

Market Update

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Editor: Nick Auld
General Manager
RedBook New Zealand
email: nick.auld@redbook.co.nz
Linkedin: @ RedBook New Zealand





The NZ Market Q2 2023

With such high volumes squeezed into registrations in June, we face a boom and bust scenario in July.

A Big Quarter Leading Up To Clean Car Tax Increases.

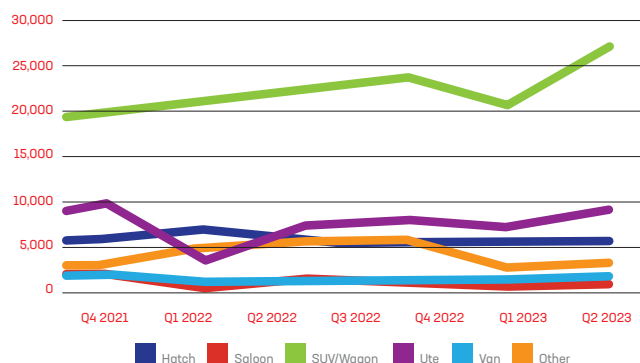
Quarter 2 in 2023 saw over 47,000 new passenger and light commercial vehicles registered, a record in recent history. This is only matched by a similar number in Q1 2022, when the Clean Car Scheme was first introduced. It comes as no surprise that only 35% of the new passenger registrations in Q2 2023 were for petrol powered vehicles, 22% were electric, 29% hybrid and 14% plug-in hybrid.

There are similar ratios in the used passenger registrations with petrol representing just 33% of the top 10, the balance being mild hybrid at 67% for Q2 2023 (50% for Q1 2023). Used import registrations for the quarter were also very high at 36,234, the second highest we have record of, the highest being prior to the start of the Clean Car Scheme in Q1 2022.

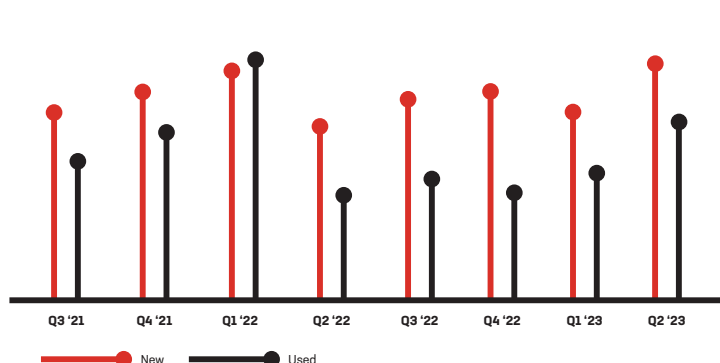
The top 10 used vehicle registrations for Q2 2023 are listed below:

MAKE	MODEL	USED REG 2022
Toyota	Aqua	4,354
Toyota	Prius	3,145
Mazda	Axela	1,773
Toyota	Corolla	1,219
Nissan	Note	1,166
Nissan	Serena	1,129
Subaru	Impreza	1,078
Honda	Fit	1,047
Mazda	Demio	861
Volkswagen	Golf	805

New Registration By Body Type



NZ Vehicle Registrations



Sources: NZTA



Top Models:

- With the increase in taxes due to take effect on 1 July 2023, it's not surprising that utes have taken out the top spots in Q2 2023. Hilux (3,100) took top spot, closely followed by Ranger (2,894) in third and Triton (1,627) in fourth.
- Toyota's Rav4 (2,894) has taken 2nd spot in the quarter with a large weighting towards the hybrid variants (75%)
- Tesla's Model Y (969) and BYD Atto3 (845) in 9th and 10th spot respectively have ensured pure EV's remain in the Top 10.
- Mitsubishi has bounced back in Q2 2023 with the Triton in 4th spot, noted above, the Eclipse Cross (1,261) in 7th and the Outlander (1,220) in 8th. These registrations are no doubt boosted by some strategic price drops in June, but also the looming loss of rebates on the hybrid variants that make up nearly two-thirds of the registrations.
- The Suzuki Swift (1,284) takes 5th spot and the MG ZS (1,261) takes 6th.
- Volumes have clearly been firmly driven by changes in the clean car rebate. It is interesting to note that the registrations of new utes in June is 1.8 times higher than the previous two months and registrations of new hybrids (most of which will likely no longer qualify for rebates) are 1.9 times higher in June.

