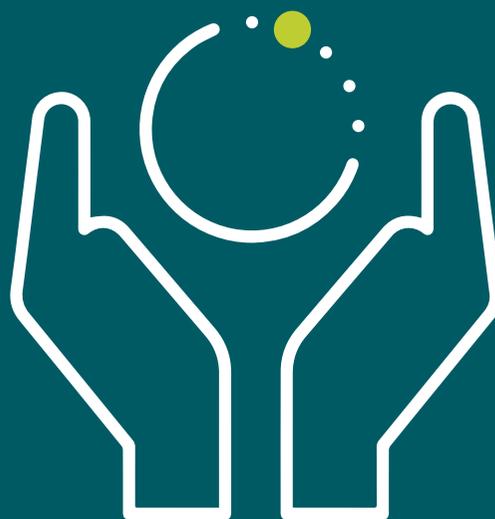


BIONTECH



SUSTAINABILITY  
REPORT 2020



”

Our core values form the basis of everything we do: we are innovative, passionate and united. Throughout our work we are committed to being transparent, acting with integrity, protecting the environment and respecting human rights. These values form the unchanging basis of our work and, above all, our very own expectations of ourselves.

“

*Dr. Sierk Poetting* Chief Financial and Chief Operating Officer  
*Ryan Richardson* Chief Strategy Officer  
*PD Dr. Özlem Türeci* Chief Medical Officer and Founder  
*Sean Marett* Chief Business and Chief Commercial Officer  
*Prof. Dr. Ugur Sahin* Chief Executive Officer and Founder

*From top left to bottom right.*

# BioNTech at a glance

## Our values



united



passionate



innovative

## Next-generation immunotherapy

Harnessing the full potential of the immune system



Building a fully integrated biopharmaceutical company



Immunotherapies for cancer & infectious diseases and beyond



Broad suite of novel technologies



Industry-leading global collaborations

## Our aim

# Climate-neutral by 2030

## Fighting against COVID-19

Authorized for emergency use/  
temporary use or conditional  
approval in

> **65** countries

COVID-19 vaccine doses ordered from  
Pfizer/BioNTech for 2021: 1.4 bn



**1.4** billion

Manufacturing capacity target 2021:  
up to 2.5 bn doses



**2.5** billion



**200**

million doses delivered  
as of March 23, 2021



Provision currently of up to 40 million doses in 2021 for low- and middle-income countries to help protect vulnerable people worldwide.



## Employees doing pioneering work

**2,047**  
employees from over

**60** nations

**45%**  
of top managers are women

3

## International company with roots in Germany



Mainz (HQ)



Berlin



Cambridge (USA)



Halle



Idar-Oberstein



Marburg



Munich

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- 6.0 Attractive Employer 41
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### INTERACTIVE PDF

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This PDF document is optimized for use on screen.

You can jump to the desired content by **clicking** on the information in the tables of contents, the headings in the headers, or on page references and links in the graphs and tables.

- | Navigation buttons   |                           | References in the text  |                |
|--|---------------------------|---|----------------|
|  | Search                    |  | Page reference |
|  | Table of contents         |  | Website        |
|  | Chapter table of contents |   |                |
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BioNTech was founded in 2008 with the understanding that each cancer patient’s tumor is unique and that each patient’s treatment should be equally individualized. To turn this idea into reality, we have combined innovative research with modern technologies.

Our objective is to develop breakthrough therapies against cancer, infectious and other serious diseases.

As a next-generation immunotherapy company, we are working to clinically prove the benefits of our treatment approach. Our COVID- 19 vaccine is an important milestone. We are continuously expanding our collaborations, our team and our own manufacturing capabilities to provide individualized treatments to patients around the world.

As a company with its roots in Mainz, Germany, we are accelerating the development of our diversified pipeline of next generation immunotherapies aspiring to improve the health of people worldwide by harnessing the full potential of the immune system. This includes cancer, infectious disease, regenerative medicine as well as autoimmune diseases and allergies.

“  
BioNTech  
addresses the  
expectations of  
all stakeholders.  
”

Dear Readers,

**W**e are convinced that everyone can make a contribution to society. For the community in which we live, every contribution is valuable and important.

BioNTech was founded in 2008 with the understanding that each cancer patient's tumor is unique and so should each patient's treatment. Helping people experience good health and well-being through the development of medicines still drives us every day.

It was a worldwide network of science that made it possible to identify the global threats of COVID-19 at an early stage. The facts of the scientists were right in front of us. And they gave reason for concern.

As entrepreneurs, we had the opportunity to make a difference. Our knowledge and experience from years of cancer research gave us reason to be hopeful that we could make a relevant contribution.

The opportunity was given because of an environment at BioNTech that is convinced of the power of science to discover and innovate: reliable investors with a long-term perspective. A Supervisory Board that, together with the Management Board, pursues the objective of sustainable value creation and has the interests of our shareholders, employees and other stakeholders equally in mind. And last but not least, employees from more than 60 different nations who have been with us for a long time and who work with great passion to realize our vision. This special environment has made the successful vaccine development possible.

The COVID-19 vaccine has put BioNTech in the spotlight of public attention. The experience gained from Project Lightspeed and its commercial success now provide a tailwind for the development of new therapies against cancer and other serious diseases. That said, the COVID-19 vaccine and a dynamically growing structure may shift the expectations of BioNTech's stakeholders: people's expectation of an effective and safe vaccine; investors' expectation of a risk-adjusted return that also takes sufficient account of the environmental, social and governance (ESG) dimensions; the expectation of employees and business partners that the Company shapes its growth in a fair and sustainable way; the expectation of the younger population that the Company's growth will be in line with the Paris Climate goals; and the expectation of many non-governmental organizations campaigning for fair and equitable global access to COVID-19 vaccines for an effective containment of the global pandemic.

BioNTech has been addressing its corporate responsibility strategically since late 2019. Since then, the basic structures for professional sustainability management have been consistently created. On this basis, the Company will address these and many other societal expectations in a structured manner and assume responsibility.

This Sustainability Report is a first milestone for us as a company. It shows us where we stand and in which areas we need to improve. For our stakeholders this report offers a first impression of our wider responsibility.

**We invite you to explore our Sustainability Report 2020. You are welcome to send us your suggestions and comments.**

**Prof. Dr. Ugur Sahin**  
*Chief Executive Officer  
and Founder*

**PD Dr. Özlem Türeci**  
*Chief Medical Officer  
and Founder*

**Dr. Sierk Poetting**  
*Chief Financial and Chief  
Operating Officer*

**Sean Marett**  
*Chief Business and Chief  
Commercial Officer*

**Ryan Richardson**  
*Chief Strategy Officer*

## BioNTech

# Developing the next-generation immuno-therapy company

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For a better future:

We never stop developing our in-depth understanding of the human immune system.



2,047

employees as of December 31, 2020

200 

million doses delivered as of March 23, 2021

 Founded in 2008

79%

of total operating costs were spent on R&D in 2020

Opportunity in 2021 and beyond

**Building a global, multi-product, immunotherapy powerhouse**



**Poised to usher in new era of vaccines and immunotherapies in multiple therapeutic areas**



**Advance broad pipeline of >20 product candidates**



**Ability to invest COVID-19 vaccine cash flows to accelerate diverse portfolio**



**Proven execution capabilities and maturation toward a commercial organization**

Deep expertise in immunology

Cutting-edge platforms across four drug classes

Bioinformatics-driven approach leveraging AI and machine learning

In-house GMP manufacturing of mRNA and cell therapies

# 1.0 BioNTech

## 1.1 BUSINESS MODEL AND ORGANIZATION

### Business Model

Biopharmaceutical New Technologies is a next-generation immunotherapy company pioneering the development of therapies for cancer and other serious diseases. The Company combines a variety of advanced therapeutic platforms and bioinformatics tools to rapidly advance the development of novel biopharmaceuticals. The diversified portfolio of oncology product candidates includes individualized therapies as well as off-the-shelf mRNA-based drugs, innovative chimeric antigen receptor (CAR) T cells, bispecific checkpoint immunomodulators, targeted cancer antibodies and small molecules. The breadth of BioNTech’s immunotherapy technologies and expertise has also enabled it to develop potential therapies to address a range of infectious diseases. The Company has rapidly mobilized these technologies and expertise to address the COVID-19 pandemic with the COVID-19 vaccine, referred to as COMIRNATY® in the EU.

BioNTech’s business model is to develop, manufacture and market proprietary immunotherapies, either alone or in collaboration with partners, following regulatory approval.

In the financial year 2020, BioNTech entered into two strategic collaborations with major pharmaceutical companies, Pfizer Inc. of New York, USA, and Fosun Pharmaceutical Industrial Development Co. Ltd. of Shanghai, China, in connection with the BNT162 vaccine program “Lightspeed”.

“BioNTech’s business model is to develop, manufacture and commercialize immunotherapies.”

In certain instances, product candidates have been out-licensed to third parties, a practice that may be applied to additional product candidates in the future. BioNTech maintains a culture of scientific excellence, shares its scientific achievements, findings and results in peer-reviewed publications, and has filed numerous patent applications. BioNTech’s intellectual property strategy also includes licensing from third parties to complement its own patent portfolio.

The BioNTech Group’s revenue in the 2020 financial year was derived primarily from the sale of the COVID-19 vaccine and research and development collaborations.

### Legal Structure

BioNTech SE was founded in 2008 as a spin-off from the Johannes Gutenberg University Mainz. It is the parent company of the BioNTech Group and has its registered office in Mainz, Germany. At the end of 2020, the BioNTech Group consisted of 23 wholly-owned and indirect subsidiaries at six different locations in Germany and one location each in the United States, Austria (in liquidation), Singapore and the United Kingdom.

In this sustainability report, “BioNTech,” the “Group,” the “Company,” “we,” “us,” and “our” refer to BioNTech SE and its subsidiaries, except where the context otherwise requires.

Significant changes in the Group structure to highlight for this sustainability report are as the following:

- The acquisition of Neon Therapeutics, Inc. (“Neon”) based in Cambridge, Massachusetts, United States (formerly Nasdaq), on May 6, 2020. The new Group company operates under the name BioNTech US Inc., which is a wholly-owned subsidiary of BioNTech USA Holding, LLC. and the headquarters of the BioNTech Group in the United States.
- The acquisition of Novartis Manufacturing GmbH, Marburg, Germany on October 31, 2020. The new production site operates under the name BioNTech Manufacturing Marburg GmbH and is a wholly-owned subsidiary of BioNTech.

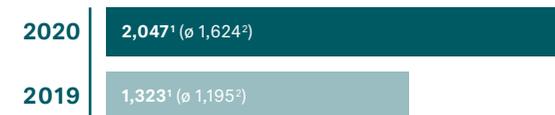
Further events are published in the Annual Report on Form 20-F for the 2020 financial year, which is accessible on the [Website of BioNTech](#).

### Organizational Structure

The Company has a dual management system: The Management Board, as the managing body, currently has five members and is appointed and supervised by the Supervisory Board, which also approves major business decisions. The Supervisory Board is elected by the Annual General Meeting and currently consists of four members.

As of December 31, 2020, there were 2,047 employees (December 31, 2019: 1,323) and an annual average of 1,624 employees (2019: 1,195) in the Group.

### Employees in the Group



Headcount excluding Management Board, trainees and interns

<sup>1</sup> As of December 31

<sup>2</sup> Quarterly annual average

### Commercialization

BioNTech’s COVID-19 vaccine is based on the Company’s proprietary mRNA technology and to date has been granted either an emergency use authorization, temporary use authorization or conditional marketing authorization in over 65 countries and regions.

In response to the COVID-19 pandemic, BioNTech launched the COVID-19 vaccine development program BNT162, based on mRNA technology, in late January 2020. The BNT162 program has entered into two strategic collaborations with major pharmaceutical companies Pfizer, Inc. (“Pfizer”) in the US and Shanghai Fosun Pharmaceutical (Group) Co., Ltd., (“Fosun Pharma”) in China to develop COVID-19 vaccine candidates and support the global supply of a post-approval vaccine.

The mRNA-based COVID-19 vaccine will be marketed under the brand name COMIRNATY® in the EU, where BioNTech has received the appropriate conditional marketing authorization. BioNTech and Pfizer are working with governments and health ministries around the world that are arranging the vaccine’s distribution during the pandemic, subject to the approval or authorization of the particular country and the terms of supply agreements. To date, supply agreements have been contracted for 1.4 billion doses worldwide.

BioNTech and Pfizer are leveraging Pfizer’s existing vaccine manufacturing and distribution capabilities, as well as structures to rapidly scale, manufacture and distribute large quantities of the vaccine in high quality, complementing BioNTech’s mRNA manufacturing expertise acquired over nearly a decade.

Production capacity is being increased continuously and includes the acquisition of a manufacturing facility in Marburg, Germany. The new production setup of the Marburg site is one of the key factors allowing the expansion of BioNTech’s production network. On March 26, 2020, BioNTech announced that the European Medicines Agency (EMA) approved the manufacturing of the COVID-19 vaccine drug product at the facility in Marburg. The approval

makes BioNTech’s Marburg manufacturing site one of the largest mRNA manufacturing sites worldwide with an annual production capacity of up to one billion doses of BioNTech’s COVID-19 vaccine, once fully operational. BioNTech expects that the first vaccines manufactured at the Marburg site to be delivered in the second half of April.

Through creating BioNTech’s own products, the Company has also taken the initial strategic steps to build its first commercial organization responsible for the distribution and marketing of COMIRNATY® in Germany.

## 1.2 INNOVATION AND R&D

As a research-based biotech company, systematic innovation management guarantees the economic sustainability of BioNTech’s business model. That is why the Company invests in innovation whenever technological barriers may stand in the way of clinical success. BioNTech is technology agnostic and strives to use the technology that is best suited for the purpose at hand.

The deep understanding of the human immune system represents the core of the Group’s innovations and resulted in the creation of four complementary drug classes:

- mRNA therapeutics
- Cell therapies
- Next-generation antibodies
- Small molecule immunomodulators

Complementing these drug classes, BioNTech has key competencies in bioinformatics. On this basis, a proprietary machine-learning algorithm has been developed to tailor immunotherapy approaches to individual patients or patient groups.

For further details on innovation, R&D and the current pipeline of preclinical programs and clinical product candidates, please refer to BioNTech’s Corporate Presentation. Regular updates on these topics are published on the [Website of BioNTech](#).

## 1.3 2020 FINANCIAL RESULTS

Revenue increased by €373.7 million from €108.6 million during the year ended December 31, 2019 to €482.3 million during the year ended December 31, 2020. Total revenues increased due to recognizing revenues for the first time under our two new collaboration agreements to develop a COVID-19 vaccine and ultimately led to the recognition of COVID-19 vaccine commercial revenues.

For more details on the Company’s 2020 financial results, please refer to BioNTech’s 2020 Annual Report on Form 20-F filed with the SEC on March 30, 2021, which is available on the SEC’s website and on the [Website of BioNTech](#).



Innovation  
is part of  
BioNTech’s DNA.



## Our Responsibility

# Making an impact on good health and well-being

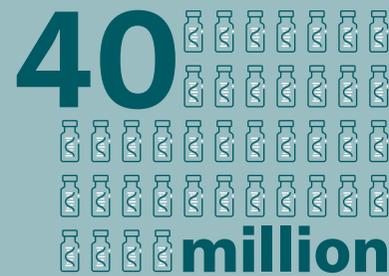
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For the people:

We make the COVID-19 vaccine available as quickly as possible – worldwide.

**1** Primary Sustainable Development Goal

**SDG 3** 



doses of COVID-19 vaccine for low- and middle-income countries



## 2.0 Our Responsibility

### 2.1 RESPONSIBILITY IN PERSPECTIVE

BioNTech is a next-generation immunotherapy company pioneering novel therapies for cancer and other serious diseases. The aim of the Company and its core business model is to provide these novel therapies to patients worldwide and thus, help to improve their lives.

BioNTech has signed the United Nations Global Compact and supports the Sustainable Development Goals (SDGs). In particular, BioNTech's work contributes to the third SDG: the promotion of good health and well-being for all people of all ages. The Company complements this commitment in its core business with good corporate governance, the exercise of social and societal responsibility and the reduction of harmful effects on the climate and environment.

Worldwide, the COVID-19 pandemic has significantly raised the profile of the United Nations' third SDG. The development of BioNTech's COVID-19 vaccine has highlighted its enormous importance to society. The vaccine saves lives and secures livelihoods. It enables social, cultural, societal and economic survival globally and on many levels.

With the first emergency use or conditional approval of the COVID-19 vaccine worldwide on December 2, 2020, and its commercial production, society's perception of BioNTech has changed significantly. With that comes new expectations for the Company:

- people's expectation of an effective and safe vaccine;
- investors' expectations of a risk-adjusted return that also takes sufficient account of the environmental, social and governance (ESG) dimensions;

- the expectation of employees and business partners to shape the Company's growth in a fair and sustainable way
- the expectations, especially of the younger population, that the Company's growth will be in line with the Paris climate goals;
- and the expectation of many non-governmental organizations campaigning for fair and equitable global access to COVID-19 vaccines to contain the global pandemic effectively.

BioNTech has been addressing its corporate responsibility strategically since late 2019. Since then, the basic structures for professional sustainability management have been created consistently. On this basis, the Company will address these and many other societal expectations in a structured manner and assume responsibility.

A few months after the first vaccine doses were delivered, the first BioNTech sustainability report provides structured answers to a wide range of questions about corporate responsibility. Not all questions will be answered by this report, some may not be answered in the desired depth. Other answers may not satisfy all stakeholders in the same way. However, the Management Board, Supervisory Board and BioNTech's CSR Team assure a serious, transparent, fact-oriented and sincere engagement with the most important questions of BioNTech's Corporate Social Responsibility.

This first sustainability report is a first small milestone in that direction.



The COVID-19 vaccine saves lives and secures livelihoods.



### 2.2 PROJECT LIGHTSPEED: VACCINE DEVELOPMENT

#### Developing a vaccine in ten months

The catalyst for vaccine development at BioNTech came from an article in The Lancet medical journal read by BioNTech CEO Ugur Sahin in mid-January. The article was about a new virus spreading in the Chinese megacity of Wuhan. Ugur Sahin recognized that such a highly infectious virus had the potential to spread outside China's borders. He discussed the issue with BioNTech's co-founder and CMO Özlem Türeci, as well as with BioNTech's leadership team.



Within ten months, BioNTech developed the first COVID-19 vaccine approved for use in humans worldwide.



Just a few days later, BioNTech initiated "Project Lightspeed" to develop a vaccine against COVID-19 in accordance with scientific principles and ethical standards. With decades of experience in cancer vaccine research based on mRNA technology and a deep understanding of the immune system, BioNTech's aim was to accelerate vaccine development as much as possible without cutting corners. Resources were reallocated, and any idle time was redirected. Labs were staffed 24 hours a day, seven days a week. Tasks that were normally completed one-by-one were tackled simultaneously by the employees.

First, the team generated 20 potential vaccine candidates and compared them in preclinical studies. Based on the studies' findings, the most promising four candidates were selected for a thorough evaluation in clinical trials. To conduct these trials, BioNTech promptly initiated GMP-compliant production of its vaccine candidates in Germany. BioNTech's team also kept in very close communication with the regulatory authorities throughout the development process.

#### Collaborations for global expansion

In mid-March, BioNTech sealed two important collaborations to advance the development of its mRNA vaccine to protect against COVID-19 infection worldwide. Building on an existing influenza vaccine partnership, BioNTech launched the collaboration with Pfizer. The company became a partner in the clinical trials, as well as in the approval, production and distribution of the vaccine worldwide, except in China. For China, BioNTech entered into a development and commercialization collaboration with Fosun Pharma to further develop BioNTech's vaccine candidate jointly in China.

#### Getting the green light for clinical trials

In less than three months of research, BioNTech was able to begin clinical trials. On April 21, Germany's Paul Ehrlich Institute granted permission for the vaccine to be tested in humans for the first time. The first subject was vaccinated with the BNT162 vaccine on April 23 as part of the Phase 1/2 trial. This was followed in Germany by the vaccination of 199 additional subjects between ages 18 and 55. BioNTech tested four different vaccine candidates for safety, immunogenicity and dosage amount. In May, a Phase 1/2 trial was also initiated in the United States, in which 360 participants were vaccinated. This study also included older subjects.

