purpose, Investments are classified into the following categories:

- Financial assets at fair value through the income statement
- Financial assets at amortised cost

Management determines the classification of its financial assets on initial recognition and re-evaluates this at the end of every reporting period to the extent that such a classification is required.

#### *Recognition and measurement*

Purchases and sales of financial assets are recognised on the settlement date. These are initially recognised at fair value.

Fair value disclosures are made separately for each class of financial instruments at the end of the reporting period.

Financial assets are removed from the balance sheet when the rights to receive cash flows have expired or have been transferred, and Novo Holdings has transferred substantially all the risks and rewards of ownership.

#### *Financial assets 'at fair value through the income statement'*

Financial assets at fair value through the income statement consist of investments and forward exchange contracts. Equity investments are included in investments assets.

Net gains and losses arising from changes in the fair value of financial assets are recognised in the income statement as income from investments.

The fair values of quoted investments are based on current bid prices at the end of the reporting period. Financial assets for which no active market exists are carried at fair value based on a valuation methodology.

#### *Financial assets 'at amortised cost'*

Financial assets at amortised cost are cash at bank and non-derivative financial assets solely with payments of principal and interest.

If collection is expected within one year (or in the normal operating cycle of the business, if longer), they are classified as current assets. If not, they are presented as non-current assets.

Other receivables are recognised initially at fair value. Subsequently, they are measured at amortised cost using the effective interest method, less allowance for doubtful receivables.

#### *Financial liabilities 'at amortised cost'*

Financial liabilities at amortised cost consist of bank overdrafts, trade payables and other liabilities.

### 1.3 Changes in accounting policies and disclosures

No changes have been made to the principal accounting policies, and the policies have been applied consistently to all the years presented.

### 1.4 New standards and interpretations not yet implemented

The company has adopted all new and amended standards and interpretations issued by IASB and endorsed by the EU effective as of 1 January 2021. The application of new and amended accounting standards has not had material impact on the Financial Statements in 2021 and no future periods from the adoption of these new IFRS's are anticipated. It is the management's assessment that the above-mentioned changes in accounting standards and interpretations will not have any significant impact on the financial statements upon adoption of these standards.

## 2. Results for the year

This section provides information related to the company's operating profit and tax to help the reader get a deeper understanding of the company's performance in 2021.

### 2.1 Income from Novo Group companies

DKK million	2021	2020
Dividends received from Novo Nordisk A/S	6,144	5,766
Dividends received from Novozymes A/S	382	390
Gain from sale of shares in Novo Nordisk A/S	6,649	5,906
Gain from sale of shares in Novozymes A/S	330	523
<b>Total result for the year</b>	<b>13,505</b>	<b>12,585</b>

#### Accounting policy

Dividends and realised gains are included in 'Income from Novo Group companies' in the statement of comprehensive income.

### 2.2 Return from Investment Portfolio

#### Accounting policy

Realised and unrealised gains and losses on fair value adjustments are recognised in the statement of comprehensive income in the financial year in which they arise. Realised gains and losses on sale of financial assets are calculated on the basis of the original purchase price. Purchase and sale of investments are recognised on the trade date.

Dividend income from financial assets at fair value through profit or loss is recognised in the statement of comprehensive income within 'Return from Life Science Investments' / 'Return from Capital Investments' when the right to receive payments is established.

DKK million	2021			2020		
	Life Science Investments	Capital Investments	Total	Life Science Investments	Capital Investments	Total
Realised gain and return for the year, net	8,487	4,647	13,134	5,512	1,159	6,671
Appreciation to fair value, net	3,123	7,640	10,763	5,654	4,150	9,804
<b>Total investment result for the year</b>	<b>11,610</b>	<b>12,287</b>	<b>23,897</b>	<b>11,166</b>	<b>5,309</b>	<b>16,475</b>

## 2.3 Employee costs

DKK million	2021	2020
Wages and salaries	179	157
Long-term incentives	94	53
Pension costs, defined contribution plans	19	18
Other employee costs	12	17
<b>Total employee costs</b>	<b>304</b>	<b>245</b>
<i>Allocation of employee costs by category:</i>		
Life Science Investments	175	141
Financial Investments	35	22
Administration & management	94	82
<b>Total employee costs</b>	<b>304</b>	<b>245</b>
<i>Hereof remuneration to Executive Management:</i>		
Salaries and short-term incentives	19	19
Long-term incentives	14	14
Pension	1	1
<b>Total remuneration to Executive Management</b>	<b>34</b>	<b>34</b>
<b>Average number of full-time employees (no.)</b>	<b>89</b>	<b>78</b>

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### Accounting policy

Wages, salaries, social security contributions, paid annual leave and sick leave, bonuses, and non-monetary benefits are recognised in the year in which the employees render the associated services. Where the company provides long-term employee benefits, the costs are accrued to match the rendering of the services.

Since 2017, long-term incentive programmes (LTIP) have been agreed for all employees subject to them meeting certain targets. The LTIP is a capped programme measured against specific and pre-defined hurdles.

## 2.4 Costs per area

DKK million	2021	2020
Costs regarding Life Science Investments	418	328
Costs regarding Capital Investments	30	23
Administration & management	195	159
<b>Total costs for the year</b>	<b>643</b>	<b>510</b>

Pursuant to section 96 (3) of the Danish Financial Statement Act information about the Auditor's fee is stated in the consolidated financial statements of Novo Nordisk Fonden.

## 2.5 Income tax

DKK million	2021	2020
<b>Computation of effective tax rate</b>		
Statutory tax rate	22.0%	22.0%
Non-taxable income less non-deductible expenses	-17.2%	-16.8%
Deduction in accordance with the transparency rule	-4.8%	-5.2%
<b>Effective tax rate</b>	<b>0.0%</b>	<b>0.0%</b>

When assessing Danish corporation tax, Novo Holdings and all Danish subsidiaries are taxed jointly.

