

SUSTAINABLE FINANCE

THE IMPERATIVE AND THE OPPORTUNITY

Goldman Sachs 2019 Sustainability Report

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(from left to right)

John E. Waldron
President and Chief Operating Officer

David M. Solomon
Chairman and Chief Executive Officer

Stephen M. Scherr
Chief Financial Officer

FELLOW SHAREHOLDERS,

This report arrives in the midst of crisis. The coronavirus pandemic has already had a devastating impact on societies around the world. We have seen historic levels of jobless claims, record volatility in the markets, and unprecedented disruption to all aspects of our day-to-day lives. While so much remains uncertain about the course of the virus, what is clear is that we will be dealing with its effects for many months, and likely much longer.

Crisis periods like these are painful to experience but underscore the importance for all firms of managing across a broad variety of risk factors while advancing long-term opportunities. This understanding is core to our approach to sustainable finance, which is grounded in two key pillars — inclusive growth and climate transition — that we apply to our work with clients and our business.

At the same time that the business case for sustainable growth has crystallized, the consequences of inaction have also become more apparent. This is a rare moment where the pull of opportunity, and the push of risk, are driving market participants in the same direction, toward sustainable growth.

While we have been engaged in sustainable finance for the better part of two decades, 2019 represents a notable surge in momentum. During the year, we announced the formation of the Sustainable Finance Group to drive our efforts across our businesses. Our ambitions in this area are sizable. We have set a target of \$750 billion in financing, advisory and investing activity over the next 10 years across these themes of climate transition and inclusive growth. As significantly, we are weaving these capabilities across the firm, encompassing both how our divisions serve our clients and how we manage ourselves as an organization.

Sustainable finance was front and center across our client interactions in 2019. We will go deeper into several examples in the pages that follow, but a few examples are worth highlighting here. We worked with Enel to issue the first-ever general corporate purpose bond that links the payment of its coupon to the company's goal of generating at least 55 percent of its power from renewables by the end of 2021. We created a new corporate cash management solution that prioritizes business with diverse broker-dealers. And we established a new policy to only take public those companies in the US and Europe with at least one diverse board director (starting next year, we will increase our target to two). We also continued to deepen the integration of sustainable finance within our core work, from how we make and manage private equity investments, to how we steward assets as an active shareholder. Sustainable finance has been a powerful application of our One Goldman Sachs approach — mobilizing our best thinking across the firm on central questions for some of our largest clients.

Our views on climate and inclusive economic growth also manifest in how we manage our own firm. That starts with our support of our people and extends to fostering an inclusive environment where all of our colleagues can achieve their goals. In 2019, we adopted new policies to drive diverse hiring at all seniority levels and to support working parents, including by increasing parental leave to 20 weeks for all employees. Through these initiatives, we are reaffirming our belief that diversity and inclusion are critical to the long-term success of Goldman Sachs.

Managing the firm sustainably also means a continued focus on the efficiency of our operations, taking care to reduce our environmental impact over time. In the past year, we opened new talent hubs in London and Bengaluru that include best-in-class sustainability features, and we are well on our way to our 2020 goal of achieving green-building certifications for 70 percent of our global real estate portfolio.

Going forward, we will continue to pursue innovation and progress on issues related to sustainable growth. With all that is happening around us, we recognize that the path forward may not be linear, but we are committed to this work for the long-term benefit of our clients, our stakeholders and broader society.



David M. Solomon
Chairman and
Chief Executive Officer



John E. Waldron
President and
Chief Operating Officer



Stephen M. Scherr
Chief Financial Officer

RESPONDING TO IMPACTS OF THE GLOBAL PANDEMIC

The global COVID-19 pandemic is putting extraordinary pressure on all of society, and we believe we have a responsibility to help. Here's what we've done so far:

For business clients, we have suspended our share buybacks to ensure that we have more liquidity to meet their needs.

For consumers, we are working through Marcus and Apple Card to help customers during this time of economic hardship — for example, by allowing customers to postpone a monthly loan or card payment without accruing interest and providing early access to funds in CDs with no early withdrawal penalties.

For small businesses, we developed a \$525 million Small Business Stimulus Package that includes \$500 million to provide emergency loans to small businesses across the US, and \$25 million in grants to Community Development Financial Institutions (CDFIs) and other mission-driven lenders.

For frontline medical teams, we have donated across the US and Europe over 2.5 million surgical masks and 700,000 N-95 masks — which we acquired over a number of years following

prior epidemics like SARS, as part of our operational risk management efforts.

For hard hit communities, we've launched the Goldman Sachs COVID-19 Relief Fund, a \$30 million commitment under *Goldman Sachs Gives* — including a Special Employee Matching Gift Program — to help healthcare workers, families and the most vulnerable populations. In addition, through *Community TeamWorks*, our people are able to lend a hand from home, whether helping the elderly and underserved students, or helping nonprofit managers develop continuity strategies.

For our people, we are offering 10 days of COVID-19 family leave to allow time to care for family members due to COVID-19 related illness or childcare needs, including homeschooling. We also curated digital learning resources and insights on resiliency and wellness to support our people, as well as digital meditation and fitness classes.

INTRODUCTION

RAISING OUR COMMITMENT EXECUTING OUR PLAN

In this report, we detail our progress in putting our views into action, including our commitment to deploy \$750 billion in sustainable financing, investment and advisory activity by 2030; how we are leveraging the breadth of our expertise to broaden our sustainable finance capabilities across our businesses; as well as our continued commitment to prioritizing sustainability in how we manage our firm.



SUSTAINABLE FINANCE STRATEGY: FOCUS ON OPPORTUNITY

OUR PLATFORM FOR SUSTAINABLE FINANCE

Sustainability is a firmwide mandate focused on commercial solutions that address climate transition and inclusive growth. We are making our point of view actionable by targeting **\$750 billion** in sustainable finance activity by 2030, and continuing our commitment to those interconnected themes in how we manage our people, our operations and risk.

ACCELERATING THE CLIMATE TRANSITION

Using our commercial expertise to catalyze innovative market-driven solutions for mitigating climate risk and capturing growth opportunities in clean energy, sustainable transport, food and agriculture, waste and materials, and ecosystem services.

DRIVING INCLUSIVE GROWTH

Drawing on innovation and partnerships to drive inclusion in underserved populations worldwide, whether to improve healthcare access, affordability of education, financial inclusion or community investment.

MANAGING OUR FIRM

Seeking to manage Goldman Sachs for the long term, by supporting our people and increasing diversity and inclusion in our ranks, effectively managing risk, and seeking to limit our operational impacts around the world.

"There is not only an urgent need to act, but also a powerful business and investing case to do so."

David M. Solomon, Chairman and Chief Executive Officer

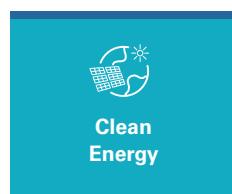
For more information on our nine sustainable growth themes, visit:
gs.com/sustainablefinance

(continued)

Climate transition and inclusive growth, which represent both an opportunity and an imperative, drive our commitment to sustainable finance. You will see in this report how they break down into nine areas of focus where we see the most potential for impact by doing what we do best — raising capital, advising clients, making investments, managing risks and structuring innovative market solutions to some of the world's most complex challenges. You will also see how our deep experience and position in capital markets gives us perspective on how and where to leverage our philanthropic efforts in cases where commercial solutions may not be as effective.

OUR NINE SUSTAINABLE GROWTH THEMES

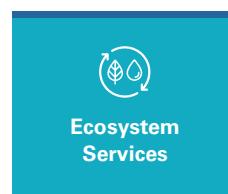
CLIMATE TRANSITION



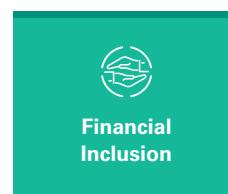
Clean Energy



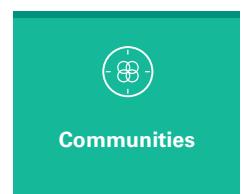
Sustainable Food & Agriculture



Ecosystem Services



Financial Inclusion



Communities

INCLUSIVE GROWTH



Sustainable Transport



Waste & Materials



Accessible & Innovative Healthcare



Accessible & Affordable Education

Supporting efforts to reduce emissions and environmental impact by enabling renewable energy generation, energy efficiency and grid services.

Enabling improved sustainability of the food and agriculture value chain by starting with agricultural production and moving through storage, processing and distribution to green consumer products.

Monetizing the value of forests, water, and biodiversity and contributing to the sustainable management of natural resources for our clients.

Advancing the growth of financial technology, insurance products and alternative credit to help support financial inclusion for underserved populations.

Community investment and supporting clients to enable infrastructure development, affordable housing and livelihood advancement.

Enabling clients to reduce their environmental impact by shifting the mode of transit or increasing per-trip efficiency through electric vehicles, connected services, autonomous driving and public transportation development.

Supporting clients that manage waste responsibly and promote sustainable production and consumption through their operations.

Advancing accessible and innovative health care to enable the use of digital technology, coordination and infrastructure advancements for our clients, as well as to support advanced devices and diagnostics toward better health care outcomes.

Working with our clients to enable greater access to education, improve learning outcomes and help close opportunity gaps for learners of all ages.

SUSTAINABILITY ACROSS OUR FRANCHISE

We work with clients on sustainable finance across each of our businesses. Below are select examples of our sustainability-related commercial efforts, where we are putting our views and expertise into practice.

INVESTMENT BANKING

- **Financings:** Including green, social, sustainability and SDG-linked bonds and new ESG-linked product innovation
- **Client Advisory:** Advising corporate clients as they seek to integrate ESG into their corporate strategy to enhance value
- **M&A Opportunities:** Helping clients identify potential sustainability-related M&A opportunities

GLOBAL MARKETS

- **ESG Structured Products:** Developing investment solutions linked to sustainable companies or outcomes
- **Risk Management Solutions:** Risk management solutions for sustainability-focused companies, including renewable power hedging, electric battery metals supply/offtake agreements and carbon credit client solutions
- **Global Investment Research:** Thematic research reports, including *Carboneconomics* and *Womenomics*, as well as GS SUSTAIN, which incorporates ESG into the fundamental analysis of companies

ASSET MANAGEMENT

- **Investing:** For clients globally, building portfolios across asset classes, implemented with a deep roster of internally managed and open architecture strategies. ESG and impact AUS of \$74 billion as of year-end 2019
- **Alternatives:** Various ESG and impact considerations are integrated into our investment strategies, including within our merchant bank — across private equity, private credit and infrastructure in climate transition and inclusive growth themes — and in the Renewable Power Group, which invests on behalf of clients and is one of the largest owners of distributed solar generation in the US
- **ESG Cash Management Solutions:** Investment products that integrate ESG considerations into liquidity solutions offerings, such as money market funds and SMAs
- **Stewardship:** Proactive stewardship effort to engage companies across themes related to sustainability and financial performance, which is integrated into the investment process

CONSUMER & WEALTH MANAGEMENT

- **Customized Client Portfolio Solutions:** Dedicated proprietary and external investment solutions for clients focused on ESG and impact investing across asset classes
- **Financial Health Tools & Resources:** Marcus offers free online tools and resources to help customers understand their overall financial health and improve financial literacy



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Through the individual examples of our work with companies and institutional investors, the future of sustainable finance is visible. It includes an emphasis on scaling proven approaches to advancing climate transition and inclusive growth, while creating new and innovative tools to further advance the market. It involves taking an important issue like diversity and inclusion and exploring its application across your commercial business and through your organization. And, it underscores the importance of driving efforts where you are uniquely positioned to lead, while realizing the incremental value of collaboration and partnership.

In **Accelerating the Climate Transition**, we show how we're helping our clients move toward a low-carbon future and promote more sustainable business practices, whether we are raising capital for innovative sustainability solutions, developing low-carbon investing approaches or leveraging our expertise to support clients across all sectors in addressing risks associated with climate change.

In **Driving Inclusive Growth**, we highlight our commercial efforts to increase affordability, quality and accessibility, whether in health care, education or financial services. We'll also show how we're applying expertise and capital, as well as the efforts of our people, to invest in underserved communities.

Finally, in **Managing Our Firm**, we highlight how the same core views on Climate Transition and Inclusive Growth that are central to our commercial activities also drive how we manage our firm. This includes striving to support and develop an inclusive workforce — one defined by cultural values of partnership, service, integrity and excellence — and achieving sustainability in our facilities and supply chains, as well as managing risks.

MILESTONES

\$88B

in clean energy financings
and investments since 2012

\$59B

in green, social and sustainability
bonds underwritten since 2014

\$8.5B+

invested in underserved American
communities since 2001

\$74B

AUS in dedicated ESG and
impact as of year-end 2019¹

\$230M

invested in women-led
businesses since 2018¹

9,700

10,000 Small Businesses
program graduates to date

ZERO

net carbon emissions
across our global operations and
business travel since 2015

85%

reduction of single-use plastics in
operations as of year-end 2019²

¹As of January 2020. ²Reduction from 2018 baseline.

Advancing the Ecosystem



ACCELERATING THE CLIMATE TRANSITION

Climate change poses a significant challenge for the global economy, and as a leading institution in the capital markets, we see tremendous opportunity to be part of the solution. By leveraging our commercial expertise to catalyze market-driven solutions, Goldman Sachs is committed to helping our clients and stakeholders accelerate the transition to a low-carbon economy in an inclusive and orderly way.

Our approach to climate change encompasses a holistic view of commercial solutions to mitigate climate risk and capture opportunities that promote environmental progress across growth areas in clean energy, sustainable transport, food and agriculture, waste and materials, and ecosystem services. Through innovative approaches to climate, combined with our deep market expertise across these themes, we are at the forefront of advising clients on their climate transition strategies, thereby helping markets and economies capture sustainable growth.

INNOVATIVE APPROACH TO FINANCING CLIMATE TRANSITION

Goldman Sachs has been a leader in the development of innovative financing approaches that drive capital toward green and social projects. The past year's activity had a number of notable firsts, including those that provide new solutions that can be scaled across the market.

THE FIRST SDG-LINKED BOND



Working with Enel, an Italian-headquartered energy company, Goldman Sachs structured the first sustainability performance bond linked to the United Nations' Sustainable Development Goals (SDGs). Rather than restrict the use of proceeds to specific green projects, the bond ties Enel's cost of capital to its strategic commitment to make installed capacity 55% renewable by the end of 2021 — core to the company's broader decarbonization strategy, including its long-term goal of net-zero emissions. Under the bond's performance-based covenant, investors receive a step up in interest rates if the target is not met.

Issued in September 2019, Enel's \$1.5 billion inaugural SDG-linked bond was preceded by robust discussions with investors on the innovative structure, and followed in October by a €2.5 billion similar offering. Enel has operations in 33 countries on five continents. It manages 46 gigawatts of capacity from renewable sources and supplies 70 million customers worldwide.

FIRST BOND BASED ON CLIMATE RESILIENCE

Despite advancing efforts on many fronts to cut greenhouse gas emissions, climate impacts will be unavoidable.

As a result, an equal emphasis needs to be placed on climate resiliency and adaptation, which is the focus of a \$700 million bond issuance by the European Bank for Reconstruction and Development (EBRD).

Goldman Sachs has been at the forefront in developing catastrophe bonds, which are debt instruments designed to raise money in the event of natural disasters, including from extreme weather events. From there,

it was a natural step to the development of the first resiliency bond, a new category of green bond based on a set of climate resilience principles established by the Climate Bonds Initiative, an international organization that is mobilizing the bond market to support a low-carbon and climate-resilient economy.

The offering is an outgrowth of a 2018 Climate Bonds Initiative meeting that brought together experts in resilience and climate adaptation. As a result, principles around these issues were added to existing standards and certification criteria, which the Initiative had been applying to green bonds since 2015. Goldman Sachs served on the advisory board and helped develop the principles.

Innovative Approach to Financing Climate Transition (continued)

INAUGURAL ISSUERS THAT SCALE THE MARKET

Goldman Sachs facilitated climate-focused green and sustainability bond issuances for two of the largest companies in the world — PepsiCo and Sysco.

PepsiCo's first-ever green bond aims to support decarbonizing the company's global operations and supply chain and investing in advanced packaging and water sustainability. The \$1 billion issuance that we helped underwrite in 2019 drew strong market support, with growing investor interest in ESG-linked securities. PepsiCo intends to use the proceeds to pursue a wide range of initiatives, including greater use of renewable energy, water replenishment in high-water-risk regions, and investments in sustainable product packaging.



Sysco, the international food distributor, became the second US company to issue a sustainability bond, which allocates proceeds to both green and social projects. In February 2020, we structured a \$1 billion issuance for Sysco, which included \$500 million in sustainability bonds. The sustainability bond portion will support a wide range of initiatives, including procurement of sustainably harvested food, investments in more sustainable water management, and sourcing clean energy, as the company seeks to use renewable sources through long-term power purchase agreements for a portion of its energy needs.



FIRST GREEN BOND FOR US CONSERVATION

The mission of The Conservation Fund is to accelerate land conservation in ways that make both environmental and economic sense. The Conservation Fund was formed in 1985 to help public agencies and local communities in the United States achieve permanent protection of land and water resources with interim capital and technical expertise.

In 2019, Goldman Sachs helped issue a \$150 million green bond for The Conservation Fund — the first such nonprofit to issue a green bond to solely fund permanent land conservation. The proceeds will be dedicated to scaling efforts to protect some 5 million acres of the nation's working forests, mitigating climate change, protecting ecosystems and strengthening rural communities.

