

PayPal's 2023 Task Force on Climate-related Financial Disclosures (TCFD) Index

The following summarizes PayPal's approach to managing and reporting on climate-related governance, strategy, risk management, and metrics and targets in alignment with Task Force on Climate-related Financial Disclosures (TCFD) recommendations. For additional climate-related disclosures, we encourage you to review our [2023 Global Impact Report](#) and our latest [CDP Climate Change response](#).



1. Governance

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

The Board of Directors of PayPal Holdings, Inc. (PayPal) is actively engaged in corporate sustainability and impact ("CS&I") matters that impact business strategy. As specified in its [charter](#), the Corporate Governance and Nominating Committee (Governance Committee) of the Board of Directors (Board) is responsible for the oversight of CS&I 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 PayPal's 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 CS&I-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's CS&I program, which includes the management of climate-related risks and opportunities, is directed and managed in collaboration with executives, including our Chief Financial Officer, Chief People Officer, EVP and General Manager — Consumer Group & Global Marketing and Communications, and Chief Enterprise Services Officer.

These senior leaders and their teams provide regular updates to the Board and Board committees on climate- and CS&I-related topics. Representatives from PayPal's CS&I Steering Committee update senior management on relevant environmental matters based on reports from the cross-functional Environmental Working Group chaired by the Director of Environmental Sustainability. Representatives from the Steering Committee meet with a subcommittee of the Enterprise Risk Management Committee (ERM Committee) at least annually to review current and emerging non-financial risks, including climate-related risks.

In addition, members of the senior management team 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 Risk Management 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 (1-3 years), medium term (3-5 years), and long term (5+ years). In 2023, we undertook a climate scenario analysis and risk exposure assessment consistent with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). As an output of this assessment, we have identified and evaluated fifteen climate-related risks, categorized into five climate-related risk areas that are potentially relevant to the management of enterprise risk at PayPal. Consistent with the TCFD guidance, we considered both transition risks

potentially resulting from the global shift to a low-carbon economy and physical risks potentially resulting from changing global climate conditions, such as extreme weather events.

Climate-Related Risk Areas Identified:

- **Business Strategy:** Transition and physical climate risks related to reputation management, risk management, strategic planning, and competitive landscape.
- **Market Conditions:** Transition risks related to changes in consumer behavior, impacts of climate change on merchants, and digital finance products and services considerations.
- **Operations:** Transition and physical risks related to our supply chain, operating costs, business continuity, and workforce planning.
- **Geopolitical and Regulatory Risks:** Transition risks related to political uncertainty and government policies and actions, including climate-related regulatory compliance obligations and legal exposure.
- **Infrastructure and Workforce Safety:** Acute and chronic physical risks to PayPal's infrastructure, including data center and office sites, as well as safety and security considerations for PayPal's workforce.

We have mapped these climate-related risk areas to PayPal's enterprise risk taxonomy and integrated them into PayPal's overall enterprise risk management, as discussed in Section 3c. below.

Climate-related opportunities were also considered as part of the scenario analysis exercise. Such opportunities might have positive impacts on the business. Short-term (1-3 years) 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 potential medium-term (3-5 years) and long-term (5+ years) 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 potential 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 over the short, medium, and long term

As part of the climate scenario analysis and risk exposure assessment undertaken in 2023, we have assessed the impact of climate-related risks on PayPal's business, strategy, and financial planning across the short term (1-3 years), medium term (3-5 years), and long term (5+ years).

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. The climate scenario analysis, as described in 2c. below, informed the assessment of PayPal's climate-related risk exposure.

As summarized in Table 1 on page 4, overall, we found the impact of climate-related risks on PayPal's business to be generally low across the short and medium term, with impacts in certain risk areas anticipated to increase moderately over the long term due to changes over time in the nature of physical

and transition climate risks. These are exogenous changes that are outside of PayPal's control, and our assessment of the risk profile over longer time horizons is inherently uncertain and not related to any anticipated changes to the nature of PayPal's business.

Based on the results of our assessment, we have not found any climate-related risks in the short, medium, or long term that we believe pose significant risk for PayPal. We will continue to monitor and assess climate-related risks and their impact on PayPal's business, strategy, and financial planning across the specified time horizons. We recognize that climate change is evolving and difficult to predict and that the nature of the climate-related risks that are applicable to our business could change. We will periodically evaluate these results and consider future opportunities to refresh our climate risk exposure assessment as necessary.