Novo Holdings is acting as the administrative company of the joint taxation. The Danish group companies are jointly liable for corporation tax on the consolidated taxable income.

The income tax paid for the Danish tax group in the current year was DKK 9,802 million (DKK 6,023 million in 2020). There have been some adjustments to prior years which predominantly driven by tax payments regarding tax disputes and reversal of the associated tax liability. The adjustments to prior years tax received at an amount of DKK 338 million (DKK 123 million in 2020).

The total costs consists of employee costs of DKK 304 million (2020: DKK 245 million) and external costs of DKK 339 millions (2020: DKK 265 million). For more information in relation to employee costs, please refer to note 2.3

Total costs including results from Novo Holdings operating entities Novo Ventures (US), Inc., Novo Holdings Equity (US), Inc. and Novo Holdings Equity Asia Pte Ltd. are DKK 625 millions (2020: DKK 504 million)

Re-classification of DKK 18 million from "Costs regarding Life Science Investments" to "Administration & management" has been made to comparative figures for 2020.

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### Accounting policy

Corporation taxes in the statement of comprehensive income include tax payable for the year.

Tax payable/receivable includes tax payable computed on the basis of the expected taxable income for the year and any adjustment for tax payable for previous years.

Novo Holdings is covered by the tax rules concerning compulsory joint taxation, due to which the company is jointly taxed with its Danish subsidiaries. Corporation tax is allocated between profit-making and loss-making Danish companies in ratio to their taxable income. Provision is made for tax using the full allocation method. Novo Holdings applies the tax transparency rules and distributes its taxable income to the Novo Nordisk Foundation.



## 3. Capital structure

### 3.1 Share capital

Share capital	No.	Nominal value DKK million
A share capital (shares of DKK 1)	115,400,000	115
B share capital (shares of DKK 1)	384,600,000	385
<b>Total share capital as of 31 December</b>	<b>500,000,000</b>	<b>500</b>

Any share amount of DKK 1 of the A share capital carries 10 votes, while any share amount of DKK 1 of the B share capital carries 1 vote.

There have been no changes in the share capital during the last 5 years.

Proposed distribution of profit	2021	2020
Proposed dividend	1,800	6,000
Retained earnings	31,527	19,443
	<b>33,327</b>	<b>25,443</b>

Paid dividend per share equals DKK 12.00 (2020: DKK 16.00)

### 3.2 Investments in Novo Group companies

DKK million	2021	2020
Costs at the beginning of the year	3,393	3,465
Disposals during the year	-54	-72
<b>Carrying amount at the end of the year</b>	<b>3,339</b>	<b>3,393</b>

The Novo Group companies are valued at historical costs.

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#### Accounting policy

Dividends are recognised as a liability in the period in which they are declared at the Annual General Meeting.

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#### Accounting policy

Investments in the category 'Novo Group companies' are defined as being the directly owned shares in Novo Nordisk A/S and Novozymes A/S. Investments in Novo Group companies are included in the financial statements at cost. If cost exceeds the recoverable amount, the carrying amount is written down to recoverable amount.

## 4. Investment Portfolio

### 4.1 Life Science Investments and Capital Investments

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#### Accounting policy

Life Science Investments are defined as direct or indirect investments in financial assets that are primarily related to either healthcare or bioindustrial segments and which do not meet the definition of investments in Novo Group companies. Investments that do not meet the definition of any of the above two categories are defined as Capital Investments.

Subsidiaries, associates and other financial assets that fall into the category of either Life Science or Capital Investments are recognised in accordance with IFRS9 at fair value through profit or loss. Investments are initially recognised at fair value and subsequently adjusted to fair value.

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#### Significant accounting estimates and judgements

Life Science Investments and Capital Investments are valued at fair value, if this can be set with a sufficient degree of reliability. By nature, uncertainties exist regarding fair value assessment of investments not based on observable market data. Consequently, preparation of the financial statements requires the application of certain estimates and judgements.

The material area of estimation or judgement for each of the applied valuation approaches is set out below:

Valuation approach	Valuation methodology	Estimation and assumptions	Value DKK million
Income-based approaches	Discounted cash flows	Cash flows and discount rates	19,241
Market-based approaches	Trading multiples	Selection of comparable companies, trading multiples, sales and profit forecast	14,084
Value trigger approach	Relative adjustments based on pre-defined value triggers	Relative adjustment to previous valuation	4,546
Financing round approach	Price at recent financing round	N/A	3,784
LP approach	Adjusted reported NAV	Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant)	18,249
Cost approach	Cost at recent transaction	N/A	4,860
<b>Total</b>			<b>64,764</b>

Management reviews and assesses the value of the individual investments on an ongoing basis with specific and planned reviews of the total Investment Portfolio on a quarterly basis.

The discount rates used range from 4% to 30% whereas the EV/EBITDA multiples are in the range from 15x to 28x. These ranges should be seen as a result of our diversified investment portfolio.

**Accounting policy**

Fair value is the price that would be received by selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Novo Holdings has implemented fair value guidelines and procedures which ensure a consistent fair value measurement of each individual investment over time. Moreover, the fair value guidelines provide a framework for reasonable, consistent and transparent selection of valuation methodologies for valuing the investments. The selection criteria are in line with the value hierarchy in IFRS 13.