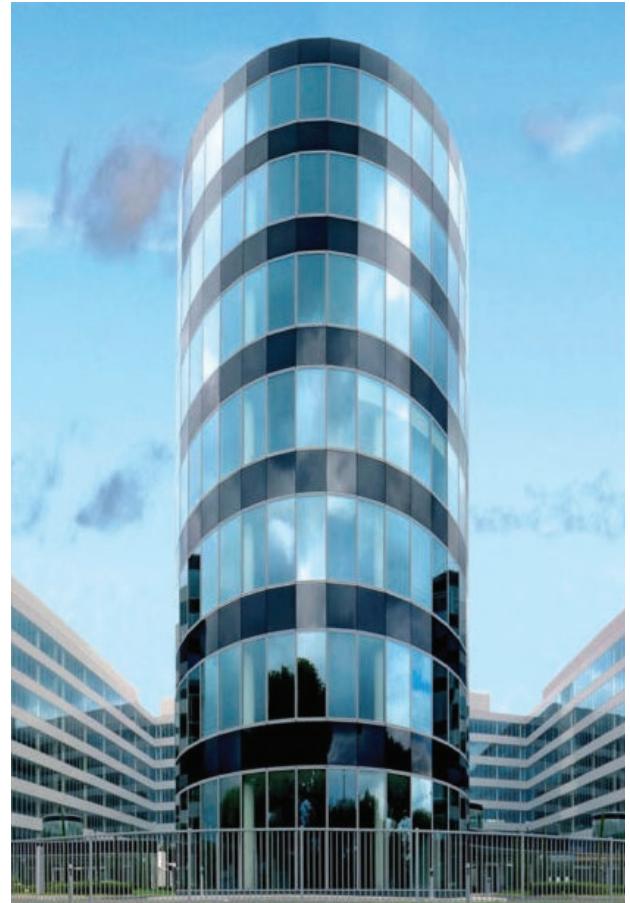
Innovative Approach to Financing Climate Transition (continued)

FIRST HYBRID GREEN NOTE BY LATIN AMERICAN COMPANY



In October 2019, AES Gener, an electricity generator in Chile, Argentina and Colombia, issued a \$450 million green bond with Goldman Sachs' help — the first green hybrid security in Latin America. AES Gener will use the proceeds to continue the transition to a more sustainable energy matrix by increasing its base of renewable power projects.

AES Gener is making this transition according to its Greentegra strategy, with the goal of becoming South America's energy supplier of choice by decarbonizing its customers' electric supply through long-term renewable power purchasing agreements and reducing the carbon intensity of its portfolio. This includes aggressive development of a wide range of renewable energy projects, including hydro, wind, solar and advanced battery energy storage technology.



FIRST GREEN EUROPEAN CMBS

In 2019, we created the first Green European Commercial Mortgage-Backed Security — River Green Finance 2020 — a green bond that enables companies to tap capital markets based on the sustainable aspects of their collateral. In this case, the asset is River Ouest, a 690,000-square-foot office building in the western suburbs of Paris with a "very good" rating from BREEAM, a sustainability assessment method for rating buildings, infrastructure and master planning projects. The €186 million mortgage-backed issuance gives asset managers the opportunity to invest in a securitized product with green collateral.

DEPLOYING CAPITAL TO ADVANCE THE CIRCULAR ECONOMY

Expansion of recycling and reuse is among the most important ways to fight climate change by limiting dependence on new materials and reducing waste. Whether through capital raising or direct investment, we have helped drive the circular economy by enabling companies involved to innovate and scale operations.



Brightmark is a San Francisco-based global waste solutions provider whose projects include turning plastic waste into transport fuels and other useful products. Through a \$185 million financing Goldman Sachs facilitated, Brightmark is building and plans to operate a new Plastics Renewal plant in Ashley, Indiana, that will turn 100,000 tons of scrap plastic into 18 million gallons of ultra-low-sulfur diesel fuel, naphtha blend stocks and nearly 6 million gallons of commercial-grade wax. The company will employ the process of pyrolysis, or plastics renewal, which uses heating to decompose post-use plastic in an environment with limited oxygen. This process is seen as a key solution to both reducing petrochemical production and plastic waste in markets around the world.

Big River Steel, an advanced recycler and steelmaker in northeast Arkansas, and the first steel producer in the US that is LEED-certified, will use a \$487 million industrial bond offering structured by Goldman Sachs to expand scrap metal recycling and production of flat-rolled steel. This will set the stage for downstream investment, including the production of higher-grade electrical steel, demand for which is expected to grow as electric-vehicle production ramps up. Big River Steel's Flex Mill technology, along with its focus on machine learning and data analytics, allows it to produce some of the most demanding steel grades at a competitive cost.

INVESTING TO SCALE CLEAN TECHNOLOGIES

FUELING GROWTH IN DISTRIBUTED POWER

We saw an under-addressed market opportunity in small and mid-sized commercial and industrial solar — helping companies, cities, schools and hospitals install solar on their rooftops. Based on our assessment, the opportunity was a good fit for our firm's network of relationships, expertise in risk management in energy markets, and strength in evaluating and managing credit risk. From that foundation, we formed the GSAM Renewable Power Group, a team of roughly 35 experienced professionals that invests in renewable energy assets. This model allows us to partner with clients to own and manage projects across the United States that deliver clean energy, and in turn, to sell the power produced by these assets under long-term agreements to energy users.

Currently, the GSAM Renewable Power Group is among the largest owners and operators of

distributed renewable generation assets in the United States with over 1 gigawatt of operating capacity. The Group currently manages equity capital of approximately \$1.9 billion, and expects to deploy approximately \$4 billion of total capital, including \$500 million from a green bond offering in December 2019.

The GSAM Renewable Power Group partnered with one of the largest solar developers, SunPower, to build New York City's largest solar project at JFK Airport. Once completed, the project will allow surrounding communities to access solar energy at reduced rates. Besides reducing JFK's greenhouse gas emissions by approximately 7,000 tons annually (equivalent to taking about 1,400 cars off the road), the project is expected to lower the Port Authority's greenhouse gas emissions at the airport by around 10 percent. The GSAM Renewable Power Group will hold the power purchase agreement for the project, while SunPower will develop and construct the infrastructure at JFK.

POWERING A REVOLUTION IN BATTERY TECH

In 2019, a fund managed by our Merchant Bank, alongside Volkswagen Group and BMW, led a \$1 billion equity capital raise for Northvolt, a Swedish supplier of sustainable, high-quality lithium-ion battery cells and systems manufactured for the automotive, industrial and energy storage sectors. The capital raise underpinned the financing of the first 16 GWh of Northvolt's first gigafactory, which will be powered by 100% renewable electricity with plans for a co-located battery recycling facility, which will deliver the world's greenest lithium-ion battery with a minimal CO₂ footprint. Further supporting the equity financing and subsequent debt financing process, Northvolt signed a number of supply agreements with a combined order value over \$13 billion through 2030. In addition to the Swedish primary facility, Northvolt also formed a joint venture with the Volkswagen Group to establish a 16 GWh battery cell gigafactory in Germany, which will bring Volkswagen's total investment in Northvolt to around \$1 billion.



SUSTAINABLE FOOD AND AGRICULTURE

FEEDING THE PLANET SUSTAINABLY

Amid a growing focus on human health, climate change, resource

conservation and animal welfare, Goldman Sachs led the \$277 million IPO of Beyond Meat. Beyond Meat is one of the fastest growing food companies in the United States offering a portfolio of revolutionary plant-based meats. Founded in 2009, Beyond Meat has a mission of building meat directly from plants, an innovation that enables consumers to experience the taste, texture and other sensory attributes of popular animal-based meat products while enjoying the nutritional and environmental benefits of eating its plant-based meat products. As of December 31, 2019, Beyond Meat's portfolio of fresh and frozen plant-based proteins was sold at approximately 77,000 retail, restaurant and foodservice outlets in more than 65 countries worldwide.

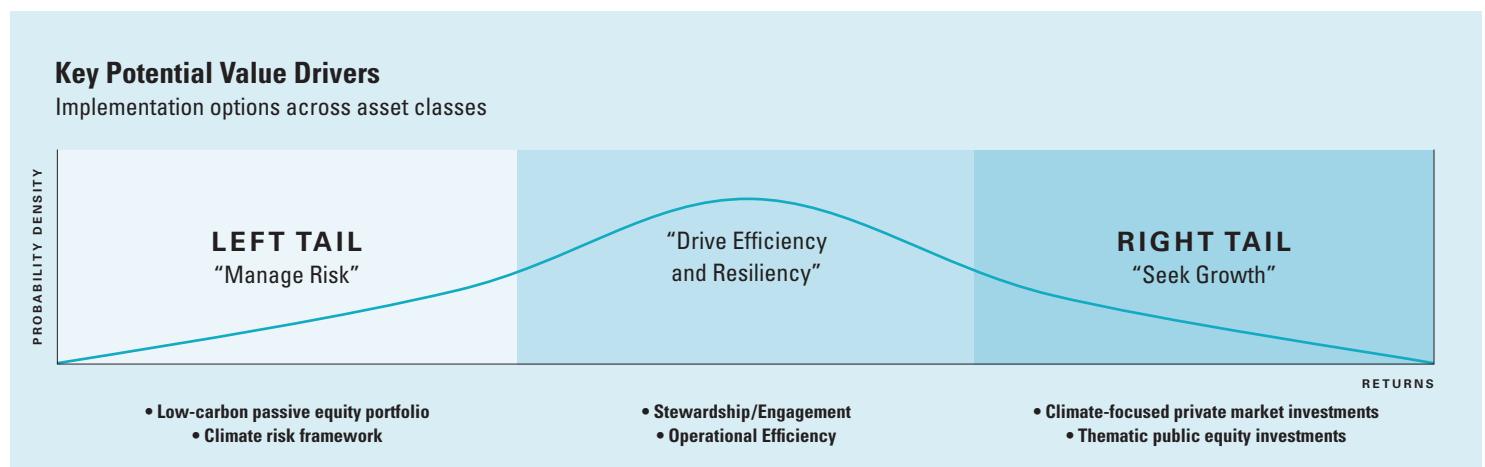


DRIVING FOOD SECURITY

Twiga Foods is a Kenyan end-to-end distributor of fresh and processed food. Through Goldman Sachs' investment in the company, Twiga Foods is developing proprietary technology and logistical assets to support its distribution system, which enables improved sustainability of the food and agriculture value chain and allows farmers to be paid within 48 hours via mobile platforms. The investment is laying the groundwork for expansion to cities across Africa, helping to drive sustainable access to lower-cost, higher-quality food and improved economic security for farmers.

DIFFERENTIATED ESG INVESTING STRATEGIES

Expanding the Opportunities ESG and impact investments continue to gain momentum driven by rapidly rising demand from institutional and individual investors. We continue to develop our capabilities in delivering innovative and differentiated investment strategies, including those focused on renewable energy and decarbonization. At GSAM, ESG assets under supervision increased from \$17 billion in December 2018 to \$74 billion in December 2019.



For illustrative purposes only and should not be construed as research, investment advice or a recommendation. Certain markets or sectors that an ESG strategy targets may not develop as expected or may develop more slowly than anticipated. The return distribution above does not represent a guarantee that any amount of future realized returns can be achieved. The above is an illustration only.

FUNDAMENTAL EQUITY STRATEGY

In 2019, GSAM raised assets for an equity strategy that invests in companies focused on environmental impact, with themes that range from renewable energy — including solar, wind, bioenergy and smart grid services — to electric and autonomous vehicles and sustainable food production.

The strategy assumes that, in fighting climate change, government-led approaches will undershoot key targets — and that private sector innovation will be critical to meeting the climate challenge. It also assumes that companies that successfully provide new solutions have significant upside, and that institutional and individual investors seek the opportunity to take part in that potential.

The strategy leverages our deep experience in ESG investment and our proprietary approach to weighing ESG factors, risks and opportunities.

Recognizing that environmental factors can affect investment performance and represent potential investment risk, GSAM has prioritized engagement on climate change-related issues, including environmental disclosure, climate risk and carbon reduction commitments. For example, in 2019, the GSAM Global Stewardship Team had ongoing engagement with a Japanese railway company, which resulted in enhanced internal ESG oversight and improved disclosure.



Differentiated ESG Investing Strategies (continued)



A PARTNERSHIP FOR SUSTAINABLE WATER

GSAM was an anchor investor and partner in the Renewable Resources Group's Sustainable Water Impact Fund (SWIF). Through client commitments, GSAM was able to provide over \$300 million of the SWIF's \$900+ million fundraise. Renewable Resources Group launched SWIF in partnership with The Nature Conservancy to invest in portfolio companies that will improve the management of surface water, groundwater and farms to more sustainably meet the water supply needs of people, the environment and the agricultural economy. The Nature Conservancy is a technical advisor to the Fund, helping to further enhance sustainability benefits and support habitat and ecosystem restoration across the Fund's properties. Renewable Resources Group seeks to invest in and operate assets that can set new standards for environmental leadership and social responsibility.



The New York State Common Retirement Fund is the third-largest public pension fund in the United States, with assets of more than \$200 billion.¹ Together with the Fund, over the years, we've developed an equity strategy aimed at reducing portfolio carbon emissions by 70 percent by tilting toward companies that are at the forefront of carbon efficiency. Benchmarked to the Russell 1000 index, the strategy relies on a carbon emissions metric, developed jointly with the Fund, that takes into account Scope 1 and Scope 2 emissions — those produced directly by the burning of fossil fuels and indirectly by consuming electrical power.

The San Francisco Employees' Retirement System (SFERS) sought to reduce its carbon footprint as part of a broad strategy to address climate risk and opportunities. GSAM enabled SFERS to develop a framework for a multifaceted approach grounded in the view that some oil & gas companies are better positioned than others for the transition to a low-carbon economy. The framework enables identification of high-risk fossil fuel assets, establishes a plan for engagement where possible, and outlines options for targeted and phased disinvestment of assets where there may be a high unmitigated risk.

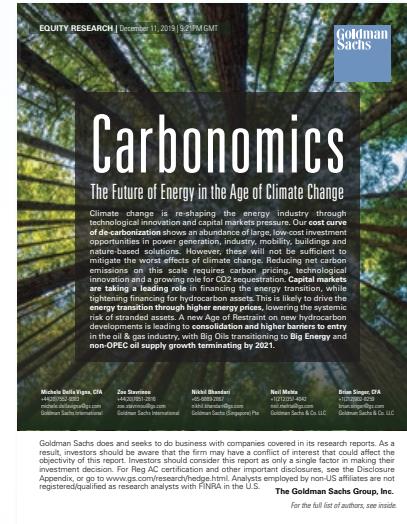
¹ As of March 2019.

Differentiated ESG Investing Strategies (continued)

Carbon Pricing: A Market-Oriented Emissions Reduction Strategy

As a firm, we have underscored the need for governments to provide transparency around the costs of greenhouse gas (GHG) emissions and create long-term value for GHG emissions reductions. In February 2020, Goldman Sachs joined as a founding member of the Climate Leadership Council (CLC), a policy organization representing the broadest coalition on climate in the US supporting a revenue-neutral carbon fee and dividend plan as a pragmatic and efficient solution for reducing GHG emissions and addressing climate change. In December 2019, our CEO David Solomon also published an editorial that underscored the urgency and business case for climate transition and sustainable growth and called for governments to put a price on the cost of carbon.

Carbonomics, a report issued in December by Goldman Sachs Global Investment Research, analyzes the cost curve of decarbonization through almost 100 different technologies. The report identifies an abundance of large, low-cost investment opportunities in power generation, industry, transport, buildings and nature-based solutions that can support \$1–2 trillion dollars of decarbonization investments annually, creating new jobs, higher energy security and lower pollution. Reducing net carbon emissions quickly and effectively will demand a combination of carbon pricing, technology and CO₂ sequestration. The report describes how capital markets already play a leading role by financing the energy transition while reducing investments in hydrocarbon development, fostering consolidation in a “new age of restraint” for the hydrocarbon industry, and the evolution of large companies from Big Oil to Big Energy as they become broader, cleaner energy providers.



ADVANCING THE ECOSYSTEM

In addition to our work with clients, we continue to inform broader market approaches by leveraging our insights through thought leadership and partnerships.

QUANTIFYING IMPACT AND PERFORMANCE

Underpinning the potential for broader scale and impact across inclusive growth and climate transition themes is a need for good data. The Sustainability Accounting Standards Board (SASB) is partnering with corporates and investors alike to drive the adoption of financially material, market-informed data that is industry specific. Goldman Sachs was the first major US financial institution and the first global investment bank to report under SASB standards in 2019 and GSAM is a long-standing member of the SASB Alliance and SASB's Investor Advisory Group.

PARTNERING WITH ASSET OWNERS



In 2019, GSAM teamed up with a select group of other leading asset managers to advance climate-related investment among national sovereign wealth funds (SWFs). Known as the One Planet Asset Managers Initiative, this collaboration supports the efforts of the One Planet SWF Working Group, composed of leading SWFs, to drive a deeper consideration of the impact of climate change on investment portfolios. We believe that, while more SWFs are incorporating sustainability into their portfolios, broadening sets of investment options and approaches can accelerate the trend, further bridging the gap between policy and portfolio objectives.



In January 2019, Goldman Sachs joined the CEO-led Climate Finance Leadership Initiative (CFLI) as one of seven founding members alongside Allianz, AXA, ENEL, GPIF, HSBC and Macquarie. CFLI was established by Michael R. Bloomberg, in his capacity as the UN Secretary-General's Special Envoy for Climate Action, to support greater mobilization of climate finance flows around the world. In September 2019, CFLI delivered the *Financing the Low-Carbon Future* report to the UN, outlining ways to further mobilize private climate finance at the scale and speed needed to support a rapid and orderly transition to a low-carbon global economy.

DRIVING INCLUSIVE GROWTH

It is imperative that the global economy generate growth that is more inclusive — that enables people to contribute to society, expands the middle class, and helps businesses and communities grow. Our firm is focused on driving a range of inclusive growth opportunities, spanning innovative financial products and services that reach more people, expanded access to education and healthcare, as well as greater investment in housing and infrastructure development in underserved communities.

At its core, our approach to inclusive growth draws upon innovative ideas that mitigate unequal access, increase affordability and improve quality. Leaning on the principles of inclusivity and disruptive thinking, paired with our core capabilities as an advisor, financier and provider of capital, we support concrete solutions that make inclusive growth possible.



Closing the Investment Gap

Launch With GS investment strategy grounded in our belief that diverse teams drive strong returns

\$500M



Supporting the Power of Small Business

The 10,000 Small Businesses network represents a large economic force with

175K+
total US employees



Empowering Women Entrepreneurs

10,000 Women lending facility for women-owned businesses reaches

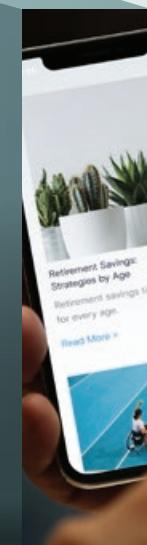
\$1.76B
in committed capital



Increasing Financial Empowerment

Using Marcus pro-consumer hub to increase financial literacy, savings and access to credit

5M
customers



DRIVING FINANCIAL INCLUSION

CLOSING THE CREDIT GAP

We're working with clients worldwide to advance technology and ideas that improve access to quality, affordable financial services — whether to finance unexpected costs or grow and scale a business that strengthens the local community.

