Specific Contract Number: 300084480

Support to EU-New Zealand FTA process: Ratification and implementation

Investing in New Zealand: Exploring the Opportunities for EU Investors

June 2025

Legal Notice

This document has been prepared for the European Commission, however, it reflects the views of the authors, and the European Commission is not liable for any consequences stemming from the re-use of this publication. More information on the European Union is available on the Internet (http://www.europa.eu).

Contents

Li	st of F	igures	v			
Li	st of T	ables	vi			
Αl	bbrevio	ations	vii			
E>	cecutiv	ve summary	viii			
1	·					
2	New	/ Zealand's economy	3			
	2.1	Key industries				
	2.2	International trade	6			
3	New	/ Zealand's investment framework	9			
	3.1	Key actors in New Zealand's investment landscape				
	3.2	Research and science landscape	10			
	3.3	New Zealand-EU policies				
	3.3.1	: -				
	3.3.2	Horizon Europe	12			
	3.4	The Overseas Investment Act				
	3.4.1	3				
	3.4.2 3.4.3					
	3.4.4	.				
	3.4.5					
	3.5	Reform of the Overseas Investment Act	18			
	3.6	Investor visa categories	19			
4	Inve	estment landscape	21			
	4.1	Overview of EU investments in New Zealand	22			
	4.2	EU investment in sensitive assets in New Zealand	23			
	4.2.1	Investments in sensitive assets between 2022-2023	24			
	4.3	Overseas investor visa applications from the EU				
5	EU's	s global investment	28			
6	Inve	estment opportunities in New Zealand	31			
	6.1	Aquaculture	32			
	6.2 Wood/Bioenergy		35			
6.3 Food production		38				
6.4 Cleantech			41			
	6.5	Technology	43			
	6.6	Renewable energy				
	6.6.1 6.6.2	5,				
	0.0.2	Solar energy	48			

Re	eferences67			
7	Con	tacts	64	
	6.7.3	Aerospace	58	
		Shipping		
	6.7.1	Urban mobility	54	
	6.7	Advanced transportation	54	
	6.6.4	Green Hydrogen	51	
		Geothermal energy		

List of Figures

Figure 1: Comparing the EU's and New Zealand's GDP per capita (1990-2023)	3
Figure 2: New Zealand's inflation and GDP development	4
Figure 3: New Zealand's main sectors and their development over time (YE March)	5
Figure 4: Growing and declining sectors between YE March 2021 and 2024	
Figure 5: New Zealand's top exports and imports of goods and services with the World a	
the EU (YE December 2024)	8
Figure 6: Overview of the key actors in New Zealand's investment landscape (with	
examples)	
Figure 7: Overview of the proposed overseas investment screening process	19
Figure 8: New Zealand's top foreign investors, YE March 2024 (Figure 8a); and their	
development over time, YE March 2012-2024 (Figure 8b)	21
Figure 9: New Zealand's foreign investment liabilities by sector (YE March 2012-2024)	22
Figure 10: Share of EU investments in New Zealand, by sector, 2022, Eurostat	22
Figure 11: Consents given for sensitive investments by pathway between 2022-2023;	
global investments (Figure 11a) and EU investments (Figure 11b)	24
Figure 12: Approved consents for sensitive investments for EU Member States between	
2022-2023	25
Figure 13: Investor Visa applications, 2014-2024	26
Figure 14: Investor Visa applications by EU Member State, 2014-2024 (Figure 14a); EU	
Investor Visa applications by investor visa type (Figure 14b)	26
Figure 15: EU FDI stock in the rest of the world, by sector (2022) (Figure 15a); Investme	ent
opportunities for EU Member States in New Zealand (Figure 15b)	28
Figure 16: NZTE's investment priorities	31
Figure 17: Development of Aquaculture Exports (2020–2026f)	32
Figure 18: Development of food and fibre exports (YE June 2020-2026)	38
Figure 19: Tech investments by sub-sector (July 2021 – June 2023)	44
Figure 20: Development of electricity generation, by source (2019-2024) (Figure 20a) a	ınd
growth rates of different renewable energy sources (2020- 2024) (Figure 20b)	47
Figure 21: Travel behaviour in major cities – mode share across all trips	55
Figure 22: Inland transport infrastructure investment across the OECD (2021)	56
Figure 23: Breakdown of advanced aviation sub-sectors (2024), in m NZD (Deloitte Surv	/ey)
	59
Figure 24: Breakdown of space sub-sectors for 2019 and 2024 (Deloitte Survey)	60

List of Tables

Table 1: New Zealand's top 10 global trading partners in goods and services (YE Decem	ber
2024)	6
Table 2: Consent requirements based on origin of investor and investment type	13
Table 3: Overview of the updated Active Investor Plus Visa (April 1st, 2025)	20
Table 4: EU foreign direct investment stock in New Zealand by Member State (Eurostat)	23
Table 5: Investor Visa Applications from the EU for 2014-2024	27
Table 6: Potential investment opportunities for EU Member States in New Zealand	29
Table 7: Total energy supply per capita for different bioenergy carriers (2019)	36

Abbreviations

AI Artificial Intelligence

CAGR Compound Annual Growth Rate

CBD Central Business District

CO₂ Carbon dioxide

CPTPP Comprehensive and Progressive Agreement for Trans-Pacific Partnership

CRI Crown Research InstituteEEZ Exclusive Economic ZoneETS Emissions Trading Scheme

EU European Union

EUR Euro

EV Electric Vehicle

FDI Foreign Direct InvestmentFTA Free Trade AgreementGDP Gross Domestic Product

GJ Gigajoule GW Gigawatt

GWh Gigawatt hours

ICT Information and Communication Technology

IEA International Energy Agency

IMO International Maritime Organization

IPEF Indo-Pacific Economic Framework for Prosperity

LINZ Land Information New Zealand

LLM Large Language Model

MBIE Ministry of Business, Innovation & Employment

MDL Ministerial Directive LetterMPI Ministry for Primary Industries

MW Megawatt

NIFFCo National Infrastructure Funding and Financing

NSPO National Security and Public Order

NZ New Zealand

NZD New Zealand Dollar

NZTE New Zealand Trade and Enterprise

OECD Organisation for Economic Co-operation and Development

OIA Overseas Investment Act
OIO Overseas Investment Office
PRO Public Research Organisation

PV Photovoltaic

RBNZ Reserve Bank of New Zealand

SaaS Software as a Service

SCGT Supercritical Geothermal Technology

TEU Twenty-Foot Equivalent Unit

TWh Terawatt hours

YE Year-End

Executive summary

New Zealand's trade and investment relationship with the European Union (EU) is shaped by the country's unique position as a small, open economy with a strong international orientation. Despite its geographical remoteness and modest market size, New Zealand has consistently pursued liberal trade and investment policies to integrate more deeply into global markets. This study outlines the evolving investment landscape in New Zealand (NZ) and identifies opportunities for EU investors in light of ongoing regulatory reforms and the EU–NZ Free Trade Agreement (FTA).

In 2024, two-way trade in goods and services between New Zealand and the EU reached NZD 19.3 billion, making the EU New Zealand's fourth-largest trading partner. In terms of investments, the EU is the fifth-largest foreign investor in New Zealand and has demonstrated consistent growth in its investment over time. EU investment is concentrated in finance, manufacturing, and technical services. The EU–NZ FTA, which entered into force in May 2024, provides opportunities to deepen these flows by lowering trade barriers and easing investment conditions.

