2021

WINTERSHALL DEA
ANNUAL REPORT

WINTERSHALL DEA
AT A GLANCE

KEY FIGURES 2021

PRODUCTION[1] EBITDAX CAPEX 2P RESERVES

€3.0 BN
OPERATING CASH FLOW

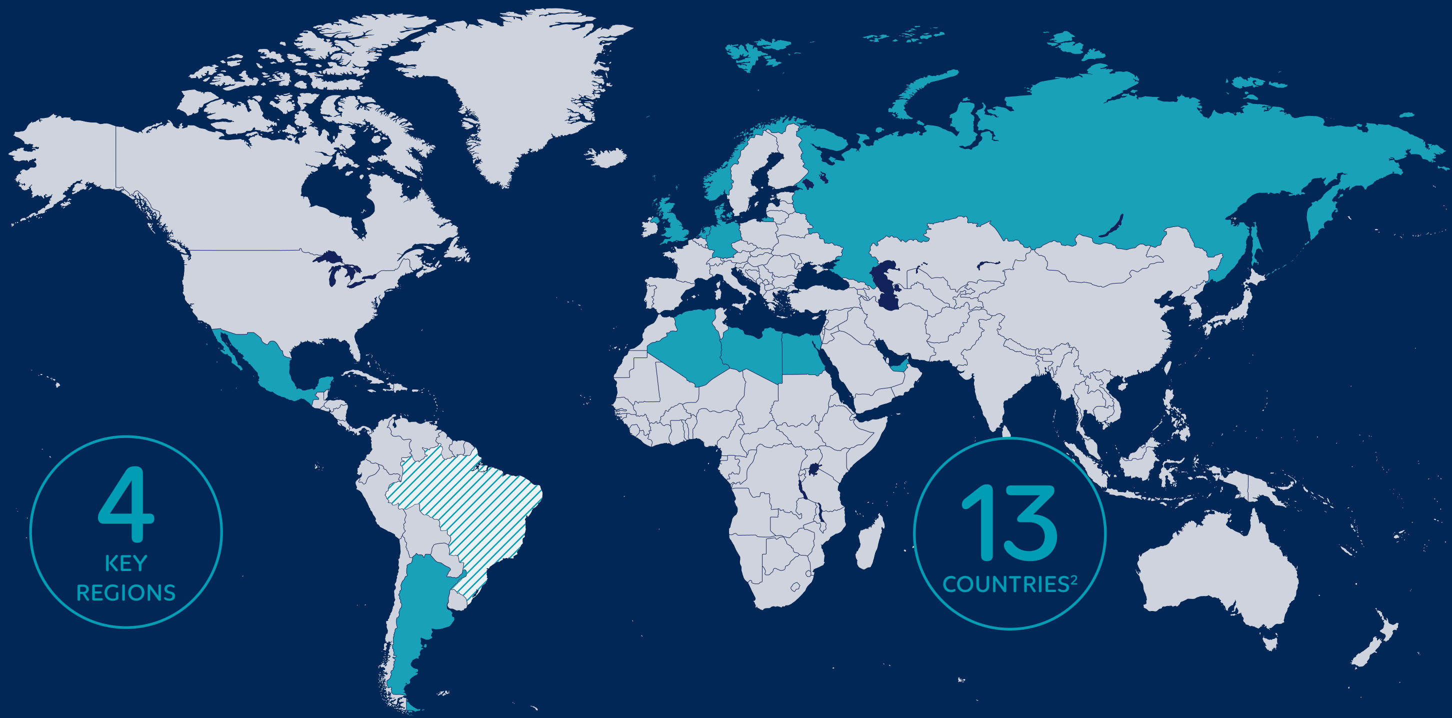
€2.1 BN
FREE CASH FLOW

€950 M
ADJUSTED NET INCOME

€3.8 PER BOE[3]
PRODUCTION COSTS

15 YEARS
2P RESERVES LIFE

OUR GLOBAL PRESENCE



[1] Excluding Libya onshore production.
[2] Activities in Brazil are being terminated.
[3] Excluding one-off effect in Q4 2021.

WINTERSHALL DEA
OUR RESULTS

SAFETY

TRIR

2021	2.37
2020	2.07
2019[1]	3.09[2]

LTIR

2021	0.12
2020	1.03
2019[1]	0.60[2]

OPERATIONAL

Production[3] (mboe/d)

2021	634
2020	623
2019[1]	617

2P reserves (bn boe)

2021	3.4
2020	3.6
2019	3.8

Production costs (€/boe)

2021[4]	3.8
2020[4]	3.5
2019[1]	3.8

FINANCIAL

EBITDAX (€ million)

2021	3,832
2020	1,643
2019[1]	2,801

Adjusted Net Income[5] (€ million)

2021	950
2020	195
2019[1]	512

Free Cash Flow (€ million)

2021	2,082
2020	159
2019[1]	– 118

Leverage[6] (x)

2021	0.7
2020	3.4
2019[1]	2.1

[1] On a like-for-like basis, as a sum of Wintershall Dea Group, Wintershall Group and Dea Group figures.
[2] 2019 figures have been retrospectively amended.
[3] On a working interest basis, including proportional production from at equity accounted companies, excluding Libya onshore production.
[4] Excluding one-off effects in Q4 2021 and Q4 2020 related to a pre-merger commercial settlement with a third party.
[5] Defined as EBITDAX less depreciation and amortisation, less exploration expenses, plus financial income, less financial expenses and less income taxes, adjusted for special items as well as tax effects on adjusted special items or disregarded items.
[6] Net debt divided by last twelve months EBITDAX.

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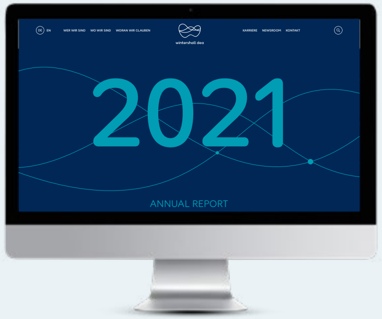
ONLINE ANNUAL REPORT SUMMARY 2021



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SUSTAINABILITY REPORT 2021

Release in March 2022

FURTHER EXPLANATIONS

You will find further information on the Internet.

You will find further information in this report.

A ABOUT WINTERSHALL DEA

ABOUT THIS REPORT

Wintershall Dea's annual report is intended to provide a thorough and transparent overview of our activities, including our financial performance for fiscal year 2021.

The annual report combines our key financial, operational and sustainability-related information in a comprehensive report to allow for a full evaluation of our performance. The report comprises the following:

- Report to our stakeholders (including sustainability reporting in accordance with the relevant disclosure standards)
- Group management report
- Consolidated financial statements
- Notes to the consolidated financial statements

The group management report, consolidated financial statements and notes to the consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) and German Accounting Standards (GAS).

Unless otherwise stated, "Group", "Wintershall Dea", "Wintershall Dea Group" and "we" refer to Wintershall Dea AG and its consolidated and equity-accounted subsidiaries. All reserves and resource figures in this report are shown based on Petroleum Resources Management System (PRMS) definitions. All production figures are shown based on working interest volumes, unless otherwise stated. "Net zero by 2030", "Net zero GHG emissions by 2030" or similar expressions used in this report refer to our target to reduce our Scope 1 and Scope 2 greenhouse gas emissions of our upstream activities (operated and non-operated at equity share basis) to net zero by 2030.

DISCLAIMER

This annual report contains forward-looking statements regarding the future development of Wintershall Dea and its companies, as well as of the economic and political environment. These statements are assessments that we have made based on information available to us at the time this document was prepared. Forward-looking statements are not guarantees of the future developments and results outlined therein. In the event that the underlying assumptions do not materialise or unforeseen risks arise, actual developments may deviate from the currently predicted developments. Therefore, we cannot assume responsibility for the correctness of these statements. Wintershall Dea does not assume any obligation to update the forward-looking statements contained in this report above and beyond the legal requirements.

Mario Mehren
CEO of Wintershall Dea

CHIEF EXECUTIVE LETTER

Dear stakeholders,

2021 was an outstanding year for Wintershall Dea. The commodity price environment and our robust operations allowed us to achieve extraordinary financial performance on all key metrics. We have maintained low production costs, hit our production target for the year, and achieved record financial results. And we've done that while also making significant progress setting up our business to shape a low-carbon future. Despite the serious difficulties of the pandemic, we take many positives out of 2021. For that, I thank our team at Wintershall Dea, our partners and all our stakeholders who supported us.

We achieved full year production of 634 mboe/d in 2021, above the midpoint of the originally planned range. We entered the year with significant operating momentum, allowing us to deliver record production of 659 mboe/d in the first quarter. In the third quarter a fire at a third-party gas and condensate treatment plant caused a temporary but significant production interruption in our Russian operations. Production was however back up and running quickly. Our fourth quarter production was again a record at 678 mboe/d, meaning we ended 2021 and entered 2022 in a strong position.

Project delivery was on track in 2021. In the context of our gas-focused strategy we are particularly excited to have delivered additional gas volumes from our newest developments, Raven in Egypt and Achim Development Area 4A/5A in Russia. Our partners in Norway have started-up the Solveig field and delivered the remaining wells at the Ærfugl Phase 2 project: profitable projects with low-breakevens. In total we brought six projects onstream in 2021 and are making good progress on the delivery of the remaining major projects in Norway – Dvalin, Nova and Njord. These are on track to come onstream towards the end of this year.

Our strong operational performance, combined with the exceptional market environment, has led to a significant improvement in our financial performance. That, combined with the actions we have taken over the last two years to create a sustainable business, has allowed us not only to resume dividend payments but also to significantly strengthen our balance sheet. This puts us in a strong position to pursue our strategic objectives.

We have updated those strategic objectives in recent months. Wintershall Dea stands for a resilient, gas-weighted portfolio with stable production in attractive markets, an industry-leading cost structure and constant portfolio optimisation. Portfolio renewal will happen through increased emphasis on value-accretive M&A opportunities and highly focused exploration. And we will continue to be guided by a disciplined capital allocation framework enhancing returns and providing competitive shareholder returns through the cycle.

We have already taken steps to deliver, in particular with further portfolio optimisation. We have divested our unconventional oil activities in Argentina, at Aguada Federal and Bandurria Norte. We have closed our successful oil engagement in Egypt by divesting our interest in the Gulf of Suez concessions. Both transactions were executed as of January 1st, 2022. And, we have terminated our oil focused exploration activities in Brazil, exiting the country. All three moves reflect our focus on gas, and on resilience.

In 2021 we continued to change the way we work, to support our resilience and our ability to thrive in a changing world. We further accelerated digitalisation, introducing artificial-intelligence based solutions and advancing data-driven decision making. And we implemented flexible working model which we call 'Flex Forward'. This model for flexible working practices will remain when the pandemic is gone, to improve performance and build on our agile and diverse culture.

The future demands a business that is smart, digital, productive – and sustainable. We are clear about our role in shaping a cleaner future. We will continue to focus on natural gas, given its significant benefits for energy sustainability, security and affordability in the near term. We will do so in the cleanest, most efficient way, guided by our commitment to net zero greenhouse gas emissions from our upstream activities[1] by 2030. And in the longer term we intend to deliver solutions for a net zero future: We will develop opportunities in the potentially complementary carbon management and hydrogen business in a phased manner, in particular, in the field of carbon capture and storage (CCS).

We have already made significant progress, advancing multiple CCS and hydrogen projects in 2021. Of particular note is the Project Greensand CCS consortium in Denmark, which received public funding in recognition of its potential significance. There, together with our partners, we are moving into a pilot phase and expect to be injecting first volumes late this year. Our growing Carbon Management & Hydrogen division will continue to find and invest in projects, in support of our ongoing transformation.

2021 was another year full of challenges. In response, we delivered strong results, and laid the foundations of our successful future. A future, in which we will continue to implement our strategy and to follow our clear financial framework; balancing future growth with attractive returns to shareholders, while maintaining a strong balance sheet. A future, where we deliver the natural gas, carbon management solutions and hydrogen that our societal, economic and environmental well-being demands.

Mario Mehren

[1] Scope 1 and Scope 2, operated and non-operated at equity share basis.

Dr Hans-Ulrich Engel
Chairman of the Supervisory Board of Wintershall Dea AG

REPORT OF THE SUPERVISORY BOARD OF WINTERSHALL DEA AG

FOR THE FISCAL YEAR FROM 1 JANUARY THROUGH 31 DECEMBER 2021

In the period from 1 January to 31 December 2021, the Supervisory Board performed the duties incumbent on it under the law and the Articles of Association and continuously monitored the management of the company. The Management Board regularly informed the Supervisory Board about the company's activities and certain matters of corporate policy, both in meetings and in writing. The business policy intended by the Management Board, as well as the situation and development of the company, were discussed in detail. In addition, the Supervisory Board received regular reports on ongoing projects. The Chairman of the Supervisory Board also discussed key business matters with the Management Board and was informed about the situation and development of the company in individual discussions.

With effect as of 26 July 2021, Wintershall Dea GmbH has converted its legal form from a limited liability company (Gesellschaft mit beschränkter Haftung) to a joint-stock company (Aktiengesellschaft), under the company name Wintershall Dea AG. In the course of the change in legal form, the Supervisory Board has been increased from nine to twelve members. All members of the Supervisory Board at that point of time remained in office. Matti Lievonen and Scott Nyquist have joined the Supervisory Board as new shareholder representatives as of 26 July 2021. Heiko Rehder was appointed by court as an additional employee representative on 20 August 2021.

Four ordinary meetings of the Supervisory Board were held in Kassel, two meetings of Wintershall Dea GmbH and after the change of legal form two meetings of Wintershall Dea AG. Considering the exceptional circumstances caused by the COVID-19 developments and the related travel advisory, the Supervisory Board members agreed on a video conference option in addition to in-person meetings.

In an additional written circulation procedure, against the background of the change of legal form, Mario Mehren (Chairman), Dawn Summers, Thilo Wieland, Hugo Dijkgraaf and Paul Smith were elected as members of the "first" Management Board of Wintershall Dea AG.

Another additional written circulation procedure concerned the merger of Shell Exploration und Produktion Deutschland GmbH into Wintershall Dea Deutschland GmbH, which the Supervisory Board approved.

Besides the changes in the Supervisory Board due to the change in legal form, in the year 2021 there were some other changes in the composition of the Supervisory Board. Until 23 March 2021, Sabine Brandt was a member of the Supervisory Board of Wintershall Dea GmbH as an employee representative. On that date, Günther Prien was newly appointed to the Supervisory Board by court as an employee representative. Dr Wolfgang Haas declared to resign from his office as a member of the Supervisory Board with effect from the first General Meeting of Wintershall Dea AG held on 26 August 2021. The Annual General Meeting then elected Dr Dirk Elvermann as member of the Supervisory Board. The Chairman of the Supervisory Board, Lord John Browne of Madingley, has resigned as a member and Chairman of the Supervisory Board with effect to the end of 1 November 2021. Dmitry Avdeev has been elected to replace Lord Browne of Madingley in the Supervisory Board with effect as of the beginning of 2 November 2021. The Supervisory Board has elected Dr Hans-Ulrich Engel as new Chairman of the Supervisory Board and Dmitry Avdeev as First Deputy Chairman with effect as of the beginning of 2 November 2021.

The members of the Supervisory Board as of the beginning of 2 November 2021 are Dr Hans-Ulrich Engel (Chairman), Dmitry Avdeev (First Deputy Chairman), Michael Winkler (Second Deputy Chairman, employee representative), Saori Dubourg, Dr Dirk Elvermann, Michael Heinz, German Khan, Matti Lievonen, Scott Nyquist, Birgit Böl, Günther Prien and Heiko Rehder.

In the Inaugural Meeting of the Supervisory Board after the change of legal form an Audit Committee, a Personnel Committee and a Nomination Committee of the Supervisory Board were established and the Rules of Procedure for the Supervisory Board, for the Management Board and for the Committees were approved. Also, the members of the Committees were elected.

The members of the Audit Committee are Dr Hans-Ulrich Engel, Dmitry Avdeev, Dr Dirk Elvermann, Matti Lievonen, Michael Winkler and Günther Prien.

The members of the Personnel Committee are Dr Hans-Ulrich Engel, Michael Heinz, German Khan, Scott Nyquist, Michael Winkler and Birgit Böl.

The members of the Nomination Committee are Dr Hans-Ulrich Engel, Michael Heinz, German Khan and Matti Lievonen.

The Audit Committee held one meeting and elected Matti Lievonen as chairman. The Personnel Committee elected Dr Hans-Ulrich Engel as chairman by means of written proceedings. There was no meeting of the Nomination Committee during the year 2021.

The Supervisory Board monitored the accounting processes, the effectiveness of the internal control system, the risk management system and the internal audit system, as well as the audit of the financial statements, and dealt with the selection and independence of the auditor.

Furthermore, the Supervisory Board dealt with the course of business, production, cost and revenue development, as well as the earnings situation, corporate planning and all significant transactions of the company. In addition, the Supervisory Board received reports relating to the market environment for oil and gas prices, measures to hedge business risks, corporate development, the business model and corporate strategy. Furthermore, the Supervisory Board was informed of the HSE performance (which includes personal safety, process safety and environmental performance) in the context of Health, Safety, Environment, Quality (HSEQ) reporting. The financial results were also discussed in detail.

The financial statements and the consolidated financial statements for Wintershall Dea AG for the year from 1 January to 31 December 2021, the management reports of the Group and Wintershall Dea AG were audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, the elected and appointed auditors. The auditors issued an unqualified audit opinion. The financial statements and the consolidated financial statements of Wintershall Dea AG for the year from 1 January through 31 December 2021, the management reports of the Group and Wintershall Dea AG and the respective auditor's reports were distributed to the Supervisory Board in a timely manner prior to the balance sheet meeting on 18 February 2022 and reviewed by the Audit Committee at the meeting on 18 February 2022.

The auditor took part in the discussion of the annual financial statements and the consolidated financial statements, reported about material findings of the audit and was available to answer questions. The Supervisory Board noted the report and the explanations. The Supervisory Board approved the audit results for the financial statements and consolidated financial statements for the year from 1 January through 31 December 2021.

The Supervisory Board examined the financial statements, the consolidated financial statements and the management reports compiled by the Management Board for the Group and for Wintershall Dea AG. The final audit did not give rise to any objections. The Supervisory Board approved the annual financial statements and the consolidated financial statements for the year from 1 January through 31 December 2021.

The Supervisory Board would like to thank the members of the Management Board and all employees for their commitment and their efforts.

Kassel, 18 February 2022

On behalf of the Supervisory Board
Dr Hans-Ulrich Engel, Chairman

OUR MANAGEMENT BOARD

Corporate Governance – Management Board

Above, from left to right

Mario Mehren
Chief Executive Officer, CEO

Dawn Summers
Chief Operating Officer, COO

Thilo Wieland
Member of the Board,
Region Russia, Latin America
and Midstream

Below, from left to right

Hugo Dijkgraaf
Chief Technology Officer, CTO

Paul Smith
Chief Financial Officer, CFO

OUR FOUNDATION

OUR GUIDING PRINCIPLES

As the leading independent European gas and oil company, Wintershall Dea is committed to producing natural gas and crude oil in the most efficient and environmentally friendly way. The company acknowledges its responsibility to help solve two of today's greatest global challenges: meeting the world's growing energy needs and achieving climate goals.

OUR PURPOSE

WHAT WE DO

We are the leading independent European gas and oil company. We explore for and produce gas and oil worldwide in the most efficient and responsible way.

WHY WE DO WHAT WE DO

We believe we contribute to a better world for today's and tomorrow's generations by addressing two major challenges at the same time – the world's growing demand for energy and global climate change. We are committed to securing energy supplies while pursuing climate targets.

HOW WE DO WHAT WE DO

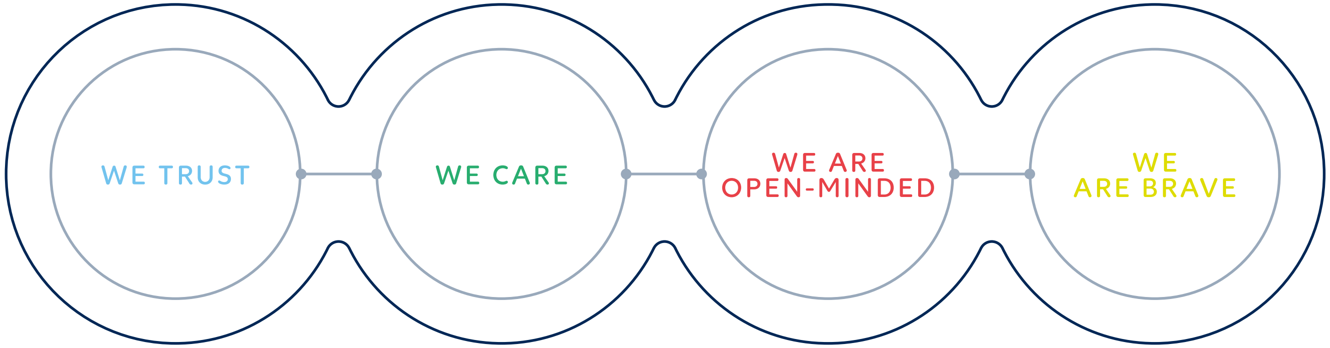
Reliable partner
As the leading independent European gas and oil company, we are the long-term and reliable partner for all our stakeholders. We are setting industry benchmarks in safety and environmental responsibility as well as in operational and financial performance.

Ambitious people
People are our greatest resource. We promote an entrepreneurial spirit and empower people, while welcoming diversity. We cultivate an open and team-orientated working environment which makes it possible to find the best solutions.

Experienced pioneer
German engineering is our heritage. We push for innovation, embrace opportunities presented by the digital revolution and constantly strive to broaden our horizons. We are and will remain experts in the most demanding fields – now and in the future.

OUR VALUES

We know that as a company, we are measured at all levels by our actions. Our four corporate values are therefore extremely important to us in all our relations – both internally and externally. Our values guide our actions and define how we want to work together – as a team, with our stakeholders and our partners. They are pivotal in defining Wintershall Dea's culture.



Trust is the basis for all our values and also their outcome. We believe in respect and sustainability as the foundation for our success. We also believe in trust as the basis for achieving our goals and empowering our organisation. We trust people to make informed decisions.

We care for our people, the environment, our assets and our capital. We accept responsibility and act on it. We do not shy away from difficult conversations and weigh our decisions carefully. Safe operations that pose no threat to people and the environment are always our top priority.

We are convinced that open-mindedness is key to being innovative, to achieving robustness, to securing exciting projects and providing an inspiring work environment. We work on the assumption that we can learn something from every person whom we interact with.

We are ready to accept big challenges, be they demanding fields, new opportunities or our social responsibility to advance the gas and oil industry. We have a strong focus on performance delivery and strive for excellence in all that we do. We seize opportunities while managing risks intelligently.

OUR STRATEGY

MARKET CONTEXT	OUR STRATEGIC PILLARS	HOW WE DO IT
Macroeconomic environment impacted by pandemic-related, geopolitical and economic uncertainties	#1 PROFITABLE BUSINESS GENERATING COMPETITIVE SHAREHOLDER RETURNS	› Maintain healthy investment & dividend outlook through the cycle › Pursue focused, value-accretive M&A to further enhance returns
Carbon to be priced in the global economy, creating challenges but also opportunities for the industry, for example in low carbon hydrogen and carbon storage solutions	#2 ADVANTAGED UPSTREAM PORTFOLIO	› Gas weighted E&P business maintained at 650-750mboed production › Constant portfolio high grading in terms of cost and emissions footprint › Sustain gas-focused portfolio in attractive markets › Highly focused exploration
	#3 CARBON MANAGEMENT AND HYDROGEN	› Develop opportunities in potentially complementary CM&H business in a phased manner
Despite the tightening stakeholder scrutiny, mid-term perspective of the industry remains robust	#4 DISCIPLINED FINANCIAL FRAMEWORK	1. Maintain strong balance sheet and investment grade rating 2. Progressive base dividend and flexibility for additional shareholder returns 3. Disciplined capital allocation
	#5 FOCUS ON SUSTAINABILITY	› Reduce Scope 1 & 2 emissions to Net Zero by 2030[1] › Intermediate goal of 25% net reduction of Scope 1 & 2 emissions[1] by 2025 from 2020 level

[1] Operated and non-operated at equity share basis.

OUR ENERGY TRANSITION PATHWAY

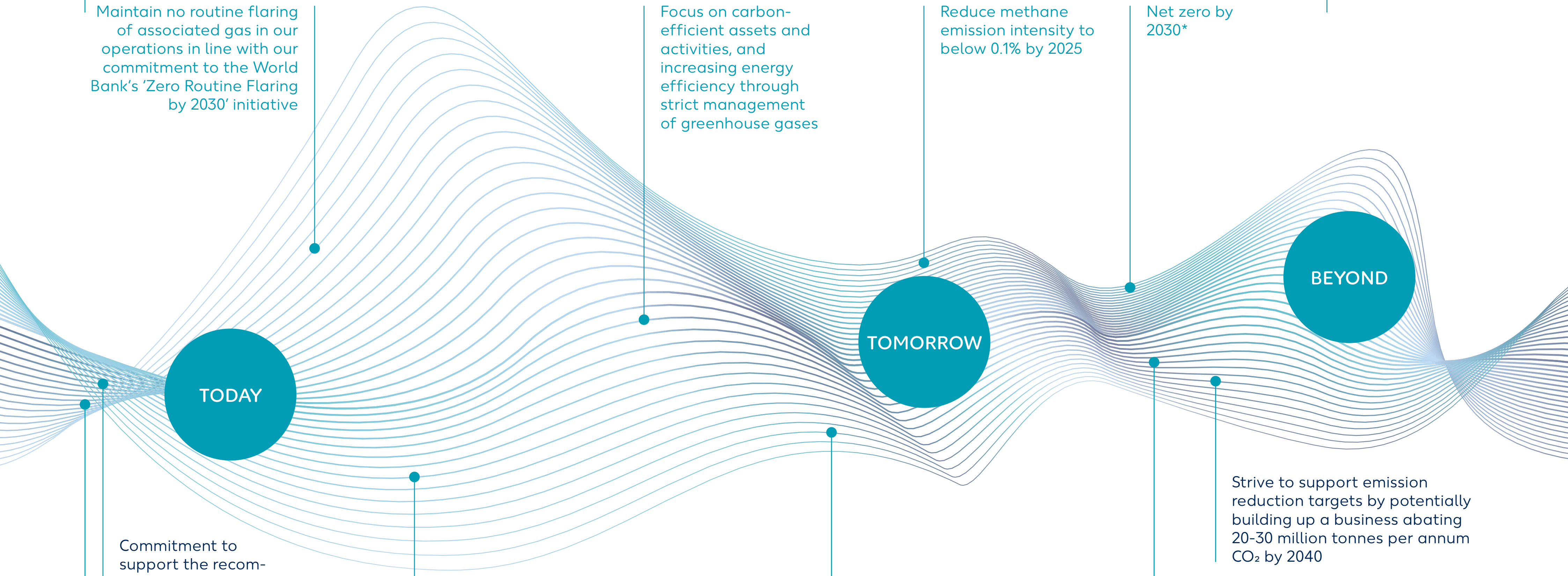
TARGETS

Maintain no routine flaring of associated gas in our operations in line with our commitment to the World Bank's 'Zero Routine Flaring by 2030' initiative

Focus on carbon-efficient assets and activities, and increasing energy efficiency through strict management of greenhouse gases

Reduce methane emission intensity to below 0.1% by 2025

Net zero by 2030*



Strive to support emission reduction targets by potentially building up a business abating 20-30 million tonnes per annum CO_2 by 2040

Commitment to support the recommendations of the Task Force on Climate-related Financial Disclosures

Member of the Oil and Gas Methane Partnership 2.0, a voluntary initiative to help companies reduce methane emissions by establishing a high level of data confidence

Investments in nature-based solutions (such as forest protection and reforestation) to compensate for unavoidable emissions

Reduce Scope 3 greenhouse gas emissions through application of hydrogen technologies and CCS

Founding member of the Methane Guiding Principles industry initiative

* Scope 1 and 2; operated and non-operated at equity share basis

OUR NEXT STEPS

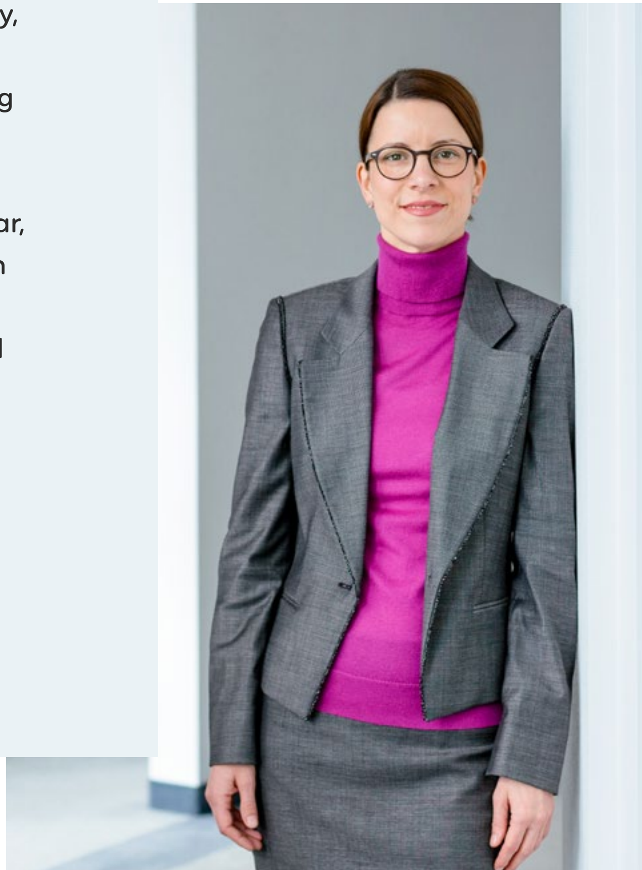
As Europe's leading independent natural gas and oil company, we are determined to play a key role in the energy transition, delivering low-cost, reliable energy to customers and ensuring a safe and secure energy supply. And we have set ambitious and measurable targets to further reduce our emissions[1] and contribute to the global climate targets. In the past fiscal year, we made a significant step in this direction/on this path. With our new Carbon Management & Hydrogen division, we are already developing solutions to achieve decarbonisation and ensure a sustainable supply of energy for tomorrow.

The following three stories exemplify **where we stand**, as well as what we are doing in the fields of **hydrogen projects, CO_2 storage** and **digitalisation**.

INTERVIEW WITH NADJA BRAUHARDT

CREATING BEST SOLUTIONS TOGETHER

Wintershall Dea's contribution to the energy transition



Climate change and the associated transformation are among the biggest shared challenges the world is facing today. Wintershall Dea has already taken concrete steps along this path and is prepared to take many more to support the energy transition – today, tomorrow and beyond.

The key to responding to that challenge is our Energy Transition Pathway (ETP), with the target to reduce our GHG footprint to net zero by 2030[1], which provides the strategic framework for taking action. In an interview, Nadja Brauhardt, Vice President Sustainability, talks about how Wintershall Dea plans to achieve its energy transition targets.

Nadja Brauhardt
Vice President Sustainability

[1] Scope 1 and Scope 2, operated and non-operated at equity share basis

Nadja, how does Wintershall Dea plan to achieve its energy transition targets?

To this end, we have defined our sustainability strategy, which is incorporated into the Company's strategy. Our ESG principles – our rules for environmental, social and governance matters – provide the overarching guidance. We are constantly working on integrating ESG aspects into our activities. To achieve our goals for the environment and the energy transition in particular, we launched the Energy Transition Pathway in 2020 focusing on portfolio optimisation, strict emission management, alternative technologies and compensation – with the clear goal to become net zero for our Scope 1 and 2 emissions by 2030.

Where do the challenges lie?

Climate change shows that sustainability is not always black and white. The International Energy Agency in its 2021 World Energy Outlook sees an important role especially for natural gas but also for oil in the supply mix for decades to come, even as the scenarios differ significantly. Meeting the growing global need for reliable and affordable energy and helping to mitigate climate change are often seen as two opposing goals. But both must go hand in hand. That's not easy, but we have accepted the challenge. Our Energy Transition Pathway is set to contribute to sustainable, responsible and profitable gas and oil production in a low-carbon environment.

How do you ensure that Wintershall Dea remains on track to deliver the targeted performance?

Climate protection is a joint effort. Everybody needs to contribute. At Wintershall Dea, we have established robust governance of the related four ETP pillars, including the oversight by a Board-led Steering Committee. We have also incorporated clear expectations into the balance scorecards of our leadership team. My team is monitoring and constantly reviewing our sustainability performance, supported by a network of internal interdisciplinary sustainability experts. Independent ESG ratings reflect the quality of our work, especially when it comes to investor expectations. I am proud that Sustainalytics, a leading ESG risk rating agency, has rated Wintershall Dea among the best industry performers in its ESG risk rating. We belong to the 4th percentile of the industry group Oil & Gas Producers.

> "Sustainability is never black and white. We are taking bold decisions for a sustainable future."

Nadja Brauhardt
Vice President Sustainability

Climate protection is a joint effort. Wintershall Dea participates and has set itself concrete targets.

How do you intend to drive the topic forward?

We have set ourselves concrete climate targets, which now need to be achieved. Sustainability is not an option – it is a must, and not only for ensuring our own future. We take this responsibility very seriously at Wintershall Dea and are taking bold decisions for a sustainable future.

REUSE TO REDUCE

CO_2 storage plays an essential role in reducing emissions

Hugo Dijkgraaf, Chief Technology Officer of Wintershall Dea, has taken his place at the Nini A production platform and looks out to the Danish North Sea. Yet the real music is playing out beneath his feet in the depleted oil field Nini West. The oil is gone from the reservoirs, but now those same rocks offer plenty of space for CO_2. Carbon capture and storage, or CCS for short, is the name of the technology that is used to capture the CO_2 produced by the combustion of fossil fuels and then store it under pressure. CCS offers an effective way to help to decarbonise sectors where CO_2 emissions are generally unavoidable, such as the steel and cement industries, or to split off the CO_2 that accrues during the production of blue hydrogen from natural gas.

"Project Greensand with Nini West is well on its way to becoming an international model and benchmark for CCS," Dijkgraaf says. INEOS E&P Denmark continue to operate the "dry" oil field, with Wintershall Dea being a very active partner. Both companies also form the core of the Greensand CCS project consortium, which includes an additional 21 business entities and organisations. To mark the start of the pilot phase, a few representatives of the project partners have met on the platform, which is located approximately 150 kilometres off the western coast of Denmark.

"Project Greensand is one of our CCS lighthouse projects."

Andreas Szabados
Project Manager Greensand

"Project Greensand is one of our lighthouse projects on CCS that we are involved in with the goal of achieving the climate targets for Denmark," Andreas Szabados, project manager for Greensand CCS, explains. Wintershall Dea is committed to achieving net zero Scope 1 and 2 greenhouse gas emissions for all of its exploration and production activities by 2030. It intends to significantly cut the Scope 3 emissions as well, most of which are generally caused by society via the combustion or further refinement of oil and gas.

CO_2 injections to start in late 2022

Going forward, Greensand may provide a way to deal with such emissions. The goal for the current pilot phase is to demonstrate that storing CO_2 in the offshore reservoir is safe, cost-efficient and eco-friendly. In November 2020, the Norwegian certification body DNV issued an independent confirmation that the location is suitable for such storage, opening the door to further exploration. CO_2 injections are now scheduled to start in late 2022 or early 2023. The general approach is to capture emissions at emitters' sites and transport them to the Nini A site by ship. In Phase 2 of the project, CO_2 will first be injected as a test before large-scale storage activity is realised in 2025. The consortium believes that the area holds safe storage potential of up to 1.5 million tonnes of CO_2 per year from 2025 at the Nini A site, increasing to a potential peak of 8 million tonnes per year by 2030 including the other offshore platforms Nini East, Cecilie and Siri in the Siri Fairway – one-quarter of Denmark's total annual emissions.

For Hugo Dijkgraaf, Chief Technology Officer, Greensand is therefore an important project for both Denmark and Europe as a whole. "It allows us to show how unavoidable industrial emissions, and even CO_2 generated during the necessary production of blue hydrogen, can be safely stored. That means a clear win-win situation for the climate and the economy." According to Dijkgraaf, the significance is also tremendous for Wintershall Dea itself: "CCS, along with gas-based hydrogen, plays a crucial role towards our emission reduction targets. Thanks to our

OUR FOUR HYPOTHESES ON CCS

#1
Europe will only achieve its ambitious climate targets with CCS

#2
CCS enables net zero in industry

#3
Europe can become the CCS frontrunner with the support of policymakers

#4
CCS paves the way for a transition to a future hydrogen market

Find out more

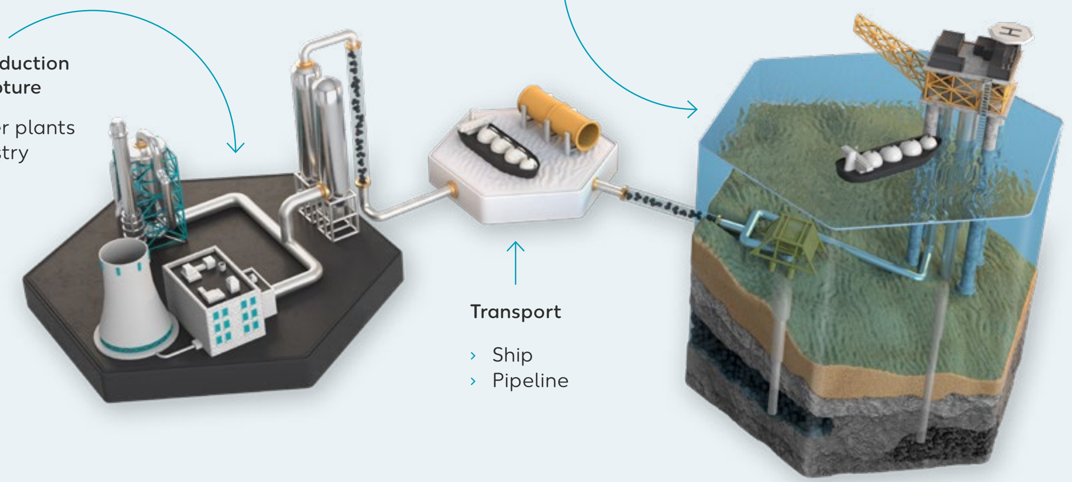
By late 2022 or early 2023 emissions captured at emitters' sites will be brought to the Nini A site by ship.

company's history, we already have best-in-class offshore expertise and extensive knowledge of subsoil and rock. Greensand is now helping to tremendously advance our practical understanding when it comes to CO_2 storage and transport. Oil and gas companies are naturally best positioned to play an integral part in CCS, since they have already been using the technology for decades.

In December 2021 the project was awarded with the funding of DKK 197 million (€26 million) by the Danish Energy Agency. The support by the Danish government recognises that CCS is essential for delivering climate goals in Denmark and Europe and demonstrating the potential of CO_2 storage in the North Sea."

HOW DOES CCS WORK?

Carbon capture and storage (CCS) involves collecting CO_2 from industry or hydrogen production on site, transporting it to a reservoir and then storing it at great depths. Underground storage makes it possible to capture up to 95% of the CO_2 produced from industrial processes and safely store it under the surface.



Familiar with the region and the sea

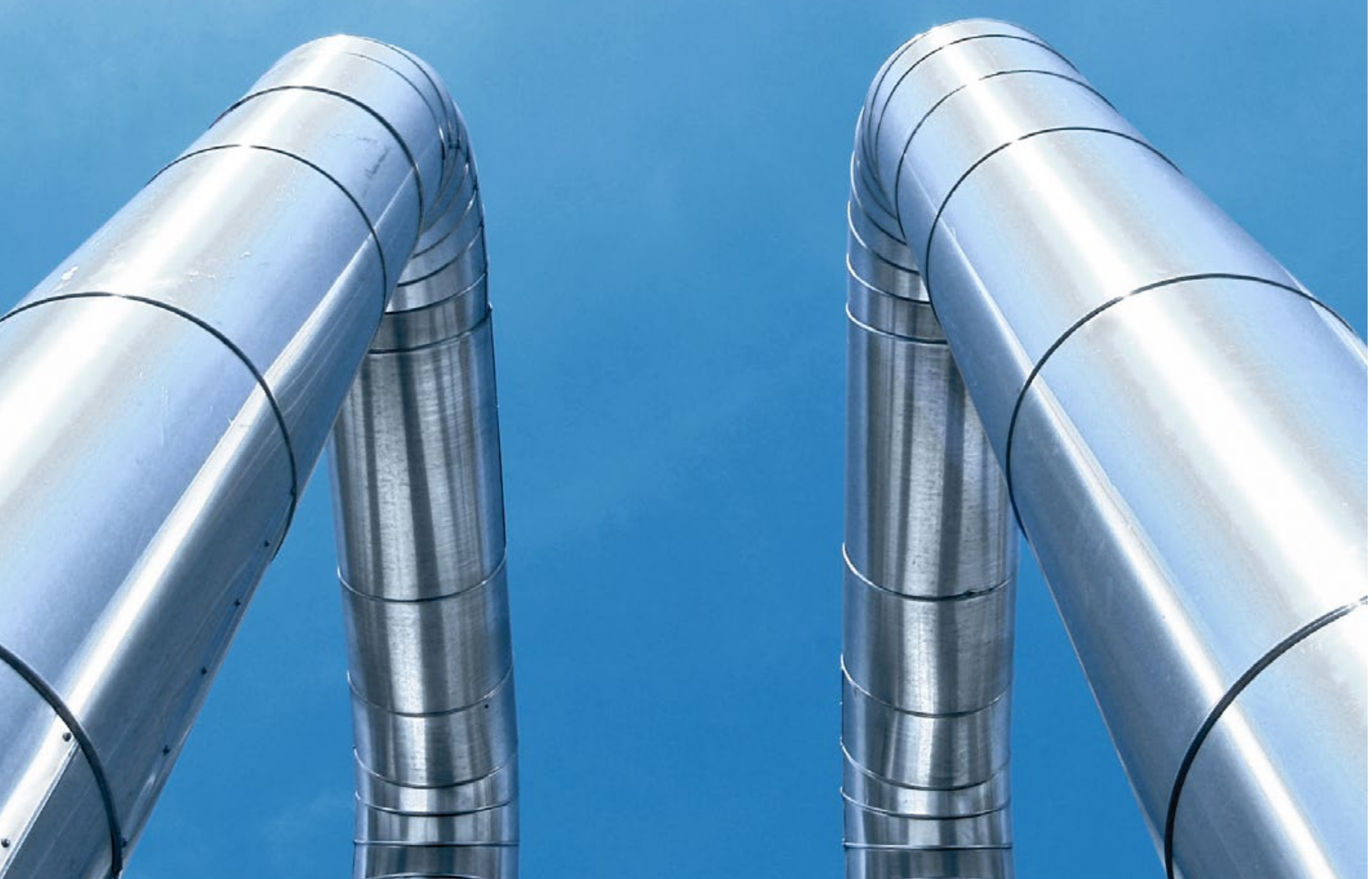
With decades of exploration activity in the North Sea under its belt, Wintershall Dea's familiarity and knowledge extends well beyond the reservoirs of Danish Siri Fairway. We are partner in the Equinor operated Snøhvit gas field where CO_2 is separated from the natural gas stream and injected back into safe rock formations below the gas reservoirs. We use this know how and capability to drive our CCS vision further. A screening study on the Norwegian Continental Shelf for suitable CO_2 storage locations has yielded very promising results. With this so-called saline aquifer storage, most of the CO_2 stored underground will be dissolved in the salty subsurface water or simply stick to the rock. Only a small portion is trapped by geological seals. Over longer time spans, the CO_2 starts to mineralise into carbonate-type rocks. Dijkgraaf says: "We will take care of safely storing the CO_2 during the operations phase. When the storage is full, after many years of CO_2 injection, we will plug the wells and monitor to see that no leakage occurs. Once that is proven, the reservoir will be handed back to Norwegian state."

> "Project Greensand is now helping to tremendously advance our practical understanding and the business case of CCS."

Hugo Dijkgraaf
Chief Technology Officer

FILLING THE GAP

Hydrogen from natural gas is part of the solution



At Wintershall Dea's headquarters in Kassel, Margarethe Kleczar, who leads the Carbon Management & Hydrogen – Project Planning & Development department, is engaged in a lively debate with several colleagues. The conversation revolves around how to ensure energy provision and mobility in the near and distant future by producing sufficient amounts of hydrogen in a GHG emission neutral manner from natural gas. The process concerned simultaneously decarbonises the gas. Alongside CO_2 storage, this type of natural gas use is the hot topic which the Carbon Management & Hydrogen unit is using to drive forward research projects internally and with external partners.

The team's work is a very practical way of implementing Wintershall Dea's sustainability strategy, which focuses on future-proof energy sources such as hydrogen in order to combat climate change. When it comes to hydrogen, though, it is important to be aware of the range of different types. Germany has been producing and consuming hydrogen for decades – the current figure is around 55 to 60 TWh. However, almost all of this is so-called grey hydrogen, which means associated CO_2 emissions are released into the atmosphere. In the future, what will be needed for the energy transition are enormous amounts of CO_2-free green hydrogen using renewable energy, as well as blue and turquoise hydrogen from natural gas. The Federal Ministry for Economic Affairs and Climate Action expects Germany to need up to 110 TWh of this type of energy by 2030, while demand across the EU could reach up to 665 TWh in the same period.

HYDROGEN COLOURS EXPLAINED

Blue hydrogen
is produced from natural gas through a process known as steam reforming. Heat and water are added in order to convert the methane contained in natural gas into hydrogen and CO_2. The resulting CO_2 is captured from the process and stored safely in underground reservoirs underneath the sea.

Turquoise hydrogen
is obtained during methane pyrolysis, which does not generate any CO_2 emissions. The methane contained in natural gas is split into hydrogen and solid carbon using green electricity. The solid carbon can then be used for industrial purposes or in new materials.

Green hydrogen
is generated from water using green electricity by splitting water into hydrogen and oxygen through a process known as electrolysis.

Natural gas as a second mainstay

In its National Hydrogen Strategy published in summer 2020, the German federal government expects a hydrogen demand of up to 110 TWh in 2030 with an expected green hydrogen production of 14 TWh. Therefore, it is becoming increasingly consensus that we cannot rely merely on green hydrogen in the short- and medium-term to meet the growing demand and to ramp up a hydrogen market in Germany. Similar to the German market, the projections for the European Union's hydrogen market indicate in the best-case scenario, that green hydrogen will cover around half of the accumulated, predicted 665 TWh of the EU's future hydrogen demand in 2030. That is why the European Commission's hydrogen strategy acknowledges the need for „low-carbon hydrogen" to meet the market's demand in the foreseeable future. However, thanks to enormous reserves in and around Europe, gas is able to act as a second mainstay to fill the gap – in the form of natural gas today, and as sustainable hydrogen in the future. "Along with green, we need to give more priority to blue and turquoise. If politicians and societies want it, CO_2-neutral hydrogen from natural gas can soon be available worldwide to power heavy duty vehicles, heat homes, store energy and, above all, support high-emission sectors, such as the chemical or the steel industry," says Kleczar.

The accelerating pace of climate change requires rapid solutions for eliminating CO_2 emissions in the foreseeable future. More than 30 electrolysers have already been set up in Germany to produce green hydrogen but almost exclusively under research and demonstration projects. "With our products, we want to contribute more to the swift solutions being called for. That's why we are working hard to develop new technologies," says Klaus Langemann, Senior Vice President Carbon Management & Hydrogen, who is also participating in the discussion. Langemann

> "We believe that blue hydrogen is an essential option to decarbonise our society and especially the heavy industries."

Klaus Langemann
Senior Vice President
Carbon Management & Hydrogen

Under the right conditions, hydrogen from natural gas will soon be capable of powering trucks and much more.