Credijusto is a small business lender in Mexico that serves companies with few traditional



banking options. Through financing we provided, Credijusto can continue to serve its clients ranging from local small enterprises to companies with up to \$10 million in revenues, which are often overlooked by banks.

Small business lending is critical to Mexico's economy. According to Credijusto, small and medium enterprises (SMEs) make up 99 percent of businesses and account for 74 percent of the country's total employment. Despite this, SMEs receive only 15 percent of outstanding credit, with banks rejecting over 80 percent of loan applications from such businesses. In addition, even when credit is available, the lending process is lengthy, with waits of up to six months for loans that often have high interest rates.

Goldman Sachs also led a funding round for ZestMoney, an Indian fintech startup that lends to millions who lack traditional credit. ZestMoney enables consumers to secure loans and make online purchases while building a credit history that opens doors to traditional credit markets. ZestMoney uses mobile technology, digital banking and artificial intelligence to extend credit amounts of \$140 to \$3,000 and enable users to pay back in manageable installments. To date, ZestMoney is accepted by more than 3,000 merchants, including Flipkart, Amazon and Paytm. The platform has more than 6 million users, and future plans call for entering brick-and-mortar retail as well.



SUPPORTING JOB GROWTH

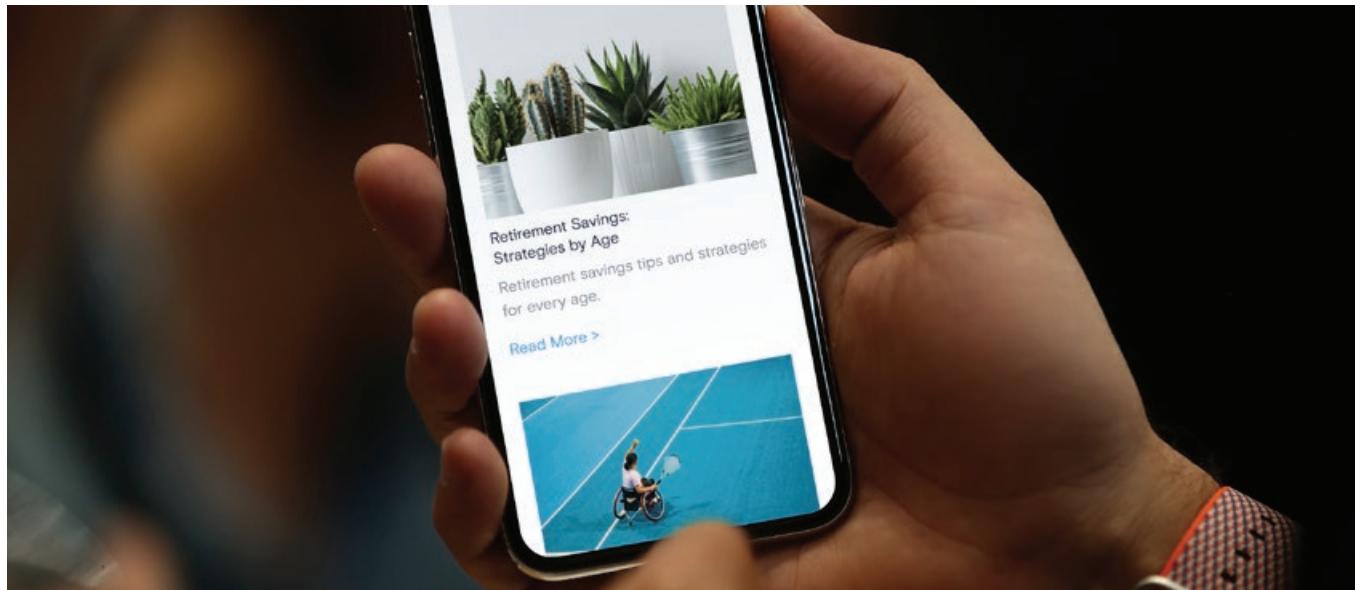
Climb Credit makes accessible loans to people striving to improve their lives through career training. Climb works with career-training and professional schools with proven track records, as measured by post-graduate job placement and starting salary. The company provides funds for hundreds of courses at schools across the United States, all evaluated for their ability to deliver the knowledge and skills necessary for jobs offering solid earnings and room for personal and financial growth.

Climb-supported courses of study range from coding programs to truck driving and heavy equipment operation, nursing, dental assistance, teaching, cosmetology, and many other trades and professions. The company enables learners to borrow up to the full cost of tuition and offers quick loan decisions and

learner-friendly payback terms. Goldman Sachs' Urban Investment Group (UIG), an investor in community and economic development, provided a \$50 million loan facility to Climb.

In addition, UIG made a commitment of up to \$10 million to On the Road Lending, a Community Development Financial Institution loan fund that provides low-interest loans for purchasing reliable fuel-efficient cars. The company focuses on underserved markets throughout the Southeast, where mass transit is largely unavailable, car transport is essential, and low-income individuals are vulnerable to predatory lending practices. This service helps reduce poverty in these areas by increasing access to quality jobs, affordable health care and fresh food.

Driving Financial Inclusion (continued)



CREATING A CONSUMER HUB FOR FINANCIAL EMPOWERMENT AND LITERACY

Marcus, Goldman Sachs' Consumer business, was created to help consumers achieve financial well-being. Core to this philosophy is a commitment to value, transparency and simplicity, which includes providing no-fee personal loans, valuable savings products, and an intuitive digital experience, alongside access to tools and resources that can help increase financial empowerment and literacy. These include savings and loan calculators and educational content focused on savings, budgeting, smart use of credit and long-term financial planning. This content covers a wide range of financial topics, from building and maintaining an emergency fund, to understanding how 529 education plans work, to strategizing for empty-nesters.

In addition, in 2019 we partnered with Apple to launch a no-fee credit card that incorporates new levels of privacy, security and transparency, and provides tools that make it easy to analyze spending patterns over time and show customers how to save on interest.

Since its launch in 2016, the Consumer business platform has attracted 5 million customers, with \$7 billion in loans and credit card balances and \$60 billion in total deposits. In 2019, the Marcus loan program scored highest in J.D. Power's Personal Loan Customer Satisfaction Study, which gauged consumer satisfaction across four key metrics: application and approval process, billing and payments, customer interaction, and loans and terms.

COVID-19 Support

Marcus has helped provide relief to consumers facing unexpected hardship through its customer assistance program. During recent natural disasters — including hurricanes and last year's California wildfires — this program supported consumers as they recovered, allowing them to postpone loan payments without being charged interest. In 2020, as the COVID-19 pandemic continues to pose challenges, we are focused on helping consumers through Marcus and Apple Card — allowing customers to postpone two monthly payments without accruing interest, and have early access to funds in CDs with no early withdrawal penalties.

ADVANCING DIVERSITY AND INCLUSION — A COMMERCIAL IMPERATIVE

We believe that diversity, in addition to being a social imperative, is also just good business. Increased diversity of experience, gender identity, race, ethnicity and sexual orientation reduces the risk of groupthink and unlocks creative and impactful solutions. This is why we are committed to driving diversity in our work with clients and have prioritized having a diverse and inclusive workforce — including ambitious diversity goals for recruitment and hiring.

LEVERAGING THE STRENGTHS OF DIVERSE ENTREPRENEURSHIP

Research shows that companies that have a top quartile ranking as it relates to ethnic diversity of their management team are 33 percent more likely to have industry-leading profitability — and that companies ranked in the top quartile for gender diversity of their management team are 21 percent more likely to outperform peers.¹

Yet, despite this evidence, just 3 percent of US venture capital goes to women-led teams, while a mere 1 percent goes to black and Latinx founders. Mirroring this imbalance, lack of diversity is pronounced among venture capital and private equity firms. Although diverse-owned firms are overrepresented in the top quartile of private equity groups, diverse asset managers have less than 1.3 percent of the \$69 trillion of global assets under management.²

This imbalance is the impetus behind *Launch With GS*, a \$500 million investment strategy grounded in our belief that diverse teams drive strong returns. *Launch With GS* seeks to increase access to capital for women, black, Latinx, and other diverse entrepreneurs and investors. Since its inception, Goldman Sachs has deployed more than \$230 million to businesses with diverse management teams globally — from a software provider in Atlanta, to a fintech company in Bengaluru and a pediatric clinic in China.

In early 2020, *Launch With GS* announced Goldman Sachs' first Black and Latinx Entrepreneur Cohort, which will be comprised of a group of high-growth startups from across the United States. Beyond access to capital, these businesses will participate in an eight-week virtual, customized experience that will include one-on-one and sector-specific workshops with our research, banking and investment teams and interaction with startup experts across key areas including legal services, capitalization, marketing and branding. Members of the Cohort will engage with the Goldman Sachs network, as well as the *Launch With GS* Advisory Council, composed of leading entrepreneurs, investors and executives. The program will culminate in an Investor Showcase, where entrepreneurs will introduce their companies to an invitation-only investor audience.



¹ McKinsey, 2018. ² Knight Foundation, 2019.

Advancing Diversity and Inclusion — A Commercial Imperative (continued)



BOOSTING ACCESS TO DIVERSE BROKER-DEALERS

In 2018, when GSAM repositioned a money market fund focused on the purchase of US government securities, including treasuries and agencies, the purpose was to drive diversity by directing the fund's trades, subject to best execution, to diverse broker-dealers. On average, during 2019, the fund used diverse broker-dealers to buy approximately half of its assets, simultaneously helping these dealers to grow and enabling clients to add a diversity-focused investment solution to their portfolios.

In 2019, the fund reached \$1.5 billion in assets, drawing high-profile investors, including one of America's most prominent companies: JetBlue. JetBlue was among the first clients to join the repurposed fund, leveraging it as a vehicle to expand opportunities for underrepresented firms.

INCREASED FOCUS ON BOARD DIVERSITY

Underscoring our conviction that diverse perspectives can have a strong impact on company performance, we have prioritized board diversity in our stewardship efforts. During the 2019 proxy season, GSAM voted against 312 directors at 214 companies for lacking at least one woman on the board. In November 2019, GSAM contacted approximately 50 companies in situations where votes were cast against board members for lack of female representation. Through these engagements, we sought information on each company's approach to recruiting diverse talent and the potential barriers to such recruitment.

As an additional example of these efforts, GSAM made engagement on board diversity a key feature in repositioning an \$11 billion European money market fund under its management. The fund, which also employs an ESG alignment approach across various factors, has a dedicated engagement focus with respect to board diversity. To encourage diversity, the GSAM Stewardship Team assesses, engages and tracks progress in portfolio companies with an underrepresentation of women on the board.

DRIVING BOARD DIVERSITY AT THE STARTING GATE

Further underscoring our commitment to advancing diversity, we announced that, effective July 2020, we will only underwrite IPOs of companies domiciled in the US and Western Europe that have at least one diverse board member. We will raise this target to two during 2021. We strongly believe in the business case for diversity and that having diverse perspectives on boards leads to better governance and stronger company performance for our corporate clients.

While we define diversity across multiple dimensions, one example our CEO David Solomon cited as part of the announcement is that the performance of public offerings of US companies with at least one female director has significantly outperformed companies with no female directors over the past four years.

It is our responsibility as an advisor supporting our IPO clients to ensure that their governance structure is setting them up for long-term success, particularly as they transition to the public markets for the first time. We are actively working with our clients to help them achieve and surpass these diversity targets by facilitating access to our extensive network of diverse board candidates, which encompasses individuals representing a broad definition of diversity, such as race, gender, ethnicity and sexual orientation.

INVESTING IN COMMUNITIES

Our Urban Investment Group (UIG) has deployed over \$1 billion annually in community and economic development.



SUPPORTING HOUSING DEVELOPMENT

As one of the most expensive housing markets in the country, New York City has strong demand for affordable units at a time when 44 percent of all households are “rent-burdened” (defined as spending more than 30 percent of income on rent), and more than half of those are severely rent-burdened — spending more than 50 percent. In 2019, we provided \$88 million in financing for South Point at Hunters Point South in Long Island City, NY, which is part of the broader Hunters Point South, the largest affordable housing development created in New York City since the 1970s. South Point consists of 1,132 units of mixed-income housing across two buildings with 849 permanently affordable housing units for families earning between \$32,000 and \$128,000 a year.

In addition, the project will be Enterprise Green Community–certified, using low-emissivity glass, exhaust heat recovery systems, low-flow plumbing fixtures, and a water-sourced heat pump to achieve 15 percent greater energy efficiency than required by the city code.

In the Pacific Northwest, we made a private investment in and are providing a debt facility to Sustainable Living Partners (SLP), a real estate technology venture aimed at sustainable, affordable multifamily housing using a prefabricated building technology with a distinctly green profile. SLP is the result of a joint venture between Sustainable Living Innovations (SLI) of Seattle and Renova Capital Partners, a private equity firm specializing in sustainable infrastructure. SLI’s innovative construction process creates mid- and high-rise multifamily buildings while incorporating features such as recycled steel trusses and energy-efficient, low-emission, reduced-water building systems. Furthermore, because building components arrive at building sites preassembled, construction takes up less room, requires less energy and creates less disruption in local communities. SLP’s first mid-rise multifamily building is underway in downtown Seattle and is expected to be certified as a net-zero energy building.

ADVANCING NEIGHBORHOOD HEALTH AND ECONOMIC DEVELOPMENT

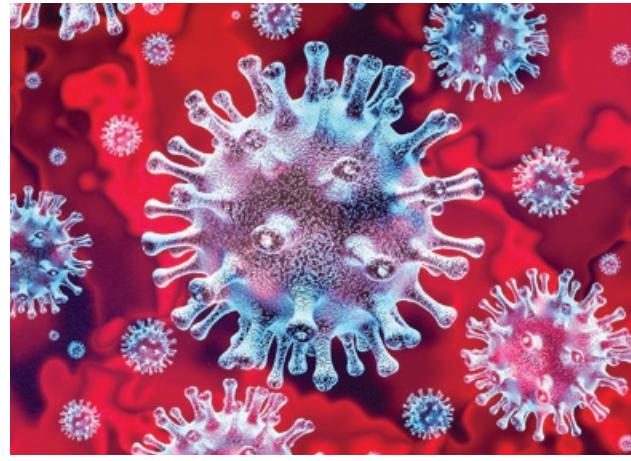
Access to health care is a challenge in many underserved urban neighborhoods. Odyssey House Louisiana (OHL) is a multiparty development that is turning a former automotive factory into a state-of-the-art healthcare facility in New Orleans.



We invested \$5 million to support the renovation, which will yield 37,000 square feet for the healthcare facility and another 4,000 square feet of new retail space. The development will increase OHL’s ability to provide behavioral health and substance abuse treatment critical to fighting the current battle against opioid addiction. In addition, it will boost economic development in the area, bringing 45 jobs to a neighborhood with a 52 percent poverty rate and a 37 percent unemployment rate at the time of investment closing. OHL has remained open throughout the entire COVID-19 crisis and has even expanded its services, offering telehealth in its Community Health Center and opening a drive-through COVID-19 testing site open to drivers and bicyclists. OHL is the only testing site in New Orleans to accept individuals on bikes — key for its client population, which typically does not have access to a private vehicle.

INNOVATIVE FINANCING APPROACHES

SOCIAL BONDS TO BATTLE COVID-19



To help alleviate the economic and social impact of the COVID-19 pandemic, this year we have led over \$15 billion of COVID-related bonds globally. For example, we worked with the African Development Bank to issue a \$3 billion Fight COVID-19 Social Bond. The bond provides support and financing to countries and businesses fighting against COVID-19 and helps investors support African communities to curb the spread of the virus and overcome the many challenges caused by the outbreak. We also underwrote the Inter-American Development Bank \$2 billion Sustainable Development Bond as part of their \$12 billion COVID-19 response package, the Republic of Austria €7.5 billion issuance — part of whose proceeds will support a €4 billion COVID-19 emergency fund — and the French Development Agency €1.5 billion issuance.

IN ECUADOR, SUPPORTING FIRST-TIME HOME BUYERS

Goldman Sachs worked with Ecuador to issue a \$400 million social bond — the first social bond issuance by a sovereign — to support Casa Para Todos, an Ecuadorian government program designed to build affordable housing. The issuance is expected to aid in the purchase of more than 24,000 homes for first-time buyers from low- and middle-income families and includes a mandate to accelerate mortgage lending for women-led households. The social bond includes a \$300 million credit guarantee from the Inter-American Development Bank, which lowered the cost for the Republic of Ecuador.

The Casa Para Todos program represents the third subsidized social housing program implemented in recent years by Ecuador. It is aligned with a number of United Nations Sustainable Development Goals, including reducing poverty, increasing access to water and sanitation, reducing inequality within and among countries, and making more cities and human settlements inclusive, safe, resilient and sustainable.



INVESTING IN PHILANTHROPY TO DRIVE GLOBAL GROWTH

For areas related to inclusive growth where there is not an immediate market opportunity, we strive to develop philanthropic initiatives that level the playing field and spark economic growth in communities around the world. As a firm, we approach this work with the same rigor and innovation we commit to our everyday business. Across our philanthropic programs, the firm has invested more than \$2.5 billion to date.



ASSESSING THE CONTINUED IMPACT OF 10,000 SMALL BUSINESSES IN THE US AND THE UK

10,000 Small Businesses US

Our *10,000 Small Businesses* (*10KSB*) initiative is a \$500 million investment to help entrepreneurs create jobs and economic opportunity by providing access to education, capital and support services to growth-oriented small businesses. The program partners with community colleges and universities across the country to deliver an intensive 10-week program to small business owners in both urban and rural areas. It also provides access to capital through partnerships with Community Development Financial Institutions and other mission-driven lenders.