New Zealand's regulatory environment

The Overseas Investment Act governs foreign investment in New Zealand. It is currently being reformed in 2025 to make the investment screening process faster and more targeted. A new two-stage, risk-based approach will fast-track low-risk investments, while retaining full national interest scrutiny for sensitive or high-risk cases. The reform consolidates the current Investor Test, Benefit Test, and National Interest Test into one streamlined framework (excluding farmland, housing, and fishing), reducing red tape while preserving safeguards. Under the current act, consent is generally required for overseas investments involving significant business assets exceeding NZD 100 million. However, under the EU-NZ FTA, this threshold has been raised to NZD 200 million for investors from EU member states. This means EU investors benefit from more flexible rules compared to investors from countries without similar agreements, facilitating increased investment flows from the EU. Additionally, the current act mandates consent for transactions involving sensitive land, fishing quotas, and certain strategically important businesses, with specific notification or consent criteria depending on the investor's country of origin. These provisions remain in place until the new streamlined framework takes effect, likely at the end of 2025.

To further attract foreign capital, the government has also overhauled its investor visa settings. The previous Investor 1 and 2 visa categories have been replaced with a simplified Active Investor Plus visa, which was recently modified. The reform now introduces two clear investment pathways: the Growth category, which requires a minimum investment of NZD 5 million in higher-risk ventures for at least three years, and the Balanced category, which involves a lower-risk mix of investments with a minimum commitment of NZD 10 million over five years. To attract more active investors, the revised settings also ease residency obligations and ease the English language requirement, while broadening the range of acceptable investments.

Globally, the EU accounted for 7% of investor visa applications between 2014 and 2024, submitting a total of 831 applications, of which 597 were approved. Germany was the leading EU country, contributing 408 applications—nearly half of the EU total during this period—followed by France, Austria, and the Netherlands.

Sectoral Opportunities for EU Investors

Recognising the importance of foreign direct investment (FDI) for New Zealand's economic growth, the government's international business development agency, New Zealand Trade and Enterprise (NZTE), has outlined seven key investment priorities, which this study examines in greater detail. The key findings are outlined below:

Aquaculture

New Zealand's aquaculture sector is one of the most advanced in the Southern Hemisphere, anchored by high-value exports of King salmon, Greenshell™ mussels, and Pacific oysters. The sector presents significant investment opportunities across the entire value chain. Key areas include hatcheries, nurseries, selective breeding, and feed production; expansion into open ocean farming with advanced technologies; state-of-the-art processing for premium export markets; and improved logistics infrastructure, including ports, cold storage, and freight capacity to support efficient global distribution.

Wood Processing and Bioenergy

Bioenergy supplies about 7% of New Zealand's primary energy, mainly through solid biomass used in wood processing and pulp industries. While forestry provides a strong, sustainable resource base, growth opportunities lie in expanding biogas and biofuel use—though progress is limited by infrastructure needs and inconsistent policy support. The sector offers diverse investment opportunities, including expanding biomass feedstock production on underutilised land and building biofuel conversion facilities close to resource sites to reduce costs. Additional prospects lie in producing advanced liquid biofuels for transport and integrating bioenergy into existing industries such as pulp and paper through industrial symbiosis.

Food Production

The food and fibre sector is New Zealand's largest export sector, leveraging fertile soils, a mild climate, and a reputation for safe, high-quality production. The sector contributed NZD 53.3 billion in export revenue in 2024, representing 81.1% of New Zealand's goods exports, with expected export revenues of over NZD 58 billion by 2026. Investment opportunities within this sector strongly align with global sustainability and innovation trends, particularly in alternative proteins, regenerative agriculture practices, and advanced technological solutions such as precision farming and blockchain applications for enhanced supply chain transparency.

Cleantech

Cleantech in New Zealand covers emission reduction, sustainable agriculture, water management, and circular economy solutions, but remains undercapitalised despite strong environmental targets. The sector is supported by more than 130 companies and has drawn over NZD 500 million in recent private investment. The sector offers investment opportunities driven by rising global demand for sustainable solutions. Key areas include renewable energy such as geothermal and green hydrogen, circular economy innovations in waste-to-value technologies, and advancements in sustainable agriculture, bio-based materials, and lowemission transport.

Technology

The technology sector contributed NZD 22.6 billion to New Zealand's gross domestic product (GDP) and employed nearly 122,000 people in 2023. Strong export growth—particularly in software, Software-as-a-Service (SaaS), and sub-sectors like healthtech and game development-continues to drive the sector, despite challenges in talent shortages and access to scale-up capital. The sector offers investment opportunities, particularly in green data centres, artificial intelligence (AI) solutions, and digital infrastructure. Additional prospects lie in applying AI across key industries and upgrading infrastructure to support the sector's rapid growth.

Renewable Energy

New Zealand generates 85% of its electricity from renewables and aims to achieve 100% by 2030. Key sources include hydro, wind, geothermal, solar, and emerging hydrogen technologies. The sector is undergoing dynamic transformation, with solar energy showing the fastest growth and wind and geothermal capacity expanding steadily. Key areas for investment include offshore wind development in high-potential regions, commercial and utility-scale solar installations, advanced geothermal technologies, and green hydrogen infrastructure. Furthermore, investments in supporting infrastructure—such as ports, transmission networks, electrolysis facilities, and hydrogen transport—are essential to unlocking the sector's full potential and ensuring long-term scalability.

Advanced Transportation

New Zealand's advanced transportation sector is undergoing a major transformation across urban mobility, coastal shipping, and aerospace, driven by the need to decarbonise, modernise infrastructure, and support economic resilience. While public transport and active mobility in cities remain underdeveloped due to historic underinvestment, government funding and reforms are now targeting more sustainable and integrated transport systems. At the same time, the shipping and aerospace sectors are gaining traction through greener technologies and targeted investment, opening new pathways for long-term growth. Urban mobility offers strong investment opportunities in public transport expansion and electric vehicle (EV) charging networks. In maritime transport, demand is growing for alternative fuel infrastructure, port upgrades, and modern coastal shipping to support freight growth and decarbonization. Aerospace opportunities include autonomous aerial vehicles, space and aviation testing zones, as well as satellite data services.

1 Introduction

The New Zealand Government is placing economic growth at the centre of its agenda, and facilitating foreign investment is one of the avenues the government intends to leverage. It has launched a series of initiatives to facilitate foreign investment in New Zealand. These include reforming the New Zealand overseas investment regime, taking a risk-based approach to verifying information and streamlining consent processes; introducing changes to the New Zealand investment visa categories to attract more foreign investors and stimulate economic growth; and streamlining foreign investment through the establishment of a new Agency - Invest New Zealand, modelled on the success of Ireland and Singapore, to attract capital into key sectors such as infrastructure, manufacturing, and innovation. Simultaneously, a major overhaul of the science and innovation sector is underway to increase the role of science and technology in the economy, drive breakthroughs, commercialise research, and enhance productivity. The government is also tackling longstanding barriers to growth by reforming resource management, increasing competition in key industries, improving transport networks, and reducing regulatory burdens on businesses and farmers. By actively fostering an environment that rewards entrepreneurship and investment, New Zealand wants to position itself as a competitive and dynamic economy, ensuring that opportunities for wealth creation remain within the country rather than driving talent and capital abroad. 1 2

This study aims to provide a better understanding of the key sectors with potential for attracting EU investment in New Zealand, alongside insights into the country's legal and regulatory framework affecting these areas. It addresses, among others, the following questions:

- What is the current state of EU investments in New Zealand at the EU and Member State levels?
- Which sectors in New Zealand align with EU investment strengths and priorities?
- What is the legal framework, including incentives, challenges, and constraints?
- What key considerations are relevant for investing in New Zealand?
- Who are the main contacts for EU companies interested in investing in New Zealand?

Building on a combination of primary and secondary research methods, this study provides a comprehensive overview. It draws on interactions with New Zealand Trade and Enterprise (NZTE), representatives of EU Member States, industry experts, and stakeholders from a wide range of sectors in New Zealand. These interactions offered valuable firsthand insights into the opportunities, challenges, and dynamics of EU investment in the country.