DKK million	2021			2020		
	Life Science Investments	Capital Investments	Total	Life Science Investments	Capital Investments	Total
Cost at the beginning of the year	49,226	56,901	106,127	42,440	48,734	91,174
Additions during the year, net	13,846	6,863	20,709	6,786	8,167	14,953
<b>Cost at the end of the year</b>	<b>63,072</b>	<b>63,764</b>	<b>126,836</b>	<b>49,226</b>	<b>56,901</b>	<b>106,127</b>
Value adjustments at the beginning of the year	28,328	16,670	44,998	22,674	12,520	35,194
Appreciation to fair value, net	3,123	7,640	10,763	5,654	4,150	9,804
<b>Value adjustments at the end of the year</b>	<b>31,451</b>	<b>24,310</b>	<b>55,761</b>	<b>28,328</b>	<b>16,670</b>	<b>44,998</b>
<b>Fair value at the end of the year</b>	<b>94,523</b>	<b>88,074</b>	<b>182,597</b>	<b>77,554</b>	<b>73,571</b>	<b>151,125</b>
Hereof investment assets	94,523	88,084	182,607	77,554	73,576	151,130
Hereof investments with negative value	0	-10	-10	0	-5	-5

**Fair value estimation***Hierarchy of fair value inputs*

Investments measured at fair value are classified according to a fair value hierarchy depending on the inputs used in the valuation method. The fair value hierarchy distinguishes between observable and unobservable inputs, which are classified at one of the following levels:

- Level 1 – Unadjusted quoted market prices for identical assets in an active market.
- Level 2 - Inputs, other than quoted market prices included within Level 1, which are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices). Quoted prices for similar assets are level 2 inputs.
- Level 3 – Inputs for the asset that are not based on observable market data.

Securities traded on active markets are classified at level 1. Securities traded on inactive markets are generally classified at level 2. Securities in private unlisted operating companies are generally classified at level 3.

Investments in private investment companies are classified at level 2 or level 3, depending on the nature of their investment portfolios, their ability to liquidate their underlying investments and any other restrictions on the disposition of the investments. If the investment can be redeemed at the reported net asset value on the measurement date or in the near future, the investment is classified at level 2. Otherwise the investment is classified at level 3.

#### **Policy for determining when transfers between levels are deemed to have occurred**

Transfers to level 3 occur when quoted market prices (level 1) or other observable inputs (level 2) are no longer available. Transfers out of level 3 occur if quoted market prices (level 1) or other observable inputs (level 2) become available (e.g. when a private company goes public through an IPO, equity investments in the company transfers from level 3 to level 1 as the shares can be valued using the quoted market price (level 1)).

#### **Valuation methods and input**

The general principle applied in the selection of valuation approach maximises the use of observable inputs and minimises the use of unobservable inputs.

If a security trades in an active market, the closing price is applied. An active market is defined as one in which transactions for the security occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Should a security not trade in an active market, it is initially booked and held at cost in the first twelve months succeeding the investment, unless any material events occur within this timeframe. Beyond the twelve months window, the valuation methodology follows the following hierarchy:

When independent broker quotes representing contemporaneous trades exist, these will be applied in estimating the fair value of the security.

If a portfolio company has carried out any financing rounds within the last twelve months and the pricing in the financing round is likely to represent a fair value, the fair value estimate is based on the price obtained in the financing round.

If neither independent broker quotes nor pricing from financing rounds are available, the fair value will be based on application of a modelling approach, which again follows a strict hierarchy:

1. If the company runs an established business with an identifiable stream of continuing earnings or cash flows that are considered to be maintainable, and it is possible to identify comparable companies in terms of risk attributes and earnings growth prospects, the fair value shall be based on application of the market approach (i.e. relevant multiples based on a set of comparable companies);
2. If no comparable companies in terms of risk attributes and earnings growth prospects can be identified, the fair value shall be based on application of an income approach (i.e. a discounted cash flow model);
3. If the company does not run an established business with an identifiable stream of continuing earnings or cash flows that are considered to be maintainable, the fair value shall be based on a value trigger approach, by which the fair value changes based on the occurrence of value triggering events.



## Fair value measurement by hierarchy

DKK million	31 December 2021			Total
	Level 1	Level 2	Level 3	
<b>Life Science Investments</b>				
Public Equity	38,632	0	0	38,632
Private Equity	0	0	39,061	39,061
Venture Capital	5,046	0	10,299	15,345
Credit	0	0	1,485	1,485
<b>Total Life Science Investments</b>	<b>43,678</b>	<b>0</b>	<b>50,845</b>	<b>94,523</b>
<b>Capital Investments</b>				
Public Equity	37,144	4,624	0	41,768
Private Equity	50	0	2,849	2,899
Venture Capital	0	0	1,472	1,472
Credit	3,744	6,294	1,202	11,240
Real Assets	0	0	8,396	8,396
Bonds	14,120	8,179	0	22,299
<b>Total Capital Investments</b>	<b>55,058</b>	<b>19,097</b>	<b>13,919</b>	<b>88,074</b>
<b>Total investments</b>	<b>98,736</b>	<b>19,097</b>	<b>64,764</b>	<b>182,597</b>

Change in value in 2021 not based on observable market data (level 3):

Asset class	At the beginning of the year	Additions during the year	Disposals during the year	Change in hierarchy due to investments that completed an IPO during the year	Gains through profit or loss*	Total
Private Equity	29,005	11,315	-1,367	-7,662	10,619	41,910
Venture Capital	8,067	3,991	-2,560	-2,663	4,936	11,771
Credit	1,934	652	-173	0	274	2,687
Real Assets	4,494	2,031	-11	0	1,882	8,396
<b>Total Investments at fair value</b>	<b>43,500</b>	<b>17,989</b>	<b>-4,111</b>	<b>-10,325</b>	<b>17,711</b>	<b>64,764</b>

\*Of this amount, DKK 10,753 million relates to unrealised gains and losses on investments held at year-end 2021, compared to DKK 2,023 million year-end 2020.