Table 1 – Climate-Related Risk Exposure Assessment

Climate-Related Risk Area	TCFD Risk Type	Overall Exposure Assessment		
		Short (1-3 years)	Medium (3-5 years)	Long (5+ years)
Business Strategy	Transition & Physical	Unlikely - Low	Possible - Low	Likely - Low
Market Conditions	Transition	Unlikely - Low	Possible - Low	Likely - Moderate
Operations	Transition & Physical	Possible - Low	Likely - Low	Likely - Low
Geopolitical & Regulatory Risks	Transition	Possible - Low	Likely - Low	Likely - Moderate
Infrastructure & Workforce Safety	Physical	Possible - Low	Likely - Moderate	Likely - Moderate

We see potential opportunities for our digital payments technology to help the financially underserved build climate resilience and pursue new economic opportunities. For instance, 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 footprint and capabilities, we endeavor to launch campaigns to aid in the delivery of relief efforts to impacted communities. These capabilities could 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 individuals and small businesses adapt to and capture economic opportunities resulting from changing climate conditions. We are in the early phases of researching the potential of digital climate finance solutions in this area, which could 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. In 2023, we undertook a climate risk scenario analysis. Consistent with the TCFD recommendations, we used three scenarios from the Network for Greening the Financial System, which comprises central banks and financial supervisors, to evaluate PayPal's climate-related risks.

Future Climate Scenarios Assessed:

- **Net-Zero Emissions by 2050:** Under this scenario, coordinated global government-level action limits warming to 1.5 degrees Celsius by 2100. Stringent policy action results in net-zero greenhouse gas emissions globally around 2050. This scenario aligns with the International Energy Agency Net-Zero Emissions by 2050 Transition Scenario.
- **Delayed Transition:** Government-level policy actions are delayed and uncoordinated, resulting in aggressive and costly global mitigation actions and global temperature rise of 1.8 degrees Celsius by 2100.
- **Current Policies:** Under this scenario, no new government-level climate mitigation or adaptation policies are adopted beyond those existing in 2022. The planet experiences warming of 3.3 degrees Celsius by 2100, with physical climate impacts increasing in severity and frequency through 2050, including sea-level rise, desertification, extreme weather patterns, and ecosystem collapse. This scenario aligns with the physical climate impacts of the International Panel on Climate Change Representative Concentration Pathway (RCP) 6.0.

As described in 2b. above, we found that PayPal's strategy is resilient to physical and transition risks under all three future climate change scenarios. Overall, we found low exposure of PayPal's strategy to climate-related risks in the short term (1-3 years) and medium term (3-5 years), with the potential for certain risk factors to increase moderately over the long term (5+ years). We will periodically evaluate these results and consider future opportunities to refresh our climate risk scenario analysis as necessary.

3. Risk Management

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

ESG-related risks, including climate-related risks, are integrated into our enterprise risk taxonomy. PayPal's [Environmental Risk Management Policy](#) establishes the processes for the identification and assessment of climate-related risks. When reviewing potential risks and opportunities, including those related to climate change, senior leaders at PayPal evaluate a broad set of inputs and consult with internal experts to assess the potential impact and take appropriate responsive actions.

In 2023, we undertook a climate scenario analysis and risk exposure assessment. With leadership from PayPal's CS&I team and participation from relevant teams across PayPal, we analyzed the potential climate-related risks for PayPal across each of the three future climate scenarios described in Section 2c. above. The climate-related risks were grouped into the five climate-related risk areas described in Section 2a. above and mapped to PayPal's enterprise risk taxonomy. The likelihood and impact of climate-related risks in each climate-related risk area were assessed in consultation with teams that are responsible for enterprise risk management in that area. For example, the likelihood and impact of physical climate risks associated with extreme weather events on PayPal's office operations were assessed in consultation with PayPal's real estate and facilities and safety and security teams.

On an ongoing basis, members of PayPal's Environmental Working Group monitor climate-related risks and opportunities for PayPal. Other functions across PayPal, including teams across risk and compliance, finance, legal, and corporate affairs, monitor current and emerging enterprise risks for PayPal, including climate-related risks.

We strive to comply with all climate-related risk assessment obligations to which PayPal is subject. In 2023, PayPal completed a 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 implemented key milestones of 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 going forward.

As discussed in Section 2b. and 2c. above, we have assessed PayPal's overall exposure to climate-related risks to be low in the short term and medium term. We will periodically reevaluate these results and consider future opportunities to refresh the climate risk scenario analysis and risk exposure assessment as may be necessary.

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

The CS&I Steering Committee, consisting of senior leaders across PayPal, provides strategic direction and leadership for the continued development of our CS&I strategy. The CS&I Steering Committee also oversees program implementation through the Environmental Working Group and partners with functions across PayPal on the management of climate-related risks. In connection with updates to the [Environmental Risk Management Policy](#) in 2023, we enhanced our management of the climate-related risks that are most applicable to our business.