In addition to primary research, the study incorporates the analysis of secondary data sources. These include statistical data and reports from prominent organisations such as Eurostat, StatsNZ, the Organisation for Economic Co-operation and Development (OECD), and other relevant institutions. By synthesising information from these diverse sources, the study

² New Zealand Government, "Economic Growth the Key to Better Days Ahead," 2025, accessed March 4, 2025, https://www.beehive.govt.nz/release/economic-growth-key-better-days-ahead.

¹ New Zealand Government, "State of the Nation 2025," 2025, accessed March 4, 2025, https://www.beehive.govt.nz/speech/state-nation-2025.

aims to deliver a comprehensive and data-driven perspective on EU investment opportunities in New Zealand.

The available data on investments presents several limitations. Variations between EU and New Zealand statistics arise due to misaligned figures, often influenced—though not exclusively—by confidentiality restrictions in reporting specific sectors, particularly on the EU side. Additionally, conducting a detailed analysis of investment flows, especially at the country level, is constrained by data availability. While the rankings of the largest EU investors are broadly consistent across sources, variations in recorded values require cautious interpretation. To enhance transparency, this report specifies the data source used for each analysis.

In accordance with Article 10 of the EU-NZ FTA, this study defines investment as the establishment, acquisition, or expansion of an enterprise by an investor of a Party in the territory of the other Party, including through capital participation, the creation of a branch or representative office, or the setting up of a juridical person, with a view to creating or maintaining lasting economic links.

2 New Zealand's economy

New Zealand exemplifies a small, distant, open economy—a geographically isolated economic system with a relatively small domestic market and a heavy reliance on international trade for growth. It has liberal trade policies and a strong orientation toward global market integration, and while its remoteness poses challenges, New Zealand seeks to increase access to major consumer markets and enhance global competitiveness.³ Due to its isolation and size, most firms, apart from exporters, remain small by global standards, and the domestic market is typically highly concentrated.4

Between 1990 and 2023, New Zealand's economic performance has been marked by stable growth, with GDP per capita expanding at an average annual rate of 4.0%, exceeding the EU's growth rate of 2.8% (see Figure 1).5

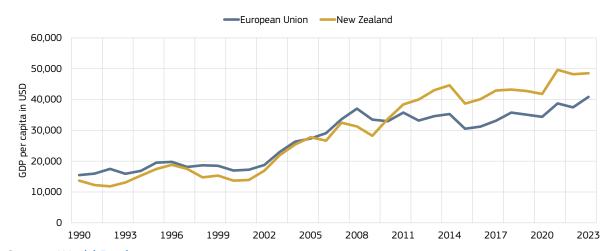


Figure 1: Comparing the EU's and New Zealand's GDP per capita (1990-2023)

Source: World Bank

In recent years, however, the New Zealand economy has exhibited some volatility. Following a swift recovery from the Covid-19-induced recession, GDP by late 2022 had grown 8% above pre-pandemic levels. However, this rapid expansion led to an over-expansion, characterised by excess domestic demand, soaring global prices for durable goods, and the continued suspension of inbound tourism. Inflationary pressures, which first appeared in mid-2021 due to pandemic-related supply chain disruptions, were later exacerbated by the global economic fallout from Russia's invasion of Ukraine.6

³ Eldrede T. Kahiya, "Context in International Business: Entrepreneurial Internationalization from a Distant Small Open Economy," International Business Review 29, no. 1 (2020), https://dx.doi.org/10.1016/j.ibusrev.2019.101621.

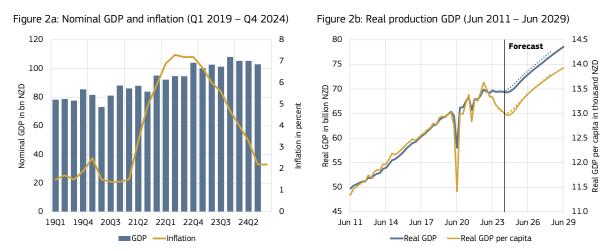
⁴ The Treasury, "Competition Policy in Small Distant Open Economies: Some Lessons from the Economics Literature," 2003, accessed November 27, 2024, https://www.treasury.govt.nz/publications/wp/competitionpolicy-small-distant-open-economies-some-lessons-economics-literature-wp-03-31#abstract-01.

⁵ World Bank Group, "World Development Indicators," 2025, accessed April 26, 2025, https://databank.worldbank.org/indicator/NY.GDP.PCAP.CD/1ff4a498/Popular-Indicators.

⁶ Organisation for Economic Co-operation and Development, "Oecd Economic Surveys: New Zealand 2024," 2024, accessed December 4, 2024, https://www.oecd.org/en/publications/oecd-economic-surveys-newzealand-2024_603809f2-en.html.

By early 2024, macroeconomic imbalances began to stabilise. Inflation moderated, falling from a peak of 7.2% to 4% in the first quarter and further to 2.2% in the third quarter, where it remained through the fourth quarter—marking the first return to the Reserve Bank of New Zealand's (RBNZ) target range of 1–3% since March 2021 (see Figure 2a). New Zealand's GDP amounted to NZD 422 billion year end September in 2024,8 placing it approximately on par with the economy of Greece.9 Looking ahead, New Zealand's economic outlook is cautiously optimistic. Projections suggest real GDP growth of 0.5% in 2025 and 3.3% in 2026 (see Figure 2b), 10 underpinned by easing monetary conditions, improved credit availability, and recovering household real incomes. Strengthening domestic demand, facilitated by reduced debt-servicing costs, is anticipated to mitigate the impact of slowing population growth.11

Figure 2: New Zealand's inflation and GDP development



Source: Reserve Bank of New Zealand, The Treasury

2.1 Key industries

New Zealand is globally recognised for its agricultural outputs; however, the service sector is the largest contributor to the country's economy, accounting for 73% of GDP, as of the year ending March 2024. This is followed by the manufacturing and construction sector at 20% and the primary sector, including agriculture, at 7% (see Figure 3a). Within services, professional, scientific, and technical services¹² represent the largest share (13%), followed by healthcare and social assistance (9%) and rental, hiring, and real estate services (8%). In the manufacturing and construction sector, construction activities make up 37% of the total,

⁷ Stats NZ, "Annual Inflation at 2.2 Percent," 2024, accessed December 5, 2024, https://www.stats.govt.nz/news/annual-inflation-at-2-2-percent/.

⁸ Stats NZ, "Gross Domestic Product (Gdp)," 2024, accessed February 1, 2025, https://www.stats.govt.nz/indicators/gross-domestic-product-gdp/.

⁹ International Monetary Fund, "World Economic Outlook Database," 2024, accessed November 27, 2024, https://www.imf.org/en/Publications/WEO/weo-database/2024/October.

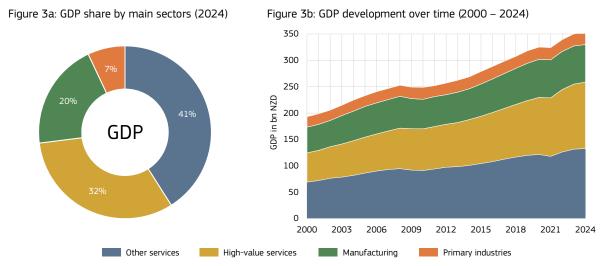
¹⁰ The Treasury, "Half Year Economic and Fiscal Update 2024," 2024, accessed March 5, 2025, https://www.treasury.govt.nz/publications/efu/half-year-economic-and-fiscal-update-2024.

¹¹ ANZ, "Anz Economic Outlook," 2024, accessed December 5, 2024, https://www.anz.co.nz/aboutus/economic-markets-research/economic-outlook/.