Results from the Phase 1/2 study showed that there was an immune response in all participants, even at the smallest dose administered. BioNTech reviewed the preclinical and clinical data in detail and then, in consultation with the global regulatory authorities, selected the vaccine candidate BNT162b2 for broad testing in a global Phase 3 trial.

#### Initiation of testing worldwide

On July 27, the U.S. Food and Drug Administration (FDA) was the first to grant BioNTech and Pfizer permission for the large-scale study. From then on, over a period of weeks, 44,000 subjects from the age of 18 to 85 were vaccinated at more than 150 study centers worldwide. The participants were from different age, gender, origin and body mass index groups and included subjects with pre-existing conditions. In order to keep up the pace during this phase, some of the data exchange with regulatory authorities was carried out in real time.

In August, a Phase 1 trial also began in China following the approval of the Chinese regulatory authority, the National Medical Products Administration. This trial was then followed by a Phase 2 trial initiated at the end of November. As of August, the vaccine was undergoing clinical trials on three continents, underscoring BioNTech's efforts to make a vaccine available globally following regulatory approval. BioNTech also entered into initial supply agreements with the United Kingdom, the United States and Japan in July. A vaccine supply agreement with the EU followed in November.

#### 95% vaccination protection in all trial groups

After testing in more than 43,000 subjects in the Phase 3 trial, the evaluation in mid-November showed that BNT162b2 was well tolerated and highly effective. The vaccine achieved 95% vaccination protection.

BioNTech and Pfizer applied for emergency or temporary approvals or conditional marketing authorizations in some countries in order to begin vaccinations as soon as possible. Shortly thereafter, a final evaluation confirmed 95% vaccination protection in all groups tested, starting seven or more days after the second vaccination.

On December 2, the UK was the first country to grant a temporary authorization for emergency use for BioNTech's mRNA vaccine. Immediately thereafter, the Company delivered the first doses of the vaccine, enabling a 90-year-old British woman to be vaccinated with BNT162b2 on December 8. The U.S. Food and Drug Administration granted use authorization for the vaccine on December 11, and on December 21, BNT162b2 received a Europe-wide marketing authorization from the EU Commission. Pfizer and BioNTech were able to ship the first doses to the 27 EU member states immediately.

The vaccine has now been granted a conditional marketing authorization, emergency use authorization or temporary authorization in more than 65 countries, and BioNTech and Pfizer have already shipped about 200 million doses.

### 2.3 ACCESS TO MEDICINE

#### COVID-19 vaccines for low and lower middle-income countries

In the fight against the global COVID-19 pandemic, there is also the question of how to achieve a fair distribution of the vaccine to all nations. This question is being addressed by the COVAX (COVID-19 Vaccines Global Access) initiative, which was set up to ensure that all participating countries have equitable access to COVID-19 vaccines. BioNTech and Pfizer are supporting this global initiative by

committing to provide up to 40 million doses of the BNT162b2 vaccine in 2021. The companies signed an agreement with COVAX to this effect on January 22, 2021. As part of the agreement, COVAX will receive the vaccine at a fair, not-for-profit price, under the "COVAX Advanced Market Commitment 92 countries." Through this mechanism, the COVAX initiative aims to ensure that 92 low- and middle-income per capita countries have access to COVID-19 vaccines at the same time as wealthy countries.

COVAX was founded by the World Health Organization (WHO) in collaboration with the Global Alliance for Vaccines and Immunization (GAVI) and the Coalition for Epidemic Preparedness Innovations (CEPI). The initiative forms one pillar of the so-called Act Accelerator program, which aims to go beyond vaccine distribution to develop and distribute medicines and COVID-19 tests worldwide. There are now 190 countries worldwide participating in COVAX, including 98 wealthier countries and 92 low- and middle-income countries.

BioNTech has been advocating for equitable and affordable access to COVID-19 vaccines for all people around the world since the beginning of the vaccine development program. The goal is to protect vulnerable populations worldwide and fight the pandemic globally. To achieve this, BioNTech relies on cross-border collaboration between companies, governments and international institutions, as promoted by the COVAX initiative.

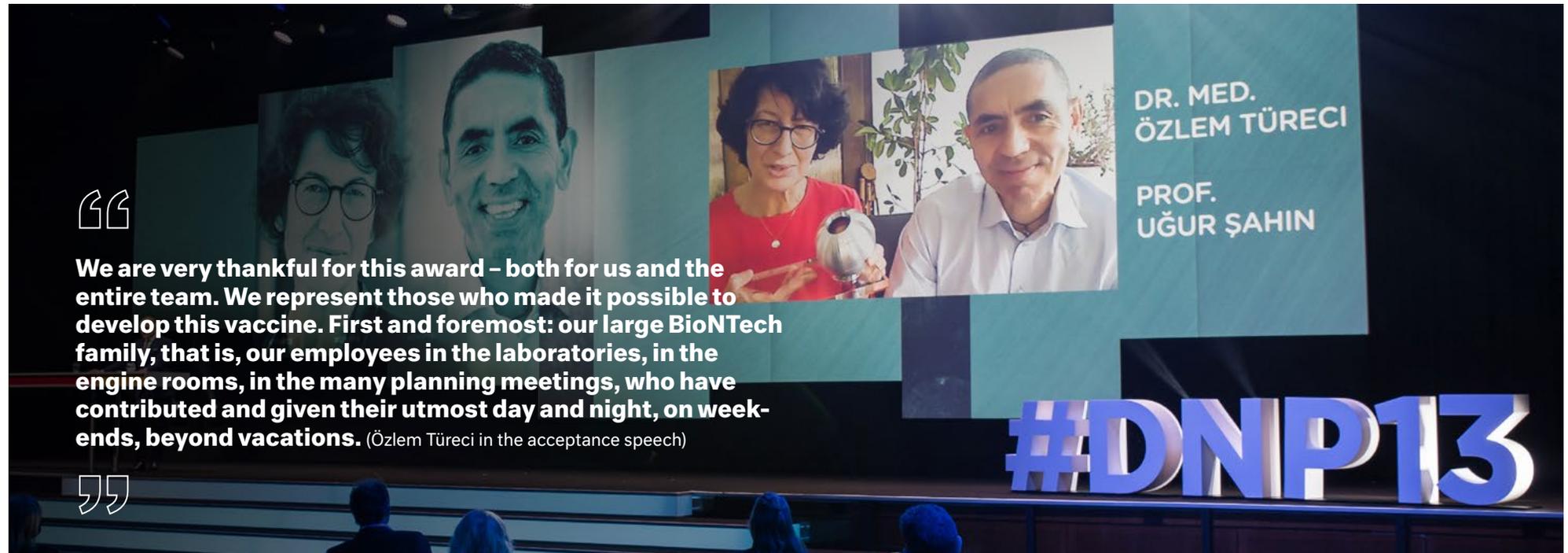
Meanwhile, Pfizer and BioNTech have shipped vaccine doses to South Korea and Colombia as part of the COVAX initiative. The first shipment of mRNA vaccine doses to the African continent also took place in early March 2021. Approximately 103,000 vaccine doses will be used to immunize healthcare workers in Rwanda.

In addition to the agreement with COVAX, BioNTech and Pfizer are committed to working with healthcare stakeholders around the world to bring their expertise and resources to low-income countries. Part of this commitment analyzes supply chains and tests novel approaches in areas such as the transportation and storage of vaccines. BioNTech also works with international organizations to support vaccine distribution in refugee and other vulnerable populations.



BioNTech strives for equitable and affordable access to COVID-19 vaccines for all countries around the world.





**We are very thankful for this award – both for us and the entire team. We represent those who made it possible to develop this vaccine. First and foremost: our large BioNTech family, that is, our employees in the laboratories, in the engine rooms, in the many planning meetings, who have contributed and given their utmost day and night, on weekends, beyond vacations.** (Özlem Türeci in the acceptance speech)



Photo: Dariusz Misztal

## 2.4 AWARDS FOR RESPONSIBILITY

### CSR Award

On December 4, 2020, founders Ugur Sahin and Özlem Türeci received an honorary award from the German Sustainability Award (GSA) foundation. The GSA honors pioneering contributions to the transformation toward a sustainable future. It is the most comprehensive award for ecological and social commitment in Europe and the most renowned and most coveted award in this field in Germany.

Since 2020, this award has been closely aligned with the 17 Sustainable Development Goals (“2030 Agenda for Sustainable Development”) and the key areas of transformation, including climate, biodiversity, resources, fairness,

and society, following the UN’s concept of sustainability. In addition to the responsible treatment of the climate and resources, COVID-19 has raised the profile of the 2030 Agenda topics of good health and well-being.

BioNTech’s Ugur Sahin and Özlem Türeci received this award for developing the first vaccine against COVID-19, as well as for the successful research and development that laid the groundwork for this accomplishment. The prize highlighted their role as examples of the guiding principle of better medicine, which, based on brilliant science, allowed them to realize an ambitious vision with their company under intense time pressure and maximum publicity.

### Order of Merit

On March 19, 2021, Ugur Sahin and Özlem Türeci were presented with the Knight Commander’s Cross of the Bundesverdienstkreuz der Bundesrepublik Deutschland for contributing to the containment of the coronavirus pandemic. The Order of Merit is awarded for political, economic-social and intellectual achievements, as well as for all special services to the Federal Republic of Germany, such as those in the social and charitable realms. It is the only award of merit in Germany and thus the highest recognition that the Federal Republic bestows for services to the general common good. The award ceremony at Bellevue palace was the first of the year to take place in person, with Germany’s President Frank-Walter Steinmeier and Chancellor Angela Merkel attending.

## CSR Management

# Anchoring responsibility in the core business

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For all stakeholders:

We are responsible not only for our business, but also for the way we conduct this business.

15

top executives on the CSR Steering Board develop CSR strategically

Material CSR Topics

identified through a multi-step and cross-functional process

Gender diversity of the CSR Steering Board



Management Board members of the CSR Steering Board:

- Chief Medical Officer, Özlem Türeci
- Dual Chief Financial Officer and Chief Operating Officer, Sierk Poetting

Signatory of the UN Global Compact since

March 2020

Signatory of the Charta der Vielfalt since

Nov. 2018

# 3.0 CSR Management

## 3.1 GROUP MANAGEMENT OF CSR

As a biotech company with research and – since the end of 2020 – commercial manufacturing, BioNTech bears responsibility not only for its business, but also for the way its business is conducted. The Company has been strategically addressing its corporate responsibility in the Corporate Social Responsibility (CSR) Team since 2019.

Overall responsibility for CSR lies with the Management Board, which is supported strategically by the CSR Steering Board and operationally by the CSR Team.

The CSR Steering Board, which meets four times a year, is responsible for the strategic management of CSR for the BioNTech Group. In addition to BioNTech’s Chief Medical Officer, Özlem Türeci, and its dual Chief Financial Officer and Chief Operating Officer, Sierk Poetting, the Board includes thirteen top executives who represent essential departments and views from across the Company. The CSR Steering Board engages intensively with the relevant and material CSR issues and decides on the strategically important topics. These include the development, coordination, and monitoring of the CSR program.

The driving force behind systematically incorporating CSR in processes, corporate culture and ways of working is the CSR Team, which reports directly to the CFO. It prepares analyses, decision papers and recommendations, coordinates CSR issues for the BioNTech Group and ensures operational development and CSR reporting in cross-functional dialogue and working groups.

The operational management and implementation of all CSR relevant tasks are carried out by the departments and subsidiaries responsible in each case. They are supported by the CSR Team, which is directly involved in all major CSR projects.

### CSR Fields of Action<sup>1</sup>

 <p><b>ECONOMIC SUCCESS</b></p>	 <p><b>RESPONSIBLE GOVERNANCE</b></p>	 <p><b>ATTRACTIVE EMPLOYER</b></p>	 <p><b>ENVIRONMENTAL PROTECTION</b></p>	 <p><b>CORPORATE CITIZENSHIP</b></p>
<p><b>INNOVATION</b> Growth &amp; Culture</p>	<p><b>PATIENT SAFETY</b> <b>PATIENT PRIVACY</b> <b>ANIMAL WELFARE</b> <b>GOVERNANCE</b></p>	<p><b>PIONEER PIPELINE</b> Pioneer Development Safety &amp; Health Equal Opportunity</p>	<p><b>CLIMATE PROTECTION</b> Pollution &amp; Waste</p>	<p><b>CARING FOR PATIENTS</b> Corporate Volunteering<sup>2</sup> Donations<sup>2</sup></p>

<sup>1</sup> Material topics are marked bold.

<sup>2</sup> Voluntary CSR topics outside the materiality assessment.

### 3.2 MATERIALITY ANALYSIS

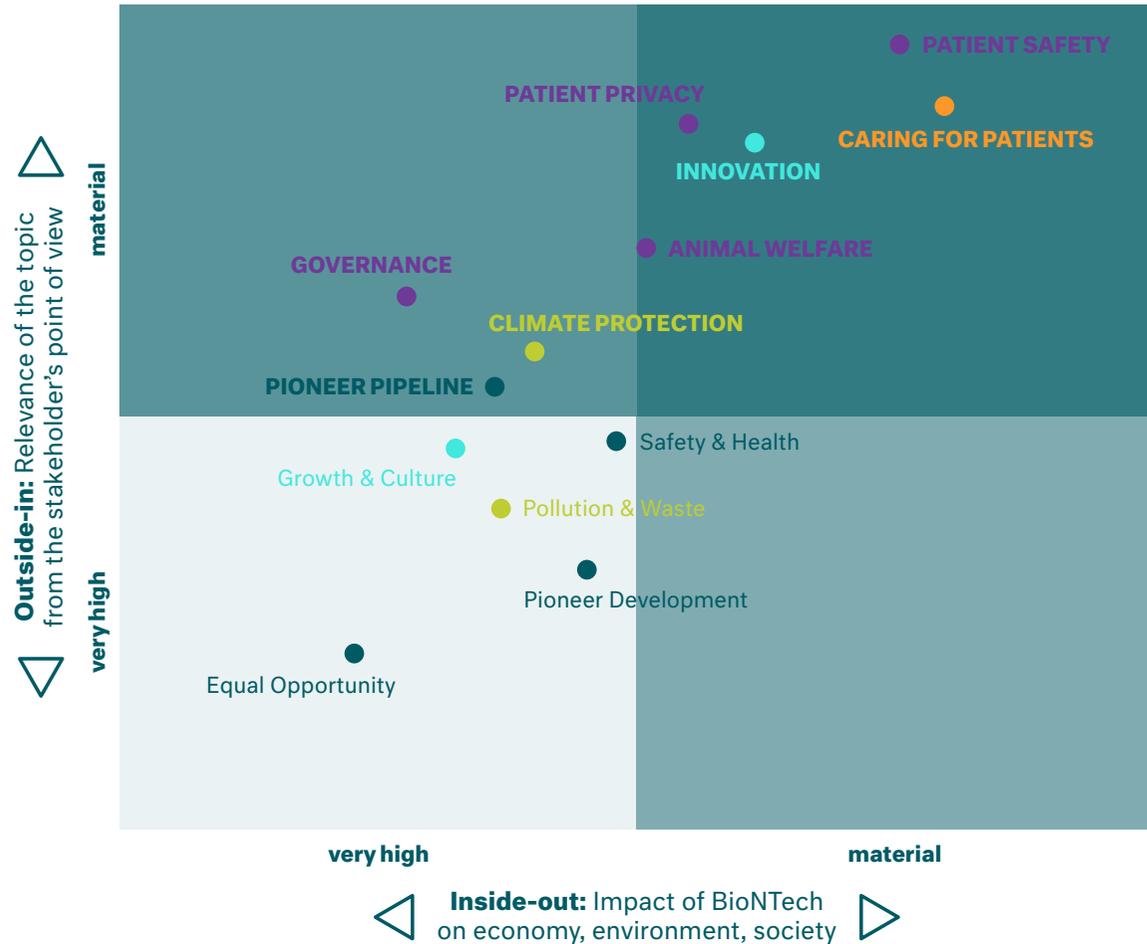
BioNTech identified the material CSR topics through a multi-step and cross-functional process. This was based on the analyses of relevant sustainability standards (e.g., GRI, SASB, NASDAQ ESG Reporting Guide) and benchmarks (e.g., the Pharmaceutical Supply Chain Initiative PSCI, Company benchmarks) as well as on structured internal interviews with top executives. By incorporating stakeholder-oriented standards, the perspectives of various stakeholder groups were taken into account in an initial materiality analysis.

Interviews for the materiality matrix were conducted in Q2 2019. The development of the COVID-19 vaccine was not foreseeable at that time. Accordingly, no direct topics on product responsibility are found in the analysis.

Based on a comprehensive “long list” of relevant CSR topics and using this stakeholder-oriented process, BioNTech identified five fields of action encompassing 13 highly relevant topics. In the final step of the process, eight material CSR topics were identified (see chart on [previous page](#)). To arrive at these eight topics, the Company was guided in particular by two dimensions of the Global Reporting Initiative (GRI): the significance from the stakeholder perspective (“outside-in”) and the impact of corporate actions (“inside-out”).

All topics mentioned in the materiality matrix have a very high importance for BioNTech. They are all intensively managed and developed. In the prioritization, the Company assigns higher importance to material topics in reporting and resource allocation due to their increased stakeholder relevance.

Materiality Matrix



### 3.3 CSR PROGRAM

After identifying the relevant and material topics during the materiality process, the related measures, objectives and implementation deadlines were defined in the CSR program. By linking the materiality analysis to the CSR program, BioNTech ensures that all relevant stakeholder interests are taken into account. Additionally, the Company plans to report regularly, openly and transparently on the degree to which objectives have been achieved.

**Status:**  
 ■ Target after 2020  
 ■ Target achieved  
 ■ Target partially achieved  
 ■ Target not achieved

Fields of Action & SDGs ▼	Topics & Activities	Reference to GRI & SASB	Reference to UNGC <sup>1</sup>	Deadlines	Status 12/31/2020	Page
<b>CSR Management</b>						
	Develop new materiality analysis according to new status as a commercially producing company	GRI 102-(46-47)/103	--	2021	■ Target after 2020	17
	Revise CSR program	GRI 102-(46-47)/103	--	2021	■ Target after 2020	18
	Revise CSR strategy	GRI 102-(46-47)/103	--	2021/2022	■ Target after 2020	--
<b>Attractive Employer</b>						
	Introduce a company-wide employer branding strategy	SASB HC-BP-330a.1	--	Strategy: 2020 Implementation: 2023	■ Target not achieved	44
	Develop a "Pioneer Pipeline" management approach with objectives for internal and external "Pioneer Pipeline"	GRI 401/103; SASB HC-BP 330a.1	--	Strategy: 2020 Implementation: 2023	■ Target not achieved	44
	Strengthen external "Pioneer Pipeline"	SASB HC-BP 330a.1	--	2022	■ Target after 2020	44
	Strengthen internal "Pioneer Pipeline"	GRI 404-2 SASB HC-BP 330a.1	--	2023	■ Target after 2020	44
	Develop employee turnover database <sup>3</sup>	GRI 401-1 SASB HC-BP 330a.2	--	2020	■ Target achieved	45
	Design an employee development strategy for all career phases	SDG 4/8 SASB HC-BP 330a.1	--	2021	■ Target after 2020	46

1 This Sustainability Report 2020 also serves as a Communication on Progress in line with the UN Global Compact. For further information on this see [➔](#) page 22.

2, 3 Postponement of strategy to 2021 due to significant changes in core business (development of COVID-19 vaccine).

