

Second-Party Opinion

Mastercard Sustainability Financing Framework



Evaluation Summary

Sustainalytics is of the opinion that the Mastercard Sustainability Financing Framework is credible and impactful and aligns with the Sustainability Bond Guidelines 2018, Green Bond Principles 2018, Social Bond Principles 2020 and Green Loan Principles 2018. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds – Green Buildings, Energy Efficiency, Renewable Energy, Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes, Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use, Climate Change Adaptation, Mastercard Impact Fund, COVID-19 Response, In Solidarity and Commercially Sustainable Social Impact – are aligned with those recognized by the Green Bond Principles 2018, Social Bond Principles 2020 and Green Loan Principles 2020. Sustainalytics considers that the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 7, 8, 9, 10, 12, 13 and 15.



PROJECT EVALUATION / SELECTION Mastercard's eligible projects will be evaluated and selected by a dedicated committee made up of representatives from the Company's sustainability, finance and legal teams. Sustainalytics considers the project selection process to be in line with market practice.



MANAGEMENT OF PROCEEDS Net proceeds will be managed by Mastercard's Finance department. The Company intends to fully allocate and/or disburse proceeds within 36 months of issuance of financing transactions. Pending full allocation, the proceeds will temporarily be invested according to the Company's normal liquidity processes. This is in line with market practice.



REPORTING Mastercard intends to report on allocation of proceeds annually on its website until full allocation. Allocation reporting will be validated by a nationally recognized accounting firm and include the balance amount of allocated and unallocated net proceeds, as well as the description of selected projects. The company is also committed to reporting on relevant impact metrics. Sustainalytics views Mastercard's allocation and impact reporting as aligned with market practice.

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Introduction

Mastercard Incorporated (“Mastercard”, or the “Company”) is a global payments technology company that offers a range of electronic fund transfer solutions to facilitate transactions globally. The Company is headquartered in New York, USA with 21,000 employees serving customers in more than 150 currencies across 210 countries and territories.

Mastercard has developed the Mastercard Sustainability Financing Framework (the “Framework”) under which it intends to issue sustainability bonds, green bonds, social bonds, green loans and other types of financing instruments (each a “Financing Transaction”) and use the proceeds to finance and/or refinance, in whole or in part, existing and/or future projects that demonstrate environmental and/or social benefits. The Framework defines eligibility criteria in seven green areas and four social areas:

Green Eligible Categories:

1. Green Buildings
2. Energy Efficiency
3. Renewable Energy
4. Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes
5. Pollution Prevention and Control
6. Environmentally Sustainable Management of Living Natural Resources and Land Use
7. Climate Change Adaptation

Social Eligible Categories:

1. Mastercard Impact Fund
2. COVID-19 Response
3. In Solidarity
4. Commercially Sustainable Social Impact

Mastercard engaged Sustainalytics to review the Mastercard Sustainability Financing Framework, dated February 2021, and to provide a Second-Party Opinion on the Framework’s environmental and social credentials and its alignment with the Sustainability Bond Guidelines 2018 (SBG),¹ Green Bond Principles 2018 (GBP), Social Bond Principles 2020 (SBP) and Green Loan Principles 2018 (GLP).² This Framework has been published in a separate document.³

Scope of work and limitations of Sustainalytics’ Second-Party Opinion

Sustainalytics’ Second-Party Opinion reflects Sustainalytics’ independent⁴ opinion on the alignment of the reviewed Framework with the current market standards and the extent to which the eligible project categories are credible and impactful.

As part of the Second-Party Opinion, Sustainalytics assessed the following:

- The Framework’s alignment with the GBP, SBP, and SBG (as administered by ICMA) and the GLP;
- The credibility and anticipated positive impacts of the use of proceeds; and
- The alignment of the issuer’s sustainability strategy and performance and sustainability risk management in relation to the use of proceeds.

For the use of proceeds assessment, Sustainalytics relied on its internal taxonomy, version 1.7.1, which is informed by market practice and Sustainalytics’ expertise as an ESG research provider.

¹ The Sustainability Bond Guidelines are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/sustainability-bond-guidelines-sbg/>

² The Green Loan Principles are administered by the International Capital Market Association and are available at:

https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/LMA_Green_Loan_Principles_Booklet-220318.pdf

³ The Mastercard Sustainability Financing Framework is available on Mastercard’s website at:

<https://investor.mastercard.com/Sustainability/default.aspx>

⁴ When operating multiple lines of business that serve a variety of client types, objective research is a cornerstone of Sustainalytics and ensuring analyst independence is paramount to producing objective, actionable research. Sustainalytics has therefore put in place a robust conflict management framework that specifically addresses the need for analyst independence, consistency of process, structural separation of commercial and research (and engagement) teams, data protection and systems separation. Last but not the least, analyst compensation is not directly tied to specific commercial outcomes. One of Sustainalytics’ hallmarks is integrity, another is transparency.

