TESTIMONY OF DARREN W. WOODS

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

EXXON MOBIL CORPORATION

BEFORE THE U.S. HOUSE OF REPRESENTATIVES

COMMITTEE ON OVERSIGHT AND REFORM

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Chairwoman Maloney, Ranking Member Comer, Chairman Khanna, Ranking Member Norman, and Members of the Committee on Oversight and Reform, my name is Darren Woods. I am the Chairman and Chief Executive Officer of ExxonMobil Corporation.

I welcome the opportunity to appear before you today to discuss climate change, the world's energy needs, and what ExxonMobil is doing to be part of the solution. This is a matter of critical importance to our country and the world.

I am proud to have spent almost 30 years with ExxonMobil. I joined ExxonMobil in 1992 as a planning analyst and, over the last three decades, have worked in several of the company's different businesses, including its chemical and refining operations. During my time with the company, and over the course of its more than 135-year history, ExxonMobil has sought to responsibly meet the world's need for reliable and affordable energy.

Energy is essential to economic activity and societal progress, and demand for energy continues to grow. What we rightfully celebrate as the American way of life depends on an affordable and reliable supply of energy. And it is not only here in America that people need dependable energy. Energy is just as critical in the developing world. Billions of people still lack basic electricity or clean cooking facilities in their homes. As a result, as recognized by the International Energy Agency ("IEA") and others, oil and natural gas will remain an indispensable part of the energy mix that will meet society's growing need for power for the foreseeable future, particularly given that alternative sources, such as renewables, currently lack the scale and reliability to satisfy more than a fraction of global demand.

At the same time, ExxonMobil has long acknowledged that climate change is real and poses serious risks. Addressing the world's need for energy while also addressing climate change is a critical challenge, and all segments of society, including the government, academia, the broader scientific community, the private sector, and consumers, must work together to solve the problem of climate change and its risks to our planet. ExxonMobil already has invested significantly in the next generation of lower-emission fuels and fuel technologies through our own research and development, and in collaboration with leading universities, governments and private companies around the world. We have made substantial progress in reducing our own emissions, and continue to set and achieve ambitious goals to build on this progress.

In addition to our substantial investments in next generation technologies, ExxonMobil also advocates for responsible climate-related policies. We support policy solutions that address the

dual challenge of providing energy in the twenty-first century: mitigating the risks of climate change while at the same time meeting the growing global need for energy in an environmentally responsible manner. That is why ExxonMobil has advocated for the establishment of an across-the-board price for carbon, supported the Paris Agreement, and backed federal methane regulation to encourage reductions in emissions.

Some have sought to portray ExxonMobil's policy positions as climate denialism and have baselessly claimed that ExxonMobil withheld information or spread disinformation about climate change. Neither charge is true. ExxonMobil does not, and never has, spread disinformation regarding climate change. Its public statements about climate change are, and have been, truthful, fact-based, transparent, and consistent with the views of the broader, mainstream scientific community at the time. Nor has ExxonMobil ever had any knowledge about climate science that was not broadly known or readily available to policy makers or the public. Any suggestion to the contrary is false. Indeed, as detailed in this testimony, ExxonMobil has contributed to the development of climate science for decades and has made its work publicly available. And as the scientific community's understanding of climate change developed, ExxonMobil responded accordingly.

My testimony today first will provide an overview of ExxonMobil and the company's perspective on the growing global need for energy and how our company's products help to meet this need. I will then describe what ExxonMobil is doing to mitigate the risks of climate change and the policies the company supports to reduce emissions. Finally, I will conclude my testimony by addressing the allegations set forth in the Committee's September 16, 2021, letter that ExxonMobil hid its climate research and mounted a "disinformation" campaign in order to mislead the public about the effects of climate change.

I look forward to a constructive discussion regarding how all of us can work together to address the risks of climate change and to responsibly meet the world's growing need for energy.