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 CS&I Steering Committee for consideration.

In addition, we annually review our CS&I significance map and conduct periodic CS&I 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.

To manage greenhouse gas emissions from our operations and supply chain, we have achieved our renewable energy target and set medium-term science-based targets and a long-term goal of reaching net-zero emissions across our value chain by 2040. We have also implemented initiatives to source renewable energy, invest in energy efficiency, and communicate our climate risk management objectives to our largest suppliers (by spend). We annually measure and report our progress against these targets.

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

Our emergency response plans are periodically updated, and our data center team annually reviews risk plans, which include consideration of climate-related risks. 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.

Our resiliency 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.

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 PayPal's key risks.

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

A subcommittee of the ERM Committee is regularly briefed on emerging risks that affect PayPal's business, including potential climate-related risks. Climate-related risks have been included in the enterprise risk taxonomy which is approved by the ARC Committee.

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 of 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 [2023 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 2021-2023 can be found in **Table 2** 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 (achieved), reducing absolute GHG emissions across our operations by 25% by 2025 from a 2019 base year, and engaging 75% of our suppliers, as measured by spend, to set science-based targets by 2025.

Table 3 on page 9 outlines progress, where applicable, toward our science-based climate goals.

Table 2 – PayPal’s Climate-Related Metrics¹

	FY23	FY22	FY21
Total GHG Emissions (MTCO₂e in thousands)	515.1	517.1	535.3
Scope 1	3.5 [^]	3.9 [^]	2.6 [^]
Scope 2 (MBM) ²	9.8 [^]	6.7 [^]	11.7 [^]
Scope 3 ³	502	507	522
Purchased Goods and Services	431	448	446
Crypto-Related ⁴	80	68	48
Capital Goods	27	16	46
Fuel and Energy-related Activities (FERA) (MBM)	9.0 [^]	8.8 [^]	9.3 [^]
Upstream Transportation and Distribution	12	11	1
Business Travel ⁵	5.8 [^]	6.2 [^]	0.8 [^]
Employee Commuting and Remote Working ⁶	18.3 [^]	17.0 [^]	18.7
Scope 2 (LBM) ⁷	86.8 [^]	101.4 [^]	99.0
Scope 3 FERA (LBM)	23.0 [^]	34.4 [^]	34.4
Carbon intensity per transaction (grams CO₂)⁸	0.5	0.5	0.7

¹ Due to rounding, numbers presented may not reflect exact totals.

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

³ Total Scope 3 emissions and spend-based emissions estimates are rounded to the nearest 1,000 metric tons of CO₂e to reflect limitations in the underlying data sources and estimation methodologies.

⁴ 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.

⁵ As part of our commitment to sustainable business travel, we have worked directly with our preferred travel vendors to refine our emissions calculation methodology. We will continue to work with vendors to enhance the granularity of employee travel information upon which our business travel GHG emissions calculations are based.

⁶ 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. We will periodically review publicly available methodologies and evaluate opportunities to enhance the quality and quantity of data available for estimating employee commuting and remote working emissions.

⁷ Calculated using the GHG Protocol location-based method (LBM), which does not incorporate contractual instruments such as energy attribute certificates.

⁸ Calculation includes operational emissions from all Scope 1 and 2 market-based method (MBM) sources, including corporate jet.

[^] Denotes that Bureau Veritas UK provided an independent limited assurance opinion with respect to the given metric in current and/or previous reporting periods.

Table 3 – PayPal’s Climate-Related Goals

Goal	2023 Progress
Reduce absolute operational GHG emissions by 25% by 2025 (from a 2019 base year) ⁹	75% operational emissions reduction from the 2019 base year ^{10^}
Engage 75% of our suppliers, by spend, to set science-based targets by 2025	Approximately 45% of suppliers, by spend, have or committed to a science-based target ^{11^}
Reach 100% renewable energy for data centers by 2023	Matched 100% of our global data center energy use with renewable generation sources since 2021 [^]

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, 2023, 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.

⁹ Operational greenhouse gas emissions include those emission sources covered by Scope 1 and Scope 2 market-based method (MBM) as defined by the Greenhouse Gas Protocol and the Science-Based Targets initiative.

¹⁰ 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.

¹¹ To calculate the progress towards our goal of reaching 75% vendors by spend with a science-based target (SBT), we consider relevant annual spend with vendors who have set or committed to setting a SBT validated by the Science-Based Targets initiative (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 commitment to set an 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.