As part of this engagement, Sustainalytics held conversations with various members of Mastercard's management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Framework. Mastercard representatives have confirmed (1) they understand it is the sole responsibility of Mastercard to ensure that the information provided is complete, accurate or up to date; (2) that they have provided Sustainalytics with all relevant information and (3) that any provided material information has been duly disclosed in a timely manner. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics' opinion of the Framework and should be read in conjunction with that Framework.

Any update of the present Second-Party Opinion will be conducted according to the agreed engagement conditions between Sustainalytics and Mastercard.

Sustainalytics' Second-Party Opinion, while reflecting on the alignment of the Framework with market standards, is no guarantee of alignment nor warrants any alignment with future versions of relevant market standards. Furthermore, Sustainalytics' Second-Party Opinion addresses the anticipated impacts of eligible projects expected to be financed with bond proceeds but does not measure the actual impact. The measurement and reporting of the impact achieved through projects financed under the Framework is the responsibility of the Framework owner.

In addition, the Second-Party Opinion opines on the potential allocation of proceeds but does not guarantee the realised allocation of the bond proceeds towards eligible activities.

No information provided by Sustainalytics under the present Second-Party Opinion shall be considered as being a statement, representation, warrant or argument, either in favour or against, the truthfulness, reliability or completeness of any facts or statements and related surrounding circumstances that Mastercard has made available to Sustainalytics for the purpose of this Second-Party Opinion.

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the Mastercard Sustainability Financing Framework

Sustainalytics is of the opinion that the Mastercard Sustainability Financing Framework is credible, impactful and aligns with the four core components of the GBP, SBP, SBG and GLP. Sustainalytics highlights the following elements of Mastercard's Sustainability Financing Framework:

- Use of Proceeds:
 - The eligible categories – Green Buildings, Energy Efficiency, Renewable Energy, Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes, Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use, Climate Change Adaptation, Mastercard Impact Fund, COVID-19 Response, In Solidarity, Commercially Sustainable Social Impact – are aligned with those recognized by the GBP, SBP and GLP.
 - The Framework defines three-year lookback period for its refinancing activities,⁵ which Sustainalytics considers to be in line with market practice.
 - Within the Green Buildings category, Mastercard contemplates expenditures related to building development, upgrade, and white box build outs.
 - Mastercard intends to use reputable third-party certification schemes to determine green building eligibility for buildings. The Framework specifies minimum standards of LEED Gold, BREEAM Excellent or other equivalent certification. Sustainalytics has conducted an evaluation of these certification schemes and considers them to be robust and credible. See Appendix 1 for further description of the referenced building standards.
 - The Framework specifies that in addition to buildings which meet the above-referenced levels of certification, Mastercard may consider as eligible, expenditures related to the

⁵ Unless otherwise noted in the bond documentation

upgrade of its offices in Belgium which are anticipated to achieve BREEAM Very Good certification. While Sustainalytics considers BREEAM Excellent to be best practice, the use of Very Good for a refurbished building is anticipated to deliver positive impacts overall, and Sustainalytics encourages Mastercard to strive for energy performance in line with the requirements of BREEAM Excellent.

- As it relates to white box buildouts,⁶ the Framework defines an energy intensity threshold of 10 kWh/square foot for the project to be considered eligible. Sustainalytics views this threshold to be indicative of strong environmental performance, while noting that in leased buildings the share of total energy usage covered by this metric may vary based on the building services under the control of the landlord or tenant.
- Mastercard's investment in the Energy Efficiency category is targeted at a range of projects in technology infrastructure and real estate. For the real estate expenditures, the Company is considering upgrades and retrofits such as LED lights and building heating and cooling systems. Mastercard has confirmed that upgrading fossil-powered equipment is not eligible under the Framework. Sustainalytics views favourably that the Framework defines a quantitative minimum improvement threshold in energy efficiency of 20% compared to the baseline performance.
- Renewable Energy expenditures under the Framework may include the acquisition or development of new onsite or offsite generation projects in wind power, solar power, geothermal power with direct emissions less than 100gCO₂/kWh,⁷ and hydropower with an installed capacity of no more than 25 MW.
 - In addition to investing directly in projects, the Company intends to procure electricity via power purchase agreements (PPAs) and purchase project-specific fixed-price renewable energy certificates (RECs). Mastercard confirms that PPAs and RECs will be long-term agreements, which Sustainalytics views as providing greater assurance of positive impacts and aligned with market practice.
 - As part of the same category, Mastercard contemplates investments in new and/or existing energy storage capacity assets or via services under long-term capacity agreements, which Sustainalytics considers to be aligned with market expectation.
- The Framework's category of Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes contemplates investments related to enabling environmental benefits through the use of Mastercard's products and services.
 - Sustainalytics views positively projects related to supporting customers in monitoring and addressing the carbon impact of their purchases, considering this enabling technology to be in line with market expectations.
- Within the Pollution Prevention and Control category, Mastercard is considering various initiatives related to waste reduction and equipment electrification. Sustainalytics notes the following:
 - Mastercard may consider eligible, expenditures related to the reduction and recycling of waste at its corporate offices. Sustainalytics considers such investments to be aligned with market expectation.
 - Switching equipment away from being powered by fossil-fuel to electric power. In this regard, Mastercard has confirmed that the proceeds under the Framework will not be used for the improvements and/or installation of fossil fuel equipment. Sustainalytics views such investments as having environmental benefits and to be aligned with market expectation.
- Mastercard may finance under the Framework's Environmentally Sustainable Management of Living Natural Resources and Land Use category, forestation and tree planting initiatives. Sustainalytics views favourably such activities, noting that Mastercard has disclosed that it is not involved in commercial-scale forestry or post-harvest replanting.
- Within the area of Climate Change Adaptation, Mastercard may invest in projects which are intended to increase the resiliency of the Company's physical assets to the effects of climate change. Mastercard has disclosed that it is in the process of conducting asset-level vulnerability

