FRMO Corp.
2025 Shareholder Letter

Dear Fellow Shareholders,

You may recall that last year, FRMO's seminal event was the establishment of a public market for Horizon Kinetics Holding Corporation (HKHC) shares. This year, we experienced two such events, both occurring after the close of the 2025 fiscal year in May. The first was the establishment of a public market for Consensus Mining & Seigniorage Corporation (CMSG). The second was the New York Stock Exchange listing of Miami International Holdings, Inc. (MIAX).

These are milestones for two of FRMO's four significant focus areas: cryptocurrency, securities exchanges, asset management, and inflation hedges. Any of those four areas can be reflected in the large FRMO investment in Horizon Kinetics Hard Assets I. Presently, the most significant area of exposure for HK Hard Assets I remains inflation hedges. FRMO increased its investment in each of these four areas in 2025.

The cryptocurrency investments can be subdivided into several components: Consensus Mining; Winland Holdings Corporation (WELX); FRMO's mining operations; and holdings in various cryptocurrencies, either directly or indirectly through funds. The market values of the direct and indirect cryptocurrency holdings can be seen in the quarterly table provided for shareholders. These have become substantial investments, while the investment in Consensus Mining is still modest. Winland has become substantial, as FRMO now owns approximately 42%.

Both Consensus and Winland are cryptocurrency companies designed to be very different from a Bitcoin ETF. A cryptocurrency firm does not merely hold coins; it aims to increase the coins held per share. A Bitcoin ETF could not possibly undertake this function. Rather, it's the opposite: since Bitcoin itself produces no income and any ETF will have expenses, a Bitcoin ETF will need to sell coins to pay for those expenses. This problem is not solved by gathering more assets under management; under this circumstance, the expenses increase. The ETF must therefore sell coins to pay expenses, and, in the fullness of time, the coins held on a per-share basis will gradually and inexorably decrease.

A recent popular proposed solution to this problem is the Bitcoin treasury company. These firms sell shares at a premium to net asset value and purchase bitcoin with the proceeds. This is an antidilutive transaction when viewed from the perspective of existing shareholders, but for the new shareholders it is dilutive. Obviously, this strategy is sustainable only as long as investors are willing to purchase these shares and accept some degree of dilution. Once the treasury companies have exhausted the supply of this type of investor, it will be necessary to discover some other approach to the challenge of growing cryptocurrency per share.

In principle, cryptocurrency mining is a solution to this problem. In practice, the difficulty has been that the administrative expenses frequently exceed the coins earned in any given period. Thus, it is not uncommon that mining companies sell shares to partially fund administrative expenses.

A more serious problem is mining equipment obsolescence. Bitcoin has a feature known as the "halving." Every four years, the block reward is reduced by 50%, or one-half. As the halving

approaches, manufacturers typically introduce new, more productive Bitcoin mining equipment that is more efficient in terms of electric power usage. This can pose a risk to an aggressive purchaser of mining equipment in prior periods, as that equipment may be rendered obsolete. Many Bitcoin miners have experienced this circumstance. Their normal course of action is to dispose of old equipment and issue shares to purchase new, more efficient equipment.

Consensus Mining has largely avoided this problem though a gradualist approach to equipment purchases, as well as investments in scrypt mining. The latter entails the purchase of mining equipment to mine coins other than Bitcoin that do not have a halving. These machines therefore have a longer expected life. The devices also produce a higher return on invested capital. The cryptocurrency earned is rapidly sold for cash, which is used to purchase bitcoin. Thus, bitcoin is indirectly mined, and can be accumulated at a higher rate than simply by mining it directly.

As of June 30th, 2025, Consensus Mining owned approximately 334 bitcoin and 11,474 Litecoin. Additional coins have been accumulated following the end of the quarter. During the most recently completed Consensus Mining quarter, a total of 6.7 bitcoin were accumulated, as well as 665 Litecoin. This was accomplished with $4,201,357 of property and equipment, net of depreciation expense.