4 Comprehensive inventory carried out; data basis will be specified in 2021.

Fields of Action & SDGs	Topics & Activities	Reference to GRI & SASB	Reference to UNGC <sup>1</sup>	Deadlines	Status 12/31/2020	Page	
 <b>Attractive Employer</b>	Strengthen employee evaluation		--	2021		--	
	Continuously monitor diversity and anti-discrimination measures	GRI 406/103	6	2020 and ongoing		48	
	Ensure fair and competitive pay and benefits	GRI 102-(35-39) GRI 405-2	6	2020		49	
	Set targets and deadlines for female representation at Supervisory Board/Management Board/senior management levels	GRI 405 GCGC (2019)	6	2020		48, 49	
	Further develop company-wide SHE (occupational safety and health) policy based on existing (binding) guidelines	GRI 403-1/103; GRI 403-(6; 8-10); SASB HCO0101-(17-19)		Strategy: 2021 Implementation: 2022		49	
	Develop programs for dealing with mental stress	GRI 403-1/103		Analysis: 2020 Implementation: 2021	Analysis Implementation	50	
	Strengthen safety culture, health and well-being	GRI 403-5		2022		50	
 <b>Environment and Climate Protection</b>							
	   	Develop climate protection strategy with specific climate targets <sup>1</sup>	GRI 305	7	2020		35
		Publish corporate carbon footprint for the BioNTech Group	GRI 305	7	2020		36
		Implement an environmental management system	GRI 305/306/103	7/8/9	2021		36
		Publish a status quo and review on water, waste and pollution	GRI 305	7	2021		39, 40
		Implement an energy management system	GRI 305	7/8/9	2021		38

<sup>1</sup> In progress; finalization postponed to 2021 to adequately address new status as a commercial manufacturing company.

Fields of Action & SDG'S	Topics & Activities	Reference to GRI & SASB	Reference to UNGC <sup>1</sup>	Deadlines	Status 12/31/2020	Page
<b>Responsible Governance</b>						
	Standardize guidelines and processes	GRI 102-(16-17)	10	2020		24
	Develop an animal welfare policy based on existing guidelines	GRI 102-(16-17)/103		Review: 2020 Implementation: 2021	Review Implementation	30
	Strengthen compliance policies and target tracking	GRI 2055/206 SASB HC-BP-510a.1/2	10	2020		24
	Conduct compliance training (including defined targets)	GRI 205/206/419	10	2020		25
	Manage suppliers and service providers (standardize onboarding process, due diligence for new suppliers)	GRI 102-9/308/414 SASB HC-BP-430a.1	1-6/10	2022		25
	Eliminate occurrence of significant non-compliance related to the impact of products and services on patient safety and health	GRI 416-2 SASB HC-BP-210a.2	--	2020 and ongoing		27
	Develop a common policy on patient data protection and privacy based on existing guidelines	GRI 418/103	--	2020		30
	Eliminate occurrence of substantiated complaints regarding breach of patient data protection and loss of patient data	GRI 418-1		2020		30
	Develop data protection policy based on existing guidelines	GRI 418		2020		30
<b>Economic Success</b>						
	Establish cross-departmental working group on "Sustainable Growth & Culture"			2020		47
<b>Corporate Citizenship</b>						
	Develop a "Corporate Citizenship" concept			2020		21
	Develop a "Caring for Patients" concept			2021		21

## 3.4 CORPORATE CITIZENSHIP

BioNTech supports the principle that the Company has a responsibility as a corporate citizen. The Company meets this responsibility with its Corporate Citizenship concept, which was adopted by the Management Board in 2020. All Corporate Citizenship activities are managed by the CSR Team. The material topic “Caring for Patients” will be addressed and developed within this framework – the conceptual development is planned for 2021. In pursuing BioNTech’s Corporate Citizenship projects, the Company will focus on its business areas in order to develop and promote the skills of employees, e.g., in the area of corporate volunteering, in a targeted and effective manner. BioNTech assigns great importance to shaping social commitment in a sustainable manner and in line with its corporate values.

### Corporate Volunteering

Corporate volunteering activities were suspended in 2020 due to the COVID-19 pandemic and associated restrictions. The future development of the volunteering approach will facilitate personal, project-based and centralized activities. The BioNTech Group will build on the advanced corporate volunteering experience of BioNTech US. BioNTech US originated as Neon Therapeutics, which was acquired by BioNTech SE in 2020.

### Donation Policy

A donation strategy was developed by the CSR Team and approved by the Management Board. A policy for the BioNTech Group was developed by the Compliance Team, approved in November 2020 by the Management Board and implemented. The policy defines what constitutes a donation and outlines the corresponding approval process. Donations must fall within the scope of the defined donation strategy and policy and are evaluated on an individual basis by the Compliance Advisory Committee.

All donations are reviewed according to the following requirements:

- Donations can be made to charitable or not-for-profit organizations but not to individual or for-profit entities. Donations cannot be made to health care organizations.
- Donations to public hospitals or clinics in developing countries (especially LICs, MICs) are acceptable under strict compliance scrutiny.
- Donations cannot be received by organizations that have a parallel (business) relationship with BioNTech.
- Donations cannot be made to organizations or any affiliated organizations that in parallel provide services to BioNTech.
- Donations cannot serve the personal interest of any individual.
- Donations cannot directly/specifically serve the commercial interests of BioNTech.
- Donations can only be received by organizations that are appropriately registered or accredited under applicable local laws.



We have a responsibility as a corporate citizen.



## 3.5 INITIATIVES

### BioNTech supports the vision of the UN Global Compact

BioNTech signed the [UN Global Compact](#) on March 9, 2020 and committed to an annual progress report. The Sustainability Report 2020 also serves as a Communication on Progress in line with the UN Global Compact.

The UN Global Compact is the world's largest and most important initiative for responsible corporate governance. Based on ten universal principles and the Sustainable Development Goals (SDGs), it pursues the vision of an inclusive and sustainable global economy for the benefit of all people, communities and markets. Building on the ten principles, signatories are called upon to promote the general goals of the United Nations, in particular the Sustainable Development Goals.

By signing the Global Compact, BioNTech shows that it shares this vision and intends to implement these principles of corporate governance through BioNTech's work. The Global Sustainability Goal 3: Good health and well-being is closely aligned with BioNTech's core business. BioNTech will continuously develop the reference to the SDGs. In this report, a more systematic reference is made mainly in the CSR program tables.



### BioNTech as a signatory of the “Charta der Vielfalt” (Diversity Charter)

The [Charta der Vielfalt](#) is a German employer initiative to promote diversity within companies and institutions. The aim of the initiative is to advance the recognition, appreciation and inclusion of diversity in the working world in Germany. Signatories strive to create a working environment that is free of prejudice. All employees should be valued and feel appreciated regardless of their gender or gender identity, nationality, ethnic origin, religion or belief, disability, age, sexual orientation or identity.

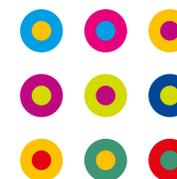
By signing this initiative, BioNTech's is committed to promoting diversity and creating an appreciative work environment at BioNTech and in the working world.

## 3.6 ESG RATINGS

ESG ratings are a valuable indicator for the continuous improvement of sustainability activities and sustainability management for BioNTech. They are a reflection of the requirements of relevant stakeholders and an important basis for the ongoing development of CSR management. The Company expects the relevance of ESG ratings to grow dynamically on the capital market.

An ESG rating for BioNTech for the financial year 2020 was not available as of the March 30, 2021 editorial deadline of this report. In early 2021, BioNTech had notified selected ESG rating agencies of its intention to publish a sustainability report on March 31, 2021. An ESG rating from ISS ESG is expected in the second quarter of 2021. BioNTech publishes its ESG rating results on its website – if and to the extent legally permissible – as soon as possible after their publication and within the scope of legal and regulatory requirements. Openness, dialogue and cooperation are important principles when engaging in dialogue with ESG rating agencies.

charta der vielfalt  
Für Diversity in der Arbeitswelt



## Responsible Governance

# Ensuring BioNTech's resilience

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### For good relationships:

We act ethically and responsibly and take all stakeholder interests into account.



Compliance Principles:

**Integrity,  
Transparency &  
Responsibility**



Principles of Animal Welfare



Whistleblower Hotline

# 4.0 Responsible Governance

## 4.1 MANAGEMENT FOR RESPONSIBLE GOVERNANCE

The Management Board and Supervisory Board work together for the benefit of BioNTech. They pursue the objective of sustainable value creation, taking into account the interests of the shareholders, the workforce and other stakeholders associated with BioNTech. These principles demand not only legal compliance but also ethically sound and responsible conduct.

All CSR-related corporate governance topics were assessed as material for the Company and for non-financial reporting. The Company and the persons acting in the corporate bodies of BioNTech are aware of their role in, and their responsibility to, society. Social and environmental factors influence the Company's success. The Management Board and Supervisory Board act in BioNTech's best interest to ensure that the potential impact (opportunities and risks) of these factors on corporate strategy and operational decisions is recognized and addressed.

Detailed information about BioNTech's Management Board, Supervisory Board, compensation and board practices can be found in the Company's Annual Report on Form 20-F, which was filed with the SEC on March 30, 2021 and is available on the [SEC's website](#). Key documents for corporate governance are also available on BioNTech's website in the [Corporate Governance section](#).

## 4.2 COMPLIANCE AND ETHICS

### Compliance

The Company has implemented a comprehensive compliance program comprised of three typical compliance program elements: prevention, detection and response.

### BioNTech's compliance program



prevent



detect



respond

#### Prevention:

- Policies and procedures (accessible to all employees)
- Campaigns to reinforce strong ethical values (the compliance principles "Integrity, Transparency & Responsibility" are part of every communication and supported by the tone at the top)
- Training and communication (due to COVID-19, personal on-site training sessions have been substituted by online videos)
- Third-party due diligence

#### Detection:

- Whistleblower hotline ("Ethics Contact Point")
- Monitoring systems and auditing
- Internal investigations

#### Response:

- Disciplinary measures resulting from investigations
- Remediation measures resulting from investigations and audits

The measures listed above are facilitated by a digital compliance platform that is provided by the service provider GAN Integrity. The platform's name is Best Practices Hub (BxP Hub). It offers a wide range of functions that support the rollout of policies, training, and monitoring activities, and features a whistleblower hotline.

Resources to further develop and implement the compliance program are being upscaled. The overall responsibility for the compliance program lies with the Management Board. The Audit Committee receives regular reports on the operation of the compliance program. In addition, measures to strengthen corporate compliance are regularly presented to and discussed by the CSR Steering Board – irrespective of the overall responsibility of the Management Board.

In addition to the core responsibilities that are borne by the Compliance Team, the Company has set up a Compliance Advisory Committee (CAC) comprised of senior leaders representing different functions such as Quality Assurance, Legal, Finance, Controlling, and Operations to address any potential compliance risk in a concerted and cross-functional manner. The CAC also plays a crucial role in the new Policy Governance model, adopted by the Company in 2020. The CAC reviews and discusses new policies and guidelines (apart from compliance policies) to ensure that they are streamlined and examined in an interdisciplinary manner. All BioNTech policies and guidelines are rolled out through the BxP Hub.

### Code of Business Conduct & Ethics

The Code of Business Conduct & Ethics was revised in 2019 to strengthen good corporate governance. The Code of Conduct applies to all BioNTech Supervisory Board members, Management Board members, directors of subsidiaries, and employees. The Code is published on the [Website of BioNTech](#). It serves as the foundation on how to behave when working for or on behalf of BioNTech. It provides an overview of the general requirements for compliance with laws, regulations and BioNTech’s internal policies. It covers topics such as human rights and international labor standards, anti-discrimination, patient safety, data protection, occupational safety, anti-corruption and fair competition. The Code is communicated to all employees and at all locations. A signature of understanding and compliance is requested from all employees. Starting in April 2021, compliance with the Code will become part of BioNTech’s employment contracts. If an employee violates the Code of Conduct, this employee may face a range of disciplinary consequences, including termination of the employment contract.



Acting with integrity is non-negotiable for BioNTech.



### Conflicts of Interest Policy

BioNTech adopted a Conflicts of Interest Policy. The Policy establishes binding procedures for potential and actual conflicts of interest. Under the Conflicts of Interest Policy, which applies to all Supervisory Board members, Management Board members, directors of Company subsidiaries and employees, board members, directors and employees are required to disclose any actual, potential or perceived conflicts of interest. If the conflict is transactional in nature and involves a Management Board or Supervisory Board member, the Management or Supervisory Board, as the case may be, with the abstention of the conflicted member, shall decide whether to approve the transaction.

**For BioNTech, it is simple:  
bribery – of anyone, at any level, at any  
organization – is never acceptable.**

### Anti-Bribery and Anti-Corruption (ABAC) Policy

BioNTech is committed to eliminating all forms of corruption, including extortion and bribery. These principles were underlined by its signing of the UN Global Compact in March 2020.

The Company has an Anti-Bribery and Anti-Corruption (ABAC) Policy in place, which is subject to an annual review (the latest version is dated November 2020). In line with this policy, BioNTech exercises a zero-tolerance policy towards corruption and bribery and prohibits any form of bribery (passive or active; indirect or direct). Each employee or consultant who provides services to the Company over a longer period signs the ABAC Policy and receives training. All contracts entered into with high-risk business partners (sales intermediaries, third parties acting on behalf of BioNTech) also include ABAC provisions.

The Company has also established a third-party due diligence process that addresses potential ABAC risks. On the basis of certain criteria, high-risk third-parties are scrutinized for potential risk. A standard mitigation measure to decrease the ABAC risk of third parties acting on behalf of BioNTech is to include an ABAC provision in the contract.

**>1,000**  
Compliance-related questions answered by the Compliance Team

**16**  
active corporate compliance training campaigns

**5**  
new corporate compliance online training videos in 2020

### 4.3 SUPPLY CHAIN AND HUMAN RIGHTS

As part of the Company's commitment to the principles set out in the BioNTech Code of Business Conduct & Ethics, the Company expects its business partners to adhere to comparable standards in their conduct (for further information see the [Website of BioNTech](#)). These standards of conduct are based primarily on the Pharmaceutical Industry Principles for Responsible Supply Chain Management of the Pharmaceutical Supply Chain Initiative (PSCI).

The Code will form part of the contracts with future suppliers and will be agreed with existing suppliers. The implementation process has not started yet.

### 4.4 PATIENT SAFETY AND CARING FOR PATIENTS

#### Patient Safety

Patient safety is the highest rated topic in BioNTech's materiality matrix of Corporate Social Responsibility (CSR). It includes all phases of the product lifecycle, from clinical development to the authorized and marketed product, as well as maintaining the highest quality standards in manufacturing, product labeling, and the disclosure of product-related risks and benefits.

#### Caring for Patients

The high rating emphasizes the safety of the patient as a human being. Compliance with the strict global regulations on patient safety is based on this understanding. It is underscored by the similarly high CSR materiality score for the material CSR topic "Caring for Patients." The Company states that patients must never be a mere object of research or a means to an end. For BioNTech, caring for patients means treating them, their families and their friends with human dignity and the utmost respect at all times. The development of a "Caring for Patients" concept is planned for 2021.



Patients must never be a mere object of research or a means to an end.



#### Management Approach to Patient Safety

BioNTech's Quality Management System ensures compliance with international guidelines encompassing clinical development, production, registration, and marketing of pharmaceuticals. These guidelines include, but are not limited to, Good Clinical Practices (GCP), Good Manufacturing Practices (GMP), Good Distribution Practices (GDP), the International Conference for Harmonization (ICH) guidelines, and Good Pharmacovigilance Practices (GVP). All processes within BioNTech or its partners that affect one of these areas are based on these principles.

The Regulatory CMC department is responsible for all regulatory matters related to BioNTech's clinical trials within the Chemistry, Manufacturing, Control (CMC) division. It ensures regulatory compliance in manufacturing as well as in the quality control of clinical trial documents. Global Regulatory Affairs is responsible for all submissions to regulatory authorities in the course of clinical trials and for obtaining regulatory approvals.

Implementation is continuously monitored by BioNTech's Quality Management. The Quality Management department ensures the quality of all products entering the market or used in clinical trials. Quality defects that could have an impact on patient safety or lead to side effects are prevented as early as possible. Thus, Quality Management is responsible for reducing risks in production and eliminating defects, impurities and contamination starting with the raw materials to the final product. It also supports the relevant quality assurance and legal standards.

#### Patient Safety in Clinical Trials

Through consistent risk-benefit management, BioNTech ensures that the benefits of drugs and therapies for patients always outweigh the risks. Long before a drug is marketed, findings from early studies are carefully analyzed and discussed with the relevant regulatory authorities. The drug undergoes a comprehensive process of research with carefully designed and controlled clinical studies. In these studies, doctors work together with patients to test a method for detecting or treating a disease. In case BioNTech does not conduct these clinical studies itself, it commissions qualified and trusted contract research organizations (CROs) to do so.

Due to the development of individualized therapies and medicine, BioNTech ensures individual monitoring of all patients in cooperation with the CROs and ensures a complete and strict chain of custody. Each individual study must be approved by a regulatory authority and at least one ethics committee.

The ethics committees are the patients' trustees. They are comprehensively involved in the study process, examining areas such as patient information and its comprehensibility, as well as the reasonableness of drug administration and treatment methods. Ethical questions that arise during a study, as well as systematic questions affecting patients, are coordinated by or with the ethics committee(s).

The regulatory authority and ethics committee monitor and support each study and its data from approval to completion. All parties involved – BioNTech, CROs, the authorities and the ethics committees – ensure that the well-being and safety of the patients are safeguarded. If there is a risk to a patient at any point in this process, the study can and must be terminated.

Patients who have questions or concerns about studies or research can contact the BioNTech Patient Hotline on the [Website of BioNTech](#) at any time.

**If there is a risk to a patient at any point in the process, the study can and must be terminated.**

BioNTech has not had any FDA or other government-sponsored inspections related to clinical trial management or pharmacovigilance that has resulted in corrective regulatory action.

### Patient Safety for the COVID-19 Vaccine

Like any other pharmaceutical product, a potential vaccine must go through stringent clinical testing and be manufactured consistently and reliably according to high standards. BioNTech received German regulatory authority approval to manufacture mRNA under GMP in 2011 and has since been producing mRNA for clinical testing, including the entire clinical supply for the COVID-19 mRNA vaccine.

BioNTech's CEO Ugur Sahin, together with eight other biopharma CEOs, pledged on September 8, 2020, to continue to make the safety and well-being of vaccinated individuals the top priority in the development of the first COVID-19 vaccines. The [document](#) was signed by the CEOs of AstraZeneca, BioNTech, GlaxoSmithKline, Johnson & Johnson, Merck (known as MSD outside the United States and Canada), Moderna, Novavax, Pfizer and Sanofi.

With the market introduction of the Pfizer/BioNTech COVID-19 vaccine, the number of patients treated with it will continue to increase substantially. As of December 31, 2020, BioNTech's mRNA vaccine had been granted a conditional marketing authorization, emergency use authorization or temporary authorization in more than 40 countries worldwide (see also "Special: BioNTech insight to patient safety" on [page 28](#)).

Rare or potentially serious side effects could occur that remained undetected during clinical development. Therefore, BioNTech's Pharmacovigilance department, together with BioNTech's partners at Pfizer, continuously monitors the benefit-risk profile of the COVID-19 vaccine.

### Monitoring Vaccine Safety

Regulatory authorities conduct inspections periodically to see whether BioNTech is complying with pharmacovigilance regulations. In Germany, these inspections are carried out on behalf of the European Medicines Agency (EMA) by the German Federal Institute for Drugs and Medical Devices (BfArM), the Paul Ehrlich Institute (PEI), and the German Federal Institute for Vaccines and Biomedical Products. Inspections by the EMA or other regulatory authorities did not take place in 2020. BioNTech additionally conducts internal audits as well as partner audits to guarantee compliance with international legislation.

### Product Information

A global [Pfizer and BioNTech website](#) provides the most up-to-date access to country-specific product information. The product information for the Pfizer-BioNTech COVID-19 vaccine educates physicians and patients on the correct use of the vaccine and enables informed treatment decisions.

This information contains all of the essential details describing the COVID-19 vaccine in accordance with legal requirements, such as dosing, administration, scheduling,

“BioNTech's top priority: the safety and well-being of vaccinated individuals.”