⁶ A white box buildout refers to the outfitting of a tenant-controlled space leased within a building and generally includes the installation of finishings, IT or other process equipment, and tenant-specific electrical fixtures.

⁷ This threshold is considered to be in line with the 2-degree compliant transition, and has been espoused by the EU Technical Expert Group on Sustainable Finance and the Climate Bonds Initiative.

assessments, which will inform such investment decisions and Sustainalytics views this to be aligned with market expectations. Sustainalytics further notes the importance that adaptation measures do not adversely affect broader resiliency efforts, and as such highlights Mastercard's management of Environmental and Social risks (see Section 2).

- Proceeds raised under the Framework may finance contributions to the Mastercard Impact Fund, namely those in the areas of Financial Security, Economic Development, the Future of Workers, and Data for Social Impact.
 - While these activities are philanthropic in nature, Sustainalytics highlights that the mission of the Mastercard Impact Fund is in these areas aligned with Mastercard's objectives.
 - As recommended by the Social Bond Principles, the Framework defines target populations for each of these investment areas.
 - Sustainalytics views positively the expressed intent of these programs and highlights that Mastercard's website discloses past projects which are recognized to have positive impact,⁸ noting the wide variety of potential activities in this category, and that the Framework does not define clear criteria about how new projects are selected or evaluated. Mastercard has disclosed that the Impact Fund is governed by a separate board, and therefore, the Company does not directly control project selection. Mastercard has provided Sustainalytics information on the fund's project evaluation structure, including how new projects are identified as well as how due diligence and approvals are carried out by internal and external subject-matter experts. Based on the disclosures provided, Sustainalytics is of the opinion that projects funded will be aligned with the intents of the Framework and are anticipated to generate net-positive social impacts. Nevertheless, Sustainalytics encourages Mastercard to provide ongoing reporting indicating which projects of the Fund have been funded with bond proceeds and how they meet the objectives of the Framework.
- In response to the COVID-19 Pandemic, Mastercard intends to provide supports to small business owners, in the form of no-cost access to products and services which will advance their businesses.⁹ Sustainalytics recognizes the disproportionate effects that COVID-19, and its consequent economic impacts and regulatory response, have had on small businesses, and therefore views positively these efforts to promote MSMEs.
- The In Solidarity category relates to programs and initiatives that support underserved, excluded and/or marginalized populations. Specifically, Mastercard is targeting black-owned business and communities in the United States,¹⁰ and will allocate expenditures and investments related to providing products and services for such entities with the goal to "combat discrimination and racism and to advance inclusion and equality".¹¹ Sustainalytics views positively Mastercard's intent to support black-owned businesses, and notes that this initiative may deliver both direct short-term benefits as well as further the preparation of such companies for the future economy.
 - Sustainalytics highlights that it considers it a market practice to ensure that small businesses are the target of such initiatives, and encourages Mastercard to prioritize such entities within this category.
- Within the Commercially Sustainable Social Impact category, Mastercard has defined a list of products and services which it may provide to target populations. These investments could include those geared towards financial inclusion, job creation, microcredit, digital payments and related infrastructure.
 - Target populations may be (i) people living below the poverty line (ii) excluded and/or marginalized populations including people with no access to banking or financial services (iii) the unemployed with a focus on advancing their inclusive growth through digitally-enabled initiatives. Additionally, the Company specifies targeting populations located in developing countries, emerging markets, and low to moderate income areas

⁸ See: <https://www.mastercardcenter.org/insights?type=Programs>

⁹ Sustainalytics recognizes that there are various approaches to measuring the value of intangible products and services. In this regard, Mastercard has confirmed the intention to benchmark against the market value of the products reflecting the Company's potential costs of forgone revenue.

¹⁰ Mastercard has confirmed that the classification for "black-owned business" refers to a company with at least 51% African American ownership structure.

¹¹ Eligible products and services could include financial, technology, product, and insight asset programs.

in developed countries, often through support for MSMEs, governments, academic institutions, and NGOs.

