



ESG & CLIMATE DISCLOSURE ANALYSIS

For Block, Inc.

ABSTRACT

This project evaluates Block, Inc.'s ESG reporting and climate risk exposure using the En-ROADS simulator and current SEC disclosure standards. The analysis models a +2.0°C policy scenario and identifies gaps in Scope 3 strategy, climate governance, and scenario planning. Recommendations focus on enhancing transparency, aligning with global frameworks, and managing regulatory risks, especially those tied to Bitcoin energy use.

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ESG Assessment of Block, INC. and En-Roads Climate Interactive

Block, Inc. (formerly Square) is a financial technology company known for its suite of products including Square, Cash App, Tidal, and its Bitcoin initiatives. BLOCK emphasizes economic empowerment, and it influences their product development and policy decisions across its brands. This paper evaluates how Block communicates its environmental, social, and governance (ESG) efforts considering global climate policy discussions and the new SEC climate disclosure rules. Using the En-ROADS climate simulator, I developed a realistic global policy scenario that limits warming to +2.0°C. En-Roads is a simulator that allows for the exploration of policy impacts on climate change. It is a great tool that can help us visualize what the long-term implications are of efforts to address climate change or lack thereof. Block demonstrates leadership in social impact reporting and technology driven empowerment yet still faces critical challenges in climate-specific disclosures, especially regarding Scope 3 emissions and Bitcoin-related energy usage. (find reference) We will discuss the policies being put forward to address climate change and recommend steps Block can take to better align with future disclosures.

En-ROADS Simulation & Climate Policy Fit

To evaluate climate readiness, I created a global policy scenario using the En-ROADS simulator. The final simulation achieved a projected warming outcome of +2.0°C. We were able to achieve this by adjusting some key levers within the simulation including:

- Carbon price set to “very high” to reflect growing global carbon market adoption. Both Canada and the EU have significantly raised their Carbon Pricing Benchmarks, and we will continue to see this trend. Several policy proposals here in the U.S. have seen numbers floated from \$40-\$75 ton for starting prices.
- New Zero-Carbon energy technologies were advanced to “breakthrough” status, encouraging innovation in clean energy efforts.

- Energy efficiency in transport would need to increase as we shift to cleaner mobility. This is a benefit for Block's customers that depend on transportation and delivery systems.
- Energy efficiency in buildings and Industry has been boosted, resulting in lowering global energy demand and helping drive significant emissions reductions at relatively low cost. While Block's own business has low emissions, the company can contribute by encouraging energy conscious practices among partners. As, of the most recent reports Block has not reported any initiatives targeting building or industrial energy efficiency, which leaves an open opportunity for them to lead here.
- Carbon dioxide removal through nature based and technological efforts were shifted to medium growth.
- Deforestation and land use adjusted minimally as they are less relevant to Block's business model.



Figure 1. *Projected climate outcomes under a +2.0°C scenario, modeled using En-ROADS. Assumptions include a high carbon price, increased energy efficiency, partial electrification, and moderate reductions in emissions and land use impacts.*

Messaging and ESG Disclosures

As previously mentioned, Block's 2023 Impact Report outlines its commitment to economic empowerment, innovation, and inclusivity. They have built their ESG around social outcomes such as:

- Democratizing access to financial tools (ex. Cash APP provides access to banking adjacent services for individuals who have difficulty attaining traditional banking accounts).
- Supporting small businesses and merchants (ex. Square helps small merchants process payments, manage payroll, and track inventory which is crucial in underserved markets. Block highlights
- Block reports workplace demographic data annually in their efforts to advance workforce diversity and pay equity. They conduct third-party audits into their efforts and support Employee Resource Groups that support inclusion.

From an ESG standpoint:

- Block discloses Scope 1 emissions (~1,230.7 metric tons CO₂e) and Scope 2 emissions (~18.3 metric tons CO₂e), which is important because these reflect direct emissions under Block's control and show the company is monitoring its operational footprint.
- Scope 3 emissions, which cover indirect impacts like purchased goods, transportation, and business travel, are reported across several categories (e.g., Purchased Goods: 268,389 mtCO₂e, Business Travel: 22,869 mtCO₂e, Employee

Commuting: 486 mtCO₂e) but the data lacks a comprehensive reduction strategy or integration with Block's long-term climate roadmap. Combined Scope 3 accounts for over 99.5% of Block's total reported emissions underscoring the outsized role of indirect value chain activities in the company's climate footprint.

