

Climate and Environmental, Social, Governance developments

ELECTRIC VEHICLE SALES ARE MOVIN' ON UP

The electric vehicle (EV) market is booming. In 2022, sales of passenger EV's rose by more than 60%, globally. According to the latest annual Electrical Vehicle Outlook report from BloombergNEF, EV sales rose in every major market: by 100% in Japan, almost 100% in China, 90% in Australia, 50% in the US and 17% in Europe. China is the single largest market for EVs and is also a big exporter of EVs.

That said, passenger EV's still have a lot of catching up to do. Last year, EV's represented only 1.7% passenger vehicle kilometres driven. It's expected that by 2050, more than 75% of all driving will be in EV's. That's a trend we can support!

For those of us who are riddled with EV battery anxiety, take heart. There's been a massive increase in the supply of EVs that can travel at least 400 kilometres without needing a charge. Five years ago, there were only nine long-range EV options available, globally. Today, there are more than 200, and the majority of these come from China automakers.

Currently, long range EV's are more expensive to buy than combustion engine passenger cars, making EVs unattainable for a lot of people. Looking ahead, though, we can expect automakers to make a push into a lower-priced and lower-range EV market. That will be a great step forward in helping people to switch from traditional combustion vehicles to EVs.

EVs can help in the fight against climate change because they emit significantly lower amounts of greenhouse gases compared with traditional gas and diesel-powered combustion engine vehicles. On the road, pure EVs don't emit carbon, however, EV batteries need to be charged at some point and if some of the electricity grid is powered by fossil fuels, the process is emitting carbon. It's argued that smart charging – or charging during off-peak times when renewable energy is more likely to be the source of power – can alleviate some of the carbon impact. It's also known that the EV batteries are carbon intensive to produce. It's estimated that the lithium-ion batteries used to power EVs is the biggest source of embedded emissions for both electric cars and trucks, and account for approximately 40 to 60 percent of total production emissions*. Looking ahead, we are optimistic that carbon emissions from battery production will decline.

While carbon emissions are created in the production of EV batteries and to a much lesser extent, in charging the batteries, total EV emissions are still significantly lower than for combustion engine vehicles. We expect that a combination of tighter regulations, technological improvements and action across the entire battery supply chain can help to reduce the embedded emissions from EV battery production in coming years. At Aurora Capital, we recognise that change is a process. We believe that the increased use of EVs is a positive shift towards a lower carbon world.

^{*}McKinseys & Company, 'The race to decarbonize electric-vehicle batteries,' 2023.

Investment markets

WHAT HAS DRIVEN INVESTMENT MARKETS?

As we always say, it's impossible to predict when markets will bounce, but when they do, the timing can sometimes be unexpected. It's a good reason to stay invested and stick to your strategy, especially when it feels uncomfortable to do so during those times when markets are volatile and falling.

Take last year. Back in September 2022, investment markets were in the doldrums and dealing with high levels of uncertainty about the economic backdrop: the risk of economic recession, rising inflation, and how much further interest rates would have to be raised. Reflecting this poor sentiment, 1-year returns for the key asset classes were negative (except for cash), with equities being the hardest hit. Fast forward to the end of the June quarter 2023 and 1-year returns for most of the key asset classes are back in the black, or close to it, with global equities leading the charge higher, lifted by double digit gains from the U.S equity market. Within U.S equities, the technology sector dominated, with staggering gains for the quarter and half year, fuelled by optimism about artificial intelligence and the outlook for chipmaking companies.

So what exactly has changed? Well, we are nearing the end of the rate hike cycle, at least in the U.S. But that aside, it's fair to say that a whole lot of uncertainty remains about whether the U.S economy is headed for a mild or hard recession hit this year (as interest rates bite), and just how long rates will remain at these higher levels. Economic and consumer activity has been surprisingly resilient given the rapid increase in rates, in part due to employment staying strong. Company profitability, in general, has held up well, which has supported continued high levels of employment. However, it does take time for higher rates to hit spending and economic activity, and this long lag time most likely means that the negative impact is yet to come.

New Zealand's economy technically fell into recession in the quarter. Despite the slowdown in growth, NZ interest rates could stay higher for longer because employment is still strong and inflation remains high. That said, we are seeing encouraging signs of inflation starting to ease, which could see NZ bond markets price in the likelihood of rates being cut sooner rather than later. In other economies, we saw rate hikes in the UK, Europe and Australia over the quarter, with inflation still a key concern. Many central banks are signalling that rates could stay higher for longer, even if the absolute peak in rates is near.

