## United States Senate

## WASHINGTON, DC 20510

May 1, 2024

The Honorable Lloyd J. Austin III Secretary of Defense U.S. Department of Defense 1000 Defense Pentagon Washington, DC 20301 The Honorable Janet Yellen Secretary U.S. Department of the Treasury 1500 Pennsylvania Ave NW Washington, DC 20220

Mr. Jake Sullivan National Security Advisor The White House 1600 Pennsylvania Avenue NW Washington, DC 20500

Dear Secretary Austin, Secretary Yellen, and Mr. Sullivan,

We write to inquire about the Biden administration's efforts to combat Iran's rampant evasion of U.S. and international sanctions through cryptocurrency (crypto) mining. Iran legalized the cryptomining industry in 2019. In the five years since, Iran has raised millions of dollars through mining crypto—a steady revenue source that allows it to purchase imports, move funds domestically and internationally, and fund Hamas and other terrorist organizations. This ongoing activity by the Iranian government threatens our national security.

Cryptomining is the process by which crypto transactions are verified and new tokens are minted. This is done via "power-hungry computers, which process new transactions and add them to the blockchain. In return, the miners are rewarded with Bitcoins—both from transaction fees as well as the minting of new Bitcoins. The mining process effectively converts energy into cryptocurrency." According to the IMF, "[m]ining for energy-intensive blockchains like Bitcoin can allow countries to monetize energy resources, some of which cannot be exported due to sanctions."

2022, https://decrypt.co/98171/imf-warns-russia-could-use-bitcoin-mining-to-evade-sanctions.

<sup>&</sup>lt;sup>1</sup> Al Jazeera, "Iran's government recognizes cryptocurrency mining with caveat," Maziar Motamedi, August 5, 2019, <a href="https://www.aljazeera.com/economy/2019/8/5/irans-government-recognises-cryptocurrency-mining-with-caveat">https://www.aljazeera.com/economy/2019/8/5/irans-government-recognises-cryptocurrency-mining-with-caveat</a>

<sup>&</sup>lt;sup>2</sup> Reuters, "Focus: New crypto front emerges in Israel's militant financing fight," Tom Wilson and Elizabeth Howcroft, November 30, 2023, <a href="https://www.reuters.com/world/middle-east/new-crypto-front-emerges-israels-militant-financing-fight-2023-11-27/">https://www.reuters.com/world/middle-east/new-crypto-front-emerges-israels-militant-financing-fight-2023-11-27/</a>; Elliptic, "How Iran Uses Bitcoin Mining to Evade Sanctions and "Export" Millions of Barrels of Oil," Tom Robinson, May 21, 2021, <a href="https://www.elliptic.co/blog/how-iran-uses-bitcoin-mining-to-evade-sanctions">https://www.elliptic.co/blog/how-iran-uses-bitcoin-mining-to-evade-sanctions</a>.

<sup>&</sup>lt;sup>3</sup> Elliptic, "How Iran Uses Bitcoin Mining to Evade Sanctions and "Export" Millions of Barrels of Oil," Tom Robinson, May 21, 2021, <a href="https://www.elliptic.co/blog/how-iran-uses-bitcoin-mining-to-evade-sanctions">https://www.elliptic.co/blog/how-iran-uses-bitcoin-mining-to-evade-sanctions</a>.

<sup>4</sup> Decrypt, "IMF Warns Russia Could Use Bitcoin Mining to Evade Sanctions," Scott Chipolina, April 19,

Iran is one of the world's largest Bitcoin producers. In 2021, Iran was estimated to mine as much as seven percent of the global Bitcoin market,<sup>5</sup> making it one of the top eight Bitcoin-producing countries in the world.<sup>6</sup> Cryptomining has become such a big industry in Iran that it has strained the country's energy grid, leading the Iranian government to temporarily suspend cryptomining several times after it was blamed for massive blackouts.<sup>7</sup> According to Elliptic, a blockchain analytics firm, the "electricity being used by miners in Iran would require the equivalent of approximately 10 million barrels of crude oil each year to generate—around 4% of total Iranian oil exports in 2020." More than three percent of all inflows to Iranian crypto exchanges—and more than 29% of all Bitcoin inflows—are estimated to come from mining pools.<sup>9</sup>

Cryptomining has become increasingly lucrative for Iran. Between 2015 and 2021, Bitcoin mining funneled more than \$186 million into Iranian crypto platforms, most of it in 2021. One estimate indicates that Iranian Bitcoin mining could have produced as much as \$1 billion in revenue in 2021. Iranian cryptominers are required to sell the crypto they produce to the Iranian central bank, which in turn uses the crypto to pay for imports and exports. An Iranian think tank affiliated with the Iranian president's office published a report in 2021 noting that newly-minted Bitcoins are preferable to existing Bitcoins because they are less traceable. The report advised that Iran could generate \$700 million a year in direct revenue through cryptomining and that the creation of large mining farms could boost Iranian employment.