- Sustainalytics recognizes that these investments could lead to positive social outcomes such as improved connectivity, and better access to financial services for the target populations, while noting the wide variety of potentially eligible initiatives and encouraging Mastercard to report transparently on the benefits achieved.
- Project Evaluation and Selection:
 - Mastercard’s eligible projects are evaluated and selected by a dedicated committee made up of representatives from the Company’s sustainability, finance and legal teams.
 - Sustainalytics considers that the collaboration between relevant business units strengthens the implementation of the Framework and is in line with market practice.
- Management of Proceeds:
 - Mastercard’s Finance department will be responsible for allocating the net proceeds to eligible projects and actual spend will be monitored using its internal system. The Company intends to fully allocate and/or disburse all proceeds within 36 months from the issuance of any Financing Transaction. Pending allocation, the Company will temporarily invest an equal amount of the unallocated and/or undisbursed balance of proceeds according to Mastercard’s normal liquidity practices.
 - Based on the defined management approach and the disclosure around management of unallocated and/or undisbursed proceeds, Sustainalytics considers this process to be in line with market practice.
- Reporting:
 - The Company commits to publishing an allocation report on its website, which will include amounts allocated to eligible projects, the remaining balance of unallocated net proceeds, case studies with additional information on highlighted projects. Furthermore, Mastercard commits to third party verification of each allocation report.
 - Mastercard intends to report annually on the estimated environmental and/or social impacts of the projects to which it has allocated proceeds. Some of the potential impact metrics include green building assets by certification type and level, annual GHG emissions reduced or avoided, annual energy savings, annual renewable energy generated and purchased, and businesses or individuals reached through programmes.
 - Sustainalytics considers Mastercard’s allocation and impact reporting processes to be aligned with market practice.

Alignment with Sustainability Bond Guidelines 2018

Sustainalytics has determined that the Mastercard Sustainability Financing Framework aligns with the Sustainability Bond Guidelines and the four core components of the GBP, GLP and SBP. For detailed information please refer to Appendix 2: Sustainability Bond/ Sustainability Bond Programme External Review Form.

Section 2: Sustainability Performance of Mastercard

Contribution of Framework to Mastercard’s sustainability performance and strategy

Mastercard has demonstrated a commitment to integrating sustainability considerations within its internal operations, supply chain and through its product offerings. The Company’s sustainability mission is centred around the concept of “an inclusive, digital economy that benefits everyone”. Mastercard has implemented quantitative targets for environmental and social performance, which are described in its Corporate Sustainability Report.¹²

The Company highlights its priority on climate change by setting out a science-based emissions target that aligns to a 1.5-degree Celsius climate trajectory as part of its contribution to the Paris Agreement¹³. In this regard, Mastercard commits to reducing absolute Scope 1 and 2 GHG emissions 38% as well as absolute

¹²Mastercard Corporate Sustainability Report 2019 at, <https://www.mastercard.us/content/dam/mccom/global/aboutus/Sustainability/mastercard-sustainability-report-2019.pdf>

¹³ Science Based Targets, “Companies Taking Action”, available at: <https://sciencebasedtargets.org/companies-taking-action#table>

Scope 3 GHG emissions 20% by 2025 from a 2016 base year. Other notable environmental goals and achievement are outlined below:

- All campuses and data centers owned by Mastercard are certified by LEED and about 85% of its global workspaces meet various regional or international green certification standards. Furthermore, Mastercard installed submetering technology across various offices in order to identify energy-saving opportunities to help reach the Company's science-based emission reduction goals.
- Mastercard has been named 2020 Gold-level Green Lease Leader by the U.S. Department of Energy and the Institute for Market Transformation.
- In January 2021, Mastercard committed to a target of net zero emissions by 2050, further advancing efforts towards environmental sustainability and building on the Company's existing commitment to the Science-Based Targets Initiative and the United Nations Business Ambition for 1.5° C.
- In April 2020, Mastercard joined RE100, to formalize the Company's commitment to source 100% renewable electricity across its global operations. To this effect, Mastercard generated about 2,600 MWh of renewable energy through solar panels in 2019.
- The Company launched the Priceless Planet Coalition in January 2020 which included a pledge to plant 100 million trees over five years alongside other partners.
- In partnership with Doconomy, Mastercard is sensitizing its customers to their environmental impact by equipping its customers with the ability to track and understand their carbon footprint based on their purchases.
- Mastercard received an "A" rating for supplier engagement from CDP, a global environmental disclosure system, as part of its efforts to make its supply chain more sustainable.

Additionally, Mastercard has undertaken various activities and set out social targets as part of its overarching sustainability goal of "inclusive growth". Some highlights:

- The Company has committed to digital inclusion of 1 billion people by 2025 as a means to economic empowerment and reduce inequalities across communities. Two key pillars of this goal are the focus on empowering (i) 50 million micro and small businesses, and (ii) 25 million women-owned and women-run businesses.
- Programmes and initiatives such as:
 - The Mastercard Center for Inclusive Growth (the "Center") which promotes equitable and sustainable economic growth. In 2019, the Center partnered with the Rockefeller Foundation to leverage data for social impact and with the Aspen Institute for the Global Inclusive Growth Partnership.
 - The Mastercard Impact Fund whose investments are administered by the Center. Grants amounting to \$5.26 million were provided to approximately 4 million micro and small business across Pakistan, Peru and Vietnam in 2019 through tools and services that support their growth.
 - The Mastercard Lab for Financial Inclusion which is based in Nairobi, Kenya and the financial solutions developed are deployed across different countries. This initiative is geared towards providing financial security solutions to individuals as well as micro and small businesses.
- Providing digital products to supply chains that are traditionally underserved including Mastercard's partnership with the Neumann Kaffee Gruppe (NKG) and its Mexican subsidiary, Exportadora de Café California (ECC) that allows farmers to get paid directly by NKG empowering 1,200 farmers as at May 2020.