The top 20 makes YTD are below:

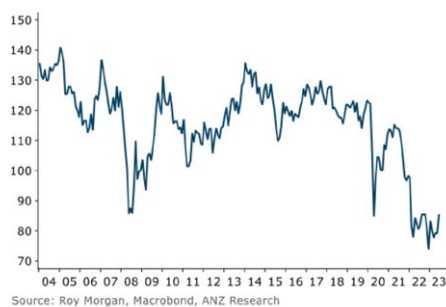
MAKE	Q1 '22	Q2 '22	Q3 '22	Q4 '22	TOTALS'22	Q1 '23	Q2 '23
Toyota	5890	7008	8232	7606	28736	6864	10358
Mitsubishi	8299	5467	5199	48925	23890	2849	5293
Ford	4977	1583	3118	5536	15214	4111	4436
Kia	2513	3582	3085	1994	11174	3155	3283
Hyundai	2427	2237	1832	1755	8251	2511	2527
Suzuki	1588	2261	2207	2417	8473	2156	2422
MG	1487	1203	1197	1433	5320	1294	1662
Volkswagen	971	900	872	1037	3780	807	1555
Mazda	2162	1400	1368	1106	6036	1258	1354
Tesla	1301	12	2880	2814	7007	1234	1335
Nissan	1759	667	704	1171	4392	1354	1265
Haval	920	290	506	566	2282	547	1133
Honda	1205	1022	704	901	3832	1156	986
Isuzu	1517	464	681	634	3296	721	856
BYD	-	-	689	998	1687	994	845
Skoda	386	625	536	699	2246	436	708
Subaru	689	592	601	586	2468	688	692
Mercedes-Benz	986	647	610	777	3020	639	567
BMW	511	373	391	384	1659	478	431
Lexus	339	271	228	186	1024	252	426
LDV	1353	119	484	457	2413	417	407
Others	5755	4356	4415	4149	18675	4059	4521
New	47035	35079	40630	42131	164875	37980	47056
Used	48752	21811	25010	22919	118492	26029	36234

NZ Economic Outlook

Consumer confidence, interest rates and the housing market are barometers for the health of our local economy, which in turn largely dictates the appetite in our automotive market.

Consumer confidence remains very low indeed with house prices, mortgage rates and the cost of living, being key concerns. With an increasing number of fixed home loans maturing, and the compounding effect of the reduction of fuel and transport subsidies, it looks like an uncomfortable economic ride for the rest of 2023.

ANZ Consumer Confidence Index (source: ANZ, Roy Morgan)



Perceptions of current personal financial situations fell 4 points from -20% to -24%.

A net 11% expect to be better off this time next year, up 6.

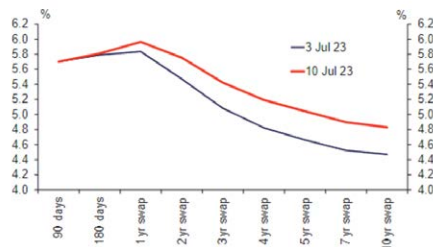
A net 27% think it's a bad time to buy a major household item, a 7 point improvement.

Perceptions regarding the economic outlook in 12 months' time lifted 9 points to -34%. The 5-year-ahead measure jumped from -12% to +1%.

House price inflation expectations jumped from 0.4% to 1.6%. They are strongest in Auckland (3.1% versus 1.5% last month) but are now positive everywhere.

