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Investments

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Mackenzie Greenchip: 2024 recap and 2025 outlook

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The Mackenzie Greenchip Team did a lot of very good things last year. We added talent to our team, integrated improved processes and systems, visited more companies in more parts of the world and modeled more securities than ever before. Yet it was clear in 2024 that several of our investments would require a degree of patience. Our solar and power management semiconductor holdings were at the top of that list. That said, our worst performing holdings in any given year often turn into our best performers the next. This was the case for Siemens Energy, which was up over 320% in 2024, after being down more than 30% in 2023. Mostly, though, it felt like all the work, care and experience employed last year was buffeted by forces beyond our control.

Sticky inflation (which we predicted) and affordability issues continued to devastate the economic realities of the masses. While there is a sound argument that investing in a more sustainable energy economy (and less money printing) is an essential part of addressing long-term affordability, with so many struggling, it was a tougher sell in 2024. The French populist "gilet jaunes" movement made the point that "the elites are talking about the end of the world; we are worried about the end of the month". Environmental concerns had become an easy target for populists. Part of this is on the investment industry, which was not always honest about the upfront costs of the energy transition. That said, populist governments are rarely upfront that energy of *all types* will cost more in the future. Nor do they mention who ecological destruction hurts most. Better, broader and more honest communication is required by all.

What was most disheartening for us, as value managers, were the financial imbalances that continued to build below the 49th parallel. The United States weaponized its currency, which, despite historic debt and deficits, soared. So too did an increasingly concentrated group of outrageously overvalued US equities. For a country that is, at best, 25% of global GDP, the US now accounts for a whopping 72% of the MSCI World Index. Over the past decade, total return for the MSCI ACWI Ex-US Index was 61% versus 229% for the MSCI USA. The "Magnificent Seven"[1] now accounts for more than one third of the S&P 500 Index by market cap. The only one of these qualifying for our investment universe, Tesla, was trading at a staggering 150 times earnings by the end of the year.

Investing in wildly overvalued companies is always a waste of capital but companies like Microsoft and Apple are at least producing real products and services. In our view, a much darker phenomenon can be found below the mega caps. Take financial products such as "Fartcoin" cryptocurrency — which recently carried a market cap of $1.3 billion USD. To put this in perspective, Fartcoin is now worth more than about 1,000 companies in the Russel 3000 Index, the largest

3,000 listed companies in the US. We could share the outrageous valuations of other crypto and AI companies that in our opinion are probably worth zero dollars. The sadness is not just that this insanity eventually leads to capital evisceration, but that so many of these "technologies" drain gobsmacking amounts of energy. All the while, we have known the electricity system is struggling, at times, to supply productive businesses with power and keep our families warm. Worse still, the valuation distortion allows crypto and AI businesses to pay almost any price for electricity — as long as they get it *now*. It means turning back on or developing more old generation technologies at the expense of renewables. This is not a uniquely American issue, but it mostly is!

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Greenchip's perspective is that better environmental businesses, with better valuation, can be found outside the United States. We currently have less than 20% of our portfolio allocated to the US and have never exceeded 25%: a benchmark agnosticism we wear proudly. However, our steadfastness to value and being underweight the US has significantly affected relative performance in the past few years.

It was always a long shot that the US could catch up to other manufacturing leaders, particularly China. According to the IEA, the US only accounts for 15% of global clean energy investment. Yet they were starting to show signs of embracing the economic possibilities of our sectors. Momentum, however, seemed dashed on November 5, when "Drill, baby drill" rhetoric overwhelmed sustainable investment sentiment. Worse still, global supply chains, already complicated, got a lot more so on November 5. Geopolitical powers were no longer bifurcating between the West and the Rest, it clearly has become the "United States vs. everyone else". Because energy transition equipment and infrastructure require access to metals, materials and production clusters that are not distributed evenly around the world, tariffs will become an increasingly significant headwind for our sectors.

So, as inflation and populism percolate, deglobalization accelerates, and sentiment turns back to fossil fuels, why would anyone allocate to a strategy like ours? Here are three reasons:

1. **The forces driving the energy transition are powerful** and will eventually overcome many of the aforementioned challenges. Never in history have so many consumed so much, on a planet that is so fully constrained by its own energy and ecological limitations.
2. **Diversification** away from concentrated and frothy US equity markets. Our best guess is that this euphoric period of US investment will be remembered as some modernized version of Dutch tulip mania, the roaring 20s and the dot-com era, all rolled up into the greatest bubble — *ever*!
3. **Overly negative sentiment has created very attractive valuations,** with the weighted average holdings in the fund now trading at a 30% discount to our calculation of intrinsic value — the highest discount since inception — we see lots of upside. There are currently 41 holdings in the portfolio. Here are thoughts on some of these as we head into 2025:
   - We continue to see tremendous demand for electricity grid equipment. Grid capex is a $300 billion annual business that we believe will double by the end of the decade. Part of growth is related to AI datacenter requirements, but we've believed for years that existing grid investment was insufficient to support new renewable generation. Transformer and other power equipment providers have benefited, like Siemens Energy (currently trading at less than half the valuation of its US doppelganger GE Vernova, which we do not hold) and Hitachi, while high voltage cable manufacturer, Nexans has orders as far as the eye can see. US engineering, procurement and construction (EPC) leader MasTec, saw its stock appreciate over 90% in 2024 — and we still see value. And we're getting close on other engineering firms that will benefit from grid investment.