I. *Introduction to ExxonMobil*

ExxonMobil has been an energy innovator throughout its 135-year history. From its origins as a regional marketer of kerosene to its current role as an advanced global producer of oil and gas products, ExxonMobil has always been at the forefront of developing and applying next-generation technologies to help safely and responsibly meet the world's growing needs for energy and high-quality chemical products used in every aspect of daily life.

Today, ExxonMobil's principal business involves exploration for, and production of, crude oil and natural gas, as well as the manufacture, trade, transport and sale of crude oil, natural gas, petroleum products, petrochemicals, and a wide variety of specialty products. While ExxonMobil is one of the largest publicly traded energy providers and chemical manufacturers, the company represents approximately 2 percent of the global oil and gas market. By contrast, State-owned oil and gas companies, such as those owned and operated by China, Russia, Saudi Arabia, Kuwait, and Venezuela, combined represent approximately 45 percent of the global market.

ExxonMobil is a proven technology leader. Since 2000, ExxonMobil has invested $16.5 billion in research and development across all business lines. In the past two decades, we have placed a special emphasis on developing lower emissions products and technologies, including: advanced biofuels; carbon capture and storage; natural gas technologies; and new energy efficiency processes, which are described in greater detail in Part III of this testimony. ExxonMobil operates or markets products in the United States and throughout the world.

ExxonMobil employs approximately 70,000 employees across the globe. In the U.S., since at least 2014, more than 30 percent of our new hires in management, professional, and technical positions have been minorities and globally, at least 37 percent have been women.

Our company also works closely with the communities in which we operate to identify and invest in initiatives that help support local needs, including local talent and skill development. I am enormously proud that, in 2020 alone—even in the middle of the pandemic—ExxonMobil families volunteered more than 200,000 hours in neighboring communities, and ExxonMobil employees and retirees donated $203 million for initiatives to improve the lives of citizens in local communities. We are committed to investing in communities and creating opportunities wherever we operate around the world.

II. *The Role of Energy and Rising Global Need*

Our commitment to help meet the global need for energy is at the core of what we do. Access to reliable, affordable energy is indispensable to modern life. It is critical to health and medical care and to economic development. Energy lifts individuals, communities, and nations out of poverty. Energy prolongs lives. And energy improves lives in nearly every respect, as the fundamental building block for health care, nutrition, and education.

In the U.S., for generations, our society has relied on ready access to a reliable and affordable supply of energy. This supply has been crucial to our nation's economic growth and stability. We rely on, and often take for granted, the energy that supports our daily lives, from powering our homes and businesses, to moving goods through commerce, to transporting us and our families to school and work.

Energy is just as critical in the developing world. A significant portion of the world's population remains energy-deprived. Approximately 770 million people still live without electricity, and millions more lack affordable and reliable access to energy. A lack of energy access is a key barrier to economic development, progress, and the benefits they bring to people's health and quality of life.

The need for energy, and the substantial benefits it provides to society, are expected to grow significantly as global population increases and the global middle class expands. Current estimates project that the world's population will grow to more than nine billion people by 2040, an increase of more than 20 percent. By that time, China and India are projected to account for 50 percent of energy demand. And, the global economic activity is expected to grow even faster than the population, almost doubling between now by 2040.

Access to energy creates a virtuous cycle. As people gain access to energy, their financial positions improve, thereby increasing demand for housing, transportation, electricity, consumer

goods and, necessarily, the energy to power them all. The middle class is estimated to expand to more than five billion people by 2030, with almost 90 percent of the next billion entrants into the middle class living in Asia. This, too, will have a significant effect on energy demand. Residential electricity use is expected to rise by approximately 60 percent between now and 2040, as a rising middle class seeks to improve health, security, and comfort with housing. In fact, just three weeks ago, the U.S. Energy Information Association projected a nearly 50 percent increase in world energy use by 2050.

Oil and gas will be needed to meet this growing need for energy. Indeed, the IEA itself recognized that natural gas will play a critical role in the decades to come in meeting the expected increase in the need for energy and ensuring an adequate supply of power. ExxonMobil intends to play an important role in meeting society's need for energy, at the same time as it is committed to reducing its emissions and investing in research to mitigate the risks of climate change.

