



# Sustainability Bond Allocation Report

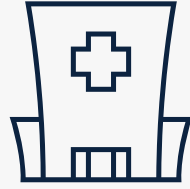
December 2022



# Key Messages & Bond Overview

## Our environmental, social and governance strategy

MSD's purpose is to use the power of leading-edge science to save and improve lives around the world. Our strategic framework reflects our commitment to operate responsibly to enable a safe, sustainable and healthy future for people and communities. We direct significant investments and resources to drive progress across all four environmental, social and governance (ESG) focus areas that matter most to our company and create value for our stakeholders:



### Access to Health

In collaboration with key stakeholders, we work to ensure our science advances health care, and our products are accessible and affordable to those in need.



### Employees

We recognize that our ability to excel depends on the integrity, knowledge, imagination, skill, diversity and well-being of our employees.



### Environmental Sustainability

We consider the impacts of our operations and strive to operate our business sustainably to support the health of our planet and its people.



### Ethics & Values

Through our unwavering commitment to transparency, we earn the trust and confidence of our stakeholders.

## Sustainability bond details

We are pairing the meaningful impact of our financing activities with our corporate strategy and broader business objectives. In December 2021, we launched our [Sustainability Financing Framework](#) to raise and direct funds to critical projects that help meet our ESG goals, support our overall ESG strategy and contribute to advancing the United Nations (U.N.) Sustainable Development Goals (SDG). In the same month, we issued our inaugural offering of a \$1 billion sustainability bond. The bond's net proceeds support a subset of projects and partnerships that increase

access to essential health care services and reduce our environmental footprint through green buildings and other management initiatives.

Our Sustainability Financing Framework defines "Eligible Projects" as expenditures for eligible social projects and/or eligible green projects. Each of our Eligible Projects meets one or more of the seven eligibility criteria defined by our Sustainability Financing Framework, which is aligned with the International Capital Markets Association (ICMA) 2021 Green Bond Principles, the 2021 Social Bond Principles and the Sustainability Bond Guidelines.

Our Sustainability Financing Committee has oversight for sustainability financing reporting, including the evaluation and selection of projects for bond allocation. This committee has cross-functional representation including individuals from the ESG Strategy Management Team to ensure strong alignment between sustainability financing reporting and our broader ESG priorities and commitments.



# Bond Allocation

## Bond allocation

Through June 30, 2022, we have allocated \$760 million of the \$994 million of net proceeds from our inaugural sustainability bond and \$234 million remains unallocated. Approximately 86% of the \$760 million was allocated to projects completed or underway during the three-year lookback period, and 14% was allocated to projects completed or underway during the roughly six-month period from bond issuance through June 30, 2022. We are committed to investing across all our eligible categories and expect the final allocation of total bond proceeds between social and environmental categories to be more balanced over time.



Access to Health



Employees



Environmental Sustainability



# Impact Reporting & Featured Projects

## METRICS

### Access to Essential Services

# 15 million

people reached through social investments in low- and middle-income countries and underserved populations in the U.S. in 2021. Projects receiving allocation from sustainability bond proceeds reached 11 million people in 2021.<sup>1</sup>



## Access to Health

### Access to Essential Services - Health Care

*Access to Health* is a priority ESG focus area. We allocated bond proceeds to investments in partnerships that address barriers to health care and health equity for underserved populations globally, and to expenditures in research and development (R&D) of products which treat diseases disproportionately impacting low-and-middle income countries (LMIC).

#### Affordability and addressing barriers to health

Our approach to expanding access to essential health care services is built on the belief that broadening our impact requires sustained effort and is best achieved through solving underlying health systems challenges. We have a long history of partnering to strengthen health systems and address health equity. Building on this history, we set an ESG goal to advance health equity by reaching 30 million people in LMIC and underserved communities in the U.S. from 2021-2025.<sup>1</sup>

Proceeds from the sustainability bond were applied to our Company's Foundation (the Foundation) to address systemic barriers to health equity and to MSD for Mothers to increase access to safe, high quality, respectful care around pregnancy and childbirth. Together these partnerships reached more than 11 million people in 2021 in support of our ESG goal.