Sustainalytics is of the opinion that the Mastercard Sustainability Financing Framework is aligned with the Company's overall sustainability strategy and initiatives and will further the Company's action on its key social and environmental priorities.

Well-positioned to address common environmental and social risks associated with the projects

While Sustainalytics recognizes that the proceeds from the Financing Transactions under the Framework will be directed towards projects that are anticipated to have positive environmental and social impact, such eligible projects could also lead to negative environmental and social outcomes. Some key environmental and social risks associated with the classes of investment include employee health and safety, environmental impacts related to the Company's operations and other activities, legal or consumer finance risks pertaining to financial transactions.

Sustainalytics is of the opinion that Mastercard is able to manage and/or mitigate potential risks through implementation of the following:

- Mastercard's Code of Conduct which guides its global operations and specifies the Company's policies as it relates to business ethics, regulatory compliance and overall corporate responsibility.¹⁴
 - This policy requires all its directors, officers, employees and contingent staff to engage in honest and ethical conduct in performing their duties.
 - As a leading payment service provider in the world payment service providers in the world, Mastercard has outlined its approach designed to prevent its products, services and technologies from being used for illegal transactions, corrupt practices and money laundering activities. Furthermore, the Company's data and privacy policies and programs as well as the global data responsibility imperative emphasize the Company's position on the security and privacy, transparency, control, accountability and integrity of handling personal information.
- Mastercard has a Corporate Security Department, People & Capabilities Team and Workplace Safety Team, all of which together reinforce the Company's commitment to providing safe working physical and virtual environments for its employees. These groups are responsible for and actively manage employee and workplace safety risks through physical, technical and administrative safety protection.¹⁵
- Additionally, Mastercard has developed a Supplier Code of Conduct which it requires all suppliers to adhere to. The code specifies the Company's expectations for health and safety and non-discrimination in employment practices and an overarching commitment for its supplier to conduct business in a legal, ethical, and socially responsible manner.¹⁶
- In recognition of its geographical footprint and environmental stewardship, Mastercard actively monitors and annually reports on its environmental impacts, including GHG emission, renewable energy breakdown, green building and data center management.¹⁷
- With regards to data and information, Mastercard has established a clear governance structure to ensure the protection of customer data, with the Chief Privacy Officer, Chief Data Officer, and Data Protection Officer designated as responsible for managing the Company's global privacy program.

Based on these policies, standards and assessments, Sustainalytics is of the opinion that Mastercard has implemented adequate measures and is well-positioned to manage and mitigate environmental and social risks commonly associated with the eligible categories.

Section 3: Impact of Use of Proceeds

All eleven use of proceeds categories are aligned with those recognized by GBP, GLP, SBG or SBP. Sustainalytics has focused on two below where the impact is specifically relevant in the context of Mastercard's key business operations.

The importance of promoting responsible consumption

Over the past 150 years, human activities have been the direct cause of the vast majority of increases in GHG in the atmosphere.¹⁸ According to the United States, Environmental Protection Agency a large share of greenhouse gas emissions are related to activities in which individual consumption decisions may have a direct bearing, such as transportation, electricity, powering commercial and residential buildings, and agriculture. Together these activities account for 78% of the total GHG emission in the United States.¹⁹ The average carbon footprint for typical U.S. households is 48 metric tons CO₂e/yr, where 10-30% of the emission

¹⁴ Mastercard, Code of Conduct, available at: https://s25.q4cdn.com/479285134/files/doc_downloads/code_of_conduct/2021/01/2020-Code-of-Conduct-English-Final.pdf

¹⁵ Mastercard Corporate Sustainability Report 2019 at, <https://www.mastercard.us/content/dam/mccom/global/aboutus/Sustainability/mastercard-sustainability-report-2019.pdf>

¹⁶ Mastercard, Supplier Code of Conduct, at: <https://cddbtesthdi.blob.core.windows.net/sourcelibrary/1014355442/C23B351B82272F05DEECADCBA42582C78DD22726209D2FFF6F5625F51B3E411D.pdf>

¹⁷ Mastercard, Sustainability Report 2019, available at: <https://www.mastercard.us/content/dam/mccom/global/aboutus/Sustainability/mastercard-sustainability-report-2019.pdf>

¹⁸ United States Environmental Protection Agency, Sources of Greenhouse Gas Emissions, at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

