

PayPal's 2022 Task Force on Climate-related Financial Disclosures (TCFD) Index

The Financial Stability Board established the [Task Force on Climate-related Financial Disclosures \(TCFD\)](#) to develop recommendations for more effective climate-related disclosures. The following summarizes PayPal's approach to managing and reporting on climate-related governance, strategy, risk management, and metrics and targets in alignment with the TCFD recommendations. For additional climate-related disclosures, we encourage you to review our [2022 Global Impact Report](#) and our latest [CDP Climate Change Questionnaire](#).

1. Governance

1a. Board's oversight of climate-related risks and opportunities

As specified in its [charter](#), the Corporate Governance and Nominating Committee (Governance Committee) of the Board of Directors (Board) of PayPal Holdings, Inc. (PayPal) is responsible for the oversight of environmental, social, and governance (ESG) matters generally, including environmental sustainability management. The Governance Committee's responsibilities include reviewing progress in developing and implementing strategies for managing relevant environmental topics, including management of climate-related risks and opportunities.

For example, the Governance Committee reviewed and was supportive of our decision to set a public goal to achieve 100% renewable energy for our data centers by 2023 and our long term goal to reach net-zero emissions across our value chain by 2040, along with our medium-term science-based targets (SBTs) in alignment with the Science Based Targets initiative (SBTi). PayPal management and designated internal leaders provide regular updates to the Governance Committee on ESG-related matters, with pertinent updates then shared with the full Board.

1b. Management's role in assessing and managing climate-related risks and opportunities

PayPal executives, including our Chief Corporate Affairs Officer and Chief Financial Officer and in partnership with other senior leaders, direct and manage the execution of our enterprise-wide ESG strategy, which includes the management of climate-related risks and opportunities.

These senior leaders and their teams provide regular updates to the Board and Board committees on climate- and ESG-related topics. Representatives from the ESG Steering Committee update members of PayPal's senior management on relevant environmental matters based on reports from the cross-functional Environmental Working Group chaired by the Global Environmental Sustainability Lead.

In addition, members of the senior management team, including our Chief Corporate Affairs Officer and Chief Technology Officer, supervise the development and execution of the Environmental Sustainability program and related initiatives. This includes monitoring the implementation of our Environmental Management System, consistent with the ISO 14001-aligned [Environmental Sustainability Policy](#), and other actions to help mitigate our environmental impacts, explore sustainable innovations across our products and services, and support employee engagement activities.

2. Strategy

2a. Climate-related risks and opportunities PayPal has identified over the short, medium, and long term

PayPal considers climate-related risks and opportunities in the short term (0-3 years), medium term (3-5 years), and long term (5-10 years). In 2022, we began a comprehensive climate risk assessment and scenario analysis led by a third-

party organization based on three scenarios from the Network for Greening the Financial System to better understand potential short-, medium- and long-term climate risks and opportunities for PayPal. Initial results identified transitional and physical risks for PayPal.

Transitional risks include the assessment of current and emerging regulations and reputational

risks. While we believe that climate change does not currently pose a substantive financial risk for PayPal, reputational risk is relevant in the short term as we observe increased stakeholder interest (including from current and potential investors, customers, employees, and partners) in our climate commitments and performance, as well as our adherence to climate regulations.

Medium- and long-term transitional risks include potential direct and indirect operating costs from carbon pricing or renewable energy regulations. If we do not adapt to, and comply with, new laws and regulations or changes to existing legal or regulatory requirements concerning climate-related matters, or fail to meet rapidly evolving investor, industry, or other stakeholder expectations and standards, or if PayPal is perceived to have not responded appropriately to concerns with respect to climate issues, our reputation may be harmed, customers may choose to refrain from using our products and services, and our business or financial condition may be adversely affected.