## PROJECT SPOTLIGHT

### Our Foundation

*Equity in cancer care*

The Foundation invests in programs that help people living with chronic conditions, including cancer, receive high-quality health care. They have supported efforts to increase timely access to patient-centered care and

reduce disparities in cancer care across the U.S. through the Alliance to Advance Patient-Centered Cancer Care. This multi-year initiative supported evidence-informed, multi-faceted programs to enhance the delivery of equitable cancer care in underserved communities across six U.S. cities.

In 2022, the Foundation launched a new five-year initiative designed to improve equity in cancer care across the U.S. The Foundation is providing grants to select non-profit health care organizations that will work collectively to improve the coordination of patient care from diagnosis through survivorship; strengthen patient engagement in treatment decisions and overall patient-provider communication; build community partnerships that address barriers to care related to social determinants of health; and provide essential psychosocial support services.<sup>2</sup>

The Foundation also supports programs that aim to improve the delivery of cancer care in low- and middle-income countries. The Foundation is supporting the American Cancer Society to establish patient navigation programs in resource-limited settings in sub-Saharan Africa and develop a toolkit to help other countries adopt navigation programs as part of delivering comprehensive cancer care.

<sup>1</sup>Third-party reporting is used to calculate the number of people reached through social investments. In some cases, third-party reports may include the cumulative number of people reached for the reporting period, and/or data that is attributable to other partners as well as our company's philanthropic investment. Notably, the 15 million people includes four million people reached through impact investments in low- and middle-income countries. Impact investments were excluded from the sustainability bond use of proceeds allocation.

<sup>2</sup>Our Company's Foundation is supporting the Alliance for Equity in Cancer Care ("the Alliance") in the United States with a commitment of \$20 million over five years (2022-2026). Accessed 10/13/2022: <https://www.msd.com/company-overview/sustainability/philanthropy/advancing-equity-in-cancer-care/>





In June 2019, we launched the Maternal Outcomes Matter, or MOMs Initiative, in collaboration with the U.S. International Development Finance Corporation with a collective goal to improve maternal health in regions of the world where there are high rates of women dying from complications of pregnancy and childbirth. The MOMs Initiative is providing blended financing to small and medium-sized enterprises in sub-Saharan Africa and South Asia to scale the reach of innovations that

<sup>3</sup> CDC. 2014-2016 Ebola Outbreak in West Africa. Accessed 09/28/2022: <https://www.cdc.gov/vhf/ebola/history/2014-2016-outbreak/index.html#print>  
<sup>4</sup> UNICEF. Emergency stockpile availability report - Ebola vaccine. Accessed 10/24/2022: <https://www.unicef.org/supply/documents/emergency-stockpile-availability-report-ebola-vaccine>

contribute to a healthy pregnancy and safe childbirth. One of the enterprises that we have invested in is Unjani Clinic.

Unjani Clinic aims to bring quality, affordable health care services to communities across South Africa. By building a successful network of clinics owned and run by nurses, the clinic is empowering black women, improving health care quality and access, and creating employment opportunities in underserved communities. Through the MOMs investment, Unjani Clinic plans to grow their network from 100 clinics to over 1,000 sites by 2030 to deliver maternal health care and other health services to more people across South Africa.

### Infectious diseases

Through our investments in R&D, our company discovers and invents medicines and vaccines that address vital global health needs where we can have the greatest impact, now and in the future. In the many countries where we conduct clinical trials, we work to design studies that reflect the diverse populations we serve and address unmet medical needs of patients. Our approach involves assessing the existing burden of disease, the availability of alternative medicines and vaccines and the appropriateness of our products to improve public health.

Proceeds from the sustainability bond were applied across investments in R&D for infectious disease in global health priority areas from 2019-2021, as defined by Policy Cures Research, and reported through their G-Finder survey analysis.