In 2019, *10KSB* launched a statewide program in Ohio, in partnership with four community colleges, committing an additional \$15 million to local small businesses and bringing the total commitment in Ohio to \$30 million. The program also sponsored the Presidential Forum Series in Iowa and New Hampshire. The Series invited 2020 presidential candidates to discuss economic and social issues with the local community, including small business priorities.

By the end of 2019, more than 9,100 small business owners had graduated from the program across all 50 states, Washington, D.C., and Puerto Rico. Graduates of *10KSB* routinely outpace the national average of revenue growth and job creation of small businesses: 67 percent increase revenues within six months of graduation — compared to the 53 percent national average over the same period. Further, 47 percent create new jobs just six months after graduation, compared to the 30 percent national average over the same period.

Investing in Philanthropy to Drive Global Growth (continued)

10,000 Small Businesses UK

Since launching in the United Kingdom in 2010, more than 1,700 small business leaders from all sectors have participated in the *10KSB* program, reflecting a commitment of \$43 million. These businesses come from across the country and are key not only to the national economy but also to their local communities; collectively they account for more than £2.8 billion of annual revenue and over 40,000 jobs in the UK.

Their collective impact was captured in the *Business 2030* report, which profiled future trends and showed how the *10KSB* UK community is creating positive social change as it drives revenue growth and job creation. Among the findings: 93 percent of graduates feel their business has an obligation to do good in their community and 92 percent have already implemented new strategies and processes to reduce the environmental footprint of their business.



2019 saw continued innovations from *10,000 Women* (*10KW*), our signature program that empowers women entrepreneurs in communities worldwide.

The *10KW* Online course enables women entrepreneurs in more regions to access the program's business curriculum. The online program, which closely follows the in-person *10KW* experience, includes 10 modules covering a range of business topics, from identifying opportunities for growth to financial planning, management techniques, marketing and leadership. By the end of the year, the *10KW* Online program had reached women from 170 countries.

In the fall of 2019, Goldman Sachs convened a select group of *10KW* Online graduates at our headquarters for business coaching and training designed to take business growth to the next level. These entrepreneurs received customized learning that complemented the online course.

In India, *10KW* relaunched its in-classroom collaboration with the Indian Institute of Management Bangalore (IIMB). The program graduated three cohorts, each consisting of 180 women entrepreneurs, expanded to Mumbai in November, and plans to expand to Delhi in 2020. During the in-classroom experience, entrepreneurs receive 15 days of instruction over the course of several months, in subjects that include business finance, marketing, operations and workforce development. Program alumni can also join the *10KW* Ambassadors Program, an advanced course launched in 2019 that enables the entrepreneurs to further scale their businesses.

10,000 Women Measures Impacts in China

In Beijing, *10,000 Women* held a 10-year alumni summit at Tsinghua University School of Economics and Management. The summit showcased the impact of the program on more than 1,940 participants over the past decade. Among the findings of the progress report: Participants created approximately 26,000 new jobs and added \$490 million in revenues within 30 months of graduation.

10,000 Women China: Advancing Women Entrepreneurs

Within six months of graduation:

- 57%** improved product quality
- 44%** launched new products or services
- 21%** opened new locations

Other notable report findings include:

- 90%** mentored other women
- 56%** generated more than a quarter of income online
- 43%** launched initiatives to alleviate poverty

Investing in Philanthropy to Drive Global Growth (continued)

NARROWING THE GENDER CREDIT GAP IN EMERGING MARKETS

In 2014, 10,000 Women launched the first-ever lending facility for women-owned business, in partnership with the World Bank's International Finance Corporation (IFC). Called the Women Entrepreneurs Opportunity Facility (WEOF), the program aims to address unmet financing needs of women-owned businesses in developing countries, recognizing the significant obstacles that women entrepreneurs face in accessing the capital needed to grow their businesses.

The first WEOF progress report, published in October 2019, shared key findings from the past five years. To date, the facility has mobilized \$1.76 billion in capital — almost three times the initial target of \$600 million — across 57 emerging market financial institutions in 36 countries, enabling credit for over 72,000 women-owned businesses.

At the 2019 World Trade Organization's Aid for Trade Global Review in Geneva, WEOF launched an innovative and first-of-its-kind gender-focused trade finance program. This program is aimed at encouraging IFC's portfolio of banks to increase trade financing for women importers and exporters.

CATALYZING GIVING TO IMPACTFUL ORGANIZATIONS

Goldman Sachs Gives is a donor-advised fund that is committed to fostering innovative ideas solving social and economic challenges, and enabling progress in underserved communities globally. The firm's senior leaders work together to recommend grants to qualifying nonprofit organizations to help them achieve their goals. To date, the effort has distributed more than \$1.6 billion in grants and partnered with 7,000 nonprofits in over 100 countries to support underserved communities around the world.

Goldman Sachs Gives is responsive to emerging needs. In the past year, grant-making to environmental organizations increased by 28 percent, in causes ranging from cleaning oceans to advancing sustainability in urban communities.

Giving also extends to Goldman Sachs analysts. Through the Analyst Impact Fund competition, analysts collaborate with peers across the firm to pitch innovative nonprofits to senior leaders for grants from *Goldman Sachs Gives*.

In 2019, participation grew by 306 percent, as 975 analysts in 29 global offices submitted applications to advocate on behalf of nonprofits of their choice. The year's first-place prize — a \$250,000 grant — was awarded to a London-based analyst team representing Days for Girls, which aims to increase access to menstrual care and education for girls in developing countries.



Investing in Philanthropy to Drive Global Growth (continued)

SUPPORTING COMMUNITIES AND SMALL BUSINESS — THE UNIQUE COVID-19 CHALLENGE



\$550M

commitment to support communities and small businesses

During this period of great uncertainty, we have a responsibility to support our people, clients and our communities in need. We are engaging in dialogue with hundreds of community partners, from small business owners to community colleges and nonprofit leaders, to assess how we can best support communities that are deeply impacted by the outbreak. We are undertaking initiatives to support small businesses, provide philanthropic capital to organizations on the front lines, and mobilize our people through volunteering and giving to support COVID-19 relief efforts globally.

Small Business Stimulus Package

Building on our decade of supporting small businesses through *10,000 Women* and *10,000 Small Businesses*, the Small Business Stimulus Package will provide emergency loans to small businesses, which employ nearly half of the American workforce and serve a critical role in the economy.

A recent *10,000 Small Businesses* survey of over 1,500 program participants found small businesses face tremendous uncertainty and require immediate support:

96% said they have been impacted by COVID-19

70% said loans at reduced interest rates would help their business, and

51% said their businesses will only be able to continue to operate for 0–3 months

Investing in Philanthropy to Drive Global Growth (continued)

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Goldman Sachs has committed \$500 million in capital to fund low-interest loans to ensure these small businesses have the resources they need to fund their operations, weather the current crisis, and meet their commitments to their landlords, suppliers and employees.

The Small Business Stimulus Package has already allocated funds in conjunction with two public-private partnerships with the cities of New York and Chicago, together with several corporate and nonprofit partners.

The firm is supporting its small business community globally through a rapid rollout of educational resources and business coaching to reach small business owners in the US and UK, as well as female entrepreneurs in emerging markets across the world, to help them navigate these challenging times.

In addition, the Goldman Sachs Foundation will provide \$25 million in grants to Community Development Financial Institution (CDFI) partners and other mission-driven lenders to increase their capacity, hire additional staff and expand critical infrastructure. CDFIs, which have a proven history of lending to underserved businesses, need additional resources to meet the urgent capital needs of small businesses. This effort extends our decade-long support of CDFIs and their critical mission.

The Goldman Sachs COVID-19 Relief Fund

A \$30 million commitment funded by *Goldman Sachs Gives* — including a special matching program — launched to support communities hardest hit by COVID-19. The Fund follows the \$1 million donated to the CDC Foundation, the Chinese Red Cross and the International Medical Corps, and will distribute grants across five specific priorities:

- **Assisting health providers on the front lines**
- **Providing assistance to the most vulnerable populations**
- **Providing economic relief for reduced and lost work**
- **Supporting children and families in the wake of school closures**
- **Supporting medical research**

Under the Special Employee Matching Gift Program, all non-partner employees who make a donation to COVID-19 relief efforts will have their donation matched dollar-for-dollar, up to \$5 million in total. For donations that are \$25 or less, we will match 3-to-1.

Virtual Community TeamWorks

Community TeamWorks, Goldman Sachs' signature volunteering initiative, enables our people to maximize their effectiveness through high-impact, team-based volunteer opportunities, including projects coordinated with hundreds of nonprofit partner organizations worldwide. To engage our people in the response to COVID-19, the firm is offering a series of opportunities to support vulnerable populations remotely — including small business owners, students and the elderly. Virtual volunteer opportunities include: serving as an emergency coach for our *10,000 Women* and *10,000 Small Businesses* entrepreneurs around the world, mentoring students who need support during school closures, and corresponding with isolated seniors in nursing homes.

MANAGING OUR FIRM



At Goldman Sachs, our commitment to inclusive growth and climate transition also informs the way we manage our people and operations. We invest heavily in developing and supporting our people throughout their careers and have outlined a comprehensive action plan to improve diversity and inclusion at all levels. We have set ambitious operational targets and seek to proactively manage climate and other sustainability-related risks to our business.

OUR PEOPLE

EXPANDING DIVERSITY AND INCLUSION, SUPPORTING OUR PEOPLE

We believe that a diverse and motivated workforce is essential to our sustainability as a firm and is a clear competitive advantage in working with clients around the world. For this reason, we've set aspirational diversity hiring goals, and are focused on fostering an inclusive and highly rewarding work environment for all of our colleagues.

We believe in a work environment that encourages our employees to reach their full potential, with ongoing opportunities for learning and career development, a strong framework for advancement, and health and wellness support that makes it possible for our people to achieve their personal and professional goals.



DIVERSE WORKFORCE, INCLUSIVE WORKPLACE

The strength of our culture, our ability to execute our strategy, and our relevance to clients all depend on a diverse workforce and an inclusive environment that encourages a wide range of perspectives. We believe it is critical to increase diversity at all levels of our businesses, from analysts and entry-level associates to managing directors and partners.

Casting a Wide Net: Goldman Sachs' management team works closely with the firm's Global Inclusion and Diversity Committee to increase diversity of our global workforce at all levels of seniority. This includes a comprehensive action plan with aspirational hiring goals for analysts and associates hired on campus or laterally, a group that accounts for more than 70 percent of the firm's annual hiring.

In addition, as a signatory of the *UK Women in Finance Charter*, we are committed to ensuring women represent at least 30 percent of UK senior talent (VP and above), and we will continue to be transparent on our progress. We are confident that, based on our persistent focus on the recruitment of and investment in diverse talent, we will meet our Charter goal by the 2023 deadline.

Attracting Diverse Talent: Through targeted engagement initiatives, the firm continues to increase its ability to recruit talent from a variety of backgrounds and life experiences — including those with neurological differences. An example of this in 2019 was the launch of our Neurodiversity Hiring Initiative, an eight-week paid internship that includes training for neurodivergent candidates, as well as on-the-desk experience and coaching and mentoring that position candidates for success at the firm.

Other key initiatives that enhance our diversity of perspectives include:

- Returnship Initiative, which helps professionals restart their careers after an extended absence from the workforce

Aspirational Goals for Analysts / Entry-Level Associates



Expanding Diversity and Inclusion, Supporting Our People (continued)

2019 Campus Analyst Class — The Firm's Most Diverse to Date



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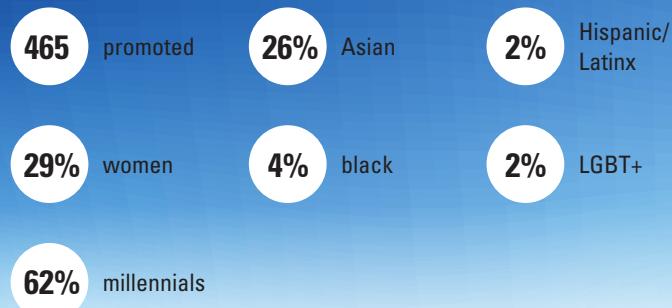
- Veterans Integration Program, which gives candidates leaving the military an introduction to a financial services career
- Exploratory Programs, providing LGBT+, women, ethnically diverse and social mobility candidates with the opportunity to meet our people, learn more about roles at the firm, and develop job-seeking skills, including networking and interviewing
- Africa Recruiting Initiative, which identifies engineering talent across the continent with the goal of filling summer and full-time analyst positions

BUILDING DIVERSITY AND INCLUSION INTO THE MANAGEMENT PIPELINE

Increasing diversity of the firm's leadership is crucial to the firm's long-term success, and the firm has ramped up outreach and career advancement programs for rising executive talent. A prime example is our Managing Director Retention Initiative, which includes sponsorship and the creation of career development plans for newly promoted Asian, black, Hispanic/Latinx and LGBT+ managing directors. Across the globe, we are also focused on providing diverse vice presidents the necessary coaching, sponsorship and advocacy to further support their career trajectories and strengthen their leadership platforms. Many other career development initiatives are aimed at grooming diverse talent at the analyst and associate level, with an eye toward advancement. Programs include the Black Analyst and Associate Initiative, providing coaching from senior leaders for black analysts and associates in the Americas and EMEA, the Hispanic/Latinx Analysts Initiative in the Americas, following a similar coaching and engagement model, and the Women's Career Strategies Initiative, a five-month global program that provides development and networking opportunities for nominated women.

2019 Managing Director Class — The Firm's Most Diverse to Date

This past year's global managing director class was the most diverse in the firm's history, with new managing directors representing 36 offices around the world.



PRONOUN INITIATIVE: THE FREEDOM TO SELF-IDENTIFY

In 2019, Goldman Sachs launched a global initiative focused on increasing awareness of the variety of pronouns people use to express their identity. The firm sees pronoun use as an important way of enabling employees to bring their authentic selves to work, and the initiative represents a firmwide effort to educate colleagues on gender identity and the importance of using pronouns in building an inclusive environment.

The firm launched a web page providing education on gender identity, different types of pronouns and practical guidance on using them. This includes tips for being an inclusive ally, such as not assuming pronouns for colleagues based on name or physical appearance, dealing with mistakes, and proactive sharing of pronouns to foster an environment of awareness and respect. Furthermore, a variety of avenues are provided to share pronouns, including via email signatures.

Expanding Diversity and Inclusion, Supporting Our People (continued)



ENGAGING INCLUSION CHAMPIONS

Globally, we have over 19,000 employees who participate in employee networks. From driving new initiatives, to moments of celebration and perspective sharing, the networks lead by example and work to strengthen truly inclusive collaboration.

In 2019, the firm's global Disability Interest Forum (DIF) appointed more than 50 colleagues from around the firm to serve as Disability Champions and regularly share best practices on disability inclusion, including tips for how our people can best support colleagues with disabilities. While external studies show that approximately 30 percent of employees have a disability, on average only 3 percent self-identify as such to their employer.¹ The DIF's Champions Initiative represents a commitment from the firm and senior leadership to ensure colleagues with disabilities feel appreciated for their diversity of thought and abilities by encouraging them to bring their whole, authentic selves to work. As part of the launch of the Champions Initiative, the DIF hosted several events in London, New York, Singapore and Bengaluru featuring senior leaders and experts on disabilities. The group also created a list of practices on inclusion, including how to best support colleagues with disabilities in the workplace.

Most recently, we piloted the Bridge Initiative, a platform for leaders to engage in dialogue on experiences related to race, ethnicity and personal identity — focused on reverse mentoring. Non-ethnically diverse senior leaders are paired with black colleagues to exchange experiences and engage in learning and conversations about inclusion.

¹ Center for Talent Innovation, 2017.

ENABLING OUR PEOPLE TO DO THEIR BEST WORK

At Goldman Sachs, we recognize that for our people to be successful in the workplace, they need support in their personal as well as their professional lives. For this reason, we have created a strong support framework for wellness, enabling them to better balance their roles at work and their responsibilities at home. The past year saw significant additions to that framework, including increased support for expectant and new parents. We also continue to advance our resilience programs, offering our people a range of counseling, coaching, medical advisory and personal wellness services. As we grapple with the impacts of the COVID-19 pandemic, these resources remain available and we've continued to evolve and strengthen virtual offerings with the aim of maintaining physical and mental well-being, effectiveness and cohesiveness of our global community. We rolled out new telemedicine services that provide our employees and their families with access to physicians (24/7) through live video or telephone. In addition, for the rest of 2020, the firm is waiving the costs of urgent care medical visits, including COVID-19 consultations. We also introduced a COVID-19 10-day family leave policy, available to our people globally to care for family members due to COVID-19 related illness or meet childcare needs, including homeschooling.

ENHANCING OUR SUPPORT FOR EXPECTANT PARENTS



In 2019, the firm made substantial enhancements to our **parental leave policy**. This includes equal parenting leave time for all new parents, whether they become parents through birth, surrogacy or adoption, and regardless of the parent's gender or caregiver status. In addition, the firm's new global parenting policy allows for 20 weeks of leave, an increase from 16 weeks in the United States, Asia Pacific and other regions around the world.

The firm also introduced four weeks of paid family care leave globally. This enables colleagues to care for family members, as needed, due to serious health conditions, foster placement or military deployment. Additionally, we launched *Pathways to Parenthood*, which increases existing stipends for adoption and surrogacy, and provides stipends for egg retrieval and egg donation where permitted by law.

Aside from leave, the firm supports expecting parents with a wide range of programs and services. These include a dedicated expectant-parent coordinator who can provide guidance on the firm's benefits, facilities and mentoring opportunities, and healthcare plan provisions that include a healthy-pregnancy program, with a focus on prenatal care, labor and delivery, and newborn care.

HELPING MANAGERS STRENGTHEN A CULTURE OF INCLUSION AND SUPPORT

Managers play an important role in fostering a culture of inclusion — and training managers to build inclusivity is a continued focus. For example, an online learning module for all new managers is *Building an Inclusive Environment*, in which managers learn to identify and address common diversity and inclusion considerations within their teams, and to build a work environment that maximizes the potential of all team members. In the program *Identity Matters: Race and Ethnicity in the Workplace*, participants learn about how race, ethnicity and social identity can shape an individual's workplace experience, and how dialogue about race and identity can create trust-based relationships.