One-year-ahead CPI inflation expectations fell back from 4.8% to 4.3%, a sharp fall that the RBNZ will be pleased to see.

Mortgages



The RBNZ has said that it expects to hold the cash rate at its current level of 5.50% for an extended period.

Westpac state that in contrast, the financial markets are pricing in a much earlier start to interest rate cuts, from early in 2024. Westpac see a risk that the OCR could lift in the coming months, and that meaningful interest rate cuts could still be some time away.

NZ June REINZ House Sales v Prices

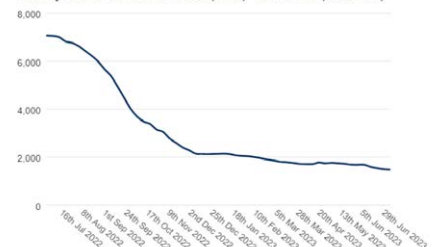


Shipping Costs Keep Falling

One positive is the substantial drop in global shipping costs year on year. These peaked during the constraints of COVID and we are still feeling the supply chain pain.



Drewry World Container Index (WCI) - 06 Jul 23 (US\$/40ft)



Sources: Roy Morgan, Macrobond, ANZ Research / WESTPAC





The Road To Electrification



EV registrations maintain momentum as the arrival of Chinese marques continue to challenge the status quo.

New EV registrations have dropped slightly, but show some consistent increases over comparable periods in 2022, and since the introduction of the Clean Car Scheme that commenced for EV's in Q3 2021.

On 1 July 2023 we will see a small reduction in the rebate offered on pure EV's and a higher fee for high emitting vehicles. Below is a graph showing the before and after changes, courtesy of the NZTA.

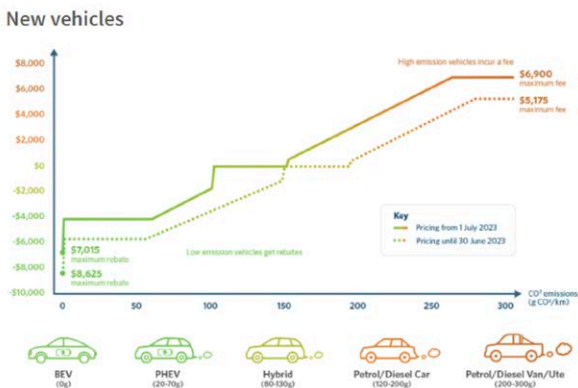
This will most certainly have a significant impact on the registrations of hybrid vehicles, many of which had previously qualified for a rebate. In Q2 2023 we saw unusually large numbers of registrations of hybrid vehicles, many of those pre-registered, or "rush-registered" to take advantage of the expiring rebates.

Pure EV's continue to maintain momentum in Q2. Tesla leads the way with 969 Model Y's registered and has opened a new showroom in Mangere, Auckland. BYD follows closely behind with 847 Atto3's registered and have just launched the Dolphin, their new hatchback, which will battle out for the cheapest EV on the market. They also unveiled the impressive looking new Seal, BYD's answer to the Model3 and Ioniq6, due for first deliveries in late 2023. The ZS EV is in third with 576 units and MG

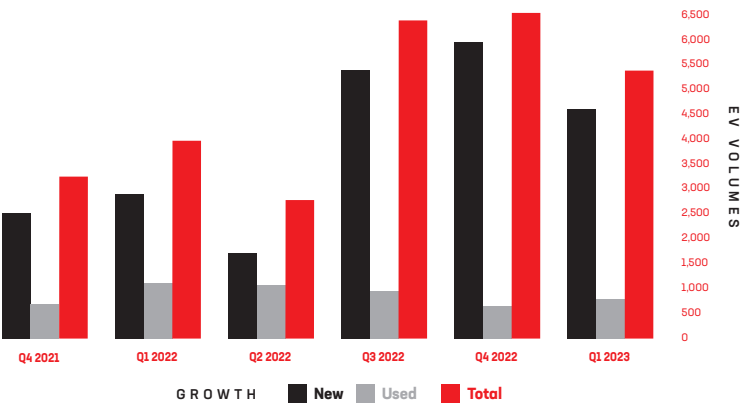
also have a new, low-priced EV coming to the market in the MG4, which is due late in Q3 but current pricing, and rebates, see it being the first sub \$40k EV in the NZ market. There are plenty of new EV's on the horizon so competition will continue to heat up in the EV market which has already seen Tesla drop prices in July 23.