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<sup>14</sup> *Id*.

Cointelegraph, "Inside the Iranian Bitcoin mining industry," Saeed Jalili, December 21, 2021, <a href="https://cointelegraph.com/magazine/iranian-miners-say-bad-regulations-killing-great-potential-in-industry/">https://cointelegraph.com/magazine/iranian-miners-say-bad-regulations-killing-great-potential-in-industry/</a>.
 World Population Review, "Bitcoin Mining by Country 2024", February 20, 2024,

https://worldpopulationreview.com/country-rankings/bitcoin-mining-by-country.

<sup>&</sup>lt;sup>7</sup> Washington Post, "Massive blackout have hit Iran. The government is blaming bitcoin mining," Miriam Berger, January 16, 2021, <a href="https://www.washingtonpost.com/world/2021/01/16/massive-blackouts-have-hit-iran-government-is-blaming-bitcoin/">https://www.washingtonpost.com/world/2021/01/16/massive-blackouts-have-hit-iran-government-is-blaming-bitcoin/</a>; Al Jazeera, "Iran orders crypto-mining ban to prevent winter blackouts," Yasna Haghdoost and Arsalan Shahla, December 28, 2021, <a href="https://www.aljazeera.com/economy/2021/12/28/biran-orders-crypto-mining-ban-to-prevent-winter-blackouts">https://www.aljazeera.com/economy/2021/12/28/biran-orders-crypto-mining-ban-to-prevent-winter-blackouts">https://www.aljazeera.com/economy/2021/12/28/biran-orders-crypto-mining-ban-to-prevent-winter-blackouts</a>.

<sup>&</sup>lt;sup>8</sup> Elliptic, "How Iran Uses Bitcoin Mining to Evade Sanctions and "Export" Millions of Barrels of Oil," Tom Robinson, May 21, 2021, <a href="https://www.elliptic.co/blog/how-iran-uses-bitcoin-mining-to-evade-sanctions">https://www.elliptic.co/blog/how-iran-uses-bitcoin-mining-to-evade-sanctions</a>.

<sup>&</sup>lt;sup>9</sup> Chainalysis, "2024 Crypto Crime Report," p. 78, <a href="https://go.chainalysis.com/crypto-crime-2024.html">https://go.chainalysis.com/crypto-crime-2024.html</a>.

<sup>&</sup>lt;sup>10</sup> Written testimony of Jonathan Levin to the U.S. Senate Committee on Banking, Housing, and Urban Affairs, March 17, 2022, <a href="https://www.banking.senate.gov/imo/media/doc/Levin%20Testimony%203-17-22.pdf">https://www.banking.senate.gov/imo/media/doc/Levin%20Testimony%203-17-22.pdf</a>.

<sup>&</sup>lt;sup>11</sup> Elliptic, "How Iran Uses Bitcoin Mining to Evade Sanctions and "Export" Millions of Barrels of Oil," Tom Robinson, May 21, 2021, <a href="https://www.elliptic.co/blog/how-iran-uses-bitcoin-mining-to-evade-sanctions">https://www.elliptic.co/blog/how-iran-uses-bitcoin-mining-to-evade-sanctions</a>.

<sup>&</sup>lt;sup>12</sup> Middle East Institute, "Iran and cryptocurrency: Opportunities and obstacles for the regime," Eric Lob, December 27, 2022, <a href="https://www.mei.edu/publications/iran-and-cryptocurrency-opportunities-and-obstacles-regime#:~:text=In%20August%202019%2C%20Iran%20issued,pay%20for%20imports%20and%20exports.">https://www.mei.edu/publications/iran-and-cryptocurrency-opportunities-and-obstacles-regime#:~:text=In%20August%202019%2C%20Iran%20issued,pay%20for%20imports%20and%20exports.</a>

<sup>&</sup>lt;sup>13</sup> Iran Wire, "Official report: Iran Could Use Cryptocurrencies to Avoid Sanctions," Behnam Gholipour, March 2, 2021, <a href="https://iranwire.com/en/features/69084/">https://iranwire.com/en/features/69084/</a>.