"The advantage of blue hydrogen compared with green is that we can offer hydrogen from natural gas cheaper, faster and in large quantities right from the start."

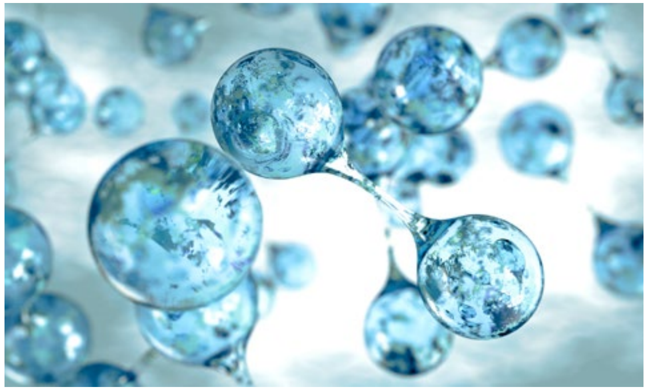
Margarethe Kleczar
Vice President Planning & Development for CCS & Hydrogen

established the division last year within the Technology & Innovation area. "We believe that natural gas-based hydrogen is a necessary option for the future. Gas and oil companies are currently seen as part of the problem – we see ourselves as part of the solution."

Several methods for decarbonising natural gas

Decarbonising natural gas and generating hydrogen from fossil fuels in this way without emitting CO_2 is possible using various methods. "The advantage of blue hydrogen compared with green is that we can offer hydrogen from natural gas cheaper, faster and in large quantities right from the start/from the very beginning because proven technologies already exist," stresses Kleczar. Blue hydrogen, for example, is merely the next logical step after grey hydrogen. Both types require the established, conventional method of steam reforming, which delivers hydrogen production and CO_2 as a by-product. Instead of escaping into

Blue hydrogen is necessary if we are to implement rapid solutions in energy supply.



OUR FOUR HYPOTHESES ON HYDROGEN

#1
We must now establish a hydrogen market

#2
Hydrogen from natural gas is necessary to rapidly scale the market

#3
Hydrogen from natural gas is essential to decarbonise industry and the transport sector

#4
A technology-open energy policy in Germany and Europe can dramatically reduce the cost of the energy transition

Find out more

the atmosphere as it does now, the CO_2 could be safely stored in areas such as depleted gas and oil fields or in deep layers of permeable rock, known as saline aquifers. The topic of CO_2 storage has recently resurfaced more prominently in the climate debate, and Wintershall Dea is pursuing a number of promising projects in this segment.

Methane pyrolysis offers tremendous potential

The development of methane pyrolysis to produce turquoise hydrogen is at an even earlier stage. This technology uses green electricity to split natural gas into hydrogen and solid carbon at temperatures of around 1,000 degrees Celsius. Solid carbon is a valuable raw material that can be used in industry to manufacture tyres, plastic and rubber, for example. "Some work still needs to be done to commercialise methane pyrolysis. But the prospect of leaving only a solid residue and no CO_2 really sets it apart," says Michael Olbricht, Process Engineer CM&H. The Carbon Management & Hydrogen team therefore entered into various partnerships in 2020 and 2021, one of which took them to the Karlsruhe Institute of Technology (KIT). The aim of the project there, which is initially due to last three years, is to lay the foundations for the future industrial use of hydrogen from methane pyrolysis, so that a pilot facility can be developed on this basis once the project is completed. Suitable reactor material has already been identified, and the effect of impurities in the gas stream is under investigation.

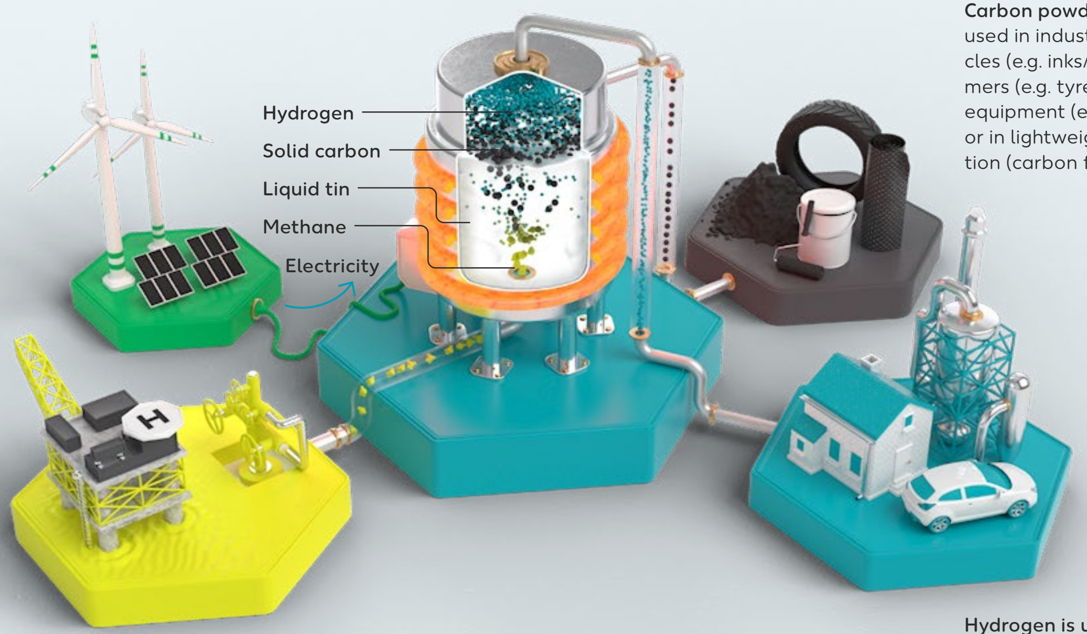
A similar goal is being pursued under a cooperation agreement together with the utility company VNG to build a methane pyrolysis facility to produce turquoise hydrogen in Germany. The technology is based on a process designed by the British company HiiROC in which Wintershall Dea has previously invested in. The pilot facility is scheduled to begin operating in 2023 with an annual capacity of around 5 gigawatt hours, making it one of the first of its kind to generate turquoise hydrogen in Germany and Europe.

"Some work still needs to be done to commercialise methane pyrolysis. But the prospect of leaving only a solid residue and no CO_2 really sets it apart."

Michael Olbricht
Process Engineer Carbon Management & Hydrogen

HOW DOES METHANE PYROLYSIS WORK?

Methane pyrolysis splits natural gas into its elementary components – i.e. gaseous hydrogen and solid carbon. What is unique about this process is that, in contrast to conventional steam reforming for the production of blue hydrogen, no CO_2 emissions are generated, and the energy efficiency of its production is at least 5 times higher than for green hydrogen.



Carbon powder can be used in industry for particles (e.g. inks/paints), polymers (e.g. tyres), high-tech equipment (e.g. batteries) or in lightweight construction (carbon fibres).

Hydrogen is used in industry, transport and private households for electricity and heat from a fuel cell combined heat and power plant, for example.

INTERVIEW WITH KATHRIN DUFOUR

EFFICIENCY THROUGH DATA

Digitalisation is key to achieving our sustainability goals

The European Union's aim to become greenhouse gas neutral by 2050 is a goal that Wintershall Dea fully supports. As Europe's leading independent gas and oil company, we are determined to play an important role in the energy transition. In November 2020, we published our Energy Transition Pathway with clearly defined sustainability ambitions and targets and a high-level road map to implementation. Achieving these goals will depend hugely on successful digitalisation at all levels of the company. Wintershall Dea has made a great deal of progress in this area recently. In an interview, Senior Vice President Digitalisation & Technology Kathrin Dufour explains how the company is taking a wide range of different digitalisation approaches to achieve its sustainability goals and produce more efficiently and effectively.

On the Mittelplate drilling and production island in the Wadden Sea, Wintershall Dea is already using a digital twin for real-time data measurement.

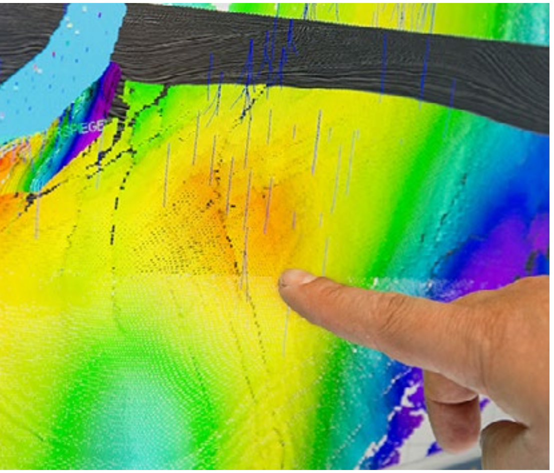
A digital energy management system helps to address and minimise sources of emissions and energy costs.

Kathrin, how are you driving digitalisation forward at Wintershall Dea in a sustainable direction?

The focus of our business, the exploration and production of natural gas and crude oil, may be fossil-based for now, but our solutions and our mindset have always been state-of-the-art – and never more so than today. We know that we can utilise digital technologies extremely well to achieve our goals: more effective, greater efficiency and fewer emissions. In 2021, we set up a special new division, Digitalisation & Technology, to address this topic. Our Energy Transition Pathway sets clear targets, such as reducing the Scope 1 and Scope 2 greenhouse gas emissions of our upstream activities (operated and non-operated) to net zero on an equity share basis by 2030. We have a clear idea about how digitalisation can help us to achieve these targets. We strive for continuous improvement in our data-driven decision-making and the further optimisation of our processes, supported by the corresponding technology and innovation.

Kathrin Dufour
Senior Vice President
Digitalisation &
Technology

"We have a clear plan of how we can achieve our sustainability goals with the help of digitalisation."



A typical digital application is the Exploration Advisory Tool (EAT), which significantly simplifies the development of new deposits.

What does that look like in reality?

On the one hand, data-driven decision-making and digital technologies need as much quality data and information as possible. On the other hand, all relevant data has to be available to the respective users whenever they need it. In the past, we were only able to access and utilise a fraction of our data, so we implemented a cloud-based data integration platform, our Wintershall Dea Data Hub, that collates, structures and contextualises all of our company data – all while respecting data protection regulations, of course.

There are many benefits to this platform that enable our colleagues across the company to access the data relevant for their daily work. By breaking up data silos and connecting information across domains, completely new insights can be created, tasks automated and process delivery times shortened. In concrete terms, this platform will allow engineers to better understand where emissions are being produced. The next step is to use this data as a basis for digital applications to pinpoint machinery or processes that are not running perfectly and optimise them to achieve greater sustainability.

What kind of digital applications are we talking about here?

In exploration, for example, we have been using a digital subsurface assistant since 2020 that helps our specialists evaluate new areas. This Exploration Advisory Tool, or EAT for short, is a cognitive search engine that we developed in partnership with IBM. EAT uses artificial intelligence to filter out relevant exploration data from documents with a high degree of precision in the blink of an eye. The tool "thinks" the same way a geologist would. Not only can it find information, but it can also establish connections between different concepts, such as umbrella terms like "formation" and "reservoir", and, in a manner of speaking, read between the lines. The tool saves a great deal of time for our experts, who would otherwise have to evaluate documents themselves. It also removes the element of human error that could have an impact on the environment. EAT is a digital success story that has already shown how valuable it is as part of a project in Egypt.

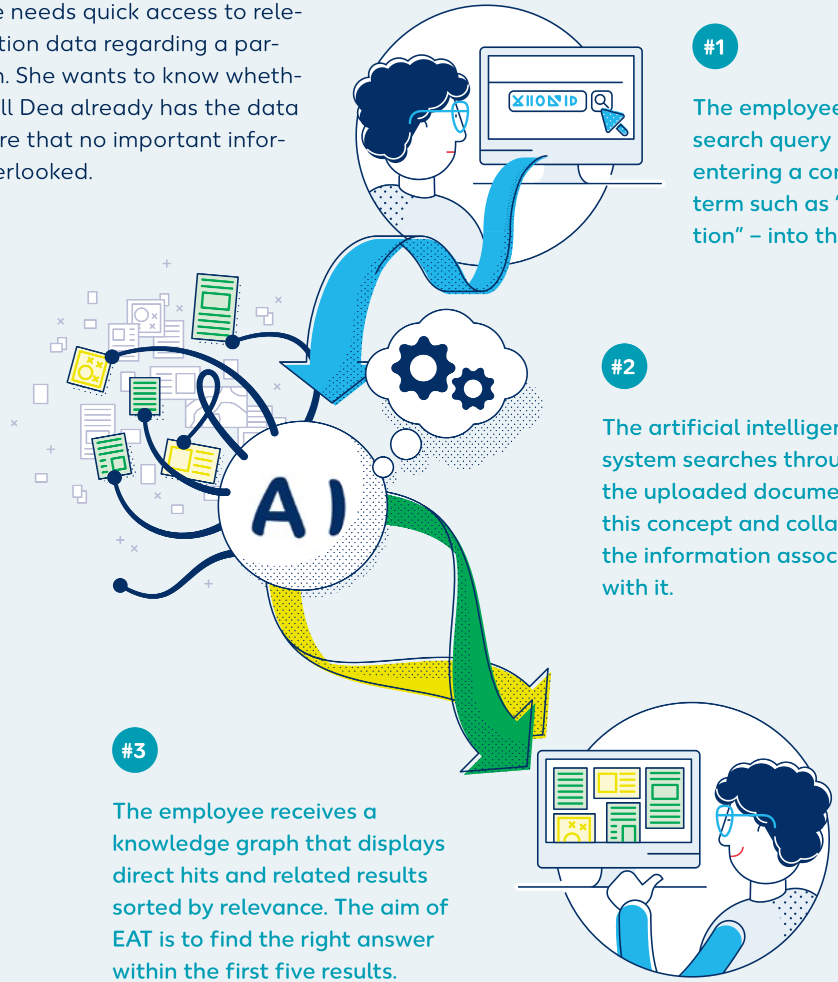
What about operations on drilling and production platforms?

At multiple sites, we have already deployed a number of digital technologies that help us to reduce emissions and move towards our net zero goal[1] for 2030. The digital energy management system in use on our Brage platform in Norway and at Mittelplate in Germany is a prime example. It analyses energy consumption and emissions data in real-time, creating the perfect starting point to address and minimise sources of emissions and energy costs. At the Mittelplate drilling and production island at the Wadden Sea

[1] Scope 1 and Scope 2, operated and non-operated at equity share basis

SMART SEARCHING WITH THE EXPLORATION ADVISORY TOOL

An employee needs quick access to relevant exploration data regarding a particular region. She wants to know whether Wintershall Dea already has the data and make sure that no important information is overlooked.



#1

The employee starts a search query in EAT by entering a concept – a term such as "formation" – into the system.

#2

The artificial intelligence (AI) system searches through all of the uploaded documents for this concept and collates all of the information associated with it.

#3

The employee receives a knowledge graph that displays direct hits and related results sorted by relevance. The aim of EAT is to find the right answer within the first five results.

national park in Schleswig-Holstein, we have even gone one step further by developing an exact digital copy, known as a digital twin, of both the drilling and production platform and the onshore station in Dieksand. The digital twin displays real-time data from each system and helps us to manage processes and the further development of the reservoir. The system also deploys artificial intelligence, allowing us to flag up potential problems and resolve them before they impact operations. All this translates into efficient production at low operating costs while minimising the impact on the environment

It sounds like you have been busy. What plans do you have for the future when it comes to digitalisation and sustainability?

Climate change is a global challenge. We are looking to equip all our locations with the right digital infrastructure for optimum sustainability as quickly as possible – regardless of specific national standards and requirements. "Transparency" is a major building block here. Only when we have a data basis – similar to what we have with our Energy Management System – to identify where there is potential for optimisation and technology at the individual assets, can we develop appropriate solutions. This also then enables us to measure our CO_2 footprint. In parallel, some of our digital solutions are already enabling greater sustainability. For example, we have developed an application that warns the control room of an oil rig before the flare system needs to be activated. This helps us not only to work more safely operationally, but also to actively reduce our CO_2 emissions.

FROM REALITY TO DIGITAL TWIN

The Mittelplate digital twin is a complete 3D representation of the real-world drilling and production platform. With the digital model, users can move around the Mittelplate drilling and production platform in virtual reality and view real-time data for each system, such as the production pumps. The digital twin consolidates all of the requisite data in one place before contextualising it and making it available to users. The data can then be assessed with ease using the dashboard or a mobile device.

> "Wintershall Dea is already using digital technologies that help to directly reduce emissions and contribute to our net zero goal[1] at multiple sites."

Felix Leicht
Vice President
Technology Applications

[1] Scope 1 and Scope 2, operated and non-operated at equity share basis

OUR PORTFOLIO

Wintershall Dea's portfolio benefits from diversification of geographies and asset classes. Our activities span four regions and 13[1] countries, with our footprint extending from Western Siberia to the southernmost platform in the world in Argentina.

We conduct our business in six segments:

- Northern Europe
- Russia
- Latin America (LATAM)
- Middle East/North Africa (MENA)
- Midstream
- Other[2]

The segments Northern Europe, Russia, Latin America and Middle East/North Africa comprise the E&P business and are further divided into eleven divisions, based on countries in the respective region. The E&P segments comprise exploration, appraisal, field development and production activities in the following divisions:

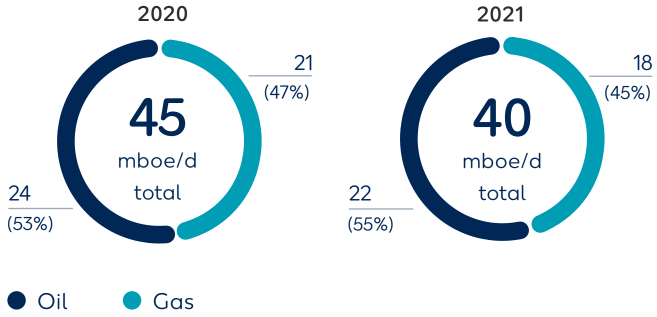
- Northern Europe: Germany, Norway, the Netherlands, United Kingdom and Denmark
- Russia
- Latin America: Argentina, Mexico and Brazil[1]
- Middle East/North Africa: Egypt, United Arab Emirates, Algeria and Libya

[1] Activities in Brazil are being terminated
[2] The Other segment includes the Management Board and the corporate functions, such as Global Exploration, Carbon Management and Hydrogen and the trading activities managed by the headquarters as well as holding companies.

NORTHERN EUROPE

- In Northern Europe, Wintershall Dea has operations in Germany, Norway, the Netherlands, United Kingdom and Denmark
- Combined production in 2021 was 206 mboe/d
- 2P reserves base is 716 million boe

PRODUCTION



2P reserves
150 mmboe

R/P
10 years

> "Stability through a continued focus on safe, reliable and efficient operations plus progression of energy transition projects."

Robert Frimpong
Business Unit Head Germany

Germany

Overview
The oil and gas industry in Germany is mature, with production slowly declining over time for most assets. Our activities are focused on our core production sites in northern Germany: Mittelplate crude oil production in Schleswig-Holstein, as well as natural gas production in the Verden area and oil production in Emlichheim, both of which are in Lower Saxony.

In line with our strategy in the country, we continued to optimise our portfolio with the divestment of several non-core interests during the year in Germany. Furthermore, we are actively engaged in the energy transition and are progressing our hydrogen prototype projects with partners to meet our climate targets.

In late 2021, we initiated a Leak Detection and Repair (LDAR) programme to mitigate methane emissions in line with our announced target to reduce corporate methane emissions intensity below 0.1% by 2025. The programme started in Germany as a pilot project and is expected to be rolled out worldwide after successful implementation.

Production

Mittelplate (100% working interest)
Our Mittelplate oil field, which started production in 1987, is the largest oil field in Germany. Located on the southern edge of the Wadden Sea national park in Schleswig-Holstein, it is regarded internationally as a benchmark for safe oil production in an environmentally sensitive area. In line with our net zero 2030[1] target, we switched the gas turbine-driven power supply of the Mittelplate drilling and production island to renewable power from shore in 2020, saving 36,000 tonnes of CO_2 per annum and making Mittelplate virtually a net zero[1] location. Mittelplate is also planned to be supplied by noiseless hydrogen-powered logistic vessels in one of the world's first zero-emission marine applications and applied at the World Heritage site Wadden Sea. This will save 275,000 litres of diesel fuel, equal to 700 tonnes of CO_2 annually.

Operations in 2021 were dominated by further implementing efficiency measures and optimisation of infill development wells aiming to maintain plateau production in the field. We continue to focus on the delivery of technically complex projects at Mittelplate. These not only enhance the ongoing development but provide us with critical know-how and competencies for follow-up projects all over the world and are highly valued by our international partners.

Völkersen (100% working interest)
In Völkersen, we operate the largest natural gas field in northern Germany, meeting about 11% of the overall German gas production. On stream since 1994, it is the most productive gas field in Germany. Operations in Völkersen continue to focus on optimising production and accelerate recovery and facilities enhancement measures to maintain production performance. The application of targeted automation and digitalisation within our operations remains a key component of continuous improvement and greater efficiency.

Emlichheim (90% working interest)
Situated near the Dutch border, the operated Emlichheim field is one of the oldest oil fields in Germany. Wintershall Dea commenced crude oil production there more than 70 years ago. Since that time, systematically applied reservoir management, production optimisation and EOR capabilities have maintained plateau production.

In 2021, we enhanced the safe and reliable transport of the crude oil produced in Emlichheim by commissioning a 14.4 kilometre pipeline that connects the fields processing facility directly with the operating site, from where it is routed to the refinery. The pipeline replaced the previous rail loading operations, decreasing the operational costs while improving environmental and safety performance.

[1] Scope 1 and Scope 2, operated and non-operated at equity share basis

Norway

Overview

Norway is Europe's second-largest supplier of natural gas and oil. Our Wintershall Dea Norge subsidiary has been active on the Norwegian Continental Shelf for almost 50 years and is now one of the leading gas and oil companies in the country. The Group currently participates in 96 licences, in 31 of them as the operator.

The portfolio is continuously being further upgraded with smart technical solutions, including advanced subsea technology for development and production, and energy-saving solutions such as hybrid battery power on our rigs and vessels.

Our portfolio in Norway consists of a large number of producing assets in different life cycles including key development projects Nova, Dvalin and Njord.

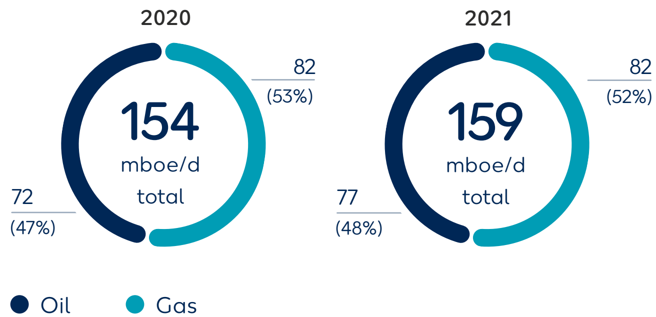
Operations

During 2021, we brought several Norwegian projects (e. g. Ærfugl Phase 2 and Solveig) safely on stream, which deliver high margin barrels. Furthermore, we progressed our remaining key development projects Dvalin, Njord and Nova, which are expected to come on stream in the second half of 2022. In terms of exploration activities, we delivered successful near-field exploration and appraisal wells. Our producing assets showed high production efficiency during 2021.

> "Norway is one of our main growth regions, providing a stable framework for long-term investment as well as numerous opportunities related to the ongoing energy transition such as electrification, blue Hydrogen and CCS."

Alv Solheim
Business Unit Head Norway

PRODUCTION



2P reserves
561 mmboe

R/P
10 years

Production

Vega (57% working interest)
Vega is an own-operated gas and condensate field located in the northern part of the North Sea, 28 kilometres west of the Gjøa facility. The production from six wells is transported to and processed at Gjøa. In order to increase production and recovery from the field, we prepared a three well infill campaign in 2021 that commenced late August and will be finalised during the first half of 2022. The first well was successfully drilled and completed in October 2021.

Maria (50% working interest)
Maria is an own-operated oil and gas field, which started production in 2017 from two subsea templates. The well stream is transported to the Kristin platform, where it is processed. Initial pressure support issues which resulted in low production volumes have been overcome by several implemented performance improvements. Production was increased in 2021 after the operational startup of two wells drilled in 2020. Further development activities are being matured.

Brage (35% working interest)
The own-operated Brage platform has been producing crude oil since 1993. A series of recent infill wells drilled are part of the continuous development of new areas of the field. The new drilling campaign started in April, with the first well delivered in October 2021.

Skarv (28% working interest)
The Skarv area comprises several gas and oil reservoirs, including Skarv, Idun, Ærfugl and Gråsel deposits. The area is located in the Norwegian Sea. Production started in December 2012 via a purpose-built floating production storage facility and off-loading unit (FPSO). Our partner and operator Aker BP completed the Ærfugl gas development bringing the remaining Phase 2 on stream ahead of schedule in November 2021. The smaller Gråsel subsea tieback came on stream in June, four months ahead of schedule. Further tie-in projects have continued to mature in 2021.

Aasta Hansteen (24% working interest)
The Aasta Hansteen field has been producing gas from four subsea templates since December 2018. The templates are tied back to a floating platform with a vertical cylindrical hull moored to the seabed (known as a "spar platform"). The field has delivered strong production with high production efficiency. The nearby Asterix project has selected Aasta Hansteen as host and is planned as a subsea tieback with an investment decision scheduled for 2022.

Gjøa (28% working interest)
Gjøa is a gas and oil field located in the North Sea that began production in 2010. The Gjøa facility is mainly supplied with power from shore and therefore generates low emissions and has a small CO_2 footprint. Gjøa serves as a production hub for other fields as well. Our operated Vega field is tied to the Gjøa facility for processing and export. Operations in 2021 contained the successful finalisation of the Gjøa P1 re-development, which started production in February 2021. In the second half of 2022, we expect to start up our own-operated Nova field, which will be tied in to Gjøa as well.

Edvard Grieg (15% working interest)
Edvard Grieg is an oil field that started production in 2015 and is located in the central North Sea. The field is developed through a fixed steel jacket installation with a full processing facility and is the first low carbon oil field certified by Intertek under the "CarbonClear" certification. The power from shore solution is expected to be in operation as of 2022, which will further reduce the emissions from the field. Three infill wells have been completed successfully during 2021, targeting new areas of the field. In Q4 2021, the Solveig field started production from three subsea satellite wells tied back to Edvard Grieg. Additionally, upcoming developments like Edvard Grieg's Segment D and Solveig Phase 2 have been further progressed and matured.

Snorre Unit (9% working interest)
The Snorre field was discovered in 1979 in the northern part of the North Sea and consists of Snorre A and B. In 2018, after decades of safe and reliable production, the field received consent to continue using the facilities to 2040. In the same year, the Snorre Expansion Project, comprising six additional subsea templates, was approved and came into production with the first wells in late 2020. During 2021, we continued the development activities successfully and a total of 18 wells were brought into production. The remaining six wells are expected to come on stream by the middle of 2022, one year ahead of schedule. Additionally, the Hywind Tampen offshore floating wind project is in execution and will supply the Snorre field with carbon neutrally produced electric power.

Development

Nova (45% working interest)
Nova is our own-operated oil field in the northern part of the North Sea close to the Gjøa field. The development consists of two four-slot subsea templates tied back to the Gjøa host platform wherefrom Nova will be provided with green power from shore. The subsea installation scope was finalised in 2021. Host platform modifications are progressing. Earlier in 2021, we completed the drilling of the top-hole sections of the planned six wells. The final drilling of the wells to target commenced towards the end of the year. Nova is on track and expected to come on stream in the second half of 2022.

Dvalin (55% working interest)
Dvalin is our operated gas field in the central part of the Norwegian Sea located north of the Heidrun facility, which is tied into one subsea template containing four gas producers. Development was completed and first gas was achieved in late 2020. However, during the commissioning phase, measurements showed that the gas flow contained a level of mercury that exceeded the maximum permitted level in the system. An onshore technical solution is being executed and start-up is expected by late 2022.

During 2021, we discovered additional volumes in the nearby Dvalin North field, which are expected to be tied into Dvalin and benefit from existing infrastructure.

Njord (50% working interest)
Njord Future is a major re-development project that aims to add an additional 20 years of production from the field. The field has been shut in since 2016 for extensive onshore upgrades and consists of Njord A, a floating integrated steel platform, and Njord B, a floating storage vessel (FSU). In Q4 2021, the Njord B modification scope was completed and the vessel left the yard. Once back in production, Njord will be the host for one existing third-party field, Hyme, and two new tieback fields, Bauge and Fenja. The project is expected to be commissioned in the fourth quarter of 2022.

Exploration

We currently hold stakes in 45 exploration licenses (excluding production assets) in Norway, thereof 15 own-operated. 16 of these licenses on the Norwegian Continental Shelf, including four as operator, were awarded in January 2021 by the Ministry for Petroleum and Energy as part of the 2020 Awards in Predefined Areas (APA). Furthermore, we participated in this year’s APA 2021 round and were awarded seven new licenses in January 2022, thereof four as operator, which will be effective as of March 2022.

In 2021, we were very successful with exploration in Norway. We drilled four successful exploration and three successful appraisal wells out of eight wells in total. The potential commercial discoveries contain the Solveig D well, which is close to the Edvard Grieg field, as well as the promising Dvalin North discovery in the vicinity of our own-operated Dvalin field, one of the largest discoveries in Norway of the last few years. The Dvalin North discovery is expected to hold 70-140 million boe. Furthermore, a new discovery Bergknapp Åre, located in the vicinity of our initial Bergknapp discovery and close to our own-operated Maria field, delivered expected estimated resources of 20-80 million boe. The minor Talisker East discovery, located close to our own-operated Brage field, delivered additional low cost hydrocarbon volumes.

The Netherlands, United Kingdom and Denmark

Overview

The majority of our activities in the Netherlands, United Kingdom and Denmark are managed through our 50% stake in Wintershall Noordzee, a 50/50 joint venture with Gazprom International.

The Netherlands

Wintershall Dea has been operating safely and efficiently in the Dutch North Sea for more than 50 years. Wintershall Noordzee has fully fledged operating and decommissioning capabilities and is highly advanced in low-cost, efficient offshore operations, complemented by its remote control centre in Den Helder, the Netherlands.

United Kingdom

Wintershall Noordzee holds and operates several licences in the United Kingdom. Gas production is clustered around the established Wingate gas field, which was discovered in 2008. Future activities will concentrate on the efficient extension of this area.

Denmark

Currently we are focussing on progressing our CCS activities in the Greensand project in Denmark. The project aims to validate the technical and commercial feasibility of CO_2 storage in the depleted Nini field in the Danish part of the North Sea in a cost-effective and environmentally safe manner.

"Wintershall Noordzee is well positioned to implement CCS projects and drive the energy transition forward."

Jone Hess
Business Unit Head NL-UK-DK

RUSSIA

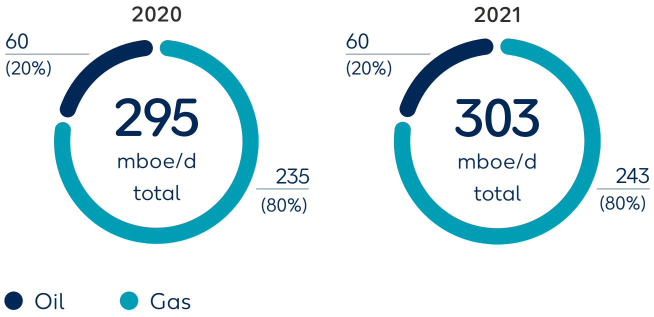
- In Russia, Wintershall Dea has activities in Western Siberia
- Combined production in 2021 was 303 mboe/d
- 2P reserves base is 2,116 million boe

Russia

Overview
Russia has the largest known gas reserves and the sixth-largest proven oil reserves worldwide. Wintershall Dea is involved in several joint venture projects for the production and development of gas and gas condensate in Western Siberia, together with PJSC Gazprom.

Relying on mutual dialogue and a long-standing relationship, both companies successfully operate three joint venture companies in Russia: Achimgaz, Achim Development and Severneftegazprom. Two of the companies operate in the Urengoyskoye field, which is one of the largest onshore gas fields in the world and is situated near the city of Novy Urengoy in Western Siberia, about 3,500 kilometres northeast of Moscow.

PRODUCTION



2P reserves
2,116 mmboe

R/P
19 years

> "Our Russian business has a long history of sustainable contribution to European energy security and climate targets. This will continue for many years to come with the startup of our latest project Achim Development."

Torsten Murin
Business Unit Head Russia

Wintershall Dea and Gazprom promote the extensive exchange of experience and know-how to support the core business activities of these joint ventures. Both companies are also investigating the feasibility of joint pilot projects in CCS and the development of hydrogen technologies based on natural gas.

In May 2021, in line with the strategic objectives to focus on low-cost gas production, Wintershall Dea transferred its 50% share in the Wolgodeminoil joint venture (WDO) to its longtime joint venture partner RITEK, a subsidiary of PJSC LUKOIL.

Production

Urengoyskoye field: Achimgaz (50% economic interest) and **Achim Development** (25% economic interest)
The Achimgaz joint venture, which produces gas and condensate from the Achimov layers in Area 1A of the Urengoyskoye field, celebrated a new production milestone in 2021: 25 million tonnes of condensate have been produced in the last 13 years.

In 2021, Achim Development, the second joint venture between Wintershall Dea and Gazprom to develop the hard-to-recover Achimov formations, successfully brought on stream Achim Development Areas 4A and 5A of the Urengoyskoye field. The field development of Areas 4A and 5A was organised in two overlapping phases, which ensured that the best available expertise in the development of the complex Achimov formations was fully used. The startup phase of the project development was completed in January 2021, with the first gas and gas condensate produced from Area 4A, followed by the startup of Area 5A in April. All wells were started up on time, within budget, and in accordance with the highest safety standards.

Further drilling of planned wells is ongoing to ensure the consecutive ramp-up of production in Areas 4A and 5A and to reach the planned yearly plateau production of 14 billion cubic metres in 2026.

Achim Development successfully completed a bridge facility in the amount of RUB 90 billion with a Russian commercial bank, allowing the joint venture to repay the initial shareholder loans from Wintershall Dea and Gazprom and further fund project development activities.

Both joint venture companies were affected by a fire at a third-party downstream gas condensate processing facility in Novy Urengoy that occurred in August 2021. Following the temporary suspension of production, which affected Areas 1A, 4A and 5A, the production was resumed and reached full planned capacity again in September 2021.

> "Along with the continuous optimisation of our operating facilities at Achimgaz, we now focus on transferring our know-how to our other joint ventures."

Ingo Neubert
Business Unit Head Achimgaz

Yuzhno-Russkoye field: Severneftegazprom
(35% economic interest)
The production from the Cenomanian layer at the Yuzhno-Russkoye gas field, operated by Severneftegazprom (SNGP), remained at the high level of 143 mboe/d throughout the year.

The development of the Turonian formation of the Yuzhno-Russkoye field is aimed to extend the life cycle of the field and secure plateau production for several years. The entire project includes the drilling of over 120 wells between 2020 and 2033. The drilling activities of the first part of the Turonian full field development were completed successfully in 2021. The gas from the Turonian formation accounted for approximately 30% of the annual production volume of SNGP in 2021. Construction activities for the second compressor station comprising six compressors were finished, and all six units were successfully tested in 2021.

LATIN AMERICA

- In Latin America, Wintershall Dea is active in Argentina, Mexico and Brazil[1]
- Combined production in 2021 was 70 mboe/d
- 2P reserves base is 184 million boe

Argentina

Overview
Wintershall Dea has been active in Argentina for more than 40 years and is the country's fifth-largest gas producer, with both operated and non-operated acreage in the Neuquén, Austral and Malvinas Basins. Today, our company has a stake in about 20 onshore and offshore fields.

In the southern part of the country, we work successfully with our partners TotalEnergies and Pan American Energy in the Cuenca Marina Austral 1 (CMA-1) concession, where we produce mainly gas from seven fields. The CMA-1 concession contributes approximately 16% of total domestic gas production in Argentina.

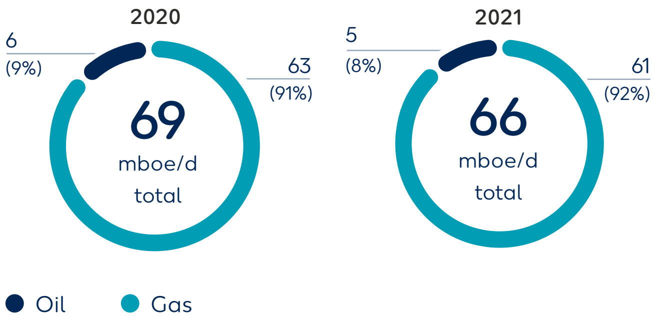
In the Neuquén province, Wintershall Dea has been active for more than 25 years, with current conventional production from Aguada Pichana Este and San Roque blocks. Building on that expertise, the company participates together with partners in the Aguada Pichana Este and San Roque blocks in the highly prolific Vaca Muerta shale formation.

[1] Activities in Brazil are being terminated

"Despite the challenging business environment, our operations in Argentina have continued to perform exceptionally, and we look forward to pursuing further value accretive investments."

Manfred Boeckmann
Business Unit Head Argentina

PRODUCTION



2P reserves
162 mmboe

R/P
7 years

In January 2022, following the strategic portfolio review, Wintershall Dea has reached an agreement with Vista on the transfer of our entire interest in the unconventional Aguada Federal and Bandurria Norte shale oil blocks. Corresponding contracts have been signed with an retroactive effect from 1 January 2022. The decision to divest is in-line with the global corporate strategy to focus on carbon efficient assets and activities.

Production

Cuenca Marina Austral (38% working interest)
CMA-1 began production in 1989 and consists of seven fields (Antares-Ara-Cañadón Alfa, Hidra, Ara South, Kaus, Carina, Aries and Vega-Pléyade) and five offshore platforms. Two onshore processing plants (Cañadón Alfa and Rio Cullen) receive and process production from the seven fields. All fields are located offshore, except Antares-Ara-Cañadón Alfa, which produces from both on- and offshore reservoirs. During 2021, the production from the CMA-1 concession was stable at the expected level, but the Vega Pléyade field was beginning to decline.

The development Fenix Phase I project is envisaged to be the next offshore development of CMA-1. Wintershall Dea, together with its partners TotalEnergies (operator) and Pan American Energy are currently preparing the project for final investment decision in 2022.

Following Fenix Phase I, additional incremental development phases in Fenix and Carina are envisaged.

Aguada Pichana Este V.M. (23% working interest)
The development of the already producing dry gas Vaca Muerta shale block is progressing according to plan with eight wells drilled in 2021 and further nine wells planned for 2022.

Vega Pléyade is connected to the onshore processing installations at Rio Cullen via a 77-km gas exporting pipeline.

Mexico

Overview

Mexico is one of the most attractive countries for hydrocarbons as it contains some of the largest proven reserves in the world.

Resulting from a farm-out bid round issued by Mexico's National Hydrocarbons Commission (CNH) in 2017, Wintershall Dea was awarded the operatorship of the onshore Ogarrio oilfield.

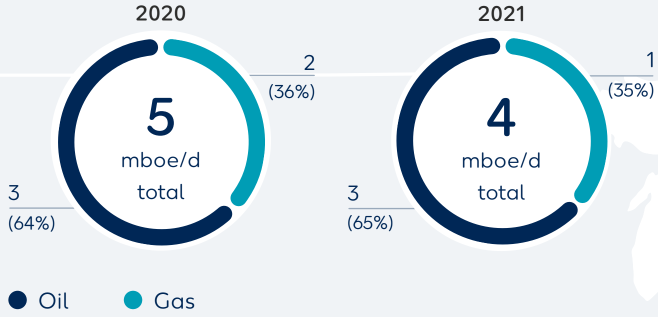
In addition, Wintershall Dea has material interests in ten offshore exploration blocks located in the Gulf of Mexico, where Wintershall Dea is the operator of three of these blocks.

With the acquisition of Sierra Oil & Gas in 2018, the company got hold of acreages in the Tampico-Misantla and the Sureste basins. The acquisition secured Wintershall Dea a participation in the particularly promising Block 7 in the Sureste basin, which contains a considerable share of the Zama discovery – one of the world's largest shallow-water discoveries in recent times, as well as Block 29 including the promising Polok and Chinwol discoveries.

"Mexico remains a key country for future growth, and during 2021 we continued to increase our growth optionality in the country."

Martin Jungbluth
Business Unit Head Mexico

PRODUCTION



2P reserves
23 mmboe

R/P
16 years

Production

In 2021, the production from our onshore Ogarrio field was above the expected level. In order to fully exploit the advantages of the field, in October, we re-started the water injection test in the central south area with one injector and several observation wells. The results of the test will be key for determining the envisioned water injection project's important reserves potential.

Development

Our offshore Zama field development in Block 7 of the Sureste Basin is progressing with the unitisation process still ongoing. Operatorship has been awarded to PEMEX with additional outstanding terms of the unitisation agreement still being negotiated. Technical work is ongoing to align the development concept between the Unit partners before a final investment decision is taken in the medium term. With gross contingent resources between 400 and 800 mmboe, the Zama project is one of the largest discoveries in recent years.

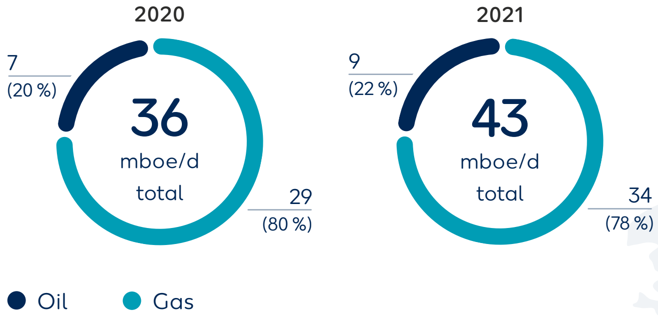
Exploration

Current exploration activities in Mexico focus around our ten exploration blocks in the Gulf of Mexico, three of which are located in the Tampico Basin and the other seven in the Sureste Basin. Wintershall Dea is the operator in three of those licenses, including Block 30, which was one of the most contested blocks during Bid Round 3.1. Wintershall Dea will commence its first operated drilling campaign with two wells in Block 30 in 2022. The exploration portfolio is complemented by the recent promising Polok and Chinwol discoveries in Block 29. The Polok discovery was successfully appraised in 2021 and potentially opens up a new play within Mexico's Salina Basin in the near future. The partnership is currently working on development options.

MIDDLE EAST AND NORTH AFRICA

- In the MENA region, Wintershall Dea is active in Egypt, the United Arab Emirates, Algeria and Libya.
- Combined production in 2021 was 55 mboe/d
- 2P reserves base is 357 million boe

PRODUCTION



2P reserves
47 mmboe

R/P
3 years

Egypt

Overview
Egypt is the second-largest natural gas producer and the largest non-OPEC oil producer in Africa, making it well-positioned to serve as an energy hub for the area. Wintershall Dea has been active in Egypt for over 45 years and has stakes in five on- and offshore concessions primarily centred around three key assets, West Nile Delta, Disouq and Gulf of Suez. In addition, Wintershall Dea is the operator in an exploration block, East Damanhour.

Production
Our producing assets have shown strong production performance and with the successful completion of the third and final stage of the West Nile Delta project we have added significant volumes to our portfolio in Egypt.

"The startup of Raven was a major step towards our strategic goals. We are looking forward to providing more gas to the growing Egyptian market."

Sameh Sabry
Business Unit Head Egypt

West Nile Delta (17% working interest)
West Nile Delta (WND), located offshore of Egypt, is one of the largest projects in the Mediterranean Sea and provides critical gas supply to the domestic market. It consists of five fields with 25 producing wells connected to the onshore processing plant via three long-distance subsea tiebacks. After the production of Raven was successfully started up in February 2021, production was gradually ramped up in the new facilities of the Raven Plant. Since September, production has reached levels close to the expected peak production of 900 mmscf/d and approximately 30,000 barrels of condensate per day (gross production). Further field development planning is ongoing.

Gulf of Suez (100% working interest)
With 38 years in production, Ras Budran and Zeit Bay are among the oldest producing oil fields in Egypt operated by the Suez Oil Company (SUCO), Wintershall Dea's joint venture with the Egyptian General Petroleum Corporation (EGPC). In 2021, following the strategic portfolio review, Wintershall Dea has reached an agreement with the government of Egypt to assign its entire interest in the Gulf of Suez to EGPC. A corresponding contract has been signed with a retroactive effect from 1 January 2022.

Disouq (100% working interest)
The onshore gas concession Disouq is located in the gas-rich Nile Delta region of Egypt and has been in production since 2013. Currently, the entire project consists of 14 producing wells and is operated by Disouco, a joint venture between Wintershall Dea and the Egyptian Natural Gas Holding Company (EGAS).

The North West Sidi Ghazi development project is being developed near the current production area, and first gas is expected in 2023.

Exploration

East Damanhour (40% working interest)
Current exploration activities in Egypt focus on value-driven, near-field exploration potential within the Nile Delta concessions. The company completed a successful farm-out of 60% of Nile Delta Block 10, East Damanhour, adjacent to the existing infrastructure in Disouq in 2021, and remained the operator of Block 10. The exploration drilling campaign commenced in early November 2021 and will continue throughout 2022/23, with a total of five to seven exploration wells planned. Any gas discoveries are planned to be tied in efficiently into the Disouq facilities.

United Arab Emirates

Overview

As one of the world's largest holders of oil and gas reserves, the United Arab Emirates (UAE) is a globally important centre for energy supply and a focus area for Wintershall Dea. Our activities in the UAE began in 2010 when we opened a branch office and established a joint venture with the national oil company ADNOC and international partner OMV.

In November 2018, we acceded the Ghasha concession with a 10% interest. In addition to ADNOC (55%) and Wintershall Dea, ENI, OMV and LUKOIL are also partnering in this mega project.

Development

The Ghasha concession is located in the Arabian Gulf offshore Abu Dhabi and consists of three major gas and condensate development projects Hail & Ghasha East, Dalma and SARB as well as other offshore oil, gas and condensate fields. The fields in the concession are expected to produce around 1.5 billion cubic feet of natural gas and 120,000 barrels of liquids per day. The Ghasha mega-project is the world's largest offshore sour gas development. The gas produced will be instrumental in providing electricity to more than two million homes in the UAE by around the middle of the decade.

The projects in the Ghasha concession are undergoing extensive studies to identify further optimisation potential within the sour gas treatment and the addition of CO_2 capture facilities to significantly improve the environmental impact in line with our net zero 2030 target[1].

Hail & Ghasha-East

The largest project within the Ghasha concession is the Hail & Ghasha-East development, where a total of ten artificial islands are being built. These islands will accommodate nine drill centres and an offshore processing plant. An onshore facility will be built for the processing of the ultra-sour gas and liquids. Wintershall Dea is directly collaborating with the operator to optimise processes and minimise emissions and cost. The construction of those islands and early civil works onshore are ongoing, with more than 60% completed. A thorough cost optimisation initiative has been carried out and a revised Front-End Engineering and Design (FEED) study has recently been awarded to incorporate the optimisation measures with the target to increase the efficiency of the project.

Dalma

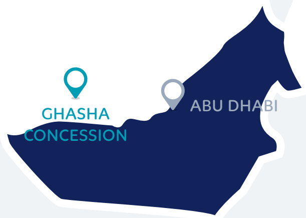
The Dalma gas project encompasses the development of three gas fields from four well head towers. The project was impacted by the pandemic, but with EPC contracts now re-awarded and drilling almost completed, the project is moving ahead.

Satah al Razboot

On the SARB gas field, first appraisal wells have been drilled, and a pre-FEED study has been started. The jacket for the first well head tower was installed in April 2021, and an additional appraisal well was spudded in October 2021.

> "Whether drilling technically demanding wells, safely producing sour gas, or knowing what counts in ecologically sensitive areas: Wintershall Dea is bringing deep technical expertise to the UAE."