¹² Includes, among others, scientific research, architecture, engineering, computer systems design, law, accountancy, advertising, market research, management and other consultancy, veterinary science and professional photography.

while machinery manufacturing (17%), fabricated metal products (9%), beverage and tobacco products (9%), and meat and meat products (8%) dominate manufacturing outputs. In the primary sector, dairy cattle farming accounts for 34%, followed by sheep, beef cattle, and grain farming (17%) and agriculture, forestry, and fishing support services, including hunting (13%).13

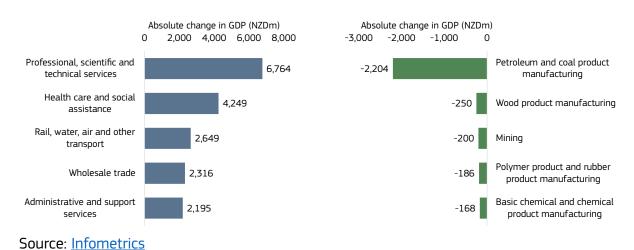
Figure 3: New Zealand's main sectors and their development over time (YE March)



Source: Infometrics

In the past 24 years, between 2000 and 2024, the services sector has grown by almost 110%, with professional, scientific, and technical services contributing a growth rate of over 150%. Manufacturing increased by over 45% during the same period, with construction activities playing a significant role in this trend. The primary sector recorded more moderate growth of approximately 24%, with agricultural activities expanding by 35%, while mining activities declined by almost 20% (see Figure 3b). 14

Figure 4: Growing and declining sectors between YE March 2021 and 2024



¹³ Infometrics, "Regional Economic Profile New Zealand," 2024, accessed December 2, 2024, https://rep.infometrics.co.nz/new-zealand/economy/structure.

¹⁴ Infometrics, "Regional Economic Profile New Zealand."

Between March 2021 and March 2024, professional, scientific, and technical services have been the largest contributors to economic growth, growing by over NZD 6.7 billion. Other significant contributors included wholesale trade and healthcare and social assistance. In contrast, petroleum and coal product manufacturing decreased by over NZD 2.2 billion, with additional declines observed in wood product manufacturing and mining (see Figure 4).15

2.2 International trade

New Zealand, as a small open economy, is heavily reliant on international trade. In 2024, its exports of goods and services reached NZD 101.4 billion, while total goods and services imports totalled NZD 107.1 billion. The country's primary export markets are China, the United States, Australia, and the European Union (see Table 1). While agriculture represents a relatively small share of New Zealand's GDP, it remains the dominant sector in terms of export contributions, with dairy products as the leading export between December 2023 and 2024 (see Figure 5). This is followed by travel-related services and meat and edible offal. For the European Union specifically, New Zealand's principal exports are travel-related services, meat and edible offal, and fruits and nuts. 16

Table 1: New Zealand's top 10 global trading partners in goods and services (YE December 2024)

#	Country	Total trade (in m NZD)	Imports (in m NZD)	Exports (in m NZD)	Trade balance (in m NZD)
1	China	38,203	17,387	20,816	3,429
2	Australia	32,150	16,671	15,478	- 1,192
3	United States	25,449	11,954	13,495	1,541
4	European Union	19,335	12,944	6,391	- 6,553
5	Singapore	9,486	7,044	2,441	- 4,603
6	South Korea	9,131	6,543	2,587	- 3,957
7	Japan	8,833	4,522	4,310	- 212
8	United Kingdom	6,834	3,559	3,274	- 285
9	Germany	4,630	3,188	1,441	- 1,747
10	Thailand	4,393	2,885	1,507	- 1,378

Source: StatsNZ

On the import side, New Zealand's leading trading partners are China, Australia, and the EU. Globally, the top import categories comprise mineral fuels and oils, mechanical machinery, and vehicles (see Figure 5). Imports from the EU primarily include mechanical machinery, vehicles, and pharmaceuticals. Within the EU, New Zealand's largest trading partners are Germany (total trade volume: NZD 4.6 billion), France (NZD 2.5 billion), and Italy (NZD 2.2 billion).

New Zealand is a vocal advocate for free trade and the regional and international institutions that underpin it, reflecting the vital role trade plays in the nation's economy. The country

¹⁵ Infometrics, "Regional Economic Profile New Zealand."

¹⁶ Stats NZ, "New Zealand International Trade," 2025, accessed April 26, 2025, https://statisticsnz.shinyapps.io/trade_dashboard/.

relies on exporting goods and services to fund its imports, making international trade indispensable. Currently, exports and imports together account for approximately 60% of New Zealand's total economic activity. 17

Trade agreements are in place with, among others, the EU, the United Kingdom, Australia, China, Korea, Thailand, Singapore, Malaysia, and Hong Kong. Recently, FTAs were concluded with the United Arab Emirates and the Gulf Cooperation Council. New Zealand is also part of regional agreements, like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), which facilitates free trade among 12 countries comprising New Zealand, Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, Peru, Singapore, the United Kingdom, and Viet Nam, as well as the Indo-Pacific Economic Framework for Prosperity (IPEF¹⁸).¹⁹

The EU-NZ FTA entered into force on 1 May 2024, offering new export opportunities for EU businesses, producers, and farmers. The FTA includes strong sustainability commitments, such as adherence to the Paris Agreement on climate change, and the protection of core labour rights. It also provides for a more open New Zealand services market in key sectors. including financial services, telecommunications, maritime transport, and delivery services. EU investors now benefit from non-discriminatory treatment in New Zealand, and EU companies have gained improved access to New Zealand Government procurement contracts for goods, services, works, and concessions. Additionally, the agreement features a dedicated chapter to support small businesses in exporting, along with significantly streamlined compliance requirements and procedures.²⁰

¹⁷ Ministry of Foreign Affairs & Trade, "Nz Trade Policy," 2024, accessed December 4, 2024, https://www.mfat.govt.nz/en/trade/nz-trade-policy.

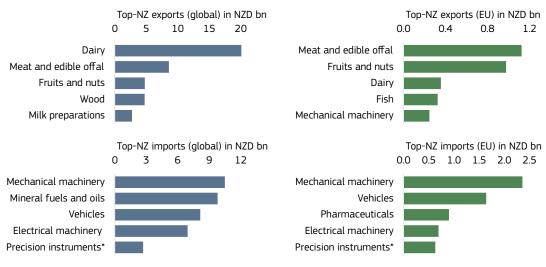
¹⁸ IPEF is an economic arrangement which currently has no trade pillar. It includes 14 Indo-Pacific partners (Australia, Brunei Darussalam, Fiji, India, Indonesia, Japan, Malaysia, the Philippines, the Republic of Korea, Singapore, Thailand, the United States and Vietnam).

¹⁹ Ministry of Foreign Affairs & Trade, "Free Trade Agreements in Force," 2024, accessed December 4, 2024, https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-in-force.

²⁰ European Commission, "EU-New Zealand Trade Agreement Enters into Force, Opening New Opportunities for EU Exporters," 2024, accessed December 4, 2024, https://ec.europa.eu/commission/presscorner/detail/en/ip 24 2388.