Beyond the revenue it earns through cryptomining, Iran's use of crypto to launder funds is well known. Its largest crypto exchange, Nobitex, provides guidance on its website on avoiding sanctions. <sup>15</sup> Binance, the world's largest crypto exchange, processed \$8 billion worth of Iranian crypto transactions in a four-year period, with most of the funds flowing through Nobitex. <sup>16</sup> The Iranian government is also known to be affiliated with ransomware gangs that have perpetrated attacks against U.S. organizations. <sup>17</sup>

Iran's use of crypto to evade sanctions poses a direct threat to our national security. On April 13, Iran attacked Israel, launching over 300 drones and missiles into Israeli airspace. This brazen escalation risks bringing a proxy war into the open. The Iranian military has used crypto to fund known terrorist groups like Hezbollah, the organization believed to be partially responsible for the January 2024 drone strike in Jordan that killed three U.S. service members. The Treasury Department is currently investigating \$165 million in crypto transactions over the past three years that may be linked to Hamas, which receives about \$100 million a year from its benefactor Iran. Unless we take action, Iran will continue to use crypto to fund attacks against Israel.

To better the understand the scope of Iran's reliance on cryptomining and crypto to evade sanctions and finance terrorism and the steps the administration is taking to address these threats, we ask that you provide responses to the following questions by May 16, 2024:

- 1. How much revenue have cryptominers based in Iran earned from cryptomining since 2021?
- 2. How much of this revenue is believed to be collected by the Iranian government or actors affiliated with the Iranian government?

<sup>&</sup>lt;sup>15</sup> Reuters, "Crypto exchange Binance helped Iranian firms trade \$8 billion despite sanctions," Angus Berwick and Tom Wilson, November 7, 2023, <a href="https://www.reuters.com/business/finance/exclusive-crypto-exchange-binance-helped-iranian-firms-trade-8-billion-despite-2022-11-04/">https://www.reuters.com/business/finance/exclusive-crypto-exchange-binance-helped-iranian-firms-trade-8-billion-despite-2022-11-04/</a>.

<sup>&</sup>lt;sup>17</sup> U.S. Department of the Treasury, "Treasury Sanctions Actors Responsible for Malicious Cyber Activities on Critical Infrastructure," press release, February 2, 2024, <a href="https://home.treasury.gov/news/press-releases/jy0948">https://home.treasury.gov/news/press-releases/jy0948</a>.

CNBC, "Israel carries out limited strike against Iran, NBC News source says," Natasha Turak, April 19, 2024 <a href="https://www.cnbc.com/2024/04/19/israel-carries-out-limited-strike-against-iran-source-says-.html">https://www.cnbc.com/2024/04/19/israel-carries-out-limited-strike-against-iran-source-says-.html</a>;
 CNBC, "Iran has launched drone attacks at Israel, U.S. officials say," Rebecca Picciotto, April 13, 2024, <a href="https://www.cnbc.com/2024/04/13/iran-has-launched-drone-attacks-at-israel-idf-military-says.html">https://www.cnbc.com/2024/04/13/iran-has-launched-drone-attacks-at-israel-idf-military-says.html</a>.

CoinDesk, "Israel Seized \$1.7M in Crypto From Iranian Military and Hezbollah With Chainalysis' Aid," Amitoj Singh, June 28, 2023, <a href="https://www.coindesk.com/policy/2023/06/28/israel-seizes-millions-in-crypto-from-iranian-military-and-hezbollah-report/">https://www.coindesk.com/policy/2023/06/28/israel-seizes-millions-in-crypto-from-iranian-military-and-hezbollah-report/</a>; ABC, "US officially blames Iran-backed group for drone strike, clearing way for retaliation," Anne Flaherty, Chris Boccia, Shannon Crawford, January 31, 2024, <a href="https://abcnews.go.com/Politics/us-officially-blames-iran-backed-group-drone-strike/story?id=106834435">https://abcnews.go.com/Politics/us-officially-blames-iran-backed-group-drone-strike/story?id=106834435</a>.
 Wall Street Journal, "U.S. Probes Hamas's Use of Crypto Before Oct. 7," Ian Talley and Angus Berwick, March 13, 2024, <a href="https://www.wsj.com/finance/currencies/u-s-probes-hamas-use-of-crypto-before-oct-7-75b88153">https://www.wsj.com/finance/currencies/u-s-probes-hamas-use-of-crypto-before-oct-7-75b88153</a>.

- 3. How much money does the administration believe the Iranian government launders in cryptocurrency each year?
- 4. To what extent does Iran fund terrorist organizations, military actions, or weapons development through cryptocurrency?
- 5. Please describe the steps the administration is taking to address threats to U.S. national security posed by Iran's reliance on cryptomining and cryptocurrency more generally to earn revenue and bypass sanctions.

Sincerely,

Elizabeth Warren

United States Senator

Angus S. King, Jr. United States Senator