III. *ExxonMobil's Progress in Reducing Emissions and Addressing Climate Change Risks*

ExxonMobil is committed to being part of the solution to climate change and the risks it poses. ExxonMobil is actively engaged in efforts to reduce emissions while providing affordable energy to the communities that need it. I am pleased to report to the members of this Committee that, through the expertise and ingenuity of our thousands of ExxonMobil scientists and engineers, we have already made significant progress.

With respect to emissions, ExxonMobil has already reduced its own greenhouse gas emissions by 11 percent between 2016 and 2020, and has set new plans for further reductions through 2025. At year-end 2020, the Company exceeded the emission reduction goals it had established in 2018. The Company aims for industry-leading greenhouse gas performance across its businesses by 2030, and recently announced new emission reduction plans for 2025, which are expected to be consistent with the goals of the Paris Agreement. The 2025 plans include a 15 to 20 percent reduction in greenhouse gas intensity of upstream operations compared to 2016 levels. This will be supported by a 40 to 50 percent reduction in methane intensity, and a 35 to 45 percent reduction in flaring intensity. Our 2025 plans are expected to reduce absolute greenhouse gas emissions by an estimated 30 percent for the Company's upstream business. Similarly, absolute flaring and methane emissions are expected to decrease by 40 to 50 percent.

ExxonMobil is responding to product demand growth by also delivering solutions that enable customers to meet product performance requirements while reducing their own greenhouse gas emissions. These products and solutions include natural gas technology, lightweight materials and packaging, and advanced fuels and lubricants. From 2000 through 2020, ExxonMobil has invested more than $10 billion to research, develop and deploy lower-emission energy solutions, resulting in new products that have eliminated or avoided approximately 520 million tonnes of greenhouse gas emissions—the equivalent of taking 110 million passenger vehicles off the road for a year.

Recognizing that commercially viable technology breakthroughs will be required to achieve the objectives of the Paris Agreement, ExxonMobil is also investing in large-scale technological solutions. The Company's sustained investment in research and development is focused on

society's highest-emitting sectors of heavy industry, power generation and commercial transportation, which together account for 80 percent of global energy-related CO_2 emissions, and for which the current solution set is insufficient. ExxonMobil is one of the global leaders in Carbon Capture & Storage ("CCS"), a technology that the IEA and the U.N. Intergovernmental Panel on Climate Change ("IPCC") consider critical to achieving society's ambition for net-zero emissions as outlined in the Paris Agreement. The IEA has called CCS "a key cost-effective option for reducing CO_2 emissions in large energy-intensive industries." To date, ExxonMobil has cumulatively captured more CO_2 than any other company, accounting for approximately 40 percent of all the anthropogenic CO_2 ever captured.

In the last year, the company created a new business unit, ExxonMobil Low Carbon Solutions, the sole focus of which is commercializing and growing its extensive low-carbon technology portfolio. Just this past April, ExxonMobil unveiled a $100 billion carbon capture and storage concept to capture emissions from heavy industry located along the Houston Ship Channel. Once fully developed, this concept has the potential to capture about 100 million metric tons of CO_2 emissions annually by 2040, effectively offsetting one of the country's largest sources of industrial CO_2 emissions. This project has the potential to protect and create thousands of jobs, while drastically accelerating U.S. emission-reduction efforts and providing substantial progress toward the country's lower-carbon aspirations. For comparison, the U.S. currently captures approximately 13 million metric tons of CO_2 emissions per year – more than half of which is captured by ExxonMobil.