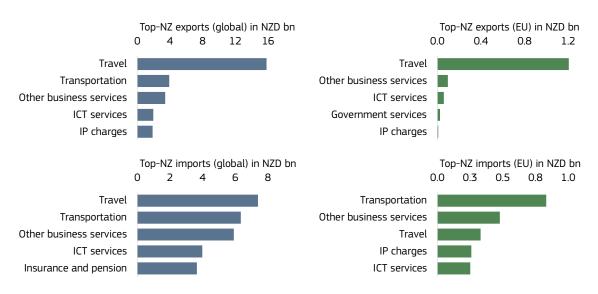
Figure 5: New Zealand's top exports and imports of goods and services with the World and the EU (YE December 2024)

Trade in goods



*Precision instrument include optical, medical, and measuring equipment

Trade in services



Source: StatsNZ

3 New Zealand's investment framework

Consistently recognised among the world's most economically free nations, New Zealand ranked sixth globally in 2024, in the Heritage Foundation's Economic Freedom Index ranking.²¹ Its regulatory environment is particularly notable, achieving a ranking of 5th out of 133 countries and 3rd globally for regulatory quality in 2022, surpassed only by Singapore and Australia, according to the World Intellectual Property Organization.²² The World Bank's most recent "Doing Business Report" further highlights New Zealand's competitiveness, ranking it first worldwide in ease of doing business out of 190 countries. The nation also secured top positions in critical subcategories, including getting credit and starting a business, underscoring its supportive framework for entrepreneurial activities.²³

3.1 Key actors in New Zealand's investment landscape

The key institutions relevant in the investment landscape can be roughly grouped into three categories: regulators and policymakers, investment promotion agencies, as well as business and industry representations, while including both domestic organisations and foreign institutions (see Figure 6).

Regulators and policymakers in New Zealand, such as the Treasury and Land Information New Zealand (LINZ), formally referred to as Overseas Investment Office (OIO), establish and oversee the legal and regulatory framework governing investment. The Treasury sets economic policy and fiscal parameters that shape the country's investment climate. LINZ, under the Overseas Investment Act (OIA), assesses and approves certain foreign investments to ensure they align with national interests. Through regulations, oversight, and market monitoring, these entities help maintain financial stability, protect investors' rights, and uphold transparent business practices.

Investment promotion agencies highlight the country's business opportunities to global audiences and support potential investors throughout their decision-making process. Their responsibilities include providing market intelligence, navigating regulatory requirements, and facilitating partnerships between foreign investors and domestic businesses. Often operating under or in collaboration with government bodies, these agencies organise trade missions, business forums, and targeted outreach campaigns. Their ultimate aim is to drive economic growth by attracting and retaining quality investments that bring capital, employment, and innovation to New Zealand.

As part of the New Zealand Government's pro-growth strategy, the establishment of Invest New Zealand, a one-stop-shop for foreign direct investment, was initiated in January 2025. Inspired by successful models in Ireland and Singapore, this agency will be tasked with streamlining the investment process and providing tailored support to foreign investors, with the goal of increasing capital investment in critical sectors such as banking and fintech, transport and energy infrastructure, manufacturing, and innovation. The new agency will incubate within New Zealand Trade and Enterprise (NZTE) and then transition to a new

²¹ Heritage Foundation, "Index of Economic Freedom," 2024, accessed January 5, 2025, https://www.heritage.org/index/pages/all-country-scores.

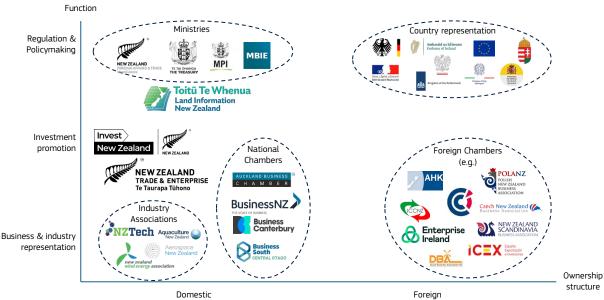
World Intellectual Property Organization, "Global Innovation Index 2024, 17th Edition: Unlocking the Promise of Social Entrepreneurship," 2024, accessed January 5, 2025, https://www.wipo.int/publications/en/details.jsp?id=4756.

²³ World Bank Group, "Doing Business 2020," 2020, accessed January 5, 2025, https://documents1.worldbank.org/curated/fr/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf.

autonomous Crown Entity. Meanwhile, NZTE will be refocused with a single mandate to support New Zealand businesses to export more.24 25

Business and industry bodies form the third major group influencing New Zealand's investment environment. They represent the collective interests of enterprises of all sizes, ranging from small startups to large multinational corporations. These organisations lobby on behalf of their members, engage in policy discussions, and provide platforms for sharing best practices. In addition, many foreign chambers of commerce and international business associations are active in New Zealand, strengthening trade links and helping firms from abroad establish or expand their local presence. Through networking events, policy advocacy, and professional development initiatives, these groups strive to ensure that New Zealand remains an attractive and competitive destination for diverse investments.

Figure 6: Overview of the key actors in New Zealand's investment landscape (with examples)



Note: This illustration contains only a limited selection of organizations from each group due to space constraints. A more comprehensive list is provided at the end of this study under the Contact section.

Source: Own illustration

3.2 Research and science landscape

Contributing to New Zealand's economic growth and its attractiveness as an investment destination is also the country's science landscape. Currently, the research and science landscape consists of about 4,000 privately owned enterprises conducting their own research and development, eight universities, seven Crown Research Institutes (CRIs), governmentowned research organisations that carry out research for the benefit of New Zealand, and Callaghan Innovation, a government-owned incubator for the commercialisation of science, engineering, technology and design.²⁶

²⁴ New Zealand Government, "State of the Nation 2025."

²⁵ New Zealand Government, "Economic Growth the Key to Better Days Ahead."

²⁶ Science New Zealand, "Basis of New Zealand's Science System," 2025April 26, 2025, https://sciencenewzealand.org/about/new-zealand-science-systems.

As announced in January 2025, the government is implementing a major reform of the science and innovation sector to strengthen commercialisation and global competitiveness. As part of this restructuring, the existing seven CRIs will be merged into three public research organisations (PROs) with a focus on bio-economy, earth sciences, and health and forensic sciences. A fourth new public research organisation will concentrate on advanced technologies such as artificial intelligence, quantum technology, aerospace and synthetic biology. Callaghan Innovation will be disestablished, with its functions integrated into other components of the science, innovation, and technology system. Through this restructuring, the government seeks to ensure that scientific breakthroughs are effectively translated into tangible economic benefits, rather than being sidelined due to insufficient commercialisation pathways. To achieve this, the reforms aim to create a more streamlined and strategically aligned research and innovation system by integrating multiple funding mechanisms, reducing bureaucratic barriers, and enhancing collaboration between public research entities and the private sector. A Prime Minister's Science, Innovation and Technology Advisory Council will be established to set strategic priorities.²⁷ ²⁸

The government also aims to ensure the right settings and incentives are in place for intellectual property to generate greater commercial and economic benefits from science, innovation and tertiary education sectors. This will involve developing a national policy for managing intellectual property for science, innovation and technology-funded research based on the model used by Canada's Waterloo University, which vests ownership of intellectual property with the researchers who create it.²⁹

3.3 New Zealand-EU policies

3.3.1 EU-NZ FTA

The EU-NZ FTA promotes investment between the EU and New Zealand. It ensures non-discriminatory treatment of investors and delivers certainty by establishing secure and predictable conditions for investment between the two regions. A number of commitments go beyond standard trading practices, enhancing opportunities for investment and cooperation. With limited exceptions, the EU and New Zealand have agreed not to impose a number of specific conditions that would restrict the ability of investments to proceed and to refrain from requiring specific nationalities for key positions in companies owned by investors from the other party.

New Zealand does maintain a monetary screening threshold for certain foreign investments in significant business assets (see Section 3.4), requiring consent for investments exceeding this limit. However, under the EU-NZ FTA, this threshold has been raised for non-governmental EU investors, doubling from NZD 100 million to NZD 200 million, thereby facilitating greater access to New Zealand's market for EU-based investors.

²⁷ Ministry of Business Innovation & Employment, "Reform of New Zealand's Science, Innovation and Technology System," 2025, accessed March 9, 2025, https://www.mbie.govt.nz/about/news/reform-of-new-zealands-science-innovation-and-technology-system.