Physical risks may be acute, resulting from increased frequency and severity of extreme weather events, and also chronic, resulting from increases in global temperature and changes in precipitation and weather patterns. In the medium and long term, PayPal considers acute disruptive events, such as severe weather, wildfires, and other climate-related risks, which could impact operations at our physical locations including offices and data centers. These extreme weather conditions may cause impacts to our business, such as safety disruptions and supply chain delays. The impacts may adversely affect worker productivity, cause us to incur additional costs to maintain, resume or rebuild operations, and lead to higher attrition. We are also investigating the impact of chronic climate hazards, which may be relevant to PayPal given that our global sites are potentially vulnerable to physical climate changes.

For example, California, where our headquarters is located, has historically experienced, and is

projected to continue to experience, adverse climate-related events more frequently, including drought, water scarcity, heat waves, wildfires, and resultant air quality impacts, and power shutoffs associated with wildfire prevention.

PayPal has also identified climate-related opportunities in the short, medium, and long term that may have financial or strategic impacts on the business. Short-term opportunities include engaging our employees, many of whom are passionate about environmental sustainability, through internal initiatives, skills-based volunteerism, and learning and development opportunities, helping to foster positive workplace culture and supporting ongoing talent attraction and retention efforts.

Additionally, we see medium- and long-term opportunities in reduced operating costs in our facilities and data center operations through participation in renewable energy programs, adoption of energy-efficiency measures, and the use of more efficient production and distribution processes, as well as reduced operating expenses in our supply chain by sourcing energy- and resource-efficient products and services. Further climate-related opportunities include new product or service innovations through climate-related research and development.

2b. Impact of climate-related risks and opportunities on PayPal's businesses, strategy and financial planning

As a digital payments company, PayPal's greenhouse gas (GHG) emissions footprint is relatively small and our customers are diverse in terms of geography and economic sector, which helps to mitigate direct risks and impacts from climate change on PayPal's business. Accordingly, we believe that the overall impact of climate risk on PayPal's business is likely low. However, we recognize that climate change is evolving and difficult to predict, and may pose potential future risks and opportunities for our business.

These potential short-, medium- and long-term risks and opportunities help inform our strategy and low-carbon transition plan. This plan includes our renewable energy target, medium-term science-based targets, and long-term goal of reaching net-zero emissions across our value chain by 2040, as well as our initiatives to source renewable energy, invest in energy efficiency, and support the GHG emissions reduction efforts of our largest suppliers (by spend).

The enterprise climate risk assessment and scenario analysis that we began in 2022 will help us further understand and identify the potential impacts of climate risks and opportunities on PayPal's business, strategy, and financial planning. The findings from this assessment will also be considered as we refine our risk management practices.

Climate risk is embedded in our overall risk assessment processes. For example, we recognize that carbon pricing mechanisms and increased severity or frequency of extreme weather events may lead to increased indirect operating costs. Renewable energy purchases for our data centers, combined with improvements to energy efficiency in the global real estate portfolio, help to mitigate risk associated with energy price fluctuations while decreasing our GHG emissions and increasing our overall corporate efficiency.

Climate risks and opportunities are already impacting how PayPal plans for indirect business costs. This is demonstrated by our financial planning for renewable energy procurement.

Additionally, our Global Safety and Security team develops and executes emergency response plans, which include response procedures for disruptive weather events. The team monitors and tracks events around the world and evaluates the potential impact to PayPal employees, facilities, and operations. For example, PayPal monitors the impact of extreme weather events, including the potential impacts of water stress to our direct operations.

Our emergency response plans are periodically updated and our data center team reviews climate risks to each data center during our leasing process and on a three-year cycle. Local Event Management teams are also established for each PayPal office to better prepare and respond to any situation, such as facility damage, inclement weather, natural disasters, wildfires, infectious diseases and pandemics, civil unrest, and geopolitical instability.

We see opportunities for our digital payments technology to help the financially underserved build climate resilience and foster opportunities in the global economy. Climate-influenced disasters threaten global stability and security, especially among populations with fewer means. PayPal's digital payments products can help enable effective and timely financial responses to natural disasters and extreme weather events. Our rapid response fundraising team actively monitors global events, including extreme weather activity, and evaluates PayPal's ability to mobilize our customers and leverage our fundraising capabilities. Where response and recovery needs align with our capabilities, we endeavor to launch campaigns to aid in the delivery of relief efforts to impacted communities. These capabilities are likely to become increasingly important to our overall disaster response efforts as climate change influences the frequency and severity of extreme weather events globally.