Helge Beuthan
Business Unit Head UAE



[1] Scope 1 and Scope 2, operated and non-operated at equity share basis

Algeria

Overview

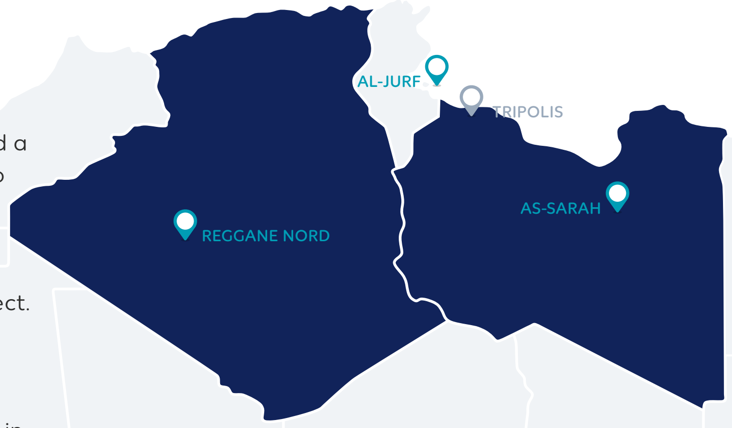
Algeria is the leading natural gas producer in Africa and a major gas exporter to Europe. The OPEC member is also one of the top three oil producers in Africa.

Wintershall Dea has been active in Algeria since 2002 and is currently producing from the Reggane Nord project.

Production

Reggane Nord (20% working interest)
The gas fields of the Reggane Nord project are located in south-western Algeria, one of the Earth's hottest regions: the Reggane Basin in the Sahara. It is located 1,500 kilometres from the capital, Algiers, and Algeria's Mediterranean coast. The project is operated by the Groupement Reggane Nord (GRN), representing its partners Sonatrach, Repsol, Edison and Wintershall Dea.

Wintershall Dea and its partners have built a central processing facility and significant infrastructure to process the gas collected from the wells, including 270 kilometres of gas collecting system and more than 160 kilometres of roads, as well as a 74-kilometre pipeline connecting the project to Algeria's export facilities. Following an extensive development programme, GRN celebrated first gas in 2017. The Reggane Nord project is commercially very attractive because of its low production costs and is expected to be in production until at least 2041. During the course of 2021, further production enhancement operations were successfully completed.



"Algeria is a very interesting country for us and we are further investigating business opportunities. In January 2022, we extended the Memorandum of Understanding (MoU) with Sonatrach, to include energy transition potentials."

Thomas Ruttmann
Business Unit Head Algeria/Libya

Libya

Overview

Oil reserves in Libya are the largest in Africa and among the ten largest globally. However since 2011, activities in the country have been affected by an unclear and difficult political situation. Since the October 2020 ceasefire, the security situation has allowed some operations to resume. Nonetheless, the situation remains critical and unpredictable, and Wintershall Dea is closely monitoring events.

Wintershall Dea has been involved in the exploration and production of crude oil in Libya since 1958.

Production

The company participates in crude oil production from nine onshore oil fields across contract areas 91 and 107 through its affiliate Wintershall Aktiengesellschaft (WIAG). After 54 years of own operatorship, in October 2020, WIAG handed over operatorship of contract areas 91 and 107 in the Eastern Sirte Basin to Sarir Oil Operations, a joint venture of WIAG with Libya's National Oil Corporation. Furthermore, Wintershall Dea operates the Area 58 exploration license on the Cyrenaica Plateau and areas 69, 70, 86 and 87 (formerly NC193) and 88 and 89 (formerly NC195) in the Sirte Basin. Since 2014, activities in these areas have been suspended due to the challenging security situation (force majeure).

Wintershall Dea also holds a 12.5% stake in the offshore oil production from the Al-Jurf platform in contract areas 15, 16, and 32 (formerly C137) located in the Mediterranean Sea and operated by Mabruk Oil Operations.

MIDSTREAM

Overview
The reliable and efficient transport of natural gas via high-pressure pipelines will continue to be of crucial importance for the security of energy supply and achieving Europe's climate protection goals. Wintershall Dea is involved in midstream projects and companies with a long track record and great outlook.

Together with PJSC Gazprom and other European energy companies, we have been contributing to creating and expanding the necessary transport systems on- and offshore for the last three decades.

Our independently operating subsidiaries transport gas through offshore and onshore pipelines to the European consumer market in the most efficient, low-cost and low-emissions way possible. Our strong presence in the gas midstream business provides us with an important source of predictable and stable price- and volume-independent earnings, complementing the inherently more cyclical upstream business. This business can also make a meaningful contribution to the fulfilment of European climate goals with the future transport of hydrogen.

Onshore Germany
Our gas transport activities started in Germany in the early 1990s. Today, they are combined within the WIGA Transport Beteiligungs-GmbH & Co. KG (WIGA), a joint venture of Wintershall Dea and Gazprom Germania GmbH, with equity interests of 50.02% and 49.98%, respectively.

The operationally independent subsidiaries of WIGA operate a high-pressure onshore pipeline network consisting of GASCADE's transportation network, OPAL and NEL. Nord Stream and Nord Stream 2 are connected to EU grids via OPAL and NEL, and EUGAL, respectively.

On 1 April 2021, with the commissioning of the second string, the European gas pipeline link EUGAL reached its full transport capacity of up to 55 billion m³ of natural gas per year. The first string has already been transporting natural gas since 1 January 2020.

WIGA Group Transportation Network
GASCADE Gastransport GmbH operates a fully regulated gas pipeline network throughout Germany. The network company offers its customers cutting-edge, competitive transport services over its own long-distance high-pressure pipeline network of 3,237 kilometres in length in the heart of Europe. The transportation network serves not only as a backbone for Germany, but also as a link connecting several European countries. GASCADE also actively engages in developing hydrogen transportation projects with its partners.

"Midstream is a profitable component of our portfolio, as it complements our upstream activities with stable and predictable earnings. The new and efficient infrastructure is contributing to the success of the European energy transition."

Margarita Hoffmann
Business Unit Head Midstream

NEL and OPAL (pipelines connecting Nord Stream to the European markets)
OPAL Gastransport GmbH & Co. KG operates one of the two connecting pipelines for Nord Stream. This partially regulated Baltic Sea Pipeline Link (OPAL) runs from Greifswald to the German-Czech border. The second connection pipeline, North European Natural Gas Pipeline (NEL/fully regulated), is operated by NEL Gastransport GmbH and runs from Greifswald westwards to Lower Saxony.

Offshore

Nord Stream (15.5% share ownership) is an offshore pipeline system with a capacity of approximately 55 billion cubic metres p.a., which connects Russia and Germany via two 1,224 kilometres subsea pipelines through the Baltic Sea. In its 10 years of successful, safe and reliable operations, Nord Stream has transported over 440 billion cubic metres of natural gas.

Wintershall Dea participates in Nord Stream 2 as a financial investor, having provided a €730 million loan to the project company. With a transport capacity of approximately 55 million cubic metres p.a., Nord Stream 2 also consists of two strings. Running largely parallel to the existing Nord Stream pipeline, this mechanically completed offshore pipeline, before commercial commissioning, is awaiting regulatory certification for its portion of assets in German territorial waters.

KEY E&P ASSETS OVERVIEW

Country	Asset	Wintershall Dea WI	Life cycle	Start of production	Operator	Partners
Algeria	Reggane Nord	19.50%	Production	2017	Groupement Reggane Nord	Sonatrach (40%), Repsol (29.25%), Edison (11.25%)
Argentina	CMA-1	37.50%	Production	1989	Total	Total (37.50%), Pan American Energy (25%)
	Aguada Pichana Este Residual	27.27%	Production	–	Total	Total (27.27%), YPF (27.27%) Pan American (18.19%)
	Aguada Pichana Este Vaca Muerte	22.50%	Production	–	Total	Total (41%), YPF (22.50%) Pan American (14%)
Denmark	Cecilie	43.59%	Production	2003	INEOS	INEOS (56.41%)
	Nini	42.86%	Production	2003	INEOS	INEOS (57.14%)
Egypt	Disouq	100%	Production	2013	DISOUCO	JV between Wintershall Dea (50%) and EGAS (50%)
	Gulf of Suez[1]	100%	Production	1983	SUCO	JV between Wintershall Dea (50%) and EGPC (50%)
	West Nile Delta	17.25%	Production	2017	BP	BP (82.75%)
	East Damanhour	40%	Exploration	–	Wintershall Dea	Cheiron (40%), INA Industrija Nafte (20%)
Germany	Mittelplate	100%	Production	1987	Wintershall Dea	–
	Völkersen	100%	Production	1994	Wintershall Dea	–
	Emlichheim	90%	Production	1944	Wintershall Dea	MEEG (10%)
Libya	Contract areas 15, 16, 32 (Al-Jurf)	12.50%	Production	2003	Mabruk Oil Operations	NOC (50%), Total (37.50%)
	Contract areas 91, 107	25%	Production	1976	Sarir Oil Operations	JV between NOC (51%) and Wintershall AG (49%)

[1] On 4 February 2022, Wintershall Dea announced the return of its entire interest in the Gulf of Suez oil assets to the Egyptian authorities after 38 years of efficient and successful production operations.

Country	Asset	Wintershall Dea WI	Life cycle	Start of production	Operator	Partners
Mexico	Ogarrio	50%	Production	1957	Wintershall Dea	PEMEX (50%)
	Zama	19.83%	Development	–	PEMEX	PEMEX (50.43%), Talos (17.35%), Harbour Energy (12.39%)
	Block 29 (Polok, Chinwol)	25%	Exploration	–	Repsol	Repsol (30%), PC Carigali / Petronas (28.33%), PTTEP Mexico (16.67%)
Netherlands	Sillimanite	19.85%	Production	2020	WINZ	WINZ (39.70%), EBN (25%), Gazprom UK (19.90%), ONE-Dyas (7.90%), Neptune (7.50%)
	K-18G	20.87%	Production	2012	WINZ	WINZ (41.74%), EBN (40%), NAM (15.88%), RockRose (2.19%), ONE-Dyas (0.19%)

Country	Asset	Wintershall Dea WI	Life cycle	Start of production	Operator	Partners
Norway	Aasta Hansteen	24%	Production	2018	Equinor	Equinor (51%), OMV (15%), Conoco (10%)
	Bauge	27.50%	Development	_	Equinor	Equinor (42.50%), Vår Energi (17.5%), Neptune (12.50%)
	Brage	35.20%	Production	1993	Wintershall Dea	Repsol/Lime Petroleum (33.84%), DNO (14.26%), Vår Energi (12.26%), Neptune (4.44%)
	Dvalin	55%	Development	_	Wintershall Dea	Petoro (35%), Sval Energi (10%)
	Edvard Grieg	15%	Production	2015	Lundin	Lundin (65%), OMV (20%)
	Gjøa	28%	Production	2010	Neptune	Neptune (30%), Petoro (30%), OKEA (12%)
	Hyme	27.50%	Development	2013	Equinor	Equinor (42.50%), Vår Energi (17.50%), Neptune (12.50%)
	Maria	50%	Production	2017	Wintershall Dea	Petoro (30%), Spirit Energy (20%)
	Njord	50%	Development	_	Equinor	Equinor (27.50%), Neptune (22.50%)
	Nova	45%	Development	_	Wintershall Dea	Sval Energi (25%), Spirit Energy (20%), ONE-Dyas (10%)
	Skarv	28.08%	Production	2012	Aker BP	Equinor (36.16%), Aker BP (23.84%), PGNiG (11.92%)
	Snorre	8.57%	Production	1992	Equinor	Equinor (33.28%), Petoro (30%), Vår Energi (18.55%), Idemitsu (9.60%)
	Vega	56.70%	Production	2010	Wintershall Dea	Petoro (31.20%), Spirit Energy (5.50%), Idemitsu (3.30%), Neptune (3.30%)

Country	Asset	Wintershall Dea WI	Life cycle	Start of production	Operator	Partners
Russia	Urengoyskoye Area 1A	50%	Production	2011	Achimgaz	JV between Gazprom (50%) and Wintershall Dea (50%)
	Yuzhno-Russkoye	35%	Production	2007	Severneftegazprom	JV between Gazprom (40%) Wintershall Dea (35%) and OMV (25%)
	Urengoyskoye Area 4A & 5A	25%	Production	2021	Achim Development	JV between Gazprom (75%) and Wintershall Dea (25%)
UAE	Ghasha	10%	Development	–	ADNOC	ADNOC (55%), Eni (25%), OMV (5%), Lukoil (5%)
United Kingdom	Wingate	32.25%	Production	2011	WINZ	WINZ (64.50%), Gazprom UK (20%) Xto (15.50%)

B GOVERNANCE AND ESG

CORPORATE GOVERNANCE

STRONG GOVERNANCE STRUCTURE

Wintershall Dea AG is a joint-stock company (Aktiengesellschaft) with its registered seat in Celle, Germany, with corporate governance consistent with German laws. Wintershall Dea GmbH has converted its legal form from a limited liability company (Gesellschaft mit beschränkter Haftung) to a joint-stock company under the company name Wintershall Dea AG. The change became effective on 26 July 2021 with registration of the legal entity in its new legal form in the Commercial Register. The company's legal identity is preserved and not affected. The composition of the Management Board remains unchanged.

Wintershall Dea AG is the ultimate parent company of various subsidiaries around the world that carry out the business of the Group.

In accordance with applicable German law, the fundamental elements of Wintershall Dea's corporate governance system are its two-tier board system with transparent, effective separation of the management of the company and supervision between the Management Board and the Supervisory Board; co-determination in the Supervisory Board by two-thirds of shareholder representatives and one-third of employee representatives; and the shareholders' rights in the General Meeting. The details of Wintershall Dea's corporate governance architecture are set out in the company's Articles of Association (Satzung), the Rules of Procedure (Geschäftsordnung) for the Management Board and Supervisory Board, as well as in a shareholders' agreement governing the legal relationship between BASF and LetterOne as shareholders that was entered into by the shareholders and the company.

"We place a strong emphasis on good corporate governance. By ensuring that Wintershall Dea operates according to good governance, we safeguard long-term value for stakeholders, partners, employees and the public."

Mario Mehren
CEO

SHAREHOLDER OVERVIEW

BASF holds 67% of the ordinary shares of Wintershall Dea and LetterOne holds 33%. As a consideration for the value of the midstream business of Wintershall Dea, BASF also received preference shares, resulting in an overall participation of BASF in the entire share capital of Wintershall Dea of 72.7% and an overall participation of LetterOne of 27.3%. The preference shares will convert into ordinary shares of the company on 1 May 2022.

Headquartered in Ludwigshafen, Germany, BASF SE is a leading global producer of chemicals.

As one of the world's leading chemical companies, BASF combines economic success with environmental protection and social responsibility. BASF's portfolio is organised in eleven divisions grouped into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions.

More than 110,000 employees in the BASF Group work in nearly all sectors and almost every country in the world.

L1 Energy is part of LetterOne Holdings, a member of the LetterOne Group.

Founded in 2013, LetterOne is based in Luxembourg. It is an international investment business led by successful entrepreneurs, former CEOs and international personnel. In 2015, LetterOne acquired DEA and E.ON Norge.

LetterOne's investments are focused on the energy, telecoms and technology industries, as well as on health and retail sectors within different business units.

GENERAL MEETING

The company's corporate bodies include the General Meeting, through which the shareholders adopt resolutions pertaining to the company.

An ordinary General Meeting is to be held during the first eight months of each financial year of the company. In general, the General Meetings are chaired by the Chairman of the Supervisory Board or any other Supervisory Board member representing the shareholders to be determined by the Supervisory Board. Each ordinary share with a nominal value of €1 grants one vote. Unless the Articles of Association or mandatory statutory provisions require otherwise, resolutions are passed with a simple majority of the votes cast in the General Meeting.

The General Meeting shall resolve, inter alia, on the appropriation of the balance profit (Bilanzgewinn), the formal discharge (Entlastung) of the members of the Management Board and the members of the Supervisory Board, the appointment of an auditor of the annual accounts, and the election of members of the Supervisory Board.

SUPERVISORY BOARD

The Supervisory Board is responsible for oversight of the Management Board and shall act in the interest of the company. While the Supervisory Board is not permitted to exercise any management functions, the Management Board requires the consent of the Supervisory Board for certain important transactions and measures in accordance with the applicable law, the Articles of Association and the Rules of Procedure for the Management Board.

The Supervisory Board is composed of twelve members, who, according to the One-Third Participation Act, include four employee representatives and eight members to be appointed by the shareholders.

The following table sets out the current composition of the company's Supervisory Board.

Name	Position
Dr Hans-Ulrich Engel	Chairman (since 2 November 2021, First Deputy Chairman until 1 November 2021); Deputy Executive Chairman of BASF SE, Ludwigshafen am Rhein
Dmitry Avdeev	First Deputy Chairman (since 2 November 2021); Senior Partner, L1 Energy, London, United Kingdom
Michael Winkler	Second Deputy Chairman; Trade Union Secretary of IG BCE, Hanover
Saori Dubourg	Member of the Board of Executive Directors of BASF SE, Ludwigshafen am Rhein
Dr Dirk Elvermann	President Corporate Finance, BASF SE, Ludwigshafen am Rhein (since 26 August 2021)
Michael Heinz	Member of the Board of Executive Directors of BASF SE, Ludwigshafen am Rhein
German Khan	Director LetterOne Holdings S. A., London, United Kingdom
Matti Lievonen	Managing Director (CEO) of Oiltanking GmbH, Hamburg (since 26 July 2021)
Scott Nyquist	Management Consultant, Houston, Texas, USA (since 26 July 2021)
Birgit Böl	Chairman of the General Works Council of Wintershall Dea AG, Kassel
Günther Prien	Chairman of the Central Works Council Hamburg and member of the General Works Council of Wintershall Dea AG, Hamburg (since 23 March 2021)
Heiko Rehder	Head of Production District Mittelplate, Deputy Chairman of the Central Works Council Hamburg of Wintershall Dea Deutschland GmbH, Friedrichskoog (since 20 August 2021)
Lord Edmund John Philip Browne of Madingley	Executive Chairman L1 Energy (UK) LLP, London, United Kingdom (member and Chairman until 1 November 2021)
Dr Wolfgang Haas	Former President Legal, Tax, Insurance and Intellectual Property of BASF SE, Ludwigshafen am Rhein (until 26 August 2021)
Sabine Brandt	Consultant for HSE, member of Central Works Council of Wintershall Dea Deutschland GmbH, Barnstorf (until 23 March 2021)

MANAGEMENT BOARD

The Management Board is responsible for the strategy and ongoing operations. It consists of five members: the chairman and four additional members.

The members of the Management Board conduct the day-to-day operations of the company and are jointly responsible for the overall management of the Group. The Management Board decides on all matters in accordance with the applicable law, the Articles of Association and the Rules of Procedure for the Management Board.

Mario Mehren

Chief Executive Officer
Mario Mehren is responsible for Human Resources, Legal, Compliance, Corporate Communications, HSEQ, Strategy and M&A, and Investor Relations. After completing his studies in business administration at Saarland University in Saarbrücken, he began his professional career in 1998 as a specialist adviser in BASF's Group Accounting section. After various positions within the BASF Group, he moved to Wintershall in 2006 and joined its Board of Executive Directors in 2011. Since 2015 he was the CEO of Wintershall Holding before becoming the CEO of Wintershall Dea in 2019.

Dawn Summers

Chief Operating Officer
Dawn Summers is responsible for Europe, Middle East and North Africa. She holds a degree in chemical engineering from Edinburgh University and executive operations leadership from MIT Sloane School of Management. During her more than 20 years with BP, she held various operations, project and leadership positions before moving to the Executive Leadership Team of Genel Energy and more recently as COO to Origin Energy and Beach Energy. In addition, she currently holds the position of president of Gas Naturally and president of IOGP Europe.

Thilo Wieland

Member of the Board, Region Russia, Latin America and Midstream
Thilo Wieland is responsible for Russia, Latin America and Midstream. After studying industrial engineering at the Technical University of Berlin, he joined Wintershall Erdgas Handelshaus in Berlin in 1999. He then held various posts at the Wintershall Group, including the role as head of Strategy & M&A and, among other responsibilities, was in charge of Nord Stream and other gas transport projects. From 2015, he served as a member of Wintershall Holding's Board of Executive Directors.

Hugo Dijkgraaf

Chief Technology Officer
Hugo Dijkgraaf is responsible for Carbon Management & Hydrogen, Digitalisation & Technology, Integrated Reservoir Management, Global Exploration, Global Development and Engineering, Global Production and Operational Excellence, and Major Capital Projects. Since 2019 he has been developing and implementing the operational GHG emission reduction programme as well as the company's CCS and gas-based hydrogen projects. He has a master's degree in petroleum engineering from Delft University of Technology, and he joined Wintershall in 2000. He held various technical, operational and management roles in five countries. In 2017, he took charge of the Norwegian activities as managing director.

Paul Smith

Chief Financial Officer
Paul Smith is responsible for Accounting and Reporting, Corporate Finance and Treasury, Information Technology, Supply Chain, Corporate Audit, and Commercial & Sales. He studied business organisation at Heriot-Watt University in Edinburgh and began his career at BP in Aberdeen in 1993. During a 15-year career with BP, he held a number of management roles in the North Sea, Trinidad & Tobago and Russia. He spent ten years in Canada with Talisman Energy, first as executive vice president North America and finally as CFO.

SUSTAINABILITY AT WINTERSHALL DEA

OUR SUSTAINABILITY STRATEGY

Our industry and our company play a vital role in the energy transition towards a low-carbon economy. At the same time, the energy industry is under increasing scrutiny from multiple stakeholders regarding a wide range of environmental, social and governance topics. At Wintershall Dea, we work to meet the growing demand for energy in a responsible manner by providing innovative and sustainable solutions.

Our sustainability strategy encompasses environmental, social and governance aspects and is an essential part of our corporate strategy. We address these issues across all our activities globally. Building on an uncompromising approach to health, safety, environment and quality (HSEQ) management, our strategic sustainability priorities are climate and environmental protection, promotion of responsible collaboration, and advanced sustainability management.

Our sustainability strategy describes the plan for achieving our ambitions and targets, which include the following:

- We produce gas and oil as efficiently and responsibly as possible
- We aim to minimise our environmental footprint and use resources efficiently
- We advocate for high social standards
- We collaborate extensively with a wide range of stakeholders
- We aim to create trust through transparency

SUSTAINABILITY STRATEGY OVERVIEW

Deliver energy and carbon management solutions in the most efficient and responsible way

Minimized corporate footprint

High transparency

ENVIRONMENT
CONTRIBUTE TO CLIMATE PROTECTION

SOCIAL
PROMOTE RESPONSIBLE COLLABORATION

GOVERNANCE
STRENGTHEN SUSTAINABILITY MANAGEMENT

We aim for:

Implementing Energy Transition Pathway:

- Net zero upstream activities[1] by 2030, and 25% net reduction by 2025[2]
- Strive to support emission reduction targets by potentially building up a business abating 20-30 million tonnes per annum CO_2 by 2040

Fostering high standards in all activities:

- Top health and safety performance
- Diversity[3] of the leadership team

Boosting ESG[4] performance:

- Strong ESG ratings
- ESG targets linked to executive remuneration

[1] Scope 1 and 2, operated and non-operated at equity share basis
[2] Based on 2020
[3] > 30% females and >35% internationals in the leadership team by 2025
[4] Environment, Social & Governance

OUR COMMITMENTS

Wintershall Dea has set strict internal standards based on international programmes and adheres to those as well as to country-specific legislation. We are committed to acting responsibly and making a positive contribution to solving global challenges within our sphere of influence. We are a proud signatory of the United Nations Global Compact and thoroughly support its ten principles for environmental protection, human and labour rights, and anti-corruption.

We also support the Sustainable Development Goals (SDGs) that, with its 17 goals, are the blueprint to achieve a better and more sustainable future for all. All actors in society are needed to achieve these goals. Wintershall Dea is committed to further driving the contribution to the SDGs. Our business activities directly and indirectly touch on many of the SDGs, as they are integrated and indivisible. We focus our efforts on those specific goals where we can make the greatest contribution: 6. Clean water and sanitation; 7. Affordable and clean energy; 8. Decent work and economic growth; and 13. Climate action.

Based on our values, we have formulated a globally binding Environmental, Social, and Governance (ESG) principle, which provides an overarching framework for our actions and activities. It includes company-wide commitments on material sustainability topics such as climate and energy, environmental protection, human rights, community involvement and engagement, as well as political relations and advocacy.

Next to our Code of Conduct, HSEQ Policy and Supplier Code of Conduct, the ESG principle provides us guidance and ensures that social and environmental aspects are taken into account in all our operations. The ESG principle supports our business decision-making process at all levels and provides a frame of reference for how we want to deal with business opportunities and risks in the context of direct and indirect ESG impacts.

SUSTAINABILITY MANAGEMENT AND TRANSPARENCY

Effective management of sustainability is vitally important for the status-quo and the further development of our company. The implementation of the sustainability strategy is based on globally defined standards, like the principle of the UN Global Compact, management processes, and an organizational structure with clearly defined responsibilities. We have established processes and targets across our business units, we regularly monitor our progress and – if required – take corrective measures. Wintershall Dea's management of sustainability is evaluated as strong by the ESG Risk Rating provider Sustainalytics.

The overarching responsibility for the topic lies with the Chief Executive Officer and the Management Board. A sustainability unit is responsible to setup the relevant policies and processes. It strategically coordinates company-wide activities to ensure the integration of sustainability into core business processes like strategy, operations, planning, reporting and decision-making. The team is supported by an internal interdisciplinary group of experts, referred to as the Sustainability Expert Community. Beyond the regular exchange with the Board, there are also frequent sessions with the Sustainability Board Committee, which is the central monitoring and steering committee for sustainability topics. The Committee discusses relevant sustainability topics, such as climate protection and our energy transition pathway or human rights and gives us guidance on the course of actions. Responsible for the implementation of regional and topic-related measures are the respective business and corporate units, who have the dedicated expertise and know-how in their specific areas and regions.

In order to meet the information needs of our stakeholders, we continuously disclose sustainability information, including our performance. We refer to different frameworks and reporting standards that guide our sustainability reporting, such as the Global Reporting Initiative, the IPIECA Reporting Guidance and the Task Force on Climate-related Financial Disclosures (TCFD).

OUR ESG FOCUS AREAS IN 2021

Environmental and climate protection

Wintershall Dea has set itself the goal of becoming operationally net zero by 2030[1]. Our Energy Transition Pathway (ETP) was developed to contribute to responsible and profitable gas and oil production with the lowest greenhouse gas emissions possible. Four pillars were defined to achieve our target and are firmly anchored in our corporate strategy.

Firstly, we continuously review and optimise our portfolio, focusing on natural gas and carbon-efficient assets and activities. **Secondly**, we are further expanding emission management in our operations by increasing energy efficiency, introducing electrification and using other state-of-the-art technologies to improve the emission footprint of our assets and activities as far as reasonably possible. **Thirdly** and **fourthly**, emissions that cannot be reasonably avoided through portfolio and emissions management will be compensated through investments in nature-based and natural climate solutions, such as afforestation or conservation projects, and the development and use of Carbon Capture and Storage (CCS) and related hydrogen activities.

In 2021, we rolled-out further processes across the organisation to optimise and manage our emissions footprint. GHG emissions became a key metric in investment decisions amongst others through the comprehensive implementation of an internal carbon price. Furthermore, Wintershall Dea developed and began implementation of a long term, multi-phased approach to manage and reduce emissions in its supply chain.

In our operations, a number of projects for emissions reduction and energy efficiency have been realised. In Germany, Wintershall Dea switched all the production locations to certified electricity generated from renewable sources. Several electrification projects have been initiated in Norway to supply platforms with green electricity from the shore. In Argentina, a gas export pipeline went on stream to export associated gas to the national grid where it can be used to generate electricity and, at the same time, eliminate routine gas flaring. A photovoltaic system for areal lightning was installed in Ogarrio, Mexico, and, in the Netherlands, more effective filters were installed for the air intake of turbines.

Wintershall Dea will cooperate more closely in the field of hydrogen in the future with various counterparts. In August, we signed a cooperation agreement with VNG AG, Germany and are planning to build a facility to produce climate-friendly “turquoise” hydrogen as the first step in Germany. The Greensand CCS project in Denmark has moved to the next phase, with offshore CO_2 injections planned by late 2022. Wintershall Dea also joined and actively participates in the Oil and Gas Methane Partnership 2.0 and obtained the gold standard for our first-year methane emissions reporting.

ESG RISK RATING: TOP PERFORMANCE

Wintershall Dea belongs to the top 4% of companies in the industry group Oil & Gas Producers in Sustainalytics’ ESG Risk Ratings, with a score of 25.3 (medium risk) as of November 2021. Wintershall Dea's management of sustainability is evaluated as strong.

Sustainalytics is a leading ESG and corporate governance research provider, ratings and analytics firm that supports investors around the world with the development and implementation of responsible investment strategies. Sustainalytics' ESG Risk Ratings measure a company's exposure to industry-specific material environmental, social and governance risks and how well the company is managing those risks.

[1] Scope 1 and Scope 2, operated and non-operated at equity share basis

HEALTH AND SAFETY

Health and safety are our top priorities. In 2021, due to the ongoing COVID-19 pandemic, we focused on the health topics of hygiene, infection prevention and work-at-home conditions. Our global health campaign "Stay healthy under changing working conditions," offered digital educational materials to all categories of employees world-wide to make positive changes and improve health maintenance strategies, particularly during the COVID-19 pandemic. We also started the "Safety Leadership Learning Journey," a global and comprehensive 18-months leadership training programme that includes raising awareness and topic specific sessions, as well as processes and systems to further enhance safety performance. In 2021, we extended the International Association of Oil & Gas Producers (IOGP) Life-Saving Rules campaign into contractor management. The goal was, and remains, to anchor safety into the DNA of the Wintershall Dea operations and into that of our contractors.

We were able to improve our occupational safety performance in the key metric Lost Time Injuries (LTI). LTIs fell in 2021 compared with the previous year from 10 to 1 (employees: 0, contractors: 1).

HUMAN RIGHTS

As a globally operating company, we understand that our business can have both positive and negative impacts on stakeholders and rightsholders. We are committed to conducting business in a manner that respects human rights. Our human rights due diligence process is the basis we use to address our impact on human rights. In 2021, our focus was to detail our holistic human rights due diligence process and continue to identify and assess our actual and potential human rights impacts in specific areas. Additionally, we are engaged in the development of corporate best practices for human rights due diligence. To exchange with peers and to share best-practices, we participate in the IPIECA's Human Rights Working Group and in the German Global Compact Network's Peer Learning Group on Business and Human Rights.

GOVERNANCE

We work to continuously integrate sustainability aspects and processes into our existing governance elements such as risk management, compliance and internal audit. Wintershall Dea has developed and implemented an integrated risk management system oriented towards the internationally recognised Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework. Following our commitment to support the recommendations of TCFD, in 2021, we continued the implementation of clear processes and policies at the company to identify, assess, manage and report climate-related risks and opportunities. It resulted in considerable progress towards the implementation of TCFD recommendations and integrating climate-related risks and opportunities into the overall risk management processes framework. In 2020, we developed a dedicated climate strategy (Wintershall Dea's Energy Transition Pathway, ETP). Our ETP includes concrete emission reduction targets. In the current year, we focused on risk management and governance. We have also expanded our sustainability governance structure by setting up a steering committee focused exclusively on implementing our Energy Transition Pathway. The ETP Steering Committee consist of relevant internal stakeholders at senior executive level and gives guidance and advice on dedicated climate aspects.

A RESPONSIBLE EMPLOYER

Each Wintershall Dea employee has a role in safeguarding and growing the value of the company. Strong production performance – safe, efficient and reliable – is the foundation of our business. We continuously challenge ourselves to maximise the economic recovery of hydrocarbons through the active management of our assets, while operating at the highest environmental, health and safety standards.

Our human resources strategy is derived from our corporate strategy and values and sets three priorities: nurturing dedicated employees, developing capable executives and fostering a modern work environment. To promote employee performance and acquire new talent, Wintershall Dea actively encourages a culture of equality and inclusion that underlines the importance of equal opportunities and the company's global workforce.

COMPANY CULTURE

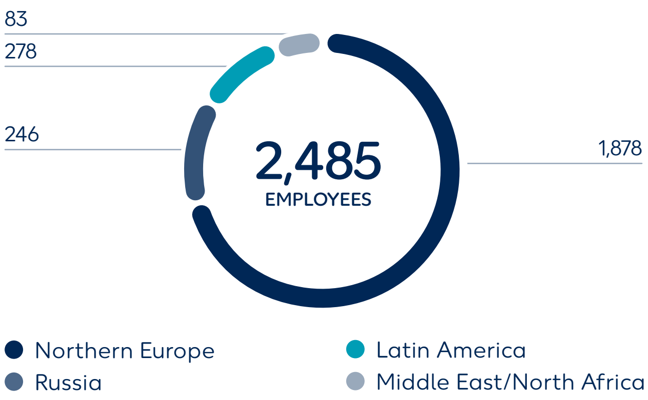
We attach great importance to a respectful and collaborative working environment. We believe that through our inclusive and diverse company culture, targeted and individualised support and facilitation of a good work-life balance, we offer our employees a positive long-term perspective.

Our four corporate values of trust, care, open-mindedness and bravery guide our actions and define how we want to work together – as a team, with our stakeholders and partners. Therefore, these values are the basis of and pivotal in defining Wintershall Dea's culture.

EMPLOYMENT

We have a strong and established team of highly competent professionals in all relevant disciplines. Some of our employees in Germany, Norway and Argentina are organised in unions. Wintershall Dea is confident of its good relationship overall with its employees and the unions involved. The number of employees (full-time equivalents) at Wintershall Dea, including all fully and proportionately consolidated companies, decreased by 28, from 2,513 as at 31 December 2020 to 2,485 as at 31 December 2021. The total number of employees includes 31 trainees and 50 apprentices. The main reason for the decrease was restructuring activities, particularly those in Germany.

EMPLOYEES BY REGION 2021



COMPANY PENSION SCHEMES

Through our employer-funded company pension schemes, we make a contribution to our employees' retirement provision and support them in the event of invalidity or bereavement. Our company pension scheme provides for a personal pension to be paid to each employee of Wintershall Dea AG once a qualifying period has elapsed and is dependent on the years of service and the remuneration paid.

To supplement the employer-funded pension scheme, our employees also have the option of providing for their retirement themselves by means of remuneration conversion, thus further securing their standard of living after retirement. At Wintershall Dea, employees have the choice of investing parts of their gross remuneration in pension insurance funds, pension funds, direct life insurance and direct commitments. Our employees also benefit from pension plans in a number of our foreign companies.

WELCOMING DIVERSITY[1]

Differences make us stronger

We embrace diversity because it enriches our organisation. Companies that are inclusive of people with different backgrounds, perspectives and approaches tend to outperform their competitors. We seek to recruit people with both technical and non-technical expertise who can add value to Wintershall Dea, regardless of their nationality, ethnicity, gender, sexual orientation, age, disability or beliefs.

Diversity and inclusion

The principles of diversity and equality are integrated into the Wintershall Dea Code of Conduct. By signing the Corporate Charter of Diversity in Germany in May 2019, we have also made our dedication to diversity visible to the outside world. By implication, this also means that we will not tolerate discrimination or exclusion of any sort due to people's personal characteristics or preferences. Training courses for employees and executives on topics such as equality help everyone increase their awareness of the value of diversity and inclusion.

[1] Diversity data have been compiled globally for all locations of Wintershall Dea and its subsidiaries.

Gender equality

Traditionally, the oil and gas industry has been a sector with a male-dominated workforce. The proportion of women employed at Wintershall Dea is about 32% (31 December 2021). Our share of women in executive positions (top 2 levels below the Management Board) is 29% (31 December 2021) and we are planning to continuously increase this to over 30% by 2025. One out of five management board positions is held by a female.

Equal pay

Wintershall Dea conducted an extensive equal pay analysis in 2021. The conclusion: there are no structural gender-specific differences in how employees are paid. The analysis was conducted by the independent partner PricewaterhouseCoopers (PwC) in compliance with the requirements of the Geneva-based Equal-Salary Foundation.

Internationality

Our industry tends to be highly international. Deployment abroad is typical of everyday work in many positions and indispensable for the advancement of our company. Even today, our workforce comprises people from almost 60 different countries. We aim for this diversity to also be reflected in our leadership. The proportion of executives of varied nationalities on our leadership team is greater than 36% (31 December 2021) and our goal is to maintain a level above 35%.

"We don't just talk about diversity and equality but also examine where we can become better. With our equal pay analysis, we've achieved a key goal in our diversity and inclusion strategy and have also set a benchmark for our industry."

Petra Angstmann
Senior Vice President Human Resources

COMPLIANCE

COMPLIANCE MANAGEMENT

The primary objective of our compliance management system is to ensure that the executives and employees and members of corporate bodies of Wintershall Dea, including third parties, if applicable, conduct themselves in compliance with all legal, internal and external regulations affecting the company by taking appropriate measures. This includes not only rule-compliant behaviour per se, but also the formal and informal internal organisation to achieve rule-compliant conduct through the implementation of appropriate measures. For this reason, all employees are required to participate in training courses shortly after joining the company and on a regular basis thereafter.

COMPLIANCE PROGRAMME

The compliance programme includes both preventive and detective measures and also covers action to be taken in the event of identified compliance violations. A key element of the programme is our group-wide Code of Conduct which is based on our company values and international standards and governs our conduct towards people, the environment, assets, information, business partners and third parties.

CODE OF CONDUCT

Wintershall Dea has a long tradition and, as a responsible company, has played a substantial part in shaping today's energy industry. We can maintain this reputation on a lasting basis only when we adhere to and are willing to be measured in our business activities by the standards defined in the Code of Conduct.

The Code of Conduct is the basis for all our business activities. Wintershall Dea demands the highest standards of its business partners and expects them to abide by the company's corporate and similar principles. When a business partner fails to meet these requirements, we are prepared to take appropriate action, which may even include terminating the relationship.

COMPLIANCE COMMITMENT

Wintershall Dea does not tolerate any form of corruption, whether active or passive, direct or indirect. We are committed to our strict zero tolerance policy. Wintershall Dea's zero tolerance attitude will be clearly communicated to all business partners at the outset of business relations and as appropriate thereafter.

COMPLIANCE ORGANISATION

Our group-wide compliance function comprises the Chief Compliance Officer and the Department of Compliance and Data Protection, acting as global compliance managers, as well as local compliance managers in all business units. The Chief Compliance Officer reports directly to the CEO and the Wintershall Dea Management Board on a regular basis about the implementation status of compliance initiatives and training courses, as well as compliance incidents and key insights, as required.

The Department of Compliance and Data Protection is responsible for the compliance management system, including the internal regulations which are applicable group-wide, the handling of compliance complaints and the administration and implementation of compliance training. Local compliance managers in the various business units are responsible for ensuring compliance with our regulations and standards on-site and in alignment with the global compliance function, as well as for local training and the handling of local compliance complaints.

DEALING WITH VIOLATIONS

If in doubt, employees are encouraged to take action and seek advice at an early stage. They can turn to their supervisors, the legal department and the company compliance managers for assistance. Employees and third parties can use our digital whistle-blower system to report potential compliance violations, and they can do so anonymously if desired. Our whistle-blower portal "SpeakUp" is available in all of the languages of the countries in which Wintershall Dea operates. In line with our non-retaliation policy, no employee or third party will face any disciplinary sanctions or any other detrimental treatment for raising genuine concerns in good faith, even if they turn out to be mistaken.

HUMAN RIGHTS

Respecting human rights in our business relationships is an important basis for how we assume our social responsibility. Our standards comply with existing laws and regulations and are guided by internationally recognised principles. Our human rights due diligence process is the foundation for addressing our human rights impacts wherever we operate.

Wintershall Dea strives to act worldwide in compliance with internationally recognised human rights standards and key labour and social standards. We are a signatory of the United Nations Global Compact, and our commitment to human rights is based on the United Nations Guiding Principles on Business and Human Rights and both the OECD Guidelines for Multinational Enterprises and the tripartite declaration of principles concerning multinational enterprises and social policy (MNE Declaration). Our approach is further guided by the International Bill of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work.

DATA AND INFORMATION SECURITY

Wintershall Dea places very high importance on the protection of information and data. Today more than ever, the value of a company is determined by its knowledge base and know-how.

We have established a global cyber security awareness programme to educate all employees and selected partners on conscientious behaviour when working with data and information technology. We constantly monitor our IT and OT environments for known and unknown cyber threats with the help of a competent security operations centre (SOC). We leverage up-to-date cloud and on-premise security technologies to manage our information technology landscape as securely as possible. On top of that, we constantly adapt our processes and policies to fulfil the evolving legal and regulatory requirements and to tackle newly discovered external threats to our security.

SUPPLIER PARTNERSHIPS

We drive our business forward using a partnership-based approach, including with our contractors. We pursue long-term business relationships and have a vital interest in continuously improving our performance through cooperation. Suppliers and contractors are not chosen merely on the basis of economic criteria; environmental protection, occupational safety and social standards also play a role in how we evaluate new and existing supplier relationships. When it comes to compliance with such standards, Wintershall Dea places equally high demands on its contractors as it does on its own employees. The qualification of each supplier is, among other things, based on the supplier's acceptance of our Supplier Code of Conduct.

C GROUP MANAGEMENT REPORT

1. CORPORATE PROFILE

1.1 BUSINESS MODEL AND STRUCTURE

Wintershall Dea is a leading European independent gas and oil company, complemented by a stable midstream business. The Group comprises Wintershall Dea AG, a joint-stock company dual-headquartered in Kassel and Hamburg, as the parent company and its subsidiaries.

The Group's business is conducted in six segments:

- Northern Europe
- Russia
- Latin America
- Middle East/North Africa
- Midstream
- Other

The segments Northern Europe, Russia, Latin America and Middle East/North Africa comprise the E&P business and are further divided into eleven divisions, based on countries in the respective region. The E&P segments comprise exploration, appraisal, field development and production activities in the following divisions:

- **Northern Europe:** Germany, Norway, the Netherlands, United Kingdom and Denmark
- **Russia:** Russia
- **Latin America:** Argentina, Mexico and Brazil[1]
- **Middle East/North Africa:** Egypt, Libya, Algeria and United Arab Emirates

The Midstream segment comprises the onshore and offshore gas transportation activities in Europe.

The segment Other includes the Management Board; corporate functions, such as Global Exploration, Carbon Management and Hydrogen; the trading activities managed by the headquarters, as well as the holding companies.

Digitalisation and technology

The Group's activities in the exploration and development of hydrocarbon reservoirs are typical for our industry. To support these activities, we have our own advanced Technology and Service Centre within our Digitalisation and Technology Department. This competence centre provides a portfolio of analyses and solutions in areas such as production and reservoir services to support the international business locations with analytical investigations and consulting services to assess reservoirs and optimise operations, recovery and storage. We are also investigating opportunities in the areas of hydrogen production and carbon capture and storage.

1.2 MANAGEMENT SYSTEM

The Group uses various key performance indicators to actively manage and steer its performance and achieve sustainable value creation.

- Adjusted EBITDAX (EBITDAX)
- Free cash flow
- Capex
- Production

The **'adjusted EBITDAX' (EBITDAX)** is a non-GAAP financial measure used for internal management control within Wintershall Dea. It is the primary key indicator derived from the consolidated statement of income and is defined as revenues and other income less production and operating expenses, less production and similar taxes and less general and administrative expenses, adjusted for special items. Further information on the EBITDAX reconciliation is provided in the chapter Earnings performance.

[1] The Group has decided to terminate all activities in Brazil as communicated on 17 January 2022.

Free cash flow is a non-GAAP financial measure and comprises cash flow from operating activities and cash flow from investing activities but excludes payments for/ proceeds from acquisitions and proceeds from the disposal of non-current assets/divestitures, as shown in the Group's consolidated statement of cash flows.

The financial measure **capex** consists of payments for intangible assets, property, plant and equipment and investment properties, as shown in the Group's consolidated statement of cash flows, less capitalised exploration.

The main non-financial measure **production** shows the quantities of gas and liquids (including oil, condensate and NGL) produced in thousand barrels of oil equivalent per day on a working interest basis for the Group's segments, including the proportion from equity-accounted companies (except Libya onshore).

Further non-financial performance indicators are presented in detail in the separate sustainability report (unaudited) to be published in March 2022 on the company's website.

Wintershall Dea is also committed to promoting the participation of women in management positions. The Act on the Equal Participation of Women and Men in Management Positions in the Private and Public Sector has been implemented at Wintershall Dea as follows: In accordance with Section 111 (5) of the German Stock Companies Act (AktG), the target set for the proportion of women on the Supervisory Board is 2 out of 12 members, and the target set for the proportion of women on the Management Board is 1 out of 5 members. In addition, in accordance with Section 76 (4) AktG, the target set for the proportion of women at the two management levels below the Management Board is 9 out of 29 for the first level and 36 out of 117 for the second level. The deadline for achieving the targets set for Wintershall Dea's Supervisory Board and Management Board and the two management levels below the Management Board is 31 December 2025.

In order to ensure the value-oriented management of the Group, we use planning and control processes to make key figures and information available to the decision-making bodies throughout the Group. Based on long-term planning, the relevant budgets are defined and tracked during the year using a rigorous performance management process. This approach allows any deviations from the budget to be detected promptly, analysed and, in the event of negative developments, corrected to the greatest extent possible by taking suitable countermeasures.

2. BUSINESS REPORT

2.1 INTRODUCTION

The reporting period for the group management report comprises the period from 1 January through 31 December 2021 and the comparison period comprises accordingly the period from 1 January through 31 December 2020. In addition, quarterly information on the consolidated statement of income, consolidated statement of cash flows and selected performance indicators by segment are presented in chapter 2.6. This voluntary information is unaudited and for illustrative purposes only.

The management report has been prepared in euros (€). All amounts, including the figures for prior years, are generally reported in millions of euros (€ million). The subtotals and totals in millions may not equal the sum of the amounts shown due to rounding.

2.2 BUSINESS ENVIRONMENT

Economic development

According to the current estimates of the International Monetary Fund, global economic output in 2021 increased by approximately 6% compared to a slowdown of -3.1% in 2020 as a result of the COVID-19 pandemic. The European Central Bank expects gross domestic product in the eurozone to have risen by around 5% in 2021, compared to -6.5% in 2020. Countries responding to the COVID-19 pandemic had a significant effect on global energy consumption in 2020. With the relaxing of restrictions and the reopening of economies, a rapid rebound coupled with pandemic outbreaks in critical supply chain links have resulted in longer-than-expected supply disruptions, causing supply-demand mismatches and significantly higher commodity prices compared to last year. Inflation prospects and their implications for the resilience of the economic recovery are uncertain.

Macro fundamentals

Gas prices

Average TTF prices increased from $3.15/mscf in 2020 to $15.69/mscf during the reporting period.

European gas prices have been impacted by a congruence of factors that have collectively resulted in a strong price increase during the year. A prolonged heating season well into Q2 2021, decreasing domestic production, a hot summer and lower levels of power from renewables resulted in low levels of gas storage coming out of the winter period. Strong liquefied natural gas (LNG) demand in Asia resulted in less LNG supply to Europe. As summer gas prices quickly rose, there was less incentive to store gas, putting further pressure on storage levels for the subsequent winter period. Rapidly rising coal and carbon prices drove the switch from coal to gas in many parts of the world, further exacerbating the demand/supply balance. All of this resulted in unprecedented volatility and record-high European gas and LNG prices.

$/mscf	2021	2020
Average Gas price for the period[1]	15.69	3.15

[1] Source: Heren/Argus; FX conversion according to ECB

Oil prices

Average Brent crude oil prices increased from $41.8/bbl in 2020 to $70.9/bbl during the reporting period.