²⁸ Science System Advisory Group, "Science System Advisory Group Report an Architecture for the Future," 2024, accessed April 26, 2025, https://www.mbie.govt.nz/assets/science-system-advisory-group-report.pdf. ²⁹ Science System Advisory Group, "Science System Advisory Group Report an Architecture for the Future."

3.3.2 Horizon Europe

New Zealand stands out as the first highly industrialised nation beyond the EU neighbourhood to be associated with Horizon Europe, a milestone that offers extensive opportunities for collaborative research between the two regions and other associated countries.

Horizon Europe, the EU's flagship research and innovation programme, boasts a budget of EUR 95.5 billion (NZD 160 billion) for the 2021–2027 period. The programme is divided into three pillars: Excellent Science, which supports fundamental research and researcher mobility; Global Challenges and European Industrial Competitiveness; and Innovative Europe, which focuses on innovation and commercialisation. New Zealand is associated with Pillar II, which has the largest funding allocation at EUR 53.5 billion (NZD 95 billion) and promotes international, interdisciplinary research projects.³⁰

Pillar II is organised into six thematic clusters:

- Cluster 1: Health (EUR 8.2 billion, NZD 14.6 billion)
- Cluster 2: Culture, Creativity and Inclusive Society (EUR 2.3 billion, NZD 4.1 billion)
- Cluster 3: Civil Security for Society (EUR 1.6 billion, NZD 2.8 billion)
- Cluster 4: Digital, Industry and Space (EUR 15.3 billion, NZD 27.2 billion)
- Cluster 5: Climate, Energy and Mobility (EUR 15 billion, NZD 26.7 billion)
- Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture and Environment (EUR 9 billion, NZD 16 billion)

The funding programme offers valuable opportunities not only for universities and research organisations but also for businesses, public sector organisations, local and regional authorities, and non-governmental organisations in the EU and New Zealand, enabling them to advance their research through collaborative efforts while receiving the necessary financial support.

3.4 The Overseas Investment Act³¹ 32 33

In most cases, foreign investment can proceed freely and without restrictions. However, certain types of investments, involving significant business assets, fishing quota, sensitive land or strategically important businesses are screened under the Overseas Investment Act 2005 (OIA). The OIA outlines the circumstances when consent for overseas investment will ordinarily be required and the criteria for obtaining consent, mandates notification of transactions, and enables the imposition of conditions on investments to manage associated risks.

³⁰ Ministry of Foreign Affairs & Trade, "New Zealand's Association to Horizon Europe: Twelve Months On," 2024, accessed January 5, 2025, https://www.mfat.govt.nz/assets/Trade-General/Trade-Market-reports/New-Zealands-Association-to-Horizon-Europe-Twelve-Months-On-March-2024.pdf.

³¹ Parliamentary Counsel Office, "Overseas Investment Act 2005," 2005, accessed January 3, 2025, https://www.legislation.govt.nz/act/public/2005/0082/latest/DLM356881.html?

³² Land Information New Zealand, "Overseas Investment," 2025, accessed January 5, 2025, https://www.linz.govt.nz/guidance/overseas-investment.

³³ Russell McVeagh, "Investing in New Zealand," 2024, accessed January 4, 2025, https://www.russellmcveagh.com/media/oxikm12h/investing-in-new-zealand-2024-master-20240522_150651.pdf.

Toitū Te Whenua Land Information New Zealand (LINZ), oversees investments captured by the OIA and is responsible for evaluating notifications and consent applications, as well as monitoring and enforcing compliance with the Act's provisions.

Consent is generally required for investments by overseas persons in the following:

- significant business assets over NZD 200m for <u>EU investors</u> under the EU-NZ FTA;
- sensitive land: and
- fishing quota or annual catch entitlements.

Investments in strategically important businesses may also need to be notified to LINZ, so that they may be screened for risks to national security or public order. An investment covered by the OIA can take various forms, including the purchase of an asset, direct investment in the asset, leasing the asset for a term exceeding three years, acquiring shares or securities related to the asset, or initiating a takeover involving the asset. Overseas persons include anyone who is not a New Zealand citizen or ordinarily resident in New Zealand, entities incorporated outside of New Zealand, entities where more than 25% of ownership or control is held by overseas investors, and New Zealand individuals or entities investing on behalf of any of these categories. See Table 2 for further information on the types of investment requiring consent.

It is important to note that the OIA is currently under reform. An amendment Bill will likely be passed by the end of 2025. More information on the reform can be found in Section 3.5. In addition, LINZ has recently published a clarification regarding the purchase of residential property in New Zealand by non-New Zealand citizens, reiterating the eligibility criteria and who requires consent. The clarification can be found here.

Table 2: Consent requirements based on origin of investor and investment type

Category	EU residents,	Resident visa holders	Australian and
	including EU entities	who live overseas,	Singaporean Citizens,
		and entities that are	Australian and
		more than 25%	Singapore permanent
		overseas-owned or	residents who live in
		controlled	New Zealand
Investing in significant			
business assets <u>over</u> NZD 200m			
	Consent required	Consent required	Consent required
Investing in other			
significant land			i i i
	Consent required	Consent required	Consent required
Buying forestry			
			i i
	Consent required	Consent required	May require consent
Developing residential			
land			~
	Consent required	Consent required	Ok to buy

Category	EU residents,	Resident visa holders	Australian and
	including EU entities	who live overseas, and entities that are more than 25% overseas-owned or controlled	Singaporean Citizens, Australian and Singapore permanent residents who live in New Zealand
Buying one home to			
live in	×		
	Won't get consent	Consent required	May require consent
Investing in strate- gically important businesses involved with military or dual- use technology	Must notify	Must notify	Must notify
Investing in another type of strategically important business	May notify	May notify	May notify

Source: Land Information New Zealand

3.4.1 Significant business assets

Overseas investors in significant business assets require consent in several situations. First, if an overseas person acquires an ownership or control interest of more than 25% in an entity that holds sensitive assets, where they previously had no interest, consent is mandatory. Similarly, if an overseas person already holds an ownership or control interest exceeding 25% in such an entity, consent is required for increasing their interest. This applies when their interest moves from over 25% but less than 50% to above 50%, from over 50% but less than 75% to above 75%, or from over 75% but less than 100% to a full 100%. Consent is also needed if an overseas person acquires an ownership or control interest in an entity with assets valued at more than NZD 200 million or if the purchase price for such an entity exceeds NZD 200 million. Additionally, overseas persons must obtain consent when starting a business in New Zealand if the cost to establish the business exceeds NZD 200 million. Finally, the acquisition of assets used in carrying on business in New Zealand also requires consent when the total consideration for those assets exceeds NZD 200 million. The threshold of NZD 200 million applies to EU-Member States under the EU-NZ FTA. It also applies to other countries with whom New Zealand has concluded FTAs and which are listed in Part 5 of the Overseas Investment Regulations 2005.³⁴ For overseas persons from countries without an exemption, the investment screening threshold is NZD 100 million.

3.4.2 Sensitive land

An overseas investment in sensitive land occurs when an overseas person acquires a qualifying interest in such land, either directly or indirectly through the purchase of securities. Qualifying interests include full freehold ownership, leases with terms of three years or more

³⁴ Note that Australia has a higher calculation-based screening threshold under Part 5 of the Overseas Investment Regulations 2005. For the period 01 January 2025 - 31 December 2025, the threshold is NZD 650 million for Australian non-government investments and NZD 136 million for Australian government investments.

for residential land, or 10 years or more for other sensitive land, including any renewals or prior agreements. They also encompass certain rights to access or use resources from the land (known as profits à prendre) if these rights extend for 10 years or longer.

Easements, which typically allow limited use of land (such as access for wind farms), are generally exempt from requiring LINZ consent. However, if the rights granted under an easement are so extensive that the landowner effectively loses control and use of the land, consent may be required. This is particularly relevant for large solar projects, where extensive land coverage by solar panels significantly restricts the owner's use of the property. Investments in securities are also considered investments in sensitive land requiring consent under the OIA if they result in acquiring or increasing ownership or control interests exceeding 25%, similar to the rules for investments in significant business assets.