We are exploring other ways for PayPal's technology to help disadvantaged communities capture economic opportunities and adapt their lives to changing climate conditions in the more than 200 markets where our products are available. We are in the early phases of researching the full potential of digital climate finance solutions, which will require significant research and development to deliver at scale.

2c. Resilience of PayPal's strategy, taking into consideration different climate-related scenarios, including a 2 degree or lower scenario

We seek to develop a detailed understanding of how business risks and opportunities are shaped by various climate scenarios.

As noted above, in 2022 we began conducting an enterprise climate risk assessment and scenario analysis, which will help us better understand the resilience of PayPal's strategy to different future climate scenarios. This includes assessing PayPal's strategy under three scenarios: a greater than 3 degrees Celsius temperature rise scenario,

below 2 degrees Celsius temperature rise scenario, and 1.5 degrees Celsius temperature rise scenario. Findings from this assessment can help inform the ways in which we look to further incorporate climate risk management into PayPal's ongoing strategy.

Our Resiliency program and Safety and Security teams prepare incident response procedures for our physical locations to help inform emergency response plans in the event of potential disasters or other crises. PayPal has implemented disaster recovery plans in the event of damage and/or business interruption, inclusive of impacts from climate-influenced disasters.

3. Risk Management

3a. PayPal's processes for identifying and assessing climate-related risks

PayPal uses a number of methods to identify and evaluate substantive financial or strategic impact when considering risks and opportunities, including those related to climate change. For example, we consider potential qualitative and quantitative impacts of climate change on our financial condition and results of operations, including impacts to our balance sheet and income statement.

We also recognize the importance of intangible value and consider impacts related to brand value, reputational risk, future business opportunities, and investor and customer expectations, among others. When reviewing potential risks and opportunities, senior leaders at PayPal evaluate a broad set of inputs, including those described above, and consult with internal experts to estimate the magnitude of the impact and take appropriate responsive actions.

ESG-related risks, including climate-related risks, are integrated into our enterprise risk framework. Our continuing efforts to conduct an enterprise

climate risk assessment will help inform the evaluation of the potential size and scope of identified climate-related risks.

Members of the Environmental Working Group, including representatives from Public Affairs and Government Relations, collaborate with functions across PayPal to consider how current and emerging regulations may impact climate-related risks and opportunities at PayPal. For example, in 2022, PayPal completed an initial climate risk assessment in Europe in accordance with new guidance on the management of climate-related and environmental risks published by the Commission de Surveillance du Secteur Financier (Circular CSSF 21/773) to identify potential areas of risk exposure. We are working to implement an action plan designed to enhance our governance processes and risk management procedures to address the identified risks. This work is instrumental in meeting current and emerging regulatory obligations in Europe and will help inform climate risk assessments in other regions.

3b. PayPal's processes for managing climate-related risks

The ESG Steering Committee, consisting of senior leaders across PayPal, provides strategic direction and leadership for the continued development of our ESG strategy. The ESG Steering Committee also oversees program implementation through the ESG and Environmental Working Groups and partners with functions across PayPal on the management of climate-related risks.

PayPal's Environmental Working Group, a cross-functional team of employees with responsibility for implementing, developing, and managing PayPal's environmental matters, is responsible for completing the annual review of environmental risks and opportunities, including those related to climate change, and reporting the results to members of the ESG Steering Committee for consideration.

In addition, we annually review our ESG significance map and conduct periodic ESG significance and prioritization assessments of non-financial risks and opportunities. This work, which includes peer benchmarking and internal and external stakeholder engagement, helps to inform the prioritization of non-financial topics relevant to PayPal, including climate change, based on their importance to PayPal's long term business performance.

3c. How processes for identifying, assessing and managing climate-related risks are integrated into PayPal's overall risk management

PayPal applies an integrated approach to risk management using the Three Lines of Defense model, which includes management, oversight, and independent assurance. Our Enterprise Risk and Compliance Management Program (ERCM Program) sets PayPal's programmatic approach to identifying, measuring, managing, monitoring, and reporting key risks facing our company.

