

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.

We note that the Aurora Liquidity Fund doesn't have exposure to equities or specifically invest in assets that are transitioning to clean energy. We included this information in your Quarterly Update as most of the Aurora Capital portfolios do have exposure to investments that are transitioning to clean energy, and we are excited by the investment opportunity created by the push towards decarbonisation in the U.S.

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.

We note that the Aurora Liquidity Fund doesn't have exposure to equities or investments in sustainable forestry, or to Rayonier, which is discussed below. 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.

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. The Aurora Future Focused Fund has an exposure to Rayonier via the Wood ETF. We believe that through investment in sustainable forestry, we are contributing towards solving the world's climate challenges.

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 the official cash rate 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.

One of the few asset classes to provide positive returns, amidst all this weakness, has been good old cash. After languishing for years, cash yields have risen.

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.

Financial performance returns

AURORA LIQUIDITY FUND AS AT 30 SEPTEMBER 2022

	RETURNS		
	3 month %	6 month %	1 year %
Strategy (after fees, before taxes)	0.64	-	-
Benchmark**	0.71	1.11	1.52

^{**} Benchmark is the Bloomberg NZ Bond Bank Bill Index As at 30 September 2022

Positive returns for the quarter were driven by rising yields. With the official cash rate being raised by the N.Z central bank to its highest level in more than 7 years, yields have been rising for the past year. Further increases to the N.Z cash rate are widely expected, which should be positive for yields.

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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