In conjunction with the economic recovery and easing of lockdown measures, global demand for oil rebounded quickly. Nevertheless, OPEC+ continued to maintain strict compliance with the agreed production quota, resulting in steady draws on global oil inventories and rising crude oil prices throughout the reporting period. Additional demand from the switch from gas to oil due to the high gas and power prices in Asia and Europe continued to support prices as the increase in incremental supply is only occurring gradually, causing a relatively tight near-term market. The oil price outlook remains uncertain due to ongoing pandemic risks and local lockdowns.

$/bbl	2021	2020
Average Brent price for the period[1]	70.9	41.8

[1] Source: Platts

Foreign currencies

Closing rates €1 =	31 Dec 2021	31 Dec 2020
Argentinian peso (ARS)	116.49	103.16
Russian rouble (RUB)	85.30	91.47
Norwegian krone (NOK)	9.99	10.47
US dollar (USD)	1.13	1.23

Average rates €1 =	2021	2020
Argentinian peso (ARS)	112.52	81.05
Russian rouble (RUB)	87.16	82.72
Norwegian krone (NOK)	10.16	10.72
US dollar (USD)	1.18	1.14

Realised prices

	2021	2020
Average realised gas price[1] (in $/mscf)	**3.28**	**1.57**
Northern Europe	7.92	3.61
Russia[2]	1.27	0.42
Latin America	3.08	2.03
Middle East/North Africa[3]	3.57	2.78
Average realised liquids price[1] (in $/bbl)	**45.0**	**27.9**
Northern Europe	58.3	36.2
Russia[2]	14.5	6.4
Latin America	56.1	34.8
Middle East/North Africa	68.2	36.6

1 Includes commodity hedge result
2 Includes the deduction of production costs and applicable taxes
3 Includes the deduction of applicable taxes for Algeria

In 2021, our realised gas price increased by 109% from $1.57/mscf to $3.28/mscf. This increase is lower than the increase in TTF prices, mainly due to the existence of domestic gas prices in certain of our jurisdictions, formula price contracts and hedges. Gas hedges with a total volume of 372 mmscf/d were realised at an average of $4.71/mscf during the year 2021. Our realised liquids price increased by 61% from $27.9/bbl to $45.0/bbl, in line with the increase in Brent prices.

2.3 MAJOR BUSINESS ACTIVITIES IN THE REPORTING PERIOD

General

In early 2021, we successfully placed a dual-tranche subordinated note issue with a total transaction volume of €1.5 billion. The proceeds were partially used to repay all outstanding term loans, allowing to further delever and strengthen the balance sheet. In the second quarter of the year, the term loans have been fully repaid.

Our overall financial performance was recognised by Moody's with an upgraded Baa2 'stable' credit rating and a reconfirmed 'stable' BBB credit rating from Fitch.

With the more facilitative external environment, we recommenced the payment of the common dividend. In addition to €86 million in preferred dividends, we distributed a total of €600 million in common dividends to shareholders in 2021.

In Germany, we sold the building of our Hamburg headquarters in Q1 2021 and realised a €39 million cash flow contribution. The company expects to move its Hamburg based activities to a leased facility by the end of 2022.

In June 2021, our shareholders – BASF and LetterOne – announced that the planned Initial Public Offering (IPO) would be made at a later point in time. In July, Wintershall Dea GmbH converted its legal form from a limited liability company (Gesellschaft mit beschränkter Haftung – GmbH) to a joint-stock company (Aktiengesellschaft – AG), under the company name Wintershall Dea AG.

In November 2021, we were rated among the best industry performers by Sustainalytics in its ESG Risk Rating. Following the annual rating review, Wintershall Dea's ESG Risk Rating improved from 28.3 in the prior year to 25.3, placing it firmly in the medium risk category. According to Sustainalytics, the company is in the 4th percentile of the industry group Oil & Gas Producers (260 companies) and in the 5th percentile of the subindustry category Oil and Gas E&P.

Northern Europe – Norway

In the first half of 2021, we received the remaining cash refunds from the Norwegian tax authorities in the amount of NOK 2,929 million (€265 million), resulting in the receipt of a total of NOK 7,432 million (€696 million). The refunds were related to 2020 tax losses due as a result of temporary changes in the tax legislation in 2020.

During the year, we achieved several milestones in our development portfolio. Ærfugl Phase 2 came fully on stream in early November 2021, concluding the Ærfugl field development well ahead of its original 2023 target date. In June 2021, the Gråsel field commenced production four months ahead of schedule. Both fields are tied into the Skarv production vessel and extend the fields' lifetime.

In September 2021, our partner operated Solveig field came on stream, contributing additional volumes to our Norwegian production. We continued the development activities in the Snorre Expansion project successfully, and a total of 18 wells were brought into production. The remaining six wells are expected to come on stream by mid-2022, one year ahead of schedule.

We achieved several milestones in the development of our operated Nova field. The subsea installation scope has been finalised, and we completed drilling the top-hole sections of the planned wells in early 2021. The re-entry and final drilling of the wells to target commenced towards the end of the year. Nova is on track and expected to come on stream in the second half of 2022.

The development of the Dvalin field was completed, and first gas was achieved in late 2020. However, during the commissioning phase, measurements showed that the gas flow contained a level of mercury that exceeded the maximum permitted level in the system. An onshore technical solution is now being implemented and operation is expected to begin by late 2022.

The major re-development project Njord Future is progressing according to its updated plan and the facilities are expected to be commissioned in the fourth quarter of 2022.

Successful exploration drilling in Norway contributed to the expansion of our resource base. In May 2021, we discovered Dvalin North, a 70-140 million boe discovery representing one of the largest discoveries in Norway of the last few years. Dvalin North is expected to be tied into the existing Dvalin field and benefit from existing infrastructure. In September 2021, we discovered additional volumes in the vicinity of our Bergknapp discovery. The new Bergknapp Åre discovery delivered the expected estimated resources of 20-80 million boe. We also secured interests in sixteen new exploration licences in Norway in January 2021, including four as the operator, as a result of the Awards for Predefined Areas (APA) 2020 licensing round. In the subsequent APA 2021 round in January 2022, we were granted seven new licences, four of which as operator.

Northern Europe – Germany

As part of our portfolio optimisation process in Germany, we divested a number of smaller non-core licences in the country during the year. These transactions allowed us to increase our focus on the core assets we operate in the country.

In July 2021, the Emlichheim oil export pipeline came into operation, further reducing our operating costs and increasing our safety standards, while at the same time reducing the GHG emissions of our German operations in line with our Net Zero 2030 (Scope 1 and 2) commitment.

In late 2021, we initiated a Leak Detection and Repair (LDAR) programme to mitigate methane emissions in line with our announced target to reduce corporate methane emissions intensity below 0.1% by 2025. The programme started in Germany as a pilot project and, after successful implementation, is expected to be rolled out worldwide.

Russia

Our Achim Development team successfully brought on stream Areas 4A and 5A of the Urengoyskoye gas and gas condensate field in January and April of 2021, respectively. All wells started up on time, within budget, and in accordance with our high safety standards. In early August, our operations in the Urengoyskoye area were affected by a fire at a third-party gas condensate processing facility in Novy Urengoy. Following the temporary suspension of production in Areas 1A, 4A and 5A, production resumed at full capacity about four weeks later.

The development of the Turonian layer in the Yuzhno-Russkoye field, which aims to extend field life and secure plateau production for several years, is progressing to plan. The drilling activities of the first part of the Turonian full field development were completed successfully in 2021. The gas produced accounted for approximately 30% of the annual production volume of the Yuzhno-Russkoye field in 2021.

In May 2021, we divested our shares in the Wolgodeminoil joint venture to our JV partner RITEK, a subsidiary of LUKOIL, in line with our strategy to focus on cost-optimised gas and gas condensate production in Russia.

Latin America – Argentina

In Argentina we conducted a strategic review of our growth portfolio. As a consequence, we signed an agreement to divest our remaining 50% interest including operatorship in the unconventional Aguada Federal and Bandurria Norte shale oil blocks in the Neuquén province in early January 2022. With the sale, we are focusing our activities in Argentina on gas production. Here we have a strong position in the country, with projects in Tierra del Fuego and Neuquén, that contribute significantly to Argentina's energy supply.

Latin America – Brazil

In early January 2022, we decided to terminate all our activities in Brazil and to close the current office in Rio de Janeiro after the execution of all required measures. This decision is the result of a thorough strategic analysis of our global portfolio and evaluation of individual projects and how they fit with our long-term strategy in a changing global energy market.

Latin America – Mexico

In Mexico, our offshore Zama field development in Block 7 of the Sureste Basin is progressing. The final working interest allocations have been completed by SENER, the Mexican Ministry of Energy as part of the unitisation process. The determination of working interest by an independent expert in this process, led to a reduction in the company's net working interest to 19.83%, resulting in a €65 million impairment. Field development studies are ongoing with a view to facilitating the project's investment decision. The Polok discovery was also successfully appraised in 2021, and the partnership is currently working on development options.

Middle East/North Africa – Egypt

In Egypt, we successfully started up our Raven project at the end of February 2021, the last field of our West Nile Delta initial development to come on stream. Production from the Raven field was continuously ramped up and reached a production level close to the expected plateau production of 900 mmscf/d and approximately 30,000 barrels of condensate per day (gross). Production from all West Nile Delta fields significantly supports domestic consumption.

Following a strategic portfolio review, Wintershall Dea reached an agreement with the government of Egypt to assign its entire interest in the Gulf of Suez to the Egyptian General Petroleum Corporation (EGPC) in 2021. A corresponding contract has been signed with an effective date of 1 January 2022.

In East Damanhour, we commenced an exploration drilling campaign in early November 2021 that is scheduled to continue throughout 2022-2023, with a total of 5–7 exploration wells planned.

Midstream

In early April 2021, our joint-venture with Gazprom Germania GmbH, WIGA Transport Beteiligungs-GmbH & Co. KG, completed the construction of the European gas pipeline link (EUGAL). EUGAL reached its full transport capacity of up to 55 billion m³ of natural gas per year after commissioning the final second string. The first string has already been transporting natural gas since 1 January 2020.

In December 2021, JSC Gazprom announced the completion of construction of the Nord Stream 2 pipeline, where Wintershall Dea acts as a financial investor. The pipeline is currently awaiting the relevant certification and regulatory transport licence approvals before commencing gas transportation.

Others – Carbon Management and Hydrogen

In line with our Energy Transition Pathway, several steps were taken to expedite the activities in the fields of hydrogen production and carbon capture.

In August, the Project Greensand CCS consortium announced its intention to proceed with the pilot injection phase in order to demonstrate that CO_2 can be safely injected and stored in the offshore Nini West reservoir in Denmark. The project can potentially store up to 8 million tonnes of CO_2 per year – an amount equivalent to a quarter of all emissions in Denmark. In December, the project was granted funding from the Danish Government. CO_2 injections are expected to start in late 2022 or early 2023.

Also in August, we announced a cooperation agreement with VNG to collaborate closely in the field of hydrogen production in Germany and build a facility to produce 'turquoise' hydrogen. The pilot facility is planned to begin operation in 2023.

2.4 OPERATIONAL PERFORMANCE

Production

Natural gas (mboe/d)[1]	2021	2020
Northern Europe	106	109
Russia	243	235
Latin America	62	65
Middle East/North Africa	43	37
	454	**446**

Liquids (mboe/d)[1]	2021	2020
Northern Europe	100	97
Russia	60	60
Latin America	8	9
Middle East/North Africa[2]	12	11
	180	**177**

Total production (mboe/d)[1]	2021	2020
Northern Europe	206	206
Russia	303	295
Latin America	70	74
Middle East/North Africa[2]	55	48
	634	**623**

[1] Mboe/d – thousand barrel of oil equivalent per day/on a working interest basis including proportional production from at equity-accounted companies
[2] Excludes Libya onshore

In 2021, the Group's daily production averaged 634 mboe/d, consisting of 454 mboe/d of gas and 180 mboe/d of liquids, representing an increase of 11 mboe/d compared to 2020. The higher production was primarily a result of the commencement of production in Areas 4A and 5A, as well as in the Turonian layer in the Yuzhno-Russkoye field. The temporary stop of all our production in the areas 1A, 4A and 5A in Q3, caused by a fire at a third-party gas and condensate treatment plant, prevented even higher production. The start-up of the Raven field in Egypt contributed to the strong production of liquids and gas in the Middle East/ North Africa region, whereas the overall production in Northern Europe remained stable. The lower production in Latin America was mainly due to unplanned maintenance work in the last quarter of 2021.

Additional information regarding reserves (unaudited)

The Wintershall Dea Group provides updates on the Group's reserves and resources once a year. Reserves as at 31 December 2019, 31 December 2020 and 31 December 2021 were internally estimated by professionally educated and trained Wintershall Dea engineers. These estimates are subject to an annual internal reserves control process carried out by an internal corporate team of experts. Nearly 100% of our total reserves and economically viable contingent resources are regularly reviewed by internal or independent external auditors. The volumes of reserves and contingent resources are reported on a working-interest basis. The net entitlement in assets with production-sharing agreements may be lower. Reserves and contingent resources are evaluated and classified in accordance with the Petroleum Resources Management System (PRMS) of the Society of Petroleum Engineers (SPE), the World Petroleum Council (WPC) and others, which Wintershall Dea applies, as follows:

1P reserves, or 'proved reserves', are those quantities of petroleum that, from the analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term 'reasonable certainty' is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate.

2P reserves, or 'proved plus probable reserves', are 1P reserves plus those additional reserves that the analysis of geoscience and engineering data indicate are less likely to be recovered than 1P reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the estimated 2P reserves. In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P reserves estimate.

2C resources or 'contingent resources' are those quantities of petroleum that have been estimated on a given date to be potentially recoverable from known accumulations by application of development projects. They are not however currently considered to be commercially recoverable owing to one or more contingencies of the same technical confidence as proved plus probable but not commercially matured to reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the estimated 2C resources. In this context, when probabilistic methods are used, there should be at least a 50%

probability that the actual quantities recovered will be equal to or exceed the 2C resources estimate.

As at 31 December 2021, Wintershall Dea had 2P reserves of 3,372 million barrels of oil equivalent, which corresponds to c. 95% of the reserves reported as at 31 December 2020. The undeveloped reserves base amounted to 1,308 million barrels of oil equivalent.

In Northern Europe, the decline in reserves was driven by produced volumes, reserves revisions and asset sales in Germany. The reserves accounted for c. 87% compared to the previous year. In Norway, we expanded our 2C resources by the Dvalin North and Bergknapp Åre discoveries.

In Russia, the produced reserves were partially replenished by positive revisions and reserves maturation of Achimgaz projects (Urengoyskoye Area 1A), resulting in an overall reduction in our 2P reserves to c. 98% of last year's figure.

In Latin America, the reserves base declined to c. 87% compared to the volumes as at 31 December 2020 due to stable production and the sale of operated assets in Argentina.

In the MENA region, our 2P reserves decreased to c. 97% compared to the volumes as at 31 December 2020, mainly due to reserves revisions related to the Raven field and our Ghasha Hail Development.

In 2021, the Group's decline in reserves due to produced volumes was only partially compensated by organic reserves additions. The reserve replacement ratio was therefore 20% for 2P reserves and 81% for 1P reserves. Our economically viable 2C resources as at 31 December 2021 amounted to 1,819 million barrels of oil equivalent.

The Group's 1P reserves life is c. 12 years, and 2P reserves life is c. 15 years.

2P RESERVES[1]

Gas in million boe	Northern Europe	Russia	Latin America	Middle East/ North Africa[2]	**Group total**	Thereof developed	Thereof undeveloped
2P reserves as at 31 Dec 2021	361	1,673	157	187	**2,378**	1,551	826
Thereof equity-accounted companies	5	1,005	–	–	**1,010**	669	341
Revisions and other changes	1	20	-3	-2	**16**	–	–
Maturation and discoveries	3	29	–	–	**32**	–	–
Purchase/sale of reserves	-10	–	–	–	**-11**	–	–
Production	-39	-88	-23	-16	**-165**	–	–
2P reserves as at 31 Dec 2020	406	1,713	183	205	**2,507**	1,300	1,207
Thereof equity-accounted companies[3]	6	1,071	–	–	**1,078**	364	714
Revisions and other changes	-16	29	-4	-15	**-7**	–	–
Maturation and discoveries	4	–	–	–	**4**	–	–
Purchase/sale of reserves	–	–	–	–	**–**	–	–
Production	-40	-86	-24	-14	**-163**	–	–
2P reserves as at 31 Dec 2019	459	1,770	211	233	**2,673**	1,210	1,463
Thereof equity-accounted companies[3]	8	1,100	–	–	**1,108**	287	821
Revisions and other changes	40	9	6	-23	**32**	–	–
Maturation and discoveries	13	–	–	111	**124**	–	–
Purchase/sale of reserves	-1	–	–	–	**-1**	–	–
Production	-38	-85	-24	-14	**-162**	–	–

[1] 2P reserves (proved plus probable reserves) are inclusive of 1P reserves (proved reserves), some figures might not sum up properly due to rounding
[2] Excludes Libya onshore
[3] The previously in 2019 and 2020 reported equity-accounted company figures for Russia have been reassessed and amended

Liquids in million boe	Northern Europe	Russia	Latin America	Middle East/ North Africa[2]	**Group total**	Thereof developed	Thereof undeveloped
2P reserves as at 31 Dec 2021	355	443	27	169	**995**	513	482
Thereof equity-accounted companies	–	168	–	–	**168**	55	114
Revisions and other changes	-16	14	–	12	**10**	–	–
Maturation and discoveries	1	11	3	–	**14**	–	–
Purchase/sale of reserves	-7	-1	-3	–	**-11**	–	–
Production	-37	-22	-3	-5	**-66**	–	–
2P reserves as at 31 Dec 2020	414	442	30	162	**1,048**	489	559
Thereof equity-accounted companies[3]	–	175	–	–	**175**	2	173
Revisions and other changes	-8	–	-11	-23	**-41**	–	–
Maturation and discoveries	–	–	–	–	**–**	–	–
Purchase/sale of reserves	–	–	–	–	**–**	–	–
Production	-35	-22	-3	-4	**-65**	–	–
2P reserves as at 31 Dec 2019	457	463	44	189	**1,153**	509	644
Thereof equity-accounted companies[3]	12	179	–	–	**191**	5	186
Revisions and other changes	15	-16	9	2	**10**	–	–
Maturation and discoveries	29	–	–	149	**178**	–	–
Purchase/sale of reserves	–	–	–	–	**–**	–	–
Production	-35	-20	-3	-4	**-63**	–	–

[1] 2P reserves (proved plus probable reserves) are inclusive of 1P reserves (proved reserves), some figures might not sum up properly due to rounding
[2] Excludes Libya onshore
[3] The previously in 2019 and 2020 reported equity-accounted company figures for Russia have been reassessed and amended

Total in million boe	Northern Europe	Russia	Latin America	Middle East/ North Africa[2]	**Group total**	Thereof developed	Thereof undeveloped
2P reserves as at 31 Dec 2021	716	2,116	184	357	**3,372**	2,064	1,308
Thereof equity-accounted companies	5	1,173	–	–	**1,178**	723	455
Revisions and other changes	-15	33	-3	10	**25**	–	–
Maturation and discoveries	4	40	3	–	**47**	–	–
Purchase/sale of reserves	-18	-1	-3	–	**-22**	–	–
Production	-75	-111	-25	-20	**-231**	–	–
2P reserves as at 31 Dec 2020	820	2,155	212	367	**3,554**	1,789	1,766
Thereof equity-accounted companies[3]	7	1,246	–	–	**1,253**	365	887
Revisions and other changes	-24	29	-15	-38	**-47**	–	–
Maturation and discoveries	4	–	–	–	**4**	–	–
Purchase/sale of reserves	–	–	–	–	**–**	–	–
Production	-75	-108	-27	-18	**-228**	–	–
2P reserves as at 31 Dec 2019	916	2,234	254	423	**3,826**	1,719	2,107
Thereof equity-accounted companies[3]	20	1,278	–	–	**1,299**	292	1,007
Revisions and other changes	55	-6	14	-21	**43**	–	–
Maturation and discoveries	42	–	–	261	**303**	–	–
Purchase/sale of reserves	-1	–	–	–	**-1**	–	–
Production	-73	-106	-28	-19	**-225**	–	–

[1] 2P reserves (proved plus probable reserves) are inclusive of 1P reserves (proved reserves), some figures might not sum up properly due to rounding
[2] Excludes Libya onshore
[3] The previously in 2019 and 2020 reported equity-accounted company figures for Russia have been reassessed and amended

Capex

€ million	2021	2020
Northern Europe	-800	-1,036
Russia	-6	-12
Latin America	-39	-33
Middle East/North Africa	-105	-151
Other	-3	-5
Total	**-952**	**-1,237**

In 2021, capital expenditures amounted to €952 million compared with €1,237 million in 2020. The decrease was a result of lower investment activity following the commencement of production in several of our development projects, as well as the rephasing of capex in our three existing major projects in Norway which have experienced Covid related construction delays. The majority of capex is currently directed towards the completion of our major projects in Norway - Njord, Nova and Skarv area.

Net exploration expenditures

€ million	2021	2020
Exploration capex	-98	-31
Northern Europe	-70	-30
Russia	–	–
Latin America	-27	-1
Middle East/North Africa	-1	–
Other	–	–
Exploration expenses	-134	-181
Northern Europe	-79	-125
Russia	–	–
Latin America	-49	-44
Middle East/North Africa	5	-4
Other	-10	-8
Adjusted for dry well costs from prior years	11	23
Adjusted for gains/losses from disposal of exploration assets	31	45
Proceeds from disposal of exploration assets and acquisitions	13	17
Adjusted for changes in provisions	-5	-27
Total	**-181**	**-154**

Net exploration expenditures comprise capitalised exploration, exploration expenses as shown in the consolidated statement of income, adjusted for exploration expenses for prior-year dry well costs, adjusted for gains/losses from disposal of exploration assets, adding proceeds from the disposal of exploration assets and acquisitions and adjusted for changes in provisions.

In 2021, exploration expenditures totalling €98 million were capitalised. These expenditures related to seven successful wells drilled in Northern Europe and Latin America. A total of twelve wells were drilled overall.

Exploration expenses included expenses for the acquisition of seismic data, licence fees and expenses for dry well costs. In 2021, exploration expenses decreased by 26% to €134 million compared to €181 million in 2020, mainly due to lower dry well costs in Northern Europe.

2.5 FINANCIAL PERFORMANCE

Earnings performance

€ million	2021	2020
Revenues gas and oil	7,611	3,314
Revenues other	193	328
Net income from equity-accounted investments: gas and oil	83	-14
Net income from equity-accounted investments: midstream	202	196
Other operating income	99	68
	8,188	**3,892**
Production and operating expenses	-3,971	-1,863
Production and similar taxes	-123	-94
Depreciation and amortisation	-1,456	-1,438
Net impairment on assets	-111	-1,152
Exploration expenses	-134	-181
General and administrative expenses	-429	-277
	1,964	**-1,113**
Financial income	182	220
Financial expenses	-323	-445
	-141	**-225**
Income/loss (-) before taxes	**1,823**	**-1,338**
Income taxes	-1,230	499
Net income/loss (-)	**593**	**-839**
Net income/loss (-) attributable to shareholders	553	-839
Net income/loss (-) attributable to subordinated notes investors	40	–

EBITDAX

Revenues and other operating income

Revenues gas and oil increased by €4,297 million, or 130%, to €7,611 million, compared with €3,314 million in 2020. Excluding revenues from trading activities managed by the headquarters, revenues gas and oil increased by €2,026 million to €4,744 million. This was mainly due to significantly higher commodity prices. The realised price for liquids increased by 61%, and the realised gas price increased by 109%. Due to domestic gas prices in some of our jurisdictions, as well as formula price contracts and hedges, the development of realised gas prices was weaker than the development of TTF.

Revenues from the headquarters' trading activities also increased due to higher commodity prices as well as slightly higher volumes, but were largely offset by a respective increase in the cost of trade goods.

Other revenues primarily encompassing construction services related to the General Contracting Agreement with Achim Development for Areas 4A and 5A decreased by €135 million to €193 million.

Other operating income in 2021, comprised primarily income from divestitures in Northern Europe, the sale and leaseback of the office building in Hamburg and a government grant in Argentina, increased by €31 million to €99 million compared to €68 million in 2020.

Production and operating expenses

Production and operating expenses, excluding cost of trade goods, decreased by €136 million to a total of €1,106 million compared to €1,242 million in 2020.

	Production costs in € million		Production costs per boe (€/boe)	
	2021	2020	2021	2020
Northern Europe	488	453	6.7	6.2
Russia	22	22	0.4	0.4
Latin America	88	83	3.4	3.1
Middle East/North Africa	86	87	4.3	4.9
Total	**684**	**645**	**4.0**	**3.7**

Production costs amounted to €684 million compared with €645 million in 2020.

Overall, specific production costs increased by €0.3/boe to €4.0/boe compared to €3.7/boe in 2020. The reporting and the comparison periods both include a one-off effect resulting from a provision for a pre-merger commercial settlement with a third party (2021: €40 million; 2020: €44 million). Excluding this one-off operating expense, the underlying production costs would have been €3.8/boe compared to €3.5/boe for the comparison period mainly due to the increase of CO_2- and energy taxes in Northern Europe.

Other costs increased by €62 million to €78 million compared to €16 million in 2020 mainly due to losses from the disposal of fixed assets. This increase was completely offset by a decrease in other cost of sales of €175 million to €114 million, primarily due to a reduction in the scope of work arising from the General Contracting Agreement with Achim Development for Areas 4A and 5A after the completion of the majority of construction work in 2020. In addition, transport fees and leases decreased by €29 million.

Cost for trade goods increased in parallel to the revenues from trading from €621 million in the comparison period to €2,865 million in the reporting period.

Production and similar taxes

Production and similar taxes increased by €29 million from €94 million in the comparison period to €123 million in the reporting period. The increase in production and similar taxes was primarily due to higher prices in Germany, Argentina and Mexico.

General and administrative expenses

General and administrative expenses increased by €152 million and amounted to €429 million compared to €277 million in 2020. The increase resulted primarily from the fact that the comparison period included the reversal of €86 million in restructuring provisions, whereas the reporting period comprised an addition of €42 million. The losses from the disposal of fixed assets also increased by €35 million in the reporting year, mainly due to the sale of the interest in the Wolgodeminoil joint venture (€34 million). This increase was partially offset by a €33 million decrease in integration costs to €20 million in the reporting year, compared to €53 million in the 2020 comparison period.

RECONCILIATION OF EBITDAX

€ million	2021	2020
Revenues gas and oil	7,611	3,314
adjusted for unrealised changes in fair value of commodity derivatives	8	6
Revenues other	193	328
Net income from equity-accounted investments: gas and oil	83	-14
adjusted for net impairments on assets included in the net income of equity-accounted investments	29	–
Net income from equity-accounted investments: midstream	202	196
Other operating income	99	68
adjusted for gains from sale of assets/changes in consolidation scope	-47	-5
Production and operating expenses	-3,971	-1,863
adjusted for net impairments and write-offs on/from operating receivables	1	13
adjusted for losses from sale of assets	35	3
adjusted for non-recurring items (merger related costs, acquisition costs, etc.)[1]	41	–
Production and similar taxes	-123	-94
General and administrative expenses	-429	-277
adjusted for net impairments and write-offs on/from operating receivables	2	–
adjusted for losses from sale of assets/changes in consolidation scope	36	1
adjusted for non-recurring items (merger related costs, acquisition costs, etc.)[2]	61	-33
EBITDAX	**3,832**	**1,643**

[1] 2021: included integration costs of €30 million and restructuring costs of €11 million.
[2] 2021: included integration costs of €19 million and restructuring costs of €42 million; 2020: included the reversal of restructuring provisions (€86 million), partially offset by €53 million in integration costs

EBITDAX increased by €2,189 million from €1,643 million in 2020 to €3,832 million in the reporting period, primarily due to higher revenues gas and oil -excluding revenues from the headquarters' trading activities- since the increase in the trading revenues was offset by the respective increase in trading costs. The increase in adjusted revenues from at equity accounted investments (€132 million) was offset by a decrease in other revenues (€135 million). Excluding trading costs, adjusted production and operating expenses decreased by €197 million mainly due to lower other cost of sales and transport fees and tariffs.

EBITDAX PER SEGMENT

€ million	2021	2020
Northern Europe	2,337	1,039
Russia	728	239
Latin America	306	200
Middle East/North Africa	404	105
Midstream	201	193
Other	-145	-133
Total	**3,832**	**1,643**

RECONCILIATION OF ADJUSTED NET INCOME

€ million	2021	2020
EBITDAX	3,832	1,643
Depreciation and amortisation	-1,456	-1,438
Exploration expenses	-134	-181
adjusted for gains and losses from sale of assets	31	45
adjusted for non-recurring items (merger-related costs, acquisition costs, etc.)	3	–
Financial income	182	220
Financial expenses	-323	-445
adjusted for net impairments on other financial assets and financial receivables	3	92
Income taxes	-1,230	499
adjusted for taxes on adjusted and disregarded items	41	-240
Adjusted net income	**950**	**195**

Adjusted net income is a non-GAAP financial measure which represents an additional performance indicator, and, as such, is disclosed as a measure of profit or loss in the segment reporting. Adjusted net income is derived from EBITDAX less depreciation and amortisation, less exploration expenses, plus financial income, less financial expenses and less income taxes, adjusted for special items and tax effects on adjusted special items and disregarded items (e.g. net impairments on assets).

Exploration expenses

In the reporting period, exploration expenses decreased by €47 million or 26%, to €-134 million compared to €-181 million in the period 2020, mainly due to less dry well costs in Northern Europe. Further information on exploration expenses is provided in the section Net exploration expenditures.

Financial result

The financial result amounted to €-141 million in the reporting period, an increase of 37% compared to €-225 million in 2020. This increase mainly reflected the positive development of the currency result (€302 million) and the impairment of financial receivables in the prior year (€92 million), partially offset by higher losses from financial derivatives (€-344 million).

Income taxes

Income before taxes amounted to €1,823 million in the reporting period compared to a loss before taxes of €1,338 million in 2020. In the reporting period, Wintershall Dea incurred a total tax expense of €1,230 million (comparison period: income of €499 million). The increase was mainly driven by the strong increase in the Norwegian income before taxes in 2021 compared to a loss in 2020. Norway is a country with a high applicable tax rate due to the special petroleum tax regime. The effective tax rate in the reporting period amounted to 67% (comparison period: 37%).

Adjusted net income

Adjusted net income amounted to €950 million in 2021, compared to €195 million in 2020. The increase in EBITDAX has been partly offset by the increased tax expense.

Net impairments on assets are part of the net income/loss as reported in the consolidated statement of income but not included in the calculation of the adjusted net income. In the reporting period, net impairment losses amounted to €111 million and were significantly lower than in 2020 (€1,152 million). Net impairments included impairment losses of €461 million and a reversal of impairment losses of €-350 million. Impairment losses were related to Northern Europe (€47 million), Latin America (€273 million) and Middle East/North Africa (€141 million). The impairment losses recognised in June mainly relate to acquisition costs for concessions in Mexico, and are primarily triggered by a reduction in the Group's working interest in Block 7 following the determination of working interest by an independent expert as part of the unitisation process. The impairment losses recognised in December are mainly triggered by updated operational assumptions from the latest business plan, including reduced reserves expectations for the West Nile Delta development in Egypt, and portfolio optimisation measures (mainly in Latin America). The reversal of impairment losses were allocated to Northern Europe (€-288 million) and Latin America (€-62 million) due to an overall increase in the expected service potential.

Financial Position

€ million	2021	2020
Net income/loss (-)	**593**	**-839**
Amortisation/depreciation/impairment losses/reversal of impairment losses	1,592	2,631
Changes in provisions	-21	-139
Changes in deferred taxes	326	112
Gains (-)/losses from disposal of non-current assets	67	67
Other non-cash income/expenses and finance costs	-291	-138
Changes in working capital	-504	-143
Changes in other balance sheet items	1,235	53
Cash flow from operating activities	**2,998**	**1,604**
Payments for intangible assets, property, plant and equipment and investment property	-1,050	-1,268
Payments for/proceeds from acquisitions	25	-11
Payments for equity-accounted investments	–	-124
Proceeds from the disposal of non-current assets/divestitures	99	106
Payments for financial receivables	-32	-189
Proceeds from financial receivables	166	132
Changes in financial receivables from cash pooling	-1	4
Cash flow from investing activities	**-792**	**-1,350**
Capital contribution from subordinated notes investors	1,491	–
Dividend payments to shareholders	-686	-57
Distributions paid to subordinated notes investors	-8	–
Proceeds from debt to banks	55	28
Repayments of debt to banks	-1,896	-28
Changes in financial liabilities to related parties (cash pooling)	128	-91
Repayment of lease liabilities	-59	-67
Cash flow from financing activities	**-975**	**-215**
Change in cash and cash equivalents	**1,230**	**39**
Effects of foreign exchange rate changes, changes in the consolidation scope and other changes in value	55	-32
Cash and cash equivalents at the beginning of the reporting period	**821**	**814**
Cash and cash equivalents at the end of the reporting period	**2,106**	**821**

Cash flow from operating activities

Cash flow from operating activities increased by €1,394 million from €1,604 million in 2020 to €2,998 million in 2021. The increase was primarily due to higher commodity prices, which were partly offset by lower income tax benefits primarily in Norway. Cash refunds in the first half of 2021 for the tax value of losses in 2020, less tax payments for 2021 to Norwegian tax authorities resulted in a cash inflow of €230 million in the reporting period compared to a cash inflow of €557 million in the comparison period. The changes in income tax assets and liabilities (including cash payments) are largely reflected in other balance sheet items.

Cash flow from investing activities

Cash flow from investing activities, which includes capital expenditures, acquisitions, payments for and proceeds from financial receivables and proceeds from divestitures and disposals, amounted to €-792 million in 2021 compared to €-1,350 million in 2020. This decrease was related to lower capital expenditures (€218 million) due to lower investment activity following the commencement of production in several of our development projects and lower financing of investment activities in our equity-accounted investments through equity or loans (net proceeds of €134 million in 2021, compared to net payments of €-181 million in 2020). In 2021, a loan to one of our Russian joint ventures was fully repaid.

Cash flow from financing activities
Cash flow from financing activities amounted to €-975 million in the reporting period, compared to €-215 million in 2020. The change compared to the previous year was partly attributable to the common dividend payment made to both shareholders (€-600 million) and higher dividends on preferred shares (€-86 million in 2021 compared to €-57 million in 2020). In addition, we received €1,491 million in proceeds from the issue of the subordinated notes and were able to repay all outstanding bank term facilities, totalling €-1,869 million, ahead of schedule.

€ million	2021	2020
Cash flow from operating activities	2,998	1,604
Cash flow from investing activities	-792	-1,350
less payments for/proceeds from acquisitions	-25	11
less proceeds from the disposal of non-current assets/divestitures	-99	-106
Free cash flow	**2,082**	**159**

Wintershall Dea believes the Group has sufficient funds available to meet its liquidity needs, including working capital, based on its current liquidity reserves, including €2,106 million in cash and cash equivalents at the end of the reporting period, an undrawn committed revolving credit facility of €900 million, and its access to various capital markets.

Net assets

€ million	31 Dec 2021	31 Dec 2020
Intangible assets	5,292	5,629
Tangible assets	9,170	8,776
Equity-accounted investments	2,856	2,671
Financial receivables	1,159	1,127
Other assets/receivables	308	315
Non-current assets	**18,785**	**18,518**
Financial receivables	65	141
Trade and other receivables	1,745	908
Other current assets	2,728	1,410
Assets held for sale	129	–
Current assets	**4,666**	**2,459**
Assets	**23,452**	**20,977**

Non-current assets equalled €18,785 million as at 31 December 2021, amounting to 80% of total assets. Compared to €18,518 million as at 31 December 2020, non-current assets increased by €267 million or 1%.

Intangible assets amounted to €5,292 million (31 December 2020: €5,629 million). Goodwill increased by €137 million to €2,435 million as at 31 December 2021 primarily as a result of foreign currency translation effects. Exploration assets amounted to €226 million, a decrease of €416 million compared to the prior year, mainly due to the reclassification of exploration assets to gas and oil assets in Northern Europe following the start of the development phase, disposals of exploration assets in Northern Europe and impairment losses on exploration assets in Latin America, Middle East/North Africa and Northern Europe. Other intangible assets amounted to €2,631 million as at 31 December 2021, a decrease of €58 million compared to 31 December 2020, mainly due to amortisation and impairment, and were partially compensated by foreign currency translation effects.

Tangible assets increased by €394 million and amounted to €9,170 million. The increase resulted primarily from additions (€1,121 million), mainly for our Norwegian development projects. Foreign currency translation effects (€550 million), the reclassification from exploration assets to gas and oil assets (€349 million), as well as the reversal of impairments on tangible assets for two Norwegian licences (€260 million), also increased tangible assets. This was partially offset by depreciation (€1,275 million), disposals resulting from divestments in Germany and revaluation of abandonment assets (€360 million) as well as impairment losses (€206 million) primarily with regard to a licence in Egypt due to reduced reserves expectations and our agreed divestment in Argentina.

Equity-accounted investments amounted to €2,856 million, an increase of €185 million compared to 31 December 2020, primarily due to increases in the underlying proportionate net income of the participations and foreign currency translation effects, which were partly compensated by dividends received.

Non-current financial receivables increased by €32 million to €1,159 million following an increase in a loan to other parties.

Non-current other assets and receivables decreased by €7 million to €308 million, driven mainly by a decline in derivative instruments (€71 million) and other receivables (€27 million), and largely compensated by an increase in deferred tax assets (€94 million).

Current assets increased by 90% compared to 31 December 2020 and amounted to €4,666 million as at 31 December 2021.

Current financial receivables decreased by €76 million to €65 million primarily due to the net repayment of a loan to one of our Russian joint ventures.

Trade and other receivables amounted to €1,745 million compared with €908 million as at 31 December 2020. The increase of €837 million was due to significantly higher commodity prices and trading quantities, as well as to currency translation effects.

Additionally, other current assets increased by €1,318 million to €2,728 million. The increase in cash and cash equivalents of €1,285 million (€821 million as at 31 December 2020) was mainly attributable to free cash flow. Cash and cash equivalents as at 31 December 2021 included a restricted amount of €13 million. Derivative instruments amounted to €441 million, an increase of €349 million compared to 31 December 2020 (€92 million), attributable primarily to commodity derivatives. Income tax assets decreased in 2021 primarily as a result of refunds received from Norwegian tax authorities for the tax value of losses for fiscal year 2020.

Assets held for sale amounted to €129 million as at 31 December 2021 and included the assets related to the planned divestment in Argentina.

€ million	31 Dec 2021	31 Dec 2020
Equity	**7,852**	**6,435**
Provisions	3,169	3,327
Financial debt	4,055	5,886
Other non-current liabilities	3,241	3,361
Non-current liabilities	**10,464**	**12,574**
Provisions	483	437
Financial debt	575	471
Trade and other payables	1,277	766
Other current liabilities	2,795	294
Liabilities directly associated with assets classified as held for sale	5	–
Current liabilities	**5,136**	**1,968**
Equity and liabilities	**23,452**	**20,977**

Equity increased by €1,417 million to €7,852 million compared with 31 December 2020. This increase resulted mainly from the capital raised through the issue of subordinated notes (€1,491 million), the net result (€593 million) and the positive effects of unrealised gains from currency translation (€507 million), whereas adverse fair value changes in derivatives which have partly been impacted by a change in the applied tax rate (€531 million net of tax) as well as paid dividends (€686 million) reduced equity.

The equity ratio for Wintershall Dea increased slightly from 31% as at 31 December 2020 to 33% as at 31 December 2021.

Compared with 31 December 2020, non-current liabilities decreased by €2,110 million to €10,464 million as at 31 December 2021.

Overall, non-current provisions declined by €158 million to €3,169 million as at 31 December 2021. Pension provisions decreased by €73 million to €558 million primarily due to changes in the discount rates. Decommissioning provisions decreased to €2,467 million (31 December 2020: €2,607 million), mainly due to reversals of provisions in Norway from a reduction in cost estimates and the disposal of assets in Germany partially offset by additions, as well as to foreign currency translation effects, among other factors. Other provisions increased by €54 million and amounted to €143 million.

Non-current financial debt amounted to €4,055 million (31 December 2020: €5,886 million). The decline of €1,831 million was primarily due to the full repayment of bank facilities. The balance consists primarily of bonds. The maturities of the four tranches of €1,000 million each are 2023, 2025, 2028 and 2031 and the corresponding interest rates are 0.452%, 0.840%, 1.332% and 1.823%. A revolving credit facility (RCF) totalling €900 million was agreed with a bank consortium and can be utilised if necessary. This facility is available until March 2026 and is currently undrawn.

Other non-current liabilities amounted to €3,241 million, a decline of €120 million compared to 31 December 2020. The position includes derivative instruments, other liabilities, income tax liabilities and deferred tax liabilities. Deferred tax liabilities decreased by €1,052 million to €2,198 million, driven by higher losses from hedging of the Norwegian gas production reported under other comprehensive income (OCI). This was partially offset by foreign currency translation effects on deferred taxes mainly in Norway, as well as other existing taxable temporary differences. The increase in derivative instruments (€926 million) was attributable primarily to commodity derivatives. Income tax liabilities amounted to €27 million as at 31 December 2021.

Current liabilities increased by €3,168 million to €5,136 million as at 31 December 2021, driven mainly by the increase in derivative instruments, trade and other payables and income tax liabilities.

Overall, current provisions increased by 11% to €483 million. Decommissioning provisions increased by €26 million to €193 million, mainly due to reclassifications from non-current decommissioning provisions. Other provisions increased by €21 million to €291 million, primarily as a result of additions to restructuring provisions.

Current financial debt increased by €104 million, primarily due to higher cash pool liabilities (€143 million) that were partly offset by a decrease in lease liabilities (€34 million).

Trade and other payables increased by €511 million to €1,277 million compared with €766 million as at 31 December 2020. This increase was mainly related to the headquarters' gas trading activities.

Other current liabilities include derivative instruments and income tax liabilities and amounted to €2,795 million as at 31 December 2021. The increase of €1,876 million in derivative instruments (€258 million as at 31 December 2020) was mostly attributable to commodity derivatives. Income tax liabilities increased year-on-year to €661 million (31 December 2020: €36 million). This increase was due to the strong result before taxes of our Norwegian subsidiary compared to a loss before taxes in the comparison period and an increase in the tax rate in Argentina.

Net debt/EBITDAX ratio

€ million	31 Dec 2021	31 Dec 2020
Bonds	3,999	3,997
Debt to banks	3	1,828
Financial liabilities from cash pooling	536	394
Lease liabilities	90	133
Total debt	**4,628**	**6,352**
Financial receivables from cash pooling	-13	-12
Cash and cash equivalents	-2,106	-821
Net debt	**2,510**	**5,519**
EBITDAX (LTM)[1]	**3,832**	**1,643**
Net debt/EBITDAX ratio	**0.7**	**3.4**

[1] LTM = Last 12 months

Net debt as at 31 December 2021 amounted to €2,510 million compared to €5,519 million as at 31 December 2020. Temporary banking facilities were repaid earlier this year, primarily through the issue of €1,491 million subordinated notes (recognised in equity), with the remainder financed from company funds. Total debt has decreased by 27% to €4,628 million. In addition, cash and cash equivalents increased by 156% to €2,106 resulting in net debt of €2,510 million and a reduction in the net debt to EBITDAX (LTM) ratio from 3.4x to 0.7x.

Overall statement

In the course of the recovery of the global economy, especially in commodity prices, and despite the volatility in the international environment, Wintershall Dea can look back on a satisfactory business development in the reporting year 2021. The increased key figures and the positive development of the results of operations, financial position and net assets in 2021 demonstrate the company's solid financial basis. Overall, business performance was above management's expectations. Information on the outlook for 2022 is provided in the Outlook, Risks and Opportunities Report.

2.6 VOLUNTARY QUARTERLY INFORMATION (UNAUDITED)

CONSOLIDATED STATEMENT OF INCOME

€ million	Q4 2021	Q4 2020
Revenues gas and oil	3,243	1,076
Revenues other	80	81
Net income from equity-accounted investments: gas and oil	24	3
Net income from equity-accounted investments: midstream	40	44
Other operating income	27	13
	3,414	**1,217**
Production and operating expenses	-1,857	-667
Production and similar taxes	-39	-18
Depreciation and amortisation	-413	-391
Net impairment on assets	-41	-208
Exploration expenses	-25	-108
General and administrative expenses	-73	25
	966	**-150**
Financial income	13	70
Financial expenses	-77	-140
	-64	**-70**
Income/loss (-) before taxes	**902**	**-220**
Income taxes	-747	129
Net income/loss (-)	**155**	**-91**
Net income/loss (-) attributable to shareholders	144	-91
Net income/loss (-) attributable to subordinated notes investors	11	–

CONSOLIDATED STATEMENT OF CASH FLOW

€ million	Q4 2021	Q4 2020
Net income/loss (-)	**155**	**-91**
Amortisation/depreciation/impairment losses/reversal of impairment losses	452	611
Changes in provisions	20	-44
Changes in deferred taxes	242	24
Gains (-)/losses from disposal of non-current assets	14	70
Other non-cash income/expenses and finance costs	-30	-45
Changes in working capital	-344	-83
Changes in other balance sheet items	513	160
Cash flow from operating activities	**1,021**	**602**
Payments for intangible assets, property, plant and equipment and investment property	-290	-296
Payments for equity-accounted investments	–	-124
Proceeds from the disposal of non-current assets/divestitures	32	55
Payments for financial receivables	–	-35
Proceeds from financial receivables	147	131
Changes in financial receivables from cash pooling	1	–
Cash flow from investing activities	**-111**	**-269**
Proceeds from debt to banks	27	12
Repayments of debt to banks	-32	-12
Changes in financial liabilities to related parties (cash pooling)	4	-40
Repayment of lease liabilities	-14	-12
Cash flow from financing activities	**-15**	**-52**
Change in cash and cash equivalents	**895**	**281**
Effects of foreign exchange rate changes, changes in the consolidation scope and other changes in value	1	3
Cash and cash equivalents at the beginning of the reporting period	**1,210**	**537**
Cash and cash equivalents at the end of the reporting period	**2,106**	**821**

SELECTED PERFORMANCE INDICATORS BY SEGMENT

	Q4 2021						
€ million	Northern Europe	Russia	Latin America	Middle East/ North Africa	Midstream	Other	**Total**
Realised prices							
Average realised gas price[1] (in $/mscf)	13.03	2.54[2]	2.85	4.16[3]	–	–	**5.05**
Average realised liquids price[1] (in $/bbl)	62.4	18.8[2]	63.8	76.6	–	–	**49.3**
External revenues	679	394	122	224	–	1,903	**3,323**
Production[4]							
Natural gas (mboe/d)	108	277	60	44	–	–	**489**
Liquids (mboe/d)	100	68	8	13[5]	–	–	**189**
Total production (mboe/d)	208	345	68	57[5]	–	–	**678**
Production costs per boe (€/boe)	9.0	0.5	4.7	5.9	–	–	**5.2**
EBITDAX	834	381	66	195	40	-7	**1,509**
Adjusted net income	35	293	-60	71	40	-2	**376**
Exploration							
Exploration capex	-3	–	-7	–	–	–	**-10**
Exploration expenses	-15	–	-10	1	–	-2	**-25**
Net exploration expenditures	-17	–	-18	–	–	-2	**-37**
Capex	-239	-2	-9	-29	–	-1	**-280**
Free cash flow	432	235	1	84	3	123	**878**

[1] Includes commodity hedge result
[2] Includes the deduction of production costs and applicable taxes
[3] Includes the deduction of applicable taxes for Algeria
[4] Mboe/d – thousand barrel of oil equivalent per day/on a working interest basis including proportional production from at equity-accounted companies
[5] Excludes Libya onshore

	Q4 2020						
€ million	Northern Europe	Russia	Latin America	Middle East/ North Africa	Midstream	Other	**Total**
Realised prices							
Average realised gas price[1] (in $/mscf)	4.82	0.55[2]	1.75	2.57[3]	–	–	**1.85**
Average realised liquids price[1] (in $/bbl)	40.6	8.2[2]	36.7	37.1	–	–	**30.2**
External revenues	528	172	75	50	–	331	**1,157**
Production[4]							
Natural gas (mboe/d)	113	249	65	34	–	–	**461**
Liquids (mboe/d)	108	67	9	9[5]	–	–	**193**
Total production (mboe/d)	221	316	74	43[5]	–	–	**654**
Production costs per boe (€/boe)	8.2	0.4	3.2	5.3	–	–	**4.6**
EBITDAX	313	88	30	7	42	20	**500**
Adjusted net income	84	61	-56	-15	41	13	**128**
Exploration							
Exploration capex	-5	–	4	–	–	–	**-1**
Exploration expenses	-96	–	-11	-1	–	–	**-108**
Net exploration expenditures	-29	–	-21	7	–	-1	**-44**
Capex	-248	-2	-5	-38	–	-3	**-295**
Free cash flow	468	42	-82	-55	-26	-69	**278**

[1] Includes commodity hedge result
[2] Includes the deduction of production costs and applicable taxes
[3] Includes the deduction of applicable taxes for Algeria
[4] Mboe/d – thousand barrel of oil equivalent per day/on a working interest basis including proportional production from at equity-accounted companies
[5] Excludes Libya onshore

3. OUTLOOK, RISKS AND OPPORTUNITIES REPORT

3.1 OUTLOOK

Underlying assumptions

Our guidance is based on the underlying assumption that the recovery from the COVID-19 pandemic will continue, and the negative economic effects of the pandemic will gradually fade.