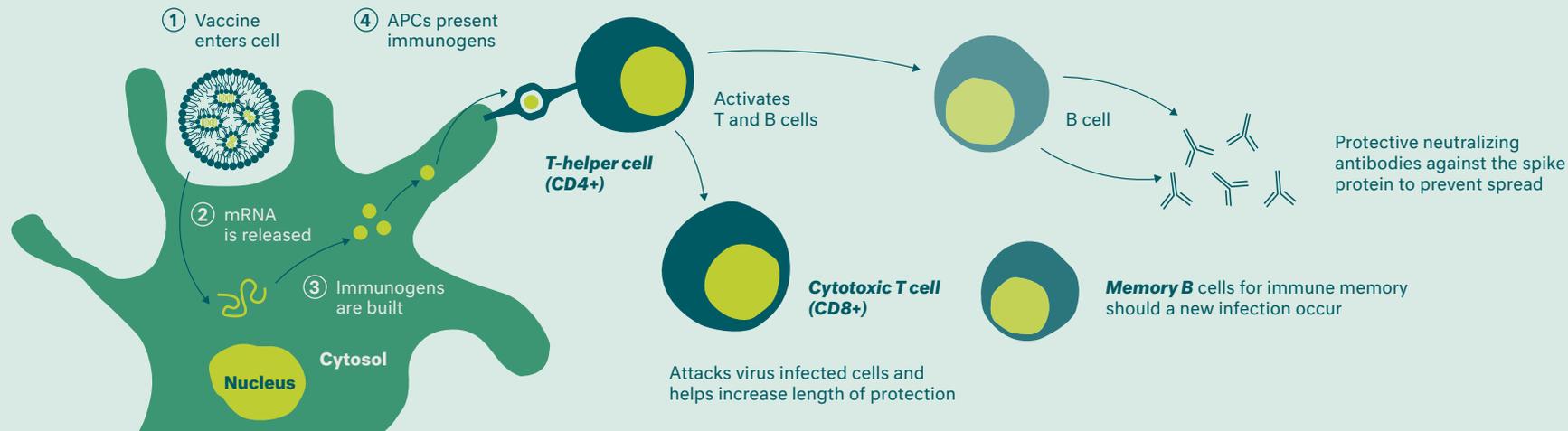
”

storage, handling, contraindications, warnings and precautions, as well as possible side effects. It also includes the mandatory requirements for vaccine administration under the emergency use authorization. BioNTech submits changes to the package inserts to the relevant regulatory authorities for approval in accordance with legal requirements. In 2020, there was no incident of non-compliance with the legal requirements for the labeling of medicinal products or pharmaceutical products.

### Training

To raise general awareness for patient safety, all BioNTech employees must complete mandatory training on the fundamentals of pharmacovigilance once a year. The training enables BioNTech employees, as well as the relevant BioNTech contractors, to identify safety-related information. All employees involved in the safety and quality of BioNTech's active ingredients receive regular training in accordance with internationally applicable rules. The requirements of Good Pharmacovigilance Practice (GVP) are complied with at all times.

## How mRNA-based prophylactic vaccines against infectious disease work

**mRNA VACCINE-MEDIATED SIDE EFFECTS VIA GENOMIC INTEGRATION HIGHLY UNLIKELY.**

The COVID-19 vaccine was developed by BioNTech in partnership with Pfizer as a contribution to the worldwide efforts to address the COVID-19 pandemic and conforms to high scientific and ethical standards. The vaccine is based on messenger ribonucleic acid (mRNA) and is designed to generate protective immunity against the virus. It does not contain any live virus or its components. Nor does it contain any DNA.<sup>1</sup> Rather, the mRNA of the vaccine serves as the “blueprint” of a viral protein. This blueprint instructs human cells to temporarily produce and present these protein fragments of SARS-CoV-2 to immune cells, so that they “learn” and “remember” how to recognize and attack the virus. These “educated” immune memory cells can prevent the virus from entering cells and eradicate it from the body.<sup>2,3</sup> They ensure a quick and specific immune response upon exposure to the actual virus, thereby blocking its spread within the body and to other individuals.

The use of the COVID-19 vaccine has been authorized in multiple countries after rigorous and successful clinical testing of its safety and efficacy.<sup>4</sup> As this is the first mRNA vaccine ever approved for human use, several questions have been raised regarding its long-term effects, including whether the vaccine’s mRNA could cause any harmful long-term effects via integration into the human DNA thereby altering the genetic information. However, there is no biologically likely scenario for such events to take place. In order for the vaccine mRNA to integrate into the DNA and cause harm, the vaccine mRNA would need to (i) be reverse-transcribed into DNA, (ii) enter the nucleus, (iii) integrate into the genome, and thereby (iv) interfere with the regulation of specific genes. Each of these prerequisites is highly unlikely, and all of them happening at once is even less likely, as is further substantiated below.

i. mRNA and DNA have different chemical structures, and mRNA cannot directly integrate into DNA.<sup>5</sup> For the information carried by an mRNA to be incorporated into the human DNA, the mRNA would first have to be reverse-transcribed into DNA. Genes are the basic units of hereditary information that can be passed on from parent to offspring or from a cell to its daughter cells during normal processes of growth and regeneration. The flow of genetic information in the human cell is much like the flow of a river, which cannot normally be turned around. Genes are stored in highly stable chromosomal DNA and can be transcribed into mRNA, which serves solely to deliver the genetic code to the protein synthesis machinery. Unlike DNA, each mRNA molecule only exists for the limited amount of time that is needed for the cell to decipher the code and produce proteins.<sup>5</sup> Proteins serve as key tools of a cell and are involved in all vital processes, such as cell motility, signal transmission and metabolism. Enzymes capable of reverse transcription originate either from viruses such as the human immunodeficiency virus or from relics of ancient viral infections that are usually not present or active in a healthy person.



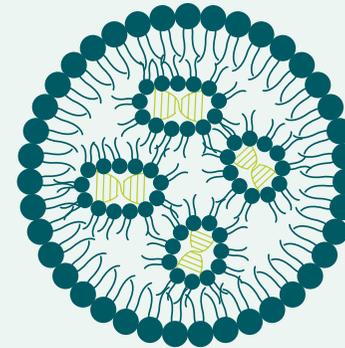
**Overall, based on current biological knowledge, there is no likely scenario for the mRNA vaccination to cause changes to the genome or potentially harmful effects related to integration into the genome.**



**ii.** In the extremely unlikely case that vaccine mRNA would be reverse-transcribed into DNA, an integration into the genome would require the transport of the RNA into the nucleus. The nucleus serves as a vault securing the genomic DNA from any outside influence. Exit and entry to the nucleus are tightly regulated, and normally only certain smaller molecules such as ions and proteins are able to enter efficiently. There is no endogenous cellular mechanism to allow access of DNA or mRNA into the nucleus and thus, this is rare and happens only under specific circumstances such as cell division.<sup>6</sup>

**iii.** Integration into the genome is a highly inefficient process that requires the intruding DNA to have sequences matching the human DNA, or specific signal codes, of which neither is present in reverse-transcribed vaccine mRNA. Massive amounts of mRNA are continuously produced in the cell. And yet, none of that mRNA usually integrates into the genome. Consequently, even if reverse-transcribed vaccine mRNA made it into the nucleus, integration into the DNA genome is, again, highly unlikely.

**iv.** The reason people are concerned about foreign DNA being integrated into the DNA genome is the potential to promote oncogenesis. The process of DNA integration per se can potentially activate genes that promote or inactivate genes that prevent cell division, thereby promoting tumor formation. Given the sheer size of the genome, it is highly unlikely that DNA integration damages a cell in such a way. Most of the human genome consists of DNA sequences that do not control the structure or function of any genes.<sup>7, 8</sup> Therefore, the overwhelming majority of insertions has no significant consequences.<sup>9, 10</sup> For example, more than 90% of the human population is infected with the Epstein Barr virus (EBV), a virus that is known to integrate into the DNA genome; nonetheless, EBV-related cancer is very rare.<sup>11</sup>



#### REFERENCES

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## 4.5 PATIENT PRIVACY

When patients, customers or other individuals do business with BioNTech, they entrust their personal information to the Company. Having access to this information is vital for BioNTech's business and the advancement of science. BioNTech takes responsibility for ensuring that personal information is collected, used and processed only for legitimate business purposes while protecting the data from any possible misuse, inappropriate disclosure or loss.

**We ask each patient for their consent and tell them how we use their data in the study.**

When processing the personal data of employees, customers, patients, business partners, other individuals and stakeholders in the conduct of its business, BioNTech is responsible for ensuring compliance with the data protection laws applicable to BioNTech. These data protection laws include, for example, the European Union General Data Protection Regulation ("GDPR") and other laws in the various countries where BioNTech operates. These laws apply to any activity that involves personal data, including but not limited to market research, clinical studies and other research with human subjects, consulting and service arrangements, and the processing of financial transactions.

The BioNTech Data Privacy Policy sets out the requirements and standards applicable to BioNTech for the processing of personal data throughout the course of BioNTech's business activities and aims to ensure compliance with data protection laws.

In addition to the internal data privacy policy reflecting the GDPR principles and other applicable data protection laws, BioNTech's commercial (consumer) data privacy notice can be retrieved at the [Website of BioNTech](#). It applies to all personal data of natural persons and business partners, such as consumers, contractors, customers, study participants, and employees of business partners, as well as to parties interested in establishing a business relationship with BioNTech.

## 4.6 ANIMAL WELFARE

BioNTech aspires to improve the health of people worldwide by harnessing the full potential of the immune system. The Company's mission is to develop the next generation of immunotherapies for cancer and other serious diseases through scientific rigor and operational excellence.

The use of animal testing remains a small yet important part of drug research and development – and therefore in fulfilling the Company's mission. In order to ensure the highest possible standards of animal welfare, BioNTech is committed to limiting the use of animal testing to a minimum and supports the substitution with alternatives wherever feasible. In the CSR materiality analysis, animal welfare was identified as a material CSR issue for BioNTech. In accordance with Global Reporting Initiative (GRI) requirements, the Company reports on its position and commitments concerning animal welfare and how it ensures adherence to these standards in its management and daily operations.

### Our Commitment

BioNTech is morally and legally obligated to ensure the quality, safety and efficacy of its vaccines and therapeutics. While the Company is committed to developing and implementing non-animal methods, animal studies remain essential in drug research and development, as some questions can be only partially addressed in vitro (e.g., with cell culture systems) or in silico on computer models.

While acknowledging that animal testing is an integral part of the drug research and development process, BioNTech is fully committed to ensuring that tests are kept to a minimum and in accordance with the highest animal welfare standards. In its testing practices, BioNTech is taking steps to meet the legal and regulatory requirements for animal studies. The Company is strongly committed to the three Rs (Replacement, Reduction, Refinement) – and has added a fourth dimension: Responsibility.

- **Replacement:** Whenever possible, non-animal testing methods are preferable to using animals. BioNTech's in vitro test systems are based on standard cell cultures e.g., derived from cancer entities. Researchers use patient material (e.g., biopsies and blood donations) for test systems, allowing them to decode the complex interplay of the immune system in health and disease and use this knowledge for drug development.
- **Reduction:** The number of animals required to obtain the necessary information should be kept to an absolute minimum. For example, isolated murine or human tissue slices can be used to predict the impact of a substance on toxicity and cell activation.

- **Refinement:** All research methods should be refined to promote animal welfare and prevent or minimize the potential pain, suffering and distress for the animals. BioNTech never causes pain or discomfort for the sake of saving labor, time or money.
- **Responsibility:** BioNTech takes responsibility for all animals used in research and development by ensuring that all staff involved in these processes continue to be educated on how to implement the three Rs above and are well-equipped to uphold the Company's high animal welfare standards.

### The 4 R Principles for Animal Welfare



Replacement



Reduction



Refinement



Responsibility

### Focusing on the Fourth R: Responsibility

BioNTech feels a deep responsibility to continuously improve animal welfare – an effort that is closely coordinated with the CSR Steering Board. Technicians, scientists and veterinarians regularly conduct retrospective analyses of experiments with an eye to animal welfare, a process that includes evaluating scientific data and establishing guidelines for animal protection.

BioNTech is also setting up an ongoing training program for those involved in animal testing. The program will be continuously updated and therefore always cover the latest insights and best practices when it comes to biology, behavior and handling methods. Theoretical training is complemented by practical instruction and hands-on experience whenever possible.

### Strict Test Planning

Every study involving vertebrate animals must be announced and reported to the regulatory authorities to ensure transparency in research activities and clinical drug development. An individual animal testing plan must be drawn up for all experiments and approved by the responsible regulatory authorities in cooperation with an independent ethics commission on animal welfare. The entire process is monitored strictly by several relevant authorities and internal bodies.

At BioNTech, pathways and processes are established to check suitable drug candidates thoroughly before animal testing is initiated, all in accordance with the principle of limiting animal studies to the most promising substances and targets. To reduce the Company's use of animals, BioNTech's researchers use computer models and a range of in vitro test systems (e.g., with cell cultures, murine or human cell compartments, or isolated tissues of interest) during the planning and preparation processes. This ensures that studies involving animals take place only when absolutely necessary.

### Management and Supply Chain

In accordance with European and national law and the European Commission's "Ethics for Researchers," it is BioNTech's responsibility not to inflict pain, suffering or harm on any animal without reasonable justification while limiting adverse effects as much as possible.

Animal studies during preclinical research are conducted in state-of-the-art animal facilities with housing conditions that are in strict accordance with Annex III of Directive 2010/63/EU. The Company helps ensure animal welfare with a specialized management team and the strict implementation of animal welfare guidelines. It also maintains a dedicated and regularly trained staff, monitors the work of animal welfare officers and veterinarians with routine inspections, and openly and transparently cooperates with authorities.

BioNTech's suppliers are also expected to comply with the same rules in the Supplier Code of Conduct. In the General Terms and Conditions of Purchase, BioNTech reserves the right of extraordinary termination if animal welfare standards are violated.

In close coordination with the CSR Steering Board, a cross-functional working group has begun a comprehensive review of BioNTech's existing measures to further strengthen its animal welfare policy – a process that will be completed in 2021.

## 4.7 GOVERNMENT RELATIONS

### Tax Compliance

BioNTech ensures that it meets its tax obligations in full and on time in all countries in which it operates. The Company also makes certain that it effectively monitors tax-relevant business processes in a risk-oriented manner. It ensures that it meets its tax obligations by implementing suitable measures. BioNTech does not perform tax-motivated transfer mispricing. In all tax matters, BioNTech cooperates with the relevant tax authorities in a trustworthy and transparent manner. This is part of the mandatory Code of Business Conduct & Ethics.

### Financial Assistance

#### Governments Grants

In the fiscal year 2020, BioNTech received a government funding commitment for government grants totaling €375.0 million. The commitment was issued on September 15, 2020, as part of an initiative of the German Federal Ministry of Education and Research (BMBF) to support the accelerated development of SARS-CoV-2 vaccines. Of this amount, €326.9 million was drawn down during the year ended December 31, 2020. The portion of the grant that related to expenses incurred by BioNTech amounted to €238.9 million and is recognized as other operating income. The portion that was received and will compensate BioNTech for future expenses has been deferred and is presented as a government grant in the amount of €88.0 million in the consolidated statements of financial position. €48.1 million of funding remains available to the Company for further drawdowns, subject to drawdown conditions during the year ended December 31, 2021. BioNTech uses the milestone-based BMBF funding to support its contribution to the Company's mRNA vaccine program BNT162 that is being co-developed with its partners

Pfizer Inc. and Fosun Pharma. The grants are used for the expansion of vaccine development and manufacturing capabilities in Germany, as well as for increasing the number of participants in late-stage clinical trials. Less than 10% of the funding has been dedicated to the expansion of manufacturing capabilities in Germany. The BNT162 vaccine program is one of three programs supported by the BMBF initiative, which will provide a total of up to €750 million to its funding recipients.

#### Loans from State-Supported Banks

The European Investment Bank (EIB) and BioNTech concluded a €100 million debt financing agreement, consisting of two tranches of €50 million each on June 11, 2020, to support the development of the Company's COVID-19 vaccine program. The financing is being used to expand BioNTech's manufacturing capacity to facilitate the rapid supply of the vaccine worldwide in response to the pandemic. The Company had drawn down €50 million of these funds by December 21, 2020.

#### Special Non-Governmental Grants

On November 25, 2020, BioNTech and the Bill & Melinda Gates Foundation (BMGF) signed a grant agreement under which BMGF provides BioNTech a COVID immunotherapy and pandemic grant supporting the development of a COVID-19 therapeutic approach.

#### Political Contributions

BioNTech does not make monetary contributions to political parties or affiliated political organizations. The same applies to initiatives that support the objectives of a political party's candidacy for public office. In addition, the Company does not make monetary contributions to influence in any way the election of a representative to public office or a candidate for public office.



BioNTech does not make monetary contributions to political parties or affiliated political organizations.



#### Advocacy

Due to the high sociopolitical relevance of BioNTech's COVID-19 vaccine, the Company is experiencing increasing interest in its positions in the political realm. Where necessary, BioNTech has presented its positions and views in direct dialog with politicians. In early 2021, the Company began strategically and operationally bundling its public affairs activities into an independent function. BioNTech aims to promote constructive exchange with its political stakeholders and advance the vision of fighting infectious diseases and cancer through the development of novel therapies.

## Environment & Climate Protection

# Creating value within planetary boundaries

5.1 BioNTech's Impact on the Environment	34
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5.5 Waste	40
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For future generations:

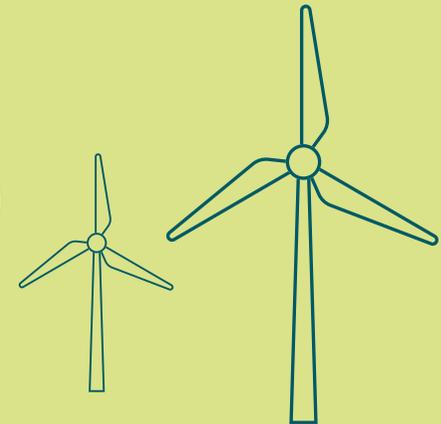
We follow our successful path in a Paris-aligned and environmentally conscious way.