- ESG disclosures do not follow a formal framework like GRI, or TCFD, although the company references SDG alignment in broad terms.
- The report lacks quantified climate targets, scenario planning, or board-level ESG oversight discussion.

This suggests that while Block's messaging is strong on mission and community, it needs a more structured and transparent approach to environmental risks and opportunities.

Block's business model aligns partially with a low-carbon transition due to its digital infrastructure and low direct emissions. However, its heavy involvement in Bitcoin presents a regulatory risk under carbon pricing scenarios. While Block has committed to net-zero emissions by 2030, its disclosures do not clearly explain how it plans to reduce Scope 3 emissions or manage indirect impacts from its supply chain and product use.

Conclusion

Given the direction of regulatory changes such as the SEC climate disclosure rule and similar EU regulation, the sooner these needs are met, the sooner stakeholders can shift their concerns elsewhere. There are some specific challenges to this which include:

- Lack of Scope 3 emissions data, particularly related to suppliers and bitcoin mining.
- Unclear emissions reduction roadmap, making it difficult for investors to assess climate risk.
- Inadequate use of recognized frameworks, reducing comparability and reliability.

The En-ROADS scenario shows that realistic policy environments will likely penalize high-carbon activities like proof-of-work mining. Block's strategic arms like TBD who focuses on open-source financial structure, and Spiral which supports the Bitcoin development, should prioritize transparency in energy sourcing and invest in green alternatives or offsets. This will help them mitigate risks and exposure to high emission technology.

While Block has begun aligning itself with industry reporting standards beginning with SASB, their disclosures are limited in forward looking insights particularly for Scope 3 emissions and climate scenario analysis. The company also refers to their alignment with the UN Sustainable Development Goals and disclosing their carbon offset purchases in accordance with California AB 1305, however they are pretty broad and lack any detailed metrics or plans for integrating it into a long-term w=emissions strategy.

To remain competitive and credible in a business environment where stakeholders are increasingly focused on a firm's ESG efforts, Block will need to enhance their disclosures and climate governance. This plan would include clearly communicating long term decarbonization plans, integrating scenario analysis, and expanding transparency across its operations and ventures. The amount of business that Block can influence and impact us substantially and this is an immense opportunity for Block. Doing so will protect shareholder value and enhance its long-term resilience.

Tools & Frameworks Used

- En – Roads Climate Simulator
- ESG Disclosure Guidelines (SASB, GRI, SEC Rules)
- CDP, MSCI, Sustainability ESG Scores

Sources

1. SEC Climate Rule Overview – KPMG. <https://kpmg.com/us/en/frv/reference-library/2024/sec-climate-rule.html>

2. EY. (2024). Is Your ESG Data Unlocking Long-Term Value?
https://www.ey.com/en_us/assurance/is-your-esg-data-unlocking-long-term-value
3. CDP Score (Block, Inc.) or ESG Ratings – <https://www.cdp.net> or
<https://www.msci.com/our-solutions/esg-investing/esg-ratings>
4. European Commission. (2024). *EU Emissions Trading System (EU ETS)*.
https://climate.ec.europa.eu/eu-action/eu-emissions-trading-system-eu-ets_en
5. Government of Canada. (2023). *Carbon pricing in Canada*.
<https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work.html>
6. KPMG. (2024). *SEC climate disclosure rule*. <https://kpmg.com/us/en/frv/reference-library/2024/sec-climate-rule.html>
7. EY. (n.d.). *Is your ESG data unlocking long-term value?*
https://www.ey.com/en_us/assurance/is-your-esg-data-unlocking-long-term-value
8. Bloomberg Law. (2024). *Laws like SEC climate reporting rules already happening in the EU*. <https://news.bloomberglaw.com/us-law-week/laws-like-sec-climate-reporting-rules-already-happening-in-the-eu>
9. Block, Inc. (2024). *2023 CDP Climate Change Questionnaire*.
https://s29.q4cdn.com/628966176/files/doc_downloads/2024/02/block_2023_cdp_report.pdf
10. Sustainalytics. (2024). *ESG Risk Rating for Block, Inc.*
<https://www.sustainalytics.com/corporate-solutions/know-your-esg-score/block-inc/1091799056>
11. TechCrunch. (2024). *Jack Dorsey's Block Faces ESG Scrutiny Over Bitcoin Energy Use*.