Sustainability bond proceeds were applied to our company's expenditures on ERVEBO (Ebola Zaire Vaccine, Live), the world's first FDA-approved, WHO-prequalified vaccine for the prevention of Ebola virus disease (EVD) caused by Zaire ebolavirus in individuals 18 years and older. The Zaire ebolavirus can cause an

acute, serious illness which may be fatal if untreated. In the 2014-2016 outbreak in West Africa, approximately 28,000 suspected, probable and confirmed cases of EVD and approximately 11,000 deaths were reported in Guinea, Liberia and Sierra Leone, combined. The outbreak orphaned an estimated 30,000 children and was estimated to cost \$4.3 billion.<sup>3</sup> With the approval of ERVEBO in 2019, the world gained an important tool in helping to support future outbreak preparedness and response efforts.

In January 2021, our company partnered with UNICEF to establish the world's first global Ebola Zaire vaccine stockpile with ERVEBO. The stockpile inventory is being built over time and will be maintained by our company. Since establishing the agreement to build the stockpile, we have been working with UNICEF to deliver licensed doses. As of October 2022, the availability of doses of licensed vaccine in the stockpile is over 436,000.<sup>4</sup> The global stockpile, governed by the International Coordinating Group on Vaccine Provision, will offer a critical rapid response tool to help combat future outbreaks of disease caused by Zaire ebolavirus.

## Preventing Ebola virus disease with ERVEBO vaccine



On average, EVD has a case-fatality of approximately 50%, and is most prevalent in low-income countries ([Source: WHO](#))



ERVEBO is the world's first WHO-prequalified vaccine for the prevention of disease caused by Zaire ebolavirus in individuals 18 years of age and older



MSD partnered with UNICEF to establish the world's first Ebola Zaire vaccine stockpile, currently holding over 436,000 doses





## Employees

# Socioeconomic Advancement and Empowerment

Our company is committed to the highest ethical standards to help maximize the long-term sustainability of our business and of the communities in which we operate. We create socioeconomic development through employment, spend with diverse suppliers, and partnerships with communities all over the world, including communities that have historically been underserved or underfunded.

Our company is a member of the Billion Dollar Roundtable (BDR), founded in 2001 to recognize corporations that spend at least \$1 billion annually with women- and minority-owned suppliers, influencing and shaping supplier diversity excellence globally. In 2021, our company spent \$2.4 billion in the U.S. with more than 640 diverse suppliers – driving more than \$5 billion in economic impact and helping to sustain more than 30,000 jobs.<sup>5</sup>

In addition, we have established business relationships with thousands of suppliers in over 140 countries around the world, including direct suppliers (including external manufacturing providers), capital expenditure suppliers, indirect suppliers and research providers.

We have a sourcing management process in which environmental sustainability, social responsibility, and economic inclusion and supplier diversity (EI&SD) principles are integrated in each stage.



### PROJECT SPOTLIGHT

## AgileOne

*strategic partnership for the contingent workforce*

AgileOne is a key diverse supplier for our company. They are a member company of ActOne, a privately held, woman- and minority-owned business with over 2,900 employees and 225 locations across more than 30 countries. [AgileOne](#) is a global leader in the human resources industry in talent management and procurement solutions.

We contract with AgileOne to hire and manage our contingent workforce. AgileOne ensures our contingent workforce supports sustainable practices that align with our organizational priorities, including diversity,

equity and inclusion. Moreover, by outsourcing the day-to-day management of our contingent workforce, we can improve compliance, control spending and gain enterprise-wide visibility into our most valuable resource: our human capital.

\$100 million of sustainability bond proceeds were allocated to our company’s expenditures with diverse suppliers like AgileOne, signaling our strengthened commitment to advance socioeconomic opportunity and EI&SD.