¹⁹ United States Environmental Protection Agency, Sources of Greenhouse Gas Emissions, at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

comes from food, while other major household emission sources also include residential electricity use, heating and personal transportation.²⁰

Mastercard has recognized the importance of increasing individual awareness of their environmental impacts and the need for action towards reducing GHG emissions. One tool that the Company has developed is Mastercard Carbon Calculator which enables users to track their personal carbon footprint based on purchasing activities.²¹ Mastercard highlights the role that purchasing power plays in promoting sustainable and responsible consumption by providing information on patterns, tips on how to reduce carbon emissions as well as offering options for customers to compensate for their emissions through tree planting projects.²²

Sustainalytics is of the opinion that Mastercard's investments in technology that tracks the impact of individual activities will encourage the reduction of overall emissions, has the potential to drive more sustainable and responsible consumption behaviour and contribute towards global environmental targets such as the Paris Agreement.

Importance of digital financial inclusion in the modern economy

Research from the World Bank indicates that an estimated 1.7 billion adults around the world do not have bank accounts, with the largest gaps in financial services existing for individuals based in developing countries in Asia and Africa.²³ The low levels of financial inclusion relative to developed countries has been attributed primarily to overall income levels. While about 93% of the population in high income economies have access to banking services, the number is only about 63% for low and middle income economies.²⁴

Access to financial services is a key component of economic development due to its high correlation with access to other basic services such as housing, healthcare and education.²⁵ Considering there are more people without access to financial services in underdeveloped and developing regions, the lack of financial access also limits the potential economic development and poverty reduction for this segment of the world's population.²⁶ In response, the World Bank has launched the Universal Financial Access 2020 Initiatives, partnering with 14 banks and financial services companies, including Mastercard, to increase the access to a transaction account for adults globally.²⁷ A variety of the activities which Mastercard may finance are directly related to promoting inclusion in the modern and digital economies, through supports targeted to both end consumers and to small businesses and entrepreneurs.

Based on the above, Sustainalytics is of the view that the Mastercard Impact Fund and activities under the Framework related to financial inclusion will have a positive impact on job generation and improve economic growth in developing countries and contribute to reducing the inequalities faced by underserved populations.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 by the United Nations General Assembly and form an agenda for achieving sustainable development by the year 2030. The Financing Transactions issued under the Mastercard Sustainability Financing Framework advances the following SDGs and targets:

Use of Proceeds Category	SDG	SDG target
Green Buildings	9. Industry, Innovation and Infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all

²⁰ University of Michigan, Center for Sustainable Systems, Carbon footprint factsheet, at: <http://css.umich.edu/factsheets/carbon-footprint-factsheet>

²¹ Mastercard corporate website, Mastercard Carbon Calculator, at: <https://www.mastercard.us/en-us/vision/corp-responsibility/priceless-planet/carbon-calculator.html>

²² Mastercard corporate website, Purchasing power plus carbon footprint tracking: <https://www.mastercard.com/news/perspectives/2020/purchasing-power-plus-carbon-footprint-tracking/>

²³ The World Bank, Global Financial Inclusion (Global Findex) Database, at: <https://datacatalog.worldbank.org/dataset/global-financial-inclusion-global-findex-database>

²⁴ ENIF (2018), "National Survey for Financial Inclusion", https://www.gob.mx/cms/uploads/attachment/file/435813/ENIF_2018_en.pdf

²⁵ United Nations Secretary-General's Special Advocate for Inclusive Finance for Development, Financial Inclusion, at: <https://www.unsgsa.org/financial-inclusion>

²⁶ The World Bank, UFA2020 Overview: Universal Financial Access by 2020, at: <https://www.worldbank.org/en/topic/financialinclusion/brief/achieving-universal-financial-access-by-2020>

²⁷ The World Bank, Getting to Universal Financial Access 2020, at: <https://www.worldbank.org/en/news/infographic/2016/10/04/getting-to-universal-financial-access-2020>

		countries taking action in accordance with their respective capabilities
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes	13. Climate Action	13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
Pollution Prevention and Control	12. Responsible Consumption and Production	12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
Environmentally Sustainable Management of Living Natural Resources and Land Use	15. Life on Land	15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
Climate Change Adaptation	13. Climate Action	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
Mastercard Impact Fund	8. Decent Work and Economic Growth	8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors
COVID-19 Response		8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services
In Solidarity		
Commercially Sustainable Social Impact	10. Reduced Inequalities	10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

Conclusion



Mastercard has developed the Mastercard Sustainability Financing Framework under which it intends to undertake Financing Transactions and use the proceeds finance and/or refinance, in whole or in part, a range of existing and/or future projects that demonstrate environmental and social benefits. By focusing on activities that minimize the carbon footprint of its operations, supply chain and customer activities as well as providing tools for underserved populations, Mastercard is supporting responsible consumption and inclusive growth. Sustainalytics considers that the projects funded by the sustainable financing are expected to provide positive environmental impact and social impact.