For 2022, we assume the following commodity prices and exchange rates:

- Brent prices of $67-71/bbl
- TTF gas prices of $13-14/mscf
- $/€ exchange rate of 1.17

During the year, we provided quarterly updates to the initial guidance. According to the requirements of GAS 20, the actual performance in fiscal year 2021 should be compared to the original 2021 guidance.

During the year, Brent was c. 50% on average above the underlying assumptions and TTF c. 200% on average above the underlying assumptions as a result of the strong swings in demand for hydrocarbons and the faster than expected rebound in the global economy. In addition, gas prices in Europe were also impacted by a colder than expected winter and a hotter than expected summer, further increasing demand for natural gas. The dollar versus the euro in the reporting year was 8% weaker on average compared with the underlying assumptions in last year's guidance.

Production[2] for 2021 was slightly above the midpoint of the original guidance and above the latest revised guidance in the third quarter of 2021.

Capex in 2021 was €0.1 billion below the midpoint of last year's guidance.

In 2021, we met both our EBITDAX and free cash flow targets.

Outlook

The Wintershall Dea Group's new medium-term planning (MTP) was adopted in early December 2021. Our guidance, which does not include potential M&A activities, is based on this MTP.

In 2022, we expect the following:

- Production[2] in the range of: 610–630 thousand boe per day
- Capex in the range of €1.0–1.1 billion
- Exploration expenditures of €200–250 million
- EBITDAX to increase slightly (<10%) compared to 2021, based on our price assumptions for the year
- Free cash flow to decrease (<40%) compared to 2021, based on our price assumptions for the year.

[2] Excluding Libya onshore

3.2 OPPORTUNITIES AND RISKS

The goal of Wintershall Dea's risk management is to identify and evaluate opportunities and risks as early as possible and take appropriate measures in order to seize opportunities and avoid harm to the company, people, the environment, business partners and third parties. The aim is to avoid risks that pose a threat to Wintershall Dea's continued existence and make optimal managerial decisions to create value. There can be no assurance, however, that Wintershall Dea will be able to meet its strategic goals on time or at all.

We define opportunities as events that positively affect the achievement of our strategy and business goals. We understand risk to be any event that negatively affects the achievement of our strategy and business goals.

In order to effectively measure and manage the identified opportunities and risks, we quantify these where appropriate in terms of their probability and impact in the event they occur. Where possible, we use statistical methods to aggregate opportunities and risks into risk factors. This provides an overall view of the opportunities and risks at portfolio level, allowing us to take effective action to manage risks.

Overall assessment

- Significant opportunities and risks arise from changes in market prices for commodities and foreign currencies
- No threat to the continued existence of Wintershall Dea

For 2022, we are assuming continued elevated uncertainty surrounding geopolitical tensions and the pandemic's recovery. Sustained global supply chain disruptions, higher commodity prices or the emergence of new virus variants could dampen growth momentum substantially. Although price pressures can be expected to subside globally in 2022, the prospect of transitory inflation remains uncertain. However, if progress continues to be made with COVID-19 vaccinations and medications and supply chain issues recede, we anticipate global economic growth to remain robust.

According to our assessment, there are no significant individual risks that pose a threat to the continued existence of Wintershall Dea. The same applies for the sum of individual risks, even in the case of a global economic crisis. Ultimately, however, all entrepreneurial activities retain some level of risk that cannot be ruled out, even with comprehensive risk management.

The aggregated potential short-term effects on free cash flow (FCF), as set out below, provide a holistic view of Wintershall Dea's quantitative opportunities and risks in 2022, including the upside opportunity and downside risk of the company's ability to pay dividends. Risks with probabilities below or equal to 2% (tail events) are not depicted in the aggregation table as a 98% confidence interval is applied for each risk factor based on planned values.

POTENTIAL SHORT-TERM EFFECTS ON FREE CASH FLOW (FCF) OF KEY OPPORTUNITY AND RISK FACTORS

Categories	Outlook Effects on free cash flow 2022 – +
Hydrocarbon prices	○○●●●◉◉◉◉◉
Foreign exchange	○○○●●◉◉◉○○
Credit / Counterparty	○○○●●◉○○○○
Tax	○●●●●◉◉○○○
Liquidity	○○○○●○○○○○
Influence on third parties	○○○●●◉○○○○
Facilities / Wells	○○○○●◉◉○○○
Subsurface / Reserves	○○○○●◉◉○○○
Contracts	○○●●●○○○○○

Categories	Effects on free cash flow from	to	Outlook –+
Very low		< €50 m	○○○○●◉○○○○
Low	€50 m	€150 m	○○○●●◉◉○○○
Moderate	€150 m	€500 m	○○●●●◉◉◉○○
High	€500 m	€750 m	○●●●●◉◉◉◉○
Very high	> €750 m		●●●●●◉◉◉◉◉

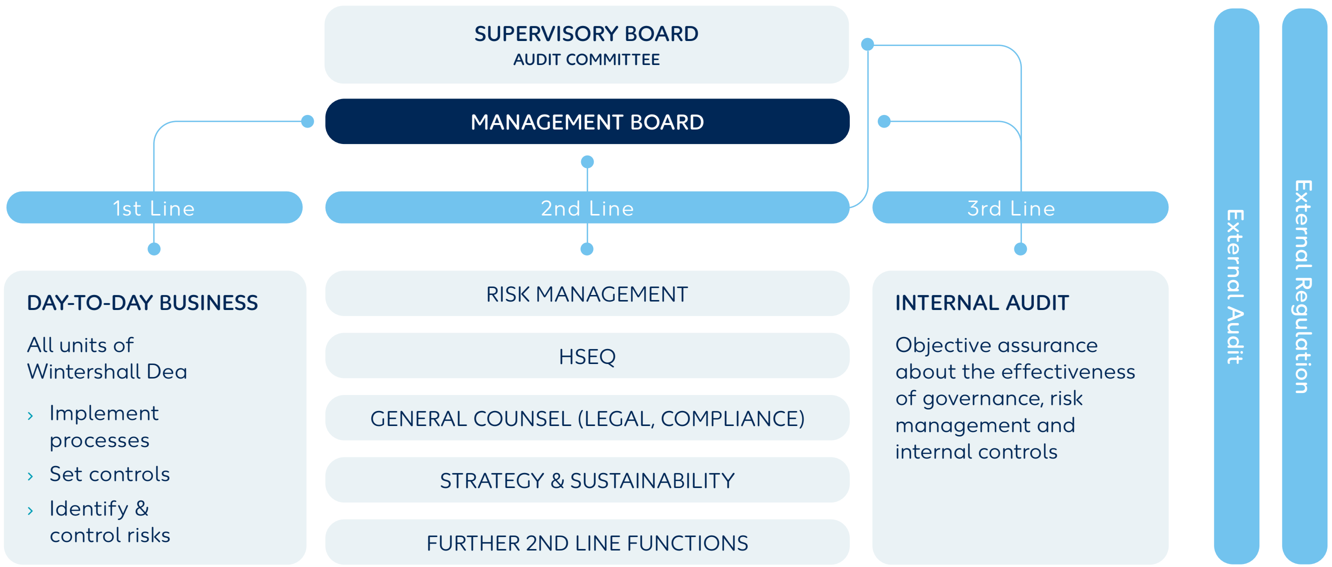
Risk management process

Wintershall Dea's risk management process is based on the international risk management standard COSO Enterprise Risk Management – Integrating with Strategy and Performance (2017) and has the following key features:

Organisation and responsibilities

Ensuring the risk awareness of each employee at Wintershall Dea is an integral part of the company's day-to-day risk culture.

RISK MANAGEMENT ORGANISATION



- The organisation of risk management within Wintershall Dea follows the principles of the 'Three Lines Model'.
- Risk management is the responsibility of the Management Board, which also determines the processes for approving investments, acquisitions and divestitures.
- The Management Board is supported by Group Risk Management, which coordinates the risk management process at company level, examines quantitative and qualitative opportunities and risks and provides the structure and appropriate methodology. This ensures that opportunity and risk management is integrated into the strategy, planning and decision-making processes.
- A network of local risk managers from international business units advances the implementation of appropriate risk management practices in daily operations.
- Market risks, including commodity and currency risks, are centrally evaluated and actively hedged at Group level. Hedging activities are governed by the Group's hedging policy. The management of operational opportunities and risks is largely delegated to the business and corporate units at a regional or local level.
- The primary goal of our compliance management system is to ensure Wintershall Dea, its executive bodies, employees, and third parties, if applicable, comply with all legal, internal and external regulations affecting the company using appropriate measures.
- The internal auditing unit (Corporate Audit) is responsible for regularly auditing the risk management system established by the Management Board in accordance with Section 91 (2) of the German Stock Corporation Act. Furthermore, as part of its monitoring of the Management Board, the Audit Committee of the Supervisory Board reflects on the effectiveness of the risk management system.
- The sustainability unit is responsible for the strategic integration of sustainability into our core business and the coordination of company-wide measures. To ensure the alignment of operational activities with the corporate sustainability strategy, relevant projects such as country entries and investments with potential meaningful sustainability impacts undergo a dedicated sustainability assessment.

Process

- The Risk Management Policy, applicable throughout the company, forms the framework for risk management and is implemented by the business units and corporate units in accordance with their specific circumstances.
- A catalogue of opportunity and risk factors helps to identify all relevant quantitative and qualitative opportunities and risks as comprehensively as possible.

- Wintershall Dea has established a bottom-up risk management process that involves all levels within the organisation through regular risk dialogues. As part of this process, Group Risk Management aggregates and reports opportunities and risks to the Management Board and the Audit Committee twice a year.
- Furthermore, updates on the risk portfolio are provided for all quantitative risks and opportunities during the regular planning cycles. If new relevant risks are identified, they must be immediately reported.
- Probability of occurrence and potential impact are quantitatively and qualitatively evaluated for all opportunities and risks where applicable. Evaluation criteria are defined as quantitative and qualitative KPIs and refer to the actual risk, taking into consideration the effective response measures in place.
- The quantification is based on the probability of occurrence and the potential impact on the planned free cash flow (FCF) and EBITDAX, which also include potential impacts on the major KPIs of production per day and capex. The threshold for consideration is €10 million per annum within the two-year period under review. The quantified risks and opportunities are simulated and aggregated to provide risk-based information using a 98% confidence interval. Long-term quantitative opportunities and risks that affect the FCF and/or EBITDAX in later years are considered separately by the net present value (NPV) of projects and assets.
- The qualitative assessment considers the potential impact on the environmental, safety and security situations as well as legal and reputational consequences.

ENTERPRISE RISK MANAGEMENT PROCESS

SHORT-TERM OPPORTUNITIES AND RISKS

Hydrocarbon prices

- The Group's business depends significantly on hydrocarbon prices, which are impacted by global economic conditions and can be volatile

The Group's estimated revenues, cash flow, reserves and resources, as well as profitability and growth, depend substantially on the prevailing international and local prices of the hydrocarbons that the Group produces. Hydrocarbon prices are volatile and depend on factors beyond the Group's control. Prices are currently driven and expected to be driven in the future largely by general uncertainty about the recovery in global economic activity, the potential further spread of COVID-19 and the containment actions taken globally in response, including restrictions on travel, the imposition of quarantines, the prolonged closures of workplaces, curfews and other social distancing measures. Current global economic conditions and instability in certain emerging markets are likely to have significant long-term effects on the Group's operating results. Continued price volatility for oil and/or gas, a downturn in global economic conditions and the speed of the energy transition could all have a material adverse effect on the Group's business, financial condition and results of operations.

Risk management

The Group manages short to mid-term hydrocarbon price risk by systematically hedging portions of its oil and gas price risk to protect its investment-grade rating and increase dividend predictability. This risk management serves to ensure sufficient debt capacity and provide the management with the flexibility it needs to adapt its strategy in the event of critically low commodity prices.

The amounts to be hedged depend on the Group's financial situation, its commodity price exposures, and commodity market conditions. The maximum hedge volume is set at 75%, 50%, and 25% of efficiently hedgeable production for a one-, two-, or three-year horizon, respectively. We effectively hedge up to one-third of our hydrocarbon after-tax exposure primarily through the use of linear contracts.

Furthermore, the Group's long-term strategy is designed to withstand changing market conditions with a relentless focus on maintaining and increasing the resilience of the existing portfolio and investment decisions.

Foreign exchange

› Changes in foreign exchange rates may affect the Group's results of operations and financial position

The Group is exposed to market fluctuations in foreign exchange rates. Its reporting currency is the euro. Revenues are generated in several currencies, including the US dollar, while operating expenses and investments may be denominated in other currencies, such as the Norwegian krone and Russian rouble. Significant fluctuations in exchange rates between the US dollar and the euro or the Group's other operational currencies could materially and adversely affect its reported results.

Risk management
The Group monitors and manages foreign currency exposure on a daily basis in an effort to eliminate the effect of currency fluctuations on the income statement. Currency risks are monitored at the Group and entity levels, and the Group's net foreign currency exposure (after natural hedges) is actively hedged, where feasible, with linear contracts.

Credit/Counterparty

› The Group is subject to credit risks

The Group's business is exposed to the risk that the amounts owed by its customers for products sold or services rendered will not be paid when due and that some customers may not be able to meet their obligations fully or on a timely basis due to insolvency or other issues. In such cases, the Group seeks to resolve any disputes and recover the amounts owed to it in conformity with the laws of the jurisdictions where the Group operates and established business practices. The Group is also exposed to credit risks through its arrangements with suppliers, joint ventures and other partners. As a result of the uncertainty regarding the amount and date at which the Group will recover overdue debts from its customers, the Group may need substantial financial resources to maintain its financial stability.

Risk management
Credit risks are managed on a Group basis. Group-wide procedures cover applications for credit approval, the granting and renewal of counterparty credit limits, the proactive monitoring of exposures with respect to these limits and the requirements triggering secured payment terms. As part of these processes, credit exposures with all counterparties are regularly monitored and assessed on a timely basis.

Tax

› The Group is exposed to tax environment risks

The Group operates and owns interests in assets in a large number of countries. It is therefore exposed to a wide range of tax environments that are subject to change in a manner that may be materially adverse for the Group, which can include changes and uncertainty surrounding subsidies, royalties or taxation (including policies relating to the granting of advance rulings on taxation matters).

Opportunities
Favourable changes to subsidies, royalties or taxes may also serve as an opportunity.

Liquidity

› The Group's ability to generate sufficient cash flow to fund its operations depends on many factors beyond its control

The Group requires, and expects to continue to require, substantial capital expenditures in its business, including in the areas of exploration, development, production, transportation and acquisition of oil and natural gas reserves and resources, for example, to offset declines in its key production assets and to meet its obligations under changing environmental laws and regulations.

In recent years, there has been a shift in investor sentiment away from extractive industries, including oil and gas production. If this trend continues, it could lead to reduced or less favourable access to capital markets and other sources of funding for companies in these industries, including the Group.

Risk management
Materialising risks that cause cash flow fluctuations are recognised promptly as part of our liquidity planning. Foreseen and unforeseen short-term liquidity needs can be covered using our cash position, our syndicated revolving credit facility of up to €900 million, and existing uncommitted working capital lines.

Additionally, the Group focuses on maintaining and increasing the resilience of the existing portfolio and making investment decisions to achieve its overall strategic goals.

Our investment-grade rating gives us access to debt capital markets, and we mitigate our refinancing risks by maintaining a balanced maturity profile.

Influence on third parties

› The Group's influence on its joint venture partners may be limited

To the extent that the Group is not the operator of its gas and oil assets, the Group is dependent on its commercial partners acting as operators. In this context, the underperformance of any commercial partner may result in losses, delays and/or increased costs. In cases such as midstream partnerships, our influence on partners is limited.

Risk management
Wintershall Dea's Non-Operated Joint Ventures (NOJVs) represent a large portion of Wintershall Dea's business. While we fully respect the role of the operator, we believe that we also share responsibility for the success or failure of our joint ventures. We perform our see-to-it duty independently of authorities' requirements.

The business units track the performance of the assets and their respective operator. We have established a workflow to secure a consistent approach to joint venture influencing. This approach includes operator assessments, stakeholder analyses, opportunities and risks and their mitigation. On this basis, the responsible asset team determines key focus areas that are deemed significant and can be influenced by Wintershall Dea. These areas are followed up regularly. Our corporate unit 'Joint Venture Influencing' supports the asset teams to drive performance. It connects all of the Groups' joint venture influencing activities by providing guidance, service, support, consultation and quality assurance.

Facilities/Wells

› The Group is exposed to financial risks related to its exploration, development and production activities

Some of the development projects have required and will require significant investment due to the complexity, scale and/or harsh environmental conditions. The Group's assets also require substantial ongoing expenditures for their operation, optimisation, inspection, maintenance and repair.

There is significant risk involved in estimating the expenditures for the abovementioned exploration, development and production activities due to the inherent uncertainties involved in areas such as drilling operations in new formations, encountered fluid compositions, and technical complexities related to developing wells and facilities. Additionally, planned production targets might not be met due to events such as a temporary cessation or curtailment in production.

Risk management
We apply defined corporate processes to ensure companywide quality standards throughout the E&P value chain.

We utilise available technologies that economically increase and enhance production, reduce costs and mitigate risks. Our digital team co-develops IT solutions where required. Further on, our Technology Service Centre is our competence centre for reservoir services and production services all over the E&P value chain. We provide a portfolio of analyses and solutions, which support, above all, the assessment of reservoirs and the optimisation of operations and recovery.

Subsurface/Reserves

› The Group may fail to properly estimate reserves and resources

Reserves are those quantities of oil and natural gas anticipated to be commercially recoverable from known accumulations of hydrocarbons. Reserve estimates may undergo positive or negative changes over time and exert an influence on current depreciation and amortisation, as well as on the value of the company's assets. In general, estimates of economically recoverable oil and gas reserves are based on a number of factors and assumptions made as at the date on which the reserve estimates are determined, such as geological and engineering estimates, production from the fields, the assumed effects of regulation by governmental agencies, and estimates of future commodity prices and operating costs, all of which may vary considerably from actual results.

The uncertainties described may result in either an overestimation or underestimation of the production realised in the future. We estimate that the assessment of our reserves volume on corporate level might be affected by these uncertainties within a range of approximately -20% to +13% of the base case.

It may also be required to scale down, delay or cancel drilling operations or surface construction, or respectively reduce or stop production due to different factors such as unexpected drilling conditions or adverse reservoir characteristics, e.g. pressure regimes.

Risk management
The quality of bookings of reserves and resources at the company level is assured by an independent corporate team of experts and based on defined business processes. As part of this assurance process, our reserves and contingent resources are also evaluated by independent external reserves auditors.

Contracts

› The Group is exposed to risks from existing or future contracts

The Group is a party to various contracts, including production sharing contracts, joint operating agreements, sales contracts, and sales and purchase agreements. These contracts carry several risks that could have an adverse effect on the Group's business, such as hidden disadvantages, contingent liabilities, price revision or compensation clauses, and disputes over specific contract terms. The Group may also fail to fulfil commitments or could violate defined covenants resulting from those contracts.

Disputes may arise over specific contract clauses that could ultimately lead to litigation. The damages claimed may be material and significant expenses may be incurred for legal defence.

Risk management
Management of contractual risks involves all necessary steps to comply with contractual obligations and enforce contractual rights. Contracts may also serve to mitigate risks associated with reimbursement and compensation clauses.

LONG-TERM OPPORTUNITIES AND RISKS

Health, Safety and Environment (HSE)

› The Group is exposed to HSE risks inherent to its international activities

The geographical distribution of our operating units in combination with the technical and operational complexity of our activities exposes us to a wide range of HSE risks that could potentially result in a major accident. In addition, the effects of natural disasters, social unrest and global pandemics form a potential threat to our operational continuity and could have an adverse impact on our financial results.

Risk management
Wintershall Dea is strongly committed to HSEQ (health, safety, environment, quality) leadership: We care about the health, safety, security and environment of those who work for and with us, as well as about the communities we work in. Our global HSEQ framework helps to protect our employees, business activities and reputation from potential and existing risks. Our goal is always to maintain a proactive and strategic approach that aligns with Wintershall Dea's global risk profile and supports our operational activities.

In addition to an overarching group HSEQ policy, we have functional requirements in place that apply across the company and clearly require compliance with laws and regulations at local, regional and global level.

We believe our trusting working environment, shaped by open and transparent communication and positive error-management, sets the right tone for our HSEQ culture. Our leaders are trained to understand their role in HSEQ and act in accordance with our HSEQ principles.

HSEQ risk management: The Group actively manages the safety of all personnel working in its operations by applying health and safety standards, implementing security measures and conducting internal and external audits of health and safety risks and other measures.

For the assets, activities and sites over which Wintershall Dea does not exercise control, it seeks to promote Wintershall Dea's HSEQ expectations and endeavours to have similar expectations adopted. It actively engages with HSEQ topics at its joint ventures through broadly established practices such as knowledge sharing, partner audits, and follow-ups on results.

Major accident prevention: The Group commits to active barrier management to ensure asset integrity (including well-, plant- and pipeline integrity) and process safety throughout all phases of the life cycle in compliance with relevant regulations, codes, standards and industry best practices. It employs effective integrity management systems to ensure that integrity is maintained throughout the entire life cycle by applying multiple independent technical, operational and organisational barriers. A continuous improvement process is carried out to ensure that the information and knowledge gained is communicated to those responsible for the phase of the life cycle in which the improvement can be implemented.

Incident response and business continuity: While we continuously aim to protect people and the environment, we acknowledge that exceptional events can still occur and are committed to minimising any potential impact by implementing clearly defined crisis management and emergency response throughout the global organisation. Company-wide crisis management tools and processes ensure a systematic approach and assist the effective collaboration across the organisation. Training is regularly conducted to raise employees' awareness of risks and prepare them for emergency situations.

Our Business Continuity Management helps us to identify time-critical processes and prepare scenario-specific response plans to ensure a timely recovery of our operations and the continued delivery of products and services during a disruption.

Political

› The Group is exposed to significant political risks

The Group operates and owns interests in assets in a large number of geographic regions and countries, some of which are complex or have unstable political or social climates. As a result, the Group is exposed to a wide range of political, economic, regulatory, social and tax environments. These environments are subject to change in a manner that may be materially adverse for the Group.

Examples include uncertainties and changes involving government policies or industrial production regulations; changes in areas such as foreign investment, inflation, capital and price controls, import and export controls, tariffs, subsidies, income and other forms of taxation (including policies related to granting advance rulings on taxation matters); the nationalisation or expropriation of property and repatriation of income and royalties; as well as changes in the areas of environment, labour, health and safety.

The Group has also seen significant growth in the opposition to oil and gas development. Despite improvements in their climate and industry policies, companies in the oil and gas industry can become the target of opposition to hydrocarbon development from stakeholder groups, including national, state and local governments, regulatory agencies, non-governmental organisations, local communities and public citizens. This opposition may attempt to limit or stop hydrocarbon development, extraction activities or transportation in or from certain areas.

The Group is committed to complying with all applicable sanctions in its business and taking all of the measures necessary to mitigate risks to its business resulting from the imposition of or changes in applicable sanctions regimes. There can be no assurance that compliance with applicable sanctions will not impose material costs on the Group.

Risk management
We continuously monitor geopolitical and societal developments to the extent of their importance to our interests. The results of this monitoring are taken into consideration when defining our strategy and respective actions.

The Group's material investments in its North African and Russian assets, as well as its major investment in Mexico, benefit from investment guarantees provided by the Federal Republic of Germany for direct investments made by German companies in developing and emerging countries. These guarantees offer protection in specific circumstances against certain political risks, including expropriation, nationalisation, wars (including civil wars and other armed conflicts), payment embargoes and moratoria.

Climate change and energy transition

› The Group's activities may be exposed to climate-related risks.

The categorisation of climate-related risks and opportunities is based on the methodology of the Task Force on Climate-related Financial Disclosures (TCFD) and differentiates risks primarily between transition and phyiscal risks (more about our TCFD commitment and reporting can be found in chapter Climate & Energy in our 2021 Sustainability Report).

› Transition risks are divided into three sub-categories (1) Market/Technology, (2) Policy and Regulation and (3) Reputation. Within the sub-category Market/Technology risks are related to changing long-term hydrocarbon demand and prices, emission risks, decreasing financial results and shareholders returns as well as the risk of 'stranded' assets. The sub-category Policy and Regulation is related to a risk of evolving carbon regulation, higher CO_2 prices and taxes, legislative changes, exposure to litigation, stricter or prohibitive regulations and increasing costs. Various claims have been filed in different countries to increase pressure on legislators and the industry. Wintershall Dea has been also sued in Germany, and the legal proceedings of this case are still ongoing. Risks in the sub-category Reputation are related to increased stakeholder concerns and loss of credibility.

- Physical risks are related to the damage of facilities, infrastructure and equipment through extreme weather events such as extreme heat, severe flooding, storms, cyclones and wildfires. Physical risk may also result in the disruption of operations, loss of production or environmental impacts.

Risk management

Depending on the potential specific risk event Wintershall Dea seeks for appropriate risk and opportunity management and mitigation measures. We, for example, have declared our support for the European Union's 2050 climate neutrality target and adhere to international and internal standards, as well as country-specific legislation in all that we do. Therefore, also in case of litigation claims, we ensure compliance with all applicable laws and regulations. We have developed an Energy Transition Pathway (reference to Annual Report chapter 'Our Energy Transition Pathway') and have set measurable targets to thrive in the energy transition. We target to reduce our Scope 1 and 2 greenhouse gas emissions of our upstream activities -operated and non-operated at equity share basis- to net zero by 2030. We will bring our methane emission intensity to below 0.1% by 2025 and maintain zero routine flaring in our operations in accordance with our commitment to the World Bank's 'Zero Routine Flaring by 2030' initiative. Beyond 2030, our ambition is to manage and reduce net carbon intensity, including Scope 1, 2 and 3 greenhouse gas emissions. Our approach to reaching these targets and ambitions is based on four pillars: portfolio optimisation, emissions management, innovative technologies and offsetting. The implementation of energy and emission efficiency programmes, emission reduction projects and exploring low carbon technologies such as CCS and hydrogen are part of our decarbonisation efforts. At the same time, GHG emissions have become one of the company's performance indicators in the strategy, business planning, target setting, decision making and balance scorecards. Our focus is on natural gas and low cost and low carbon assets (reference to Annual Report chapter 'Sustainability at Wintershall Dea') . We apply internal carbon pricing, scenario analysis and sensitivity testing, and consider financial and climate-related aspects in our investment decisions to ensure the resilience of our portfolio. In the area of physical risks, we assess the potential impact on assets with a focus on the corresponding design of facilities, the implementation of HSE campaigns and protective measures as well as coverage from insurance policies. Wintershall Dea has solid governance and management commitment to climate-related and energy transition topics incl. its participation in a wide variety of sustainability initiatives and associations. In addition, we are committed to a high level of transparency and the implementation of leading reporting and governance systems.

Reserves replacement and development

- The Group may be unsuccessful in finding, acquiring, developing and producing oil and gas reserves and resources that are economically recoverable

The Group's future success depends on its ability to find and develop or acquire additional oil and gas reserves and resources that are economically recoverable.

Risk management

Inorganic reserves replenishment remains an important element of our strategy, supported by our solid financial position and cash flow generative asset portfolio. We remain focused on creating and capturing value for our shareholders and, strive to pick up on opportunities early and identify regions with above-average attractiveness. We also use active portfolio management to continuously optimise our license portfolio and increase the probability of exploration success with the funds available.

The Group seeks to maintain and grow its operating capabilities in countries where it can add value through its knowledge and experience in engineering, reservoir management and project execution, and as a result of having its own teams for operational excellence.

We pursue value-accretive acquisitions as they arise, with a focus on production and reserves rather than undeveloped resources. In parallel, we continue to seek opportunities to optimise our portfolio and enhance our strategic and financial flexibility through divestments.

Additionally, through strategic partnerships and cooperation with renowned partners, such as Gazprom in Russia, Equinor in Norway, BP in Egypt, Total in Argentina and ADNOC in Abu Dhabi/UAE, we strive to get access to new projects and benefit from regional expertise and influence, as well as to implement joint projects on a significant scale.

Information technology

- The Group's IT systems may be subject to unauthorised access to data

Continuously changing how we work as a consequence of COVID-19, including having a large part of the workforce work from home, requires an agile and flexible change of technologies. The implementation of our new ERP system is ongoing and changes processes, systems and responsibilities. Effective control mechanisms must be replaced in a short time frame to ensure uninterrupted business operations.

Changes such as these pose a risk of unauthorised access to data from physical, social or cyber attacks to gain control over Wintershall Dea's confidential data. External parties could gain a competitive advantage or damage Wintershall Dea's reputation.

Fine-tuning technology and organisational alignment, especially concerning the competent use of technologies by our staff and partners, are required to reach the desired level of protection.

Risk management
Wintershall Dea completed the consolidation of its IT infrastructure in the IT post-merger transition project, which included implementing advanced technologies to protect the privacy and integrity of confidential company data. A dedicated cybersecurity organisation has been set up to ensure a high standard of cybersecurity for the internal organisation and service providers alike. An external security operations centre has been established to prevent, detect and respond to cybersecurity threats. We continue to conduct extensive awareness campaigns to raise the awareness of all Wintershall Dea staff and partners of the potential for attacks.

In the course of redeploying our IT and changing how we work, the need to address cybersecurity threats has become even more evident to all IT staff and the majority of Wintershall Dea's users. Together with newly implemented countermeasures, this has raised awareness and could considerably reduce the potential long-term damage from cyber attacks.

Human resources

› The Group depends on skilled personnel to effectively manage its business

Attracting new recruits and retaining existing skilled personnel are fundamental to the continued growth of the Group's business. Skilled personnel are required in both the technical and non-technical business areas. The Group cannot provide assurance that it will be able to successfully attract new personnel or retain the existing personnel required to continue its business expansion and successfully execute and implement its business strategy.

Risk management
We continuously assess and develop our workforce in alignment with our business needs. Our proactive diversity and inclusion philosophy, combined with our attractive compensation and benefits strategy, makes us a sought-after employer. We use employer branding to support our recruitment of local and global talents.

Compliance

› The Group is exposed to corruption risks

The Group is exposed to the risk of violating anti-corruption laws and regulations that are applicable in those countries where the Group and its business partners do business. Some of the international locations in which the Group operates may lack a developed legal system and have high levels of corruption.

Risk management
Wintershall Dea does not tolerate any form of corruption, whether active or passive, direct, or indirect. We are committed to our strict zero tolerance policy. Our zero-tolerance attitude is clearly communicated to all business partners at the outset of the business relationship, as well as during the relationship, as appropriate.

The Group has regulations and procedures designed to ensure that Wintershall Dea, its executive bodies, employees. and third parties, if applicable, comply with all legal, internal and external regulations affecting the company using appropriate measures. The Group has also trained its employees to comply with such laws and regulations and to consider the regulations and compliance of its business partners when choosing entities with whom to do business. Regulations covering areas such as internal approval processes for gifts and invitations must be followed, and business partner due diligence must also be performed. Contracts are worded appropriately to make contractors aware of the Group's supplier code of conduct and the expectation that they comply. The department of Compliance and Data Protection performs an annual legal and compliance risk assessment covering all fields of risks relevant to the company. The risk assessment consists of interviews with all business and corporate unit managers concerning relevant topics. In many cases, other local functions, such as Legal and Finance, join in on these interviews. The objective is to identify new risks and update existing risk assessments in order to monitor existing mitigation measures and further develop the compliance management system. All of the findings made within the scope of monitoring, especially those related to the results of the Enterprise Risk Management and Corporate Audit departments, are included in the risk evaluation and vice versa. Employees, as well as third parties, can report potential compliance violations via a whistleblower system available on the company's intranet and homepage. Reports can be submitted in different languages and in total anonymity by telephone or via a secure website. The Compliance department verifies each report received and strives to take action where appropriate. Employee and third parties will not face any disciplinary measures or other negative repercussions for raising genuine concerns in good faith, even if they turn out to be mistaken (non-retaliation).

MAJOR INDIVIDUAL RISKS

GENERAL

Planned WIGA group cash flow contribution to WD might be lower

In 2021, customer bookings of transport capacities with the regulated, independent transport network operators of the WIGA Group became increasingly short-term and more difficult to plan. Each year, transport network operators are allocated an annual revenue cap by the German Federal Grid Agency (Bundesnetzagentur, BNetzA). Potential surpluses or shortfalls in revenues are offset in subsequent periods to ensure that the revenue caps are always earned over a broader time perspective. Within delimited time periods, however, a lack of marketing of transport capacities can have a negative impact on the forecasted liquidity and earnings within a calendar year – both at the level of the network operators and in the 2022 annual result of the WIGA Group. Consequently, the WIGA Group's planned cash flow contribution to Wintershall Dea in 2023 may be lower originally projected.

DISPUTES AND PROCEEDINGS

OPAL Gas Pipeline

In 2009, the German Federal Grid Agency (Bundesnetzagentur, BNetzA) decided to largely exempt the OPAL capacities from regulation for 22 years as of their commissioning, from where it enters German territory to where it exits into the Czech Republic. The European Commission (EU-COM) made this exemption subject to usage restrictions for companies with a dominant position in the Czech gas market. In order to enable the full booking of all OPAL capacities, OGT, PAO GAZPROM, Moscow, Russia (GAZPROM), OOO Gazprom Export, Saint Petersburg, Russia (Gazprom export), and the BNetzA entered into a public-law settlement agreement on 11 May 2016, which was approved by EU-COM on 28 October 2016, subject to conditions. The conditions imposed by EU-COM were implemented in the new public-law settlement agreement signed by the contracting parties on 28 November 2016. Pending appeals (main proceedings and urgent applications) prevented the settlement agreement concluded in 2016 from being applied until January 2017. The state of Poland, the partially state-owned Polish company Polskie Górnictwo Naftowe i Gazownictwo S.A., Warsaw, Poland (PGNiG S.A.), and its German trading subsidiary PGNiG Supply & Trading GmbH, Munich, Germany (PGNiG S&T) have all filed lawsuits and urgent applications against EU-COM and BNetzA, while Naftogaz of Ukraine AG (NAK Naftogaz Ukrajiny), Kiev, has filed a lawsuit only. The General Court of the European Union in Luxembourg (EGC) and the Higher Regional Court (OLG) in Düsseldorf both issued interim injunctions at the end of 2016, which suspended the further implementation of the settlement agreement until a decision is handed down in the urgent applications. On 21 July 2017, the EGC lifted the interim orders issued at the end of 2016 and dismissed the urgent applications. Both the OLG Düsseldorf and the BNetzA subsequently suspended their decisions. Since August 2017, the marketing of the partially regulated interconnection capacities has been underway. On 11 October 2017, the OLG Düsseldorf dismissed the urgent applications brought by PGNiG S&T and PGNiG S.A. In December 2017 and March 2018, the EGC dismissed the actions for annulment brought by PGNiG S&T, Naftogaz and PGNiG S.A. against EU-COM's approval of the OPAL settlement agreement as inadmissible.

By decision of the EGC of 10 September 2019, EU-COM's approval of the public law settlement agreement of 28 October 2016 was declared null and void. In accordance with the BNetzA's decision of 13 September 2019, which follows the decision of the EGC, OGT was no longer permitted as of that date to market the interconnection capacities offered under the terms of the settlement agreement of 28 October 2016, or to carry out any transports based on such capacities already booked. The Federal Republic of Germany, as a party to the proceedings, filed an appeal against the decision of the EGC with the Court of Justice of the European Union (CJEU) on 20 November 2019. For its part, OGT appealed the decision of the BNetzA to the competent court, the OLG Düsseldorf. It is assumed that the parties to the settlement agreement consider scenarios in which the OPAL interconnection capacities could be fully used and marketed on the basis of the exemption ruling of the BNetzA dating from 2009.

The CJEU confirmed the EGC's decision of 10 September 2019, which declared null and void the EU-COM's ruling of 28 October 2016 on the public-law settlement agreement and the Federal Republic of Germany's appeal was therefore dismissed. In addition, the OLG Düsseldorf dismissed OGT's appeal against the decision of the BNetzA dated 13 September 2019. OGT issued the appeal against the decision of the OLG Düsseldorf at the Bundesgerichtshof on 25 June 2021. OGT's statement of appeal was submitted on 27 September 2021. For as long as the application of the public-law settlement agreement for the marketing of part of OPAL's interconnection capacities remains suspended, OGT will generate reduced transport fee income. For periods during which the reduced fee applies, OGT's revenue and profit will decline. On the basis of the exemption ruling of the BNetzA dating from 2009 the marketing opportunities for OPAL's interconnection capacities may be increased again.

Nord Stream 2

The Group finances Nord Stream 2 AG. The Group's involvement with the Nord Stream 2 project is limited to the provision of loans together with four major European energy companies (ENGIE, OMV, Shell and Uniper), shown as financial receivables. The US has decided to place the Nord Stream 2 project within a broader geopolitical framework and is threatening all industries and parties involved in the project with sanctions. All of the loans made were grandfathered under the initial 'Countering America's Adversaries Through Sanctions Act "CAATSA"., Section 232 Public Guidance' from 31 October 2017. On 21 July 2021, the governments of the US and Germany, entered the 'Joint Statement of the United States and Germany on Support for Ukraine, European Energy Security, and our Climate Goals', to create a framework for the commissioning of Nord Stream 2 that would be politically acceptable for both sides and defines measures to support Ukraine in its energy transition and to achieve independence from transit revenues. Nevertheless, further sanctions legislation or other political motivated impacts on energy projects with Russian participation cannot be ruled out. In general, geopolitical risks remain and could have consequences for the timing of commercial commissioning and operation of Nord Stream 2.

The pipeline was built, independently certified and filled with the gas needed for operations according to applicable technical and industry standards to ensure safe and reliable operations in the future. Since 29 December 2021, the two string pipeline system has been ready from a technical standpoint to begin gas transportation.

For the commercial commissioning of Nord Stream 2, its sections in German territorial waters must be brought into compliance with European gas market regulation.

The project company has submitted an application to the BNetzA for certification as an Independent Transmission System Operator. The corresponding process officially started on 8 September 2021 and was suspended on 16 November 2021. It is expected that the project company will fulfil all regulatory requirements and that the certification procedure will be continued.

In the unlikely event that the project cannot be put into operation and/or Nord Stream 2 cannot service the loans, there are customary contractual provisions in place that aim to limit the financial risks for the Group. Even if there might be a delay in commissioning due to the not yet completed certification process, we expect that the contractual obligations towards the financial investors will be fulfilled. Should the commissioning of Nord Stream 2 be prevented by political intervention, we assume that the project company will be able to enforce compensation claims. Currently, Wintershall Dea sees no reasonable scenario in which there will be political intervention without compensation. The scenarios were based on our current internal risk and legal assessments.

In 2021, Nord Stream 2 AG met all of its contractual obligations towards the financial lenders.

The Polish competition authority (PCA) instigated competition proceedings on 30 April 2018 in connection with the financing arrangements. In these proceedings, the PCA alleged that the company's subsidiary, Wintershall Dea Nederland Transport and Trading B.V. (WDNTT), as well as the other lenders, infringed their notification obligations by participating in the financing of the Nord Stream 2 project without submitting the transaction for approval in violation of the Polish Act on Competition and Consumer Protection. On 7 October 2020, the PCA ended its proceedings and imposed fines on the financial investors, including the sole owner Gazprom. In addition, the authority is demanding that the financing agreements be terminated within 30 days. The fines correspond to 10% of the previous year's turnover of the companies financing Nord Stream 2 AG (in the case of WDNTT, a fine of approximately €6.9 million). The fines imposed translate to the highest possible for an alleged infringement of the notification obligation in establishing a joint undertaking in Poland. The Group believes the fine is unfounded and represents the PCA's use of an unconventional approach in this case by adopting a wide interpretation of the notion of concentration. Consequently, on 5 November 2020, WDNTT appealed PCA's decision before the competent Polish court resulting in a suspension. We expect the appeal proceedings to last a total of 3–5 years. In 2021, no significant procedural steps were taken.

Further proceedings

In addition, Wintershall Dea AG and its participating interests are regularly involved as defendants or other parties in judicial and arbitration proceedings, as well as official proceedings. On the basis of the knowledge available at present, these proceedings have no significant impact on Wintershall Dea's economic situation.

Provisions for legal risks and trial costs are included in other provisions and amounted to €6 million in 2021 (previous year: €5 million). Further provisions for legal risks were not to be considered.

D

CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF INCOME

€ million	Note	2021	2020
Revenues gas and oil	4	7,611	3,314
Revenues other	4	193	328
Net income from equity-accounted investments: gas and oil	2	83	-14
Net income from equity-accounted investments: midstream	2	202	196
Other operating income	4	99	68
		8,188	**3,892**
Production and operating expenses	5	-3,971	-1,863
Production and similar taxes		-123	-94
Depreciation and amortisation		-1,456	-1,438
Net impairment on assets	12	-111	-1,152
Exploration expenses	6	-134	-181
General and administrative expenses	7	-429	-277
		1,964	**-1,113**
Financial income	9	182	220
Financial expenses	9	-323	-445
		-141	**-225**
Income/loss (-) before taxes		**1,823**	**-1,338**
Income taxes	10	-1,230	499
Net income/loss (-)		**593**	**-839**
Net income/loss (-) attributable to shareholders		553	-839
Net income/loss (-) attributable to subordinated notes investors		40	–

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

€ million	2021	2020
Net income/loss (-)	**593**	**-839**
Actuarial gains/losses	49	-27
Actuarial gains/losses from equity-accounted investments	-1	-8
Income and expenses that will not be reclassified to the statement of income at a later date, recognised directly in equity	**49**	**-35**
Unrealised gains/losses on currency translation	409	-624
Unrealised gains/losses on currency translation from equity-accounted investments	98	-86
Fair value changes in derivatives designated in cash flow hedges	-547	-228
Fair value changes in derivatives designated in cash flow hedges from equity-accounted investments	16	6
Income and expenses that will be reclassified to the statement of income at a later date, recognised directly in equity	**-24**	**-932**
Other comprehensive income (net of tax)	**24**	**-967**
Total comprehensive income	**617**	**-1,806**
Total comprehensive income attributable to shareholders	578	-1,806
Total comprehensive income attributable to subordinated notes investors	40	–

CONSOLIDATED BALANCE SHEET

€ million	Note	31 Dec 2021	31 Dec 2020
Assets			
Non-current assets			
Goodwill	12	2,435	2,298
Exploration assets	12	226	642
Other intangible assets	12	2,631	2,689
Property, plant and equipment and investment property	12	9,170	8,776
Equity-accounted investments	13	2,856	2,671
Other financial assets		13	16
Financial receivables	15	1,159	1,127
Derivative instruments	25	50	121
Other receivables	16	11	38
Deferred tax assets	10	234	140
		18,785	**18,518**
Current assets			
Inventories	14	177	201
Financial receivables	15	65	141
Trade and other receivables	16	1,745	908
Derivative instruments	25	441	92
Income tax assets	10	4	296
Cash and cash equivalents	17	2,106	821
Assets held for sale	3	129	–
		4,666	**2,459**
Total assets		**23,452**	**20,977**

€ million	Note	31 Dec 2021	31 Dec 2020
Equity and liabilities			
Equity attributable to shareholders and subordinated notes investors	18		
Subscribed capital		189	189
Capital reserve		1,161	1,161
Retained earnings and other comprehensive income		4,976	5,085
Equity attributable to subordinated notes investors		1,525	–
		7,852	**6,435**
Non-current liabilities			
Pension provisions	19	558	631
Decommissioning provisions	20	2,467	2,607
Other provisions	20	143	89
Financial debt	21	4,055	5,886
Derivative instruments	25	988	62
Income tax liabilities	10	27	18
Other liabilities	22	27	31
Deferred tax liabilities	10	2,198	3,250
		10,464	**12,574**
Current liabilities			
Decommissioning provisions	20	193	167
Other provisions	20	291	270
Financial debt	21	575	471
Trade and other payables	22	1,277	766
Derivative instruments	25	2,134	258
Income tax liabilities	10	661	36
Liabilities directly associated with assets classified as held for sale	3	5	–
		5,136	**1,968**
Total equity and liabilities		**23,452**	**20,977**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY[1]

				Other comprehensive income					
€ million	Subscribed capital of Wintershall Dea AG	Capital reserves of Wintershall Dea AG	Retained earnings and net retained profit	Actuarial gains and losses	Foreign currency translation	Cash flow hedges	Shareholder's equity	Equity attributable to subordinated notes investors	**Total**
As at 1 Jan 2021	189	1,161	7,047	-225	-1,496	-241	6,435	–	**6,435**
Other comprehensive income	–	–	–	49	507	-531	24	–	**24**
Net income/loss (-)	–	–	553	–	–	–	553	40	**593**
Total comprehensive income	–	–	553	49	507	-531	578	40	**617**
Capital increase/ decrease (-)	–	–	–	–	–	–	–	1,491	**1,491**
Dividends/distributions	–	–	-686	–	–	–	-686	-8	**-694**
Other changes	–	–	-4	4	–	–	–	2	**2**
As at 31 Dec 2021	**189**	**1,161**	**6,910**	**-172**	**-989**	**-773**	**6,327**	**1,525**	**7,852**
As at 1 Jan 2020	189	6.152	2.943	-190	-786	-19	8.289	–	**8.289**
Other comprehensive income	–	–	–	-35	-710	-222	-967	–	**-967**
Net income/loss (-)	–	–	-839	–	–	–	-839	–	**-839**
Total comprehensive income	–	–	-839	-35	-710	-222	-1.806	–	**-1.806**
Capital increase/decrease	–	9	–	–	–	–	9	–	**9**
Dividends/distributions	–	–	-57	–	–	–	-57	–	**-57**
Other changes	–	-5.000	5.000	–	–	–	–	–	**–**
As at 31 Dec 2020	**189**	**1.161**	**7.047**	**-225**	**-1.496**	**-241**	**6.435**	**–**	**6.435**

[1] For further information, please refer to Note 18

CONSOLIDATED STATEMENT OF CASH FLOW

€ million	2021	2020
Net income/loss (-)	**593**	**-839**
Amortisation/depreciation/impairment losses/reversal of impairment losses	1,592	2,631
Changes in provisions	-21	-139
Changes in deferred taxes	326	112
Gains (-)/losses from disposal of non-current assets	67	67
Other non-cash income/expenses and finance costs	-291	-138
Changes in working capital	-504	-143
Changes in other balance sheet items	1,235	53
Cash flow from operating activities	**2,998**	**1,604**
Payments for intangible assets, property, plant and equipment and investment property	-1,050	-1,268
Payments for/proceeds from acquisitions	25	-11
Payments for equity-accounted investments	–	-124
Proceeds from the disposal of non-current assets/divestitures	99	106
Payments for financial receivables	-32	-189
Proceeds from financial receivables	166	132
Changes in financial receivables from cash pooling	-1	4
Cash flow from investing activities	**-792**	**-1,350**
Capital contribution from subordinated notes investors	1,491	–
Dividend payments to shareholders	-686	-57
Distributions paid to subordinated notes investors	-8	–
Proceeds from debt to banks	55	28
Repayments of debt to banks	-1,896	-28
Changes in financial liabilities to related parties (cash pooling)	128	-91
Repayment of lease liabilities	-59	-67
Cash flow from financing activities	**-975**	**-215**

€ million	2021	2020
Change in cash and cash equivalents	**1,230**	**39**
Effects of foreign exchange rate changes, changes in the consolidation scope and other changes in value	55	-32
Cash and cash equivalents at the beginning of the reporting period	**821**	**814**
Cash and cash equivalents at the end of the reporting period	**2,106**	**821**
Supplementary information on cash flows from operating activities		
Income tax paid (less refunds)	70	431
Interest paid[1]	-56	-70
Interest received	51	29
Dividends received gas and oil	28	40
Dividends received midstream	139	177

[1] Includes capitalised borrowing cost of €-19 million (2020: €-41 million) shown as part of the payments for intangible assets, property plant and equipment and investment property in the cash flow from investing activities.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – SUMMARY OF ACCOUNTING POLICIES

General information

Wintershall Dea AG (formerly Wintershall Dea GmbH) is a joint-stock company registered at the District Court (Amtsgericht) of Lüneburg under entry no. HRB 209823. In accordance with the entry in the commercial register on 26 July 2021, Wintershall Dea GmbH changed the legal form and transformed into a joint-stock company under the company name Wintershall Dea AG.

