

Congress of the United States

Washington, DC 20515

February 6, 2023

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Room 3426 WJC North
Washington, DC 20460

The Honorable Jennifer Granholm
Secretary
Department of Energy
1000 Independence Ave. SW
Washington, DC 20585

Dear Administrator Regan and Secretary Granholm:

We write to thank you for your respective agencies' responses to a July 2022 letter several of us sent regarding an investigation of the environmental impacts of cryptocurrency mining, which revealed high and rapidly increasing energy use and emissions from cryptominers.¹ Your responses described your clear authority to require emissions and energy-use disclosures by cryptominers, and we urge you to use those authorities to implement a mandatory disclosure regime as rapidly as possible.²

In the response letter sent on November 8, 2022, Secretary Granholm confirmed that cryptomining “represents a rapidly growing source of electricity consumption and associated greenhouse gas emissions, and...the lack of comprehensive reporting by this sector limits the ability to understand the scale of the impact and develop appropriate solutions.”³ The letter also confirms that 15 U.S.C. § 772(a) and (b), provisions governing the Energy Information Administration's (EIA) information-gathering authority enacted in the *Federal Energy Administration Amendments of 1974*, allow the EIA to require energy consumption reporting from cryptominers, which would be considered “operating facilities... engaged in... major

¹ Letter from Senator Elizabeth Warren and Colleagues to Environmental Protection Agency Administrator Michael Regan and Department of Energy Secretary Jennifer Granholm, July 15, 2022, <https://www.warren.senate.gov/oversight/reports/warren-colleagues-call-on-environmental-protection-agency-and-department-of-energy-to-require-cryptomining-companies-to-disclose-energy-use-and-emissions>.

² Letter from Environmental Protection Agency Associate Administrator William Niebling to Senator Warren, November 7, 2022, <https://www.warren.senate.gov/imo/media/doc/EPA%20Response%20to%20Sen%20Warren%20Letter%20re%20Cryptocurrency%2011%2007%202022%20Signed.pdf>; Letter from Department of Energy Secretary Jennifer Granholm to Senator Warren, November 8, 2022, <https://www.warren.senate.gov/imo/media/doc/DOE%20Response%20to%20Senator%20Warren%20Re%20Cryptocurrency.pdf>.

³ Letter from Department of Energy Secretary Jennifer Granholm to Senator Warren, November 8, 2022, <https://www.warren.senate.gov/imo/media/doc/DOE%20Response%20to%20Senator%20Warren%20Re%20Cryptocurrency.pdf>.

energy consumption.”⁴ Secretary Granholm’s letter further indicates that the EIA has additional authority to require data reporting directly from electric utilities, explaining that “[a]lternatively, there may also be opportunities to collect information directly from power plant operators and distribution utilities on any electricity they sell to cryptocurrency operators. Form EIA-861 Annual Electric Power Industry Report requires distribution utilities to report their annual electricity sales by customer type, typically residential, commercial, or industrial.”⁵

In the November 7, 2022 letter from Associate Administrator William Niebling, the Environmental Protection Agency (EPA) response confirms that “EPA’s Greenhouse Gas Reporting Program (GHGRP), using Clean Air Act Section 114 authority, collects emissions data for facilities emitting more than 25,000 tons of carbon dioxide equivalent.”⁶ The investigation conducted by several of us found that the two cryptomining companies that gave a concrete answer to our question regarding their emissions, and which generate their own energy for cryptomining, had facilities whose emissions were above that 25,000 ton threshold: Greenidge, located in upstate New York, emitted 273,326 tons of CO₂ equivalent in the 12 months prior to November 30, 2021, and Stronghold’s Scrubgrass and Panther Creek facilities in Pennsylvania emitted 412,445 and 203,109 tons of CO₂, respectively, in just the first three quarters of 2021.⁷ These and other large cryptomining facilities would clearly fall within the agency’s regulatory authority for emissions reporting, and in fact Greenidge’s and Stronghold’s power generating facilities are included in the GHGRP inventory.⁸

It is critical that the EPA and Department of Energy (DOE) rapidly implement this disclosure regime on a mandatory basis. As your staff noted in a briefing on October 17, 2022, EPA and DOE are regulatory agencies that need comprehensive data to determine baselines for emissions and energy intensity, and to develop metrics and benchmarks to measure the effectiveness of environmental performance measures that are under agency consideration.⁹ This data is crucial, and your agencies should not have to rely on the good nature of the crypto or electric utility industries to obtain it. Indeed, the rolling series of scandals, scams, and corporate governance failures that have occurred in the crypto industry, most recently with the collapse of the crypto exchange FTX,¹⁰ underscores the need for strong mandatory rules that ensure the industry’s compliance. This would fulfill the recommendations made by the White House Office

⁴ *Id.*

⁵ *Id.*

⁶ Letter from Environmental Protection Agency Associate Administrator William Niebling to Senator Warren, November 7, 2022, <https://www.warren.senate.gov/imo/media/doc/EPA%20Response%20to%20Sen%20Warren%20Letter%20re%20Cryptocurrency%2011%2007%202022%20Signed.pdf>.

⁷ Letter from King & Spalding on behalf of Greenidge Holdings, Inc., to Senator Elizabeth Warren, Dec. 17, 2021, <https://www.warren.senate.gov/imo/media/doc/Greenidge%20Response%20Letter%2012.17.2021.pdf>; Letter from Stronghold Digital Mining to Members of Congress, February 8, 2022, <https://www.warren.senate.gov/imo/media/doc/Stronghold%20Response%20Letter%202.8.2022.pdf>.