Tesla's recent price cuts herald the arrival of increasing competition, with quality new models such as the MG4 and BYD Seal arriving in nz soon.

Clean Car Discount rebate and fee pricing before and after 1 July 2023



EV sales by quarter



Global EV News

As EV sales grow globally so does competition.

Watching the global EV market unfold is a clue to emerging trends in the NZ EV market...



China

Shanghai Auto Show

This quarters Shanghai Auto Show in late April showcased a huge variety of new Chinese EV models and concepts vying for media attention.

Chery showcased the iCar 03, which owes very little to a Land Rover Defender, NIO their medium SUV the ES6 (will be EL6 in Europe) and MG announced its return to roadsters with the stunning Cyberster, launching in 2024 to celebrate 100 years of MG. Two other highlights include the BYD Song L and the Aion Hyper GT which looks to press the BYD Seal, Xpeng G7, Neta S, Rising F7, Deepal SL03 and one you will have heard of, a certain Tesla 3. Searching out some images of some of these less familiar brands and models, it quickly becomes very clear that the more established Chinese EV market is becoming increasingly competitive across market segments as it gets filled with well designed, well built and high specification EVs.

BYD is now Chinas leading OEM and leads Chinese EV registrations, substantially above Tesla despite some aggressive price reductions.

Chinese Government Support

Strong Chinese government support for EVs continues over the next four years. The

government will inject its biggest ever support package of 520 billion yuan (\$NZ 114 Billion) into tax breaks for 'new energy vehicles' (NEVs as they call them) to bolster sales, which briefly showed signs of slowing down earlier this year and was largely kick-started by Tesla price reductions.

The credit will extend to NEVs bought in 2024 and 2025, amounting to as much as 30,000 yuan (c. NZ\$ 6800) per vehicle, reports Reuters. The Chinese Ministry of Finance stated that cars purchased in 2026 and 2027 can qualify for half the amount, as the exemption will be capped at 15,000 yuan (c. NZ\$ 3400).

USA

A heavyweight discounting battle between Tesla and Ford has contributed to rising EV sales. Tesla delivered a new record 466,000 cars between April and June after cutting prices in the US in January and this in turn prompted Ford to reduce its price on the Mustang Mach-E.

Tesla then lowered prices again in March. The Inflation Reduction Act, President Joe Biden's signature climate change and industrial policy law, grants consumers up to \$7,500 in tax credits and this has clearly also boosted uptake, just as we have witnessed in NZ.

In another Tesla related boost to EV uptake in

the US, Tesla have announced that they will open its Supercharger network to non-Tesla owners.

The Tesla website states:

"It's always been our ambition to open the Supercharger network to non-Tesla EVs, and by doing so, encourage more drivers to go electric. More customers using the Supercharger network enables faster expansion. Our goal is to learn and iterate quickly, while continuing to aggressively expand the network, so we can eventually welcome both Tesla and non-Tesla drivers at every Supercharger worldwide."



Global EV News (continued)

Europe

To further accelerate the decarbonisation of light-duty vehicles, the European Automobile Manufacturers' Association (ACEA) outlines seven actions for achieving the European 2025 and 2030 CO2 reduction targets. They are a blueprint for successful long-term change globally.

They are:

1. Establish an ambitious and competitive industrial policy ACEA urges the Commission to initiate a structured dialogue with other global players and reminds policy makers that a sufficient supply of materials and batteries will be critical to ensuring the industry can meet the CO2 targets, especially the 100% target in 2035.