The company's registered office is located in Celle, Lower Saxony, Germany, and it is dual-headquartered in Kassel (Friedrich-Ebert-Straße 160 in 34119 Kassel) and Hamburg (Überseering 40 in 22297 Hamburg), Germany. Its operations and principal activities are the exploration and production of natural gas, oil and other resources and resulting products and co-products, trading in all of the resources and commodities, as well as the operation of natural gas pipeline systems. The presented consolidated financial statements were approved for publication by Management Board of Wintershall Dea AG on 10 February 2022. They are filed electronically with the operator of the German Federal Gazette and subsequently published therein.

The consolidated financial statements of Wintershall Dea AG comprise the period from 1 January until 31 December 2021.

Basis of presentation

The consolidated financial statements of Wintershall Dea AG and its subsidiaries ('Wintershall Dea' or the 'Group') have been prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) applicable in the European Union (EU), and in accordance with the supplementary accounting regulations pursuant to Section 315e (1) of the German Commercial Code (HGB). IFRSs are applied only after their adoption by the EU. All IFRSs and pronouncements of the International Financial Reporting Interpretations Committee (IFRIC) that are binding for fiscal year 2021 have been applied.

The consolidated financial statements have been prepared in euros (€). All amounts, including the figures for prior years, are generally reported in millions of euros (€ million). Exceptions to this rule are explicitly marked in the text (individual figures are shown in thousands of euros: € thousand). The presentation in millions of euros does not result in any loss of information. Due to rounding, the subtotals and totals in millions may not equal the sum of the amounts shown. The statement of income is prepared in accordance with a modified cost-of-sales method which also considers certain items based on the nature of expenses (e.g. depreciation and amortisation). Various items of the consolidated statement of income and the consolidated balance sheet are combined to improve the transparency of presentation. These items are presented and explained separately in the notes.

The consolidated financial statements have been prepared on a historical cost basis with the exception of certain items that have been measured at fair value as described in 'Significant accounting and measurement policies'.

The financial statements of the consolidated companies were prepared as at the balance sheet date of the consolidated financial statements. The accounting policies applied generally correspond to those applied in the prioryear. This does not apply to changes resulting from the application of new or revised accounting standards.

Consolidation principles

The consolidated financial statements include the accounts of Wintershall Dea AG and its subsidiaries over which the company has control. The scope of consolidation is based on the application of IFRS 10 and IFRS 11. According to IFRS 10, a group consists of a parent company and its subsidiaries, which are controlled by the parent company. Wintershall Dea controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its control over the investee. A subsidiary is deconsolidated as from the date that control is lost.

According to IFRS 11, which regulates the accounting of joint arrangements, a distinction must be made between joint ventures and joint operations. In the case of a joint venture, the parties that have joint control of the arrangement have rights to the net assets of that arrangement. In joint operations, the parties that have joint control have direct rights to the assets and obligations for the liabilities relating to the arrangement. Companies whose corporate governance structures classify them as joint arrangements are analysed to determine if they meet the criteria for joint ventures or joint operations in accordance with IFRS 11. Should the arrangement be structured through a separate vehicle, its legal form, contractual arrangements and all other facts and circumstances are reviewed. There are joint arrangements in the course of development and production activities as well as for the midstream business.

Associated companies are entities that are not subsidiaries, joint ventures or joint operations, but over whose operating and financial policies significant influence can be exercised. In general, this applies to companies in which Wintershall Dea has an investment of between 20% and 50%. Such investments are accounted for in the consolidated financial statements in accordance with the equity method and are initially recognised at cost. Subsequently, the carrying amounts of equity-accounted investments are increased/reduced based on the proportional net income and other comprehensive income of the period as well as dividends received. The proportional net income is recognised in separate line items in the statement of income subdivided into gas and oil and midstream.

The consolidated financial statements include Wintershall Dea AG and all material subsidiaries in full, as well as one joint operation on a pro rata basis. Companies whose business is dormant or of low volume and therefore of minor importance for the presentation of a true and fair view of the net assets, financial position and results of operations, are not consolidated but, instead, reported under 'Other financial assets'. These companies are carried at amortised cost and written down in the event of an impairment. The aggregated assets and equity of these companies amount to less than 2.5% of both corresponding values at Group level.

The financial statements of the domestic and foreign companies included in the consolidated financial statements are uniformly recognised and measured in accordance with the principles described herein. For companies accounted for using the equity method, adjustments have been made for material deviations in measurement resulting from the application of other accounting principles.

Expenses and income, as well as receivables and liabilities between the consolidated subsidiaries, are eliminated in full and proportionally eliminated for joint operations. Intercompany gains or losses are eliminated unless they are negligible. Capital consolidation is performed by offsetting the carrying amounts of subsidiaries against their equity. Impairments charged to the companies' individual statements of shares in and loans to consolidated subsidiaries are reversed.

In accordance with IFRS 3, the cost of acquisition is measured at the fair value of the assets acquired and liabilities assumed at the date of acquisition. Identifiable assets acquired and liabilities assumed in a business combination (including contingent liabilities) are measured initially at their fair values at the acquisition date, irrespective of the extent of any non-controlling interest. Finally, the acquisition cost is compared with the proportional share of the net assets acquired at fair value. The resulting positive differences are capitalised as goodwill. Negative differences are recognised directly in profit or loss.

The incidental acquisition costs of a business combination are recognised in the consolidated statement of income under general and administrative expenses. The results of the subsidiaries acquired or disposed of during the year are included in the consolidated statement of income from the date of acquisition or until their disposal, respectively.

Foreign currency translation

In the companies individual financial statements, foreign currency transactions are translated at the exchange rates prevailing at the date of the transaction. Monetary foreign currency items are measured at the current exchange rate at each balance sheet date. Exchange rate gains and losses incurred by the balance sheet date are recognised in the statement of income under financial result.

The financial statements of Group companies with functional currencies other than the Group's presentation currency (euro) are translated using the closing rate method. All balance sheet items are translated at the balance sheet date at the prevailing period-end exchange rates (daily average rate). Translation differences compared with the previous year's translation are recognised in other comprehensive income without impact on profit or loss. Statement of income items are translated generally at the average exchange rate for the year. Differences between average exchange rates and closing exchange rates are also recognised in other comprehensive income.

SELECTED EXCHANGE RATES

	Closing rates €1 =		Average rates €1 =	
	31 Dec 2021	31 Dec 2020	2021	2020
Argentinian peso (ARS)	116.49	103.16	112.52	81.05
Brazilian real (BRL)	6.31	6.37	6.38	5.89
British pound (GBP)	0.84	0.90	0.86	0.89
Norwegian krone (NOK)	9.99	10.47	10.16	10.72
Russian rouble (RUB)	85.30	91.47	87.16	82.72
US dollar (USD)	1.13	1.23	1.18	1.14
Mexican peso (MXN)	23.14	24.42	23.98	24.52

Changes in accounting policies

The International Accounting Standards Board (IASB) has adopted changes in existing International Financial Reporting Standards (IFRS), which in general became effective as at 1 January 2021. The amendments to IFRS 16 'COVID-19 Related Rent Concessions beyond 30 June 2021', which became effective as at 1 April 2021, were endorsed by the European Union (EU) as at 30 August 2021.

Amendments to IFRS 4 'Insurance Contracts' – Deferral of IFRS 9 (2020)
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (2020) 'Interest Rate Benchmark Reform – Phase 2'
Amendments to IFRS 16 (2021) 'Covid-19 Related Rent Concessions beyond 30 June 2021'

The amendments had no material impact on Wintershall Dea's consolidated financial statements.

New accounting policies

The IASB has adopted further standards and amendments to standards, which are not yet mandatory in the European Union for the fiscal year beginning on 1 January 2021. EU endorsement is still pending in several cases.

	Effective date (IASB)
Amendments to IFRS 3 (2020) 'Reference to the Conceptual Framework'	1 January 2022
Amendments to IAS 16 (2020) 'Property, Plant and Equipment – Proceeds before Intended Use'	1 January 2022
Amendments to IAS 37 (2020) 'Onerous Contracts – Cost of Fulfilling a Contract'	1 January 2022
Amendments to Annual Improvements 2018 – 2020 (2020)	1 January 2022
IFRS 17 (2017) 'Insurance Contracts' including Amendments to IFRS 17 (2020)	1 January 2023
Amendments to IAS 1 (2020) 'Classification of Liabilities as Current or Non-current'	1 January 2023
Amendments to IAS 1 (2021) 'Disclosure of Accounting Policies'	1 January 2023
Amendments to IAS 8 (2021) 'Definition of Accounting Estimates'	1 January 2023
Amendments to IAS 12 (2021) 'Deferred Tax related to Assets and Liabilities arising from a Single Transaction'	1 January 2023
Amendments to IFRS 17 (2021) 'Initial Application of IFRS 17 and IFRS 9 – Comparative Information'	1 January 2023

The effects of the new standards and amendments on Wintershall Dea's consolidated financial statements are currently under review and no material impacts are expected.

Significant accounting and measurement policies

Revenue recognition

Revenues are recognised when a performance obligation has been satisfied by transferring a promised good or service to a customer. The transfer criterion is fulfilled when the customer obtains control. Revenues are measured at the transaction price that is allocated to the respective performance obligation.

Revenues of Wintershall Dea originate primarily from gas and oil sales. Gas and oil revenues are recognised at the time of delivery to the contractual delivery point. This is generally the case when the oil passes the vessel's rail or, in the case of gas and oil supply via pipeline, when passing agreed delivery points.

Revenues and expenses from gas and oil concessions are often allocated based on defined formulas set out in exploration and production sharing agreements between the state and one or more development and production companies. The proceeds to be received under these contracts are reported as revenue.

Strategic purchases and resales of gas and oil (trading activities) are generally presented on a gross basis as cost of trade goods and revenues. Further trading activities for the purpose of margin improvement, as well as the trading transactions of the Russian subsidiary YRGM Trading, are shown net of cost under revenues.

The Group applies the simplification rule set out in IFRS 15. It therefore does not adjust the agreed amount of consideration to reflect the effects of a material financing component if, at the contract start date, the period between the transfer to the customer of the promised goods or services and the date the customer is expected to pay for those goods or services is expected to be one year or less.

Income taxes

Tax positions under respective local tax laws and tax authorities' views can be complex and subject to different interpretations by taxpayers and local tax authorities. Different interpretations of tax laws may result in additional tax payments for previous years and are included in management considerations.

Under the liability method, deferred tax assets and liabilities are recognised for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This also comprises temporary differences arising from business combinations, except for goodwill.

Deferred tax assets and liabilities are calculated using the country-specific tax rates applicable for the period in which the asset is realised or the liability settled. Tax rate changes enacted or substantively enacted on or before the balance sheet date are taken into consideration.

Deferred tax assets are recognised if sufficient future taxable profit is available, including knowledge about income from forecast operating earnings, the reversal of existing taxable temporary differences and established tax planning opportunities.

As at each reporting period-end, Wintershall Dea evaluates the recoverability of deferred tax assets on the basis of projected future taxable profits. According to the level of historical taxable income and projections for future taxable income over the periods in which the deferred tax assets are deductible, Wintershall Dea believes it is probable to realise the benefits of these deductible differences. As future developments are uncertain, assumptions are necessary to estimate future taxable profits as well as the period in which deferred tax assets will recover. Estimates are revised in the period in which there is sufficient evidence to revise the assumption.

Deferred tax assets are offset against deferred tax liabilities, provided they are related to the same tax authority and have the same maturities.

IFRIC 23 clarifies the application of the recognition and measurement regulations of IAS 12 if there are uncertainties with regard to the income tax treatment. For recognition and measurement, estimates and assumptions have to be made, such as whether the assessment should be made separately or together with other uncertainties, whether to use a probable or expected value for the uncertainty and whether changes have occurred in comparison to the previous reporting period. The risk of detection is not relevant for the accounting treatment of uncertain balance sheet items. The accounting is based upon the assumption that the tax authorities consider the issue in question and that they have all relevant information. There are no significant effects on the consolidated-financial statements of Wintershall Dea.

Changes in deferred taxes in the balance sheet are recognised as deferred tax expense/income if the underlying transaction is also recognised in profit or loss. For those effects that have been recognised in equity, changes to deferred tax assets and tax liabilities are also recognised directly in equity.

Intangible assets

Intangible assets include goodwill, capitalised exploration expenditure and other intangible assets such as cost recovery rights, licence rights in the production phase, commercial and technical software.

The exploration phase encompasses the period from the receipt of the exploration rights until their expiry or until the technical feasibility of a field's development and its economic viability have been demonstrated. The exploration expenditure capitalised during this phase includes, for example, concession acquisition costs, licences and exploration rights, as well as exploration wells. Exploration wells are accounted for at their historical cost of acquisition or production according to the successful efforts method, i.e. expenses incurred on exploration wells are generally capitalised only when they were successful, meaning they specifically led to the discovery of oil and gas deposits. Costs for geological and geophysical investigations are generally reported under exploration expenses. Once the technical feasibility and commercial viability are demonstrable, the exploration wells are reclassified as property, plant and equipment, and intangible exploration rights are reclassified as other intangible assets. During the exploration phase, the exploration expenditure capitalised is not subject to scheduled amortisation/depreciation. At least once a year, all exploration wells are assessed from an economic, technical and strategic viewpoint to see if development is still viable. If this is not the case, the capitalised expenses for the respective well are written off. With the start of production, these exploration assets are amortised/depreciated according to the unit-of-production method (see 'Property, plant and equipment'). Capitalised exploration wells for which no reserves could be proven are shown as asset disposals and expensed as exploration expenses.

Other intangible assets have a finite useful life and are therefore subject to systematic straight-line or production-related amortisation. The useful life of concessions and other licence rights corresponds to the contractual term or comprises the period until the end of economic production. Software for commercial or technical applications is amortised using the straight-line method over 2 to 5 years. The useful economic life and amortisation methods are subject to annual reviews.

The intangible asset from the marketing agreement for natural gas from the Yuzhno- Russkoye natural gas field is amortised in accordance with Wintershall Dea's share of the volume produced and marketed.

Goodwill is not subject to systematic amortisation. It is subject to an impairment test on an annual basis or whenever there are indications of impairment. Goodwill is allocated to cash-generating units. The goodwill impairment test is performed at the level of a cash-generating unit or a group of cash-generating units. This is the lowest level at which goodwill is monitored for internal management purposes.

Property, plant and equipment and investment property

Property, plant and equipment comprise land and buildings, gas and oil assets, other plant, machinery and equipment as well as fixtures, fittings and office equipment. They are valued at amortised acquisition or production cost. Borrowing costs that can be directly allocated to the acquisition or production of an asset are capitalised as part of the acquisition or production costs if a considerable period is necessary to convert the asset into its intended state for use or sale ('qualified asset'). The cost of property, plant and equipment also includes the estimated cost of deinstallation or demolition and removal or reconditioning of the site under public or private law obligations, to the extent related provisions are recognised. Maintenance and repair costs are stated as expenses.

Gas and oil assets are generally depreciated using the unit-of-production method. In principle, depreciation of capitalised wells is based on the current production for the period in relation to proven developed producing reserves. In the case of acquisition costs and production facilities/support equipment, the current production for the period is set in relation to total proved reserves. Other property, plant and equipment, excluding land and similar rights, is depreciated using the straight-line method.

The estimated useful lives and depreciation methods for property, plant and equipment are based on experiences, plans and estimates. The depreciation methods, useful lives and residual values are reviewed at each balance sheet date. The typical useful lives of Wintershall Dea's non-production-related property, plant and equipment are as follows:

Useful lives	Years
Buildings	4–50
Technical plant and machinery	2–33
Fixtures and fittings and office equipment	1–23

Leases
A lease is a contract conveying the right to control the use of an identified asset for an agreed-upon period in return for compensation.

The present value of future lease payments is generally recognised as a financial liability at the commencement date of all lease agreements under which the Group acts as the lessee. Lease payments are split into principal and interest portions using the effective interest method. Correspondingly, the right-of-use asset is recognised at the present value of the liability, adding any directly attributable costs. Payments made before the commencement date and incentives received from the lessor are also included in the carrying amount of the right-of-use assets.

Right-of-use assets are shown under intangible assets or property, plant and equipment and are generally depreciated or amortised on a straight-line basis over the lease term. Right-of-use assets that are allocated to the asset category ‘gas and oil assets’, are depreciated on a straight-line basis or according to the unit-of-production method. The provisions of IAS 36 concerning the determination and recognition of impairments of assets also apply to right-of-use assets.

If the expected lease payments change as a result of index-linked consideration, for example, or on the basis of new assessments of contractual options, the liability is remeasured. The new carrying amount is generally adjusted without impacting profit or loss by making a corresponding adjustment to the right-of-use assets.

For leases of low-value assets with a maximum amount of €5 thousand and short-term leases with a maximum term of twelve months, the Group exercises the optional application exemptions. The lease payments under these contracts are generally recognised on a straight-line basis over the lease term as expense in the statement of income.

Impairment test
An impairment loss is recognised on intangible assets, property, plant, equipment, investment properties and equity-accounted investments if the recoverable amount of the asset is less than its carrying amount. Exploration assets are required to be tested for impairment as soon as the technical feasibility and profitability of a resource can be proven. The presence of facts and circumstances indicating an impairment also gives rise to an impairment test. If the asset is part of a cash-generating unit (the smallest identifiable group of assets generating cash flows, which are largely independent of the cash inflows of other assets or other groups of assets), then impairment is derived on the basis of the recoverable amount of the cash-generating unit. In the event that the carrying amount of a cash-generating unit to which goodwill has been allocated exceeds the recoverable amount, the resulting impairment loss is initially applied to the allocated goodwill. Any further impairment required is taken into account through the pro rata reduction of the remaining carrying amounts of the cash-generating unit. A reversal of an impairment loss up to the value of amortised cost is made if the reasons for an earlier impairment no longer exist. In this case, the higher carrying amount resulting from a reversal must not exceed the carrying amount net of amortisation and depreciation. Impairment losses are reported net of reversals of impairment losses as net impairments on assets.

Within the scope of the impairment test, the recoverable amount of the cash-generating unit is determined.
The recoverable amount is defined as the higher of fair value less cost of disposal or value in use. The fair value represents the best possible estimate of the amount for which an independent third party would acquire the cash-generating unit as at the balance sheet date; the cost of disposal is deducted. Value in use reflects the present value of the future cash flows that are expected to be generated with the cash-generating unit. If either of these amounts exceeds the carrying amount, it may not always be necessary to determine both amounts. These values are determined on the basis of discounted cash flow calculations which, in turn, are generally based on current corporate planning. The cash flow forecasts pertain to the life-of-field period for the individual concession/licence or groups of concessions/licences. The calculations are based on historical experience as well as expectations of future market trends. The discount rates applied are based on the weighted average cost of capital (WACC), taking into consideration specific country risks. The calculation is independent of the actual capital structure of the Group and, instead, based on a peer group.

The goodwill impairment test is based on groups of cash-generating units. At Wintershall Dea, these units largely correspond to the business units. Goodwill impairments are reported under net impairments on assets. Impairment losses on goodwill are not reversed.

Inventories

Inventories are carried at the cost of acquisition or production or at the lower net realisable value. Production costs reflect the total costs directly related to production and are determined on the basis of the normal capacity. To the extent that the net realisable value of previously impaired inventories has increased, the resulting reversal is recognised in the same expense item in which the original impairment was recorded.

Financial assets and financial liabilities

Financial assets and financial liabilities are recognised in the consolidated balance sheet when Wintershall Dea becomes a party to a financial instrument. Financial assets are derecognised when Wintershall Dea no longer has a contractual right to the cash flows from the financial asset or when the financial asset is transferred together with all material risks and rewards of ownership. Financial liabilities are derecognised when the contractual obligations expire, are discharged or cancelled. Regular-way purchases and sales of financial instruments are generally accounted for based on the settlement date.

The fair value of a financial instrument is the price that would be received on the sale of an asset or paid on the transfer of a liability in an orderly transaction between market participants at the measurement date. If pricing on an active market is available, for example in the form of share prices, these are used as the basis for the measurement. Otherwise, the measurement is based on internal measurement models using current market parameters or external measurements, for example, from banks. These internal measurements predominantly use the net present value method and option pricing models.

Except in the case of financial assets measured at fair value through profit or loss, impairments for expected credit losses are recognised regardless of the actual default events. If the reasons for impairments no longer exist, the impairment is reversed in the statement of income up to the carrying amount that would have resulted without impairment. Impairments are generally recognised in separate accounts.

The classification and measurement of financial assets are based on what is known as the cash flow condition (cash flows exclusively from interest and principal repayments), i. e. the specific structure of the contractually agreed cash flows from an individual financial asset. Secondly, they depend on the business model, depending on which portfolios of financial assets are managed. Based on these two criteria, Wintershall Dea uses the following measurement categories for financial assets:

- Financial assets to be measured at fair value through profit or loss (FVPL)
- Financial assets to be measured at amortised cost

Financial assets are measured at amortised cost only if the asset is managed based on a business model whose objective is to collect the contractual cash flows and the contractual terms give rise to cash flows that relate solely to payments of principal and interest.

Except for trade accounts receivable from revenues, at initial recognition, financial assets are measured at their fair value plus, in the case of a financial asset not subsequently measured at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Trade accounts receivable from revenues are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components.

After initial recognition, financial assets are measured depending on their classification, either at amortised cost using the effective interest method or at fair value through profit or loss.

For financial assets measured at amortised cost, expected credit losses are recognised. The assessment of credit losses is carried out on a forward-looking basis. Impairment losses, according to IFRS 9, are presented in the respective line item for the operating functions in the statement of income. Reversals of impairment losses are credited against the same line item.

Financial liabilities are classified in the following measurement categories:

- Financial liabilities to be measured at fair value through profit or loss (FVPL)
- Financial liabilities to be measured at amortised cost

Financial liabilities are measured at fair value less, in the case of a financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial liabilities.

After initial recognition, financial liabilities are measured depending on their classification, either at amortised cost using the effective interest method or at fair value through profit or loss.

Derivative financial instruments

Derivatives are initially recognised at fair value at the date the derivative contract is entered into and are subsequently measured at their fair values at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged.

At the inception of the hedge relationship, the Group documents its risk management objective and strategy for entering into the hedge transaction, as well as the economic relationship between the hedging instrument and hedged items. This documentation includes whether changes in the cash flows of the hedging instrument are expected to offset changes in the cash flow of the hedged items.

The Group has designated derivatives as hedging instruments within the scope of cash flow hedges. Cash flow hedges are used to hedge the risk of variability in cash flows from highly probable forecast transactions. The effective portion of changes in the fair value of derivatives that are designated as cash flow hedges is recognised as other comprehensive income within equity. The gains or losses relating to the ineffective portion are recognised immediately in profit or loss.

Amounts accumulated in equity are reclassified when the hedged item affects profit or loss. When a hedging instrument expires, is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, any cumulative deferred gains or losses in equity at that time remain in equity until the forecast transaction occurs. When the forecast transaction is no longer expected to occur, the cumulative gains or losses are immediately reclassified to profit or loss.

Changes in the fair values of any derivative instrument that does not qualify for hedge accounting are recognised immediately in profit or loss.

Agreements concluded for the receipt or delivery of non-financial items in accordance with the Group's expected buying, selling and utilisation needs and held for this purpose (own use contracts) are not accounted for as financial derivatives but as pending transactions. If the agreements contain embedded derivatives, then the derivatives are accounted for separately from the underlying agreement if the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the underlying agreement.

Provisions

Provisions are recognised for all legal or factual obligations to third parties as at the balance sheet date when they are based on past events and will probably lead to an outflow of resources in the future, and to the extent they can be reliably estimated. Provisions are not recognised for possible obligations to third parties or for existing obligations where an outflow of resources is improbable or cannot be reliably determined. Such obligations are disclosed in the notes as contingent liabilities unless the possibility of an outflow of resources with economic benefits is remote.

Provisions are carried at their foreseeable settlement amount and not netted against any recovery claims. The settlement amount comprises cost increases to be taken into account as at the balance sheet date. In the case of non-current provisions, the amounts are discounted to the present value applying the risk-free country-specific or currency-specific market interest rate applicable as at the respective balance sheet date. Provisions based on a large number of similar events are reported at their expected value. Reversals of provisions are made against the expense item against which the provision was originally recognised.

Decommissioning provisions cover the updated commitments for the plugging of wells, the deinstallation of onshore and offshore production facilities and the reconditioning of operations and drilling sites. The extent of these provisions is based on the anticipated total cost, taking into account the empirical data and cost benchmarks determined by the Association of German Crude Oil and Natural Gas Producers or comparable assumptions available for foreign activities. Should any changes in interest rates or estimates in terms of timing or level of payout lead to changes in this provision, the carrying amount of the associated asset is adjusted accordingly. If the reduction is higher than the carrying amount, the excess amount is recognised directly in profit or loss.

Provisions for pensions are recognised for defined benefit plans. This relates to commitments by the companies to cover vested entitlements of employees in active service and current benefits to active and former employees or their dependents. These commitments relate in particular to old-age pension payments.

The Group`s various pension plans consist of both: Defined benefit as well as defined contribution plans. Provisions for defined benefit plans are based on the actuarial projected benefit obligation, measured using the projected unit credit method. This method takes into account not only the pension benefits and benefit entitlements known as at the balance sheet date, but also anticipated future increases in salaries and pension benefits. The calculation is based on actuarial reports, taking into account appropriate mortality rates. The provision is reduced by the fair value of the plan assets established to cover the pension commitments. The service cost, i.e. the increase in the obligation resulting from the work performed by employees in the period under review, is disclosed in the operating functional areas and the interest expenses/income are reported in financial expenses. The net interest expense for the fiscal year is based on the actuarial interest rate and the net defined benefit obligation at the beginning of the year.

Results of the remeasurement of defined benefit plans are fully recognised in the fiscal year in which they occur. They are reported in other comprehensive income without impact on profit or loss. In subsequent periods, they are not reclassified to the statement of income.

The Group still participates in a legally independent multi-employer plan provided by BASF Pensionskasse VVaG, which is financed by employer and employee contributions as well as the return on plan assets. Since no sufficient information is available for this multi-employer plan, the Group accounts for the plan as if it was a defined contribution plan.

In the case of contribution-based benefit plans, the Group does not incur any further obligations beyond making contribution payments to special-purpose funds as well as to a life insurances. The contribution payments are recorded as expenses.

Discontinued operations and assets held for sale

Discontinued operations are reported when a component of an entity that either has been disposed of or is classified as 'held for sale' represents a separate major line of business or geographical area of operations. In the consolidated statement of income, the result from discontinued operations is reported separately from the result from continuing operations. In the consolidated statement of cash flows, the cash flows from discontinued operations are also presented separately from cash flows of continuing operations. Previous periods are, in each case, presented on a comparable basis. Except in the case of Note 1, the disclosures in the notes that refer to the consolidated statement of income and the consolidated statement of cash flows relate to continuing operations. In order to present the financial effects of discontinued operations, income and expenses and receivables and liabilities arising from intragroup transactions are eliminated. Non-current assets classified as 'held for sale' are measured at the lower of their carrying amount and fair value, less costs to sell, unless these assets are not part of the measurement scope defined in IFRS 5. Depreciation and amortisation cease from the date of classification as 'held for sale'.

Important estimates and assumptions

Preparation of the consolidated financial statements on the basis of IFRS requires management to make estimates, assumptions and judgements that affect the amounts reported for assets, liabilities, income and expenses as well as disclosed contingent liabilities and fair values. The estimates, assumptions and judgements concern mainly the following areas:

Impact of climate change and energy transition

Our accounting estimates include possible impacts of climate policies and energy transition (for example, the long-term assumptions for gas, oil and CO_2 prices). The estimates affect the recoverable amount of gas and oil assets and intangible assets (including goodwill) as well as the useful life and time of decommissioning. The future impact of climate policies and energy transition is a source of uncertainty and could result in changes to accounting estimates in the future.

Wintershall Dea targets to reduce Scope 1 and 2 greenhouse gas emissions of its upstream activities -operated and non-operated at equity share basis- to net zero by 2030. Our approach to reach these targets and ambitions, includes besides strict emission management, alternative technologies and compensation, a continuous review and optimisation of our portfolio focusing on natural gas and carbon-efficient assets and activities which may also affect the future development or viability of exploration assets.

Gas and oil reserves

Natural gas and oil reserves are used to determine the recoverable amount within the scope of an impairment test, as well as for production-related depreciation and amortisation using the unit-of-production method. Reserves are estimated by the Group's own qualified engineers and geoscientists based on standardised valuation methods and are classified in line with international industry standards. This process is subject to specific guidelines. Furthermore, the estimates are audited by an independent consultant on a regular basis.

Impairment tests

Assumptions used in impairment testing for intangible assets (including goodwill) and property, plant and equipment and equity-accounted investments relate to estimated reserves, price assumptions for natural gas and crude oil, consumer price indices and exchange rates, CO_2 prices, production forecasts and discount rates as well as production costs.

The in-house assumptions on the long-term development of gas and oil prices are based on empirically sound analyses of global gas and oil supply and demand taking into account possible impacts of climate policies, energy transition and energy efficiency gains. External sources such as consultants data, consensus views, forwards data as well as peers estimates are frequently assessed. Local price assumptions are derived dependent on global market dynamics, regulations in place as well as contractual terms.

The discount rates are based on the weighted average cost of capital, taking into consideration specific country risks.

Impairment on financial assets

Impairments on financial assets are based on assumptions regarding the probability of default and expected credit losses. The inputs to the impairment calculation are based on past experiences, existing market conditions and forward-looking estimates.

Derivative financial instruments

In accounting for derivative financial instruments, assumptions have to be made as to whether the principles of hedge accounting apply. In addition, certain contracts require a decision as to whether they should be recognised as derivatives or treated as pending transactions in the same way as ‘own use’ contracts.

Provisions

Decommissioning provisions mainly require estimates and assumptions with regard to terms, costs to be considered and discount rates. Future actual cash outflows may differ due to changes in relation to these items.

With regard to pension provisions, the discount rate is one of the most important estimators. The discount factor for pension obligations is determined on the basis of yields on high-quality, fixed-rate corporate bonds on the financial markets as at the balance sheet date.

Leases

When determining right-of-use assets and corresponding lease liabilities, assumptions must be made regarding the exercise of extension or termination options as well as discount rates in particular.

All assumptions and estimates are based on conditions and evaluations made as at the balance sheet date. In addition, with regards to expected future business trends, the future development (considered realistic at the current time) of the economic environment in the industries and regions in which Wintershall Dea operates is taken into account. If the actual trend deviates from the assumed development of conditions, then the assumptions and, if necessary, the carrying amounts of the assets and liabilities concerned are adjusted accordingly. As at the date of preparation of the consolidated financial statements, it is not expected that there will be a material change in the assumptions and estimates.

NOTE 2 – SCOPE OF CONSOLIDATION

The consolidated financial statements include 48 fully consolidated companies and one proportionally consolidated company (31 December 2020: 49 fully consolidated companies and one proportionally consolidated company, for more information, please refer to Note 32). Although Wintershall Dea does not have discretionary power over the relevant activities of AO Gazprom YRGM Trading, it is entitled to the company's results on the basis of the profit distribution agreements and controls the company as principal.

There are 7 joint ventures and associated companies that are accounted for using the equity method (31 December 2020: 8). Following the sale of its direct interest in the Wolgodeminoil joint venture in May 2021, Wintershall Dea Wolga Petroleum GmbH was reclassified from equity-accounted investments to other financial assets due to materiality reasons.

NUMBER OF FULLY AND PROPORTIONALLY CONSOLIDATED COMPANIES

As at 1 Jan 2021	50
First-time consolidation of newly founded subsidiaries	4
Deconsolidation of a liquidated subsidiary	-1
Merged subsidiaries	-4
As at 31 Dec 2021	**49**

Joint operations

A large part of the activities in the Exploration & Production business area is carried out in the context of joint operations, some of which are managed through separate companies. The following joint operations are structured as separate entities:

Name	Nature of the joint operation	Principal place of business	Ownership interest/voting rights (%)
Suez Oil Company (SUCO)	Operating Company for the development and production phase	Cairo, Egypt	50.00
Deminex Egypt Oil Company (DEOCO)	Operating Company for the development and production phase; performed by SUCO as a service	Cairo, Egypt	50.00
Disouq Petroleum Company (DISOUCO)	Operating Company for the development and production phase; performed by SUCO as a service	Cairo, Egypt	50.00
Groupement Reggane	Operating Company for the development and production phase	Algiers, Algeria	19.50

Joint operations that are not managed through separate companies are mainly located in Germany, Norway and Argentina.

The Group's shares in joint operations are accounted for by recognising its respective share in assets and liabilities as well as its income and expenses. The joint operation AO Achimgaz, Novy Urengoy/Russia is operated jointly with Gazprom to produce natural gas and condensate. Wintershall Dea holds a 50.00% interest in the company and controls the company jointly with Gazprom. The company was classified as a joint operation within the meaning of IFRS 11 and is proportionally consolidated.

Joint ventures and associated companies

The tables below contain summarised financial information for joint ventures accounted for using the equity method:

WIGA TRANSPORT BETEILIGUNGS-GMBH & CO. KG AND ITS SUBSIDIARIES (WIGA GROUP) (100%)[1] [2]

€ million	2021/ 31 Dec 2021	2020/ 31 Dec 2020
Balance sheet		
Non-current assets	4,426	4,525
Current assets	975	750
of which cash and cash equivalents	386	–
Equity	2,417	2,358
Non-current liabilities	2,870	2,828
of which financial debt	1,962	2,008
Current liabilities	114	89
of which financial debt	53	1
Statement of Income/Statement of comprehensive income		
Revenue	851	899
Depreciation and amortisation	-53	-277
Interest expenses	-21	-19
Income taxes	81	10
Net income/loss (–)	232	231
Other comprehensive income	10	-20
Total comprehensive income	242	212
Wintershall Dea share	**50.02%**	**50.02%**
Wintershall Dea share of total comprehensive income	121	106
Received dividends/distribution	-93	-114
Carrying amount of the equity-accounted investment at the end of the year	**1,207**	**1,179**

[1] Preliminary figures, not based on final year-end accounts
[2] Fair value adjustments are included on a grossed-up basis (100%).

The WIGA Group comprises the onshore gas transportation activities in Germany.

WINTERSHALL NOORDZEE B.V., RIJSWIJK/THE NETHERLANDS (100%)[1]

€ million	2021/ 31 Dec 2021	2020/ 31 Dec 2020
Balance sheet		
Non-current assets	293	445
Current assets	242	70
of which cash and cash equivalents	150	26
Equity	7	–
Non-current liabilities	421	454
of which financial debt	–	–
Current liabilities	107	61
of which financial debt	–	–
Statement of Income/Statement of comprehensive income		
Revenue	262	66
Depreciation and amortisation/ net impairment losses	-159	-88
Interest expenses	2	-3
Income taxes	-38	4
Net income/loss (–)	–	-34
Other comprehensive income	–	–
Total comprehensive income	–	-34
Wintershall Dea share	**50.00%**	**50.00%**
Wintershall Dea share of total comprehensive income	–	-16
Impairments	–	-23
Reversal of impairments	4	–
Carrying amount of the equity-accounted investment at the end of the year	**4**	**–**

[1] Fair value adjustments are included on a grossed-up basis (100%).

The tables below contain summarised financial information for associated companies accounted for using equity method:

OAO SEVERNEFTEGAZPROM, KRASNOSELKUP/RUSSIA (100%)[1 2]

€ million	2021/ 31 Dec 2021	2020/ 31 Dec 2020
Balance sheet		
Non-current assets	1,355	996
Current assets	243	148
Equity	808	730
Non-current liabilities	649	377
Current liabilities	141	37
Statement of Income/Statement of comprehensive income		
Revenue	508	533
Net income/loss (–)	92	40
Other comprehensive income	1	–
Total comprehensive income	93	40
Wintershall Dea share/economic participation	**25.00%/35.00%**	**25.00%/35.00%**
Wintershall Dea share of total comprehensive income	32	14
Currency translation effect	19	-77
Received dividends/distribution	-24	-19
Carrying amount of the equity-accounted investment at the end of the year	**283**	**256**

[1] Preliminary figures, not based on final year-end accounts
[2] Fair value adjustments are included on a grossed-up basis (100%).

NORD STREAM AG, ZUG/SWITZERLAND (100%)[1]

€ million	2021/ 31 Dec 2021	2020/ 31 Dec 2020
Balance sheet		
Non-current assets	4,477	4,772
Current assets	582	596
Equity	2,834	2,588
Non-current liabilities	1,706	2,243
Current liabilities	519	537
Statement of Income/Statement of comprehensive income		
Revenue	1,073	1,078
Net income/loss (–)	535	526
Other comprehensive income	73	52
Total comprehensive income	608	568
Wintershall Dea share	**15.50%**	**15.50%**
Wintershall Dea share of total comprehensive income	94	88
Received dividends/distribution	-56	-54
Carrying amount of the equity-accounted investment at the end of the year	**452**	**414**

[1] Preliminary figures, not based on final year-end accounts

WINTERSHALL AG, KASSEL/GERMANY (100%)[1]

€ million	2021/ 31 Dec 2021	2020/ 31 Dec 2020
Balance sheet		
Non-current assets	518	556
Current assets	156	104
Equity	222	159
Non-current liabilities	263	336
Current liabilities	189	165
Statement of Income/Statement of comprehensive income		
Revenue	188	–
Net income/loss (–)	63	-26
Other comprehensive income	–	–
Total comprehensive income	63	-25
Wintershall Dea share	**51.00%**	**51.00%**
Wintershall Dea share of total comprehensive income	32	-13
Carrying amount of the equity-accounted investment at the end of the year	**113**	**81**

[1] Preliminary figures, not based on final year-end accounts

The company comprises exploration and production activities in Libya (onshore). The joint operating company (JOC) named Sarir Oil Operations, which was founded by WIAG and NOC (51.00% NOC, 49.00% WIAG), assumed operatorship for areas 91 and 107 in the onshore Sirte Basin in October 2020.

LLC ACHIM DEVELOPMENT, NOVY URENGOY/RUSSIA (100%) AND JSC ACHIM TRADING, SAINT PETERSBURG/RUSSIA (100%)

€ million	LLC Achim Development[1 2] 2021/ 31 Dec 2021	JSC Achim Trading[1 2] 2021/ 31 Dec 2021
Balance sheet		
Non-current assets	1,418	2,732
Current assets	140	137
Equity	856	2,328
Non-current liabilities	648	455
Current liabilities	54	86
Statement of Income/Statement of comprehensive income		
Revenue	288	355
Net income/loss (–)	49	38
Other comprehensive income	–	–
Total comprehensive income	49	38
Wintershall Dea share/economic participation	**25.01%/25.01%**	**18.01%/ 25.01%**
Wintershall Dea share of total comprehensive income	12	9
Currency translation effect	4	39
Carrying amount of the equity-accounted investment at the end of the year	**214**	**582**

[1] Preliminary figures, not based on final year-end accounts
[2] Fair value adjustments are included on a grossed-up basis (100%).

Achim Development develops and operates Areas 4A and 5A of the Achimov Formation. Achim Trading is responsible for the marketing of produced volumes from Areas 4A/5A. Economic activity commenced with the production start in 2021.

NOTE 3 – MAJOR ASSET SALES AND ASSETS HELD FOR SALE

Major asset sales in the reporting period

In May, Wintershall Dea Wolga Petroleum GmbH sold its interest in Wolgodeminoil LLC. The sale led to a loss of €34 million predominately due to the recycling of currency translation effects from equity (OCI) to profit and loss (€35 million), reported under general and administrative expenses.

The sale of the Hamburg headquarters' building, which was incorporated into a sale and leaseback transaction and therefore recognised in accordance with the regulations stated in IFRS 16, led to a gain of €22 million in April, included in other operating income.

During the reporting period, Wintershall Dea divested a number of smaller non-core licences and assets in Germany. The disposals led to a net gain of €11 million (gains of €21 million are included in other operating income and losses of €10 million are included in production and other operating expenses).

Assets held for sale

Following the agreed divestment of our 50% interest in the unconventional Aguada Federal and Bandurria Norte blocks in Argentina (Segment Latin America) in January 2022, the respective fixed assets have been written down to fair value less costs to sell, resulting in an impairment loss of €132 million. Further information on impairments is provided in Note 12.

The concerned assets and associated liabilities are shown as held for sale as at 31 December 2021. A proportional part of the goodwill related to Argentina was allocated to the disposal group and fully impaired following the classification as asset held for sale. The impairment loss of €15 million is shown under net impairments on assets.

€ million	31 Dec 2021
Assets held for sale	
Other intangible assets	16
Gas and oil assets	48
Other receivables (non-current)	32
Other receivables (current)	33
	129
Liabilities directly associated with assets held for sale	
Decommissioning provision	5
	5

NOTE 4 – REVENUES AND OTHER INCOME

€ million	2021	2020
Revenues gas		
Gas sales own production	2,158	1,143
Gas sales trading	3,135	672
Unrealised gains/losses from gas derivatives	-8	-6
	5,285	**1,809**
Revenues oil		
Oil sales own production	2,313	1,489
Oil sales trading	13	16
	2,326	**1,505**
Total revenues gas and oil	**7,611**	**3,314**
Revenues other	193	328
Total	**7,804**	**3,642**

Gas and oil (crude oil/condensate) revenues from own production also include revenues from service fees for extraction services in Russia. 'Revenues other' mainly comprise revenues from construction services provided from Achimgaz to Achim Development.

Trading revenues cover the trading activities for gas and oil. The corresponding purchase costs for gas and oil volumes sold to third parties are shown under 'cost of trade goods'. The headquarters' trading activities for the purpose of margin improvement and the trading transactions of the Russian subsidiary YRGM Trading are shown net of cost under trading revenues.

Wintershall Dea has gas sales and purchase contracts that are physically settled despite not qualifying as own use prior to settlement. These contracts are accounted for as financial instruments, according to IFRS 9. The changes in fair value prior to settlement are shown separately as unrealised gains/losses from gas derivatives unless they are qualifying for hedge accounting and are recognised in other comprehensive income.

The realised gains/losses from these gas sales contracts as well as realised gains/losses from commodity derivatives, which are settled in cash, are shown under revenue gas and oil. As a consequence, gas and oil sales are reported at the contract price.

In the reporting period, realised losses from gas sales and purchase contracts measured at fair value through profit or loss according to IFRS 9 are recognised as revenues gas and cost of trade goods in the amount of €68 million. In addition, revenues gas include realised losses of €1,299 million for fixed-price contracts for which hedge accounting is applied. Revenues oil include realised losses from oil swaps amounting to €136 million. These gains and losses are not within the scope of IFRS 15.

Other operating income

Other operating income mainly includes gains from asset disposals as well as government grants in Argentina. In the prior year, it also included a gain from the settlement of a fixed-price contract in Norway.

NOTE 5 – PRODUCTION AND OPERATING EXPENSES

€ million	2021	2020
Production costs	684	645
Change over-/underlift	-12	–
Transport fees and leases	229	258
Development costs	14	34
Cost of trade goods	2,865	621
Other cost of sales	114	289
Other costs	78	16
Total	**3,971**	**1,863**

Production costs also comprise gas and oil extraction service costs in Russia. Other cost of sales includes mainly expenses related to construction services for Achim Development.

Cost of trade goods covers the trading activities for oil and gas. The corresponding revenues are shown under gas and oil sales trading. The headquarters' trading activities for the purpose of margin improvement and the trading transactions of the Russian subsidiary YRGM Trading are shown net of costs under trading revenues.

NOTE 6 – EXPLORATION

Exploration expenses in the consolidated statement of income (€134 million) comprise, among other things, expenses related to seismology, geology, geophysics, unsuccessful exploration wells, additions and reversals of provisions and allocable administrative expenses. Impairment losses and reversals are not included in the exploration expenses.

Provisions comprise decommissioning obligations as well as obligations arising from onerous contracts and unfulfilled work programmes related to exploration licences in the amount of €102 million.

The cash flow from operating activities attributable to exploration amounts to €-96 million. In addition, the cash flow from investment activities amounts to €-84 million.

NOTE 7 – GENERAL AND ADMINISTRATIVE EXPENSES

In the reporting period, the general and administrative expenses include €61 million restructuring and integration costs.

NOTE 8 – ADDITIONAL DISCLOSURES: PERSONNEL EXPENSES AND EMPLOYEES

Total personnel expenses included in production and other operating expenses, exploration expenses and general and administrative expenses are as follows:

PERSONNEL EXPENSES

€ million	2021	2020
Wages and salaries	350	338
Social security and other benefits	41	40
Expenses relating to post-employment benefits	32	38
Total	**423**	**416**

NUMBER OF EMPLOYEES

	Average 2021	Average 2020
Wintershall Dea Group	2,469[1]	2,610[2]
of which trainees	49	56
of which employees on fixed-term contracts	153	157

[1] Thereof 243 employees in the proportionally consolidated company (of which 49 employees on fixed-term contracts)
[2] Thereof 266 employees in the proportionally consolidated company (of which 69 employees on fixed-term contracts)

NOTE 9 – FINANCIAL RESULT

€ million	2021	2020
Interest income from third parties	128	114
Interest income from related parties	7	8
Foreign currency exchange gains, net	41	–
Gains from financial derivatives, net	–	92
Income from investments	6	5
Other financial income	–	1
Financial income	**182**	**220**
Interest expenses to third parties	58	80
Less capitalised borrowing costs	-19	-41
Foreign currency exchange losses, net	–	261
Losses from financial derivatives, net	252	–
Interest from addition to provisions	26	44
Loss absorptions	1	7
Net impairments on other financial assets	3	–
Net impairment on financial receivables	–	92
Other financial expenses	1	2
Financial expenses	**323**	**445**
Total financial result	**-141**	**-225**

Interest income and interest expenses result from assets and liabilities measured at amortised cost.