In addition to the Houston ship channel concept, ExxonMobil is developing a number of CCS projects and partnerships in areas where the company has expertise and proven experience at scale. Just last week, we announced that we had initiated the process for engineering, procurement, and construction contracts as part of plans to expand CCS at our LaBarge, Wyoming facility, which has already captured more CO2 than any other facility in the world. The expansion project will capture up to 1 million metric tons of CO2, in addition to the 6-7 million metric tons already captured at LaBarge each year. At the Strathcona refinery in Edmonton, Canada, Imperial Oil, an affiliate majority-owned by ExxonMobil, is moving forward with plans to produce approximately 20,000 barrels per day of renewable diesel, which could reduce emissions in the Canadian transportation sector by about 3 million metric tons per year. The complex will utilize locally grown plant-based feedstock and hydrogen with CCS as part of the manufacturing process. ExxonMobil is also participating in the Port of Rotterdam, Netherlands, CO2 Transportation and Offshore Storage ("Porthos") project; a multi-stakeholder project at the Port of Antwerp; the Acorn project in northeast Scotland to capture CO2 from industrial facilities; a hub concept to capture, transport and permanently store CO2 generated by industrial activity in the Asia-Pacific region; and several existing joint ventures with Qatar Petroleum to operate a CCS project with an annual capacity of 2.1 million tonnes.

IV. *ExxonMobil's Climate Research and Policy Engagement*

In its September 16, 2021, letter to ExxonMobil, the Committee charged that ExxonMobil, other oil and gas producers, and certain trade associations "have been aware of the science of climate change for decades" and that the industry "has reportedly led a coordinated effort to spread disinformation to mislead the public and prevent crucial action to address climate change."

We addressed this allegation at the outset of this testimony, but it bears repeating here: ExxonMobil does not spread disinformation regarding climate change and its public statements about climate change are, and have always been, truthful, fact-based, transparent and consistent with the contemporary understanding of mainstream climate science.

ExxonMobil has supported the development of climate science for nearly 40 years. ExxonMobil's research in climate science has resulted in nearly 150 papers, including more than 50 peer-reviewed publications that the Company has made available to the public. In its research efforts, ExxonMobil also partners with universities and the federal government. These partnerships include climate modeling at Massachusetts Institute of Technology ("MIT"), development and commercialization of lower-emission solutions at Stanford University, and engagement with the U.S. Department of Energy. More information about these partnerships is available here: https://corporate.exxonmobil.com/Climate-solutions/University-and-National-Labs-partnerships/Collaborating-with-leading-universities-to-meet-global-energy-demand#Andmanymore. In addition, ExxonMobil's scientists have participated in the U.N.'s IPCC since its inception in 1988. ExxonMobil scientists have also repeatedly been selected by the IPCC as authors of the past five major assessment reports.

Having said that, I want to be unmistakably clear: ExxonMobil has never had any unique or superior knowledge about climate science, let alone any that was unavailable to policy makers or the public. In the 1970s and 1980s, governments, universities, research institutions, and hundreds of scientists all contributed to the existing body of climate science research. ExxonMobil's research efforts were modest in comparison, and focused largely on monitoring and analyzing the research produced by the broader scientific community. For example, the 1977 ExxonMobil memorandum from which the Committee's September 16 letter quotes a single sentence, without context, was based entirely on publicly available scientific research, as expressly confirmed by its bibliography. Based on those sources, the author cautioned that the then-available climate models were in a "primitive stage of development" and that "considerable uncertainty" existed regarding the science of climate change. Similar observations about the uncertainties underlying climate science echo the reports issued by other researchers at the time, including relating to the timing, specific causes, and likely impacts of climate change. Government agencies and independent climate researchers all recognized that more research was needed before any definitive pronouncements could be made about climate change.

As the scientific community's understanding of climate change developed, ExxonMobil responded accordingly. Indeed, ExxonMobil's public statements regarding climate change have been aligned with those of the IPCC since its first assessment in 1990. And for almost two decades now, as the science has developed, ExxonMobil has publicly acknowledged both the risks presented by climate change and the need for coordinated action by governments, businesses, and academic communities around the world to address these risks. To provide just a few examples:

- In 1998, Exxon began comprehensively reporting on its annual greenhouse gas emissions.

- In 2000, ExxonMobil published an op-ed in *The New York Times* on "The Promise of Technology" in which it wrote, "Climate change may pose legitimate long-term risks. As

one of the world's leading science and technology organizations, ExxonMobil is confident that technology will reduce the potential risks posed by climate change."