## METRICS

### Socioeconomic Impact

# \$2.4 billion

spent in the U.S. with more than 640 diverse suppliers in 2021 – driving more than \$5 billion in economic impact and helping to sustain more than 30,000 jobs.<sup>5</sup> \$100 million of sustainability bond proceeds were allocated to diverse supplier spend.

### KEY DIVERSE SUPPLIER

# AgileOne

AgileOne is a member company of the ActOne group, a privately held, woman- and minority-owned business with 2,900 employees and 225 locations across more than 30 countries.

<sup>5</sup> Billion Dollar Roundtable Economic Impact Study. University of Washington, Foster School of Business

METRICS

## Environmental Impact

MORE THAN

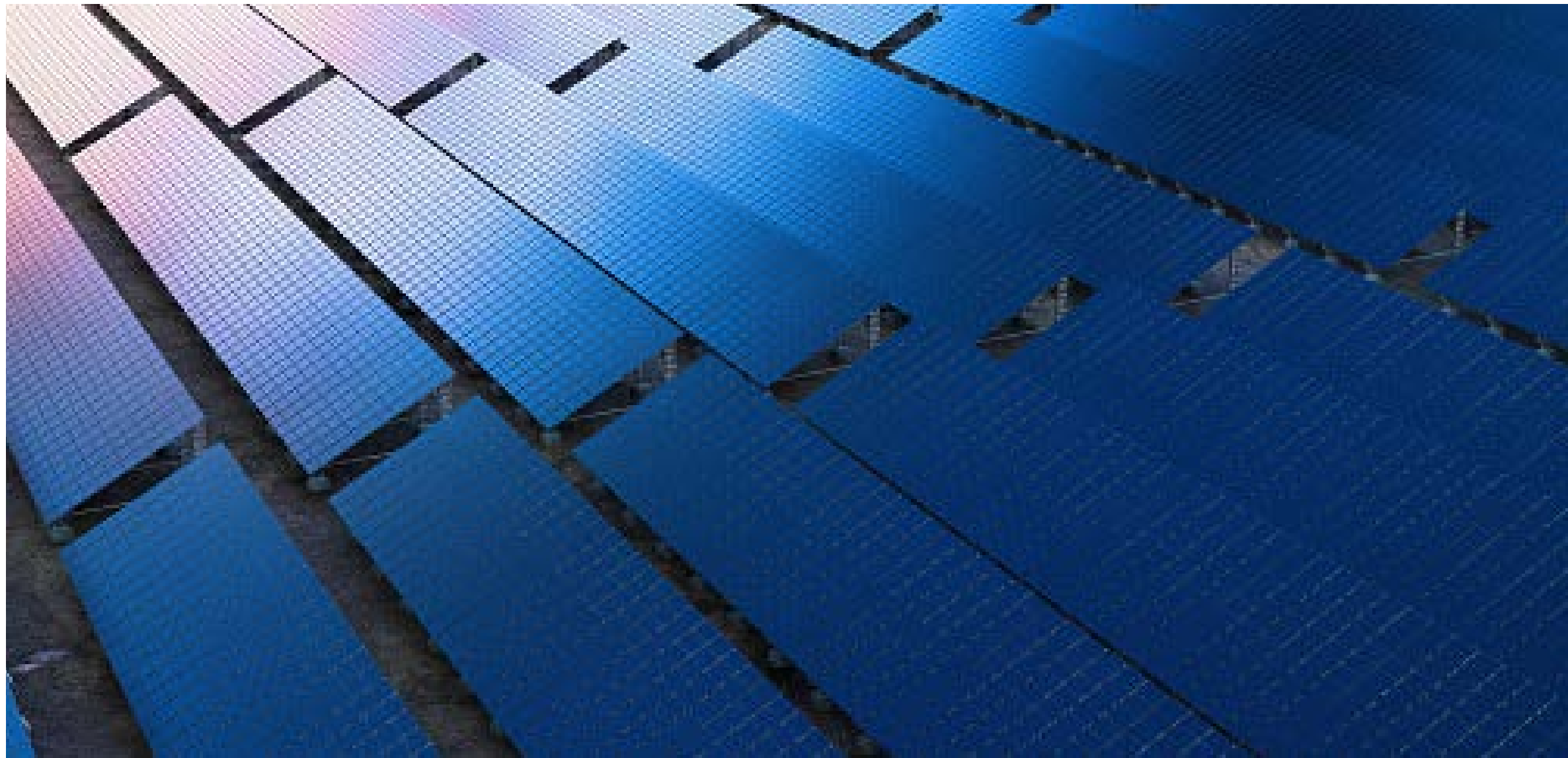
# 2.7 million

square feet of “green” floor space either completed or in construction. Projects receiving allocation from sustainability bond proceeds comprise 340,000 square feet.

REDUCED WATER USAGE BY

# 16% since 2015

and recovered, reused or recycled 5% of total water use in 2021. The Brinny, Ireland, wastewater project, which received allocation from sustainability bond proceeds, reduced on-site water usage by 25%.



## Environmental Sustainability Environmental Impact

A healthy planet is essential to human health and the sustainability of our business. A more sustainable environment enhances opportunities for product innovation and leads to reduced costs and risks. Our company has a long history of environmental stewardship and compliance, and we realize that our strategy and efforts need to continuously evolve in the face of a changing climate.

### Our environmental sustainability strategy has three focus areas:

- 1 Driving energy, water and resource efficiency in our operations
- 2 Designing new facilities and products to minimize environmental impact
- 3 Reducing any impacts in our upstream and downstream value chain



## Environmental Sustainability Green Buildings

Our sustainability priorities for workspaces are guided by our company-wide sustainability values and are applied everywhere we operate. We start by applying a strong foundation of sustainability standards to the design, construction and operation of our workplaces.

In 2021, our internal Sustainable Design Standard was revised to address growing expectations to minimize the environmental footprint of our expanding network and to align with our corporate environmental goals.