In the previous year, net impairments on financial receivables comprised an impairment on a shareholder loan granted to a Dutch equity-accounted investment in the amount of €91 million.

NOTE 10 – INCOME TAXES

In Germany, a uniform corporate income tax rate of 15% and a solidarity surcharge of 5.5% are levied on all distributed and retained earnings. In addition to corporate income tax, income generated in Germany is subject to a trade tax that varies depending on the municipality in which the company is represented. The weighted average corporate income and trade tax rate in 2021 was 30% (2020: 30%). The 30% tax rate used to calculate deferred taxes for German Group companies remained unchanged in 2021. The income of foreign Group companies is assessed using the tax rates applicable in their respective countries.

The foreign Group companies use the following tax rates for the deferred tax calculation:

TAX RATES FOR THE DEFERRED TAX CALCULATION

Norwegian Group company	78% / 56% / 22%
Mexican Group companies	30%
Dutch Group companies	25.8%
Russian Group companies	20%
Argentine Group company	35%

TAX EXPENSES

€ million	2021	2020
Income taxes current year (corporate income tax, solidarity surcharge and trade taxes)	870	-536
Income taxes for prior years	41	-75
Current income tax expenses	**910**	**-611**
from changes in temporary differences	409	219
from changes in tax loss carryforwards/ unused tax credits	-89	-107
Deferred tax expenses	**320**	**112**
Income taxes	**1,230**	**-499**

Taxes on income are derived from the expected tax expenses as follows:

RECONCILIATION TO THE EFFECTIVE TAX EXPENSE AND THE TAX RATE

€ million	2021	2020
Income/loss (-) before taxes	**1,823**	**-1,338**
Expected income taxes based on German weighted average corporate and trade income tax rate (30%)	-547	401
Effect of different tax rates on income of foreign Group companies	-580	179
Effect of different tax bases on income of foreign Group companies	29	135
Effect of different tax rates and tax bases on income of foreign branches	-19	-175
Effect from tax rate changes	-13	–
Taxes for prior years	-45	9
Withholding tax on dividends	-19	-15
Tax effects on		
Expenses of German Group companies not deductible for tax purposes	-15	-15
Changes in tax loss carryforwards	-43	–
Goodwill impairments and disposal	-7	-16
Financial asset impairments and disposal losses	-9	-39
Net income from investments in associated companies and joint ventures	67	55
Future dividends from subsidiaries and associates	-43	–
Miscellaneous	13	-20
Effective income taxes	**-1,231**	**499**
Effective income tax rate in %	**67**	**37**

The effect of different tax rates on income of foreign Group companies of €-580 million was mainly caused by a strong increase in Norwegian income which is a country with a high applicable tax rate due to the special petroleum tax regime.

The effect of different tax bases on the income of foreign Group companies of €29 million was mainly impacted by an uplift (additional depreciation allowance for tax purposes in Norway) and a countereffect from changes in permanent differences such as non tax deductible foreign currency losses in Argentina.

The effect of different tax rates and bases on the income of foreign branches of €-19 million was mainly caused by fixed and intangible asset impairments, which qualify as permanent differences in the respective jurisdiction.

An amount of €-13 million deferred tax expense relates to a corporate tax rate change in Argentina from 25% (2020) to 35% (2021).

Income tax assets and liabilities

Income tax assets and liabilities consist primarily of income taxes for the respective current year and prior-year periods that have not been definitively audited by the tax authorities. The income tax liabilities also comprise provisions for uncertain tax positions.

Deferred tax assets and liabilities

The deferred tax assets and liabilities are allocable to the following balance sheet items:

DEFERRED TAX ASSETS AND LIABILITIES IN 2021

€ million	1 Jan 2021, net	Effects recognised in income	Other	Effects recognised in OCI: Cash flow hedge	Effects recognised in OCI: Remeasurement of benefit plans	Effects recognised in OCI: Currency translation effect	**31 Dec 2021, net**	Deferred tax assets	Deferred tax liabilities
Intangible assets, property, plant and equipment and investment property	-4,837	-165	–	–	–	-389	**-5,391**	6	5,397
Inventories, receivables and financial assets	-69	-271	–	14	–	-2	**-328**	10	338
Pension provisions	147	-3	–	–	-20	3	**127**	155	28
Other provisions, liabilities and financial liabilities	1,479	26	–	1,759	–	96	**3,360**	3,371	11
Other	2	-1	–	2	–	–	**3**	3	–
Tax loss carryforwards	168	89	–	–	–	8	**265**	265	–
Deferred tax assets/ liabilities before netting	**-3,110**	**-325**	**–**	**1,775**	**-20**	**-284**	**-1,964**	**3,810**	**5,774**
Netting (same taxation authority)	–	–	–	–	–	–	**–**	-3,576	-3,576
Deferred tax assets/ liabilities after netting	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**234**	**2,198**

DEFERRED TAX ASSETS AND LIABILITIES IN 2020

€ million	1 Jan 2020, net	Effects recognised in income	Other	Effects recognised in OCI: Cash flow hedge	Effects recognised in OCI: Remeasurement of benefit plans	Effects recognised in OCI: Currency translation effect	**31 Dec 2020, net**	Deferred tax assets	Deferred tax liabilities
Intangible assets, property, plant and equipment and investment property	-4,884	-85	-299	–	–	431	**-4,837**	6	4,843
Inventories, receivables and financial assets	-82	1	11	-2	–	3	**-69**	1	70
Pension provisions	145	1	–	–	4	-3	**147**	173	26
Other provisions, liabilities and financial liabilities	1,363	-136	295	65	–	-108	**1,479**	1,517	38
Other	9	–	-7	–	–	–	**2**	2	–
Tax loss carryforwards	68	107	–	–	–	-7	**168**	168	–
Deferred tax assets/ liabilities before netting	**-3,381**	**-112**	**–**	**63**	**4**	**316**	**-3,110**	**1,867**	**4,977**
Netting (same taxation authority)	–	–	–	–	–	–	**–**	-1,727	1,727
Deferred tax assets/ liabilities after netting	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**140**	**3,250**

Current and deferred tax assets and liabilities are offset if there is a legally enforceable right to set off current tax assets against current tax liabilities, and the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities that intend to either settle current tax liabilities and assets on a net basis or realise the assets and settle the liabilities simultaneously in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

The increase in deferred tax assets was mainly driven by increased losses from hedging of the Norwegian gas production reported under other comprehensive income (OCI).

Of the total amount of deferred tax assets and deferred tax liabilities, €1,481 million (2020: €178 million) and €250 million (2020: €70 million) are expected to be realised within 12 months.

No deferred tax liabilities were recognised for temporary differences associated with investments in subsidiaries, branches and associates in the amount of approximately €409 million in 2021 (2020: €632 million) because Wintershall Dea is in a position to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future.

Current income taxes for current and prior periods are measured at the amount that is expected to be paid to or be refunded from the tax authorities, taking into account the tax rates applicable in the countries of the respective Group companies as at the balance sheet date. The Group companies are liable for taxation in several countries. When assessing the Group-wide tax receivables and tax liabilities, the interpretation of tax law may create uncertainty. There is a potential risk that tax authorities and Group companies will interpret tax rules differently. Changes in assumptions of tax law interpretations that may, for example, result from revised jurisprudence are recognised in the measurement of uncertain tax receivables and liabilities in the respective period. Uncertain tax liabilities are recognised with the probable value if their probability is more likely than not.

In determining the Group's worldwide income tax provisions, judgment is involved in assessing whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments and whether to reflect the respective effect of uncertainty based on the probable amount. In applying these judgments, the Group considers the nature and the individual facts and circumstances of each uncertain tax treatment as well as the specifics of the respective jurisdiction, including applicable tax laws and the Group's interpretation thereof.

For matters, the Group has not recorded a provision as the Group believes that the tax authorities' claims have no merit and that no adjustment is warranted, but if, contrary to the Group's view, the tax authorities were to prevail finally in their arguments, the Group would expect to have an additional expense of approximately €83 million.

Tax loss carryforwards

The deferred tax assets result from domestic and foreign activities. Deferred tax assets comprise capitalised tax credit claims resulting from the expected utilisation of loss carryforwards in subsequent years. The realisation of these tax loss carryforwards is ensured to an adequate level of certainty. In the reporting period under review, there were tax loss carryforwards of €993 million (2020: €552 million) in Germany and €382 million (2020: €293 million) in Mexico, for which deferred taxes of €265 million (2020: €168 million) were recognised. The amount of tax loss carryforwards not covered by deferred tax assets totals €736 million (2020: €558 million). A total amount of €472 million will not expire. A total amount of €264 million will expire between 2025 and 2036.

Tax expenses include a deferred tax income of €1 million (2020: deferred tax expense of €-3 million) from a reversal of a previously written-down deferred tax asset from temporary differences (2020: write-down).

Deferred tax income from a previously unrecognised tax loss amounts to €5 million.

The business plan is the basis for the assessment, if it is probable that future taxable profits will be available to utilise deferred tax assets, if the utilisation of the deferred tax assets is dependent on future taxable profits in excess of the profits arising from the reversal of existing taxable temporary differences. According to the latest available business plan, it is probable that there will be sufficient taxable profit in the German tax group to utilise the deferred tax assets.

NOTE 11 – SEGMENT REPORTING

The Group's business is conducted in six segments:

- Northern Europe
- Russia
- Latin America
- Middle East/North Africa
- Midstream
- Other

The segments Northern Europe, Russia, Latin America and Middle East/North Africa comprise the E&P business and are further divided into eleven divisions based on countries in the respective region. The E&P segments include exploration, appraisal, field development and production activities in the following divisions:

- **Northern Europe:** Germany, Norway, the Netherlands, United Kingdom and Denmark
- **Russia:** Russia
- **Latin America:** Argentina, Mexico and Brazil[3]
- **Middle East/North Africa:** Egypt, Libya, Algeria and United Arab Emirates

The Midstream segment comprises the onshore and offshore gas transportation activities in Europe.

The segment Other includes the Management Board and the corporate functions, such as Global Exploration, Carbon Management and Hydrogen and the trading activities managed by the headquarter as well as holding companies.

[3] The Group has decided to terminate all activities in Brazil as communicated on 17 January 2022.

The accounting policies for the segments are the same as the Group's accounting policies described in Note 1.

The consolidation column includes the elimination of inter-segment sales, mainly resulting from the gas trading activities between the headquarter and the business segments. Sales between the segments are made at prices that approximate market price.

The key internal performance measure 'adjusted EBITDAX' (EBITDAX), which is used for internal management control purposes, and the additional performance indicator 'adjusted net income' are disclosed as a measure of profit and loss for each reporting segment. EBITDAX and adjusted net income are not recognised measures under IFRS.

In addition, the segment reporting includes the non-IFRS measures 'free cash flow' and 'production', which also serve as key performance indicators for internal management control.

	2021							
€ million/mboe/d	Northern Europe	Russia	Latin America	Middle East/ North Africa	Midstream	Other	Consolidation	**Total**
External revenues	2,249	862	464	472	2	3,754	–	**7,804**
Inter-segment revenues	955	–	–	–	–	62	-1,017	**–**
Segment revenues	3,204	862	464	472	2	3,816	-1,017	**7,804**
Depreciation and amortisation	-1,106	-41	-169	-133	–	-8	–	**-1,456**
Net impairment on assets	241	–	-211	-141	–	–	–	**-111**
Exploration expenses	-79	–	-49	5	–	-10	–	**-134**
Income tax	-979	-148	11	-62	–	-51	–	**-1,230**
Adjusted net income	246	547	-99	165	202	-112	–	**950**
EBITDAX	2,337	728	306	404	201	-145	–	**3,832**
of which net income from equity-accounted investments	–	51	–	32	202	–	–	**285**
Total capex[1]	-870	-6	-66	-105	–	-3	–	**-1,050**
of which production and development capex	-800	-6	-39	-105	–	-3	–	**-952**
of which exploration capex	-70	–	-27	-1	–	–	–	**-98**
Free cash flow	1,348	505	65	91	121	-49	–	**2,082**
Production[2]	206	303	70	55[3]	–	–	–	**634**
of which gas	106	243	62	43	–	–	–	**454**
of which liquids	100	60	8	12	–	–	–	**180**

[1] Cash outflows for intangible assets, property, plant and equipment and investment property
[2] On a working-interest basis, including proportional production from at equity-accounted companies
[3] Excluding Libya onshore

	2020							
€ million/mboe/d	Northern Europe	Russia	Latin America	Middle East/ North Africa	Midstream	Other	Consolidation	**Total**
External revenues	1,680	574	344	237	2	805	–	**3,642**
Inter-segment revenues	211	–	–	–	–	9	-220	**–**
Segment revenues	1,891	574	344	237	2	814	-220	**3,642**
Depreciation and amortisation	-1,121	-46	-151	-113	–	-7	–	**-1,438**
Net impairment on assets	-386	-17	-158	-591	–	–	–	**-1,152**
Exploration expenses	-125	–	-44	-4	–	-8	–	**-181**
Income tax	517	-46	37	-27	2	16	–	**499**
Adjusted net income	161	154	-106	-6	190	-198	–	**195**
EBITDAX	1,039	239	200	105	193	-133	–	**1,643**
of which net income from equity-accounted investments	-17	16	–	-13	196	–	–	**182**
Total capex[1]	-1,066	-12	-34	-151	–	-5	–	**-1,268**
of which production and development capex	-1,036	-12	-33	-151	–	-5	–	**-1,237**
of which exploration capex	-30	–	-1	–	–	–	–	**-31**
Free cash flow	401	254	-42	-55	111	-510	–	**159**
Production[2]	206	295	74	48[3]	–	–	–	**623**
of which gas	109	235	65	37	–	–	–	**446**
of which liquids	97	60	9	11	–	–	–	**177**

[1] Cash outflows for intangible assets, property, plant and equipment and investment property
[2] On a working-interest basis, including proportional production from at equity-accounted companies
[3] Excluding Libya onshore

External revenues are allocated to the following divisions:

EXTERNAL REVENUES

€ million	2021	2020
Norway	1,856	1,218
Germany	380	455
The Netherlands/UK/Denmark	12	7
Northern Europe	**2,249**	**1,680**
Russia	**862**	**574**
Argentina	402	295
Mexico	62	49
Latin America	**464**	**344**
Egypt	315	143
Libya	106	54
Algeria	51	40
Middle East/North Africa	**472**	**237**
Midstream	**2**	**2**
Other	**3,754**	**805**
Total	**7,804**	**3,642**

EBITDAX and adjusted net income

EBITDAX is defined as revenues and other income, less production and operating expenses, less production and similar taxes, less general and administrative expenses, adjusted for special items.

Adjusted net income is derived from EBITDAX less depreciation and amortisation, less exploration expenses, plus financial income, less financial expenses and less income taxes, adjusted for special items and tax effects on adjusted special items and disregarded items (e.g. net impairments on assets).

€ million	2021	2020
Revenues gas and oil	7,611	3,314
adjusted for unrealised changes in fair value of commodity derivatives	8	6
Revenues other	193	328
Net income from equity-accounted investments: gas and oil	83	-14
adjusted for net impairments on assets included in the net income of equity-accounted investments	29	–
Net income from equity-accounted investments: midstream	202	196
Other operating income	99	68
adjusted for gains from sale of assets/changes in consolidation scope	-47	-5
Production and operating expenses	-3,971	-1,863
adjusted for net impairments and write-offs on/from operating receivables	1	13
adjusted for losses from sale of assets	35	3
adjusted for non-recurring items (merger-related costs, acquisition costs, etc.)	41	–
Production and similar taxes	-123	-94
General and administrative expenses	-429	-277
adjusted for net impairments and write-offs on/from operating receivables	2	–
adjusted for losses from sale of assets/changes in consolidation scope	36	1
adjusted for non-recurring items (merger-related costs, acquisition costs, etc.)	61	-33
EBITDAX	**3,832**	**1,643**

€ million	2021	2020
EBITDAX	**3,832**	**1,643**
Depreciation and amortisation	-1,456	-1,438
Exploration expenses	-134	-181
adjusted for gains and losses from sale of assets	31	45
adjusted for non-recurring items (merger-related costs, acquisition costs, etc.)	3	–
Financial income	182	220
Financial expenses	-323	-445
adjusted for net impairments on other financial assets and financial receivables	3	92
Income taxes	-1,230	499
adjusted for taxes on adjusted and disregarded items	41	-240
Adjusted net income	**950**	**195**

NOTE 12 – INTANGIBLE ASSETS, PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY

INTANGIBLE ASSETS

€ million	Goodwill	Exploration assets	Other intangible assets	**Total**
Cost of acquisition and production				
As at 1 Jan 2021	2,298	827	3,839	**6,964**
Additions	–	98	9	**106**
Disposals	-10	-101	-6	**-116**
Transfers	-15	-357	-44	**-415**
Currency translation effect	161	43	251	**454**
As at 31 Dec 2021	**2,435**	**511**	**4,049**	**6,995**
Accumulated amortisation				
As at 1 Jan 2021	–	185	1,150	**1,335**
Amortisation/depreciation	–	8	209	**217**
Impairments	–	118	120	**238**
Reversal of impairments	–	–	-86	**-86**
Disposals	–	-39	-5	**-44**
Transfers	–	–	-34	**-33**
Currency translation effect	–	12	64	**76**
As at 31 Dec 2021	**–**	**284**	**1,418**	**1,703**
Net carrying amount as at 31 Dec 2021	**2,435**	**226**	**2,631**	**5,292**

INTANGIBLE ASSETS

€ million	Goodwill	Exploration assets	Other intangible assets	**Total**
Cost of acquisition and production				
As at 1 Jan 2020	2,580	1,769	3,585	**7,934**
Additions	–	31	37	**68**
Disposals	-53	-81	-20	**-154**
Transfers	–	-805	642	**-163**
Currency translation effect	-229	-87	-405	**-721**
As at 31 Dec 2020	**2,298**	**827**	**3,839**	**6,964**
Accumulated amortisation				
As at 1 Jan 2020	–	192	660	**852**
Amortisation/depreciation	–	10	210	**220**
Impairments	53	144	271	**468**
Disposals	-53	–	-19	**-72**
Transfers	–	-149	151	**2**
Currency translation effect	–	-12	-123	**-135**
As at 31 Dec 2020	**–**	**185**	**1,150**	**1,335**
Net carrying amount as at 31 Dec 2020	**2,298**	**642**	**2,689**	**5,629**

PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY

€ million	Land and buildings[1]	Gas and oil assets[2]	Other plant, machinery and equipment	Fixtures and fittings and office equipment	**Total**
Cost of acquisition and production					
As at 1 Jan 2021	186	17,671	25	95	**17,977**
Additions	13	1,103	–	6	**1,121**
Disposals	-22	-700	–	-16	**-738**
Transfers	2	199	–	6	**207**
Currency translation effect	5	1,121	1	1	**1,128**
As at 31 Dec 2021	**185**	**19,393**	**26**	**92**	**19,696**
Accumulated amortisation					
As at 1 Jan 2021	62	9,053	17	69	**9,201**
Amortisation/depreciation	24	1,242	1	9	**1,275**
Impairments	1	206	–	–	**207**
Reversal of impairments	–	-260	–	–	**-260**
Disposals	-9	-354	–	-15	**-378**
Transfers	1	-95	–	-4	**-98**
Currency translation effect	1	575	–	1	**578**
As at 31 Dec 2021	**81**	**10,366**	**18**	**61**	**10,526**
Net carrying amount as at 31 Dec 2021	**105**	**9,026**	**8**	**31**	**9,170**

[1] Land and buildings include investment property.
[2] Gas and oil assets include assets under construction (€3,028 million as at 31 Dec 2021).

PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY

€ million	Land and buildings[1]	Gas and oil assets[2]	Other plant, machinery and equipment	Fixtures and fittings and office equipment	**Total**
Cost of acquisition and production					
As at 1 Jan 2020	175	17,243	28	102	**17,548**
Additions	14	1,271	–	5	**1,290**
Disposals	-4	-71	–	-9	**-84**
Transfers	9	317	–	-1	**325**
Currency translation effect	-8	-1,089	-3	-2	**-1,102**
As at 31 Dec 2020	**186**	**17,671**	**25**	**95**	**17,977**
Accumulated amortisation					
As at 1 Jan 2020	43	7,487	17	69	**7,616**
Amortisation/depreciation	14	1,235	1	9	**1,259**
Impairments	–	657	–	1	**658**
Reversal of impairments	–	-14	–	–	**-14**
Disposals	-3	-7	–	-8	**-18**
Transfers	9	153	–	-1	**161**
Currency translation effect	-1	-458	-1	-1	**-461**
As at 31 Dec 2020	**62**	**9,053**	**17**	**69**	**9,201**
Net carrying amount as at 31 Dec 2020	**124**	**8,618**	**8**	**26**	**8,776**

[1] Land and buildings include investment property.
[2] Gas and oil assets include assets under construction (€2,876 million as at 31 Dec 2020).

Capitalised borrowing costs

In connection with the acquisition and production of qualified assets, borrowing costs amounting to €19 million (2020: €41 million) were capitalised as part of acquisition and production costs in the reporting period. The financing cost rate applied in this context was between 1.1% and 1.2% (2020: 1.1% and 1.3%).

Impairment testing

Impairment tests of individual cash-generating units are performed when triggering events point to a potential impairment. External triggering events include, for example, changes in oil and gas prices and in the estimated reserves. Changes in production processes or physical damage to assets constitute internal indicators of impairment. Goodwill is subject to an annual impairment test, which was carried out in the fourth quarter of 2021 at the level of groups of cash-generating units. At Wintershall Dea these units largely correspond to the business units.

An impairment is recognised when the carrying amount of an asset or a cash-generating unit, including goodwill, exceeds the recoverable amount. The recoverable amount corresponds to the fair value less cost of disposal (level 3 in fair value hierarchy). For producing licences and licences in the development phase, the recoverable amount is estimated based on discounted future cash flows after tax.

NET IMPAIRMENT ON ASSETS

€ million	Northern Europe 2021	Latin America 2021	Middle East/ North Africa 2021	**Total** 2021
Exploration assets (acquisition cost of concessions and exploration wells)	17	61	40	**118**
Acquisition cost of concessions	17	99	5	**121**
Land and buildings	–	–	1[1]	**1**
Producing and Development assets	13	98	95	**206**
Impairment losses	**47**	**258**	**141**	**446**
Acquisition cost of concessions	-24	-62	–	**-86**
Producing and Development assets	-260	–	–	**-260**
Reversal of impairment losses	**-284**	**-62**	**–**	**-346**
Net impairments on intangible assets and property, plant and equipment	**-237**	**196**	**141**	**100**
Impairment losses on goodwill (allocated to assets held for sale [Note 3])	–	15	–	**15**
Reversal of impairment losses on equity-accounted investments (Note 13)	-4	–	–	**-4**
Net impairment on assets	**-241**	**211**	**141**	**111**

[1] Thereof right-of-use assets €1 million

The recoverable amounts for intangible assets and property, plant and equipment that have been impaired or for which an impairment has been reversed in the reporting period amount to €860 million for Northern Europe, €943 million for Latin America and €432 million for Middle East/North Africa.

The impairment losses recognised in June mainly relate to acquisition costs of concessions in Mexico, and are primarily triggered by a reduction in the Group's working interest in Block 7 following the working interest determination by an independent expert as part of the unitisation process. The impairment losses recognised in December are mainly triggered by updated operational assumptions from the latest business plan, including reduced reserves expectations for the West Nile Delta development in Egypt and portfolio optimisation measures (mainly in Latin America). The reversals of impairments on assets in Norway and Mexico are related to an overall increase in the expected service potential.

The following key assumptions have been used for the impairment test as at 31 December 2021.

Oil and gas prices

Oil and gas price forecasts are based on the Group's current oil and gas price scenario taking into account management's estimates and the available market data. The oil and gas price scenario includes an oil price of $69/bbl and a gas price of $13.3/mmbtu for the year 2022.

Discount rates

The discount rates applied are based on the weighted average cost of capital, taking into consideration the individual functional currency and specific country risks. The beta factor is based on publicly available market data about the identified peer group. For the impairment test in 2021, the discount rates applied per functional currency ranged between 6.5% and 18.5%.

Discount rates of 6.6% and 6.7% were used for the goodwill impairment test for the business units Germany and Norway, to which a significant portion of the goodwill was allocated.

Allocation of goodwill

Goodwill is allocated to the following groups of cash-generating units:

€ million	31 Dec 2021	31 Dec 2020
Norway	1,644	1,519
Germany	303	312
Achimgaz	201	187
YRGM Trading	156	145
Argentina	115	120
The Netherlands	10	9
Middle East	6	6
Total	**2,435**	**2,298**

Sensitivities

Oil and gas prices, production volumes and discount rates (WACC) are considered to be the most critical input parameters and assumptions for goodwill impairment testing. A sensitivity analysis was carried out for these items. In accordance with IAS 36.134 f, the analysis focused solely on the business unit Norway and business unit Germany.

After determining the corresponding recoverable amounts of the business units by assessing reasonable deviations (-20% on prices, -20% on production and +1% on WACC) for the stated input parameters, there was no indication that the carrying amount would exceed the recoverable amount and trigger goodwill impairment for the business units Germany and Norway with regard to the discount rates. In the case of production volumes or gas and oil prices, a considerable decrease for one of these parameters may be associated with a potential risk of impairment of the allocated goodwill. The recoverable amounts of the business units Germany and Norway exceed their carrying amounts by €419 million or €808 million, respectively, in the reporting period. The recoverable amounts would correspond to the carrying amounts of the business units if the gas and oil price forecasts were approximately 15% lower in Germany and 13% lower in Norway or if production volumes were 13% lower in Germany and 11% lower in Norway.

Cash flows for valuation purposes are derived from life-of-field sheets, which reflect production volumes and cost elements for the remaining expected economic lifetime of a gas or oil field and end with the year of the field's abandonment or upon the expiration of the production licence.

NOTE 13 – EQUITY-ACCOUNTED INVESTMENTS

€ million	31 Dec 2021	31 Dec 2020
Net carrying amount at the beginning of the reporting period	2,671	2,685
Additions	–	124
Disposals	-9	–
Dividends	-173	-192
Proportional net income	285	182
Proportional other comprehensive income	15	-2
Impairments	–	-40
Reversal of impairments	4	–
Currency translation effect	63	-86
Net carrying amount at the end of the reporting period	**2,856**	**2,671**

NOTE 14 – INVENTORIES

€ million	31 Dec 2021	31 Dec 2020
Raw materials, consumables and supplies	167	188
Work in process and finished goods	11	13
Total	**177**	**201**

NOTE 15 – FINANCIAL RECEIVABLES

	31 Dec 2021		31 Dec 2020	
€ million	Non-current	Current	Non-current	Current
Loans and financial receivables to related parties and other participations	212	12	212	90
Loans and financial receivables to other parties	948	40	915	39
Financial receivables from cash pooling	–	13	–	12
Total	**1,159**	**65**	**1,127**	**141**

Loans and financial receivables to other parties relate almost exclusively to the financing of the Nord Stream 2 pipeline project. An expected credit loss of € 1 million (31 December 2020: € 1 million) has been recognised based on the assessment of the scenarios for contractual provisions and for the unlikely event of a political intervention. Currently, Wintershall Dea sees no reasonable and supportable scenario in which there will be a political intervention without compensation.

NOTE 16 – TRADE AND OTHER RECEIVABLES

	31 Dec 2021		31 Dec 2020	
€ million	Non-current	Current	Non-current	Current
Trade accounts receivable				
Trade accounts receivable from revenues	–	1,407	–	557
Other trade accounts receivable	–	78	–	62
	–	**1,485**	**–**	**619**
Other receivables				
Receivables from other taxes	–	82	–	69
Prepayments and prepaid expenses	1	51	1	52
Underlift receivables	–	53	–	25
Miscellaneous other receivables and assets	9	73	37	143
	11	**260**	**38**	**289**
Total	**11**	**1,745**	**38**	**908**

NOTE 17 - CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprise cash on hand, credit balances on bank accounts and term-deposits for up to three months with banks. Cash and cash equivalents at 31 December 2021 include restricted cash in the amount of €13 million that is required for gas trading activities at the commodity exchange.

NOTE 18 – EQUITY

Shareholder's equity

As at 31 December 2021, the subscribed capital of Wintershall Dea AG amounted to €189 million and was divided into 156,716,500 ordinary shares with full voting rights and a nominal value of €1.00 each and 32,721,027 preference shares with a nominal value of €1.00 each. The ordinary shares in the company are held by BASF Handels- und Exportgesellschaft mbH (67%) and L1 Energy Capital Management Services S.à r.l. (33%). The preference shares are held by BASF and result from an equity contribution in the course of the merger with DEA. The preference shares will convert into ordinary shares of the company on 1 May 2022. The preference shares lead to a total holding in the company's share capital of 72.7% for BASF and 27.3% for L1 Energy Capital Management Services S.à r.l. (LetterOne).

Wintershall Dea is subject to significant influence by BASF and LetterOne as set out in the corporate governance.

In a letter dated 12 October 2021, BASF Handels- und Exportgesellschaft mbH notified us in accordance with Section 20 (4) AktG that it directly held a majority shareholding in Wintershall Dea AG pursuant to Section 16 (1) AktG.

In a letter dated 26 October 2021, L1 Energy Capital Management Services S.à r.l. notified us pursuant to Section 20 (1) AktG that it directly held more than one-quarter of the shares in Wintershall Dea AG pursuant to Section 16 (1) AktG.

Indirect shares pursuant to Section 20 (1) and (4) AktG are held by BASF SE and LetterOne Holdings S.A.

A dividend on preference shares in the amount of €86 million and a common dividend on ordinary shares in the amount of €600 million were distributed in the reporting period.

Equity attributable to subordinated notes investors

In January 2021, Wintershall Dea AG issued two series of subordinated resettable fixed rate notes (subordinated notes), in the aggregate principal amount of €1,500 million through its fully owned subsidiary Wintershall Dea Finance 2 B.V. The subordinated notes are callable three months prior to the first reset date for the NC2026 series and six months prior to the first reset date for the NC2029 series. The first reset date for the NC2026 Subordinated Notes (€650 million with a coupon of 2.4985%) is on 20 July 2026, and the first reset date for the NC2029 Subordinated Notes (€850 million with a coupon of 3.0000%) is on 20 January 2029.

Under IAS 32, subordinated notes are classified entirely as equity. The capital raised through subordinated notes issues is recognised in equity, less discounts and transaction costs. Deferred taxes on discounts and transaction costs are also recognised in equity. Accrued interest payable to the subordinated notes investors increase equity, whereas the distribution of interest payments reduces equity.

The net proceeds from subordinated notes issues are shown as capital contribution in the consolidated statement of cash flows. The proceeds were used for the repayment of bank facilities.

NOTE 19 – PENSION PROVISIONS

In addition to state pension plans, most employees are granted company pension benefits from either defined contribution or defined benefit plans. Benefits generally depend on the length of service, compensation and contributions and take into consideration the legal framework of labour, tax and social security laws in the countries where the companies are located. To limit the risks of changes in financial market conditions and demographic developments, for a number of years now, employees have been offered, almost exclusively, defined contribution plans or equivalent company pension benefits for future years of service.

Description of the defined benefit plans

Germany

Some Wintershall Dea companies in Germany participate in the BASF group's pension plans. BASF Pensionskasse VVaG provides a basic level of benefits which is financed by employer and employee contributions and the return on plan assets. Some of the benefits financed via BASF Pensionskasse VVaG are subject to adjustments that must be borne by its member companies to the extent that these cannot be borne by BASF Pensionskasse VVaG due to the regulations imposed by the German supervisory authority. In 2004, the basic defined benefit plan was closed for newly hired employees at German Wintershall Dea companies and replaced by a defined contribution plan. Occupational pension commitments that exceed the basic level of benefits are financed via pension provisions at the German Group companies. The benefits are largely based on modular plans. Furthermore, employees are given the option of participating in various deferred compensation schemes.

BASF SE is not providing the required plan information from BASF Pensionskasse regarding the allocation of assets to Wintershall Dea for year-end closing. As a result, the participation in BASF Pensionskasse is accounted for as a multi-employer defined benefit plan with no access to sufficient information about the asset allocation and, therefore, as a defined contribution plan in accordance with IAS 19.36.

In addition, Wintershall Dea has self-managed pension plans in place in Germany. In relation to these pension plans, assets have been transferred to Willis Towers Watson Treuhand GmbH within the framework of Contractual Trust Arrangements (CTAs) and to Willis Towers Watson Pensionsfonds AG as insolvency insurance. Willis Towers Watson Pensionsfonds AG falls within the scope of the Act on Supervision of Insurance Undertakings and Oversight by the German Federal Financial Supervisory Authority (BaFin). Insofar as a regulatory deficit occurs in the pension fund, supplementary payments are requested from the employer. Irrespective of the aforementioned rules, the liability of the employer shall remain in place. The bodies of Willis Towers Watson Treuhand GmbH and Willis Towers Watson Pensionsfonds AG are responsible for ensuring that the funds under management are used in compliance with the contract and thus fulfil the requirements for their recognition as plan assets. The defined benefit plans that are recognised as pension provisions mainly include a pension promise and are hence subject to longevity risk. All of the aforementioned pension plans have been closed to new employees since 31 March 2020. Newly hired employees after that date generally have blanket commitments that are reflected in the pension provisions. The blanket commitments will be specified with their transfer to a new pension scheme in the course of 2022.

Norway

The Wintershall Norge defined benefit plans have been closed to new employees since 1 January 2016. For Norwegian employees whose remaining length of service until retirement on 1 January 2016 was 15 years or less, a final salary commitment continues to apply after the closure of the plan. The plans are partly funded via Nordea Liv AS. Employees who still had a remaining length of service of more than 15 years on the date of 1 January 2016 and employees who joined the company after this date are entitled to benefits under a defined contribution pension plan. Defined contribution plans are either secured with Nordea Liv AS or unfunded and administered by Storebrand Pensjonstjenester on behalf of Wintershall Dea Norge AS.

Moreover, closed defined benefit plans are in place for former DEA Norge employees. These are secured with DNB ASA. Employees who on 1 January 2021 still had 15 years or less until retirement remained in the existing plans. All others were transferred to existing defined contribution plans.

Actuarial assumptions

The amount of the provision for defined benefit pension schemes was determined by actuarial methods on the basis of the following key assumptions.

	31 Dec 2021		31 Dec 2020	
Key assumptions (%)	Germany	Norway	Germany	Norway
Discount rate	1.15%	1.50%	0.70%	1.50%
Pension growth	1.70%	0.00%	1.50%	0.00%

The assumptions used to determine the present value of the entitlements as at 31 December 2020 are used in the following fiscal year to determine the expenses for pension plans.

The valuation of the defined benefit obligation is generally performed using the most recent actuarial mortality tables as at 31 December 2021.

ACTUARIAL MORTALITY TABLES AS AT 31 DEC 2021

Germany	Heubeck Richttafeln 2018 G
Norway	K2013

PROVISIONS FOR PENSIONS

€ million	Defined benefit obligations	Plan assets	**Total**
As at 1 Jan 2021	1,078	-447	**631**
Current service costs	21	–	**21**
Interest expense/(income)	8	-3	**5**
	29	**-3**	**26**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	–	-29	**-29**
Actuarial gains/losses			
of which effect of changes in financial assumptions	-59	–	**-59**
of which effect of experience adjustments	19	–	**19**
	-40	**-29**	**-69**
Currency effect	4	-2	**2**
Employer contribution to the funded plans	–	-12	**-12**
Benefit payments	-43	24	**-19**
As at 31 Dec 2021	**1,028**[1]	**-469**	**558**

[1] Including unfunded pension plans in the amount of €352 million

€ million	Defined benefit obligations	Plan assets	**Total**
As at 1 Jan 2020	1,049	-470	**579**
Current service costs	28	–	**28**
Interest expense/(income)	12	-5	**7**
	40	**-5**	**35**
Remeasurements			
Return on plan assets, excluding amounts already recognised in interest income	–	-5	**-5**
Actuarial gains/losses			
of which effect of changes in financial assumptions	59	–	**59**
of which effect of experience adjustments	-23	–	**-23**
	36	**-5**	**31**
Currency effect	-7	4	**-3**
Employer contribution to the funded plans	–	-3	**-3**
Benefit payments	-44	25	**-19**
Gains on settlement	-16	7	**-9**
Transfer	20	–	**20**
As at 31 Dec 2020	**1,078[1]**	**-447**	**631**

[1] Including unfunded pension plans in the amount of €358 million

The present value of the defined benefit obligations less plan assets measured at fair value results in the net defined benefit obligation arising from funded and unfunded plans and is recognised as pension provision on the balance sheet. Of the present value of defined benefit obligations, €948 million (31 December 2020: €1,005 million) relate to benefit obligations in Germany and €80 million (31 December 2020: €73 million) to benefit obligations in Norway.

Domestic company pensions are subject to an obligation to review for adjustments every three years pursuant to Section 16 of the German Occupational Pension Act (BetrAVG). Additionally, some commitments grant annual pension adjustments, which may exceed the legally mandated adjustment obligation.

The weighted average duration of the pension obligations is 17 years in Germany (prior year: 17 years) and 19 years in Norway (prior year: 18 years).

Sensitivity analysis of defined benefit obligations

An increase or decrease in the discount rate and pension growth would have the following impact on the present value of the defined benefit obligations:

CHANGE IN ACTUARIAL ASSUMPTIONS

	Impact on defined benefit obligations	
€ million	31 Dec 2021	31 Dec 2020
Discount rate		
Increase of 0.5 percentage points	-59	-85
Reduction of 0.5 percentage points	68	96
Pension growth		
Increase of 0.5 percentage points	35	66
Reduction of 0.5 percentage points	-30	-57

An alternative valuation of the pension obligations was performed to determine how changes in the underlying assumptions influence the amount of the pension obligations. A linear extrapolation of these amounts based on alternative changes in the assumptions, as well as an addition of combined changes in the individual assumptions is not possible.

Plan assets

The investment policy in Germany is based on detailed asset liability management (ALM) studies. Portfolios are identified that can achieve the best target return within a given risk budget. Of these efficient portfolios, one is selected, and the strategic asset allocation is determined. Strategic asset allocation consists of two main elements. The first is to hedge fluctuations and involves the use of capital market instruments that hedge the financial risks arising from the valuation of pension obligations. The second is the generation of income and diversifying the portfolio. The broadly diversified portfolio includes investments in bonds, equities, real estate and other asset classes. The assets are continuously monitored and managed from a risk and return perspective.

COMPOSITION OF PLAN ASSETS (FAIR VALUES)

	31 Dec 2021			
€ million	Germany	Of which has an active market	Norway	Of which has an active market
Assets held by insurance company	3	–	35	100%
Specialised funds	432	100%	–	–
Total	**434**	**–**	**35**	**–**

Contributions into the CTA are usually processed to the extent that at least a constant level of funding is achieved. The amount to be contributed in 2022 will depend, among other things, on the performance of the plan assets and interest rate developments.

Defined contribution plans

For defined contribution plans, expenses of €8 million were incurred in the reporting period (2020: €8 million).

As Wintershall Dea AG does not have the required information on asset allocation, it accounts for the multi-employer defined benefit plan of BASF Pensionskasse as a defined contribution plan. The pension provision of €45 million covers the obligation for future pension adjustments. Other future supplementary payment obligations may occur due to unexpected funding requirements. Since these obligations are neither predictable nor probable, they are not included in the company's pension provisions.

The company's contribution to the multi-employer plan represents a certain percentage of the employee contribution. This percentage is the same for all participating employers, including those outside the BASF group. It takes into account the differences between the actuarial estimates and the actual values for the factors used to determine liabilities and contributions. For 2022, the company expects to make contributions of €2 million to the plan.

NOTE 20 – DECOMMISSIONING AND OTHER PROVISIONS

	31 Dec 2021		31 Dec 2020	
€ million	Non-current	Current	Non-current	Current
Decommissioning provisions	**2,467**	**193**	**2,607**	**167**
Other provisions				
Employee obligations	60	104	64	95
Litigation risks, damage claims	–	6	–	5
Other	83	181	25	170
	143	**291**	**89**	**270**
Total	**2,610**	**483**	**2,696**	**437**

€ million	As at 1 Jan 2021	Additions	Utilisation	Reversal	Other changes	**As at 31 Dec 2021**
Decommissioning provisions	**2,774**	**175**	**-43**	**-380**	**133**	**2,660**
Other provisions						
Employee obligations	159	102	-97	-2	2	**164**
Litigation risks, damage claims	5	2	–	–	–	**6**
Other	195	107	-30	-11	4	**264**
	359	**210**	**-127**	**-14**	**6**	**434**
Total	**3,133**	**385**	**-170**	**-394**	**139**	**3,094**

Decommissioning obligations pertain mainly to anticipated costs for filling wells and removing production equipment after production activities have come to an end. In order to determine the present value, discount rates of between 0.00% and 8.69% were applied in the reporting period (2020: 0.00% to 6.25%). The determination of the discount rates is country-/currency-specific based on the terms of the respective fields. The expected settlement of the provisions depends on the ratio of produced reserves to expected reserves and generally varies within a range of less than one year up to approximately 30 years.

Provisions for employee obligations include, in particular, obligations to pay long-service bonuses, anniversary bonuses, and variable remuneration, including the associated social security contributions and provisions due to restructuring measures or early retirement as well as phased-in early retirement models.

NOTE 21 – FINANCIAL DEBT

	31 Dec 2021		31 Dec 2020	
€ million	Non-current	Current	Non-current	Current
Bonds	4,000	12	4,000	12
less transaction cost	-13	–	-15	–
	3,987	**12**	**3,985**	**12**
Debt to banks	–	3	1,819	3
less/plus transaction costs and embedded derivatives	–	–	6	–
	–	**3**	**1,825**	**3**
Financial liabilities to related parties	–	538	–	399
Lease liabilities	67	23	76	57
Total	**4,055**	**575**	**5,886**	**471**

Bonds

In September 2019, Wintershall Dea Finance B.V., a fully owned subsidiary of Wintershall Dea AG, issued bonds in the amount of €4,000 million. The transaction comprised four tranches.

Transaction costs were capitalised as a reduction in the bond amount and are being amortised over the expected life applying the effective interest method.

Bonds	%	Maturity	Currency	Nominal value (€ million	Fair value 31 Dec 2021 (€ million)	**Carrying amount 31 Dec 2021 (€ million)**
Bond ISIN XS2054209320	0.452	2023	EUR	1,000	1,009	**998**
Bond ISIN XS2054209833	0.840	2025	EUR	1,000	1,018	**997**
Bond ISIN XS2054210252	1.332	2028	EUR	1,000	1,026	**996**
Bond ISIN XS2055079904	1.823	2031	EUR	1,000	1,034	**996**
Total				**4,000**	**4,087**	**3,987**

The fair value is determined using quoted prices on an active market. The Group's repayment obligation remains unchanged at €4,000 million.

Debt to banks

Debt to banks comprised an external financing arrangement via a consortium of banks (Syndicated Credit Facilities Agreement). The facilities were partially repaid in January 2021 using the net proceeds from the subordinated notes. The remaining outstanding amount of €335 million was fully repaid in May, resulting in no term debt obligations as at 31 December 2021.

Transaction costs were capitalised as a reduction of the loan amount. In addition, the financing facility comprised embedded derivatives that were required to be separated. The positive fair value of the embedded derivatives was initially recognised as an increase in the loan amount. Both amounts were being amortised over the term of the loans with a corresponding effect on the financial result. Following the repayments in January and May the remaining amount of €6 million was immediately amortised in profit or loss.

Credit facilities

A revolving credit facility (RCF) in the total amount of €900 million, with an initial tenor of five-years and additional extension options of up to two years was agreed with the bank consortium and can be utilised if necessary. The first and second one-year extensions were confirmed for the full amount. This facility is available until March 2026 and is currently undrawn.

CHANGES IN LIABILITIES ARISING FROM FINANCING ACTIVITIES UNDER IAS 7

€ million	1 Jan 2021	Cash flows from repayments/ proceeds	Currency effect	Other changes	**31 Dec 2021**
Bonds	3,997	–	–	2	**3,999**
Debt to banks	1,828	-1,841	25	-9	**3**
Financial liabilities to related parties	399	128	4	7	**538**
Lease liabilities	133	-59	7	9	**90**
Total	**6,357**	**-1,772**	**35**	**9**	**4,629**

The reconciliation breaks down the changes in financial liabilities into cash-effective and non-cash-effective changes.

The cash flows from repayments/proceeds presented above correspond to the figures in cash flows from financing activities.

NOTE 22 – TRADE ACCOUNTS PAYABLE AND OTHER LIABILITIES

	31 Dec 2021		31 Dec 2020	
€ million	Non-current	Current	Non-current	Current
Trade accounts payable	**–**	**770**	**–**	**354**
Other liabilities				
Liabilities from other taxes	6	192	4	71
Prepayments – contract liabilities	6	16	6	46
Other prepayments and deferred income	4	51	12	8
Liabilities related to social security	–	4	–	4
Overlift liabilities	–	50	–	32
Other miscellaneous liabilities	11	194	9	251
	27	**507**	**31**	**412**
Total	**27**	**1,277**	**31**	**766**

NOTE 23 – LEASES

The lease agreements of the Group are essentially related to office buildings, transport and production vessels, drilling rigs and other assets used in operations. The capitalised right-of-use-assets are allocated to the following asset classes:

RIGHT-OF-USE ASSETS

€ million	Additions 2021	31 Dec 2021	31 Dec 2020
Exploration assets	–	–	8
Land and buildings	11	56	52
Gas and oil assets	–	16	56
Fixtures and fittings and office equipment	–	–	1
Total	**12**	**72**	**117**

The following amounts are recognised in the consolidated statement of income:

LEASE EXPENSES

€ million	2021	2020
Amortisation and depreciation right-of-use assets	48	54
Interest expenses on lease liabilities	3	5
Expenses relating to short-term leases	3	6
Expenses from variable lease payments (not included in lease liability)	1	1
Total	**54**	**66**

The amortisation and depreciation of right-of-use assets are allocated to the following asset classes for the reporting periods:

AMORTISATION AND DEPRECIATION RIGHT-OF-USE ASSETS

€ million	2021	2020
Exploration assets	8	10
Land and buildings	8	7
Gas and oil assets	31	36
Fixtures and fittings and office equipment	1	1
Total	**48**	**54**

Some of the lease contracts contain price-adjustment clauses as well as extension and termination options. Such options are taken into account in the determination of the lease term only if extension or non-termination options can be assumed with reasonable certainty.

The statement of cash flows comprises cash outflows for leases amounting to €65 million (2020: €79 million). In addition to the cash payments for the interest and principal portions of recognised lease liabilities, the amounts reported include payments for unrecognised short-term leases and leases for low-value assets. Cash payments for the principal portion (€59 million) are reported within cash flow from financing activities. Cash payments for the interest portion are included in the cash flow from operating activities.

Wintershall Dea has also entered into a lease agreement that, following its commencement, will lead to a nominal cash outflow of around €43 million over a lease term of 10 years and 3 months.

Further information on sale-and-leaseback transactions is provided in Note 3.

NOTE 24 – OTHER FINANCIAL OBLIGATIONS

Contingent liabilities

Contingent liabilities relate to legal disputes and potential tax risks. Wintershall Dea AG and its subsidiaries are regularly involved as defendants or other parties in judicial and arbitration proceedings, as well as in official proceedings. Based on the present knowledge, these proceedings have no significant impact on Wintershall Dea's economic situation.