**Our aim: climate neutral by 2030.**

Up to

# 92%

of total energy consumption will be covered by renewables in 2021



# 2.35

**Emissions per employee<sup>1</sup>**  
(Scope 1, 2)



# 3.18

**Emissions per employee<sup>1</sup>**  
(Scope 1, 2, 3)

<sup>1</sup> t CO<sub>2</sub>e in 2020 per full-time equivalent (FTE)

# 5.0 Environment & Climate Protection

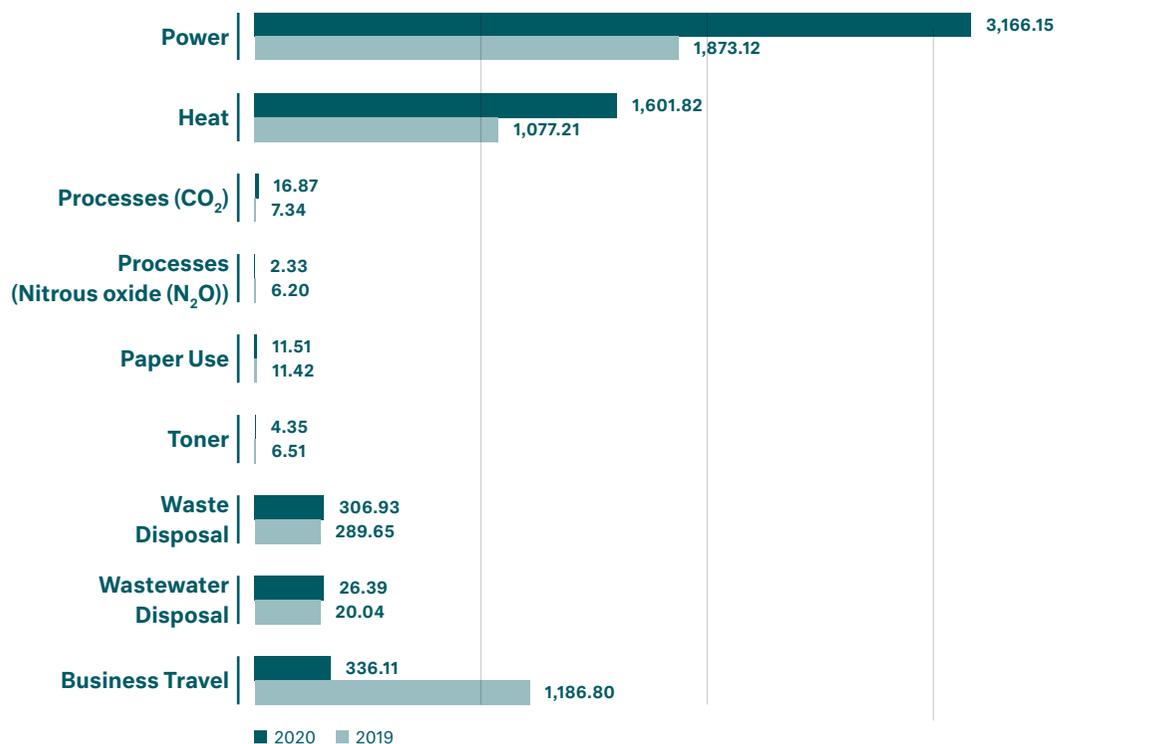
## 5.1 BIONTECH'S IMPACT ON THE ENVIRONMENT

As a research-based and commercially producing biotech company, BioNTech and the work that it does have an impact on the environment. Production processes and the

operation of research and development laboratories result in energy need, consumption of raw and auxiliary materials and the generation of waste. Additionally, personal interactions with other researchers, collaborators and business partners are essential. Therefore, many of BioNTech's business activities require business travel. The

### Emissions split by sources (Scope 1, 2, 3)

Emissions in t CO<sub>2</sub>e



highly regulated safety requirements in the biotech industry present special challenges in environmental protection, e.g., in waste and water management. BioNTech's planned major infrastructure and construction projects also have a significant impact on the environment and the local area.

The CSR materiality analysis revealed two topics for the field of action "Environmental and Climate Protection." The relevance of the topic "pollution & waste" was rated as very high, while the topic "climate protection" was rated as material. BioNTech is focused on minimizing its environmental impact whilst balancing compliance with the industry's strict regulations.

## 5.2 GROUP ENVIRONMENTAL MANAGEMENT

BioNTech was founded in 2008. For more than ten years, the Company operated as a research and development company with small scale production for clinical trials only. With increasing organic and inorganic growth and commercial vaccine production starting in 2020, the requirements for environmental management have increased. With this, the corporate environmental management of the BioNTech Group is evolving.

The essential responsibility for the environmental management of the BioNTech Group lies within the SHE Management department (Safety, Health and Environmental Protection).

The scope of SHE Management includes, among others, environmental and climate protection, including wastewater and waste management, energy management and energy audits, occupational health and safety, plant and process safety, as well as biological safety. Group-wide policies, guidelines and operating instructions on these

topics are continuously developed, improved and monitored. Compliance with all relevant environmental, health and occupational safety laws and regulations is assured. SHE Management accompanies the construction of new technical systems and the introduction of new processes and monitors their compliance with all relevant requirements. To this end, dialogs are held with authorities, and external audits are supported.

When acquiring new sites or starting new infrastructure and construction projects, detailed due diligence procedures are performed. The Company strives for the best available techniques in the design of buildings, laboratories, offices and company premises and their equipment under environmental aspects.

SHE Management carries out its own risk assessments and, in liaison with the CSR Team, contributes to group-wide risk management. Potential risks are identified, evaluated and qualified or financially quantified within defined criteria, and appropriate measures are taken if necessary.

The Company is developing an environmental management system for the BioNTech Group that consists of the following elements:

- A Global Climate Protection Strategy with concrete emission targets, measures and KPIs for the approved target of climate neutrality by 2030, including the further development of CO<sub>2</sub>e reporting and an extended and more detailed Scope 3 inventory for the corporate carbon footprint and a product carbon footprint.
- Globally coherent ISO 50001 certified Energy Management and ISO 14001 certified Environmental Management Systems with targets, measures and KPIs.

- Optimization of the existing data on water and waste through a risk-based assessment.
- Development of a specific BioNTech standard for sustainable construction and infrastructure projects, taking into account biodiversity.

### 5.3 CLIMATE PROTECTION

There is consensus among the scientific community that humans are the main cause of today's climate change. If humanity fails to limit global warming to 1.5°C, severe consequences must be expected for humanity and nature at large around the world.

BioNTech supports the legally binding international treaty on climate change ("Paris Agreement"), adopted at the end of 2015 by the 21st Conference of the Parties (COP) under the Framework Convention on Climate Change (UNFCCC). In its climate policy target of the CSR Steering Board, the Company declares its intention to be climate neutral by 2030 at the latest, despite growth and while maintaining the highest standards of quality in research and development, work and production. Emissions are to be avoided where possible, continuously reduced and, as a final step, unavoidable emissions transparently compensated through authorized projects under the "Gold Standard Foundation" or comparable programs.

The carbon footprint and the Greenhouse Gas Emission Intensities (Scope 1, 2 and 3) are currently the performance indicators relevant for control. The climate protection target and the indicators are to be reviewed and further developed in accordance with the strategic objectives as part of a climate protection strategy yet to be developed.

In its 2019 annual report, BioNTech announced the development of a climate protection strategy by the end of 2020. Due to the development, production and marketing of the COVID-19 vaccine, the extent of which could not be predicted at the time of reporting, a new status as a commercially producing company was achieved. The development of the climate protection strategy was therefore extended to 2021 in order to appropriately take the current corporate developments into account.



**BioNTech  
intends to be  
climate neutral  
by 2030  
at the latest.**



### Carbon footprint

**+7%**

Total emissions in t CO<sub>2</sub>e



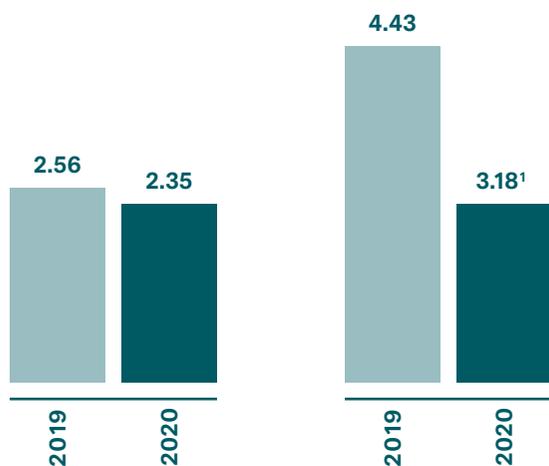
### Emission intensity

Emissions per employee (FTE) in t CO<sub>2</sub>e (Scope 1, 2)

Emissions per employee (FTE) in t CO<sub>2</sub>e (Scope 1, 2, 3)

**2.35**  
2020

**3.18**  
2020



### Greenhouse Gas Emissions

BioNTech accounts for its greenhouse gas emissions in accordance with the internationally recognized standards of the GHG Protocol. All GHG emissions calculations were externally reviewed by an external consulting firm. The data quality for the Corporate Carbon Footprint 2020 assessment was predominantly “very good” at all sites apart from “medium” data quality in the areas of waste and heating in one subsidiary.

BioNTech’s CO<sub>2</sub>e footprint in 2020 was 6,179 metric tons CO<sub>2</sub>e (2019 baseline: 5,801 metric tons CO<sub>2</sub>e). In the balance sheet for 2019, a value of 113 metric tons CO<sub>2</sub>e was not included in the waste sector due to a calculation error. In relation to the total emissions (reported 5,688 metric tons CO<sub>2</sub>e), this results in a share of 1.99%. In this report and on our updated online factsheet (3/2021), the value for 2019 is shown with the corrected value.

GHG Emission Intensity 1 (Scope 1 & 2 emissions from electricity and heat generation divided by FTEs) was 2.35 in the financial year 2020 (2019: 2.56); GHG Emission Intensity 2 (Scope 1 & 2 emissions from electricity, heat generation plus Scope 3 emissions from upstream process

chain divided by FTEs) was 3.18 in the financial year 2020 (2019: 4.43). The main reason for the slightly reduced Emission Intensity 1 in 2020 compared to 2019 appears to be the lower increase in direct emissions from in-house heat generation (increase of 16%) relative to the stronger increase in FTEs from 1,310 in 2019 to 1,941 in 2020 (increase of 48%). This will be assessed in the course of implementing a climate strategy and climate risk management.

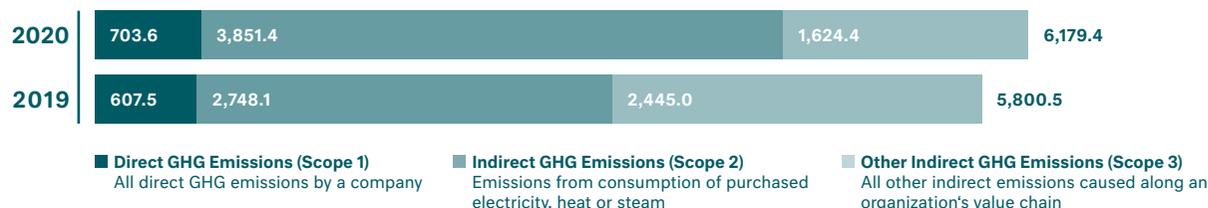
The reduced business travel emissions (Scope 3) due to the COVID-19 travel restrictions and a strong increase in FTEs were the main reasons for the significantly reduced GHG Emission Intensity 2 in 2020. In Q4 2020, the CSR Steering Board instructed the responsible departments and the CSR Team to work together to revise the existing BioNTech travel guidelines, taking into account the Company’s environmental and climate protection targets.

### BioNTech’s Corporate Carbon Footprint

The “operational control” approach was chosen by BioNTech to consolidate GHG emissions. Under the control approach, a company accounts for 100% of the GHG emissions from operations over which it has control.

### Carbon footprint in the value chain

Emissions in t CO<sub>2</sub>e



■ **Direct GHG Emissions (Scope 1)**  
 All direct GHG emissions by a company

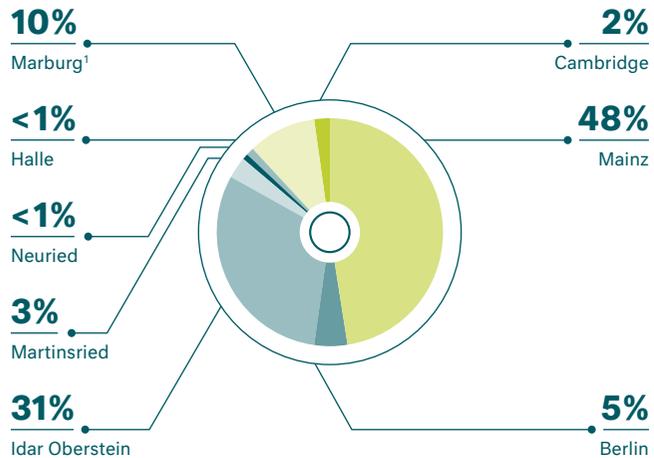
■ **Indirect GHG Emissions (Scope 2)**  
 Emissions from consumption of purchased electricity, heat or steam

■ **Other Indirect GHG Emissions (Scope 3)**  
 All other indirect emissions caused along an organization’s value chain

<sup>1</sup> Impacted by reduced business travel during COVID-19 restrictions.

### Emissions split by location

Emission in t CO<sub>2</sub>e



Total emissions in 2020: 100% = 6,179.42 t CO<sub>2</sub>e  
 1 November and December 2020 (period of affiliation with Group)

Using this approach, the Corporate Carbon Footprint (CCF) includes the Company's seven German sites (Mainz, Berlin, Idar-Oberstein, Martinsried, Neuried near Munich, Halle (Saale), and Marburg) and BioNTech US in Cambridge, USA.

Significant changes to the CCF resulted from the acquisitions of the new sites in Halle (Saale), Marburg and Cambridge (USA). The emissions attributable to BioNTech Manufacturing Marburg GmbH only for the months of November and December 2020 (time of affiliation in 2020) accounted for 10% of the BioNTech Group's total 2020 emissions. The Company expects the emissions volume for the financial year 2021 to increase due to the start of production of the COVID-19 vaccine in Marburg.

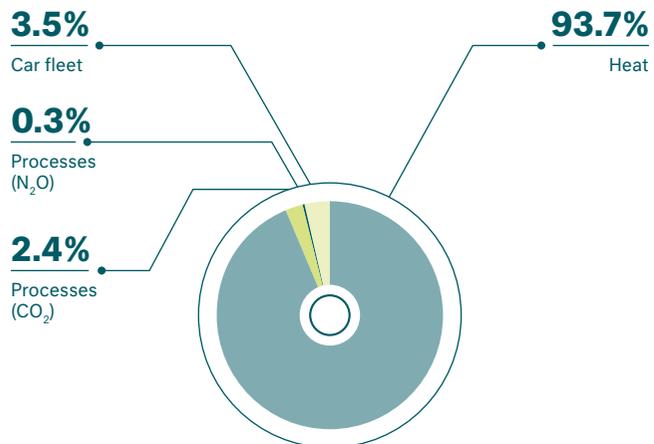
### Dual Reporting of Electricity Emissions

The GHG Guidelines for calculating Scope 2 emissions state that electricity emissions must be calculated using a dual structure of "market-based accounting" and "location-based accounting." This means that two values must be reported for electricity-related Scope 2 emissions:

- **location-based accounting:** Calculation based on the national grid average, regardless of which electricity tariff is purchased.
- **market-based accounting:** Calculation based on the self-selected tariff. In 2020, this is relevant due to the green electricity contracts of Berlin JPT Peptide Technologies GmbH.

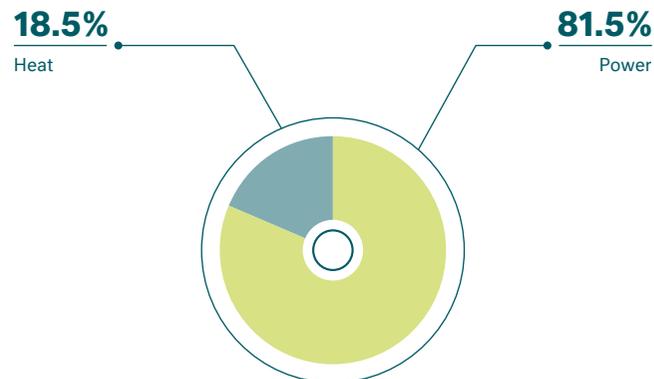
Without calculating the specific CO<sub>2</sub>e emission factors for renewable ("green") electricity, the total amount of CO<sub>2</sub>e would add up to 6,583 metric tons (for further information, see → page 54).

### Direct GHG Emissions (Scope 1)



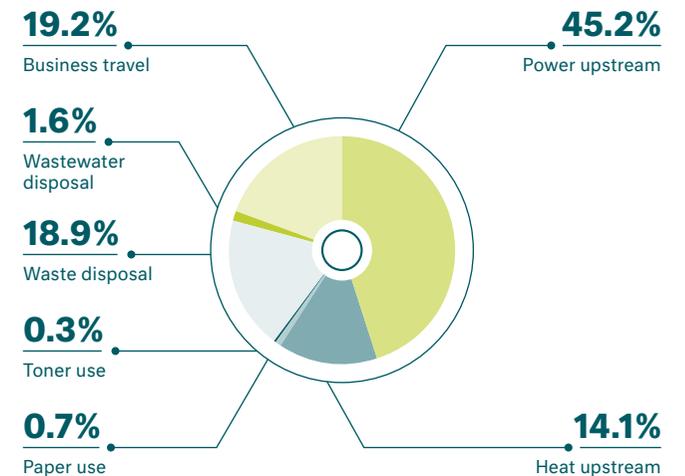
Total emissions in 2020: 100% = 703.64 t CO<sub>2</sub>e

### Indirect GHG Emissions (Scope 2)



Total emissions in 2020: 100% = 3,851.41 t CO<sub>2</sub>e

### Other Indirect GHG Emissions (Scope 3)



Total emissions in 2020: 100% = 1,624.37 t CO<sub>2</sub>e

### Energy Management

Improving energy efficiency and reducing energy consumption is a high priority for climate protection. BioNTech pursues the implementation of energy efficiency in the BioNTech Group and strives to reduce energy consumption and the associated greenhouse gas emissions. BioNTech plans to introduce an energy management system at its locations according to the international energy management standard ISO 50001. The Company will carry out a group-wide energy audit according to DIN EN 16247-1, which will serve as the starting point for the energy management system and is intended to identify opportunities and risks.

### Energy Data

The majority of energy is consumed for heating the premises and providing electricity to the research and development processes and laboratory work at the Company's locations. Due to the acquisition of new sites in 2020 (Cambridge, USA: BioNTech US; Halle (Saale), Germany: BioNTech Delivery Technologies GmbH, Marburg, Germany: BioNTech Manufacturing Marburg GmbH) and the increasing number of employees, total energy consumption grew by 29%. Through the new acquisitions and construction of new buildings, BioNTech expects total energy consumption to grow in the future.

Despite its growth, BioNTech's energy intensity decreased by 13% in 2020 (8.78 MWh/FTE) compared to 2019 (10.12 MWh/FTE). The energy audit planned for 2021 will provide information on the causes of this development. In order to meet the objective of climate neutrality in growth-oriented scenarios, economic growth and energy consumption must be decoupled from BioNTech's CO<sub>2e</sub> emissions.

### Tariff Switches in 2021

With 75.9%, fossil energy sources and nuclear energy dominated the energy mix used by BioNTech in 2020 (see Table "Energy by Source" on [page 53](#)). They are responsible for a significant share of BioNTech's CO<sub>2e</sub>.

### Energy consumption within the BioNTech Group

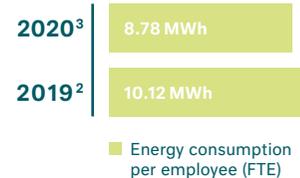
(Change from 2019 to 2020)



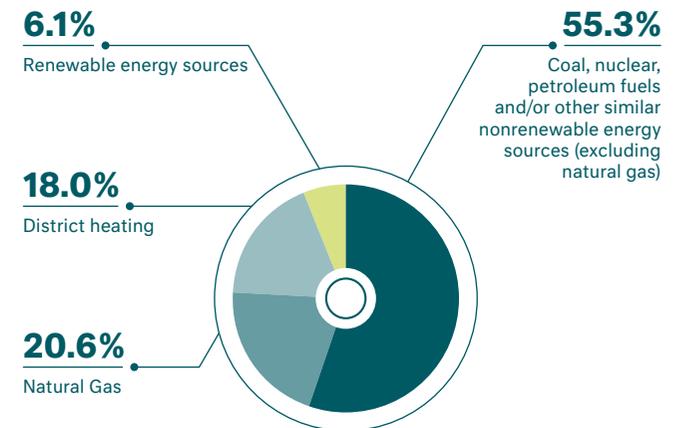
Energy consumption<sup>1</sup>



Energy intensity



### Energy use by source in 2020



Total energy consumption in 2020: 100% = 17,047 MWh

1 For detailed data see [page 53](#).

2 For 2019, only the data for the Berlin, Idar-Oberstein, Mainz, Martinsried and Neuried locations are reported.

3 Further locations were added in 2020: Cambridge (USA), Halle (Saale) and Marburg (since November 2020).

## Use of Green Energy in 2021



As of January 1, 2021, BioNTech began switching its energy contracts (electricity and heat) under direct contractual control to tariffs with renewable electricity and climate-neutral natural gas. In the course of this changeover, up to 92% of the total energy consumption (based on the total energy consumption in 2020) will be switched to energy sources that have a climate-neutral effect for BioNTech either directly or through CO<sub>2</sub>e offsets. The remaining 8% relate to energy use under supply agreements to which BioNTech has no direct access. The Company plans to hold talks with suppliers in 2021 to continue its switch to climate-friendly tariffs.