Since the June 30th, 2025 price of a bitcoin was about $110,500,[1] and the approximate Litecoin price was $88, $740,350 in bitcoin was created and $58,520 in Litecoin was created during the quarter—a total value of $798,870 on a $4.2 million investment base. It is important to emphasize that this was a quarterly return, and these figures do not include any appreciation of the existing cryptocurrency balances. This amounts to a quarterly pre-tax return of about 19%. There does not appear to be any other asset that can provide this magnitude of return. The Winland experience has been entirely consistent with the Consensus Mining experience.

As the mining procedures and protocols were in the process of development, it was necessary to determine whether the protocols were consistently repeatable. Moreover, it was necessary to develop protocols that would enable the company to generate cash from mining activities that could be used to replace mining equipment when needed, since all such equipment has a limited lifespan. The research and development activities, undertaken over a prolonged period, needed to address questions such as:

A) How can the useful lifespan of the equipment be extended?

B) How does one guard against the problem of sudden technological obsolescence?

C) How can one explore the limits of return on invested capital without using an enormous sum of capital?

D) Is it possible to extract capital from equipment once an investment has been made—and apply extracted capital in a superior manner?

[1] Incidentally, the reason for using an approximate quarter-end bitcoin price instead of a closing price, as in the case of a traditional common stock, is that Bitcoin trading is continuous and never stops. It also trades in literally thousands of venues and there are differences in pricing.

E) How can one fund capital equipment upgrades without ultimately exhausting the existing corporate capital?

This latter matter is rather important, inasmuch as a singular cryptocurrency mining problem has been that the various publicly traded mining enterprises have a frequent need to raise new capital to replenish previously exhausted capital. Yet another challenge was to create public markets for Winland and Consensus Mining without conducting a traditional dilutive equity offering.

The traditional approach in cryptocurrency mining is to build scale rapidly. This entails a commitment to large equipment purchases. The paradox is that one pathway to maximization of return on invested capital is to reduce the amount of capital that must be committed. In other words, if return on capital can be simplistically expressed in the formula $^{R}/_{C}$, the value of the expression is maximized if the value of C can be minimized. An important goal was to create an enterprise that required no further outside capital input.

In the case of Consensus Mining, this has been accomplished. As a corporation, Consensus has conducted only one equity capital raise, in 2021. On March 31st, 2022, Consensus held on its balance sheet $9,283,912 of capital equipment at carrying value, net of $1,815,737 of accumulated depreciation. On June 30th, 2025, the net carrying value of mining equipment was only $4,201,357.

In that same period, the value of the cryptocurrency assets increased from $7,508,178 to $36,890,729. Over 96% of this sum is bitcoin. The amount of cryptocurrency held has almost quintupled. The price of bitcoin has increased 2.43x from March 31st, 2022 to June 30th, 2025. In other words, had bitcoin remained at its spring 2022 price, the bitcoin held would still have increased by almost 2.5x.

In terms of initial funding, Winland did not issue one large offering of shares to fund its transition to a cryptocurrency business. As in the case of Consensus, Winland did require some equity capital funding for initial equipment purchases. For Winland, it proved practical to gradually raise very small amounts of capital from FRMO, since the equipment was to be purchased in a gradualistic manner similar to Consensus.

The primary difference between Consensus Mining and Winland is that the latter never amassed a large cash balance. Winland currently holds about $8 million of cryptocurrency. This is largely in the form of bitcoin, and the balance is mostly, but not entirely, Litecoin. Winland also has a legacy business: the production and sale of electronic sensors. Consensus Mining has no legacy business, as it was a “de novo” corporation at inception. Winland follows the same cryptocurrency mining protocols as Consensus.

As to securities exchanges, the most important development was the initial public offering of MIAX this August. It will be recalled that MIAX acquired two large FRMO exchange investments: the Minneapolis Grain Exchange and the Bermuda Stock Exchange. MIAX has been a very successful investment. It is owned by FRMO as well as Horizon Kinetics. The Horizon Kinetics holding, as of the most recent 13-D filing, consists of 8,679,747 shares, representing a 10.7% interest in MIAX. The company only received its first exchange license in 2012. Per the MIAX press release of August 7th, multi-listed options volume for just the month of July 2025 reached

189.4 million contracts, a 37% increase over the same month one year ago. This is a 16.7% share of the entire options market.