⁸ EPA, “Facility Level Information on GreenHouse gases Tool (FLIGHT) 2021 Greenhouse Gas Emissions from Large Facilities,” August 12, 2022, <https://ghgdata.epa.gov/ghgp/main.do>; Stronghold Digital Mining, “Power Facilities,” <https://strongholddigitalmining.com/the-facility/>.

⁹ Briefing by Environmental Protection Agency and Department of Energy Staff to Congressional Staff, October 17, 2022, [Notes on File with the Office of Senator Elizabeth Warren].

¹⁰ Office of Senator Elizabeth Warren, “Senator Warren in Wall Street Journal Op-Ed: FTX’s Implosion Should Be a Wake-up Call,” press release, November 22, 2022, <https://www.warren.senate.gov/newsroom/press-releases/senator-warren-in-wall-street-journal-op-ed-ftxs-implosion-should-be-a-wake-up-call>.

of Science and Technology Policy's (OSTP's) September 2022 report on the Climate and Energy Implications of Crypto-Assets in the United States, which called for "collecting and analyzing information from crypto-asset miners and electric utilities," including "mining energy usage and fuel mix, power purchase agreements, environmental justice implications, and demand response participation."¹¹

The urgency of the climate crisis, combined with the rapid growth of cryptomining in the U.S.,¹² dictates a comprehensive mandatory disclosure and data collection regime. We therefore urge your agencies to work together to address the lack of information about cryptomining's energy use and environmental impacts and require mandatory reporting of this information from cryptominers as rapidly as possible. Accordingly, we ask that you respond in writing with answers to the following questions no later than March 6:

1. By which date does the EIA expect to use its authority under 15 U.S.C. §772(a) and (b) to begin collecting energy and use information from cryptomining firms?
 - a. Secretary Granholm, your letter noted that the EIA could require energy consumption reporting from cryptocurrency operators, and that this would require development of a new survey to collect this information.¹³ What would be the process of developing this new survey, and what is your expected timeline for completing it?
 - b. Secretary Granholm, you note that Form EIA-861 requires distribution utilities to report their annual electricity sales by customer type, typically residential, commercial, or industrial, and that an additional category could be added to distinguish electricity sales to data centers and cryptocurrency operations.¹⁴ Could cryptocurrency operations be created as a category separate from data centers, and what would be the steps to do so and timeline for completion?
 - c. Do you anticipate being able to generate this data at the facility level?
2. Administrator Regan, does the EPA currently have, within its Greenhouse Gas Reporting Program, a list of facilities that generate more than 25,000 tons of carbon dioxide equivalent for the purposes of cryptomining? If not, when do you expect to begin developing that list?
3. By when do your agencies individually or jointly expect to begin collecting and analyzing information on mining energy usage and fuel mix, power purchase agreements, environmental justice implications, and demand response participation

¹¹ White House Office of Science and Technology Policy, "Climate and Energy Implications of Crypto-Assets in the United States," September 8, 2022, p. 8, <https://www.whitehouse.gov/wp-content/uploads/2022/09/09-2022-Crypto-Assets-and-Climate-Report.pdf>.

¹² *Id.*

¹³ Letter from Department of Energy Secretary Jennifer Granholm to Senator Warren, November 8, 2022, <https://www.warren.senate.gov/imo/media/doc/DOE%20Response%20to%20Senator%20Warren%20Re%20Cryptocurrency.pdf>.

¹⁴ *Id.*

from cryptominers and electric utilities, as per the recommendations in the OSTP report?¹⁵

- a. What is your plan for coordination between EPA, DOE, and OSTP in creating this reporting mechanism? Do you plan to create joint or separate reporting systems and analyses?
4. On the October 17, 2022 briefing call, your staff described their plan to reach out to the cryptomining industry via the Digital Chamber of Commerce to offer trainings on the Energy Star program's Portfolio Manager tool, which is used to benchmark the energy use of commercial buildings like data centers, and therefore could be used to measure the energy use of cryptominers.¹⁶
 - a. Have any cryptomining companies taken you up on this offer, and have any trainings occurred or are planned to occur?
 - b. Are any cryptomining companies, to your knowledge, currently using this tool to track their energy consumption?
5. In the briefing, staff mentioned that DOE might provide technical assistance for communities that are or are considering hosting cryptomining facilities.¹⁷ Please provide any updates on this work, and whether DOE or any agency or office within it has already engaged with local communities for this purpose.

Sincerely,



Elizabeth Warren
United States Senator



Jared Huffman
Member of Congress



Sheldon Whitehouse
United States Senator



Rashida Tlaib
Member of Congress

¹⁵ White House Office of Science and Technology Policy, "Climate and Energy Implications of Crypto-Assets in the United States," September 8, 2022, p. 8, <https://www.whitehouse.gov/wp-content/uploads/2022/09/09-2022-Crypto-Assets-and-Climate-Report.pdf>.

¹⁶ Briefing by Environmental Protection Agency and Department of Energy Staff to Congressional Staff, October 17, 2022, [Notes on File with the Office of Senator Elizabeth Warren].

¹⁷ *Id.*

Edward J. Markey

Edward J. Markey
United States Senator

Katie Porter

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Member of Congress

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