We use established risk management committees to oversee the implementation and execution of our program, including the Enterprise Risk Management Committee (ERMC). The ERMC is the highest-level risk management committee and is co-chaired by PayPal's Chief Risk and Compliance Officer and Chief Enterprise Services Officer. They regularly review and discuss the overall effectiveness of the ERCM Program with the Board and its Audit, Risk, and Compliance Committee.

We regularly report on emerging ESG risks that affect PayPal's business, including potential climate-related risks, to a subcommittee of the ERMC. Additionally, beginning in 2022, climate-related risks have been included in the enterprise risk taxonomy which is approved by the Audit, Risk, and Compliance Committee of the Board.

4. Metrics and Targets

4a. Metrics used by PayPal to assess climate-related risks and opportunities in line with its strategy and risk management process

PayPal tracks climate-related metrics related to total energy consumed, percentage renewable energy, Scope 1, 2, and 3 GHG emissions, carbon intensity per transaction, and percentage of

suppliers by spend who have set or committed to set a science-based target.

For a historical view of our metrics and discussion of results and methodology, please see our [2022 Global Impact Report](#). Additionally, PayPal considers performance on climate-related targets in performance evaluations of relevant business unit managers.

4b. Scope 1, Scope 2 and Scope 3 greenhouse gas (GHG) emissions

Our GHG emissions data and related metrics for 2020-2022 can be found in **Table 1** on page 8.

4c. Targets used by PayPal to manage climate-related risks and opportunities and performance against targets

Informed by stakeholder consultation and validated by the SBTi, we established science-based emissions reduction targets aligned with limiting temperature rise to no more than 1.5 degrees Celsius. The medium-term targets help demonstrate our progress toward our long-term goal of achieving net-zero GHG emissions across our value chain by 2040 and include: sourcing 100% renewable energy for data centers by 2023, reducing absolute GHG emissions across our operations by 25% by 2025 (from a 2019 baseline),

and engaging 75% of our suppliers (by spend) to set science-based targets by 2025.

Table 2 on page 9 outlines progress, where applicable, toward our science-based climate goals.

Table 1 – PayPal’s Climate-Related Metrics

	FY22	FY21	FY20
Total GHG Emissions (MTCO₂e in thousands)	517.1	535.3	39.1
Scope 1	3.9 [^]	2.6 [^]	3.0 [^]
Scope 2 (MBM) ¹	6.7 [^]	11.7 [^]	22.1 [^]
Scope 3 ²	507	522	14
Purchased Goods and Services	448	446	-
Crypto-Related ³	68	48	-
Capital Goods	16	46	-
Fuel and Energy-related Activities (FERA) (MBM)	8.8 [^]	9.3 [^]	11.0 [^]
Upstream Transportation and Distribution	11	1	-
Business Travel ⁴	6.2 [^]	0.8 [^]	2.5 [^]
Employee Commuting and Remote Working ⁵	17.0	18.7	-
Scope 2 (LBM) ⁶	101.4 [^]	99.0	108.6
Scope 3 FERA (LBM)	34.4 [^]	34.4	-
Carbon intensity per transaction (grams CO₂)⁷	0.5	0.7	1.6

¹ Scope 2 emissions data is calculated using the GHG Protocol Market-Based Method (MBM), which includes purchases of renewable energy based contractual instruments.

² In 2021, we expanded our Scope 3 emissions reporting to include relevant categories across PayPal’s value chain. Total Scope 3 emissions and spend-based category emissions estimates are rounded to the nearest 1,000 metric tons CO₂e to reflect limitations in the underlying data sources and estimation methodologies.

³ Cryptocurrency-related emissions are estimated using calendar year activity data and the Hybrid Emissions Allocation Method as presented in the Accounting for Cryptocurrency Climate Impacts guidance published by Crypto Carbon Rating Institute and South Pole in 2022. Cryptocurrency-related emissions are accounted for as purchased goods and services, consistent with the GHG Protocol, Value Chain Standard.