### Construction Projects

For BioNTech, sustainability and climate protection are of great importance for new construction projects. LEED (“Leadership in Energy and Environmental Design”) certification is sought in order to optimize building energy efficiency as much as possible, thereby minimizing the environmental and social impact. The American LEED model is an internationally recognized certification system used worldwide. It defines standards for design, construction, operation and maintenance of green buildings to be more environmentally responsible, use resources more efficiently and build more sustainably. The Company strives to earn the best possible certification possible with the given infrastructure.

## 5.4 WATER AND EFFLUENTS

Climate change increases uncertainty about water availability and leads to an increase in extreme events such as droughts and floods. The number of areas in which water is scarce is increasing worldwide. Legal and regulatory requirements for water protection are continuously tightened.

According to the German Federal Environment Agency (the Umweltbundesamt), there is no water stress in Germany so far. Despite the overall sufficient water supply, there are regional differences in water availability. This was evident in 2018 and 2019. In some places, there have been local or regional shortages. Further consecutive dry summers with additional low precipitation in winter would, in any case, have a negative impact on water availability. Water supply and water-related use, such as commercial water transportation, may be affected. The World Wildlife Fund (WWF) points out that while Germany itself has sufficient water resources, global production and supply chains are already importing water risks.

With the development of commercial production at BioNTech, the management of water as a natural resource is considered a relevant task for sustainable development and the Sustainable Development Goals (SDGs). According to BioNTech’s CSR materiality analysis, the topic “Pollution & waste” is not material, but of very high importance. The objective of the Company’s environmental management is to ensure sustainable water management. As a first step, this means ensuring that the condition of the water will not be adversely affected.

Access to pure and affordable freshwater is crucial for and could affect BioNTech’s facilities or suppliers in the future. The Company expects the issue of water scarcity to become more relevant. As part of corporate risk management, these potential risks are to be carefully identified and evaluated – also in terms of their potential longer-term impact.

### Water Withdrawal

BioNTech operates only in countries where the percentage of the population without access to improved drinking water sources is low (<2%), according to the water risk mapping tool Aqeduct, from the World Resources Institute.<sup>1</sup> The Company monitors its water consumption on a yearly basis, using the water bills from each site.

### Water consumption

in cbm



BioNTech’s water consumption comparing 2020 to 2019 shows a sharp increase of 68.3%. Because of BioNTech’s considerable expansion in 2020, which included increasing its staff, laboratories and offices, and opening up and acquiring new sites, the figures shown above are not comparable. The data does highlight however the need for focused monitoring of the issue as well as the potential risks to the environment and BioNTech in the future.

### Wastewater Effluents

Similar to its monitoring of water consumption, BioNTech also closely monitors the discharged wastewater effluents. Apart from usual sanitary wastewater from offices and other administrative establishments, wastewater is generated in the Company’s research and development laboratories and production. In order to not adversely affect the body of water and to avoid the possible entry of chemicals and substances hazardous to water, these must not be disposed of as wastewater or into the sewerage

<sup>1</sup> [www.wri.org/aqueduct](http://www.wri.org/aqueduct).

system. There are internal guidelines and mandatory procedures on how to deal with wastewater to prevent it from turning into wastewater effluents.

Since BioNTech sites are all situated in countries with strict legal and regulatory requirements for wastewater handling, its wastewater is subject to strict monitoring and analysis before being discharged into disposal channels. In addition, neutralization systems for wastewater are operated at some sites before it can be discharged into the municipal sewage system or treatment plant.

### Waste Accumulation

Waste in t



## 5.5 WASTE

BioNTech attaches great importance to waste prevention and professional waste disposal – especially of hazardous waste. Waste management is part of BioNTech’s group environmental management system. The group standards are implemented at the respective sites. The procedure is described in internal operating procedures as well as in mandatory work instructions. Disposal service providers are selected with great care, and disposal conditions are contractually defined. Each service provider must provide evidence of the proper disposal of waste.

BioNTech generated 1,557.5t (2019: 371.4t) of waste in 2020, representing growth of 319%. Of this amount, 59% was energetically recycled and 41% duly disposed of in

landfills. The significant increase in total volume can be put into perspective against the backdrop of the Company’s strong corporate growth in 2020. Expressed in terms of full-time equivalents, our waste generation in the financial year 2020 was 0.8 tons per FTE (in 2019: 0.28 tons per FTE).

### Hazardous Waste

At least 18% of BioNTech’s waste in 2020 was hazardous waste that needed to be incinerated in special plants and energetically recovered. Hazardous waste is inherent to BioNTech’s industry and the Company will not be able to avoid this completely. To prevent endangering people and the environment, BioNTech attaches great importance to both waste prevention and the professional disposal of waste and hazardous waste. In the interest of achieving this, the Company selects its disposal service providers with the utmost care and defines the disposal conditions contractually. Each of BioNTech’s service providers is required to prove that they properly dispose of our waste.

### Reuse of Raw and Auxiliary Materials

The BioNTech site in Mainz developed an internal system for the reuse of raw and auxiliary materials. As part of this system, unused raw and auxiliary materials and material residues from operations can be used by the research and development departments in the laboratories and as residual quantities for research purposes. In addition, an exchange system was established in the research and development departments in Mainz. Employees who need raw and auxiliary materials or only small quantities can contact their colleagues from other departments to ask whether it is still in stock before reordering. A mailing list is provided for this purpose.

## 5.6 SUPPLY CHAIN

With the increasing importance of environmental and climate protection issues, BioNTech expects its suppliers to adhere to standards comparable to those in the BioNTech [Code of Business Conduct & Ethics](#). The standards in the [Supplier Code of Conduct](#) are based primarily on the Pharmaceutical Industry Principles for Responsible Supply Chain Management of the Pharmaceutical Supply Chain Initiative (PSCI).

BioNTech expects its suppliers to

- have an environmental management system in place;
- act in an environmentally friendly and efficient manner and minimize negative impacts on the environment;
- preserve natural resources and avoid the use of hazardous substances wherever possible;
- explore the possibility of participating in reuse and recycling activities;
- comply with all applicable environmental laws and regulations;
- have systems in place to ensure safe recycling or handling, movement, storage, reuse or disposal of waste, air emissions and wastewater discharges;
- have systems implemented to prevent and mitigate accidental spills and leaks into the environment; and
- provide comparable supplier declarations to their suppliers.

The Supplier Code of Conduct will become part of the contractual basis for future suppliers and will be agreed to successively by existing suppliers. The screening process has not yet started.

## Attractive Employer

# Shaping a sustainable corporate culture for growth

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For our employees:

We innovatively develop the knowledge and skills of our employees.

**2,047** employees  
from over  
**60** nations

**45%**  
of top managers are women



**501**  
new hires  
in 2020

**54%**  
women

**46%**  
men

# 6.0 Attractive Employer

## 6.1 VISION AND VALUES

BioNTech is pioneering individualized immunotherapies with the aim to become the leading global biotechnology company for individualized cancer medicine. BioNTech stands for visionary thinking and a pioneering spirit.

### The Values

Innovation and innovative thinking in all areas of BioNTech's activities are the cornerstones of its success. Passion and enthusiasm guide the Company's employees in their work. Common unity forms BioNTech's foundation so it can reach its goals. These values define the Company's identity and provide cultural guidance.

### Relevance and Materiality

On its path towards becoming a 21st century immunotherapy powerhouse, BioNTech is striving to usher in a new era of individualized cancer medicine, build a global business and commercialize its own products. BioNTech's employees – known as “pioneers” within the Company – are a key success factor in achieving this objective.

Their great importance is reflected in BioNTech's CSR strategy and CSR program. The topics of Pioneer Pipeline, Pioneer Development, Safety & Health, Equal Opportunity and Non-Discrimination were identified as highly relevant CSR topics. As a result of the CSR materiality analysis (see [Chapter 3.2](#)), they are grouped in the “Attractive Employer” field of action. BioNTech has classified the optimized recruiting of talent and efficient succession planning (“Pioneer Pipeline”) as material topics.

### Our values



united

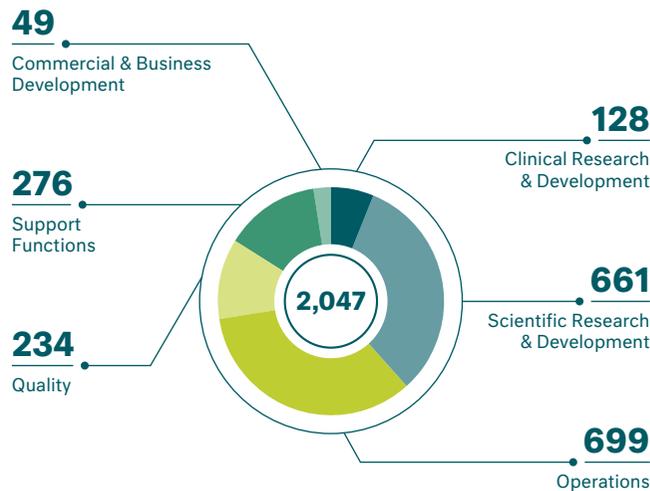


passionate



innovative

## Breakdown of employees<sup>1</sup> by function



<sup>1</sup> Headcount as of December 31, 2020, excluding Management Board, trainees and interns. For detailed information, see [page 55](#).

## 6.2 HUMAN RESOURCE MANAGEMENT

### Functional Areas of Human Resources

The great importance of employees for BioNTech requires human resource (HR) management that meets the strategic and operational challenges. BioNTech addresses these through the following specific functional areas:

- The **HR Talent Acquisition** functional area organizes the recruitment process from identification and communication of requirements to contract signature. Crucially, this functional area ensures that all relevant positions are always filled by the right employees and that backfill positions are filled in a timely manner.
- The **HR People Management** functional area is responsible for aligning business objectives with employees and management. This area works closely with employees and management by providing value-added HR services and HR guidance, improving working relationships, building morale, and increasing productivity and employee retention, thereby making a significant contribution to retaining the right employees for the long term.
- The **Learning & Development** functional area supports learning within the organization for personal and professional development of employees. The availability of qualified employees for future tasks is supported through training and further education programs, in-house training, and support for trainees (IHK vocational training) as well as scholarship recipients.

- An **HR Total Rewards** Manager manages the strategic orientation and design of the overall compensation and benefits package. A group-wide consistent, fair and non-discriminatory compensation and benefits policy that enables BioNTech to succeed in a highly competitive market is the objective of this function.
- The **HR Labor Law** functional area ensures that BioNTech complies with all labor law and industrial constitutional law requirements.

All functional areas are managed by experienced HR managers. The Senior Director Human Resources and the overall HR management function ensure the long-term strategic global development of HR policy, define and prioritize HR objectives between all functional areas, and contribute to the continuous development of HR processes in this dynamically growing company.

### Human Rights

BioNTech complies with the Universal Declaration of Human Rights and the Fundamental Labor Rights as stipulated by the International Labour Organization's Declaration of Fundamental Principles and Rights at Work. The Company avoids causing or contributing to adverse human rights impacts through its own activities and addresses such impacts when they occur. BioNTech aims to prevent or mitigate any adverse impact on human rights that is directly linked to its operations, products or services and which may arise from its business relationships, even if such relationships have not contributed to such impact.

### Human Rights in the Supply Chain

BioNTech does not partner or conduct business with any individual or company that participates in

- forced, bonded or indentured labor or involuntary prison labor;
- the exploitation of children (including child labor defined in the ILO Convention No. 138 on Minimum Age and the ILO Convention No. 182 on the Worst Forms of Child Labour);
- harassment or discrimination;
- harsh or inhumane treatment, including any sexual harassment, sexual abuse, corporal punishment, mental or physical coercion or verbal abuse of workers or the threat of any such treatment;
- human trafficking or any form of modern slavery.

BioNTech expects suppliers and partners to

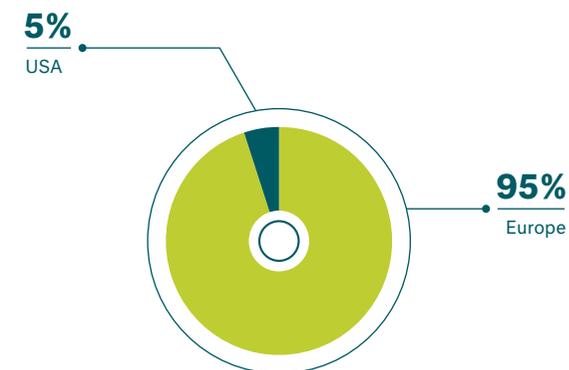
- pay workers according to applicable wage laws, including minimum wage, overtime and mandatory benefits;
- respect the rights of workers in compliance with local laws to associate freely, join or not join labor unions, seek representation or join workers' councils; and
- protect their workers' health and safety.

BioNTech's [Supplier Code of Conduct](#) codifies these expectations. The Code will form part of the contracts with future suppliers and will be agreed with existing suppliers. The screening process has not started yet. Therefore, data according to GRI 414-1 and GRI 414-2 cannot be provided in this initial report.

### Freedom of Association

BioNTech respects the rights of every individual and is committed to complying with the labor laws in the markets where it operates. Over 95% of employees work within the European Union and are subject to the strict EU workplace regulations of this market.

### Breakdown of employees<sup>1</sup> by region



<sup>1</sup> Headcount as of December 31, 2020, excluding Management Board, trainees and interns.

BioNTech complies, at a minimum, with the provisions of the ILO Core Labour Standards Nos. 87 and 98 on freedom of association and the right to collective bargaining, without prejudice to more favorable national regulations. The Company confirms this by being a signatory of the UN Global Compact, in which these freedoms are explicitly named in Principle 3.

Suppliers are expected to comply with the Supplier Code of Conduct's provisions on freedom of association and the right to collective bargaining.

BioNTech employees have the right to form and join employee organizations of their choice. Employee organizations are allowed to act independently of the employer. BioNTech supports these activities by giving employees adequate access to the information, resources and means necessary to carry out their duties. There are works councils in Mainz, Marburg, and Idar-Oberstein, as well as a Group Works Council.

Employees have the opportunity to voice their concerns to the Company individually or collectively without fear of reprisal. This is ensured through regular town hall meetings, “Ask us anything” formats and staff meetings (“Betriebsversammlungen”). Questions are typically answered directly by the responsible Management Board member.

Comprehensive information on these employee rights is provided to employees, in particular via the intranet. Every employee has access to BioNTech’s compliance tool, BxP Hub, which gives employees the opportunity to report potential violations of the Code of Conduct, internal guidelines or laws. Reports can be submitted confidentially.

### 6.3 PIONEER PIPELINE

#### Management

As described in [previous chapter 6.2](#) (HR Management), optimizing talent acquisition and effective succession planning are the responsibility of the HR Talent Acquisition functional area. The entire recruiting process is based on binding guidelines that enable effective, efficient, legally impeccable recruiting in accordance with all data protection standards.

At the operational level, a recruitment team is responsible for the implementation. During the recruiting processes, the team ensures that all applicants are treated fairly and according to objective and comparable criteria and that there is no discrimination. Recruitment officers are available to employees and managers at all locations as a point of contact and recruiting service.

#### 2020: Significant Changes in Recruiting

2020 saw many changes with the development of BioNTech’s COVID-19 vaccine. Company resources were shifted and priorities changed, with numerous employees having to rearrange their personal priorities to make the vaccine a reality within an extremely short timeframe. At the same time, the vaccine’s development also opened up new opportunities for BioNTech.

The same is true for BioNTech’s material topic of a Pioneer Pipeline (recruiting) to attract the right talents. Recruitment staff worked hard in 2020 due to the pandemic and vaccine development. Planned projects had to be postponed or re-assessed. At the same time, the recruiting unit benefited positively from the development of the COVID-19 vaccine, which boosted BioNTech’s employer brand and market recognition. As BioNTech itself has attracted massive global attention, this also led to a significantly improved perception as an attractive employer.

The changes associated with recruiting will be evaluated in 2021. The planned hiring numbers for 2020 have been outmatched by far (see adjacent graph), and the lessons from 2020 will provide input for further development of the Pioneer Pipeline strategy in terms of targets and the completion of the employer branding strategy. This will not change the basic objectives and deadlines of the projects of employer branding strategy or the internal and external strengthening of the Pioneer Pipeline within the CSR program.

#### Development of new hires<sup>1</sup>

Total number of new employees



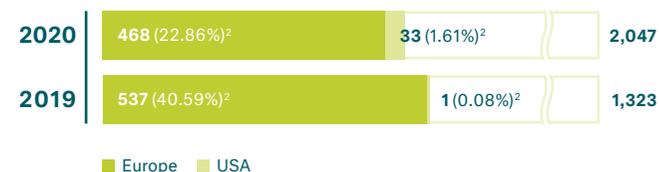
By age group



By gender



By region



<sup>1</sup> Headcount as of December 31, 2020, excluding Management Board, trainees and interns. For detailed information, see [page 55](#).  
<sup>2</sup> Formula for calculating the rate of new employee hires in percentage: Total number of new employee hires divided by number of employees as of December 31, 2020. For detailed information, see [page 55](#).

### Employee Turnover

Basic requirements for employee turnover have changed due to the changes described above. The development of a meaningful database for BioNTech on employee turnover – part of BioNTech’s CSR Program for 2020 – is to be re-assessed against the background of the 2020 developments and will be postponed to 2021. The expansion of the new BioNTech production facility in Marburg will also be taken into account.

#### Total turnover rate<sup>1</sup>

11.58%

2020

12.80%

2019

#### By age group

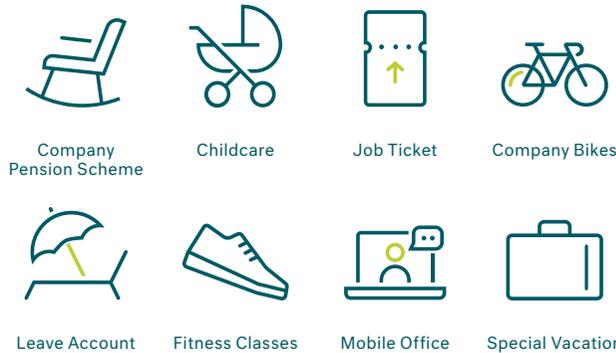


Despite the rapid growth and major challenges in 2020, BioNTech has succeeded in slightly reducing the turnover rate compared to 2019. In the medium and long term, BioNTech’s goal is to reduce the turnover rate and become the employer of choice in the highly competitive employment market.

### Benefits

#### Professional employee support during the pandemic

Since 2020, BioNTech has offered daily, three-hour virtual childcare for school-age children between the ages of 6 and 12. The usual cap of twelve days off per year for direct childcare through pme Familienservice has been suspended due to the COVID-19 pandemic. The objective is to provide relief for parents working from home and educational activities for the children, as well as opportunities for social interaction.



### Number of employees entitled to parental leave



### Number of employees who took parental leave



■ Women ■ Men

For detailed information, see [page 57](#).

<sup>1</sup> Turnover rate is calculated as follows: Total number of leavers from the past 12 months divided by the quarterly average employee headcount (see table on [page 56](#)) multiplied by 100.

### BioNTech 2020 Employee Equity and Restricted Stock Unit Plans

Without BioNTech's employees, the development and approval of the COVID-19 vaccine would not have been possible. This scientific and entrepreneurial achievement has had a positive economic impact on BioNTech. In recognition of these achievements, in December 2020, BioNTech's Management Board and Supervisory Board approved the adoption of the BioNTech 2020 Employee Equity Plan for employees in Europe and the BioNTech 2020 Restricted Stock Unit Plan for employees in the US (together the "Plans"). All employees employed by BioNTech in 2020 in Europe and the US are eligible to participate in the Plans, with the first awards under the Plans being made in 2021. The Plans are long-term in character and intended to motivate employees to commit to BioNTech for the long term. Under the Plans, employees receive restricted stock units (RSUs) free of charge and, after the relevant vesting periods applicable to the Plans have been satisfied, the vested RSUs can be settled in existing BioNTech's American Depositary Shares (ADS), which are traded on the Nasdaq stock exchange. BioNTech also has the option to settle the RSUs in cash instead of ADS after expiry of the relevant vesting period.

