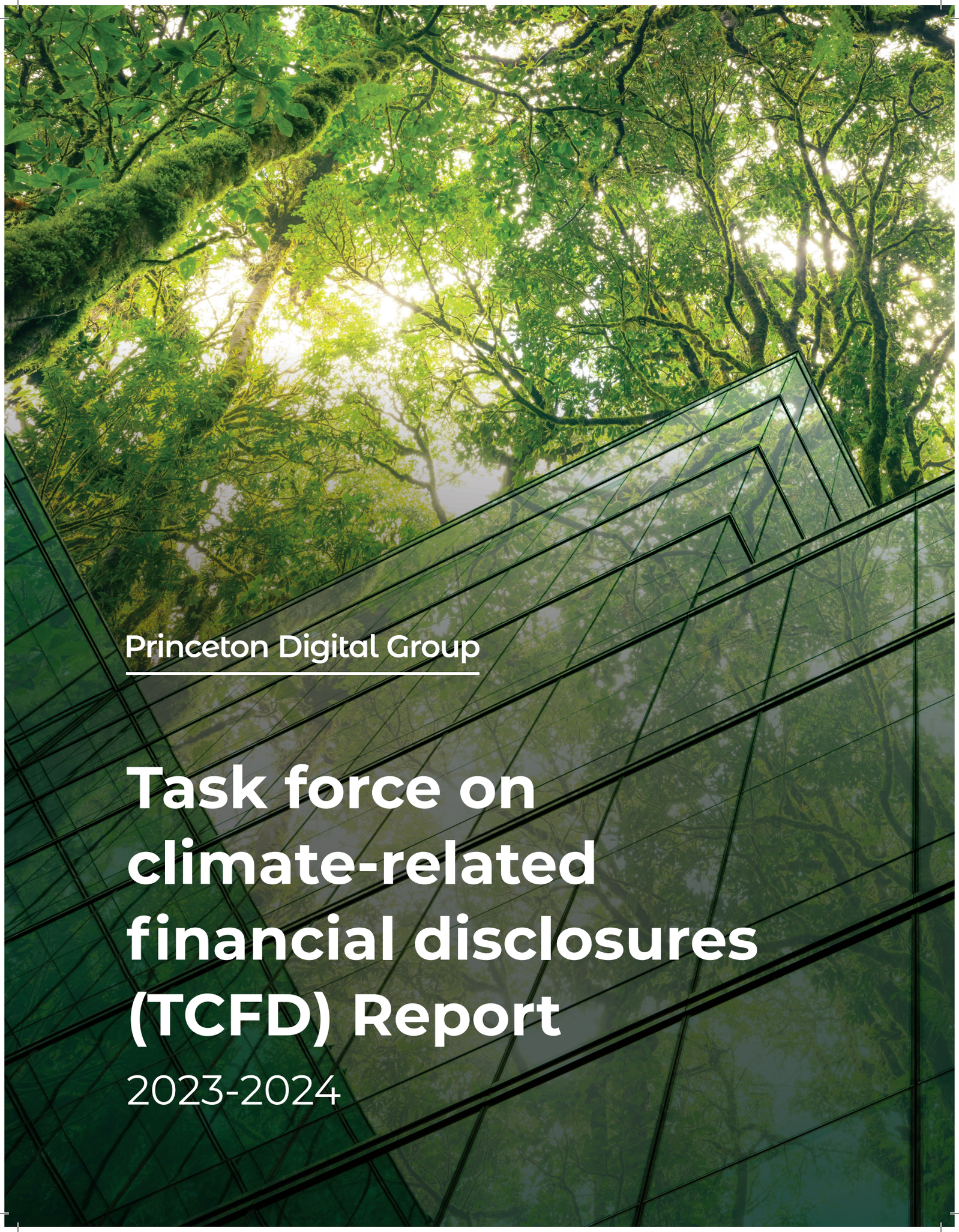

Princeton Digital Group

Task force on climate-related financial disclosures (TCFD) Report

2023-2024

Contents

About This Statement

This TCFD Commitment is a declaration of Princeton Digital Group's (PDG) ongoing dedication to integrating climate-related disclosure across PDG's operations. This statement relates to the fiscal year starting January 1, 2023, and ending December 31, 2023, encompassing PDG's data centers located in Singapore, Japan, India, Indonesia, China, and Malaysia.