- In 2002, ExxonMobil published an op-ed in *The New York Times* on "Managing Greenhouse Gas Emissions," where it stated, "The risks of climate change and its potential impacts on society and the ecosystem are widely recognized."

- In November 2002, ExxonMobil announced the Global Climate and Energy Project at Stanford, committing $100 million over 10 years to focus on solutions to climate change.

- In 2004, ExxonMobil included climate change language in its "Corporate Citizenship Report," which stated, "We recognize that, although scientific evidence remains inconclusive, the potential impact of GHG emissions on society and ecosystems may prove to be significant."

- In 2007, ExxonMobil's Vice President for Public Affairs was quoted in the *Washington Post* cautioning that the "global ecosystem is showing signs of warming, particularly in polar areas" and "the appropriate debate isn't on whether the climate is changing but rather should be on what we should be doing about it."

In short, there is no truth to the suggestion that ExxonMobil ever misled the public or policy makers about climate change. The Company has long acknowledged the reality and risks of climate change, and it has devoted significant resources to addressing those risks.

Certain groups have sought to misrepresent ExxonMobil's position on climate science, and its support for effective policy solutions, by recasting genuine policy debates as a disinformation campaign. These charges are baseless. The fact that ExxonMobil has supported certain climate policies, such as a revenue-neutral carbon tax and adherence to the Paris Agreement, while opposing others, is not tantamount to promoting climate disinformation.

Like many other companies, ExxonMobil offers its perspective and insights on important public policy issues being considered by Congress and regulators. And, like many public policy debates, it should not be surprising that there are competing views about how best to address the risks of climate change. Nor is it surprising that ExxonMobil supports certain climate policies and opposes others. But it would be a mistake to equate such policy disagreements with promotion of climate "disinformation."

ExxonMobil has long sought to promote a balanced approach to climate policy debates, consistent with its understanding of the existing state of the science. When considering particular policy proposals to address climate change, ExxonMobil examined the available science as well as the possible implications of these policies for, among other things, access to affordable and reliable energy and the potential economic and financial consequences. Needless to say, ExxonMobil has not been the only party engaging in the climate policy discussions over the last 40 years. The public, policy makers, industry, environmental activists, and government officials on all sides of the issue, and in both major political parties in the United States, have participated in robust debate about which policy proposals were appropriate in light of scientific understanding at the time. Even as climate data and modeling have improved over time, the

debate over which policies should be enacted to mitigate climate change continues today, as the Committee is aware.

It will take concerted efforts from businesses, governments, and consumers to reduce the risk of climate change, and ExxonMobil is committed to playing its part. To further these efforts, the Company actively engages on policy at the domestic and international levels to inform business planning and to assist policymakers seeking expertise about energy markets and technology. For example, ExxonMobil has supported the Paris Agreement since its adoption, and has consistently voiced support for U.S. participation in the agreement.

ExxonMobil also has supported a carbon tax for years to incentivize the search for market-based lower-emissions energy solutions while also providing the stability and predictability that businesses need to make long-term and capital-intensive investments. Adopting a carbon price would send a clear signal to the market, creating powerful incentives to reduce emissions for businesses and individuals alike, and would encourage investment in R&D for breakthrough emission-reduction technologies, such as carbon capture. That is why I intend to continue engaging with government officials here and abroad to make the case for this important policy. In addition, to reduce emissions, ExxonMobil has advocated in the U.S. for a cost-effective, federal regulatory standard to manage methane emissions from both new and existing oil and natural gas facilities.

When it comes to important policy decisions, ExxonMobil believes the best-informed decisions result from free and open debate. The Company is transparent about its public policy positions, including with respect to climate policy.

ExxonMobil has great respect for the state and federal officials with whom we engage on matters important to our company, and always seeks to represent our views with the utmost integrity and honesty.

V. *Conclusion*

It is my hope that today's testimony will assist the Committee and the Congress as they contemplate policy proposals to address climate change.

I welcome the Committee's questions.