

Climate and Environmental, Social, Governance developments

TACKLING CLIMATE CHANGE IN THE U.S JUST GOT REAL

After years of dragging its heels on tackling the climate crisis, the United States recently passed the most important climate laws the country has ever seen. The Inflation Reduction Act was signed into law in August 2022, and with this, sweeping changes were made to climate, energy, and health laws.

Approximately US\$370 billion will be spent by the government on curbing greenhouse gas emissions and supporting green technology over the next ten years. Cut to the chase - these policies are expected to reduce U.S emissions by roughly 40% (below 2005 levels) by 2030.

Previously, President Biden had pledged to slash emissions by at least 50% by 2030, though in reality, the U.S was falling well short of that, probably only a 30% cut in emissions. So, the new laws get the U.S closer to where it needs to be

The U.S now stands a chance of moving closer to limiting global warming to the crucial 1.5 C (1.5- degree Celsius) temperature, which is widely agreed to be the temperature threshold where severe climate disruptions might be staved off around the world. In April, the UN Intergovernmental Panel on Climate Change (IPCC) warned 1.5 C was looking remote, and that heating of nearly 3 C remained the likeliest scenario.

These new climate change laws in the U.S are a game changer for sparking faster growth in clean energy industries. We expect to see a massive increase in climate change related innovation and a decrease in the cost of clean technologies, through the use of tax credits, which will help to boost demand. Technologies that are still in their early days, such as green hydrogen and carbon capture, will likely become commercially viable sooner rather than later. With this new legislation, the transition to renewables has been given a much-needed boost, while also placing the U.S as the climate change champion of the world.

At Aurora Capital, most of our portfolios have an exposure to companies that are transitioning to clean energy. We note that the Growth Fund doesn't have a specific exposure to investments that are in the process of transitioning to clean energy.

INVESTING IN SUSTAINABLE FOREST MANAGEMENT

The climate is changing, and the primary cause of this is rising levels of greenhouse gases in our atmosphere, of which carbon dioxide is the major culprit. There are two sides to this climate change battle; one and by far the most important, is to reduce the amount of carbon being emitted and two, to capture carbon from the atmosphere.

There are several emerging technologies being developed to capture carbon, but the simplest way to absorb it is by planting a tree. As a tree grows through photosynthesis, carbon is absorbed from the atmosphere, and the great thing is that when a tree is cut down to be used as building material this carbon remains stored. This is known as carbon sequestration, which is a fancy term you hear a lot in discussions about climate-change. Carbon sequestration is the process of capturing, securing and storing carbon dioxide from the atmosphere. Growing

trees captures carbon from the atmosphere and stores it as wood. We believe sustainable forestry is an important piece of the climate change puzzle, and hence support this through our investment in Sustainable Timber and Forestry.

Case study - Rayonier

As an example, we are invested in a company called Rayonier, which is a global forestry business with forest land in the US as well as New Zealand. The Aurora Future Focused Fund has an exposure to Rayonier via the Wood ETF. To get an idea of Raynonier's positive climate impact, in 2021, they planted 34.8 million seedlings, adding to the carbon absorption impact of their existing forests. In that same year it was estimated that Rayonier's forests sequestered over 14.6 million metric tonnes of CO2e, also known as carbon dioxide equivalent emissions, while their business operations contributed to just under 350 thousand metric tonnes of CO2e emissions: a massive net negative result.

CO2e is a metric measure that is used to compare emissions from various greenhouse gases based on their global warming potential by converting them to the equivalent amount of carbon dioxide (CO2). While CO2 emissions are the largest contributor to



global warming, there are other greenhouse gases contributing to global warming, including: methane, nitrous oxide, and hydrofluorocarbons. It's important to include the warming impact of all the other gases, and that's what the CO2e measure does. It converts the range of different gases into one single metric.

To put the 14.6 million of CO2e sequestered into perspective; this number is equivalent to taking more than 3.1 million cars off the road. After Rayonier's trees are harvested, they replant their forests and start the process of growing trees and sequestering carbon all over again. Even after the trees are harvested, carbon can remain stored for decades within the end-use products made from such trees, including lumber, plywood, engineered wood products.

Using the EMMI carbon analytics tool on Rayonier, the company has a Global Carbon Efficiency Rating (GCER) of 96/100 and its future implied carbon trajectory is net-zero compatible. This means that Rayonier has low carbon risk and is well-positioned to operate in a future low carbon world.

By providing capital to companies like Rayonier, Aurora Capital is supporting the growth of forestry, which in turn helps to offset carbon emissions. We note that the Aurora Growth Fund doesn't have an exposure to Rayonier. However, we have included this information in your Quarterly Update as we believe that these types of investments are important in improving the health of the planet. We also hope you may be interested to learn about investments in other portfolios that we manage at Aurora Capital.

Investment markets

WHAT HAS DRIVEN INVESTMENT MARKETS?

Investment markets have had a topsy-turvy kind of a year. Most of the key asset classes ended the September quarter and the calendar year-to-date with negative returns. Behind this weakness were worries about:

- sharply rising inflation.
- how high official interest rates will need to be raised, in order to lower inflation.
- the risk of a deep economic recession, versus a short and shallow one.
- how long company profits would hold up in the face of weaker economic growth.

The third point is worthy of extra explanation. Changes to official interest rates are usually made in small and gradual increments. However, in this cycle, central banks around the world, led by N.Z and the U.S, have made large interest rate increases over a short period of time, increasing the risk of a deeper recession.