All our new facilities are required to comply with our Energy Design Guide and Energy Conservation Planner. When we purchase a facility, it is evaluated for energy efficiency and assessed against our energy scorecard as part of its integration into our company.

All new laboratories, new offices and major renovations of existing facilities are built following cost-effective and energy-efficient practices, and they are designed to meet the Leadership in Energy and Environmental Design (LEED) rating system, or a comparable country standard (e.g., BREEAM, EXEED, HQE, etc.). New offices and laboratories are expected to achieve LEED Gold certification at a minimum.





PROJECT SPOTLIGHT  
**South San Francisco  
 research facility**

Sustainability bond proceeds were allocated to our new research facility in South San Francisco, a nine-story, 290,000+ square-foot tower, completed in 2019, and designed to optimize environmental sustainability. The building has earned LEED Gold ratings for core and shell and commercial interiors and is our first site to achieve LEED Zero certifications for net-zero carbon emissions and energy use. Energy modeling during design predicted it to be 23% more efficient than a conventional

lab building, however it is actually 35% more efficient in practice.

Green elements include a 235-kilowatt solar panel on the roof, strategic design of the building’s mechanical systems, electric vehicle charging spaces, and solar- and wind-powered light poles. A 40% annual reduction in indoor water use compared to a similar facility of footprint and type was achieved by installing highly efficient plumbing fixtures in restrooms and 96% of waste generated during construction was diverted from landfills. Other green features to promote employee well-being and engagement at the site include a living wall of greenery, onsite honeybee hives, a pollinator-friendly native garden, and smart waste-sorting bins.

**South San Francisco research facility**

**LEED Gold rating**

and LEED Zero certifications for net-zero carbon emissions and energy use

**35%** more energy efficient

**40%** annual reduction in indoor water use

**96%** construction waste diverted from landfills



**Environmental Sustainability**

**Sustainable Water and Wastewater Management**

Our global water strategy aims to achieve sustainable water management within our operations and our supply chain, which supports U.N. Sustainable Development Goal six, “Clean Water and Sanitation.”