- Last year we were encouraged to see our large, diversified utility holdings reallocate capital budgets from renewable projects to grid development. We believe holdings like Enel, EDP, SSE, Eversource and Eletrobras will realize better risk adjusted returns from grid investment today while enabling more renewable opportunities for the future. That said, our utility stocks were relatively weak in 2024, while fundamentals were generally strong.
- Overall, renewable installations did increase in 2024. However, wind and solar are maturing businesses and growth rates are likely to slow. Meanwhile, fundamentals have deteriorated on manufacturing overcapacity. As such, investors needed to pick their spots. We were happy to have avoided the offshore wind euphoria of the early decade, instead backing Nordex, a German turbine manufacturer focused exclusively on mid-sized onshore equipment, and one of the few to remain profitable in 2024. As mentioned earlier, our solar holdings were the biggest drag on portfolio performance last year. Their challenges were partly related to increasing trade restrictions, but we also believe industry consolidation is needed. We feel Jinko Solar (the largest module manufacturer), Canadian Solar (a mid-sized manufacturer with growing solar plus storage and renewable development businesses) and Daqo New Energy (the lowest-cost, highest quality polysilicon manufacturer in the world) all have strong balance sheets (staying power) and are currently priced for significant upside. But patience is required.
- Grid-scale storage may be the fastest growing energy technology. Prices for lithium batteries continue to decline precipitously, with some chemistries falling below the $50 per kWh mark, an unimaginable price point only a few years ago. For some time, battery manufacturers came with overly inflated equity prices, leaving investors largely disappointed. We have had limited exposure through companies like Saft and more recently TDK which has some interesting but rarely mentioned partnerships with CATL (the largest battery manufacturer in the world), and through the aforementioned storage business of Canadian Solar. We've been researching, visiting, modeling, and may be getting closer on new entry points.
- We have largely avoided trying to pick an EV winner. We believe in the long-term growth outlook; however, competition is fierce, margins are razor thin or negative, and industry fundamentals look terrible to us. For some time, we have also believed hybrids and plug-in-hybrids will curb full battery EV adoption. This, in turn, will slow demand for high-density batteries, but also the materials required to build them. Instead, we have invested in the electronic componentry that make electrification possible. Companies like ST Micro, Infineon and Rohm. While this sector is currently in a down-cycle of inventory clearance, the long-term outlook is excellent and again valuations (and balance sheets) are extremely attractive.
- Electric metals are another area we leaned into last year. We built positions in copper miners like Hudbay, Capstone and First Quantum as the price of copper fell from its peak in early 2024. At $4.20 a pound, copper costs less than butter. The world currently produces about 25 million tons of copper each year, we'll need 50 million! We also hold Neo Performance Materials (rare earths) and Australian scrap recycler Sims.
- It is more difficult to find a short and simple narrative for our holdings in agriculture, mass transit, water, building materials or the many interesting divisions of our diversified industrials, but given more space we would gladly share our enthusiasm for these positions too.

One final reason…the Mackenzie Greenchip Team

While Greg and John have been focused exclusively on environmental sectors for almost 20 years, our teams' cumulative sector knowledge far exceeds that of the "founders". Johnathan Prestwich joined us four years ago with a mechanical engineering degree from McMaster. He has not only become a very good analyst but has added greatly to the systems, tools and structure we employ. Rohit Bhalgat joined us a year and a half ago. He brought an engineering degree from Pune University in India, and a Master of Finance from Texas A&M. He also brings almost a decade of experience as both a utilities and metals analyst at two of the largest banks in the world. Finally, we were thrilled that Ileana Chintea joined as a full-time analyst following two summers with us and completing her business degree at Queen's University. We should mention that Mackenzie has over 150 investment professionals, some of whom we interact with frequently, particularly on the Resource, Fixed Income and Sustainability teams.

To summarize, despite a relatively difficult year in 2024, the energy transition isn't going away. Our portfolio holdings are trading at historically attractive valuations. The portfolio offers great diversification benefits and our team is more experienced and robust than ever.

[1] The "Magnificent Seven" stocks: Alphabet, Amazon, Apple, Meta Platforms, Microsoft, NVIDIA and Tesla.

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