Sensitive land includes various types of property, such as residential land categorised as "residential" or "lifestyle" in the local authority's District Valuation Roll, as well as residential flats. It also encompasses non-urban land larger than five hectares in size (typically land used for grazing, horticulture, or forestry). Additionally, sensitive land includes areas adjacent to or encompassing specific features, such as islands, foreshore, seabed, lakebed, conservation or reserved land, historic or sacred places, and Māori (the indigenous people of New Zealand) reservations.

Investments in forestry also fall under sensitive land and therefore require consent under the OIA under certain conditions. This includes buying freehold or leasehold land to convert into a plantation forest, purchasing an existing forest, forestry lease, or forestry right, or investing in a forestry business. However, an overseas person can purchase up to 1,000 hectares of forestry rights per calendar year or forestry rights lasting less than three years without needing consent.

3.4.3 Fishing quota or annual catch entitlements

The majority of commercial fishing in New Zealand's territorial waters requires ownership of a fishing quota. Under the Fisheries Act, along with the OIA and its Regulations, overseas individuals are prohibited from holding an interest in a fishing quota or in a business that directly or indirectly owns or controls a fishing quota, unless they have obtained the necessary consent.

3.4.4 Strategically important businesses

The OIA includes a national security and public order (NSPO) "call-in" regime that applies to certain investments in "strategically important businesses," even if those investments do not normally require consent. Notification to the Minister of Finance, via LINZ, is required for some types of these investments, while for others, it is optional.

A "strategically important business" includes those involved in ports, airports, electricity generation or distribution, electricity metering, large or medium drinking water supplies, wastewater or stormwater networks, telecommunications, New Zealand-registered banks, financial market infrastructure, media businesses with significant influence, or critical national infrastructure.

It is mandatory to notify LINZ for investments in businesses that work with military or dualuse technology or that supply critical services to the New Zealand Defence Force or national security agencies. For other types of national security transactions, such as investments in ports, telecommunications, or businesses holding sensitive data, notification is optional but recommended. The NSPO regime applies regardless of the size or value of the initial investment, except for media businesses or listed companies. Subsequent investments will only trigger the regime if they increase the overseas investor's ownership or control to 25%, 50%, 75%, or 100%.

3.4.5 Tests required for consent approval

To obtain consent under the OIA, applicants may need to undergo several tests designed to provide LINZ with a clearer understanding of the investor's intentions.

Investor Test

To obtain consent for investing in significant business assets, sensitive land, or fishing quotas under the OIA, investors must satisfy the Investor Test, which functions as a negative bright line assessment. This means the test is passed if none of the specified character or capability criteria are triggered, or if LINZ determines that, despite a criterion being triggered, the investor remains suitable to own or manage sensitive New Zealand assets. These criteria are designed to assess the fitness of the involved entities and individuals to control such assets. The Investor Test applies to both relevant overseas persons and individuals with control. Relevant overseas persons refer to the entities undertaking the investment, such as purchasers of sensitive land or business assets, as well as upstream entities responsible for key investment decisions. Individuals with control are those who govern or significantly influence these relevant entities, typically members of boards or senior executives with authority over critical investment decisions.

LINZ's review emphasises identifying the correct entities and individuals subject to the test and examining their ownership and control structures. To meet the Investor Test, these parties must satisfy the character and capability criteria. The character criteria require the absence of serious criminal convictions, significant regulatory penalties, or involvement in offences or violations with substantial consequences. The capability criteria ensure individuals are not barred from managing companies, have not faced penalties for tax evasion, and do not have outstanding tax debts exceeding NZD 5 million.

Even if a particular criterion is not met, the Investor Test can still be passed if LINZ determines that this does not make the investor unsuitable to own or control sensitive New Zealand assets, allowing for a nuanced evaluation of each case. Investors who have previously met the new investor test (effective from 22 March 2021) are not required to undergo the test again unless their circumstances change.

Benefit Test

If consent is required for the investment in sensitive land or fishing quota, the investor may also be required to satisfy LINZ's benefit test, showcasing that the investment results in a benefit for New Zealand. This assessment considers seven broad benefit factors: economic benefits (such as job creation, new technology, and increased productivity), environmental improvements (like protecting native flora and enhancing water quality), public access to sensitive land, the protection of historic heritage, support for significant government policies, increased New Zealand ownership or participation in the investment, and any other relevant benefits. If an investment strongly supports one or two benefit areas, LINZ may give less weight to the others, as long as the overall benefit threshold is clearly met.³⁵

³⁵ The Treasury, "Ministerial Directive Letter Dated 6 June 2024 under Section 34 of the Overseas Investment Act 2005," 2024, accessed May 31, 2025, https://www.treasury.govt.nz/sites/default/files/2024-06/ministerial-directive-letter-june-2024.pdf.

To meet the Benefit Test, investors must submit an investment plan as part of their application. This plan should outline the current state and use of the assets, the investor's intended actions over a specified time frame (typically three to five years), and the net benefits the investment is expected to deliver to New Zealand. The plan must demonstrate a high degree of certainty and commitment to the proposed benefits, which must be framed as firm commitments. LINZ uses these commitments as conditions for granting consent, monitors their fulfilment post-investment, and requires annual progress reports from the investor.

LINZ assesses the net benefits in a proportionate manner, aligning the level of required benefits with the sensitivity, size, and nature of the land or assets involved, as well as the specifics of the overseas investment, such as whether the interest is leasehold or freehold.

National interest test

The National Interest Test acts as a "backstop" to address significant risks arising from transactions that are ordinarily subject to screening under the Act (excluding call-in transactions). It is intended to be applied rarely and only when essential to safeguard New Zealand's core national interests.³⁶

The test is an additional assessment applied by LINZ and the Minister of Finance for certain overseas investment applications in New Zealand that involve matters critical to national interests. This test is mandatory for investments involving strategically important businesses or cases where a non-New Zealand government investor acquires more than 25% ownership or control of a target business or assets. Beyond these scenarios, the Minister of Finance retains broad discretion to apply the test to any investment that might pose risks to New Zealand's national interest. The test allows the government to block or impose conditions on transactions, even if investors meet other requirements like the Investor Test and Benefit Test.

Factors triggering the National Interest Test include foreign government involvement below the 25% threshold that still grants disproportionate control over sensitive assets, investments that confer significant market power or vertical integration in an industry, or transactions inconsistent with government objectives, such as environmental or economic goals. Despite its scope, the test is designed to be used sparingly, only when necessary to protect New Zealand's core national interests.

Certain investment pathways in New Zealand require additional specific tests to ensure

Additional tests

compliance with the OIA. The Commitment to Reside Test evaluates whether an applicant holds a residence class visa, demonstrates a commitment to living in New Zealand, and is purchasing residential property solely for personal use. The Incidental Residential Use Test ensures residential land is occupied only for purposes closely tied to the associated business activity, while the Increased Housing Test focuses on boosting housing supply or long-term accommodation, such as aged care facilities. For applicants intending to make New Zealand their permanent home, the Intention to Reside Test requires an appropriate visa and evidence of actions and plans to reside within 12 months, particularly for sensitive land that is not classified as residential. The Non-Residential Use Test ensures residential land is utilised

strictly for essential business purposes. Specialised tests include the Special Forestry Test,

³⁶ The Treasury, "Guidance Note: Foreign Investment Policy and National Interest Guidance," 2021, accessed May 31, 2025, https://www.treasury.govt.nz/sites/default/files/2021-06/for-invest-pol-nat-interest-guidancejun21.pdf.

which streamlines investment in existing forestry, and the Standing Consent, which offers pre-approval to investors with a positive track record for forestry or residential land investments. Lastly, the Farm Land Benefits Test emphasises the economic benefits of investments in farmland and the involvement of New Zealanders, requiring substantial benefits in at least one of these areas.