How your money is changing the world

Financial performance returns

AURORA RETIREMENTPLUS AS AT 30 JUNE 2023

		RETURNS		
	3 month %	6 month %	1 year %	
Strategy at age 55*	3.03	6.89	8.05	
Strategy at age 65*	2.23	5.21	6.31	
Strategy at age 75*	1.43	3.54	4.56	

^{*} Strategy returns are after fees, before taxes

Most of the key asset classes ended the June quarter flat or higher, with the exception of NZ bonds, which weakened owing to expectations of another interest rate hike. The superstar performer for the quarter and six month period was global equities. Investments in NZ equities, listed property and cash also delivered positive performance for the quarter and 6 month period. In global bond markets, longer dated bond yields in many developed markets ended the June quarter higher, reflecting surprisingly resilient economic data, and this led to mixed performance from bonds for the quarter.

Portfolio returns rebounded for the 1 year period and are back in the black, reflecting the solid contribution from equities since October 2022. Amidst all the volatility, cash has been a consistent performer for the portfolio. The bond component of the portfolio also delivered positive returns for the portfolio, amidst an environment of rising yields.

Looking ahead, we expect continued market volatility as we approach the cycle turning point. All eyes are on signs of easing inflation, which would give central banks a reason to lower interest rates. In our view, the balance of risks suggests that higher interest rates will eventually lead to slowing growth and with it, lower inflation. It's a difficult balancing act: the longer interest rates remain at these high levels, the greater the risk that growth falls sharper than intended. Our view is that the rise in bond yields over the past 12 months has resulted in better value. When the cycle turns and inflation eventually declines, bond markets are likely to perform well and offer diversification to equities.

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. A portion of the portfolio is exposed to sectors and companies that are transitioning away from carbon to renewable energy over the medium term. These investments can elevate the current carbon risk of the portfolio, but as long as companies stick to their decarbonisation plans, the carbon risk of these companies will reduce over time. Like we always say, change is a journey. We also look at how much the portfolio is aligned with the UN's Sustainable Development Goals (SDG's) and how this compares with the relevant global equity index. You can read more about the SDG's and why we look at each portfolio's contribution to SDG's here.

AT AGE 55

TEMPERATURE ALIGNMENT AS AT 30 JUNE 2023 UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs) AS AT 30 JUNE 2023

PORTFOLIO CARBON INTENSITY
AS AT 30 JUNE 2023

BASED ON PORTFOLIO CARBON INTENSITY

% OF SALES CONTRIBUTING TO THE SDGs

TONNES PER \$1M OF PORTFOLIO VALUE

2.6
DEGREES CELSIUS

63%

MSCI WORLD*

60%

285
MSCI WORLD*
455

AT AGE 65

TEMPERATURE ALIGNMENT
AS AT
30 JUNE 2023

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs) AS AT 30 JUNE 2023

PORTFOLIO CARBON INTENSITY
AS AT 30 JUNE 2023

BASED ON PORTFOLIO CARBON INTENSITY

% OF SALES CONTRIBUTING TO THE SDGs

TONNES PER \$1M OF PORTFOLIO VALUE

2.3
DEGREES CELSIUS

62%

MSCI WORLD*

60%

214

MSCI WORLD*

455

AT AGE 75

TEMPERATURE ALIGNMENT
AS AT
30 JUNE 2023

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs) AS AT 30 JUNE 2023

PORTFOLIO CARBON INTENSITY
AS AT 30 JUNE 2023

BASED ON PORTFOLIO CARBON INTENSITY

% OF SALES CONTRIBUTING TO THE SDGs

TONNES PER \$1M OF PORTFOLIO VALUE

PORTFOLIO

2.0

DEGREES CELSIUS

61%

MSCI WORLD*

60%

142
MSCI WORLD*
455

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.

WHAT THIS MEANS FOR YOU

This metric looks at how much of the portfolio is aligned with the UN's Sustainable Development Goals (SDGs), based on annual sales of the underlying companies. It's currently applied only on the equity component of the portfolio.

All portfolios are making a higher contribution to sustainability goals

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 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.

Source: EMMI

than the MSCI World*, a global equity index.

The SDGs are a set of 17 goals established by the United Nations in 2015 as part of the 2030 Agenda for Sustainable Development. The goals focus on range of global issues, including creating positive environmental and social impacts.

*MSCI World ETF

Source: Sustainable Platform, BlackRock iShares the portfolio and to compare that with market indexes, such as the MSCI World, which is a global shares index.

* MSCI World ETF

Source: EMMI, BlackRock iShares

Questions?

If you have questions about this report, we encourage you to contact your adviser who can discuss this with you.

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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