The Minneapolis Grain Exchange has been rebranded as the MIAX Futures Exchange. MIAX now has an equities exchange known as MIAX Pearl Equities that, in the month of July 2025, traded 4.2 billion shares.

MIAX is extraordinarily well-managed and has been very proficient in the evolution of its technology. In general, exchanges have the attribute that incremental increases in volume, whether through existing or new trading products, create far more revenue than the expenses needed to sustain the additional activity. Exchanges typically exhibit sustainably high returns on shareholders' equity. We are extremely pleased with our MIAX investment.

The other important exchange investment that FRMO and Horizon Kinetics hold in common is the privately held Canadian Securities Exchange. It is in the process of trying to acquire the National Stock Exchange of Australia in an all-cash transaction. As a generalization, mergers between exchanges tend to be highly accretive. This is because the combined transaction volume of two exchanges can be placed on one computer system, thereby eliminating one set of expenses, but nevertheless vastly increasing the volume—and therefore the revenue—of the acquiring company.

This particular transaction, if successfully completed, will transform the Canadian Securities Exchange into a multi-geography exchange. This is important because it opens the possibility of extending the trading day, which entails the opportunity for revenue increases with no significant increase in expenses. As in the case of MIAX, the Canadian Securities Exchange has made a great deal of progress in not very many years.

Our significant investment in the asset management field remains Horizon Kinetics, which has been steadily growing its ETF portfolio. Historically, an important part of the Horizon business was mutual funds. The mutual fund, in its traditional sense, has many operational disadvantages relative to an exchange traded fund (ETF). A very important difference is that ETFs tend to have a far lower cost of operation. In addition, the ETF is far more tax efficient. Until rather recently, ETFs were reserved for index fund use and there were no practical means of launching actively managed ETFs.

This began to change, with new regulatory approvals, only several years ago. It is now possible to create an actively managed ETF, and Horizon Kinetics has created a number of them. The most successful thus far has been the Horizon Kinetics Inflation Beneficiaries ETF (INFL). Although many of the fund's holdings would be beneficiaries of broadly higher commodity prices, it has been very successful despite the absence of *generalized* commodity price inflation, in part because of instances of significant *localized* commodity price inflation.

The most important such example has been the increase in gold and silver prices. The INFL fund inception date is January 12th, 2021. At that time, gold was trading at approximately $1,800 per ounce. At the time of this writing, gold is at about $3,639, essentially doubling. In addition, most of this price increase is relatively recent. For example, on October 6th, 2023, gold was trading at approximately $1,845. Thus, that doubling has essentially happened in less than two years. The silver price increase has been equally dramatic. At fund inception, silver was almost $25 per ounce,

and in early February 2024, it had declined to less than $23. At the time of this writing, the price of silver has increased to $41.51.

An important factor relating to the price increase is the inability to materially increase production in relation to higher demand. Despite the gold *price* increase, global *production* remains at the 2019 level. According to Statista, gold production worldwide was 3,300 metric tonnes in 2019. In 2024, the last full year for which there is data, production was still 3,300 tonnes. The recent global gold price phenomenon is a very complex subject that resists a simple explanation. However, one important factor is the general inability of small gold mining companies to raise capital for exploration.

Investor exposure to gold, though, at least through indexation, which is now the dominant investment strategy, can fairly be described as de minimis. There is only one gold miner in the S&P 500 Index: Newmont Corporation (NEM), the 123rd-largest position in the S&P 500. Despite a roughly $80 billion stock market value, it has a mere 15-basis point index weight. At this scale, it is statistically irrelevant in the index. By market capitalization, the next-largest gold mining company is Agnico Eagle Mines (AEM). As a Canadian company, it is ineligible for S&P 500 inclusion.