The Mastercard Sustainability Financing Framework outlines a process by which proceeds will be tracked, allocated, and managed, and commitments have been made for reporting on the allocation and impact of the use of proceeds. Furthermore, Sustainalytics believes that Mastercard Sustainability Financing Framework is aligned with the overall sustainability strategy of the company and that the use of proceeds categories will contribute to the advancement of the UN Sustainable Development Goals 7, 8, 9, 10, 12, 13 and 15. Sustainalytics is of the opinion that Mastercard has adequate measures to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects to which the proceeds have been allocated.

Based on the above, Sustainalytics is confident that Mastercard is well-positioned to issue sustainability bonds, green bonds, social bonds, green loans, and that the Mastercard Sustainability Financing Framework is robust, transparent, and in alignment with the Sustainability Bond Guidelines (2018) and the four core components of the Green Bond Principles (2018), Social Bond Principles (2020) and Green Loan Principles (2020).

Appendices

Appendix 1: Overview of Green Building Certification Schemes

	LEED	BREEAM
Background	Leadership in Energy and Environmental Design (LEED) is a U.S.-based, globally-used certification system for the rating of green buildings across various building types. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and includes programs covering the design, construction, maintenance and operation of buildings.	BREEAM (Building Research Establishment Environmental Assessment Method) was first published by the Building Research Establishment (BRE) in 1990. Based in the UK. Various schemes for new and refurbished buildings, as well as for the design phase or "in use" phase of a building.
Certification levels	Certified Silver Gold Platinum	Pass Good Very Good Excellent Outstanding
Areas of Assessment: Environmental Performance of the Building	Energy and atmosphere Sustainable Sites Location and Transportation Materials and resources Water efficiency Indoor environmental quality Innovation in Design Regional Priority	Energy Land Use and Ecology Pollution Transport Materials Water Waste Health and Wellbeing Innovation
Requirements	Prerequisites (independent of level of certification) + Credits with associated points. These points are then added together to obtain the LEED certification level. There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools-/Retail-/Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).	Prerequisites depending on the levels of certification + Credits with associated points This number of points is then weighted by item ¹⁵ and gives a BREEAM level of certification, which is based on the overall score obtained (expressed as a percentage). Majority of BREEAM issues are flexible, meaning that the client can choose which to comply with to build their BREEAM performance score. BREEAM has two stages/ audit reports: a 'BREEAM Design Stage' and a 'Post Construction Stage', with different assessment criteria.
Performance display		 BREEAM-scores Pass Good Very Good Excellent Outstanding

Accreditation	LEED AP BD+C LEED AP O+M	BREEAM Assessor, licensed and qualified by BRE
Qualitative considerations	Widely recognised internationally, and strong assurance of overall quality.	BREEAM and various national versions of BREEAM are considered robust and well-regarded in their markets and focus on the important environmental impacts of buildings both generally and in their local market context. Over 500,000 BREEAM certificates have been issued across more than 80 countries.

Appendix 2: Sustainability Bond / Sustainability Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	Mastercard
Sustainability Bond ISIN or Issuer Sustainability Bond Framework Name, if applicable:	Mastercard Sustainability Financing Framework
Review provider's name:	Sustainalytics
Completion date of this form:	February 22, 2021
Publication date of review publication:	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBP, SBG, GLP and SBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (please specify): | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW (if applicable)

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section (if applicable):

The eligible categories for the use of proceeds Green Buildings, Energy Efficiency, Renewable Energy, Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes, Pollution Prevention and Control, Environmentally Sustainable Management of Living Natural Resources and Land Use, Climate Change Adaptation, Mastercard Impact Fund, COVID-19 Response, In Solidarity and Commercially Sustainable Social Impact are aligned with those recognized by the Sustainability Bond Guidelines 2018, Green Bond Principles 2018, Social Bond Principles 2020 and Green Loan Principles 2020. Sustainalytics considers that the eligible categories will lead to positive environmental or social impacts and advance the UN Sustainable Development Goals, specifically SDG 7, 8, 9, 10, 12, 13 and 15.

Use of proceeds categories as per GBP:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input checked="" type="checkbox"/> Pollution prevention and control | <input checked="" type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input type="checkbox"/> Clean transportation |
| <input type="checkbox"/> Sustainable water and wastewater management | <input checked="" type="checkbox"/> Climate change adaptation |
| <input checked="" type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input checked="" type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other (please specify): |

If applicable please specify the environmental taxonomy, if other than GBPs:

Use of proceeds categories as per SBP:

- | | |
|--|---|
| <input type="checkbox"/> Affordable basic infrastructure | <input type="checkbox"/> Access to essential services |
|--|---|

- | | |
|---|--|
| <input type="checkbox"/> Affordable housing | <input type="checkbox"/> Employment generation (through SME financing and microfinance) |
| <input type="checkbox"/> Food security | <input type="checkbox"/> Socioeconomic advancement and empowerment |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with SBP categories, or other eligible areas not yet stated in SBP | <input checked="" type="checkbox"/> Other (please specify): Mastercard Impact Fund, COVID-19 Response, In Solidarity, Commercially Sustainable Social Impact |

If applicable please specify the social taxonomy, if other than SBP:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

Mastercard's eligible projects will be evaluated and selected by a dedicated committee made up of representatives from the Company's sustainability, finance and legal teams. Sustainalytics considers the project selection process to be in line with market practice.