2. Fast-track recharging and refuelling infrastructure
3. Boost the greening of corporate fleets
4. Boost demand for public fleets
5. Prolong national support schemes
6. Speed up the upskilling and reskilling agenda
7. Reinforce better regulation agenda

With regards to regulation most European countries offer fiscal support to stimulate market uptake of electric vehicles, but these tax benefits and purchase incentives differ widely.

In a separate report the ACEA summarises over 20 different nations varying support programmes for electric vehicle uptake.

All of which vary widely in their structure, the type of vehicle supported, the level of financial support and the areas of support. The support flexes between taxation benefits i.e. in acquisition, ownership and company vehicles and with incentives, for either purchase or around infrastructure.

It is no wonder at all that manufacturers are seeking a more unified approach.





A Journey To Clean Mobility

This quarter we feature Hyundai New Zealand to understand a little more about their journey to 'clean mobility'. If you were at Fieldays you will have seen the IONIQ 6, Car of the Year 2023, and their Hydrogen fuel section- which we wanted to find out more about. We spoke to Grant Doull, their National Manager for Hydrogen and Commercial Vehicles, to find out more.

Hyundai are global leaders in BEV vehicle and Hydrogen fuel cell development. Is it a case of backing 'two horses' or do you see the two technologies running side by side in the future?

Hyundai are absolutely committed to its vision of Progress for Humanity and clean mobility at the core.

Both Hydrogen and BEV will be fundamental in this journey as they solve different problems. Generally we use our cars for short trips 1 or 2 hrs a day, they can be recharged overnight or a couple of times a week using a fast charger, so Hyundai BEV's are great for most car applications.

With Commercial vehicles operating long driving hours and carrying heavy payloads, Hydrogen Fuel cell technology is far more suited to these applications. They can be fueled in about the same time as a diesel vehicle and carry similar loads and travel similar distances.

So, we are very much "AND" advocates, we need both in the future. Hydrogen is more likely to be heavy and commercial with BEV light and local.

What is Green Hydrogen?

Hydrogen is the most abundant element in the universe, so we have a lot of it, meaning it is a really great source of energy, the problem is it is normally combined with something else so needs to be separated before we can use it.

The different colors of hydrogen define the process to extract it. For example, brown and grey hydrogen production have associated greenhouse gas emissions. Using brown or grey hydrogen is like charging your BEV from a coal power station, the tail pipe emissions are clean, but the process to make the fuel is not. Therefore, Hyundai NZ does not use Grey or Brown Hydrogen - we only use Green.

Green hydrogen is made in a process using water ($H_2O = 2$ parts hydrogen and 1 part oxygen), renewable electricity and an electrolyzer. The hydrogen and oxygen are separated in the process with the hydrogen captured as a gas and stored for use later and the oxygen is captured or released to the air. Its green because no green house gasses are emitted in the production process.

Because hydrogen can be stored it can be produced in times of surplus renewable energy, ie. By the wind in the middle of the night.

A Journey To Clean Mobility (continued)

Can you briefly explain how a Hydrogen fuel cell vehicle works?

Absolutely. A hydrogen fuel cell electric vehicle (FCEV) is an electric vehicle, the main difference is the energy is stored as Hydrogen in a tank (rather than chemical energy stored in a battery) and it uses a system called a Fuel Cell to convert the hydrogen back to electricity to drive the electric vehicle.

A fuel cell has no moving parts, it has a number of plates making up the cells, each cell produces one volt and we have 400 cells.

Hydrogen gas is supplied to one side of the fuel cell (anode) and oxygen from the air to the other side (cathode) and then via a catalyst the protons and electrons are separated and take different paths to produce the electricity.

Or to put it more simply the hydrogen goes in one side, air in the other; the oxygen and hydrogen get back together producing the electricity and turn back to clean water (H₂O) that can go back into the environment.