This is the case with most gold mining companies. Most are of foreign domicile. Such firms are eligible for inclusion in a global index such as MSCI ACWI. However, in this case, the potential weight of a gold mining company is limited by the index geographical weight. Canada has only a 2.92% index weight. Agnico Eagle Mines is only an 8-basis-point weight in MSCI ACWI, while Newmont is only a 9-basis-point weight.

Commodity extraction is highly capital intensive, and it is exceedingly difficult for any commodity producer to attract significant equity capital. This has been made even more difficult by the need to raise fantastic amounts of capital for data centers and artificial intelligence projects. Moreover, to the degree that energy, specifically natural gas, is needed for the expansion and development of artificial intelligence and its electric power requirements, the equity capital has been raised for energy midstream projects, such as pipelines to bring more natural gas to electric utility plants. Yet, as of this writing, there are no scheduled energy sector initial public offerings on the IPO calendar. There has been very little equity capital raised by energy companies for years.

Similar statements can be made for all the extractive industries globally. Eventually, the other extractive industries will experience the same phenomena as gold and silver mining. Therefore, the prices of the commodities will increase—perhaps very dramatically, as in the case of gold and silver—with little or no equity capital raised to address the supply deficiency.

This is one of the reasons that both FRMO and Horizon Kinetics have maintained a high exposure to commodity producers within the corporate capital allocation. If one were to study the last 100 IPOs in the U.S. up to the date of this writing, one would find that only four were related to the energy industry. These four raised a total of just $64.57 million in equity capital. This is quite extraordinary, given the fact that energy is the most capital-intensive industry.

It seems likely that the energy industry will become yet more capital intensive because of the electric power requirements of artificial intelligence (AI). According to ChatGPT, a single GPT query consumes 15 times more energy than a typical Google query.

The "GPT" in ChatGPT stands for Generative Pre-Trained Transformer. The query response is made possible by drawing data from the internet. It is unclear exactly how much data exists on the internet. Some experts claim that 463 exabytes of data are created daily. If the daily data creation figure is correct, this means that slightly over two days is required to create a zettabyte. A zettabyte contains 1,000 exabytes, or 1 trillion gigabytes. A gigabyte is a data file size that some people encounter, and therefore have at least a general understanding of its size.

It is important to understand that any electrical device that is in standby mode will consume electric power, even if switched off. For instance, a conventional television will consume about 300 watts per hour when on, and about 1.3 watts per hour even when off. This small amount of power will be consumed as long as the device is connected to the electric outlet. The same sort of figures are true for microwave ovens. There are digital clocks with memory mode that must be maintained. Similarly, a cell phone charger will draw 0.1 to 0.5 watts when not in use, as long as the device remains connected to an electric outlet.

A data center cannot cease drawing power, since a query might be received at any time. The data is manipulated by means of GPUs (Graphics Processing Units). A GPU is composed of billions of transistors. The logic chips are called FETs (Field Effect Transistors). The basic unit of time in these devices is called the clock cycle. This is the amount of time required for a complete operation of gathering, decoding, executing, and storing data elements. In every clock cycle, literally billions of gate capacitors must be charged and discharged. This is because the logic gate has only binary conditions: it is either on or off. Each operation of gates requires additional power.

To manipulate more data, more gates are required, and this requires more power. This power is typically generated using fossil fuels. There is a nearly universal consensus that the demand for fossil fuels will decrease. The available figures suggest a different reality.

Natural Gas Consumption Worldwide (2018-2024)

Year	Amount Consumed
	(in bill. cubic meters)
2018	3,831.7
2019	3,905.3
2020	3,870.4
2021	4,022.6
2022	4,006.0
2023	4,015.1
2024	4,127.8

Source: Statista

Of course, the assumption that electricity demand from data centers will increase fossil fuel demand may well be false. It is for this reason that our inflation hedges are royalty companies. A royalty company receives increased revenue if production rises and also if the price of the

commodity at the base of the royalty rises. However, the royalty company it is not responsible for capital expenditures.