Evaluation and selection

- | | |
|---|--|
| <input checked="" type="checkbox"/> Credentials on the issuer's social and green objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Sustainability Bond proceeds | <input type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other (please specify): |

Information on Responsibilities and Accountability

- | | |
|--|--|
| <input checked="" type="checkbox"/> Evaluation / Selection criteria subject to external advice or verification | <input type="checkbox"/> In-house assessment |
| <input type="checkbox"/> Other (please specify): | |

3. MANAGEMENT OF PROCEEDS

Overall comment on section (if applicable):

Net proceeds will be managed by Mastercard's Finance department. The Company commits to fully allocate and/or disburse proceeds within 36 months of issuance of financing transactions. Pending full allocation, the proceeds will temporarily be invested according to the Company's normal liquidity processes. This is in line with market practice.

Tracking of proceeds:

- ☒ Sustainability Bond proceeds segregated or tracked by the issuer in an appropriate manner
- ☐ Disclosure of intended types of temporary investment instruments for unallocated proceeds
- ☐ Other (please specify):

Additional disclosure:

- | | |
|--|---|
| <input type="checkbox"/> Allocations to future investments only | <input checked="" type="checkbox"/> Allocations to both existing and future investments |
| <input type="checkbox"/> Allocation to individual disbursements | <input type="checkbox"/> Allocation to a portfolio of disbursements |
| <input type="checkbox"/> Disclosure of portfolio balance of unallocated proceeds | <input type="checkbox"/> Other (please specify): |

4. REPORTING

Overall comment on section (if applicable):

Mastercard intends to report on allocation of proceeds annually on its website until full allocation. Allocation reporting will be validated by a nationally recognized accounting firm and include the balance amount of allocated and unallocated net proceeds, as well as the description of selected projects. The company is also committed to reporting on relevant impact metrics. Sustainalytics views Mastercard's allocation and impact reporting as aligned with market practice.

Use of proceeds reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Information reported:

- | | |
|--|---|
| <input type="checkbox"/> Allocated amounts | <input type="checkbox"/> Sustainability Bond financed share of total investment |
| <input type="checkbox"/> Other (please specify): | |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Impact reporting:

- | | |
|--|--|
| <input type="checkbox"/> Project-by-project | <input checked="" type="checkbox"/> On a project portfolio basis |
| <input type="checkbox"/> Linkage to individual bond(s) | <input type="checkbox"/> Other (please specify): |

Information reported (expected or ex-post):

- | | |
|---|--|
| <input checked="" type="checkbox"/> GHG Emissions / Savings | <input checked="" type="checkbox"/> Energy Savings |
| <input type="checkbox"/> Decrease in water use | <input checked="" type="checkbox"/> Number of beneficiaries |
| <input type="checkbox"/> Target populations | <input checked="" type="checkbox"/> Other ESG indicators (please specify): Green buildings by certification type and level, Renewable energy generate and/or purchased |

Frequency:

- | | |
|--|--------------------------------------|
| <input checked="" type="checkbox"/> Annual | <input type="checkbox"/> Semi-annual |
| <input type="checkbox"/> Other (please specify): | |

Means of Disclosure

- | | |
|---|---|
| <input type="checkbox"/> Information published in financial report | <input type="checkbox"/> Information published in sustainability report |
| <input type="checkbox"/> Information published in ad hoc documents | <input type="checkbox"/> Other (please specify): |
| <input type="checkbox"/> Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review): | |

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)**SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE****Type(s) of Review provided:**

- | | |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (please specify): | |

Review provider(s):**Date of publication:****ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP AND THE SBP**

- i. **Second-Party Opinion:** An institution with sustainability expertise that is independent from the issuer may provide a Second-Party Opinion. The institution should be independent from the issuer's adviser for its Sustainability Bond framework, or appropriate procedures such as information barriers will have been implemented within the institution to ensure the independence of the Second-Party Opinion. It normally entails an assessment of the alignment with the Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy, and/or processes relating to sustainability and an evaluation of the environmental and social features of the type of Projects intended for the Use of Proceeds.
- ii. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or sustainability criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally or socially sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Sustainability Bond proceeds, statement of environmental or social impact or alignment of reporting with the Principles may also be termed verification.
- iii. **Certification:** An issuer can have its Sustainability Bond or associated Sustainability Bond framework or Use of Proceeds certified against a recognised external sustainability standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. **Green, Social and Sustainability Bond Scoring/Rating:** An issuer can have its Sustainability Bond, associated Sustainability Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental and/or social performance data, process relative to the Principles, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material sustainability risks.

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Named

2015: Best SRI or Green Bond Research or Rating Firm
2017, 2018, 2019: Most Impressive Second Opinion Provider