**To achieve these strategic objectives we are focusing on the following:**

- ✓ Ensuring that our wastewater discharges comply with local and national standards, as well as internal standards for pharmaceuticals in the environment
- ✓ Engineering innovations to reduce water use
- ✓ Understanding and controlling our operational water footprint
- ✓ Managing water risk at our facilities and in our supply chain
- ✓ Reporting publicly on our water use and goals



PROJECT SPOTLIGHT  
**Brinny, Ireland**

Sustainability bond proceeds were allocated to our Brinny, Ireland, manufacturing site. From 2019-2021, the wastewater treatment plant (WWTP) at our Brinny site was improved to handle new waste streams resulting from the existing infrastructure reaching its end of life. In addition to addressing these environmental risks, the project had environmental and innovative benefits. A recycled water system to reuse final effluent for rinsing cycles was introduced resulting in an average reduction of 25% of daily water withdrawal. Dynamic pH monitoring now enables precise adjustments to chemical dosing, reducing chemical use.





## Report of Independent Accountants

To the Management of Merck & Co., Inc., Rahway, N.J., USA

We have examined the accompanying management assertion of Merck & Co., Inc., Rahway, N.J., USA (the Company) that \$760 million of the net proceeds of \$994 million from the December 10, 2021 issuance of the \$1 billion 1.900% Notes due 2028 were allocated to finance or refinance, in whole or in part, existing or new eligible projects, during the period from December 10, 2018 (beginning 36 months prior to the issuance) through June 30, 2022, in accordance with the assessment criteria defined in management's assertion. The Company's management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA). Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management's assertion. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management's assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

We are required to be independent and to meet our other ethical responsibilities in accordance with relevant ethical requirements related to the engagement.

Only the information included in the management assertion of the Company on page 10 and the allocation of the net proceeds to eligible projects as presented under the Bond Allocation section on page 3 are part of our examination engagement. The other information in this Sustainability Bond Allocation Report has not been subjected to the procedures applied in our examination engagement, and accordingly, we make no comment as to its completeness and accuracy and do not express an opinion or provide any assurance on such information.

In our opinion, management's assertion that \$760 million of the net proceeds of \$994 million from the December 10, 2021 issuance of the \$1 billion 1.900% Notes due 2028 were allocated to finance or refinance, in whole or in part, existing or new eligible projects, during the period from December 10, 2018 through June 30, 2022, in accordance with the assessment criteria defined in management's assertion is fairly stated, in all material respects.

*PricewaterhouseCoopers LLP*

Florham Park, New Jersey

December 12, 2022

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# Management Assertion

Management of Merck & Co., Inc., Rahway, N.J., USA (MSD) asserts that \$760 million of the net proceeds of \$994 million from the December 10, 2021 issuance of our \$1 billion 1.900% Notes due 2028 were allocated to finance or refinance, in whole or in part, existing or new eligible projects, during the period from December 10, 2018 (beginning 36 months prior to the issuance) through June 30, 2022, in accordance with the assessment criteria set forth below. MSD is responsible for the completeness, accuracy and validity of this management assertion and the allocation of the net proceeds to eligible projects as presented under the Bond Allocation section on page 3.

## Eligible projects and assessment criteria

### Access to Essential Services - Health Care

Expenditures in medicines and vaccines, programs, systems, facilities or equipment for or that enhance access to public, not-for-profit, free or subsidized essential products or services to the target population of people in low- and middle-income countries, as defined by the World Bank; vulnerable and underserved people in high-income countries, as defined by the U.S. Department of Health and Human Services; people without insurance or unable to pay for medication; or people affected by global health and/or socioeconomic crises.