DKK million	31 December 2020			
	Level 1	Level 2	Level 3	Total
<b>Life Science Investments</b>				
Public Equity	31,728	0	0	31,728
Private Equity	0	0	28,576	28,576
Venture Capital	7,964	0	7,974	15,938
Credit	0	0	1,312	1,312
<b>Total Life Science Investments</b>	<b>39,692</b>	<b>0</b>	<b>37,862</b>	<b>77,554</b>
<b>Capital Investments</b>				
Public Equity	33,790	4,818	0	38,608
Private Equity	0	0	429	429
Venture Capital	0	0	93	93
Credit	3,098	5,372	622	9,092
Real Assets	0	0	4,494	4,494
Bonds	15,252	5,603	0	20,855
<b>Total Capital Investments</b>	<b>52,140</b>	<b>15,793</b>	<b>5,638</b>	<b>73,571</b>
<b>Total investments</b>	<b>91,832</b>	<b>15,793</b>	<b>43,500</b>	<b>151,125</b>

Change in value in 2020 not based on observable market data (level 3):

Asset class	At the beginning of the year	Additions during the year	Disposals during the year	Change in hierarchy due to investments that completed an IPO during the year	Gains through profit or loss*	Total
Public Equity	0	0	0	0	0	0
Private Equity	22,750	5,378	-3,101	0	3,978	29,005
Venture Capital	7,237	2,744	-580	-1,779	445	8,067
Credit	1,985	260	-144	0	-167	1,934
Real Assets	3,804	1,027	0	0	-337	4,494
<b>Total investments at fair value</b>	<b>35,776</b>	<b>9,409</b>	<b>-3,825</b>	<b>-1,779</b>	<b>3,919</b>	<b>43,500</b>

The following table details the applied valuation methods for determination of fair value for each asset class:

Asset class	Valuation methodology used	Unobservable input used	Sensitivity in fair value in case of changes in unobservable input
Public Equity	<ul style="list-style-type: none"> <li>Closing prices according to exchange markets</li> <li>Estimated market price based on observable input*</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Private Equity (direct)	<ul style="list-style-type: none"> <li>Discounted cash flows</li> <li>Trading multiples</li> <li>Cost at recent transaction</li> </ul>	<ul style="list-style-type: none"> <li>Cash flows and discount rates</li> <li>Trading multiples</li> <li>Cost at recent transaction</li> </ul>	<ul style="list-style-type: none"> <li>If trading multiples decreased by 10%, the fair value would decrease by DKK 2,014 million</li> <li>If the WACC increased by 0.25pp, the fair value would decrease by DKK 603 million</li> </ul>
Private Equity (LP)	<ul style="list-style-type: none"> <li>Adjusted reported NAV</li> </ul>	<ul style="list-style-type: none"> <li>Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant)</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Venture Capital (Public)	<ul style="list-style-type: none"> <li>Closing prices according to exchange markets</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Venture Capital (Private – direct)	<ul style="list-style-type: none"> <li>Discounted cash flows</li> <li>Trading multiples</li> <li>Relative adjustment based on pre-defined value triggers</li> <li>Cost at recent transaction</li> <li>Financing round</li> </ul>	<ul style="list-style-type: none"> <li>Cash flows and discount rates</li> <li>Trading multiples</li> <li>Value trigger assumptions</li> <li>Cost at recent transaction</li> <li>Price at financing round</li> </ul>	<ul style="list-style-type: none"> <li>If trading multiples decreased by 10%, the fair value would decrease by DKK 0</li> <li>If the WACC increased by 0.25pp, the fair value would decrease by DKK 0</li> </ul>
Venture Capital (Private - LP)	<ul style="list-style-type: none"> <li>Adjusted reported NAV</li> </ul>	<ul style="list-style-type: none"> <li>Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant)</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Credit	<ul style="list-style-type: none"> <li>Closing prices according to exchange markets</li> <li>Estimated market price based on observable input</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Credit (Private - LP)	<ul style="list-style-type: none"> <li>Adjusted reported NAV</li> </ul>	<ul style="list-style-type: none"> <li>Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant)</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
EM debt	<ul style="list-style-type: none"> <li>Closing prices according to exchange markets</li> <li>Estimated market price based on observable input</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Real Assets (Private – Direct)	<ul style="list-style-type: none"> <li>Discounted cash flows</li> <li>Cost at recent</li> </ul>	<ul style="list-style-type: none"> <li>Cash flows and discount rates</li> <li>Price at financing round</li> </ul>	<ul style="list-style-type: none"> <li>If the WACC increased by 0.25pp, the fair value would decrease by DKK 861 million</li> </ul>
Real Assets (Private – LP)	<ul style="list-style-type: none"> <li>Adjusted reported NAV</li> </ul>	<ul style="list-style-type: none"> <li>Latest reported NAV adjusted for capital calls, capital returns and pricing development (if relevant)</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Bonds	<ul style="list-style-type: none"> <li>Closing prices according to exchange markets</li> <li>Estimated market price based on observable input</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

\* The fair value of certain total return swaps and bonds included as collateral under Public Equity is estimated based on observable input.

## 4.2 Financial instruments and financial risk management

### Financial instruments

The company contracts derivatives to hedge financial assets based on individual considerations. The table below shows the derivatives contracted to hedge currency exposure on investments which give rise to value adjustments in the statement of comprehensive income:

DKK million	31 December 2021		31 December 2020	
	Contract amount	Market value	Contract amount	Market value
USD	-4,644	-5	-3,878	165
EUR	533	-13	761	-1
GBP	-350	-5	-127	-1
SEK	-57	0	-65	-2
CHF	-233	0	-222	1
Other	-6	0	0	0
<b>Total</b>	<b>-4,757</b>	<b>-23</b>	<b>-3,531</b>	<b>162</b>

Our policy regarding currency hedging is described in the following section on financial risk management.