A detailed description of the Europe EEP and the US RSUP is published in the S-8 SEC Filing on the SEC's website and also on the [Website of BioNTech](#).

## 6.4 PIONEER DEVELOPMENT

At the end of 2019, the entire Training & Development function was repositioned and has been available to all employees since the beginning of 2020 as the "Learning & Development" functional area. This was preceded by extensive employee surveys and the consideration of developments in the world of work and learning.

The findings showed that a holistic learning landscape with innovative, dynamic and individualized learning

opportunities was necessary to prepare employees for current and future challenges. Training will continue to play an important role but will be strongly complemented by new learning formats.

In the years ahead, the focus of the Learning and Development function will be more on active, effective, continuous learning, which is differentiated in more detail in our vision statement (see highlight).



**OUR VISION:** We empower our pioneers to continuously develop their competencies and grow by offering them individualized learning journeys and innovative learning experiences, embedded in the flow of life to contribute to BioNTech's innovation spirit.



### Learning and Development

BioNTech offers a comprehensive program to improve competencies and support employees with internal and external training opportunities. In the area of Learning and Development, current training offers consist primarily of courses that support and enhance employees' soft and human skills. As a rapidly growing and globally active company, special emphasis is placed on leadership development and coaching. In addition to specialist external training, language courses and IT user training are offered in particular. Comprehensive professional development courses, such as degree programs, technician or master courses with a minimum duration of one year, lead to a certificate of further qualification.

The Company is setting up a voluntary digital learning platform with access to LinkedIn Learning services. The existing face-to-face services for management development are to be expanded on this platform. The launch is planned for Q2 2021.

## 6.5 SUSTAINABLE GROWTH & CULTURE

BioNTech is a dynamically growing company. In many areas, the infrastructure and work processes must be continuously adapted to this growth and changed framework conditions. BioNTech wants to shape these change and restructuring processes fairly, responsibly and sustainably. To this end, the Sustainable Growth & Culture working group was founded in 2020.

Sustainable Growth & Culture combines economic aspects such as financing, process and corporate development with an actively shaped culture that promotes sustainable growth in the interests of all stakeholders. A cross-departmental working group made up of high-ranking executives has been working on relevant issues relating to Sustainable Growth & Culture since 2020. Interim results are regularly reported to the CSR Steering Board.

Following an initial assessment of the corporate culture, measures were defined in a first interim step that enabled a rapid and pragmatic improvement in critical growth issues. In some cases, existing or planned projects received additional support and resources as a result. These projects included the internal YouCouNT project. This project is intended to create more clarity internally about competencies and responsibilities. To strengthen BioNTech's innovative power, areas and opportunities for better and more efficient collaboration are to be identified.

Due to the dynamic and partly inorganic growth of BioNTech, internal focus groups were established in 2020 to better understand the current cultural state of BioNTech with all subsidiaries. The focus group meetings were held in February 2021 with the aim of contributing to a cultural vision based on the Company's successful cultural roots.

Based on this, a culture report on sustainable growth is to be prepared in 2021. The report is intended to provide better insight into the state of the Company's culture, suggest measures for actively shaping a fair and sustainable growth culture, and offer guidance on the behavior and attitudes expected of employees and managers for sustainable growth and culture.



We strive for an actively shaped culture that enables sustainable growth in the interest of all stakeholders.



## 6.6 EQUAL OPPORTUNITY & DIVERSITY

People from more than

60  
nations

work for BioNTech worldwide

### Equal Opportunity and Non-Discrimination

BioNTech has employees representing more than 60 nationalities. The Company's history shows that different cultures and perspectives enrich the Company and contribute to its success. Diversity is therefore understood as a valuable aspect of the corporate culture and promoted. Since November 2018, BioNTech has been a signatory of the Diversity Charter [□ Charta der Vielfalt](#).

At BioNTech, discrimination, favoritism or harassment on the basis of gender, race, religion or belief, nationality, ethnic or social origin, age, sexual orientation, marital status, disability, physical appearance or any other aspects of personal status is not tolerated. This is regulated in the Company's policies and in the Code of Business Conduct & Ethics, which are binding for all employees.

BioNTech perceives discrimination as unjust or unfair actions that are made either directly or indirectly against individuals or groups and may cause a hostile, intimidating or offensive working environment. Anyone who discriminates against or harasses another person may face disciplinary actions, up to and including the termination of employment with BioNTech.



Employees from over 60 different nations have worked on our vaccine. The achievement we have made is ultimately also a human achievement by people from the most diverse regions of the planet. (Ugur Sahin, CEO)

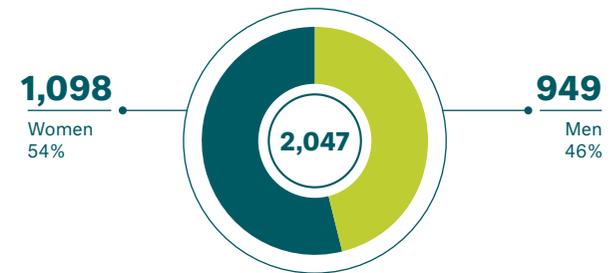


BioNTech's HR Department is responsible for and ensures a respectful environment with equal opportunities in all areas from recruitment and selection to professional development, succession planning and compensation. Each new employee receives a printout of the Code of Business Conduct & Ethics in his or her starter package. The anti-discrimination topics are part of the Code of Conduct training, which is also available on the intranet.

### Fair Representation of Women

Women account for 54% of the total workforce (2019: 56%).

#### Total number of employees<sup>1</sup>



<sup>1</sup> Headcount as of December 31, 2020, excluding Management Board, trainees and interns. For detailed information, see [▶](#) page 57.

In addition to the professional and personal qualifications of the members of the Management Board and the Supervisory Board, BioNTech also takes diversity and the appropriate participation of women into account in the composition of both bodies.

BioNTech's Management Board currently consists of five members, of which Özlem Türeci, MD, performs the function of Chief Medical Officer. Thus, the current proportion of women on the Management Board is 20% (2019: 20%).

Overall, 45% (2019: 34%) of the members of the top management level below the BioNTech Management Board are women. At the second-highest management level below the Management Board, 45% (2019: 48%) of the positions at BioNTech are held by women.

In accordance with Section 111 (5) of the German Stock Corporation Act (AktG), the Supervisory Board set the target for the proportion of women at 25% for the Management Board and at 25% for the Supervisory Board on May 4, 2020. These targets should be achieved by December 31, 2022.

In accordance with Section 76 (4) of the German Stock Corporation Act (AktG), the Management Board resolved on April 29, 2020 to set the target for the proportion of women in management positions. The share of women in the top management level below the Management Board and the second top management level below the Management Board should be at least 30% in each case. The respective targets should be achieved by December 31, 2022 at the latest.

45%

women in top  
management below  
Management Board

45%

women in  
second-highest  
management level



Same pay for  
the same job.



### Fair Remuneration

BioNTech is a fast-growing company. A portion of this growth has resulted from new operating units that were acquired on the market. The Company is therefore faced with the challenge of merging business units fairly that, in some cases, have different collective bargaining bases. In 2020, together with the Works Councils in Mainz and the Innovative Manufacturing Services unit in Idar-Oberstein, the Company signed agreements for fair and transparent base salary and job level systems and will continue to develop consistent employee compensation systems that are competitive, transparent and attractive. This is BioNTech's benchmark for enforcing these principles with all mergers and acquisitions and for all sites.

For the plant in Marburg (BioNTech Manufacturing Marburg GmbH), acquired in 2020, BioNTech is bound by an industry-wide collective bargaining agreement ("Mantel-tarifvertrag der Chemischen Industrie").

Unlike other legal systems, German law has a General Act on Equal Treatment (Gesetz zur Allgemeinen Gleichbehandlung – AGG) that applies in Germany. Part-time employees have the same access to remuneration and benefits, in some cases on a pro-rata basis, as full-time employees.

## 6.7 SAFETY AND HEALTH

Ensuring the highest occupational safety and health standards for employees of BioNTech is essential.

### SHE Management

Ultimate responsibility for safety and health rests with the Management Board. Operational implementation and operational responsibility lie with the SHE (Safety, Health, Environment) department and its management. As part of BioNTech SE, this department operates globally. It manages, among others, topics like safety, health, fire, and radiation protection, as well as the monitoring of biological agents and hazardous substances. Most of these topics, including the protection of employees, are highly regulated. The SHE department is also responsible for emergency responses, evacuation procedures, rescue plans and related training. As part of a continuous improvement process, BioNTech will implement occupational safety management software in Q2 2021 in order to better communicate with and involve employees more closely in the SHE processes.

### Targets and Risk Management

The corporate target is "No impairment of the health of our employees." By assuming personal responsibility and carrying out regular on-site reviews, compliance with all legal and other requirements is ensured to meet this objective. The Company always strives to exceed these requirements.



## No impairment of the health of our employees.



Risks and hazards are regularly identified using recognized analysis methods, such as regulatorily defined hazard assessments. Measures to protect employees are derived from these analyses.

In dialog with experts and regulatory authorities, for example, processes are optimized and compliance with legal requirements is checked.

### Tackling Mental Stress

In December 2020 and January 2021, the Company conducted a mental stress risk assessment survey. An analysis of this survey is intended to lead to the implementation of measures for the prevention of mental stress. An employee hotline for stress management, psychological problems and general conflicts at work is also planned to be launched in Q2 2021.

### Safety Briefings and Training

All measures have the objective of ensuring a safe and accident-free work environment. General safety briefings for all employees and specific safety briefings for employees in laboratories and other special workplaces are carried out regularly and monitored in accordance with heavy regulatory requirements, for example, through regular internal and external inspections of offices, laboratories and other workplaces.

Safety officers, first aid staff, and fire protection assistants receive regular training. All employees with personnel responsibility receive a mandatory annual briefing on occupational health and safety. These employees, together with the trained safety officers in the relevant departments, are contacts in addition to the SHE management and its employees. Workers who are not employees but whose work or workplace is controlled by BioNTech are included in the mandatory safety briefings.

Accidents and near-accidents are documented at all times (see detailed figures on [page 57](#)). Accidents are inspected by SHE employees, and the causes of accidents are eliminated systematically.

### Communication

All relevant information on the subject of safety and health, including operating directives, risk assessments, guidelines, and laws is available to all employees.

Relevant digital information areas have been set up for the topics of occupational safety and health and genetic engineering. They contain all laws, ordinances, rules, operating instructions, forms and relevant context information.

Mandatory training, particularly the annual general Health & Safety instruction program available to all employees, is ensured and controlled by the SHE department. In addition, all training courses – mandatory and voluntary – from SHE management are always available to all employees online.

### Occupational Medical Service

The occupational medical service is regularly on-site and conducts examinations in accordance with the German Ordinance on Preventive Occupational Medicine (ArbMedVV).

### Health Promotion

BioNTech continues to expand the measures and information on employee health protection. In addition to company-supported sports activities and health-related courses, such as yoga, health days are sponsored four times each year by the Techniker Krankenkasse statutory health insurer. Other offers, health information, and campaign days on the subject of health are regularly communicated on the intranet.

# Appendix

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# 7.0 Appendix

## 7.1 ABOUT THIS REPORT

The Sustainability Report 2020 is the first corporate responsibility and sustainability report of the BioNTech Group. It was published in English at the end of March 2021. A German translation will be made available in Q2 2021.

The reporting period corresponds to the financial year 2020. As a basic rule, the data relevant for reporting are related to the financial year 2020. The dynamics of the COVID-19 pandemic have a significant impact on BioNTech's core business – often with references to corporate responsibility or sustainability. Accordingly, the editorial deadline was the end of March 2021 in order to be able to adequately present relevant developments. Topics with relevance beyond the 2020 financial year are therefore part of the report and indicated appropriately.

The sustainability report complies with the requirements of Arts. 289b et seq. and 315b et seq. HGB and includes the so-called “non-financial aspects” of the Company's activities (environmental, employee and social issues, human rights, anti-corruption and anti-bribery) that are relevant for an understanding of its business performance and position.

This report has been prepared in accordance with the GRI Standards: Core option (see [➔ section 7.4](#))

## 7.2 VERIFICATION

The Supervisory Board has examined the contents of this Sustainability Report 2020 in accordance with Section 171 (1) AktG. The Supervisory Board found that the content of the report complies with the requirements of Sections 289b et seq. and 315b et seq. HGB. It also stated that the report is coherent in relation to the adopted strategy and corporate policy of the Management Board with regard to non-financial objectives and the concepts developed for this purpose. The Sustainability Report was reviewed with regard to the statements in the group management report on the opportunities and risks of the future development of the Company. Following the outcome of the Supervisory Board's review, there were no objections raised to the Sustainability Report for the financial year 2020.

## 7.3 DETAILED DATA

### Energy Consumption Within the BioNTech Group

	Unit	2020 <sup>2</sup>	2019 <sup>1</sup>
<b>Total consumption – Heat</b>	<b>kWh</b>	<b>6,580,975.41<sup>4</sup></b>	<b>5,446,060.00<sup>3</sup></b>
Trend – Heat	%	121	100
<b>Total consumption – Power</b>	<b>kWh</b>	<b>10,466,153.05<sup>6</sup></b>	<b>7,811,155.47<sup>5</sup></b>
Trend – Power	%	134	100
<b>Total consumption – Energy</b>	<b>kWh</b>	<b>17,047,128.46</b>	<b>13,257,215.47</b>
Trend – Energy	%	129	100
<b>Energy intensity</b>	<b>MWh/FTE</b>	<b>8.78</b>	<b>10.12</b>
Trend – Energy intensity	%	87	100

### Energy Use by Source

	Unit	2020	2019
<b>Renewable energy sources</b>	<b>kWh</b>	<b>1,041,870.05</b>	<b>942,596.87</b>
Trend	%	111	100
<b>Coal, nuclear, petroleum fuels and/or other similar energy source</b>	<b>kWh</b>	<b>9,424,283.00</b>	<b>6,869,541.60</b>
Trend	%	137	100
<b>Natural gas</b>	<b>kWh</b>	<b>3,509,127.09</b>	<b>2,470,303.00</b>
Trend	%	142	100
<b>District heating</b>	<b>kWh</b>	<b>3,071,848.32</b>	<b>2,975,757</b>
Trend	%	103	100
<b>Total energy</b>	<b>kWh</b>	<b>17,047,128.46</b>	<b>13,257,215.47</b>

1 For 2019, only the data for the Berlin, Idar-Oberstein, Mainz, Martinsried and Neuried locations is reported.

2 Further locations were added in 2020: Cambridge (USA), Halle (Saale) and Marburg (since November 2020).

3 For Berlin, Martinsried and Neuried, no data is available for the year 2019. Therefore, the data from 2018 was used in the calculation.

4 For Berlin, Martinsried, Neuried and Halle (Saale), no data is available for the year 2020. Therefore, the data from 2019 was used in the calculation. Furthermore, the data from Neuried was not available. Therefore, the assumption was made that the specific heat consumption of Martinsried (kWh/m<sup>2</sup>) applies to the Neuried.

5 For Berlin, no data was available for the base year 2019. Therefore, the data from 2018 was used in the calculation. For Neuried, only the data for the period from April 2018 to March 2019 was available.

6 For Berlin, Halle (Saale) and a small site in Mainz, no data was available for the year 2020. Therefore, the data from 2019 was used in the calculation.

**Dual Reporting of Electricity Emissions  
According to GHG Protocol**

Seven German sites of the Company and Cambridge BioNTech US

In t CO <sub>2</sub> e	Total Scope 2+3	Total Scope 2	Total Scope 3
1. Location-based	4,255	3,485.65	768.94
2. Market-based	3,873	3,138.68	734.44

**Water Consumption**

As of December 31, in cbm	2020	2019
Germany	24,364.60	18,414.49
USA	512,00	n.a.
Total	24,876.60	18,414.49
Change from 2019 to 2020	+35.12%	Base year

**Waste Accumulation of BioNTech**

As of December 31	Unit	2020	2019
<b>Germany</b>	<b>tons</b>	<b>1,534.00</b>	<b>371.39</b>
Of which hazardous waste	tons	259.18	214.23
Of which non- hazardous waste	tons	1,274.82	157.16
<b>USA</b>	<b>tons</b>	<b>23.54</b>	<b>n.a.</b>
Of which hazardous waste	tons	14.88	n.a.
Of which non- hazardous waste	tons	8.67	n.a.
<b>Total</b>	<b>tons</b>	<b>1,557.54<sup>1</sup></b>	<b>371.39<sup>2</sup></b>

1 59% recycled or energetically recovered and 41% disposed of in landfills.

2 58% recycled or energetically recovered and 42% disposed of in landfills.

**GHG Carbon Emissions**

	Unit	2020	2019
Direct GHG Emissions (Scope 1)	t CO <sub>2</sub> e	703.6	607.5
Electricity Indirect GHG Emissions (Scope 2)	t CO <sub>2</sub> e	3,851.4	2,748.1
Other Indirect GHG Emissions (Scope 3)	t CO <sub>2</sub> e	1,624.4	2,445.0
<b>Emissions total</b>	<b>t CO<sub>2</sub>e</b>	<b>6,179.4</b>	<b>5,800.5</b>
Change from 2019 to 2020	%	+7%	Base year
<b>Emissions intensity 1</b> (Scope 1 & 2 emissions from electricity and heat generation divided by FTEs)	<b>t CO<sub>2</sub>e/FTE<sup>3</sup></b>	<b>2.35</b>	<b>2.56</b>
<b>Emissions intensity 2</b> (Scope 1 & 2 emissions from electricity and heat generation plus Scope 3 emissions from upstream process chain from Scope 3 divided by FTEs)	<b>t CO<sub>2</sub>e/FTE</b>	<b>3.18</b>	<b>4.43</b>

3 FTEs 2019: 1,310; FTEs 2020: 1,941

## Quarterly average breakdown of employees by function

Headcount, excluding Management Board, trainees and interns	December 31, 2020	December 31, 2019	December 31, 2018
Clinical Research & Development	113	81	46
Scientific Research & Development	586	414	300
Operations	490	376	268
Quality	184	129	105
Support Functions	218	126	97
Commercial & Business Development	33	69	28
<b>Total</b>	<b>1,624</b>	<b>1,195</b>	<b>844</b>

## Breakdown of employees by function as of the end of the reporting period

Headcount, excluding Management Board, trainees and interns	December 31, 2020	December 31, 2019	December 31, 2018
Clinical Research & Development	128	90	52
Scientific Research & Development	661	459	338
Operations	699	416	305
Quality	234	142	118
Support Functions	276	139	109
Commercial & Business Development	49	77	31
<b>Total</b>	<b>2,047</b>	<b>1,323</b>	<b>953</b>

## New employees

	2020 BioNTech SE	2019 BioNTech SE
<b>Total number of new employee hires</b>	<b>501</b>	<b>538</b>
By age group		
Up to 29 years old	233	239
30 – 49 years old	230	269
50 years and older	38	30
By gender		
Women	251	274
Men	250	264
By region		
Europe	468	537
USA	33	1
<b>Rate of new employee hires (%)<sup>1</sup></b>		
By age group		
Up to 29 years old	11.38%	18.07%
30 – 49 years old	11.24%	20.33%
50 years and older	1.86%	2.27%
By gender		
Women	12.26%	20.71%
Men	12.21%	19.95%
By region		
Europe	22.86%	40.59%
USA	1.61%	0.08%

<sup>1</sup> Formula for calculating the rate of new employee hires: Total number of new employee hires divided by number of employees at the end of the fiscal year.