Expenditures related to funding the operations of the MSD for Mothers<sup>6</sup> programs and initiatives, contributions to our Foundation<sup>7</sup> whose mission is to strengthen health systems and improve health outcomes, and R&D expenditures<sup>8</sup> on products that treat a variety of neglected diseases, emerging infectious diseases and sexual and reproductive health issues, as defined by Policy Cures Research, and reported through their G-FINDER survey analysis as of May 2022.<sup>9</sup>

### Socioeconomic Advancement and Empowerment

Expenditures to expand access and benefit to the target population of individuals and communities that are considered underrepresented ethnic groups or women.

Expenditures related to payments made to third party-certified minority- or women-owned business enterprise (MWBE) suppliers. Management determined suppliers were MWBE suppliers based on certificates received from either the National Minority Supplier Development Council (NMSDC) or Women's Business Enterprise National Council (WBENC) that evidenced the supplier was minority- or women-owned.

### Green Buildings

Expenditures related to the design, development, construction, materials, equipment and certification costs, in new or existing buildings or facilities that received LEED Gold certification during the period from December 10, 2018 through June 30, 2022 or were refurbished and as a result achieved a minimum 30% improvement in energy use or carbon emissions based on an engineering analysis.

### Sustainable Water and Wastewater Management

Expenditures for wastewater treatment in facilities that improved water quality or water efficiency in operations, supported by a completed environmental impact assessment.

Note: Refer to the "Use of Proceeds" section of the Prospectus Supplement filed with the Securities and Exchange Commission for additional eligible projects and eligibility criteria to which the proceeds may be allocated.

<sup>6</sup><https://www.msdfornthers.com/>

<sup>7</sup>Our Foundation is a private, charitable organization established and funded by Merck & Co., Inc., Rahway, N.J., USA. It is a separate legal entity and operates independently. <https://www.msd.com/company-overview/sustainability/philanthropy/>

<sup>8</sup>R&D expenditures include costs pertaining to the research and development activities directly and indirectly associated with the selected programs.

<sup>9</sup>The G-FINDER survey tracks annual investment into R&D for new products and technologies to address priority global health challenges.



## About MSD

Merck & Co., Inc., Rahway, N.J., USA, is known as MSD outside the United States and Canada. We are unified around our purpose: We use the power of leading-edge science to save and improve lives around the world. For more than 130 years, we have brought hope to humanity through the development of important medicines and vaccines. We aspire to be the premier research-intensive biopharmaceutical company in the world – and today, we are at the forefront of research to deliver innovative health solutions that advance the prevention and treatment of diseases in people and animals. We foster a diverse and inclusive global workforce and operate responsibly every day to enable a safe, sustainable and healthy future for all people and communities. For more information, visit [msd.com](https://www.msd.com) and connect with us on Facebook, Twitter, Instagram, YouTube and LinkedIn.

## Disclaimer and forward-looking statement

This report of Merck & Co., Inc., Rahway, N.J., USA (the “company”) includes “forward-looking statements” within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These statements are based upon the current beliefs and expectations of the company’s management and are subject to significant risks and uncertainties. There can be no guarantees with respect to pipeline candidates that the candidates will receive the necessary regulatory approvals or that they will prove to be commercially successful. If underlying assumptions prove inaccurate or risks or uncertainties materialize, actual results may differ materially from those set forth in the forward-looking statements.

Risks and uncertainties include but are not limited to, general industry conditions and competition; general economic factors, including interest rate and currency exchange rate fluctuations; the impact of the global outbreak of novel coronavirus disease (COVID-19); the impact of pharmaceutical industry regulation and health care legislation in the United States and internationally;

global trends toward health care cost containment; technological advances, new products and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approval; the company’s ability to accurately predict future market conditions; manufacturing difficulties or delays; financial instability of international economies and sovereign risk; dependence on the effectiveness of the company’s patents and other protections for innovative products; and the exposure to litigation, including patent litigation, and/or regulatory actions.

The company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the company’s Annual Report on Form 10-K for the year ended December 31, 2021, and the company’s other filings with the Securities and Exchange Commission (SEC) available at the SEC’s Internet site ([www.sec.gov](http://www.sec.gov)).