### Financial risk management

In its ordinary course of activities, Novo Holdings actively manages a variety of financial risks including currency risk, credit risk, interest rate risk, price risk and liquidity risk. Novo Holdings identifies, measures and monitors risk through various control mechanisms as detailed in the following sections, including maximum approved counterparty exposure and diversifying exposures and activities across a variety of instruments, markets and counterparties. The financial risk is continually monitored by the Allocation & Risk Management Committee to ensure that appropriate steps are taken if the portfolio allocation deviates from the defined long-term risk targets.

Type	Financial risk level	Basis for financial risk level assessment
Currency risk	Medium	Relatively high unhedged allocation towards USD
Credit risk	Low	Low allocation to high yield bonds
Interest rate risk	Low	High allocation to short-term bonds
Price risk	High	High allocation to diversified growth assets
Liquidity risk	Low	High allocation to liquid assets



**Currency risk**

Currency risk is the risk of financial loss from change in currency rates. Currency risk arises as Novo Holdings invests in financial assets in other currencies than DKK. Most of the expenses are denominated in DKK.

*Risk management policies and procedures*

The financial assets in the Investment Portfolio are primarily exposed to USD, EUR and GBP. Novo Holdings policy is not to hedge equity-based assets, but to hedge bond-based and liquid assets based on individual considerations.

Hedging of currency exposure is carried out through currency derivatives, which generally have a maturity period that would not exceed six months.

The currency exposure is monitored on a monthly basis by Allocation & Risk Management Committee and reported to the Novo Nordisk Foundation on a quarterly basis.

The following table details the exposure to currency risk:

	Value 31 December 2021		Value 31 December 2020	
	Local currency, million	DKK million	Local currency, million	DKK million
<b>Traded investment assets</b>				
USD	\$ 11,520	75,672	\$ 9,458	57,258
EUR	€ 6,078	45,204	€ 4,660	34,672
GBP	£ 1,647	14,609	£ 1,299	10,713
Other	N/A	1,076	N/A	9,272
<b>FX derivatives</b>				
USD	-\$ 707	-4,644	-\$ 641	-3,878
EUR	€ 72	533	€ 102	761
GBP	-£ 40	-350	-£ 15	-127
Other	N/A	-296	N/A	-288
<b>Cash in foreign currency</b>				
USD	\$ 20	133	\$ 35	211
EUR	€ 1	9	€ 3	23
GBP	£ 0	2	£ 1	9
Other	N/A	0	N/A	0

The following table details the sensitivity to currency fluctuations:

	31 December 2021		31 December 2020	
	Unhedged exposure Local currency million	Impact on gain/loss for 2021 (DKK million)	Unhedged exposure Local currency million	Impact on gain/loss for 2020 (DKK million)
10% USD appreciation	\$ 10,833	7,116	\$ 8,852	5,359
10% GBP appreciation	£ 1,607	1,426	£ 1,285	1,060

The unhedged exposure relative to the total exposure in USD is 94% in 2021 (93% in 2020). The exposure and sensitivities in the table above includes non-monetary items. Based on monetary items alone, the impact on gain/loss in 2021 from a 10% USD appreciation and a 10% GBP appreciation would be DKK 666 million (2020: DKK 393 million) and DKK 14 million (2020: 29 million), respectively. A depreciation in currencies would have an equal but opposite impact.

**Credit risk**

Credit risk occurs in relation to bonds and other contractual obligations and is the risk of financial loss from failure of a counterparty to meet the contractual obligations.

*Risk management policies and procedures*

The company's policy is to limit the risk of financial loss from counterparty default by having most of the interest-bearing investments in Danish government bonds and domestic mortgage credit bonds with low credit risk and a minor share in high yield debt with lower credit rating. Credit ratings are

considered and monitored by the investment teams to evaluate the risk of loss from default. Investments are made across a variety of issuers to reduce the concentration of credit risk. Based on individual consideration of each asset, it is decided whether the credit risk should be hedged through derivatives.

The debt investments with high credit risk are mainly classified within Venture Capital (convertible bonds) and Credit (corporate debt in developed market). The following table illustrates the exposure of the Investment Portfolio to credit risk:

DKK million	2021	2020	Credit risk assessment
Public Equity*	4,579	6,095	Low risk
Venture Capital	198	218	High risk
Credit	12,726	10,404	Medium/High risk
Bonds	22,298	20,855	Low risk
<b>Total</b>	<b>39,801</b>	<b>37,572</b>	

\*The credit risk assessment for public equity is based on the bonds included as collateral for total return swaps.

**Interest rate risk**

Interest rate exposure arises in relation to interest-bearing investments and is the risk of financial loss from a change in interest rates.

*Risk management policies and procedures*

Novo Holdings policy is to allocate the majority of the interest-bearing asset exposure to Danish government bonds and domestic mortgage credit bonds, and a minority to high yield debt. The interest rate risk is not hedged through derivatives, but the duration of the portfolio is adjusted to a desired exposure.

The following table details the market value and the duration of the interest-bearing investments. The future payments from the floating rate interest bearing assets will fluctuate with the short-term market interest rates. However, the fair value will not fluctuate significantly with changes in market interest rates.

An increase of one percentage point in the interest rate would, other things being equal, result in a decrease in the interest bearing investments of DKK 507 million (2020: DKK 484 million).

DKK million	2021		2020	
	Fair value	Duration (years)	Fair value	Duration (years)
Floating	9,912	0.2	9,872	0.2
Fixed	19,239	1.5	18,746	1.5
Mix	10,650	1.8	8,954	2.0
<b>Total</b>	<b>39,801</b>	<b>1.3</b>	<b>37,572</b>	<b>1.3</b>

### Price risk

Price risk is the risk that the value of the Investment Portfolio will fluctuate due to changes in the market price, caused by factors specific to the individual investment, the sector in which the investment operates or factors generally affecting all similar investments traded in the market.