Support also extends to helping leaders manage family leaves and expectant parents. In 2019, our Global Diversity Committee and Human Capital Management Division introduced *Great Expectations: Managing Parenting-Related Leaves*, an eLearning program that delivers information and best practices for preparing for colleagues' time off and facilitating a successful return to work.

Tips gained through this training include how to encourage new parents to take the leave of absence, understanding how expecting a baby can generate anxiety at home and work, and how to keep lines of communication open during leaves so that colleagues remain up to speed on new developments and emerging team opportunities.

We believe managers play a critical role in ensuring that working parents have the support and resources they need to thrive in the workplace — and that they understand that the firm, and its managers, are there to support them throughout the process.

ENGAGING OUR PEOPLE TO DRIVE IMPACT

ACCELERATING INNOVATION AND COLLABORATION

Entrepreneurship and innovation have always been a core part of the Goldman Sachs culture. We believe in cultivating an environment where our people can work together, think big and shape the future with their ideas.



GS Accelerate is an initiative to foster innovation and collaboration at the firm. The program provides our people with capital, resources and support to build new businesses and products, with a focus on future growth. Past submissions have focused on digitizing workflows, entering new or underpenetrated markets and creating new strategies to better serve our clients.

In 2020, we are inviting pitches to six key business opportunities. “Creating a More Sustainable Future” is highlighted as one of these where we are looking for innovative ways to advance sustainable economic growth and combat climate change.

Now in its third year, *GS Accelerate* has provided resources for 13 projects, including new ideas about digital assets, alternatives and communication across the firm. *GS Accelerate* continues to help the people of Goldman Sachs express their entrepreneurial talents and address business-critical opportunities for our clients and the markets we serve.



RECOGNIZING OUR 150TH ANNIVERSARY WITH 150,000 HOURS OF SERVICE

Through *Community TeamWorks*, the people of Goldman Sachs contribute their ideas, time and expertise to drive tangible progress in communities where we work and live. Launched in 1997, this signature volunteering initiative enables our people to work in partnership with nonprofit organizations around the world to make a meaningful difference.

In 2019, to mark our 150th Anniversary, we set a bold challenge for ourselves: Provide 150,000 hours of volunteer service through our global *Community TeamWorks* initiative. We not only met but exceeded this goal, thanks to the collaboration of our nonprofit partners worldwide, and the dedication of our people to serving the communities in which we live and work.

Community TeamWorks 2019 Impact

150,000+ hours of service provided globally **26,000** volunteers

1,800
community projects

900
nonprofit partners

60
participating offices

OUR OPERATIONS

REDUCING OUR OPERATIONAL IMPACTS



ACHIEVED MILESTONES, NEW COMMITMENTS

In 2019, we moved forward on multiple fronts to minimize operational impacts. By the end of the year, we had nearly reached our 2020 goals of sourcing 100 percent of our electricity from renewable sources, eliminating 85 percent of disposable plastics from our global operations, making \$2 billion in green operational investments to drive energy efficiency and certifying 70 percent of our offices to a green-building standard.

We also set a host of new targets for 2025, covering energy use, waste reduction and supply chain management. As we close in on our goals of procuring 100 percent of our electricity from renewable sources, we are now committed to procuring 80 percent of all our electricity from long-term sources. We are also committed to lowering energy intensity per square feet (a measure of energy inefficiency) by 20 percent and water intensity by 15 percent, while extending carbon neutrality to include business hotel night stays. In addition, we are committed to ensuring that all new construction is LEED Gold-certified or equivalent, and extend the certification of ISO 20121 standards to off-site events.

2025 Operational Goals

20%

Energy Efficiency



Reducing energy intensity across our operationally controlled facilities by 20%

100%

Business Waste

Continue to divert 100% of waste from landfill

30%

Paper

Reducing our paper consumption per capita by 30%



100%

Plastic



Remove 100% of plastic bottles and disposables

100%

Green Buildings

Certify 100% of new builds and major renovations



80%

Renewable Energy

Sourcing 80% renewable energy from long-term PPAs and on-site projects



15%

Water

Reduce water intensity by 15%



100%

Certified Management Systems

Maintain 100% and extend to off-site events

Reducing Our Operational Impacts (continued)

A THREE-WAY PATH TO ENERGY TRANSFORMATION

Goldman Sachs became the first US corporate signatory to The Climate Group's RE100, EV100 and EP100 programs, a set of commitments aimed at moving governments and businesses to swift, decisive climate action. The programs focus on three key climate-related imperatives: moving to 100 percent procurement of electricity from renewable sources, incorporating electric-vehicle (EV) charging infrastructure and driving energy efficiency of offices.

RE100 (Renewable Energy): Goldman Sachs has pledged to meet 100 percent of its electricity needs through renewable sources by 2020, and by the end of 2019 we were already 98 percent toward that target. Last year, we completed our first power purchase agreement for on-site power generation — through solar carports at the new headquarters of our Ayco subsidiary in upstate New York, meeting 60 percent of the building's electrical needs.

EV100 (Electric Vehicle): Goldman Sachs has also begun a firmwide push to support electric transport, installing 119 EV chargers at our Bengaluru campus for EV-driving employees and ground transportation vendors. Our Ayco headquarters also installed EV chargers, and we're committed to installing EV infrastructure in all firm-owned offices that provide parking, and encouraging landlords to do the same in the offices we lease.

EP100 (Energy Productivity): Goldman Sachs recognizes that reducing our energy consumption and operating efficient offices is a critical component of transitioning to a low-carbon economy. The firm's commitment to EP100 is aligned with the "Net Zero Carbon Building" compliance pathway, which will focus on reducing the impacts of our global real estate portfolio, by consolidating into more efficient real estate, retrofitting existing spaces to LEED Gold or equivalent standards, or creating green campuses. Our new BREEAM "Excellent" certified London office has achieved a 50 percent reduction in utility consumption compared to our previous campus due to 100 percent LED lighting. Additionally, we have retrofitted lighting at our New York and New Jersey offices with LEDs, saving approximately 6 million kWh of electricity use per year.

Reducing Our Operational Impacts (continued)

SUSTAINABLE SOLUTIONS TO GLOBAL BUSINESS WASTE

We are committed to diverting 100 percent of business waste from landfill by the end of 2020. Our responsible waste management practices prioritize reducing the amount of waste we generate, maximizing recycling and composting, and utilizing waste-to-energy facilities where available. In 2019, the firm made significant efforts toward these commitments.

Paper: We launched *#goDigital*, a campaign to eliminate 10 million print pages of output annually from our operations. Opportunities to reduce consumption range from eliminating paper-based client communications to fully leveraging digital media for internal communications and reducing reliance on printed promotional material. In addition, we eliminated paper cups in our offices and shifted to reusable mugs, eliminating more than 200 tons of waste annually.

Plastics: We met our commitment to remove 85 percent of single-use plastics from our global operations, including plastic bottles and straws, and plastic film presentation covers and binders.

Food: We are also working to reduce food waste in our cafeterias and micro-market cafes. In January 2019, we began to partner with Rethink Food in New York to ensure that excess, unused food is donated and transitioned into ready-to-eat, nutrition-dense meals. Through this partnership, and collaboration with the Conrad Hotel, we were able to transform more than 32,000 pounds of food into the equivalent of 45,000 meals for New York City families in need.

Furniture: We responsibly managed the disposal of 30,000 pieces of existing furniture when moving from our legacy campus in London to Plumtree Court — ensuring nothing was sent to landfill. By partnering with Waste Match, we are donating more than 9,000 pieces of furniture to local charities, schools and medical establishments, while responsibly recycling an additional 500 tons of metal.

E-Waste: We partnered with eWorks, a certified electronics recycling and refurbishment services company that creates employment opportunities for those with disabilities. Since August 2019, the firm donated more than 11,000 pieces of technology equipment, of which over 60 percent was refurbished for resale or reuse.

MORE SUSTAINABLE AND DIVERSE SUPPLY CHAIN

In 2019, we further advanced our strategy to build a sustainable supply chain. We piloted an ESG self-assessment survey with 80 vendors in industries perceived to have the highest ESG risk exposure to better understand the controls in place to manage environmental, labor and human rights requirements detailed in our Vendor Code of Conduct. And we are leveraging these findings to further enhance our responsible supply chain practices. Our goals for the coming year also include a deeper assessment of vendors in industries exposed to high risk of slavery and human trafficking.

A key priority for our firm is fostering opportunities with small, as well as women- and minority-owned, businesses, with the aim of achieving a supply chain that reflects the diversity of our people and our clients. In 2019, we focused on increasing the firm's network and access to diverse businesses, expanding our memberships with certifying agencies. In 2020, we will enhance our reporting capabilities and we will remain focused on our 2025 goals.

2025 targets include:

- Assessment of all vendors globally for ESG risk
- Increase 2020 baseline spend with diverse vendors by 50 percent



Progress Toward 2020 Goals for Our Operations

Many of the environmental commitments set in our updated 2015 Environmental Policy Framework have been achieved, thus, we expanded those commitments to a set of new goals for 2025. In 2019, we exceeded and met a number of our 2020 goals while increasing our total operational square feet by bringing online our new London and Bengaluru buildings. We exceeded our goals to reduce energy and paper consumption, and also met our goals to certify 100 percent of our management systems and reduced utilization of single-use plastics by 2020.

Category	2019 Status	2020 Goal ¹
Renewable Energy Meeting our global electricity needs using renewable energy	98%	100%
Energy Efficiency Reducing absolute energy use across our operationally controlled facilities	-12%	-10%
Green Buildings Achieving LEED Gold or equivalent green-building certifications	61%	70%
Business Waste Diverting business waste from landfill	99%	100%
Paper Reducing our paper consumption per capita	-40%	-20%
Water Reducing our consumption in operationally controlled facilities	3%	-5%
Certified Management Systems Environmental Management Systems across our operationally controlled facilities	100%	100%
Green Operational Investments Dedicated budget for investing in green buildings and innovative green technologies	\$1.7B	\$2B
Plastic Reducing our use of single-use plastics	-85%	-85%

¹2020 goals are from a 2013 baseline except for our green operational investments, which includes capital invested since 2015, and our plastics reduction goal, which is from a 2018 baseline.

 Met or surpassed goal

OUR RISK MANAGEMENT

MANAGING RISKS

ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT

Our Environmental Policy Framework (EPF) guides our overall approach to sustainability issues, including the management of environmental and social risk. This Framework, as well as our other sustainability-related policies, was developed with the consultation of stakeholders, including investors, NGOs and regulators. Our Framework includes a number of basic tenets:

- We manage environmental and social risks with the same care and discipline as we do other business risks
- We weigh environmental and social impacts in all relevant business selection decisions
- We engage with clients to identify significant ESG issues, and help them adopt appropriate safeguards and sustainable practices where feasible
- We decline assignments when client engagement is not possible, when potential impacts cannot be mitigated, and when unacceptable risks conflict with our environmental and social policy guidelines

Our Framework also helps us work with clients to develop environmental and social risk disclosures as appropriate. In addition,

we proactively monitor developments — from emerging ESG issues to evolving best practices — and periodically review and update our guidelines to reflect these developments.

Goldman Sachs was one of the first financial institutions to underscore the urgency of addressing climate change through our EPF. We continue to enhance environmental and social risk management guidelines for carbon-intense sectors. This includes no direct financing of new coal-fired power plant development globally without carbon capture-and-storage technology, no direct financing of new thermal coal mine development, and no new financing that directly supports new upstream Arctic oil exploration or development. We work with clients across all industries on climate transition, including with power sector clients to help them diversify and reduce GHG emissions to transition in-line with the Paris Agreement.

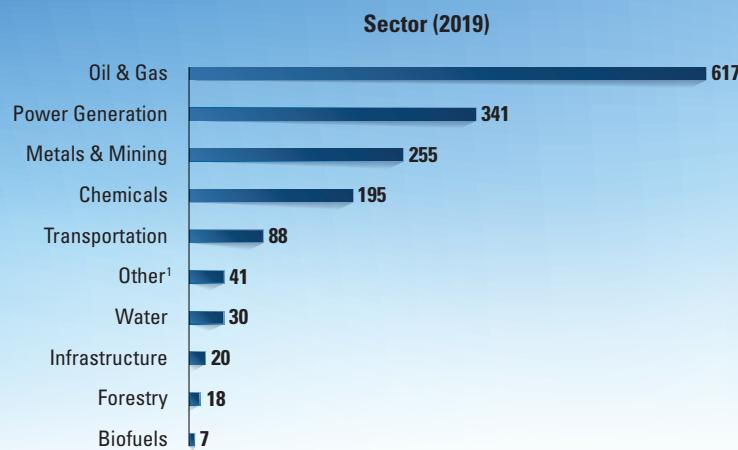
Because risk management is so critical to responsibly running our firm, we focus on training our people in risk management globally, including training with respect to environmental and social risk. As our first line of defense, our people undergo specialized training by sector and industry, particularly in sectors we believe have higher potential for environmental and social risk.

Potential Transactions Reviewed

For Environmental and Social Risks

1,612

Deals Reviewed (2019)



¹ "Other" includes agriculture, biotech, housing, palm oil and transactions for financial sponsors related to loan portfolios across various sectors.

Managing Risks (continued)

(continued from previous page)

Risk management is integrated throughout the firm. In our advisory, financing and investing activity, we focus on transaction risk and conduct enhanced review when transactions involve companies with the potential for negative ESG impacts or vulnerabilities. At the highest level, we broadly examine legal, regulatory, environmental, social and governance risks, and review potential transactions through a risk management lens.

At an operational level, in-house teams with strong technical expertise guide environmental, health and safety (EHS) standards for our investing activities. The teams also perform EHS due diligence on proposed investment transactions, helping business teams identify and mitigate potential risk factors. In these direct investments, we closely and continually examine potential risks in our portfolio. This includes monitoring portfolio companies and engaging with their managers as appropriate.

In 2019, Goldman Sachs identified and managed EHS risks in a number of potential transactions and portfolio companies, and in some cases,

forwent the transaction if risks were high and could not be mitigated. For example, when the firm was completing the due diligence on a multi-family property acquisition, our expanded due diligence scope identified that the on-site water supply well was being inadequately treated. After additional diligence into the causes and impacts of this water quality concern, we decided not to participate in the transaction.

In another case, when considering the acquisition of an industrial portfolio with a dozen facilities in Europe, we identified a number of significant deficiencies in EHS governance. Working with the Operational Risk Management & Analysis Environmental Specialist Team, we required detailed EHS audits as a condition for the approval of the transaction. As a result, detailed corrective action plans were developed for each facility to address the deficiencies, including additional staffing and enhanced authority of corporate EHS leadership, as well as development of a firmwide EHS governance process and improvements to localized EHS procedures.

A GLOBAL FRAMEWORK FOR CLIMATE RISK DISCLOSURE

Goldman Sachs supports the work of the Task Force on Climate-related Financial Disclosures (TCFD), a market-driven initiative aimed at creating a voluntary, consistent global framework for providing information on climate-related financial risks to investors, lenders, insurers and other stakeholders.

Launched after the Paris Agreement by the Financial Stability Board, an international body that monitors and makes recommendations about the global financial system, TCFD reporting provides decision-useful information that improves the understanding and analysis of material climate-related risks and opportunities. In this spirit, Goldman Sachs has published an inaugural report (see page 56) that details our approach to managing climate-related risks and opportunities across our businesses and operations, including the initial steps we have taken on transition and physical climate-risk scenario analysis.

Our approach is multifaceted across both opportunities and risks and continues to advance as both the market and our clients' needs evolve and as data, technology and tools improve over time. Since our initial 2005 Environmental Policy Framework (EPF), we have continued to integrate climate change risk mitigation and opportunities across our firm. The report covers a range of topics.

Among the highlights:

Governance

How the management and oversight of climate change is integrated across our existing governance structure, including at the management and Board level. Our approach ensures that climate change is strategically managed and the expertise of the firm is both integrated and leveraged across relevant committees and functions.

Strategy

How we've built on the roadmap laid out in our EPF, by establishing the Sustainable Finance Group in 2019 and a cross-divisional Steering Group to deepen our expertise and deliver that expertise to our clients. Also, how in 2019, we announced a new sustainable finance target of \$750 billion of financing, investing and advisory activity by 2030 and will continue to work with clients across sectors globally to accelerate climate transition in an orderly and inclusive way.

Risk Management

How climate risk is integrated into our existing risk management as well as the initiatives we are undertaking to further integrate climate-related factors and scenarios into our risk management and business selection processes, including initial scenario analysis of (1) transition risk for our balance sheet-related equity and credit assets and (2) physical risk for our global properties. Over time, our goal is to both refine the methodology and assumptions and expand the scope of analysis.

Metrics and Targets

Going forward, we will monitor and report capital deployed in clean energy as one of the nine growth themes underlying our \$750 billion sustainable finance goal, and the progress we make against new operational targets we have set for 2025, with a focus on strategic, collaborative partnerships that drive market transformation.

Managing Risks (continued)

RISK-CENTERED GOVERNANCE

Appropriate oversight by our management and Board of Directors, as well as strong policies and practices, are key contributors to our ability to effectively manage a broad spectrum of financial and nonfinancial risks across our businesses, including with respect to ESG considerations.

Our Board and its committees are responsible for overseeing the management of the firm's most significant risks, placing significant focus on reputational risk and management's operation of the firm responsibly for the long term. The Board's Public Responsibilities Committee (PRC) has primary oversight of our firmwide approach to sustainability and related risks, including through the review of key ESG policies. Our ESG policies and procedures provide transparency into our practices and are generally developed with the consultation of stakeholders, including regulators and investors. Significantly, ESG and sustainability oversight is not limited to just the PRC, but also informs discussions with other committees and the full Board on topics ranging from climate risk to human capital management to the firm's broader sustainable finance initiatives.

Oversight of the firm's culture is an important element of how the Board engages on the firm's reputation, particularly because our people are our greatest asset. Our Board holds senior management accountable for embodying, maintaining and communicating the firm's culture throughout the firm. Core to our success is that our focus on risk and reputation extends throughout every level of Goldman Sachs.