⁴ As part of our commitment to sustainable business travel, we have worked directly with our preferred travel vendors to refine our emissions calculation methodology for 2022.

⁵ Employee commuting emissions are estimated using average monthly office attendance data, employee transportation survey data, and U.S. EPA transportation mode emissions factors and are limited by data availability. Employee remote working emissions are estimated using average monthly remote working data and the remote working emissions methodology published by Anthesis Group in the Estimating Energy Consumption and GHG Emissions for Remote Workers white paper.

⁶ Calculated using the GHG Protocol Location-Based Method (LBM), which does not incorporate contractual instruments such as energy attribute certificates.

⁷ Calculation includes operational emissions from all Scope 1 and 2 sources, including our corporate aircraft.

[^] Denotes that Bureau Veritas UK provided an independent limited assurance opinion with respect to the given ESG metric.

Table 2 – PayPal’s Climate-Related Goals

Goal	2022 Progress
Reduce absolute operational GHG emissions by 25% by 2025 (from a 2019 base year) ⁸	80% operational emissions reduction from 2019 base year ^{9^}
Engage 75% of our suppliers, by spend, to set science-based targets by 2025	Approximately 39% of suppliers, by spend, have or committed to a science-based target ^{10^}
Reach 100% renewable energy for data centers by 2023	Maintained 100% of our global data center energy use with renewable generation sources [^]

Forward-Looking Statements

This index contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements that involve expectations, plans or intentions (such as those relating to future business, future results of operations or financial condition, new or planned features or services, mergers or acquisitions, or management strategies). These forward-looking statements can be identified by words such as “may,” “will,” “would,” “should,” “could,” “expect,” “anticipate,” “believe,” “estimate,” “intend,” “continue,” “strategy,” “future,” “opportunity,” “plan,” “project,” “strive,” “aim,” “forecast,” and other similar expressions. These forward-looking statements involve risks and uncertainties that could cause our actual results and financial condition to differ materially from those expressed or implied in our forward-looking statements. Such risks and uncertainties include, among others, those discussed in the “Risk Factors,” “Quantitative and Qualitative Disclosures about Market Risk” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of our Annual Report on Form 10-K for the year ended December 31, 2022 and our subsequent filings with the U.S. Securities and Exchange Commission (SEC). We do not intend, and undertake no obligation except as required by law, to update any of our forward-looking statements after the date of this index to reflect actual results, new information or future events or circumstances. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. The standards of measurement and performance contained in this index are developing and may be based on assumptions, estimates or information collected on a delayed or incomplete basis. The inclusion of information in this index is not an indication that we deem such information to be material or important to an understanding of our business or an investment decision with respect to our securities.

Incorporation by Reference

All website addresses contained in this index are intended to provide inactive, textual references only. The content on, or accessible through, any website identified in this index is not a part of, and is not incorporated by reference into, this index or in any document that we file with the SEC.

⁸ Operational greenhouse gas emissions include those emission sources covered by Scope 1 and Scope 2 using the Market-Based Method (MBM) as defined by the Greenhouse Gas Protocol and the Science-Based Targets initiative.

⁹ While we observed operational GHG reductions exceeding our 2025 goal, we recognize that in future years this may change as employees return to the office and the company continues to grow.

¹⁰ To calculate the progress towards our goal of reaching 75% vendors by spend with a SBT, we consider relevant annual spend with vendors who have set or committed to setting a SBT validated by the SBTi, or have publicly disclosed a greenhouse gas (GHG) emissions reduction goal that is aligned with the latest SBTi criteria, even if not validated by the SBTi. For vendors who have set a SBT or committed to set a SBT, their targets have been verified against the latest SBTi v4.2 and v5 criteria. We continue to refine our assessment methodology to include vendors within relevant Scope 3 categories, including purchased goods and services, capital goods, business travel and upstream transportation and distribution.

[^] Denotes that Bureau Veritas UK provided an independent limited assurance opinion with respect to the given ESG metric.