#### *Risk management policies and procedures*

Novo Holdings invests both directly and indirectly through positions in mutual funds and private equity funds. The price risk is generally not hedged through derivatives. To minimise the price risk while still achieving an attractive return, the Investment Portfolio is allocated according to a predefined set of risk tolerance levels with the following specific risk measures:

1. Sustaining the contribution to society: The risk of not maintaining the real purchasing power of the Investment Portfolio (net of grant payouts) over the coming 10 years, excluding the effect from the cash inflow from Novo Nordisk and Novozymes.
2. Sustaining the portfolio value: The risk that the Investment Portfolio will lose 25% or more in value over the coming 5 years, including the effect from grant payouts and excluding cash inflow from Novo Nordisk and Novozymes.
3. Limiting the exposure to single investments: No single investment can represent more than a certain amount (%) of the Investment Portfolio.

The defined risk measures and portfolio allocation are monitored on a monthly basis by the Allocation & Risk Management Committee and reported to the Boards of Novo Holdings and of the Novo Nordisk Foundation on a quarterly basis. In addition to the measures above, the Committee uses simulated portfolio returns in historical stress scenarios to evaluate the current and forward-looking price risk.

The value exposed to price risk is the value of the Investment Portfolio, which is detailed in the following table.

DKK million	31 December 2021				31 December 2020			
	Life Science Investments	Capital Investments	Total Investments	%	Life Science Investments	Capital Investments	Total Investments	%
Public Equity	38,632	41,768	80,400	44%	31,728	38,608	70,336	47%
Private Equity	39,061	2,899	41,960	23%	28,576	429	29,005	19%
Venture Capital	15,345	1,472	16,817	9%	15,938	93	16,031	11%
Credit	1,485	11,240	12,725	7%	1,312	9,092	10,404	7%
Real Assets	0	8,396	8,396	5%	0	4,494	4,494	3%
Bonds	0	22,299	22,299	12%	0	20,855	20,855	14%
<b>Total</b>	<b>94,523</b>	<b>88,074</b>	<b>182,597</b>	<b>100%</b>	<b>77,554</b>	<b>73,571</b>	<b>151,125</b>	<b>100%</b>

A decrease of 10 percent in the average price would, other things being equal, result in a decrease in the portfolio value DKK 18,260 million (2020: DKK 15,112 million). An increase in the average price of 10% would have an equal but opposite impact.

**Liquidity risk**

Liquidity risk is the risk of not being able to raise enough cash to meet the financial obligations when they fall due. Novo Holdings' amount of financial obligations is minimal compared to the amount of liquid financial assets, and the direct liquidity risk is therefore immaterial. However, Novo Holdings has material indirect financial obligations towards the Novo Nordisk Foundation's grant-giving obligations. The main financial obligation is to ensure the Novo Nordisk Foundation's substantial commitments to charity, investment activities and commitment to providing a stable basis for the commercial and research activities of the companies in the Novo Group.

*Risk management policies and procedures*

The liquidity risk is monitored on a monthly basis by the Allocation & Risk Management Committee and reported to the Boards of Novo Holdings and the Novo Nordisk Foundation on a quarterly basis. The Investment Portfolio is allocated to ensure that the Novo Nordisk Foundation can liquidate assets at any time, without incurring losses from forced disposals, for a value corresponding to i) actual committed as well as expected 5-year grant payout obligations plus, ii) an additional buffer. The current liquidity reserve is assessed by grouping all investments into different liquidity categories with a weight from 0% to 100%. The categorisation is based on daily trading volumes, which are used to estimate the time needed to divest the investments without impacting the trading prices negatively.

In addition to the liquidity reserve, the expected cash inflow (i.e. dividends and share buybacks) from Novo Nordisk and Novozymes also supports that the Novo Nordisk Foundation can meet current and future grant payout obligations. The strategic allocation of the Investment Portfolio provides for the ability to manage a liquidity shortfall, including the unlikely event that the cash inflow from Novo Nordisk and Novozymes were discontinued.

To further ensure that the Novo Nordisk Foundation will have enough liquidity to meet its financial obligations, the target amount of bonds in the Investment Portfolio is set to exceed the current grant payout obligations. Finally, the company also monitors its short-term liquidity, which is measured by the amount of highly-liquid, short-term bond investments with high credit rating in the Investment Portfolio.



## 5. Remuneration

### 5.1 Remuneration to the Board of Directors

DKK thousands	2021				2020			
	Board fee	Committee work	Travel and other allowance	Total	Board fee	Committee work	Travel and other allowance	Total
Lars Rebien Sørensen	1,725	-	74	1,799	1,725	-	-	1,725
Steen Riisgaard	1,150	-	74	1,224	1,150	-	-	1,150
Jean-Luc Butel	575	500	224	1,299	575	500	-	1,075
Viviane Monges	575	144	380	1,099	575	144	208	927
Jeppe Christiansen	575	-	74	649	575	-	-	575
Francis Cuss	575	-	74	649	575	-	-	575
*Carsten Stendevad	575	-	149	724	431	-	-	431
**Henrik Poulsen	575	-	74	649	-	-	-	0
	<b>6,325</b>	<b>644</b>	<b>1,123</b>	<b>8,092</b>	<b>5,606</b>	<b>644</b>	<b>208</b>	<b>6,458</b>

Committee work consists of Novo Advisory Group.

\*Carsten Stendevad has resigned on 29 November 2021.

\*\*Henrik Poulsen joined the Board March 2021.