An example of a pedestrian royalty in a non-inflationary environment is Mesabi Trust (MSB), which is an investment held in both the FRMO and Horizon capital accounts. Mesabi is an iron ore royalty trust. It has no responsibility for capital expenditures. At the time of this writing, the price of iron ore is $104.49 per ton. Ten years ago, it was $56.57. The rate of price increase has been 6.33% per annum. Ten years ago, for the quarter ended April 2015—which was, by the conditions prevalent at the time, a rather good quarter—Mesabi produced net income of roughly $940,000. It is the practice of the Trust to generally distribute the net income to its shareholders.

More recently, in the quarter ended April 2025, which might be argued was a below-average quarter, the Trust produced net income of roughly $3,630,000. The current share price is approximately double the 2015 share price. The capital appreciation alone amounts to 7.18% per annum, exclusive of very significant distributions. In the past five years alone, Mesabi Trust has distributed almost $200 million of dividend income that is tax advantaged. The market capitalization of the company is currently $409 million. FRMO and Horizon also owns interests in other similarly prolific royalty companies, which are accumulated gradually.

Another gradual investment practice worthy of mention is the FRMO short position in path-dependent ETFs. As of May 31st, 2025, the short position had a value of $11,058,971 at cost. At market value on the same date, the balance sheet amount was $1,307,495. Over the years, this has been a significant source of cash to FRMO, likewise accumulated in a gradualist fashion.

As a consequence of the gradualist approach, FRMO's shareholders' equity on May 31st, 2025 was $352.98 million, versus $102.16 million on May 31st, 2015. This is a compound annual rate of growth of 13.2%. It might be noted that, in 2015, 37.3% of total corporate assets were in cash. That cash remains on the balance sheet, and the growth was accomplished without use of the available cash balances.

As FRMO continues to increase its cryptocurrency mining—largely, but not entirely, by means of further investment in Winland—the company will assume more of the character of a conventional operating company. As noted earlier, FRMO now owns almost 43% of Winland Holdings.

Significant expansion opportunities exist in cryptocurrency. FRMO now has the balance sheet capacity to, within reason, simultaneously fund a variety of new projects. FRMO holds more than $43.8 million of balance sheet cash and only owes $622,000. Total balance sheet assets now exceed $700 million, seven times greater than a decade ago. Despite accelerating our cryptocurrency activities, balance sheet cash is more than 10% higher than at the end of fiscal 2024.

We wish to thank all of our shareholders for their continued support over the years. If this shareholder letter does not address all matters of interest, please do not hesitate to contact us with your questions.

Murray Stahl
Chairman and CEO

Steven Bregman
President and CFO

FRMO Cryptocurrency & TPL Holdings Summary

Data As Of 5/31/2025

	Held Directly[1]	Held Indirectly Through Public and Private Companies [2]
Grayscale Bitcoin Trust (GBTC) shares	9,168	637,454
Grayscale Bitcoin Mini Trust (BTC)	2,414	130,233
Grayscale Ethereum Classic Trust (ETCG) shares	233	4,875
Grayscale Bitcoin Cash Trust (BCHG) shares	252	22,125
Grayscale Litecoin Trust (LTCN) shares	43	7,728
Grayscale Zcash Trust (ZCSH) shares		670
Bitcoin (BTC)	158.96	32.08
Litecoin (LTC)	2,115.62	6,233.40
Ethereum (ETH)	34.97	-
Ethereum Classic (ETC)	662.69	3.82
Bitcoin Cash (BCH)	67.22	1,376.61
Zcash (ZEC)	61.95	21.73
Bitcoin Gold (BTG)	-	243.04
Dogecoin (DOGE)	-	2,098.07
Winland Holdings Corp (WELX)	n/a	2,328.75
Bitcoin Tracker One (COINXBT SS) shares	-	1,594
iSHARES Bitcoin Trust (IBIT) shares	120	253

Texas Pacific Land Corp.	29,514	163,599

Important Notes regarding as of Dates

[1]Includes holdings of FRMO Corp. and Fromex Equity Corp.

[2]This data has been compiled in good faith by FRMO Corp. However, you should be aware that this information may be incomplete, may contain errors or may have become out of date. FRMO reserves the right to add, modify or delete any information at any time.