Wintershall Dea is also subject to statutory liability related to participations in various joint ownerships.

Provisions for litigation risks and damage claims are included in other provisions (see Note 20) and amount to €6 million (2020: €5 million). Further provisions for legal risks were not required.

Obligations from purchase contracts

As at 31 December 2021, the Group has obligations based on firm orders for property, plant and equipment, as well as from field development projects in the amount of €313 million (31 December 2020: €373 million).

Furthermore, Wintershall Dea is committed to a certain number of exploration wells and seismic surveys within the context of exploration licences. The estimated expenditures amount to €121 million (31 December 2020: €110 million).

Further obligations from purchase contracts result primarily from long-term purchase commitments for natural gas ('own use contracts'). Any commodity purchase agreements that are enforceable and specify all significant terms are included, except those for which an offsetting agreement (sales contract) has already been contracted. The firm purchase commitments from own use contracts amount to €291 million as at 31 December 2021 (31 December 2020: €150 million). For information on cash outflows from purchase commitments within the scope of IFRS 9, please refer to Note 25.

OBLIGATIONS ARISING FROM COMMODITY PURCHASE CONTRACTS

€ million	31 Dec 2021	31 Dec 2020
2021	–	51
2022	160	39
2023	80	30
2024	33	18
2025	13	9
2026	1	1
2027 and subsequent maturities	3	2
Total	**291**	**150**

NOTE 25 – REPORTING ON FINANCIAL INSTRUMENTS

Financial risks and hedging instruments

By operating in an international environment, Wintershall Dea is exposed to market (price and foreign currency risks) and interest rate risks as well as to credit and liquidity risks in the ordinary course of its business. Subsidiaries are subject to a strict risk management regime. The operational framework, as well as responsibilities and controls, are regulated by binding internal corporate guidelines. Financial derivatives are used exclusively to hedge the risk related to underlying transactions, and not for speculative purposes.

Foreign currency, interest rate and commodity price risks

Foreign currency risks

Changes in exchange rates could lead to losses in the value of financial instruments and adverse changes in future cash flows. Foreign currency risks from financial instruments arise from the translation of financial receivables, cash and cash equivalents and financial liabilities into the functional currency of the respective Group company at the closing rates. The Group monitors and manages foreign currency exposure on a daily basis with the aim to eliminate the effect of currency fluctuations on the statement of income. Currency risks are monitored at a Group level and on individual entity level, and the Group's net foreign currency exposure (after natural hedges) is actively hedged, where feasible, with linear contracts.

A sensitivity analysis is conducted by simulating a 10% appreciation and a 10% depreciation in the functional currency against the other currencies. The impact on the income/loss before taxes of the Group would have been €-54 million and €54 million, respectively.

EXPOSURE AND SENSITIVITY BY CURRENCY

	31 Dec 2021/2021			31 Dec 2020/2020		
€ million	Exposure	Sensitivity (+10%)	Sensitivity (-10%)	Exposure	Sensitivity (+10%)	Sensitivity (-10%)
RUB	115	-10	10	263	-24	24
ARS	37	-3	3	59	-5	5
USD	124	-11	11	250	-23	23
EUR	1,298	-118	118	874	-79	79
GBP	149	-14	14	-56	5	-5
NOK	-1,086	99	-99	-858	78	-78
MXN	-42	4	-4	-33	3	-3
Total	**595**	**-54**	**54**	**499**	**-45**	**45**

In order to hedge against currency risks, linear products with symmetrical sensitivity were used in particular.

Interest rate risks

Interest rate risks arise due to potential changes in prevailing market interest rates, which can lead to changes in the fair value of fixed-rate instruments and interest payment fluctuations for variable-rate instruments. These risks are not of material significance for the Group's operating activities. Following the full repayment of non-current debt to banks (term loans) in the reporting period, the Group is no longer exposed to a significant variable interest rate position.

Commodity price risks

The Group's revenue, cash flows and profitability depend to a large extent on prevailing international and local commodity prices. Any resulting adverse changes in market prices could have a negative impact on the Group's net result and equity.

Commodity price risks related to production are assessed and mitigated regularly using systematic risk management. The principles of this approach are defined in the commodity hedging policy.

All hedging transactions are entered into for the sole purpose of reducing risks from planned transactions exposed to commodity price risks that have a high probability of occurrence. The Group hedges part of its oil and gas price risks to protect its investment-grade rating and improve dividend predictability. This serves to ensure sufficient debt capacity and thus to provide the management with the flexibility necessary to adapt its strategy should commodity prices fall to a critically low level. The volumes to be hedged depend on the economic exposure and the current level of oil and gas prices. The maximum hedge volumes are 75%, 50%, and 25% of effectively hedgeable production for a one, two, or three-year horizon, respectively.

Existing hedges as at 31 December 2021 include forward gas sales to stabilise portions of gas revenues until 2024 as well as Dated Brent oil swaps to stabilise portions of the Group's oil sales until 2024. For the latter, German and Norwegian oil production currently serves as a hedged item. The contracted price is defined via a price formula. Regression analyses show a high correlation between Dated Brent oil prices and contracted prices and provide the basis for determining optimal hedge ratios.

Commodity price risks also arise in the ordinary course of business for contracted gas purchase and supply agreements. The specific price risk associated with these trading transactions, which result from the valuation of the gas agreements concluded in the event of an adverse change in market prices, is mitigated by Wintershall Dea by imposing and constantly monitoring the limits on the type and scope of the transactions concluded..

Wintershall Dea carries out value-at-risk analyses for the existing commodity derivatives. Value-at-risk is used to quantify the market risk on an ongoing basis and to give an assessment of the possible maximum loss within the given confidence interval over a certain period. The value-at-risk calculation is based on a confidence interval of 95% and a holding period of one day. Wintershall Dea applies the exponentially weighted variance-covariance approach. Value-at-risk limit along with stop-loss limit is used to control market risks of commodity derivatives. The value-at-risk amounts to €2 million as at 31 December 2021.

Derivative financial instruments and hedge accounting

Commodity price, foreign currency and interest rate risks are hedged using derivative instruments as necessary in accordance with a centrally defined strategy. Hedging is only employed for underlying items in the operating business, cash investments, financing and planned capital measures. The risks associated with the hedged items and the derivatives are constantly monitored. Where derivatives have a positive market value, the Group is exposed to credit risks from derivative transactions in the event of the non-performance of the other party.

To minimise the default risk of derivatives with positive market values, transactions are conducted exclusively with creditworthy banks and partners and subject to predefined credit limits.

The contracting and execution of derivative financial instruments for hedging purposes are conducted according to internal guidelines and are subject to strict control mechanisms.

FAIR VALUE OF DERIVATIVE FINANCIAL INSTRUMENTS

€ million	31 Dec 2021	31 Dec 2020
Commodity derivatives	-2,560	-190
of which designated hedging instruments as defined by IFRS 9 (hedge accounting)	-2,546	-184
Foreign currency derivatives	-70	69
of which designated hedging instruments as defined by IFRS 9 (hedge accounting)	-76	74
Interest derivatives (embedded derivatives)	—	14
Total	**-2,630**	**-107**

Derivative financial instruments are measured at fair value. When interpreting positive or negative fair values, account must be taken of the fact that underlying transactions with compensating risks have an offsetting effect. All derivative financial instruments are reported as assets or liabilities.

Fair values of derivative financial instruments are determined using customary market valuation methods taking into account public market data available on the measurement date. Credit value adjustments (CVAs) and debit value adjustments (DVAs) for the company's own credit risk are applied to all derivatives. CVAs and DVAs are calculated using the standardised approach for measuring counterparty credit risk (SA-CCR).

Commodity derivatives
The Group has designated oil swaps and certain fixed-price gas sales agreements as hedging instruments within the scope of cash flow hedges. Cash flow hedges are used to hedge the risk of variability in cash flows related to highly probable forecast transactions.

The effective portion of changes in the fair value of commodity derivatives that are designated as cash flow hedges is recognised as other comprehensive income within equity. The gains or losses relating to the ineffective portion are recognised immediately in profit or loss.

Regarding oil derivatives, the price of the hedged item is defined via a price formula in the sales contract. The instruments used are Dated Brent oil swaps for which a liquid market exists. Furthermore, regression analysis shows a high correlation between Dated Brent oil and the price formula. This is also the basis to determine the hedge ratio in order to achieve the highest level of hedge effectiveness.

Fixed-price contracts with physical delivery at liquid locations are used as hedging instruments for gas sales. Published market prices for respective periods and locations are used to determine the fair values of such sales contracts. In the case of fixed-price gas sales agreements, the critical terms match method is applied to assess hedge effectiveness.

Derivatives related to the gas trading business are recognised at fair value through profit or loss and disclosed based on net risk exposure in accordance with IFRS 13.48.

Foreign currency derivativese
In the context of the Group's ordinary net foreign currency exposure, derivatives are recognised at fair value through profit and loss.

In order to hedge the foreign currency risk from future USD repayments of intercompany loans, the Group entered into cross-currency swaps. The future cash flows resulting from the repayment of the intercompany loans have been designated as hedged items. The spot elements and the forward elements of the cross-currency swaps have been separated, whereas only the value changes of the spot elements have been designated as hedging instruments. The forward elements are recognised as cost of hedging in other comprehensive income and are reclassified to profit or loss on a systematic (linear) basis. Hedge ineffectiveness is immediately recognised in profit or loss.

Embedded derivatives
In the context of financing activities, embedded derivatives were identified that were required to be separated and accounted for at fair value. Following the complete repayment of the non-current debt to banks (term loans), the embedded derivatives were derecognised accordingly.

EFFECTS OF HEDGE ACCOUNTING ON THE CONSOLIDATED BALANCE SHEET AND CONSOLIDATED STATEMENT OF INCOME

€ million	31 Dec 2021/2021 Commodity derivatives (fixed-price gas sales)	Commodity derivatives (oil swaps)	Foreign currency derivatives
Carrying amount			
Derivative assets	6	—	1
Derivative liabilities	2,373	179	77
Nominal amount	1,579	924	2,107
Maturity date	01/2022-12/2024	01/2022-12/2024	01/2022-09/2028
Quantity	293,176 mmscf	15,662 mbbl	
Average price or rate	€18.38/MWh	$59.03/bbl	$1.14/€
Amounts recognised in profit or loss and other comprehensive income			
Changes in fair value of hedging instruments recognised in OCI	-3,446	-342	-153
Reclassified from OCI to profit or loss	1,299	136	187

The changes in fair values of the foreign currency derivatives recognised in other comprehensive income relate exclusively to cost of hedging.

Gains and losses on commodity derivatives are reclassified from other comprehensive income to revenues, while gains and losses on foreign currency derivatives are reclassified to financial income/financial expenses.

The effectiveness of hedge relationships is determined at the inception of the relationship and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and the hedging instrument. With regard to oil derivatives, sources of ineffectiveness result from CVA/DVA adjustments and a change in the correlation of the hedged item and the hedging instrument. Due to the application of the critical terms match method for the fixed-price gas sales agreements, no ineffectiveness from changes in correlation occurs. For foreign currency derivatives (cross-currency swaps), ineffectiveness relates to the exclusion of intercompany interests from the hedging relationship.

The hedge ineffectiveness as at 31 December 2021 is shown in the table below:

€ million	Commodity derivatives	Foreign currency derivatives
Change in fair value of the hedging instrument	-215	-150
Change in fair value of the hedged item	222	153
Hedge ineffectiveness	7	5

Ineffectiveness is reported in revenues for commodity derivatives and in financial income/expenses for foreign currency derivatives.

Default and credit risks

Default and credit risks arise when contractual partners do not fulfil their obligations. The Group is exposed to credit risks from its operating activities (primarily trade accounts receivable) and its financing activities, including deposits with banks and financial institutions, favourable derivative financial instruments (positive fair value) and other financial receivables. Credit risks are managed on a Group basis. Wintershall Dea has Group-wide procedures in place that address credit approval applications, the granting and renewing of counterparty limits, the proactive monitoring of exposures against these limits and requirements for triggering secured payment terms. As part of these processes, counterparty credit exposure is regularly monitored and assessed on a timely basis.

If customers are independently rated, these ratings are used for assessment. If there is no independent rating, the risk management function assesses customers' credit quality based on their financial position or bases the assessment on past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with set limits. There are no significant concentrations of credit risks through the exposure to individual customers or regions. Country-specific payment risks are within the limits stipulated by the management and closely monitored.

A default event occurs if management has good reason to believe that a customer will not repay its liability to Wintershall Dea, usually due to the customer's financial difficulty. A payment delay in the course of regular business practice does not alone indicate a customer default. An assessment of the overall situation is required on a case-by-case basis.

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

Financial assets are written off when there is no reasonable expectation of recovery of the contractual cash flows. Losses from financial assets that have been written off were not material in the reporting period or in the prior year.

Impairment on financial assets

In order to determine the impairment of financial assets, Wintershall Dea uses either a general three-stage approach or the simplified approach, according to IFRS 9, as applicable. In the case of financial assets for which the simplified approach does not apply, their assessment takes place as at each reporting date to determine whether the credit risk on a financial instrument has increased significantly since its initial recognition.

Trade accounts receivable, other receivables and financial receivables and deposits with banks are subject to the expected credit loss model.

To measure the expected credit losses on trade accounts receivable, Wintershall Dea applies the simplified approach according to IFRS 9. Accordingly, the loss allowance is measured at an amount equal to the lifetime expected credit losses. For trade accounts receivable, the contractual payment term is usually 30 days. In deviation to this general rule, terms of up to one year are considered for the calculation of expected credit losses due to different regional payment practices.

The loss allowance for other receivables, financial receivables and deposits with banks is measured at an amount equal to the twelve-month expected credit loss. If the term of the financial instrument is shorter than 12 months, the lifetime expected credit loss is applied.

The valuation loss allowances are determined as follows:

€ million	As at 1 Jan 2021	Additions	Reversals	Disposals	Reclassification between stages	Transfers	Currency translation effects	**As at 31 Dec 2021**
Trade accounts receivable								
of which Stage 2[2]	3	5	-5	—	—	—	—	**3**
of which Stage 3[3]	23	1	-2	-8	—	—	1	**14**
	26	**5**	**-7**	**-8**	**—**	**—**	**1**	**16**
Other receivables								
of which Stage 2[2]	—	3	—	—	—	—	—	**3**
	—	**3**	**—**	**—**	**—**	**—**	**—**	**3**
Financial receivables								
of which Stage 1[1]	2	—	—	—	—	—	—	**1**
of which Stage 3[3]	62	—	—	-26	—	—	—	**35**
	64	**—**	**—**	**-26**	**—**	**—**	**—**	**37**
Total	**90**	**9**	**-8**	**-35**	**—**	**—**	**1**	**56**

[1] The loss allowance for financial assets is measured at an amount equal to a twelve-month expected credit losses.
[2] The credit risk has increased significantly since initial recognition, the loss allowance for the financial assets is measured at an amount equal to the lifetime expected credit losses.
[3] The financial asset is credit-impaired.

€ million	As at 1 Jan 2020	Additions	Reversals	Reclassification between stages	Transfers	Currency translation effects	**As at 31 Dec 2020**
Trade accounts receivable							
of which Stage 2[2]	3	3	-3	—	—	—	**3**
of which Stage 3[3]	10	13	—	—	—	—	**23**
	13	**16**	**-3**	**—**	**—**	**—**	**26**
Financial receivables							
of which Stage 1[1]	1	1	—	—	—	—	**2**
of which Stage 3[3]	62	91	—	—	-91	—	**62**
	63	**92**	**—**	**—**	**-91**	**—**	**64**
Total	**76**	**108**	**-3**	**—**	**-91**	**—**	**90**

[1] The loss allowance for financial assets is measured at an amount equal to a twelve-month expected credit losses.
[2] The credit risk has increased significantly since initial recognition, the loss allowance for the financial assets is measured at an amount equal to the lifetime expected credit losses.
[3] The financial asset is credit-impaired.

The impairment loss identified on deposits with banks was immaterial and therefore not recognised.

In the reporting period, valuation allowances of €5 million were recognised on trade accounts receivable and valuation allowances of €7 million were reversed. In addition, valuation allowances of €3 million were recognised on other receivables.

Liquidity risks

The liquidity risk management ensures that the required liquidity to meet financial obligations is available at all times and that the liquidity position of the Group is optimised. Centralised financial planning is the basis for liquidity risk management. Financial planning is performed for the following twelve months on a monthly basis and for the following month on a daily basis.

The Group monitors its liquidity risk by reviewing the cash flow requirements on a regular basis, taking into consideration the funding sources, existing bank facilities and cash flow generation from the producing asset base. Specifically, it is ensured that there is sufficient liquidity to meet operational funding requirements and debt servicing.

Maturity analysis

The tables below summarise the maturity profile of the Group's financial liabilities based on contractual undiscounted cash flows. Derivatives are included when they have a negative fair value and therefore represent a liability. Commodity derivatives that are settled in cash are included with their net cash flows, whereas physically settled trading contracts that are within the scope of IFRS 9 are included with their cash outflows for the purchase of the commodity. Foreign currency derivatives are shown with their gross cash outflows. Derivatives with positive fair values are assets and are therefore not taken into account.

Other financial liabilities include trade and other liabilities within the scope of IFRS 7. They are essentially non-interest-bearing and due within one year. As a result, their carrying amount corresponds to the sum of future cash flows.

	31 Dec 2021			
€ million	≤ 1 year	1–5 years	> 5 years	**Total**
Bonds	12	2,000	2,000	**4,012**
Debt to banks	3	—	—	**3**
Financial liabilities to related parties	538	—	—	**538**
Lease liabilities	24	41	37	**102**
Commodity derivative liabilities (settled in cash)	116	70	—	**186**
Trading contracts within the scope of IFRS 9 (settled physically)[1]	3,360	2,015	—	**5,374**
Foreign currency derivative liabilities[2]	1,216	—	—	**1,216**
Trade and other payables within the scope of IFRS 7	954	10	—	**964**
Total	**6,222**	**4,136**	**2,037**	**12,395**

[1] Cash outflows are used to purchase a commodity.
[2] The gross cash outflows shown are offset by a comparable amount of cash inflows.

	31 Dec 2020			
€ million	≤ 1 year	1–5 years	> 5 years	**Total**
Bonds	12	2,000	2,000	**4,012**
Debt to banks	3	1,819	—	**1,822**
Financial liabilities to related parties	399	—	—	**399**
Lease liabilities	60	44	45	**149**
Commodity derivative liabilities (settled in cash)	25	—	—	**25**
Trading contracts within the scope of IFRS 9 (settled physically)[1]	1,060	1,548	—	**2,608**
Foreign currency derivative liabilities[2]	422	—	—	**422**
Trade and other payables within the scope of IFRS 7	594	—	—	**594**
Total	**2,575**	**5,411**	**2,045**	**10,031**

[1] Cash outflows are used to purchase a commodity.
[2] The gross cash outflows shown are offset by a comparable amount of cash inflows.

Classes and categories of financial instruments

For financial receivables, trade and other receivables and cash and cash equivalents that are measured at cost, the carrying amounts approximate the fair values. The balance sheet item 'other financial assets' relates primarily to affiliated companies and investments that are not fully consolidated or recognised as equity-accounted investments for materiality reasons. Other investments shown under this position are not material and are therefore also recognised at cost. For financial debt other than bonds, trade and other payables, the carrying amount approximates the fair value.

Financial assets and liabilities are assigned to the following valuation categories according to IFRS 9:

VALUATION CATEGORIES

	Carrying amount as at 31 Dec 2021				
€ million	Amortised costs	FVPL[1]	Fair value (in hedge relationship)	Beyond the scope of IFRS 9/IFRS 7	**Total**
Financial receivables	1,224	—	—	—	**1,224**
Trade and other receivables	1,556	—	—	200	**1,756**
Derivative financial assets	—	484	7	—	**492**
Cash and cash equivalents	2,106	—	—	—	**2,106**
Bonds	3,999	—	—	—	**3,999**
Debt to banks	3	—	—	—	**3**
Financial liabilities to related parties	538	—	—	—	**538**
Lease liabilities	90	—	—	—	**90**
Trade and other payables	969	—	—	340	**1,310**
Derivative financial liabilities	—	493	2,629	—	**3,122**

[1] Fair value through profit or loss

FAIR VALUE HIERARCHY

	31 Dec 2021			
€ million	**Total**	Level 1[1]	Level 2[2]	Level 3[3]
Derivative financial assets	**492**	—	492	—
of which commodity derivatives	**481**	—	481	—
of which currency derivatives	**10**	—	10	—
Derivative financial liabilities	**3,122**	—	3,122	—
of which commodity derivatives	**3,041**	—	3,041	—
of which currency derivatives	**81**	—	81	—

[1] The fair value is determined on the basis of listed (unadjusted) prices for identical assets and liabilities on active markets.
[2] The fair value is determined based on parameters for which directly or indirectly quoted prices on active markets were available.
[3] The fair value is determined based on parameters for which there were no observable market data.

VALUATION CATEGORIES

	Carrying amount as at 31 Dec 2020				
€ million	Amortised costs	FVPL[1]	Fair value (in hedge relationship)	Beyond the scope of IFRS 9/IFRS 7	**Total**
Financial receivables	1,268	—	—	—	**1,268**
Trade and other receivables	761	20	—	165	**946**
Derivative financial assets	—	78	135	—	**213**
Cash and cash equivalents	821	—	—	—	**821**
Bonds	3,997	—	—	—	**3,997**
Debt to banks	1,828	—	—	—	**1,828**
Financial liabilities to related parties	399	—	—	—	**399**
Lease liabilities	133	—	—	—	**133**
Trade and other payables	602	—	—	195	**797**
Derivative financial liabilities	—	75	245	—	**320**

[1] Fair value through profit or loss

FAIR VALUE HIERARCHY

	31 Dec 2020			
Millionen €	**Total**	Level 1[1]	Level 2[2]	Level 3[3]
Other receivables	**20**	—	—	20
Derivative financial assets	**213**	—	213	—
of which commodity derivatives	**108**	—	108	—
of which currency derivatives	**91**	—	91	—
of which embedded derivatives	**14**	—	14	—
Derivative financial liabilities	**320**	—	320	—
of which commodity derivatives	**297**	—	297	—
of which currency derivatives	**23**	—	23	—

[1] The fair value is determined on the basis of listed (unadjusted) prices for identical assets and liabilities on active markets.
[2] The fair value is determined based on parameters for which directly or indirectly quoted prices on active markets were available.
[3] The fair value is determined based on parameters for which there were no observable market data.

Fair values of derivative financial assets and liabilities are determined using customary market valuation methods, taking into account the market data available on the measurement date as well as the default risk.

No transfers between the levels occurred during the reporting period or during the previous year.

The other receivables comprised the fair value of a contingent consideration resulting from a purchase agreement. Following a settlement agreement with the seller, the claim was settled and Wintershall Dea received €28 million in the second quarter of 2021.

OFFSETTING FINANCIAL ASSETS AND FINANCIAL LIABILITIES

31 Dec 2021	Offset amounts			Amounts that cannot be offset		
€ million	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with a positive fair value	1,325	-844	481	—	—	481
Derivatives with a negative fair value	3,705	-844	2,862	—	—	2,862

31 Dec 2020	Offset amounts			Amounts that cannot be offset		
€ million	Gross amount	Amount offset	Net amount	Due to global netting agreements	Relating to financial collateral	Potential net amount
Derivatives with a positive fair value	190	-143	47	—	—	47
Derivatives with a negative fair value	415	-143	272	—	—	272

The tables above show the extent to which financial assets and financial liabilities are offset on the balance sheet. It also shows the potential effects from the offsetting of instruments subject to a legally enforceable global netting agreement (primarily in the form of European Federation of Energy Traders [EFET] agreements for gas purchase and supply agreements that have been concluded) or a similar agreement. Only financial assets and liabilities that are covered by such agreements are included in this table.

NOTE 26 – CAPITAL STRUCTURE MANAGEMENT

The objective of capital structure management is to maintain the financial flexibility needed to further develop the business portfolio and take advantage of strategic opportunities. The objectives of the Group's financial policy are to ensure solvency, limit financial risks and optimise the cost of capital.

The Group aims to ensure financial stability through its long-term commitment to an investment-grade credit rating.

The Group is focused on maintaining cash flow discipline and active cash management is a priority. The Group manages capital commitments to generate positive cash flows from operations in order to sustain its investments, pay dividends and create financial flexibility through the economic cycle.

NET DEBT

€ million	31 Dec 2021	31 Dec 2020
Bonds	3,999	3,997
Debt to banks	3	1,828
Financial liabilities from cash pooling	536	394
Lease liabilities	90	133
Total debt	**4,628**	**6,352**
Financial receivables from cash pooling	-13	-12
Cash and cash equivalents	-2,106	-821
Total	**2,510**	**5,519**

NOTE 27 – RELATED PARTY DISCLOSURES

A related party is a natural person or legal entity that can exert influence on Wintershall Dea or over which Wintershall Dea exercises control, joint control or a significant influence.

Wintershall Dea is subject to significant influence by BASF and LetterOne. Therefore, BASF and LetterOne and their subsidiaries are considered as related parties. In addition, related parties include non-consolidated subsidiaries, joint ventures and associated companies.

The following tables show the volume of business with related parties that are included in the consolidated financial statements at amortised cost or accounted for using the equity method as well as with our shareholders and their affiliates.

REVENUES WITH RELATED PARTIES

€ million	2021	2020
Joint ventures/associated companies	161	294
Shareholders and their affiliates	708	261
Total	**869**	**555**

TRADE ACCOUNTS RECEIVABLE FROM/TRADE ACCOUNTS PAYABLE TO RELATED PARTIES

	Trade accounts receivable		Trade accounts payable	
€ million	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
Non-consolidated subsidiaries	8	9	—	3
Joint ventures/associated companies	15	32	24	8
Shareholders and their affiliates	169	36	—	6
Total	**192**	**77**	**25**	**17**

FINANCIAL AND OTHER RECEIVABLES FROM/FINANCIAL AND OTHER LIABILITIES TO RELATED PARTIES

	Financial and other receivables		Financial and other liabilities	
€ million	31 Dec 2021	31 Dec 2020	31 Dec 2021	31 Dec 2020
Non-consolidated subsidiaries	36	26	15	12
Joint ventures/associated companies	200	288	523	387
Shareholders and their affiliates	2	—	5	—
Total	**239**	**314**	**542**	**399**

Revenues, trade accounts receivable and trade accounts payable from related parties comprise transactions mainly in the Group's own products, as well as other typical business transactions.

Financial and other receivables and liabilities result mainly from financing transactions, outstanding dividend payments and profit and loss transfer agreements, as well as other financing-related and operating transactions.

Related persons are the members of the Management Board and Supervisory Board of the Wintershall Dea AG and the shareholders. No business relationships exist with members of the Management Board or the Supervisory Board or individuals close to them. The remuneration paid to the Management Board and Supervisory Board can be found in Note 28.

NOTE 28 – COMPENSATION RECEIVED BY THE MANAGEMENT BOARD AND SUPERVISORY BOARD

€ thousand	2021	2020
Total compensation paid to the Management Board	5,974	5,175
Provisions for long-term/short-term incentive plans (LTIs/STIs)	4,179	1,940
	10,153	**7,115**
Compensation paid to the Supervisory Board	80	60
Total compensation paid to former members of the Management Board	713	1,101
Pension provisions for former members of the Management Board and their surviving dependents	35,294	35,548

NOTE 29 – SERVICES PROVIDED BY THE EXTERNAL AUDITOR

Wintershall Dea recognised the following fees as expenses for services rendered by the auditor of the consolidated financial statements, KPMG AG Wirtschaftsprüfungsgesellschaft, Frankfurt am Main (KPMG AG), and companies belonging to KPMG's international network.

€ thousand	2021	2020
Audit services	2,405	2,211
of which KPMG AG	1,161	1,140
Other services	500	849
of which KPMG AG	482	425
Total	**2,905**	**3,060**

The audit services expenses related to the audit of the consolidated financial statements of the Wintershall Dea Group, as well as to the legally required financial statements of Wintershall Dea AG and the subsidiaries and joint operations included in the consolidated financial statements. Fees for other services include mainly other attestation services by the auditor that are permissible under applicable independence rules.

NOTE 30 – IMPACT OF THE COVID-19 PANDEMIC

In June 2020, the Norwegian government enacted temporary changes in the petroleum tax system, in effort to maintain oil and gas investments during a period of falling oil prices and reduced activity due to the COVID-19 situation. The changes include an increase of the uplift allowance to 24% for investments and the direct tax expense of both uplift allowance and capital expenditures in the special petroleum tax regime in 2020 and 2021. These changes result in a positive tax effect of €45 million in the tax result for full-year 2021. In addition, the final cash refunds from the Norwegian tax authorities for the tax value of losses for fiscal year 2020 were received in the first half of 2021 and totalled NOK 2,929 million (€265 million).

NOTE 31 – EVENTS AFTER THE BALANCE SHEET DATE

No events subject to mandatory disclosure occurred after the balance sheet date that were not reflected in the consolidated financial statements.

NOTE 32 – WINTERSHALL DEA LIST OF SHARES HELD PURSUANT TO SECTION 313 (2) OF THE GERMAN COMMERCIAL CODE (HGB)

The list of consolidated companies and the complete list of all companies in which Wintershall Dea holds shares, as required by Section 313 (2) HGB, as well as the information on the exemption of subsidiaries from accounting and disclosure obligations, are an integral component of the audited consolidated financial statements submitted to the German Federal Gazette (Bundesanzeiger).

I. Companies included in the consolidated financial statements on a full or proportional basis or accounted for using the equity method

FULLY CONSOLIDATED SUBSIDIARIES

Company	registered office	Share of capital (%)
AO Gazprom YRGM Trading	Saint Petersburg, Russia	25.00[1]
Coronado Energia, S. de R.L. de C.V.	Mexico City, Mexico	100.00
DEA Cyrenaica GmbH[4]	Hamburg, Germany	100.00
DEA E&P GmbH[4]	Hamburg, Germany	100.00
DEA North Africa/Middle East GmbH[4]	Hamburg, Germany	100.00
DEA Trinidad & Tobago GmbH	Hamburg, Germany	100.00
DEM México Erdoel, S.A.P.I. de C.V.	Mexico City, Mexico	100.00
DEM México Upstream, S.A.P.I. de C.V.	Mexico City, Mexico	100.00
E & A Internationale Explorations- und Produktions-GmbH[4]	Kassel, Germany	100.00
Izta Energia, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Nevada Energia, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Perote Energia, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Sierra Blanca Energia, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Sierra Blanca P&D, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Sierra Coronado E&P, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Sierra Nevada E&P, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Sierra O&G Exploracíon y Produccion, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Sierra Offshore Exploracíon, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Sierra Oil & Gas Holdings, L.P.	Ontario, Canada	100.00
Sierra Oil & Gas, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Sierra Perote E&P, S. de R.L. de C.V.	Mexico City, Mexico	100.00
WD México-Alemania, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Wintershall Dea AG	Celle, Germany	100.00

Wintershall Dea Algeria GmbH[4]	Hamburg, Germany	100.00
Wintershall Dea Argentina S.A.	Buenos Aires, Argentina	100.00
Wintershall Dea Asset Holding GmbH	Kassel, Germany	100.00
Wintershall Dea Deutschland GmbH	Hamburg, Germany	100.00
Wintershall Dea do Brasil Exploração e Produção Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall Dea Finance 2 B.V.	Rijswijk, The Netherlands	100.00
Wintershall Dea Finance B.V.	Rijswijk, The Netherlands	100.00
Wintershall Dea Immobilien GmbH & Co. KG	Hamburg, Germany	100.00
Wintershall Dea Insurance Limited	St. Peter Port, Guernsey	100.00
Wintershall Dea International GmbH[4]	Hamburg, Germany	100.00
Wintershall Dea Mexico Holding B.V.	Rijswijk, The Netherlands	100.00
Wintershall Dea México, S. de R.L. de C.V.	Mexico City, Mexico	100.00
Wintershall Dea Middle East GmbH[4]	Kassel, Germany	100.00
Wintershall Dea Nederland Asset Holding B.V.	Rijswijk, The Netherlands	100.00
Wintershall Dea Nederland B.V.	Rijswijk, The Netherlands	100.00
Wintershall Dea Nederland Transport and Trading B.V.	Rijswijk, The Netherlands	100.00
Wintershall Dea Nile GmbH[4]	Hamburg, Germany	100.00
Wintershall Dea Norge AS	Stavanger, Norway	100.00
Wintershall Dea Schweiz AG	Zug, Switzerland	100.00
Wintershall Dea Suez GmbH[4]	Hamburg, Germany	100.00
Wintershall Dea TSC GmbH & Co. KG	Kassel, Germany	100.00
Wintershall Dea Vermögensverwaltungsgesellschaft mbH[4]	Kassel, Germany	100.00
Wintershall Dea WND GmbH[4]	Hamburg, Germany	100.00
Wintershall Petroleum (E&P) B.V.	Rijswijk, The Netherlands	100.00
Xitle Energia, S. de R.L. de C.V.	Mexico City, Mexico	100.00

PROPORTIONALLY CONSOLIDATED JOINT OPERATIONS

Company	Registered office	Share of capital (%)
AO Achimgaz	Novy Urengoy, Russia	50.00

JOINT VENTURES ACCOUNTED FOR USING THE EQUITY METHOD

Company	Registered office	Share of capital (%)
WIGA Transport Beteiligungs-GmbH & Co. KG	Kassel, Germany	50.02
Wintershall Noordzee B.V.	Rijswijk, The Netherlands	50.00

ASSOCIATED COMPANIES ACCOUNTED FOR USING THE EQUITY METHOD

Company	Registered office	Share of capital (%)
Joint Stock Company Achim Trading	Saint Petersburg, Russia	18.01[2]
Limited Liability Company Achim Development	Novy Urengoy, Russia	25.01
Nord Stream AG	Zug, Switzerland	15.50[2]
OAO Severneftegazprom	Krasnoselkup, Russia	25.00[3]
Wintershall Aktiengesellschaft	Celle, Germany	51.00

II. Associated companies not consolidated due to immateriality

SUBSIDIARIES NOT CONSOLIDATED DUE TO IMMATERIALITY

Company	Registered office	Share of capital (%)
AWIAG Limited	Birkirkara, Malta	100.00
DEA PETRÓLEO E GÁS DO BRASIL LTDA.	Rio de Janeiro, Brazil	100.00
DEA Ukraine LLC[5]	Kiev, Ukraine	100.00
Nordkaspische Explorations- und Produktions GmbH[5]	Kassel, Germany	100.00
WIGA Verwaltungs-GmbH	Kassel, Germany	50.02
Wintershall Dea BM-C-19 Ltda.	Rio de Janeiro, Brazil	100.00
Wintershall Dea BM-ES-1 Ltda.	Rio de Janeiro, Brazil	100.00
WINTERSHALL DEA DO BRASIL SERVIÇOS LTDA.	Rio de Janeiro, Brazil	100.00
Wintershall Dea Exploration and Production International C.V.	Rijswijk, The Netherlands	100.00
Wintershall Dea Global Support B.V.	Rijswijk, The Netherlands	100.00
Wintershall Dea Immobilien Management GmbH	Hamburg, Germany	100.00
Wintershall DEA Mexico Holdings GP Ltd.	N. Brunswick, Canada	100.00
Wintershall Dea Russia GmbH	Kassel, Germany	100.00
Wintershall Dea Technology Ventures GmbH	Kassel, Germany	100.00
Wintershall Dea TSC Management GmbH	Kassel, Germany	100.00
Wintershall Dea Wolga Petroleum GmbH	Kassel, Germany	100.00
Wintershall Libyen Oil & Gas GmbH	Kassel, Germany	100.00

JOINT VENTURES AND ASSOCIATED COMPANIES NOT ACCOUNTED FOR USING THE EQUITY METHOD DUE TO IMMATERIALITY

Company	Registered office	Share of capital (%)
Erdgas Münster GmbH	Münster, Germany	33.66

[1] Fully consolidated pursuant to IFRS 10
[2] Wintershall Dea exerts a significant influence over financial and corporate policy.
[3] Share of result totals 35% via additional preference shares
[4] Application of Section 264 (3) of the German Commercial Code (HGB)
[5] In liquidation

NOTE 33 – MEMBERS OF THE SUPERVISORY BOARD AND MANAGEMENT BOARD

Supervisory Board

Dr Hans-Ulrich Engel
Chairman (since 2 November 2021, First Deputy Chairman until 1 November 2021); Deputy Executive Chairman of BASF SE, Ludwigshafen am Rhein

Dmitry Avdeev
First Deputy Chairman (since 2 November 2021); Senior Partner, L1 Energy, London, United Kingdom

Michael Winkler
Second Deputy Chairman; Trade Union Secretary of IG BCE, Hanover

Saori Dubourg
Member of the Board of Executive Directors of BASF SE, Ludwigshafen am Rhein

Dr Dirk Elvermann
President Corporate Finance, BASF SE, Ludwigshafen am Rhein (since 26 August 2021)

Michael Heinz
Member of the Board of Executive Directors of BASF SE, Ludwigshafen am Rhein

German Khan
Director LetterOne Holdings S. A., London, United Kingdom

Matti Lievonen
Managing Director (CEO) of Oiltanking GmbH, Hamburg (since 26 July 2021)

Scott Nyquist
Management Consultant, Houston, Texas, USA (since 26 July 2021)

Birgit Böl
Chairman of the General Works Council of Wintershall Dea AG, Kassel

Günther Prien
Chairman of the Central Works Council Hamburg and member of the General Works Council of Wintershall Dea AG, Hamburg (since 23 March 2021)

Heiko Rehder
Head of Production District Mittelplate, Deputy Chairman of the Central Works Council Hamburg of Wintershall Dea Deutschland GmbH, Friedrichskoog (since 20 August 2021)

Lord Edmund John Philip Browne of Madingley
Executive Chairman L1 Energy (UK) LLP, London, United Kingdom (member and Chairman until 1 November 2021)

Dr Wolfgang Haas
Former President Legal, Tax, Insurance and Intellectual Property of BASF SE, Ludwigshafen am Rhein (until 26 August 2021)

Sabine Brandt
Consultant for HSE, member of Central Works Council of Wintershall Dea Deutschland GmbH, Barnstorf (until 23 March 2021)

Management Board

Mario Mehren, Kassel
CEO

Paul Smith, Hamburg
CFO

Hugo Dijkgraaf, Hamburg
CTO

Dawn Summers, Hamburg
COO

Thilo Wieland, Kassel
Member of the Board Russia, Latin America and Midstream

Kassel/Hamburg, 10 February 2022

The Management Board

Mehren Smith Dijkgraaf Summers Wieland

E SUPPLEMENTARY INFORMATION

DECLARATION BY THE MANAGEMENT BOARD AND STATEMENT OF RESPONSIBILITY PURSUANT TO SECTIONS 297 (2) AND 315 (1) OF THE GERMAN COMMERCIAL CODE (HGB)

The Management Board of Wintershall Dea AG is responsible for preparing the annual consolidated financial statements and the group management report of Wintershall Dea.

The consolidated financial statements of Wintershall Dea for the fiscal year ending 31 December 2021 were prepared in accordance with the International Financial Reporting Standards (IFRS) published by the International Accounting Standards Board (IASB), London, and adopted by the European Union.

We have established effective internal control and management systems to ensure that the group management report and the consolidated financial statements of Wintershall Dea comply with the applicable accounting standards and to ensure due and proper corporate reporting.

The risk management system that we have established is designed to allow the Management Board to identify material risks at an early stage so that it can take appropriate measures to counteract them if necessary. The reliability and functionality of the internal control and risk management system are reviewed by the Internal Audit department throughout the Group on an ongoing basis.

To the best of our knowledge, and in accordance with the applicable accounting principles, the consolidated financial statements of Wintershall Dea give a true and fair view of the net assets, financial position and results of operations of Wintershall Dea. Furthermore, the group management report of Wintershall Dea provides a true and fair view of the Group's business development, including the business results and situation of Wintershall Dea, together with a description of the principal opportunities and risks associated with the expected development of Wintershall Dea.

Kassel/Hamburg, 10 February 2022

Mehren Smith Dijkgraaf Summers Wieland

INDEPENDENT AUDITOR'S REPORT

TO WINTERSHALL DEA AG, CELLE

Opinions

We have audited the consolidated financial statements of Wintershall Dea AG (until 26 July 2021: Wintershall Dea GmbH), Celle and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2021, and the consolidated statement of income, the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the fiscal year from 1 January to 31 December 2021, and notes to the consolidated financial statements, including a segment reporting as well as a summary of significant accounting policies. In addition, we have audited the group management report of Wintershall Dea AG for the fiscal year from 1 January to 31 December 2021. In accordance with German legal requirements, we have not audited the content of those components of the group management report specified in the "Other Information" section of our auditor's report.

The group management report contains cross-references to a separate sustainability report marked as unaudited and not required by law. In accordance with German legal requirements, we have not audited the content of these cross-references or the information to which they refer.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Section 315e (1) HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2021, and of its financial performance for the fiscal year from 1 January to 31 December 2021, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our opinion on the group management report does not cover the content of those components of the group management report specified in the "Other Information" section of the auditor´s report. The group management report contains cross-references to a separate sustainability report marked as unaudited and not required by law. Our audit opinion does not cover these cross-references or the information to which they refer.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and the group management report.

Basis for the Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Section 317 HGB and the German Generally Accepted Standards of Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report.
We are independent of the group entities in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the consolidated financial statements and on the group management report.

Other Information

Management and supervisory board are responsible for the other information. The other information comprises the information in the annual report.

The other information also comprises the following components of the group management report, whose content was not audited:

- information extraneous to group management reports and marked as unaudited.
- disclosure on the quota for women in management positions.

The other information does not include the consolidated financial statements, the group management report information audited for content and our auditor's report thereon.

Our opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report information audited for content or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of Management and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

Management is responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition, management is responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

is responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, management is responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, management is responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. 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 consolidated financial statements and this group management report.

We exercise professional judgement and maintain professional scepticism throughout the audit. We also:

› Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

› Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report 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 these systems.

› Evaluate the appropriateness of accounting policies used by management and the reasonableness of estimates made by management and related disclosures.

› Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective opinions. 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 Group to cease to be able to continue as a going concern.

› Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

› Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our opinions.

› Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with [German] law, and the view of the Group's position it provides.

› Perform audit procedures on the prospective information presented by management in the group management report. On the basis of sufficient appropriate audit evidence, we evaluate, in particular, the significant assumptions used by management as a basis for the prospective information and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

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.

Frankfurt am Main, 18 February 2022

KPMG AG
Wirtschaftsprüfungsgesellschaft
[Original German version signed by:]

Wetzel
Wirtschaftsprüfer
[German Public Auditor]

Strzalkowski
Wirtschaftsprüfer
[German Public Auditor]

GLOSSARY

KEY DEFINITIONS AND GLOSSARY OF TECHNICAL AND FINANCIAL TERMS

1, 2, 3

1P reserves or proved reserves
Quantities of petroleum that can be estimated with reasonable certainty (at least 90 per cent) to be commercially recoverable.

2C resources or contingent resources
Best estimate of contingent resources.

2P reserves or proved plus probable reserves
Proved reserves plus reserves that are deemed probable (at least 50 per cent likely) to be commercially recoverable.

A

Achim Development 4A and 5A
Areas 4A and 5A of the Urengoyskoye oil, gas and condensate field

ADNOC
Abu Dhabi National Oil Company

AG
German Stock Corporation (Aktiengesellschaft)

AktG
German Stock Corporation Act (Aktiengesetz)

APA
Award for predefined areas

B

BaFin
German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht)

bbl
Barrel (= 159 litres)

BetrAVG
German occupational pension act (Gesetz zur Verbesserung der betrieblichen Altersversorgung)

boe
Barrels of oil equivalent

C

Capex
Capital expenditure

CCS
Carbon capture and storage

CM&H
Carbon Management and Hydrogen

CMA-1
Cuenca Marina Austral 1

CO_2
Carbon dioxide

COSO
Committee of Sponsoring Organizations of the Treadway Commission

CTA
Contractual trust arrangements

CVA
Credit valuation adjustment

D

d
per day

DISOUCO
Disouq Petroleum Company

DVA
Debit valuation adjustment

E

E & P
Exploration and appraisal, field development and production activities

EAT
Exploration Advisory Tool

EBITDAX
Earnings before interest, taxes, depreciation, amortisation and exploration expenses

ECB
European Central Bank

EFET
European Federation of Energy Traders

EGAS
Egyptian Natural Gas Holding Company

EGC
General Court of the European Union

EGPC
Egyptian General Petroleum Corporation

EOR
Enhanced oil recovery

EPC
Engineering, Procurement and Construction

ESG
Environmental, Social and Governance

ETP
Energy Transition Pathway

EU
European Union

F

FCF
Free cash flow

FEED
Front-end engineering design

FPSO
Floating production, storage and offloading unit

G

GAS
German Accounting Standard

GHG
Greenhouse gas

GWh
Gigawatt hour

H

HGB
German Commercial Law (Handelsgesetzbuch)

HSEQ
Health, Safety, Environment & Quality

I

IAS
International Accounting Standards

IASB
International Accounting Standards Board

IEA
International Energy Agency

IFRIC
International Financial Reporting Interpretations Committee

IFRS
International Financial Reporting Standards as issued by the International Accounting Standards Board and adopted by the European Union.

IG BCE
The German Industrial Mining, Chemistry, Energy Trade Union (Industriegewerkschaft Bergbau, Chemie, Energie)

ILO
International Labour Organization

IOGP
International Association of Oil and Gas Producers

IPIECA
International Petroleum Industry Environmental Conservation Association

IPO
Initial public offering

J

JOC
Joint operating company

L

LATAM
Latin America

LNG
Liquefied natural gas

LTIR
Lost Time Injury Rate per million hours worked

M

M&A
Merger and Acquisition

mbbl
One thousand barrels

mboe
One thousand barrels of oil equivalent

mboe/d
One thousand barrels of oil equivalent per day

MENA
Middle East and North Africa

mmboe
Million barrels of oil equivalent

mmbtu
Million british thermal units

mmscf
Million standard cubic feet

mscf
One thousand standard cubic feet

MTP
Medium-term planning

MWh
Megawatt hour

N

NGL
Natural gas liquids

NOC
Libya's National Oil Corporation

NPV
Net present value

O

OCI
Other comprehensive income

oe
Oil equivalent

OECD
Organisation for Economic Co-operation and Development

OPEC
Organization of Petroleum Exporting Countries

P

PRMS
Petroleum resources management system

R

RCF
Revolving credit facility

S

SA-CCR
Standardised approach for measuring counterparty credit risk

scf
Standard cubic feet

Scope 1 emissions
Direct GHG emissions that occur from sources that are controlled or owned by the company.

Scope 2 emissions
Indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling by the company.

Scope 3 emissions
Other indirect GHG emissions that are the result of activities from assets not owned or controlled by the company but that the company indirectly impacts in its value chain.

SDGs
Sustainable Development Goals of the United Nations.

Shareholders
Refers to Wintershall Dea shareholders BASF and LetterOne.

SNGP
Severneftegazprom

SPE
Society of Petroleum Engineers

SUCO
Suez Oil Company

T

TCFD
Task Force on Climate-related Financial Disclosures

TRIR
Total Recordable Injury Rate per million hours worked

TTF
Title transfer facility (The Netherlands) is a virtual trading point for natural gas.

TWh
Terawatt hour

W

WACC
Weighted average cost of capital

WIAG
Wintershall Aktiengesellschaft

WIGA
WIGA Transport Beteiligungs-GmbH & Co. KG

WINZ
Wintershall Noordzee

WPC
World Petroleum Council

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The annual report 2021 is both available in German and English.

The annual report 2021 is available as pdf on the internet:
https://wintershalldea.com/en/investor-relations

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