### 5.2 Long-term incentive programme

In 2017, a Long Term Incentive Programme (the LTIP) was introduced for all employees in Novo Holdings, under which certain targets must be met within a three-year period. In the following years, additional Long Term Incentive Programmes were introduced, setting performance targets for a four-year period. Based on the investment returns for 2021, we have made provision for these incentive schemes.

DKK million	2021	2020
<b>Other provisions</b>		
Provision for incentive fees at the beginning of the year	79	102
Paid during the year	-45	-75
Appreciation during the year, net	99	52
Provision for incentive fees at the end of the year	<b>133</b>	<b>79</b>

## 6. Other disclosures

### 6.1 Contractual obligations

At year-end, Novo Holdings was contractually obligated to make callable follow-on investments or capital contributions of the total outstanding amount:

DKK million	2021	2020
Contractual obligations related to Life Science Investments	5,096	6,020
Contractual obligations related to Capital Investments	7,526	6,098
<b>Total contractual obligations</b>	<b>12,622</b>	<b>12,118</b>

### 6.2 Events after the balance sheet date

There have been no events after the balance sheet date which would have a significant impact on the assessment of Novo Holdings financial position as of December 31, 2021.

### 6.3 Financial definitions

#### *Equity ratio*

Total equity at year-end as a percentage of total assets at year-end.

### 6.4 Related parties

#### **Related party transactions**

The Novo Nordisk Foundation, Novo Ventures 1 A/S, Novo Invest 1 A/S, Novo Ventures (US) Inc., Novo Holdings Equity (US), Inc., Novo Holdings Equity Asia Pte. Ltd, the Sonion Group, the Xellia Group, the Novo Nordisk Group, the Novozymes Group, the NNIT Group, the BBI Group, the Altasciences Group, associated companies and the Boards and Executive Managements of the Novo Nordisk Foundation and Novo Holdings are considered to be related parties. All agreements have been negotiated on market-based terms, and the majority of the agreements are valid for one year.

Other than the above-mentioned intercompany transactions and normal remuneration to management disclosed in Note 2.3 "Employee costs", no transactions have been concluded with the Board of Directors, Executive Management or other related parties.

#### **Ownership**

Pursuant to section 112(1) of the Danish Financial Statements Act, no consolidated financial statements have been prepared. Novo Holdings is a wholly-owned subsidiary of the Novo Nordisk Foundation and is consolidated into the group financial statements of the Novo Nordisk Foundation.

The consolidated financial statements of the Novo Nordisk Foundation can be ordered at:

Novo Nordisk Foundation  
Tuborg Havnevej 19  
DK-2900 Hellerup  
Municipality of Gentofte, Denmark

DKK million	2021	2020
<b>Novo Nordisk Foundation</b>		
Sale of services	100	109
Purchase of services	13	12
The Novo Nordisk Foundation's share of joint Investment Portfolio	27,291	22,841
The Novo Nordisk Foundation's share of result from joint Investment Portfolio	3,432	3,107
Dividend payment to the Novo Nordisk Foundation	6,000	8,000
<b>Novo Nordisk A/S</b>		
Participation in share buy-back programme (sale of shares)	6,696	5,963
Purchase of services	4	4
<b>Novozymes A/S</b>		
Participation in share buy-back programme (sale of shares)	338	537
<b>NNIT A/S</b>		
Purchase of services	22	22
<b>Novo Ventures 1 A/S</b>		
Loan	789	758
<b>Novo Invest 1 A/S</b>		
Loan	751	0
<b>Novo Ventures (US), Inc.</b>		
Purchase of services	118	97
<b>Novo Holdings Equity (US), Inc.</b>		
Purchase of services	65	20
<b>Novo Holdings Equity Asia Pte. Ltd</b>		
Purchase of services	12	2
<b>Other subsidiaries and associates</b>		
Loans to other subsidiaries	1,550	1,313
Loans to associates	64	105
Contingent liabilities regarding commitments to associates	586	586

## 6.5 Group companies

Listed by investment category and secondarily degree of control.

### Novo Group

<i>Subsidiaries</i>	<i>Ownership/voting rights*</i>
Novo Nordisk A/S, Denmark	28.1%/76.7%
Novozymes A/S, Denmark	25.5%/72.6%

### Life Science Investments

<i>Subsidiaries</i>			
21st.Bio A/S, Denmark	71%	Novo Invest 1 A/S, Denmark	100%
Aristaeus HoldCo A/S, Denmark	100%	Novo Invest 2A A/S, Denmark (BBI Group)	100%
BiOrigin ApS, Denmark	100%	Novo Invest 2C A/S, Denmark	100%
CGG Amalthea HoldCo A/S, Denmark (Altasciences Group)	100%	Novo Invest 2E A/S, Denmark	100%
ENV HoldCo A/S, Denmark	100%	Novo Ventures (US), Inc., USA***	100%
ERT HoldCo A/S, Denmark	100%	Novo Ventures 1 A/S, Denmark	100%
HyperBio Therapeutics Aps, Denmark	100%	Obis Medicines ApS, Denmark	89%
Novo Accelerator, Inc., USA	100%	Rhea HoldCo A/S, Denmark	100%
Novo DP2, Inc., USA	100%	Sonion HoldCo A/S, Denmark	100%
Novo Holdings Equity (US) Inc., USA***	100%	Xellia HoldCo A/S, Denmark	100%
Novo Holdings Equity Asia Pte. Ltd., Singapore***	100%		