Adding to market jitters, the U.S central bank recently stated that it was prepared to keep raising rates to tame the inflation beast, even if that meant "some pain to households and businesses." In the U.K, a shocking minibudget caused such a sharp increase in bond yields that the Bank of England was forced to intervene in the bond market to help restore its normal function. The ongoing war in Ukraine and Russia also continued to add to market nerves. Then, in early October, the N.Z central bank raised rates yet again, to 3.5%, the highest level in more than 7 years. More interest rate increases around the world are expected in coming months.

These are interesting times. The four themes spooking investment markets in 2022 look set to continue a while longer. We expect market volatility will continue as these themes play out.

How your money is changing the world

Financial performance returns

AURORA GROWTH FUND AS AT 30 SEPTEMBER 2022

	RETURNS		
	3 month %	6 month %	1year%
Strategy (after fees, before taxes)	-0.31	-11.79	-16.52
Objective: CPI + 4%*	n/a	n/a	13.61**

^{*} CPI is the headline Consumer Price Index

The negative returns recorded by the portfolio over 3 months, 6 months and 1 year were driven by broad-based market declines across equities, fixed interest (bonds), and listed property. One of the few asset classes to

^{**} As at 30 September 2022

provide positive returns, amidst all this weakness, has been good old cash. After languishing for years, cash yields have risen and have offered some safety in the Aurora Growth Fund.

Bonds, which are usually expected to provide safety during periods when equity markets are weak, have failed to do so. It's fair to say that 2022 has been an unusual period for markets, as very few traditional 'safe-haven' assets have provided a positive return. Importantly, however, for the bond portion of the portfolio, investors who stay invested will receive the return of their money when each bond matures (assuming no defaults). However, for those who sell before maturity, the fall in bond prices will translate to losses. We recently wrote a note explaining how this works, and if you are interested, please get in touch, and we'll be happy to send it to you.

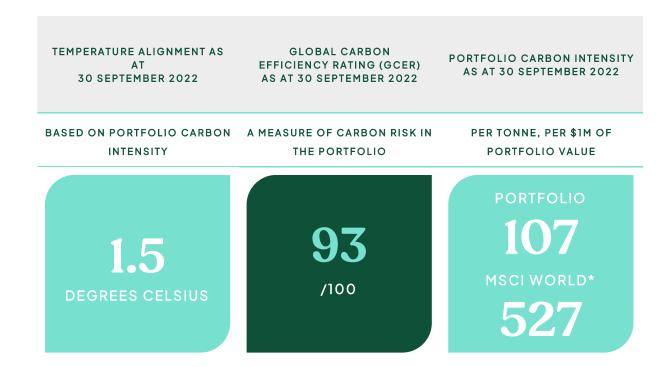
Stick to your strategy

While negative returns can be uncomfortable, selling or switching to another strategy during periods of market weakness effectively results in crystalising losses, and makes it much harder to 'make back' negative returns. When markets rebound, they tend to do so quickly and sharply, and timing the absolute bottom (or top) of the market is rarely, if ever, possible. For those who may be tempted to sit on the side lines in cash and wait for investment uncertainty to pass, we have news: the risk of missing out on the best performing days of a market rebound is high.

As you are invested in the Aurora Growth Fund, we encourage you to remember that this strategy is intended for those with a long-term investment timeframe. Staying invested is key. Our analysis shows that a market correction may actually improve your long-term wealth if you have many years ahead of you before you retire, provided you remain invested in your strategy and continue to make regular contributions.

CLIMATE SUSTAINABILITY MEASURES OF PERFORMANCE

We focus on measures of carbon risk in the portfolio because the majority of climate risk is carbon risk. We use independent third-party sources to analyse the portfolio's carbon sustainability characteristics.



WHAT THIS MEANS FOR YOU?

The Temperature Alignment is based on the portfolio's carbon intensity. It captures the temperature scenario that the portfolio is currently in line with, based on its current carbon footprint. It's currently applied only on the equity component of the portfolio.

The temperature alignment is calculated from its carbon emissions and the current carbon budgets associated with three globally acknowledged climate scenarios: 1.5°C, 2.0°C, and 4.0°C. These scenarios have been adopted by international climate science bodies.

The Growth Fund has a temperature alignment of 1.5°C, which is the best of the climate scenarios.

Source: EMMI

WHAT THIS MEANS FOR YOU

The higher the GCER, the lower the carbon exposure of a company or portfolio, and the lower the financial risk of transitioning to a future net zero emissions world.

The GCER Rating is a measure of a companies' carbon efficiency and alignment with the future transition to a carbon-constrained economy.

This metric enables us to quantify underlying carbon risk in our investments.

The current GCER Rating of 93/100 suggests a low carbon exposure.

Source: EMMI

WHAT THIS MEANS FOR YOU

Portfolio Carbon Intensity is a measure of carbon dioxide equivalents emitted by a portfolio per \$1 million of assets under management. It's currently applied only on the equity component of the portfolio.

The metric allows us to look directly at the carbon impact of the equity part of the portfolio and to compare that with market indexes, such as the MSCI World*, which is a global equity index.

The Growth Fund currently has a much lower carbon intensity than the MSCI World*.

* MSCI World ETF

Source: EMMI, BlackRock iShares

Questions?

If you have questions about this report, please contact your adviser who will be happy to help.

We welcome all feedback and would like to hear from you if you have any questions or concerns about your investment, as this can form the basis of future articles and reports that we write. We invite you to ask us questions through our website: www.aurora.co.nz, and through your adviser.

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