To this end, our people are trained in our Business Standards and Principles, which were recently distilled into our Core Values, and underscore the responsibility of every employee to uphold our culture of teamwork, excellence, personal initiative and accountability. At the management level, our firm's committee structure serves to emphasize these points. Our committees are generally composed of senior managers from our first and second lines of defense. These committees have specific oversight or decision-making responsibilities for various risk management activities. For example, while our Enterprise Risk Committee is globally responsible for overseeing all of the firm's risks, both financial and nonfinancial, our Firmwide Reputational Risk Committee is responsible for vetting transactions that have the potential for heightened reputational risk.

THE IMPORTANCE OF OUR CULTURE

Our culture has been a cornerstone of our business and performance throughout our 150-year history. Our 14 Business Principles, which were codified in 1979, outline our commitment to our clients and our cultural expectations, including how teamwork, excellence, personal initiative and accountability are integral to our long-term success. These principles continue to guide us and were recently distilled into our Core Values, which inform everything that we do.

Our Code of Business Conduct and Ethics outlines our shared responsibility to our clients, our colleagues and our communities. Goldman Sachs is committed to ensuring our culture of integrity remains a core value.

We remain intensely focused on the impact that the conduct of our people can have on our firm's reputation. To further elevate and reinforce this focus, we have now created a Firmwide Conduct Committee, which is globally responsible for the oversight of conduct risk.

In particular, the Firmwide Conduct Committee seeks to ensure that our frameworks and policies appropriately mitigate the risk that our people fail to act in a manner consistent with our Business Principles and Core Values, thereby falling short in fulfilling their responsibilities to the firm, our clients, colleagues, other market participants or the broader community.



METRICS

KEY METRICS AND INDICATORS

Below we provide an overview of selected key metrics. For a complete list of our sustainability-related resources and disclosures, please visit our [Resource Guide](#).

Goldman Sachs U.S. Workforce Demographics*

	White	Asian	Black or African American	American Indian/Alaskan Native	Hispanic or Latinx	Two or More Races	Native Hawaiian or Other Pacific Islander	Females
Exec/Sr. Officials & Managers	77.3%	14.5%	2.7%	0.1%	4.4%	1.0%	0.0%	23.4%
Officials & Managers	55.9%	33.7%	4.4%	0.1%	4.8%	1.1%	0.0%	28.6%
Professionals	53.1%	28.7%	5.8%	0.1%	9.8%	2.3%	0.2%	39.6%
All Others	57.5%	8.2%	15.9%	0.1%	15.4%	2.5%	0.4%	59.9%
Total	55.6%	25.6%	6.6%	0.1%	9.6%	2.1%	0.2%	39.8%

Source: Data anticipated to be filed in Goldman Sachs' 2019 EEO-1 report. "All Others" is a combination of the following EEO-1 job categories: technicians, sales workers, administrative support, craft workers (skilled), operatives (semi-skilled), laborers & helpers and service workers. Date as of 11/30/2019 (US only).

*Workforce pool excludes employees from Ayco and PFE Advisors/United Capital acquisitions.

Environmental Indicators

	Trend 2018–2019	2019	2018 ¹	2017 ¹
Organization				
Global Facilities Reported	↓	271	277	270
Revenues (\$M)	↓	\$36,546	\$36,616	\$32,730
Operational Square Feet (million ft²)²	↑	12.0	11.1	9.7
Employees	↑	38,300	36,600	33,600
Certification				
LEED-Certified Buildings (% of sq. ft.)³	↑	61%	57%	55%
ISO 14001 Certified Operations (% of sq. ft.)	↑	100%	95%	79%

	Trend 2018–2019	2019	2018 ¹	2017 ¹
Energy				
Global Direct Energy Consumption (MWh)	↑	45,281	41,237	41,207
Natural Gas		93%	91%	90%
Fuel Oil		7%	9%	10%
Global Intermediate Energy Consumption (MWh)	↓	489,908	508,703	499,077
Purchased Electricity		96%	96%	97%
Purchased Steam & Chilled Water		4%	4%	3%
Global Direct and Intermediate Energy Consumption (MWh)	↓	535,189	549,940	540,283
◊Reduction in Global Energy Consumption from Baseline (%)	↓	-12%	-10%	-12%
Global Renewable Energy Consumption (MWh)	↓	460,455	463,192	453,518
◊Percent Renewable Energy	↑	98%	95%	94%
Greenhouse Gas (GHG) Emissions				
Scope 1 — Direct (metric tons CO₂ equivalent [tCO₂e])	↑	12,673	11,565	11,231
Natural Gas		68%	66%	67%
Fuel Oil		6%	8%	9%
HFC Refrigerants		26%	26%	24%
Scope 2 (location) — Indirect (tCO₂e)	↓	166,249	187,418	189,599
Purchased Electricity		98%	98%	99%
Purchased Steam & Chilled Water		2%	2%	1%
Scope 2 (market) — Indirect (tCO₂e)	↓	9,109	16,284	18,410
Purchased Electricity		64%	81%	87%
Purchased Steam & Chilled Water		36%	19%	13%
Scope 3: Category 6 — Business Travel (tCO₂e)	↓	135,473	139,893	120,001
Commercial Air		83%	88%	88%
Other Travel ⁴		17%	12%	12%
Total Emissions: Scope 1 & 2 (location) (tCO₂e)	↓	178,922	198,983	200,830
Office Scope 1 & 2		55%	53%	53%
Data Center Scope 1 & 2		45%	47%	47%
Total Emissions: Scope 1, 2 (market) (tCO₂e)	↓	21,782	27,849	29,641
Total Emissions: Scope 1, 2 (market), and 3 Category 6 (tCO₂e)	↓	157,255	167,742	149,642
Verified Carbon Offset Emissions Reductions (tCO ₂ e) ¹		157,255	165,051	146,950
◊Net Emissions: Scope 1, 2 (market), and 3 Category 6 (tCO ₂ e) ¹		0	0	0
Revenues (tCO₂e/\$M)⁵	↓	4.9	5.4	6.1
Rentable Square Feet (KgCO₂e/sq. ft.)⁵	↓	14.9	17.9	20.7
Employee (tCO₂e/employee)⁵	↓	4.7	5.4	6.0

	Trend 2018–2019	2019	2018 ¹	2017 ¹
Water				
Global Water Withdrawal (m ³)	↑	1,093,979	1,037,264	1,002,696
◊Reduction in Global Water Withdrawal from Baseline (%)	↑	3%	-2%	-5%
Waste				
Global Business Waste (metric tons)	↑	5,990	5,920	5,979
Recycled/Composted Material		64%	61%	57%
◊Landfilled Material		1%	2%	7%
Waste to Energy		35%	37%	36%
Global e-Waste (metric tons)	↓	243	431	265
Refurbished and Reused Material ⁶		14%	—	—
Recycled Material		86%	100%	100%
Global Construction Waste (metric tons)	↓	3,395	6,115	4,171
Recycled/Composted Material		90%	93%	99%
Landfilled Material		10%	4%	1%
Waste to Energy		0%	3%	0%
Sustainable Procurement				
Paper Consumption (million sheets)	↓	200	236	233
New Fibers (FSC/SFI)		66%	65%	69%
Post-Consumer Recycled		19%	21%	22%
New Fibers		15%	14%	9%
Paper Consumption/Employee (sheets)	↓	5,233	6,433	6,944
◊Reduction in Paper Consumption/Employee from Baseline (%)		-40%	-26%	-20%
Reduction in Single-Use Plastics (metric tons) ⁷		38	—	—
◊Reduction in Single-Use Plastics from Baseline (%) ⁷		-85%	—	—
◊Vendor Code of Conduct ⁸		100%	100%	100%
Vendor ESG Risk Screening ⁸		100%	—	—
CDP				
Climate Change Survey: Score		A-	A	A
Climate Change Survey: Leadership Recognition ⁹		SER A List	A List	A List

Notes:

Note 1: Historical energy, water and GHG emissions data has been adjusted and restated from baseline 2013 onward to account for acquisitions and divestitures.
Carbon offsets and net emissions reflect verified totals in the year of initial reporting.

Note 2: In alignment with the World Resources Institute and World Business Council for Sustainable Development Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (Scope 1 and 2), operational square footage proportionately reflects all lease activations and expirations of occupied spaces throughout the year.

Note 3: This symbol ♦ before an indicator denotes an environmental commitment through Goldman Sachs' 2015 EPF; reductions are from a 2013 baseline.

Note 4: This includes charter air, rail/bus, ferry, car and hotels.

Note 5: Metrics are normalized using Scope 1 & Scope 2 (location) emissions.

Note 6: The firm began tracking refurbished material as separate from recycled material in 2019.

Note 7: The firm began tracking the purchase of single-use plastics in 2019. Reductions are from a 2018 baseline.

Note 8: All newly onboarded vendors must attest to the Vendor Code of Conduct. All vendors are screened for inherent ESG risk.

Note 9: In 2019 the firm's CDP response was recognized for leadership as part of CDP's Supplier Engagement Rating (SER).

RECOGNITION

FEATURED AWARDS AND RANKINGS

Each year, Goldman Sachs receives awards across categories including sustainability, business, employer of choice, and diversity and inclusion. Select awards are shown below.

Sustainability Awards and Rankings:

CDP

January 2020

Supplier Engagement Leader list (A score)
Climate Change Leader list (A- score)

Newsweek and Statista

December 2019

Ranked #93 out of 300 America's Most Responsible Companies

US Transparency Awards

October 2019

Ranked #6 out of 20

Euromoney Awards for Excellence

July 2019

North America's Best Bank for Sustainable Finance

EPA Green Power Partnership

January 2020

Ranked #43 in the National Top 100
Included on the 100% Green Power Users list

JUST Capital

November 2019

Ranked #111 out of 922 America's Most Just Companies
Ranked #4 out of 33 Capital Markets Companies

Dow Jones Sustainability Index

September 2019

Included in the North America Index

Business Awards and Rankings:

IFR Awards

December 2019

Top M&A Adviser
Top Europe High-Yield Bond House
Top Latin America Bond House
Top EMEA Loan House
Top North America Equity House
Top Asia Pacific Structured Equity House

Risk.net Risk Awards

November 2019

Interest Rate Derivatives House of the Year

Euromoney Awards for Excellence

July 2019

World's Best Bank for Finance
Asia, Latin America and North America's Best Bank for Advisory

Employer of Choice Awards and Rankings:

NAFE Top Companies for Executive Women

March 2020

Listed

Working Mother 100 Best Companies

September 2019

Listed and Hall of Fame honoree for 15 years of inclusion on the list

Vault Banking 50

January 2020

Ranked #1 Most Prestigious Banking Firm

Ranked #3 Best Banking Firm

Universum World's Most Attractive Employers

June 2019

Ranked #7 among business students

Ranked #21 among engineering/IT students

Diversity and Inclusion Awards and Rankings:

Human Rights Campaign's Corporate Equality Index

January 2020

Rating of 100%

Disability:IN's Disability Equality Index

July 2019

Scored 100%

Bloomberg Gender-Equality Index

January 2020

Listed

Asia Society's Best Asian Pacific American Employer Awards

April 2019

Best Employer for LGBT Asian Employees

Most Innovative Practice Citations for: Recruitment and Selection; Retention; and Employee Growth and Advancement (honored as Best of the Best)

SASB INDEX

This report is evidence of our ongoing commitment to provide disclosure under the Sustainability Accounting Standards Board (SASB) standards. We have included the below disclosures related to the three sectors that are most closely aligned to our mix of businesses: Asset Management & Custody Activities, Investment Banking & Brokerage, and Commercial Banks. Disclosures that appeared in more than one of these sector standards are included in a separate section at the top. Unless otherwise noted, all data and descriptions apply to our entire firm, not just the businesses relevant to that sector. We do not currently disclose all metrics included in the standards for these three sectors, but we will continue to evaluate them in the future. All data is as of or for the year ended December 31, 2019 unless otherwise noted.

Topic	Accounting Metric	Category	Code	Response
Disclosures Included in Multiple Sectors' Standards				
Diversity & Inclusion	Percentage of gender and racial/ethnic group representation for (1) executive management, (2) non-executive management, (3) professionals and (4) all other employees	Quantitative	FN-AC-330a.1 FN-IB-330a.1	U.S. Workforce Demographics As part of our commitment to improving diversity at the firm, we have also published diversity goals here .
Business Ethics	Description of whistleblower policies and procedures	Discussion and Analysis	FN-AC-510a.2 FN-IB-510a.2 FN-CB-510a.2	Raising Integrity Concerns Code of Business Conduct and Ethics
	Total amount of monetary losses as a result of legal proceedings associated with: <ul style="list-style-type: none">• Marketing and communication of financial product-related information to new and returning customers;• Fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations; and• Professional integrity, including duty of care	Quantitative	FN-AC-270a.2 FN-AC-510a.1 FN-IB-510a.1 FN-IB-510b.3 FN-CB-510a.1	During 2019, our total net provisions for all litigation and regulatory proceedings were \$1.2B.
Systemic Risk Management	Global Systemically Important Bank (G-SIB) score, by category	Quantitative	FN-IB-550a.1 FN-CB-550a.1	The G-SIB surcharge is updated annually based on financial data from the prior year and is generally applicable for the following year. The G-SIB surcharge is calculated using two methodologies, the higher of which is reflected in the firm's risk-based capital requirements. The first calculation (Method 1) is based on the Basel Committee's methodology, which, among other factors, relies upon measures of the size, activity and complexity of each G-SIB. The second calculation (Method 2) uses similar inputs but includes a measure of reliance on short-term wholesale funding. Further information about Method 1 can be found on the Bank for International Settlement 's website and further information about Method 2 can be found on the Federal Reserve Board 's website. We are bound by Method 2 and our applicable G-SIB buffer is 2.5%. Please see pages 8–9, 71–72 and 172–173 of our 2019 Form 10-K for further information. Further information about the indicators that factor into the calculation can be found in our FR Y-15 filing, which can be accessed here .
	Description of approach to incorporation of results of mandatory and voluntary stress tests into capital adequacy planning, long-term corporate strategy and other business activities	Discussion and Analysis	FN-IB-550a.2 FN-CB-550a.2	We conduct various scenario analyses including as part of the Comprehensive Capital Analysis and Review and Dodd-Frank Act Stress Tests, as well as our resolution and recovery planning. Please see pages 10–13 and 69–71 of our 2019 Form 10-K .

Topic	Accounting Metric	Category	Code	Response				
Asset Management & Custody Activities								
Transparent Information & Fair Advice for Customers	Description of approach to informing customers about products and services	Discussion and Analysis	FN-AC-270a.3	<p>We believe our clients are best served by having a clear understanding of how we work together, the capacities in which we act and the fees we charge. In addition to contracts for products and services, as well as regulatory disclosures, we provide Wealth Management clients a comprehensive brochure outlining the services we provide and the related fee structures, including how their advisor is compensated for each type of service and fee.</p> <p>Please also refer to the Business Standards Committee Impact Report, Code of Business Conduct and Ethics and Risk Factors detailed on pages 23–44 of our 2019 Form 10-K for additional firmwide information.</p>				
Incorporation of ESG Factors in Investment Management and Advisory	Amount of assets under management, by asset class, that employ (1) integration of environmental, social and governance (ESG) issues, (2) sustainability themed investing and (3) screening	Quantitative	FN-AC-410a.1	<p>As of December 2019, we had \$74B in assets under supervision that explicitly include ESG or impact objectives in the investment mandate and an additional \$101.3B subject to ESG screens.</p> <p>See our website for further information.</p>				
	Description of approach to incorporation of environmental, social and governance (ESG) factors in investment and/or wealth management processes and strategies	Discussion and Analysis	FN-AC-410a.2	Statement on ESG and Impact Investing				
	Description of proxy voting and investee engagement policies and procedures	Discussion and Analysis	FN-AC-410a.3	GSAM Stewardship Report				
Systemic Risk Management	Description of approach to incorporation of liquidity risk management programs into portfolio strategy and redemption risk management	Discussion and Analysis	FN-AC-550a.2	<p>Goldman Sachs Asset Management (GSAM) oversees liquidity risk management for the funds and client portfolios for which it serves as fund manager/investment advisor.</p> <p>GSAM monitors liquidity risk associated with a portfolio's ability to meet potential cash outflows related to investor redemptions/withdrawals or potential liabilities related to derivative positions and secured funding trades, as well as changes in the liquidity of positions within the portfolio.</p> <p>GSAM manages the liquidity of its portfolios in line with the investment strategy of each portfolio, applicable regulatory requirements, potential investor redemption requests and broader macro market conditions, at all times in the context of GSAM's obligations and its role as a fiduciary, where applicable.</p>				
	Total exposure to securities financing transactions	Quantitative	FN-AC-550a.3	<p>As of December 2019, we had \$27.0B of credit exposure from securities financing transactions. Please see page 97 of our 2019 Form 10-K for further information.</p>				
	Net exposure to written credit derivatives	Quantitative	FN-AC-550a.4	<p>As of December 2019, written credit derivatives had a total gross notional amount of \$522.6B and purchased credit derivatives had a total gross notional amount of \$581.8B, for total net notional purchased protection of \$59.2B. Please see page 130 of our 2019 Form 10-K for further information.</p>				
n/a	(1) Total registered and (2) total unregistered assets under management (AUM)	Quantitative	FN-AC-000.A	<table border="1"> <tr> <td>Registered Assets Under Supervision</td><td>\$432B</td></tr> <tr> <td>Unregistered Assets Under Supervision</td><td>\$1,427B</td></tr> </table>	Registered Assets Under Supervision	\$432B	Unregistered Assets Under Supervision	\$1,427B
Registered Assets Under Supervision	\$432B							
Unregistered Assets Under Supervision	\$1,427B							
n/a	Total assets under custody and supervision	Quantitative	FN-AC-000.B	\$1.9T assets under supervision. Please see page 63 of our 2019 Form 10-K for further information.				