### Associates

Acesion Pharma ApS, Denmark	53%	Glycomine, Inc., USA	39%
Allievex Corporation, USA	43%	Hemab ApS, Denmark	30%
AMRA Medical, Sweden	26%	Heparegenix GmbH, Germany	24%
Antag Therapeutics ApS, Denmark	43%	Hoba Therapeutics ApS, Denmark	49%
Aristea Therapeutics, Inc., USA	59%	Inthera Bioscience Ltd., Switzerland	28%
Avalyn Pharma, Inc., USA	22%	Karus Therapeutics Ltd., United Kingdom	25%
Avilex Pharma ApS, Denmark	50%	MinervaX ApS, Denmark	41%
Bactolife ApS, Denmark	26%	Muna Therapeutics Aps, Denmark	21%
Biomason Inc., USA	30%	NMD Pharma ApS, Denmark	25%
BioPhero ApS, Denmark	39%	Nuvig Therapeutics Inc., USA	26%
Biosyntia ApS, Denmark	48%	Orexo AB, Sweden	28%
Chr. Hansen Holding A/S, Denmark	22%	Prothelia, Inc., USA	31%
Chromologics ApS, Denmark	24%	Revagenix, Inc., USA	23%
Claris Biotherapeutics, Inc., USA	52%	Rgenix, Inc., USA	23%
Convatec Group Plc, United Kingdom	21%	Stargazer Pharmaceuticals, Inc., USA	48%
Disc Medicine, Inc., USA	22%	Tarveda Therapeutics, Inc., USA	37%
Draupnir Bio ApS, Denmark	28%	Tribune Therapeutics AB, Sweden	34%
F2G Limited, United Kingdom	34%	Vestaron Corporation, USA	31%



**Capital Investments****Subsidiaries**

NNIT A/S**, Denmark	33.5%
Komplementarselskabet Novo Capital Investors ApS, Denmark	100%
Novo Capital Investors P/S, Denmark	100%

**Associates**

Dades A/S, Denmark	47%
NIP Norway Gardermoen Logistikkbygg Holding AS, Norway	27%
NREP A/S, Denmark	25%

\* Voting rights are only disclosed if different from ownership. Voting rights are calculated nominally, i.e. excluding treasury shares.

\*\* NNIT A/S is listed as a subsidiary given that Novo Holdings A/S and the subsidiary Novo Nordisk A/S together own 51% of the shares and votes in the company.

\*\*\* The companies are separate legal entities that provides certain consultancy services to Novo Holdings, mainly within the areas of identifying, analysing, and negotiating investment opportunities among life science and biotech companies in the US and Asia. They also conduct related follow-up activities, such as board memberships and control and reporting efforts.

For a complete overview of the subsidiaries in Novo Holdings A/S group, please refer to the consolidated financial statements of the Novo Nordisk Foundation.





The Novo Holdings cornerstones are Performance, Respect and Responsibility which are clearly reflected in the way we do business..





# Management's statement

The Executive Management and Board of Directors have today considered and adopted the Annual Report of Novo Holdings A/S for the financial year 1 January – 31 December 2021.

The Annual Report is prepared in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act.

In our opinion, the financial statements give a true and fair view of the financial position at 31 December 2021 of the Company and of the results of the Company's operations and cash flows for 2021.

In our opinion, Management's review includes a true and fair account of the development in the operations and financial circumstances of the Company, of the results for the year and of the financial position of the Company as well as a description of the most significant risks and elements of uncertainty facing the Company.

We recommend that the Annual Report be adopted at the Annual General Meeting.

Hellerup, 8 March 2022

## Executive Management

Kasim Kutay  
CEO

Nigel Govett  
CFO

## Board of Directors

Lars Rebien Sørensen  
Chair

Steen Riisgaard  
Vice Chair

Jean-Luc Butel

Henrik Poulsen

Jeppe Christiansen

Viviane Monges

Francis Cuss



To the Shareholder of Novo Holdings A/S

# Independent Auditor's report

## Opinion

In our opinion, the Financial Statements give a true and fair view of the financial position of the Company at 31 December 2021, and of the results of the Company's operations and cash flows for the financial year 1 January - 31 December 2021 in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act.

We have audited the Financial Statements of Novo Holdings A/S for the financial year 1 January - 31 December 2021, pp 54-83, which comprise statement of comprehensive income, balance sheet, equity statement, cash flow statement and notes, including a summary of significant accounting policies ("financial statements").

## Basis of opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs) and the additional requirements applicable in Denmark. Our responsibilities under those standards and requirements are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (IESBA Code) and the additional ethical requirements applicable in Denmark, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## Statement on Management Review

Management is responsible for Management's Review, pp 1-53.

Our opinion on the financial statements does not cover Management's Review, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read Management's Review and, in doing so, consider whether Management's Review is materially inconsistent with the financial statements or our knowledge obtained during the audit, or otherwise appears to be materially misstated.

Moreover, it is our responsibility to consider whether Management's Review provides the information required under the Danish Financial Statements Act.

Based on the work we have performed, in our view, Management's Review is in accordance with the Financial Statements and has been prepared in accordance with the requirements of the Danish Financial Statements Act. We did not identify any material misstatement in Management's Review.

## Management's Responsibilities for the Financial Statements

Management is responsible for the preparation of Financial Statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the EU and further requirements in the Danish Financial Statements Act, and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, Management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting in preparing the financial statements unless Management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

## Auditor's responsibilities for the audit of the Financial Statements

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

As part of an audit conducted in accordance with ISAs and the additional requirements applicable in Denmark, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The

risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.
- Conclude on the appropriateness of Management's use of the going concern basis of accounting in preparing the financial statements and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and contents of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that gives a true and fair view.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Hellerup, 8 March 2022

**PricewaterhouseCoopers**

Statsautoriseret Revisionspartnerselskab  
CVR No 33 77 12 31

**Torben Jensen**

State Authorised Public Accountant  
mne18651

**Elife Savas**

State Authorised Public Accountant  
mne34453