Framework

The Task Force on Climate-Related Financial Disclosures (TCFD) provides a structured framework to promote the transparency and disclosure of climate-related financial information. PDG aligns with TCFD's recommendations across four key areas:

Governance

Strategy

Risk Management

Metrics and Targets

Progress

In FY 2023-2024, PDG made notable progress in aligning with the TCFD recommendations by establishing a governance framework focused on climate change, enhancing oversight and strategic integration of climate-related issues. This framework ensures that key internal stakeholders within the organization are engaged and informed about the impacts and strategies related to climate change.

With the assistance of external consultants, PDG performed a comprehensive assessment of climate risks and opportunities, including detailed scenario analyses for two future climate scenarios as per TCFD Guidelines:

- A strong mitigation scenario Representative Concentration Pathway (RCP) of 2.6 aimed at a global temperature increase of 1.5-2.0°C, focusing on achieving a speedy transition to net zero emissions.

- A business-as-usual scenario (RCP 8.5) projecting a 4.0°C rise, preparing for higher operational costs and regulatory impacts.

Parameters used in PDG climate scenario analysis exercise	
Asset Scope	PDG's data centers across Singapore, Japan, India, Indonesia, China, and Malaysia
Scenarios	Strong mitigation measures in place: RCP 2.6 (1.5 -2.0 °C)
	Business as usual (BaU): RCP 8.5 (4.0°C)
Timeframe	
Short-term	2030
Medium-term	2050
Long-term	2100
Climate related risks	
Physical risks	Rising temperatures, flooding, precipitation, surface runoff, water stress, humidity level
Transitional risks	Policy and regulatory, technology, market and reputational risks

Scope of Risks

The scope of risks identified included both transition risks, such as policy changes and market dynamics, and physical risks like increased temperatures and extreme weather conditions affecting operations.

Identification of risks and their mitigation

Following the assessment, PDG formulated strategic measures to effectively address and mitigate identified risks. These measures aim to minimize climate risk exposure, manage costs, and handle the impact of policy changes, market dynamics, increased temperatures, and extreme weather conditions on operations.

Identification of climate opportunities

PDG also identified strategic opportunities related to the global transition towards sustainability. Through this initiative, PDG is not only addressing current risks but also preparing for future challenges and opportunities in an evolving climate.

PDG will regularly reassess climate risks and take tangible steps in mitigating risks as well as progressing on opportunities.

TCFD recommended disclosures and PDG's Assessment

Governance	
TCFD Disclosure Recommendation	**PDG Action Plan**
Describe the board's oversight of climate-related risks and opportunities.	PDG's Board, supported by Sustainability Committee, holds ultimate responsibility for overseeing climate-related risks and opportunities. The Board is updated on a quarterly basis, to ensure oversight and strategic alignment on climate action and sustainability.
Describe management's role in assessing and managing climate-related risks and opportunities.	Sustainability Committee, consisting of CEO, COO, CTO, and Head – Sustainability, review, provide inputs, manage PDG's policies, strategies, and programs relating to climate issues. The Sustainability Team discusses climate-related agenda with the committee on a quarterly basis and on ad hoc basis when important issues arise.

Strategy	
TCFD Disclosure Recommendation	**PDG Action Plan**
Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	PDG evaluated its assets under both RCP 2.6 and RCP 8.5 scenarios and identified the key climate risks that will impact its assets over the short (2030), medium (2050), and long-term (2100). PDG's climate-related risk and opportunity areas have been identified as follows: **Physical Risks:** Chronic Risks • **Rising Temperatures:** Higher energy demand for cooling increases costs, strains cooling systems, and may require new technologies. • **Water Stress:** Water shortages could disrupt operations, cause downtime, and raise operating costs for PDG data centers.

Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Acute Risks • **Relative Humidity:** Extreme humidity strains equipment, reduces lifespan, and impacts service agreements. • **Urban Flooding Due to Increased Precipitation and Surface Runoff:** Increased flooding could damage infrastructure and cause operational disruptions. **Transition Risks:** ▪ **Policy and Regulation Risks:** More stringent sustainability regulations may raise compliance and operational costs, including carbon taxes. ▪ **Technology Risks:** Decarbonization under RCP 2.6 may require PDG to adopt new energy and cooling technologies. ▪ **Market and Reputational Risks:** Shifts in consumer and investor expectations on sustainability may impact financial viability and reputation, but progress in sustainability can mitigate risks and strengthen the brand. **Opportunities:** ▪ **Low-Emission Energy & Efficiency:** Transitioning to renewable energy and improving efficiency reduces carbon footprint, cuts operating costs in the longer term, and aligns with stakeholder interests while mitigating future carbon regulations. ▪ **Developing Sustainable Data Centers:** Attracts customers with low-carbon buildings and operations by incorporating sustainability in the supply chain. ▪ **Green Financing Opportunities:** Enables greater investment in sustainability projects, supporting initiatives that reduce environmental impact and operational costs. ▪ **Enhancing sustainability reporting:** Ensures alignment with customer reporting standards and targets as well as in regional regulatory requirements and targets.

Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Climate change poses both risks and opportunities for PDG, impacting the company's business operations, strategy, and financial planning. PDG conducted qualitative analyses to identify these risks and opportunities, and implications on its' business and financials. Understanding and addressing these factors is necessary for business resilience and competitive advantage in a rapidly evolving landscape. **Business Impact** • **Asset Devaluation:** Climate change and regulatory shifts have the potential to devalue PDG's assets. • **Operational Disruptions:** Climate-related events and regulatory changes could cause operational downtime and increase in costs. • **Negative Reputation:** Not proactively managing climate risks could damage PDG's reputation, undermining customer trust and market position. · I**mproved Energy Efficiency:** Enhancing energy efficiency can reduce operating costs and improve the sustainability of PDG's facilities. • **Customer Retention and Attraction through Energy-Efficient and Sustainable operations:** Supporting customers in becoming more energy and water-efficient reduces their operating costs and climate footprint thus enhancing retention. By developing sustainable data centers powered by zero-carbon energy, PDG aligns its interests with those of its customers, attracting and retaining clients while positioning itself competitively in the market for driving topline growth. **Financial Impact** • **Increased Operational Costs:** PDG may incur higher operational costs due to cooling challenges, increased maintenance, and rising carbon and energy prices. • **Increased Capital Expenditure:** More capital investment will be needed to protect assets from physical risks and comply with carbon reduction and resource efficiency mandates. • **Loss of Revenue:** Operational disruptions, reputational damage, and loss of customer trust may lead to revenue losses. • **Revenue Growth Through Renewable Energy:** Transitioning to low and zero-emission energy sources and developing renewable products or customers can generate higher revenues. However, this approach also poses risks such as the intermittent nature of renewable power and potentially higher prices. PDG's Sustainability and Energy team works with leading regional experts to focus on sourcing cost-effective renewable projects and maximizing carbon reductions.

Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	In 2023-2024, PDG conducted its initial qualitative climate risk assessment under two scenarios: a strong mitigation scenario (RCP 2.6) and a business-as-usual scenario (RCP 8.5). These scenarios helped PDG evaluate its strategic resilience over short-term (2030), medium-term (2050), and long-term (2100) timeframes. **Resilience Assessment:** 1. **Under RCP 2.6:** PDG is enhancing energy efficiency, increasing renewable energy use, and focusing on energy transition, preparing for stricter environmental standards expected in a lower warming scenario. This aligns with PDG's short-term objectives and extends into medium and long-term strategies to maintain competitiveness and compliance in a rapidly decarbonizing global economy. 2. **Under RCP 8.5:** PDG is bolstering operational efficiency and infrastructure resilience to manage higher costs and more severe physical climate impacts. This scenario requires PDG to adapt to significant regulatory changes and increased operational challenges due to more extreme climate conditions. PDG plans to conduct a quantitative risk assessment to gain deeper insights and fine-tune its strategy, ensuring it remains robust across varying climate scenarios.

Risk Management	
TCFD Disclosure Recommendation	**PDG Action Plan**
Describe the organization's processes for identifying and assessing climate-related risks.	PDG integrates the processes for identifying, assessing, and managing climate-related risks into the organization's overall risk management through several key steps: 1. **Identification:** PDG proactively identifies physical and transition risks by analyzing environmental trends and assessing policy, market, and technological changes. This helps foresee immediate and long-term operational impacts. 2. **Assessment:** PDG assesses the potential financial and operational impacts of these risks to prioritize high impact risks and their mitigation. 3. **Management:** PDG manages risks through mitigation strategies such as employing innovative cooling technologies, enhancing HVAC systems, and increasing the share of renewables in energy sourcing.
Describe the organization's processes for managing climate-related risks.	

Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	PDG has incorporated climate-related risks to be considered as part of our overall strategic decision-making processes.

Metrics and Targets	
TCFD Disclosure Recommendation	**PDG Action Plan**
Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	PDG utilizes key risk indicators (KRI) metrics to assess climate-related risks and opportunities, aligning its strategic and risk management objectives. • **Monitoring climate-related disruptions** in operational regions and assessing their impact on data center performance. • **Tracking rising temperatures** and evaluating the corresponding increase in cooling energy demand. • **Monitoring changes in environmental regulations** across operating regions to ensure compliance and anticipate potential cost impacts. • **Tracking customer and stakeholder sustainability goals** and aligning data center operations to meet or exceed those expectations. These metrics are central to PDG's efforts to monitor and manage its environmental impact and progress towards sustainability goals.
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Please refer to PDG's latest Sustainability Report for Scope 1, Scope 2, and Scope 3 GHG emissions disclosure. This report provides detailed information on PDG's direct and indirect emissions across all operational areas as well as discusses its sustainability goals and performance.
Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	PDG utilizes specific targets to manage climate-related risks and opportunities, effectively monitoring PDG's performance against these goals. PDG's key targets include: 1. **Power Usage Effectiveness (PUE):** PDG aims to optimize the energy efficiency of its data centers, maintaining a design PUE between 1.2 and 1.4. The company also focusses on reducing operating PUE in each of its data centers including through incorporating new cooling technologies such as liquid immersion, direct to chip etc. 2. **Net Zero for Scope 1 and Scope 2 Emissions by 2030:** This target guides PDG's strategies in energy

	management, low carbon technology deployment, and operational practices. 3. **Roadmap to Net Zero:** Alongside PDG's net zero goal, the roadmap focuses on incremental reductions year-on-year in GHG emissions through various initiatives, including renewable energy procurement and technological upgrades and process improvements. 4. **Increase in Renewable Energy Procurement:** To further reduce PDG's carbon footprint, the company is increasing the percentage of renewable energy in the energy mix. This strategy not only supports PDG's net zero emissions target but also enhance energy security and sustainability. 5. **Mitigation plan for identified climate risks and plan for executing on climate related opportunities:** PDG established comprehensive strategies to manage identified climate risks, such as temperature increases, water scarcity, and regulatory changes. At the same time, PDG seeks to capitalize on climate-related opportunities, including technological innovations and renewable energy adoption, to enhance sustainability. These targets are central to PDG's approach to managing climate-related risks and capitalizing on opportunities to enhance the company's environmental performance and sustainability. Performance in meeting these targets is reported annually in PDG's ESG report.