We witnessed there was a great deal of interest at your stand at Fieldays. How do you see the future of Hydrogen fuel cell vehicles playing out in NZ?

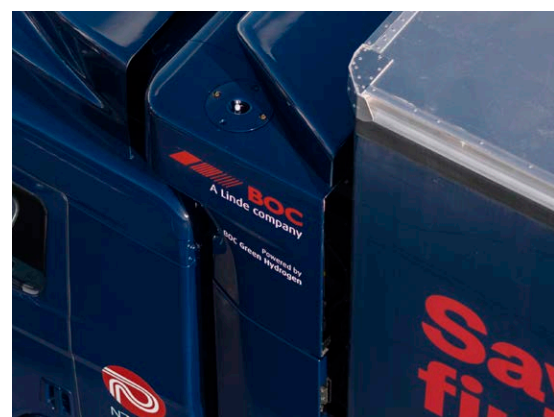
Hyundai NZ have been leaders with hydrogen vehicles locally, we first introduced NEXO in 2019 as New Zealand's first Hydrogen FCEV SUV, and in 2021 we introduced New Zealand first Hydrogen FCEV Heavy truck the XCIENT, now running in daily commercial operation with NZ Post. In 2022 we had a hydrogen fuel cell generator on site as a demonstration of the technology.

We see zero emission heavy transport as the prime focus at the moment, Hydrogen vehicles have longer range, carry similar payload and can be used 24/7 with refueling times the same as diesel. Heavy commercial vehicles make up 4% of our national fleet, yet are responsible for 25% of our total emissions. Each heavy truck we can put on the road in place of a diesel truck is the equivalent of removing the emissions from approximately 100 passenger cars. We can make a bigger difference starting here first. Of course, as the fueling network expands the Nexo will become a good option for customers wanting longer distance zero emission choices with quick refueling.

Many will be, rightly or wrongly, concerned about safety - what are the risks, and what storage and design features make it a safe option?

Hydrogen vehicles are considered very safe, some would argue safer than fossil fueled vehicles. The main safety aspects are that the storage tanks are very thick type 4 tanks, meeting the most stringent testing regime, we have a lot of technology and safety systems, as you would expect from a brand like Hyundai.

One of the natural safety characteristics of hydrogen is that it is very light, 14 times lighter than air, so if any leak were to occur it would go straight up and disperse into the air very quickly. Petrol and diesel and LPG are all heavier than air so will take longer to disperse and pose a longer volatile risk.



A Journey To Clean Mobility (continued)

What are the other key challenges for Hydrogen fuel cell vehicle adoption in NZ?

Fuel stations! We need the Government backed, Hiringa / Waitomo stations open. They are very close and when the first stations open later this year New Zealand will have a very good hydrogen infrastructure to build and expand on.

We also need long term policy supporting the transition to zero emission heavy transport to drive operator decisions and volume uptake. And with volume up, we will see cost down and more model variants for NZ.

Congratulations on scooping Car Of The Year 2023 with the IONIQ 6. What exciting new product has Hyundai got coming into NZ in the future?

IONIQ 6 is certainly an exciting, award-winning new model. Of course, it's sibling, IONIQ 5 also won World Car of Year, World Electric Vehicle and World Car Design 2022.

With such a family track record, we can't help but eagerly await the IONIQ 5 N and the IONIQ 7.

The IONIQ 5 N will be a new breed of Hyundai N vehicle (N is Hyundai's high-performance brand). This high-voltage EV will embody all the

athleticism and thrills of the gas-powered N models. As evidenced by Hayden Paddon and his KONA N rally car, you don't need to rely on fossil fuels for high performance in automotive anymore. Move over high-octane, high-voltage is here.

The IONIQ 7 will be a medium to large sized SUV. A solution for people and families who need more space, something currently lacking in the range of EV's available in NZ today. Based on IONIQ 5 and IONIQ 6 we can also expect some class-leading features and specs in this new model.