Topic	Accounting Metric	Category	Code	Response								
Investment Banking & Brokerage												
Incorporation of ESG Factors in Investment Banking & Brokerage Activities	Description of approach to incorporation of environmental, social and governance (ESG) factors in investment banking and brokerage activities	Discussion and Analysis	FN-IB-410a.3	Environmental Policy Framework (Updated in 2019)								
Professional Integrity	Description of approach to ensuring professional integrity, including duty of care	Discussion and Analysis	FN-IB-510b.4	The firm maintains a Code of Business Conduct and Ethics and requires employees to annually certify they have reviewed and will comply with the code. See the Business Standards Committee Impact Report and our Business Principles for further information.								
Employee Incentives and Risk Taking	Percentage of total remuneration that is variable for Material Risk Takers (MRTs)	Quantitative	FN-IB-550b.1	MRT is a regulatory term applied in the UK, but not a concept we apply to our global workforce. Within our UK workforce <i>only</i> , 48% of total remuneration awarded to MRTs for 2018 performance was variable. Note that we apply a pay-for-performance philosophy across our organization. Please see our Compensation Principles for further information.								
	Percentage of variable remuneration of Material Risk Takers (MRTs) to which malus or clawback provisions were applied	Quantitative	FN-IB-550b.2	All equity-based awards granted to employees are subject to robust forfeiture and clawback provisions. Please see page 44 of our 2020 Proxy Statement for further information.								
	Discussion of policies around supervision, control and validation of traders' pricing of Level 3 assets and liabilities	Discussion and Analysis	FN-IB-550b.3	Please see pages 47–48 of our 2019 Form 10-K .								
n/a	(1) Number and (2) value of (a) underwriting, (b) advisory and (c) securitization transactions	Quantitative	FN-IB-000.A	<p>Per Dealogic, our transaction volumes for 2019 were</p> <table> <tr> <td>Announced Mergers and Acquisitions</td> <td>\$1,401B</td> </tr> <tr> <td>Completed Mergers and Acquisitions</td> <td>\$1,256B</td> </tr> <tr> <td>Equity and Equity-Related Offerings</td> <td>\$68B</td> </tr> <tr> <td>Debt Offerings</td> <td>\$245B</td> </tr> </table> <p>Please see page 56 of our 2019 Form 10-K for further information.</p>	Announced Mergers and Acquisitions	\$1,401B	Completed Mergers and Acquisitions	\$1,256B	Equity and Equity-Related Offerings	\$68B	Debt Offerings	\$245B
Announced Mergers and Acquisitions	\$1,401B											
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Equity and Equity-Related Offerings	\$68B											
Debt Offerings	\$245B											

Topic	Accounting Metric	Category	Code	Response																				
Investment Banking & Brokerage																								
n/a	(1) Number and (2) value of proprietary investments and loans by sector	Quantitative	FN-IB-000.B	<p>The table below presents the concentration of our \$46.3B of firmwide gross corporate loans by industry:</p> <table border="1"> <tr><td>Consumer, Retail & Healthcare</td><td>15%</td></tr> <tr><td>Diversified Industrials</td><td>17%</td></tr> <tr><td>Financial Institutions</td><td>10%</td></tr> <tr><td>Funds</td><td>9%</td></tr> <tr><td>Natural Resources & Utilities</td><td>12%</td></tr> <tr><td>Real Estate</td><td>7%</td></tr> <tr><td>Technology, Media & Telecommunications</td><td>17%</td></tr> <tr><td>Other (incl. Special Purpose Vehicles)</td><td>13%</td></tr> </table> <p>The table below presents the asset class breakdown of our \$22.2B of equity securities at fair value (reported within our Asset Management segment):</p> <table border="1"> <tr><td>Corporate</td><td>79%</td></tr> <tr><td>Real Estate</td><td>21%</td></tr> </table> <p>For further information about investments and loans, please see pages 133 and 140, respectively, of our 2019 Form 10-K.</p>	Consumer, Retail & Healthcare	15%	Diversified Industrials	17%	Financial Institutions	10%	Funds	9%	Natural Resources & Utilities	12%	Real Estate	7%	Technology, Media & Telecommunications	17%	Other (incl. Special Purpose Vehicles)	13%	Corporate	79%	Real Estate	21%
Consumer, Retail & Healthcare	15%																							
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Corporate	79%																							
Real Estate	21%																							

Topic	Accounting Metric	Category	Code	Response																
Commercial Banks																				
Data Security	Description of approach to identifying and addressing data security risks	Discussion and Analysis	FN-CB-230a.2	Client Security Statement																
Financial Inclusion & Capacity Building	(1) Number and (2) amount of loans outstanding qualified to programs designed to promote small business and community development	Quantitative	FN-CB-240a.1	<p>As of December 2019, our Urban Investment Group had \$1.2B of debt assets outstanding from 98 transactions and \$1.6B of equity assets outstanding from 144 transactions. See our Urban Investment Group's website for further information.</p> <p>Please also refer to our programs 10,000 Small Businesses, which provides entrepreneurs in the US and UK access to education, capital and business support services, and 10,000 Women, a global initiative providing women entrepreneurs with a business and management education, mentoring and networking, and access to capital.</p>																
Incorporation of ESG Factors in Credit Analysis	Commercial and industrial credit exposure, by industry	Quantitative	FN-CB-410a.1	<p>Credit Exposure from Commercial Loans and Lending Commitments by Industry:</p> <table border="1"> <tr><td>Consumer, Retail & Healthcare</td><td>19%</td></tr> <tr><td>Diversified Industrials</td><td>14%</td></tr> <tr><td>Financial Institutions</td><td>8%</td></tr> <tr><td>Funds</td><td>3%</td></tr> <tr><td>Natural Resources & Utilities</td><td>17%</td></tr> <tr><td>Real Estate</td><td>10%</td></tr> <tr><td>Technology, Media & Telecommunications</td><td>16%</td></tr> <tr><td>Other (incl. Special Purpose Vehicles)</td><td>13%</td></tr> </table> <p>Please see page 96 of our 2019 Form 10-K for further information.</p>	Consumer, Retail & Healthcare	19%	Diversified Industrials	14%	Financial Institutions	8%	Funds	3%	Natural Resources & Utilities	17%	Real Estate	10%	Technology, Media & Telecommunications	16%	Other (incl. Special Purpose Vehicles)	13%
Consumer, Retail & Healthcare	19%																			
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Technology, Media & Telecommunications	16%																			
Other (incl. Special Purpose Vehicles)	13%																			
	Description of approach to incorporation of environmental, social and governance (ESG) factors in credit analysis	Discussion and Analysis	FN-CB-410a.2	Environmental Policy Framework (Updated in 2019)																
n/a	(1) Number and (2) value of loans by segment: (a) personal, (b) small business and (c) corporate	Quantitative	FN-CB-000.B	<p>The table below presents information by loan type:</p> <table border="1"> <tr><td>Corporate</td><td>\$46.3B</td></tr> <tr><td>Wealth Management</td><td>\$27.9B</td></tr> <tr><td>Consumer</td><td>\$4.7B</td></tr> <tr><td>Credit Cards</td><td>\$1.9B</td></tr> </table> <p>Please see page 138 of our 2019 Form 10-K for further information.</p>	Corporate	\$46.3B	Wealth Management	\$27.9B	Consumer	\$4.7B	Credit Cards	\$1.9B								
Corporate	\$46.3B																			
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CLIMATE-RELATED RISKS & OPPORTUNITIES

Goldman Sachs 2019 TCFD Report



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Introduction

At Goldman Sachs, we have long recognized the urgency of climate change and have worked to harness market solutions to help address the challenge. We also believe in the importance of providing greater transparency on our approach to managing climate-related risks and opportunities across our business and operations.

Our inaugural *Task Force on Climate-related Financial Disclosure (TCFD) Report* provides an overview of our strategy and approach to climate-related risks and opportunities, including how the management and oversight of climate change is integrated across our global business. We also include in this report the initial steps we have undertaken on climate risk scenario analysis to understand the impacts of both transition risk and physical risk.

We recognize that climate change is highly complex and that it is inherently difficult to project how related financial risks will materialize across the global economy and markets. In addition, climate scenario analysis is relatively new and evolving rapidly, including with respect to underlying assumptions, methodologies and data. As such, this report represents the first step in our journey with the commitment to deepening our understanding of and advancing our approach to climate-related risks and opportunities over time.

Climate-related opportunities and risks manifest in many different ways across our businesses. We see significant opportunities across our financing, investing, asset management, advisory and risk management activities as we work with our clients to help address the climate challenge. At the same time, extreme weather events may disrupt operations or affect the value of our investments, negative financial impacts on clients from climate change may increase credit risk, and involvement in certain industries associated with climate change may pose reputational risk. Given the broad-based impacts of climate change, our cohesive strategy leverages the breadth of our global businesses and the depth of our expertise and insights to advance climate-related opportunities and to manage climate risk.

Our strategy includes a 10-year, \$750 billion strategic target to finance, invest and advise clients across nine sustainable growth themes, which underlie climate transition and inclusive growth. In addition, given global economies for the foreseeable future are dependent on fossil-based energy and carbon-intensive activities, we are committed to supporting clients across all industries in their efforts to accelerate their climate transition and doing so in an orderly manner. This enables us to not only better serve the interests of our clients but also more effectively manage our own risk exposures.

In 2019, we strengthened our firmwide efforts by establishing the Sustainable Finance Group (SFG), which reports to the Chairman's Office and is responsible for partnering with our global businesses to deliver leading sustainability expertise and drive innovative solutions for our clients. This effort is supported by a cross-divisional steering group of senior business leaders to deliver the breadth of our capabilities.

Our strategy also entails understanding and managing climate-related physical, transition and reputational risks. This is embedded both in our comprehensive firmwide risk management approach and more specifically in our climate change risk management framework. In addition to managing risk across our client activities and related balance sheet exposure and reputational risk, we continue to adopt best practices to reduce our own carbon footprint and integrate resiliency into our global operations.

Underlying our strategy is an ongoing commitment to deepening our understanding and knowledge of, and progressing our approach to, managing climate risks and advancing market opportunities. To that end, we leverage the lessons learned from managing our own business and serving our clients, as well as from our external stakeholder engagement, to help inform the work we do and further best practices across the financial services industry and more broadly. We also harness our research insights and thought leadership to help inform markets and policy, and engage in broader partnerships to further market solutions.



Governance

Given climate-related impacts manifest across our businesses in different ways, oversight and management of climate change is integrated into our existing governance structure. This helps to ensure that climate change is strategically managed and the expertise of the firm is both integrated and leveraged across relevant committees and functions.

At the most senior level, under the oversight of the Board of Directors and at the direction of senior management, we are committed to serving our clients and delivering robust risk management, including on climate-related opportunities and risks. Our focus on not only clients but on effective risk and controls is core to our commitment to excellence, as reflected in our Core Values, [Business Principles](#), and [Code of Business Conduct and Ethics](#).

Board of Directors:

Our [Board of Directors](#) (the “Board”) and its committees are responsible for overseeing the management of the firm’s most significant risks, placing significant focus on reputational risk and management’s operation of the firm for the long term.

- The Board’s [Public Responsibilities Committee](#) (PRC) provides oversight of our firmwide sustainability strategy and sustainability issues affecting the firm, including with respect to climate change. As part of its oversight, the PRC receives updates on the firm’s Environmental Policy Framework (EPF), which serves as an ambitious roadmap for how we seek to leverage our people, capital and ideas to address critical environmental challenges and promote sustainable economic growth across our businesses. The EPF also includes environmental and social risk guidelines, including for carbon-intensive sectors.
- The [Risk Committee](#) of the Board oversees the firm’s overall risk-taking tolerance and management of financial and non-financial risks, including climate risk. In this respect, the Risk Committee provides oversight of the firm’s Risk Appetite Statement (RAS), which conveys the firm’s view of its risk culture, risk appetite and risk management philosophies, including those related to climate change.

Firmwide Committees:

In addition to Board-level oversight, we have a series of firm-level committees with risk management mandates that have oversight or decision-making responsibilities for risk management activities and environmental, social and governance (ESG) issues, including relevant climate change considerations. At a firmwide level, the **Enterprise Risk Committee** oversees all of our financial and non-financial risks, including climate-related risk.

In addition, we have firm-level risk committees that provide oversight for different businesses, activities, products, regions and entities. For example, the **Firmwide Capital Committee**, which approves and oversees debt-related transactions, including balance sheet-related commitments, integrates relevant climate-related considerations. For our own operations, the **Firmwide Resilience and Operational Risk Committee** provides oversight over operational risk and resiliency, including physical risks relating to climate change.

All of our committees have responsibility for considering the reputational impact of transactions and activities that they review. The **Firmwide Reputational Risk Committee** provides oversight over transactions that may have heightened reputational risk, which includes considerations relating to environmental and social factors, such as climate-related reputational risk.

Below are relevant key committees.

Committee	Description
Management Committee	Oversees global activities directly and through authority delegated to committees it has established. This committee consists of our most senior leaders.
Firmwide Enterprise Risk Committee	Oversees all of our financial and non-financial risks as well as the ongoing review, approval and monitoring of our enterprise risk management framework.
Firmwide Reputational Risk Committee	Assesses reputational risks arising from transactions that have been identified as having potential heightened reputational risk.
Firmwide Capital Committee	Approves and oversees debt-related transactions and ensures that business, reputational and suitability standards for underwritings and capital commitments are maintained on a global basis.
Firmwide Commitments Committee	Approves and oversees underwriting and distribution activities with respect to equity and equity-related products, and sets and maintains policies and procedures designed to ensure that legal, reputational, regulatory and business standards are maintained on a global basis.
Firmwide Investment Policy Committee	Reviews, approves, sets policies and oversees certain principal investments, including review of risk management and controls for these types of investments.
Firmwide Resilience and Operational Risk Committee	Oversees operational risk, and ensures our business and operational resilience.
Physical Commodity Review Committee	Maintains a consistent approach to evaluating risks associated with engaging in, investing in, or the financing of physical commodity activities that may have an impact on the environment or human health and safety.

Relevant Divisions / Functions:

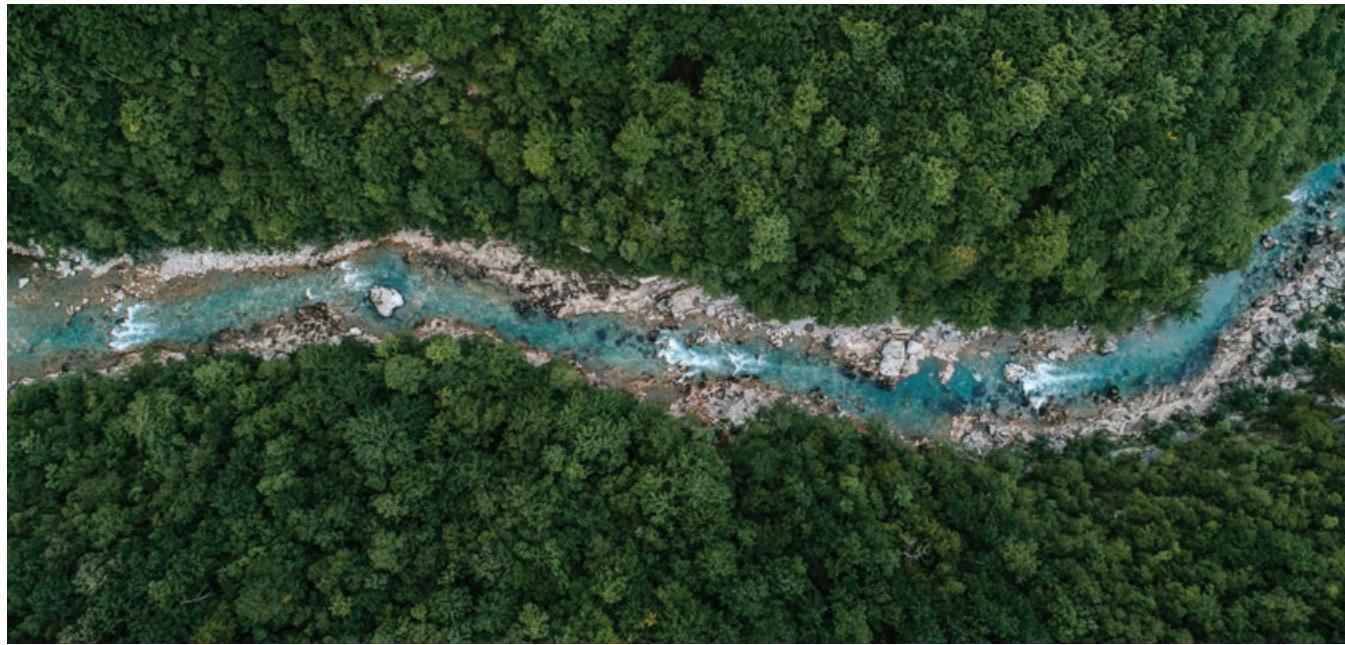
Climate change risks and opportunities are integrated across relevant areas of our businesses. As part of their responsibilities, the following three divisions/functions play a specific role in managing climate-related risks and opportunities and ensuring that we continue to advance our insights and expertise.

- **Risk Division:** The Risk Division has a range of climate-related functions, working with business units and control groups on risk identification and stress-testing activities. The division also assesses financial risks of counterparties and transactions, including credit risk. In addition, the division oversees the firm's operational resilience framework, which factors in potential impacts from climate-related risks on the firm's activities.
- **Executive Office (EO) — Sustainable Finance Group (SFG):** The SFG, which reports to the Office of the Chairman, is responsible for partnering with the firm's global businesses to deliver leading sustainability expertise and capabilities to our clients and drive innovative market solutions that advance climate transition and inclusive growth. SFG also engages with the firm's stakeholders to stay abreast of and, where relevant, help inform sustainable finance and climate change-related policy. In addition, SFG works with the Business Intelligence Group, the Risk Division and the business units on firmwide environmental and social risk management and related guidelines. By being part of the EO and working across all of the global businesses, clients and stakeholders, SFG brings together the breadth of our knowledge and capabilities and ensures we continue to deliver our insights and expertise.
- **Services Division — Corporate Services & Real Estate (CSRE), Crisis Management Group:** The Services Division provides essential commercial advisory and management services to enable the firm's flow of business, drive operational efficiency, manage risk and deliver the world's best work experience and environment. CSRE partners with the Crisis Management Group to assess and plan for near- and long-term climate-related risks across our operations through infrastructure and business continuity reviews of the firm's global corporate real estate portfolio. This enables climate-related risk to be actively monitored and threats to be minimized to ensure the firm operates continuously through and swiftly recovers from any business disruption.