## Employee turnover

As of December 31, 2020	2020 BioNTech SE	2019 BioNTech SE
<b>Total turnover rate<sup>1</sup></b>	<b>11.58%</b>	<b>12.80%</b>
By age group		
Up to 29 years old	13.94%	14.32%
30 – 50 years old	9.99%	11.97%
51 years and older	11.25%	11.75%
By gender		
Women	11.25%	13.15%
Men	11.95%	12.36%
By region		
Europe	11.75%	12.80%
USA	7.96%	0.00%
<b>Total number of leavers</b>	<b>188</b>	<b>153</b>
By age group		
Up to 29 years old	83	62
30 – 49 years old	85	78
50 years and older	20	13
By gender		
Women	98	88
Men	90	65
By region		
Europe	182	153
USA	6	0
By type according to SASB HC-BP-330a.2		
Executives/senior managers voluntary and involuntary turnover rate	5	6
Mid-level managers voluntary and involuntary turnover rate	17	13
Professionals voluntary and involuntary turnover rate	45	40
All others voluntary and involuntary turnover rate	121	94

<sup>1</sup> Turnover rate is calculated as follows: Total number of leavers from the past 12 months divided by the quarterly average employee headcount multiplied by 100.

## Parental leave in Germany

As of December 31	2020 BioNTech SE	2019 BioNTech SE
<b>Number of employees entitled to parental leave</b>	<b>136</b>	<b>101</b>
Thereof women	89	61
Thereof men	47	40
<b>Number of employees who took parental leave</b>	<b>133</b>	<b>95</b>
Thereof women	89	60
Thereof men	44	35
<b>Number of employees who returned from parental leave</b>	<b>65</b>	<b>53</b>
Thereof women	31	21
Thereof men	34	32
<b>Return to work rate (%)</b>	<b>94.20</b>	<b>92.98</b>
Thereof women	93.94	91.30
Thereof men	94.44	94.12
<b>Number of employees still working for BioNTech one year after their return from parental leave</b>	<b>Figure will be available on December 31, 2021.</b>	<b>89</b>

## Work-related injuries

In EUR thousand	2020	2019	2018
Number of fatalities as a result of work-related injuries	0	0	0
Rate of fatalities as a result of work-related injuries in % <sup>1</sup>	0	0	0
Number high-consequence, work-related injuries	0	0	n/a
Rate of high-consequence, work-related injuries (excluding fatalities) in % <sup>2</sup>	0	0	n/a
Number of recordable work-related injuries at the BioNTech facilities in Mainz <sup>3</sup>	4	2	n/a
Rate of recordable work-related injuries in % at the BioNTech facilities in Mainz <sup>4</sup>	0.2756	0.2756	n/a

## Fair representation of women

As of December 31	Total number of employees	
	2020	2019
Men	949	582
Women	1098	741
<b>Total</b>	<b>2,047</b>	<b>1,323</b>

1 Number of fatalities as a result of work-related injury divided by number of hours worked and multiplied by 200,000. Work-related injuries are those that arise from exposure to hazards at work.

2 High-consequence, work-related injuries (excluding fatalities) divided by number of hours worked and multiplied by 200,000. A high-consequence, work-related injury is a work-related injury that results in a fatality or in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months.

3 A database for group-wide reporting is currently being developed.

4 Number of recordable work-related injuries divided by number of hours worked and multiplied by 200,000. Work-related injuries are work-related injuries or ill health that result in any of the following: death, days away from work, restricted work, transfer to another job, medical treatment beyond first aid, loss of consciousness or significant injury or ill health diagnosed by a physician or other licensed healthcare professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.

## 7.4 GRI CONTENT INDEX INCLUDING SASB STANDARDS, UN SUSTAINABLE DEVELOPMENT GOALS (SDGs) AND PRINCIPLES OF THE UN GLOBAL COMPACT (UNGC)

### GRI

BioNTech's sustainability reporting is guided by the standards of the Global Reporting Initiative (GRI). This report was prepared in accordance with the current version of the guidelines, the GRI Sustainability Reporting Standards (GRI SRS) 2016. This report has been prepared in accordance with the GRI Standards: Core option. In the GRI Content Index, readers will find references to text passages which reference corresponding GRI indicators.

### SASB

BioNTech started to apply the SASB industry standards to identify, manage and communicate financially-material sustainability information to shareholders and has started to map the applicable standards in the present GRI Content Index. A greater focus on the SASB criteria is planned by the end of 2021.

### UNGC and SDGs

By signing the 10 principles underlying the United Nations Global Compact (UNGC), BioNTech has explicitly committed to respecting human rights and labor standards, promoting environmental protection in its business operations and preventing corruption.

BioNTech supports the UNGC with the objective of contributing to the global implementation of its 10 principles and the Sustainable Development Goals (SDGs). BioNTech has integrated the ten principles into its business processes and is implementing concrete actions to enforce them.

Within the GRI table, BioNTech references the 10 Principles of the UN Global Compact separately. The Overall Sustainability Report 2020 is therefore also the Communication on Progress Report for the UN Global Compact.

BioNTech supports and promotes the UN's 17 Sustainable Development Goals (SDGs). They have been cross-referenced in this report's Content Index whenever applicable.

### GRI Content Index

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
<b>General Disclosures</b>					
<b>Organizational profile</b>					
102-1 Name of the organization				7	
102-2 Activities, brands, products, and services				7	
102-3 Location of headquarters				8	
102-4 Location of operations				8	
102-5 Ownership and legal form				8	
102-6 Markets served				8, 9	
102-7 Scale of the organization				8	
102-8 Information on employees and other workers		8, 10	6	8	
102-9 Supply chain				26, 31, 32, 40, 43	
102-10 Significant changes to the organization and its supply chain				8, 11, 18, 37, 39, 44, 45, 47	
102-11 Precautionary Principle or approach				24, 25, 26, 32, 35, 36, 39, 49	

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
102-12 External initiatives				22	
SDG 17 Partnerships for the Goals		17		7, 12	
102-13 Membership of associations		17		69	
<b>Strategy</b>					
102-14 Statement from senior decision-maker			1 - 10	2, 4, 5	
102-15 Key impacts, risks, and opportunities				5, 7, 9, 11, 13, 30, 35, 39, 44, 46, 47, 49	
<b>Ethics and integrity</b>					
102-16 Values, principles, standards, and norms of behavior	HC-BP-510a.1/2	16	1-6, 7, 10	2, 21, 42	
102-17 Mechanisms for advice and concerns about ethics		16	1-6, 7, 10	24	
<b>Governance</b>					
102-18 Governance structure				16-20	
102-19 Delegating authority				16	
102-20 Executive-level responsibility for economic, environmental, and social topics				16	
102-21 Consulting stakeholders on economic, environmental, and social topics		16		17	
102-22 Composition of the highest governance body and its committees		5, 16		8, 16	<a href="https://investors.biontech.de/corporate-governance">https://investors.biontech.de/corporate-governance</a>
102-23 Chair of the highest governance body		16		See Website	<a href="https://investors.biontech.de/corporate-governance">https://investors.biontech.de/corporate-governance</a>
102-24 Nominating and selecting the highest governance body		5, 16		See Website	<a href="https://investors.biontech.de/corporate-governance">https://investors.biontech.de/corporate-governance</a>
102-25 Conflicts of interest		16		25	
102-26 Role of highest governance body in setting purpose, values, and strategy				See Website	<a href="https://investors.biontech.de/corporate-governance">https://investors.biontech.de/corporate-governance</a>
102-27 Collective knowledge of highest governance body				See Website	<a href="https://investors.biontech.de/corporate-governance">https://investors.biontech.de/corporate-governance</a>
102-28 Evaluating the highest governance body's performance				See Website	<a href="https://investors.biontech.de/corporate-governance">https://investors.biontech.de/corporate-governance</a>
102-29 Identifying and managing economic, environmental, and social impacts		16	1-10	17	
102-30 Effectiveness of risk management processes				See F-20 Report	
102-31 Review of economic, environmental, and social topics				17	
102-32 Highest governance body's role in sustainability reporting				17	

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
102-33 Communicating critical concerns				17	
102-34 Nature and total number of critical concerns					No information available. Report in Sustainability Report 2021.
102-35 Remuneration policies		5, 8	6	49	
102-36 Process for determining remuneration		5, 8	6	49	
102-37 Stakeholders' involvement in remuneration		16		49	
102-38 Annual total compensation ratio					No information available. Report in Sustainability Report 2021.
102-39 Percentage increase in annual total compensation ratio					No information available. Report in Sustainability Report 2021.
<b>Stakeholder engagement</b>					
102-40 List of stakeholder groups				5, 13, 32	
102-41 Collective bargaining agreements		8	3	43, 49	
102-42 Identifying and selecting stakeholders				17	
102-43 Approach to stakeholder engagement				11, 17	
102-44 Key topics and concerns raised				5, 11, 17	
<b>Reporting practice</b>					
102-45 Entities included in the consolidated financial statements				8	
102-46 Defining report content and topic Boundaries				8	
102-47 List of material topics				16	
102-48 Restatements of information				36	
102-49 Changes in reporting				not applicable	
102-50 Reporting period				52	
102-51 Date of most recent report				52	
102-52 Reporting cycle				52	
102-53 Contact point for questions regarding the report				69	
102-54 Claims of reporting in accordance with the GRI Standards				58	
102-55 GRI content index				58	
102-56 External assurance				52	No independent external assurance

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
<b>Material and Relevant Topics</b>					
<b>Economic Performance</b>					
<b>GRI 201: Economic Performance 2016</b>					
201-2 Financial implications and other risks and opportunities due to climate change			7, 8, 9	35	
201-4 Financial assistance received from government				32	
<b>Innovation</b>					
103-1 Explanation of the material topic and its Boundary				9	
103-2 The management approach and its components				9	
<b>Sustainable Growth &amp; Culture</b>					
103-1 Explanation of the material topic and its Boundary				47	
103-2 The management approach and its components		8, 12		47	
203-2 Significant indirect economic impacts		1, 3, 8		6, 11, 12, 13	
<b>Anti-corruption</b>					
103-1 Explanation of the material topic and its Boundary				25	
103-2 The management approach and its components				25	
<b>GRI 205: Anti-corruption 2016</b>					
205-1 Operations assessed for risks related to corruption		16	10	25	
205-2 Communication and training about anti-corruption policies and procedures		4, 16	10	25	
205-3 Confirmed incidents of corruption and actions taken		16	10	25	
<b>Anti-competitive Behavior</b>					
103-1 Explanation of the material topic and its Boundary				25	
103-2 The management approach and its components				25	
<b>Tax</b>					
103-1 Explanation of the material topic and its Boundary				32	
103-2 The management approach and its components				32	
103-3 Evaluation of the management approach				32	

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
<b>GRI 207: Tax 2019</b>					
207-1 Approach to tax		1, 10, 17		32	
207-2 Tax governance, control, and risk management		1, 10, 17		32	
<b>Environmental Topics</b>					
<b>Climate Protection</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				35	
103-2 The management approach and its components				35	
<b>GRI 302: Energy 2016</b>					
302-1 Energy consumption within the organization		7, 8, 12, 13	7, 8, 9	38	
302-2 Energy consumption outside of the organization		7, 8, 12, 13	7, 8	38	
302-3 Energy intensity			7, 8	38	
302-4 Reduction of energy consumption		7, 8, 12, 13	8, 9	38	
302-5 Reductions in energy requirements of products and services		7, 8, 9, 12, 13	8, 9		No information available, Product Carbon Footprint planned for financial year 2021.
<b>Water</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				39, 40	
103-2 The management approach and its components				39, 40	
<b>GRI 303: Water 2016</b>					
303-1 Water withdrawal by source		6, 12	7, 8	39, 40	
303-2 Water sources significantly affected by withdrawal of water		6		39, 40	
303-3 Water recycled and reused		6	8	39, 40	
<b>Emissions</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				35, 36	
103-2 The management approach and its components				35, 36	
<b>GRI 305: Emissions 2016</b>					
305-1 Direct (Scope 1) GHG emissions		3, 12, 13, 14, 15	7, 8	36, 37	
305-2 Energy indirect (Scope 2) GHG emissions		3, 12, 13, 14, 15	7, 8	36, 37	

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
305-3 Other indirect (Scope 3) GHG emissions		3, 12, 13, 14, 15	7, 8	36, 37	
305-4 GHG emissions intensity		13, 14, 15	8	36, 37	
305-5 Reduction of GHG emissions		7, 12, 13, 14, 15	8, 9	36, 37	
305-6 Emissions of ozone-depleting substances (ODS)		3, 12	7, 8	36, 37	
305-7 Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions		3, 12, 14, 15	7, 8	36, 37	
<b>Effluents and Waste</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				40	
103-2 The management approach and its components		12		40	
<b>GRI 306: Waste 2020</b>					
306-1 Waste generation and significant waste-related impacts		6, 12	8	40	
306-2 Management of significant waste-related impacts		3, 6, 12	8	40	
306-3 Waste generated		3, 6, 12, 14, 15	8	40	
306-4 Waste diverted from disposal		3, 6, 12	8	40	
306-5 Waste directed to disposal		3, 6, 12	8	40	
<b>Environmental Compliance</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				34, 35	
103-2 The management approach and its components		12		34, 35	
<b>GRI 307: Environmental Compliance 2016</b>					
307-1 Non-compliance with environmental laws and regulations		12, 13, 16	8	34, 35	
<b>Supplier Environmental Assessment</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				40	
103-2 The management approach and its components				40	
<b>GRI 308: Supplier Environmental Assessment 2016</b>					
308-1 New suppliers that were screened using environmental criteria		8, 12	8	40	No data available. The screening process has not started yet.
308-2 Negative environmental impacts in the supply chain and actions taken		12, 16	8	40	No data available. The screening process has not started yet.

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
<b>Social Topics</b>					
<b>Employment</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				42, 43	
103-2 The management approach and its components				42, 43	
<b>GRI 401: Employment</b>					
401-1 New employee hires and employee turnover		5, 8, 10	6	44, 45	
Discussion of talent recruitment and retention efforts for scientists and research and development personnel	HC-BP-330a.1.			44, 45	
(1) Voluntary and (2) involuntary turnover rate for: (a) executives/senior managers, (b) mid- level managers, (c) professionals, and (d) all others	HC-BP-330a.2.			56	
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees		3, 5, 8	6	49	
401-3 Parental leave		5, 8	6	45	
<b>Labor/Management Relations</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				43, 44	
103-2 The management approach and its components				43, 44	
<b>GRI 402: Labor/Management Relations 2016</b>					
402-1 Minimum notice periods regarding operational changes		8	3		No information available. Report in Sustainability Report 2021.
<b>Occupational Health and Safety</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				49, 50	
103-2 The management approach and its components				49, 50	
<b>GRI 403: Occupational Health and Safety 2018</b>					
403-1 Occupational health and safety management system		3, 8		49, 50	
Tackling Mental Stress at BioNTech		3		50	
403-2 Hazard identification, risk assessment, and incident investigation		8		49, 50	
403-3 Occupational health services		8		49, 50	
403-4 Worker participation, consultation, and communication on occupational health and safety		8, 16		49, 50	
403-5 Worker training on occupational health and safety		3, 4, 8		49, 50	

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
403-6 Promotion of worker health		3		49, 50	
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships		8		49, 50	
403-08 Workers covered by an occupational health and safety management system		8		Appendix Table	
403-09 Work related injuries		3, 8		Appendix Table	
403-10 Work related ill health		3, 8		Appendix Table	
<b>Training and Education</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				46, 47	
103-2 The management approach and its components				46, 47	
<b>GRI 404: Training and Education 2016</b>					
404-1 Average hours of training per year per employee		4, 5, 8, 10	6		No information available. Report in Sustainability Report 2021.
404-2 Programs for upgrading employee skills and transition assistance programs	HC-BP-330a.1.	4, 8		46, 47	
404-3 Percentage of employees receiving regular performance and career development reviews		5, 8, 10	6		
<b>Diversity and Equal Opportunity</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				48, 49	
103-2 The management approach and its components				48, 49	
<b>GRI 405: Diversity and Equal Opportunity 2016</b>					
405-1 Diversity of governance bodies and employees		5, 8	6	48, 49	
405-2 Ratio of basic salary and remuneration of women to men		5, 8	6		No information available. Report in Sustainability Report 2021.
<b>Non-discrimination</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				19, 25, 42–44, 48	
103-2 The management approach and its components				19, 25, 42–44, 48	
<b>GRI 406: Non-discrimination 2016</b>					
406-1 Incidents of discrimination and corrective actions taken		5, 8, 16	6		No information available. Report in Sustainability Report 2021.

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
<b>Freedom of Association and Collective Bargaining</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				43, 44	
103-2 The management approach and its components				43, 44	
<b>GRI 407: Freedom of Association and Collective Bargaining 2016</b>					
407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		8	2, 3	43	
<b>Child Labor</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				40, 43	
103-2 The management approach and its components				40, 43	
<b>GRI 408: Child Labor 2016</b>					
408-1 Operations and suppliers at significant risk for incidents of child labor		8, 16	2, 5		No information available. Report in Sustainability Report 2021.
<b>Forced or Compulsory Labor</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				43	
103-2 The management approach and its components				43	
<b>GRI 409: Forced or Compulsory Labor 2016</b>					
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor		8	2, 4		No information available. Report in Sustainability Report 2021.
<b>Supplier Social Assessment 2016</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				43	
103-2 The management approach and its components				43	
<b>GRI 414: Supplier Social Assessment</b>					
414-1 New suppliers that were screened using social criteria		5, 8, 16	1-6		The screening process has not started yet
SASB Supply Chain Management	HC-BP-430a.1			43	
414-2 Negative social impacts in the supply chain and actions taken		5, 8, 16	1-6		The screening process has not started yet

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
<b>Public Policy</b>					
<b>GRI 415-1: Public Policy 2016</b>					
415-1 Political contributions		16	10	32	
<b>Patients (Customer) Health and Safety</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				26-29	
103-2 The management approach and its components				26-29	
<b>GRI 416: Patients &amp; Customer Health and Safety 2016</b>					
416-1 Assessment of the health and safety impacts of product and service categories				26-29	
SASB: Discussion, by world region, of management process for ensuring quality and patient safety during clinical trials	HC-BP-210.a.1			26, 27	
SASB: Patient Safety: Number of FDA Sponsor Inspections related to clinical trial management and pharmacovigilance that resulted in: (1) Voluntary Action Indicated (VAI) and (2) Official Action Indicated (OAI)	HC-BP-210.a.2			27	
416-2 Incidents of non-compliance concerning the health and safety impacts of products and services		16		27	
<b>Marketing and Labeling</b>					
<b>GRI 417: Marketing and Labeling 2016</b>					
417-1 Requirements for product and service information and labeling		12	7	27	
<b>Patients &amp; Customer Privacy</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				30	
103-2 The management approach and its components				30	
<b>GRI 418: Customer Privacy 2016</b>					
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data		16		30	
<b>Socioeconomic Compliance</b>					
<b>GRI 419: Socioeconomic Compliance 2016</b>					
419-1 Non-compliance with laws and regulations in the social and economic area		16		24, 25	

	SASB	SDG	UNGC Principle	Page number(s)	Comments/Omissions
<b>Animal Welfare (GRI 101 2.5.3)</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				30, 31	
103-2 The management approach and its components				30, 31	
<b>GRI 101-2.5.3</b>					
101-Ziff 2.5.3 Description of Animal Welfare Measures		8, 12		30, 31	
<b>Business Ethics / Governance</b>					
<b>GRI 103: Management Approach 2016</b>					
103-1 Explanation of the material topic and its Boundary				24–26	
103-2 The management approach and its components				24–26	
<b>GRI 101-2.5.3</b>					
Business Ethics: Description of code of ethics governing interactions with health care professionals	HC-BP-510.a.2			25	<a href="https://investors.biontech.de/corporate-governance">https://investors.biontech.de/corporate-governance</a>
Compliance Training		4		20, 24, 25, 27, 48, 49, 50	
<b>Corporate Citizenship (non-material, no reporting obligations)</b>					
Corporate Citizenship					
Development of concept on “Corporate Citizenship”		16		20, 21	
<b>Caring for Patients</b>					
Development of concept on “Caring for Patients”		16		16, 17, 20, 21	

## 7.5 MEMBERSHIPS

In 2020, BioNTech was a member of the following organizations and institutions:

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- Bio Deutschland e.V.
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- gesundheitswirtschaft rhein-main e.V.
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- BME e.V. Bundesverb. Materialwirts. Einkauf u. Logistik
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