Cross-Divisional Groups:

In addition to the specific divisions/functions, we have established cross-divisional steering groups to more effectively leverage the firm's capabilities and activities and to ensure a holistic, firmwide approach to managing climate-related risks and opportunities. These include:

- **Sustainable Finance Steering Group:** Comprised of senior leaders responsible for integrating sustainability expertise across our divisions and bringing our capabilities together across the firm. The group convenes periodically to guide and support firmwide sustainable finance efforts relating to key strategic initiatives and client delivery, while providing leadership for cross-divisional work streams and new opportunities.
- **Climate Change Risk Steering Group:** Comprised of representatives from the Risk Division, Services Division and the Executive Office that are responsible for evaluating climate-related scenario analysis and the broader TCFD assessment. This group also reviews the implementation of the strategic climate risk management approach outlined in this report to strengthen climate-related financial risk integration across our businesses and practices.



Strategy — Advancing the Opportunity

As markets and client activity shift in response to climate change, we have a substantial opportunity to harness innovative capital market tools and partner with our clients to help accelerate their climate transition. In addition, our ability to leverage the breadth of our capabilities, our commitment to continuously deepening our expertise and refining our insights, and applying these both across our own operations and in serving our clients' needs, ensures we stay front-footed in integrating climate change opportunities and risks.

In December 2019, we announced a new [sustainable finance target](#) of \$750 billion of financing, investing and advisory activity by 2030. This target encompasses activities across nine strategic growth themes, which are rooted in 10+ years of market research, focused on climate transition and inclusive growth. Areas of focus in our climate transition activity include clean energy, sustainable transport, sustainable food and agriculture, waste and material, as well as ecosystem services — areas where we can help scale technology and solutions through greater and more efficient capital deployment. In addition to this target, we have expanded our work with clients more broadly to help them with their climate transition and in ensuring sustainable growth more broadly, and we are harnessing innovative market solutions to help clients better manage and adapt to climate risks.

Leveraging the Breadth of Our Businesses

We leverage our capabilities across financing, advisory, risk management solutions, asset management and investing to help our clients achieve their climate-related goals, facilitate the low-carbon transition, and strengthen adaptation and resiliency. The following table provides an overview.

Business Activity	Key Examples
<p>Investment Banking: Our Investment Banking franchise is well-positioned to support clients with climate transition strategies and to assist both incumbents and new companies to innovate and grow. Goldman Sachs is a leading global M&A advisor and is regularly recognized for our leadership in clean energy financing and innovative sustainability financing solutions.</p>	<ul style="list-style-type: none"> Deployed more than \$115 billion toward clean energy financing and investing since 2006 Active underwriter of catastrophe bonds, helping raise more than \$20 billion to manage weather-related events since 2006 Underwrote nearly \$59 billion in green, social and sustainability bonds since 2014 Advising clients on low-carbon transition and sustainable growth strategies
<p>Asset Management: Goldman Sachs has one of the leading investing and asset management franchises across the breadth of asset classes and with global scale. A key area of strategic focus is ESG and impact investing as well as investing in climate transition and sustainable growth themes.</p>	<ul style="list-style-type: none"> Merchant Banking has a track record of investing in renewable energy and clean technology solutions globally Goldman Sachs Asset Management (GSAM) has \$74 billion in ESG and impact investing assets under supervision (AUS) as of December 2019 GSAM recognizes that environmental factors, including climate change, can affect investment performance and considers it an engagement priority. It has supported shareholder proposals related to climate change disclosures 60 percent of the time and shareholder proposals related to a 2-degree scenario analysis 100 percent of the time¹
<p>Consumer & Wealth Management: ESG and impact investing is a fast-growing area for our consumer and wealth management businesses, with investment strategies across a number of innovative environmental and social themes.</p>	<ul style="list-style-type: none"> Provides innovative client solutions across portfolios, investment strategies and products, including customizable passive ESG options, ESG structured notes, and renewable funds and other climate offerings
<p>Global Markets: Goldman Sachs facilitates the efficient development of carbon and other climate-related commodity markets. Our Global Markets business has been a leading participant in the global energy markets for over 20 years and is active in both carbon and renewable energy markets, helping developers and corporates scale solutions and mitigate risks.</p>	<ul style="list-style-type: none"> Supported over \$1.5 billion of new build renewable investments through 1,250 MW+ of renewable offtake transactions since 2018 Market maker in carbon credits, participating in the EU Emission Trading Scheme from its inception and in the California carbon market

¹[GSAM Stewardship Report, 2019](#).

Global Markets and our other businesses are supported by our **Global Investment Research** (GIR) division. GIR is a leading provider of ESG thought leadership with a dedicated global SUSTAIN team. SUSTAIN research includes an ESG framework through which to evaluate corporate ESG engagement, and investing roadmaps and thematic pieces on the risks and opportunities associated with sustainability. Climate change has been a growing area of research focus, with topics such as carbon pricing, climate resiliency of cities, climate strategies of Big Oil companies, and investing in climate solutions. Read the reports [here](#).

For additional details, please refer to our [2019 Sustainability Report](#).

Public Policy and Industry Engagement

We continue to work with other companies, nonprofit organizations and other stakeholders to share insights and further best practices that advance sustainability and climate transition. In addition, where appropriate, we advocate for effective climate policy to help inform ways to advance market solutions that can help address climate change.

The following are examples.

- **Paris Climate Agreement:** We have actively engaged in making the business case for global climate action, including support for the 2015 [UNFCCC Paris Agreement](#). We were one of the first US companies to commit to the [White House American Business Act on Climate Pledge in 2015](#); we signed an [open letter alongside 29 other CEOs](#) in 2017 to support the US staying in the Paris Agreement; and more recently, we were part of a [group of 80+ CEOs and labour leaders](#) reiterating our support that staying in the Paris Agreement will strengthen US competitiveness in global markets.
- **Carbon pricing:** We have long articulated the need for governments to provide transparency around the costs of greenhouse gas (GHG) emissions and to create long-term value for GHG emissions reductions. More recently, in a December 2019 [editorial](#), our CEO David Solomon underscored the urgency and business case for climate transition and called for governments to put a price on carbon. In February 2020, Goldman Sachs, alongside more than 25 companies, joined as a founding member of the [Climate Leadership Council](#) (CLC) to support a revenue-neutral carbon fee and dividend plan for the US.
- **Catalyzing climate finance:** We have continued to leverage our market insights to help catalyze greater capital flows to address climate change. In 2019, we joined the CEO-led [Climate Finance Leadership Initiative](#) (CFLI) as one of seven founding members, to support greater mobilization of climate finance flows. In September 2019, CFLI delivered its [Financing the Low-Carbon Future](#) report to the UN to inform ways to further mobilize private climate finance at the scale and speed needed to support a rapid and orderly transition to a low-carbon global economy.
- **Integrating climate-related risks and opportunities:** In 2019, Goldman Sachs Asset Management teamed up with a select group of other leading asset managers to advance climate-related investment among national sovereign wealth funds (SWFs). Known as the [One Planet Asset Managers Initiative](#), this collaboration supports the efforts of the One Planet SWF Working Group, composed of leading sovereign wealth funds, to drive a deeper consideration of the impact of climate change on investment portfolios.

Operational Best Practices

In addition to harnessing the breadth of our businesses to help our clients with their climate transition and scaling innovative market solutions to address climate change, Goldman Sachs is committed to being a leader in implementing sustainability practices that minimize the impact of our global operations on the environment. For example, we have been carbon neutral from 2015 onward across our global direct Scope 1, indirect (market-based) Scope 2, and Scope 3 business travel emissions. Additionally, by year-end 2020, we are committed to procuring 100% renewable energy and attaining LEED Gold or equivalent for 70 percent of our global corporate real estate footprint.

In December 2019, we established a new suite of 2025 operational sustainability goals with a focus on strategic, collaborative partnerships that drive market transformation, as outlined in our [Sustainability Report](#). The firm has been a member of [RE100](#) since 2015 and recently joined additional initiatives [EV100](#) and [EP100](#) with ambitious commitments to electrify transport and deploy smarter energy use — making us the first US company to become a member of all three of [The Climate Group](#)'s global corporate leadership initiatives to accelerate the clean energy transition.



Risk Management

Because we are a global financial services firm with clients operating in diverse sectors and offices across many countries, climate change presents a range of potential risk considerations across our businesses and activities. For example, climate change may cause extreme weather events that disrupt operations at one or more of our primary locations, which may negatively affect our ability to service and interact with our clients and also may adversely affect the value of our investments. Climate change may also have a negative impact on the financial condition of our clients, which may decrease cash flows from those clients and increase the credit risk associated with loans and other credit exposures to these clients. Additionally, our reputation may be impacted as a result of our involvement, or our clients' involvement, in certain industries or projects associated with climate change.

The table below provides a description of the range of climate-related risk considerations.

Risk	Description
Market	Physical and transition risk could impact the value of assets in which we make markets and invest.
Credit	Counterparty financial performance and collateral values could deteriorate as the transition and physical impacts of climate change manifest over time.
Liquidity	Climate-related disruptions could impact the availability and accessibility of capital in markets for certain sectors and securities.
Operational	Increased severity of climate-related events could impact our office locations and disrupt our systems, people and processes across our global footprint.
Reputation	Growing stakeholder focus on corporate action to meet emissions reduction targets can result in increased reputational risk and reduced client and employee loyalty, investor divestment and impacts to client activity.
Legal	Climate-related disclosures are increasingly important and climate-related litigation could also result from stranded assets, acute climate events or resulting market price declines.

Climate-Risk Scenario Analysis

Our overall business structure, strategy and comprehensive risk management provide a strong foundation for managing and mitigating these potential risks. However, climate change is highly complex and non-linear, with many uncertainties. In addition, new data, tools, and expectations are continuously evolving. As such, we have a climate change risk management framework, which includes stress testing based on an initial set of scenarios. As part of ongoing implementation, we are undertaking further refinement of the scenarios with the goal of improving their risk management benefit.

As a global financial institution, we use a variety of stress-testing techniques to calculate the potential impact of a wide range of potential market moves. We perform stress testing on a regular basis to ensure a comprehensive analysis of our vulnerabilities and idiosyncratic risks in anticipation of market events or conditions, which include climate considerations. For climate stress testing, we perform both (i) transition risk stress tests on the value of our balance sheet-related equity and credit assets, and (ii) physical risk stress tests on our global properties. The following is what we have initially undertaken:

(i) Transition Risk Stress Test

Transition risk arises from changes to policy, technology and consumer preferences over time that reduce reliance on carbon-intensive products and services. The composition of industries, particularly in the energy sector, will change as a result of compliance with climate policy changes such as the implementation of the Paris Agreement. Since individual countries will implement decarbonization policies in different ways, changes to industries will also depend on where they are located and how the policies evolve over time. Climate policy changes introduce financial risks to financial institutions that may own or finance companies whose value could be affected. To measure these risks, we perform transition risk stress testing.

Currently, we perform transition risk stress tests under two scenarios: 1) a scenario in which the Paris Agreement is fully implemented by all countries; and 2) a scenario in which the Paris Agreement is partially implemented in line with current policy plans. In implementing each scenario, we assume that a credible policy change is announced and that the market consequently adjusts credit ratings and prices of affected companies and trades. In each stress test, we estimate the change in credit ratings that would result from each policy change as well as the changes in equity and credit prices that are consistent with those credit rating changes. We then reprice all affected assets on our balance sheet to measure the total change in value that would result under each scenario.

(ii) Physical Risk Stress Test

Physical risk arises from changes to the environment that are produced directly by the continuing concentration of GHGs in the atmosphere and the consequent increases in temperature, precipitation, sea level and other environmental factors. Physical changes in the environment may affect the value of properties directly; an increase in sea level, coupled with more extreme precipitation and hurricanes, would affect the value of coastal properties, for example. But physical risks may also influence the value of assets indirectly by reducing local economic growth, worsening health or lowering labor productivity. The magnitude of physical risks that manifest is linked to transition scenarios, since GHG emissions and their resulting impacts will be determined by policy-driven mitigation measures.

In our physical stress test, we examine the effect of heat stress, water stress, extreme precipitation, sea level rise, and flooding on our properties. The climate policy that we assume in our stress test is a high-emissions policy. We assume that the concentration of GHGs increases even more than expected under current policies and that therefore temperature and other environmental risks worsen relative to business-as-usual expectations.

(iii) Next Steps

These initial stress tests were helpful in understanding relative sensitivities and providing a starting point for further refining the analysis. To that end, we are working to enhance our transition risk and physical risk stress tests along a number of dimensions in order to improve their decision usefulness. In our transition risk stress test, we are examining how to increase its flexibility so that we can run a wider range of scenarios that incorporate more varied policy changes. Similarly, in our physical risk stress tests, we are exploring how we might incorporate a wider range of policy changes, such as full adherence to the Paris Agreement. We are also considering how to add more physical risks to our physical stress test, such as wildfires, and how to better estimate the effects of physical risks on asset values. More broadly, we are investigating whether the transition risk and physical risk stress tests should be unified or whether it would be more beneficial to keep them separate.

Comprehensive Risk Management Approach

Business Structure and Strategy:

As a global financial institution with a diverse set of businesses and clients, our business structure and strategy help us manage overall climate-related risks and increase our ability to participate in climate-related opportunities.

- A significant part of our client financings in our **Investment Banking** business are provided through our underwritten offerings where we connect users of capital with investors versus holding financings on our balance sheet. For underwritings, how we perform due diligence, make business selection decisions and provide relevant disclosures are critical and form part of our comprehensive risk management approach.
- Our **Asset Management** and **Consumer & Wealth Management** businesses largely relate to client assets and are integrating ESG considerations, including climate-related strategies for our clients, as well as taking into account factors that could be material in valuing performance and risk, such as those relating to climate change.
- Our **Global Markets** business is highly diversified and managed in a way that reflects real-time information and shifts in potential risks.

Given this current business mix and structure, and based on our initial stress tests, the direct balance sheet impacts from climate change are relatively modest. However, our ability to effectively manage climate risks and opportunities is important across our businesses in serving our clients and managing and protecting existing pools of assets while creating opportunities for further growth.

Business Activities:

We believe that effective risk management is critical to our success. Accordingly, we have a well-established enterprise risk management (ERM) framework, which is ultimately overseen by our Board. The ERM framework employs a comprehensive, integrated approach to risk management, and it is designed to enable robust risk management processes through which we identify, assess, monitor and manage the risks we assume in conducting our business activities.

As part of our risk management approach, we have firmwide policy guidelines and dedicated teams that support business selection and review processes:

- **Firmwide policy guidelines** for carbon-intensive sectors and activities, such as coal-fired power generation, palm oil, and oil & gas are included in our [Environmental Policy Framework](#) (EPF). The EPF was updated in December 2019 to restrict certain carbon-related business activities and to strengthen our work with clients to help them with their climate transition.
- Upfront **business selection** and **due diligence processes** that include 14 key sector and cross-sector [guidelines](#), and worst-case-loss calculations for physical commodities in certain carbon-intensive sectors, complement the EPF. These guidelines and tools are leveraged across the various activities of the firm at the business selection stage and through designated committee review processes. There are escalation mechanisms and protocols undertaken at each stage. Where relevant, we also incorporate extreme weather and flooding event probability into worst-case-loss calculations for certain transactions. See [Environmental and Social Risk Management](#) for more information.
- **Risk Identification and Scenario Design**, which is a periodic process that we undertake to review the materiality of evolving risks in our business activities over a two-year forward-looking horizon, includes the assessment of impact from climate change.

In addition, our ongoing risk monitoring from credit, liquidity, and market risk management teams, mark-to-market portfolio valuations, dynamic hedging, and insurance requirements where relevant, enables overall position management and exposure reduction where potential material risks are identified.

Operations:

For our physical assets, the Firmwide Resilience and Operational Risk Committee oversees business continuity planning and crisis management efforts, including planning for climate-related risks. The committee oversees efforts related to:

- Regular resiliency reviews
- Comprehensive infrastructure and business continuity assessments
- Overall real estate site selection and management strategy
- Business Continuity Planning and remote access infrastructure

We also consider such risks through all stages of our corporate real estate strategy, from site selection and building design to occupancy and facilities management. Within our operations, we utilize various metrics and dashboards to prioritize and track risks that pose a threat to the health and safety of our employees or to the firm's critical infrastructure assets that support core business functions.

Metrics and Targets

Business Opportunities: The firm has had a long-standing commitment to harnessing market solutions to address climate change. One of the key ways we have been doing this is by mobilizing capital to scale clean energy, given energy is the largest contributor of greenhouse gas emissions. Clean energy also brings benefits of energy diversification and security, technology innovation, and green jobs, as well as health benefits. Since 2006, we have mobilized over \$115 billion in clean energy financing and investments.

Going forward, we have a more expansive goal to deploy \$750 billion in sustainable finance over the next 10 years, with a focus on climate transition and inclusive growth. Please refer to our [Sustainability Report](#) for more information about our Sustainable Finance Goals.

Operations and GHG Emissions: To ensure we remain a leader in implementing sustainability practices and reducing operational risk, our Services Division is committed to minimizing the impact of our operations on the environment and adopting best practices. We have been carbon neutral across our global operations and business travel since 2015, and are progressing on our 2020 operational goals. Additionally, alongside the sustainable finance target, we announced new operational goals for 2025, with a focus on strategic, collaborative partnerships that drive market transformation.

See [Our Operational Impact](#).

We currently measure, disclose and reduce Scope 1 and Scope 2 GHG emissions from our own activities, and also disclose Scope 3 emissions related to business travel. See [page 47](#) for our latest GHG emissions and energy use data for 2019.



The Path Forward

This report is the first step in our application of TCFD recommendations. Goldman Sachs is committed to continuing our work with various stakeholders, including clients, shareholders, peer banks and other key constituents to improve methodologies on climate-related risk analysis and disclosures and to furthering climate-related opportunities to facilitate the transition to a sustainable low-carbon economy. Per the TCFD recommendations, which acknowledge that implementation is a journey that will evolve over time, we will continue to refine our climate initiatives and disclosure in a way that progresses our ability to more effectively manage risk-and-capture strategic growth opportunities while helping to inform the broader market. We look forward to continuing our engagement on this important topic, and leveraging the breadth of our businesses to navigate the transition to a low-carbon economy.

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Statements about the effects of the COVID-19 pandemic on the firm’s targets and results may constitute forward-looking statements and are subject to the risk that the actual impact may differ, possibly materially, from what is currently expected.