3.5 Reform of the Overseas Investment Act³⁷ 38 39 40

The New Zealand Government has announced several intended changes to the Overseas Investment Act, aiming to streamline the investment screening process while maintaining national interest protections. The proposed reforms include retaining the current screening requirements for farmland, fishing quotas, and residential housing while introducing a fast-track consent process for other investments. The government seeks to shift the focus toward a more risk-based approach, where investment is generally assumed to be beneficial unless specific risks are identified.

The proposed approach would introduce a two-stage assessment process designed to ensure swift approvals for low-risk investments while allowing more detailed scrutiny for transactions that may affect New Zealand's national interest (see Figure 7). In the first stage, investment applications would undergo an initial rapid risk assessment, where regulators would quickly evaluate whether any national interest risks exist. If no concerns are identified, the investment would receive fast-track approval within 15 working days. However, if risks are detected, the application would move to the second stage, where a full national interest assessment would be conducted. The proposed reforms would introduce a modified national interest test that consolidates the existing investor test, benefit test, and national interest test into a single framework, except for farmland, fishing quota, and residential housing, which would retain their current screening processes. The second stage would allow the government to impose conditions, approve with modifications, or, in exceptional cases, reject the investment if it is deemed contrary to the national interest.

A Ministerial Directive Letter (MDL) has also been proposed as a means of guiding decision-making for the national interest test. This would play a central role in the framework by ensuring that regulatory decisions remain flexible and responsive to changing policy objectives without requiring legislative amendments. The MDL would outline risk factors, decision-making considerations, and specific areas where the government may encourage or scrutinise foreign investment.

By integrating a streamlined risk-based approach, the government aims to reduce unnecessary regulatory burdens while preserving its ability to intervene in cases where foreign investments could pose security, economic, or strategic risks. Detailed legislative

³⁷ Land Information New Zealand, "Reform of the Overseas Investment Act," 2024, accessed January 4, 2025, https://www.linz.govt.nz/our-work/overseas-investment-regulation/reform-overseas-investment-act.

³⁸ MinterEllisonRuddWatts, "Open for Business? New Zealand Set to Relax Foreign Direct Investment Regulation," 2024, accessed January 4, 2025, https://www.minterellison.co.nz/insights/open-for-business-new-zealand-set-to-relax-foreign-direct-investment-regulation.

³⁹ Bell Gully, "Government's Positive Signals for Overseas Investments into New Zealand," 2024, accessed January 4, 2025, https://www.bellgully.com/insights/government-s-positive-signals-for-overseas-investments-into-new-zealand/.

⁴⁰ The Treasury, "Cabinet Paper Cab-25-Sub-0013: Detailed Policy Decisions for the Overseas Investment Act Reform Information Release," 2025, accessed May 3, 2025, https://www.treasury.govt.nz/publications/cabinet-paper/cabinet-paper-cab-25-sub-0013-detailed-policy-decisions-overseas-investment-act-reform-information-release.

proposals are currently under development, with the objective of enacting the legislation by the end of 2025.

Stage 1: Regulator's initial triage Low-risk cases where no national interest risk factors are High-risk classes of investment present Stage 2: National interest assessment The Act and the Ministerial Directive Letter will set out how the government considers the national interest and what is contrary to it Farmland, fishing quota, and residential housing would be subject to the full national interest test and not subject to to initial triage phase Strategically important businesses and acquisitions of more than 25% control ownership would automatically be required to undergo the national interest assessment Benefits and investor test The benefit and investor test would be retained for farmland, fishing quota, and residential housing consents Consent is granted (with or without conditions) by the Only the Minister may **prohibit** if contrary to national Regulator or Minister

Figure 7: Overview of the proposed overseas investment screening process

Source: New Zealand Government (adapted)

3.6 Investor visa categories

Starting on 19 September 2022, the Active Investor Visa Plus category replaced the Investor 1 and Investor 2 resident visa categories. The Investor 1 visa required a minimum investment of NZD 10 million for a minimum of three years, while the Investor 2 visa required a minimum investment of NZD 3 million for a minimum of four years. Acceptable investments included stocks, shares in venture capital or investment funds, residential or commercial property, capital for a New Zealand company, or in charitable foundations (no more than 15%).41 42

Due to a significant decline in applications, the New Zealand Government announced on February 9, 2025, that it was introducing a modernised approach to its investment visa settings to attract more foreign investors and stimulate economic growth. The revised Active Investor Plus visa, which took effect on April 1, 2025, replaces the previous complex

⁴¹ New Zealand Immigration, "Investor 1 Resident Visa," 2025January 5, 2025, https://www.immigration.govt.nz/new-zealand-visas/visas/visa/investor-plus-investor-1-resident-visa.

⁴² New Zealand Immigration, "Investor 2 Resident Visa," 2025, accessed January 5, 2025, https://www.immigration.govt.nz/new-zealand-visas/visas/visa/investor-investor-2-resident-visa.

weighting system⁴³ with two streamlined investment categories. The Growth category requires a minimum investment of \$5 million in higher-risk ventures, such as direct investments in New Zealand businesses, for a minimum of three years. In contrast, the Balanced category allows for a mix of lower-risk investments, with a required minimum investment of \$10 million over five years (see Table 3).⁴⁴

Beyond these structural changes, the scope of acceptable investments is being expanded to include bonds, which will help local governments raise capital for infrastructure projects and support business development. Additionally, immigration requirements for investors choosing more active investment options have been eased, reducing obligations such as time spent in New Zealand. The English language requirement has also been removed to reduce barriers for high-value investors. These measures follow the relaxation of visa rules in January 2025, allowing holidaymakers to work remotely while visiting the country, aimed at boosting New Zealand's tourism sector.

Table 3: Overview of the updated Active Investor Plus Visa (April 1st, 2025)

Investment category	Investment volume	Investment options	Investment period	Time to be spent in New Zealand
Growth category	NZD 5 million	Direct investmentsManaged funds	3 years	21 days
Balanced category	NZD 10 million	 Bonds Listed equities New property developments Existing commercial or industry property developments Philanthropy Direct investments Managed funds 	5 years	105 days Time can be reduced by investing: - NZD 11m (14-day reduction) - NZD 12m (28-day reduction) - NZD 13m (42-day reduction)

Source: New Zealand Government

Through its <u>Deal Pipeline portal</u>, Invest New Zealand showcases investment opportunities from verified New Zealand companies and facilitates direct connections with innovative founders leading high-growth ventures.

⁴³ The Active Investor Plus visa, introduced in 2022 and valid until March 31, 2025, replaced two earlier visa categories. To qualify, investments must meet specific criteria: they cannot be for personal use, must be made in New Zealand using New Zealand currency, and must be directed into one or more approved investment options, including listed equities, philanthropy, managed funds, or direct investments. The total investment must amount to NZD 15 million (after applying weightings), be distributed over three years, and maintained for an additional year. Applicants are required to spend at least 117 days in New Zealand over the four-year period and demonstrate a reasonable level of English proficiency (IELTS 5). Different investment types are assigned varying weightings toward the NZD 15 million threshold. For instance, direct investments

in private businesses receive the highest weighting (3x), making a direct investment of NZD 5 million acceptable. Conversely, listed equities and philanthropy have a weighting of 1x and are capped at NZD 7.5 million each, meaning they cannot independently meet the threshold. Property is excluded as an acceptable investment class.

44 New Zealand Government, "Going for Growth: Unlocking Investment in Nz," 2025, accessed February 9,

^{2025,} https://www.beehive.govt.nz/release/going-growth-unlocking-investment-nz.

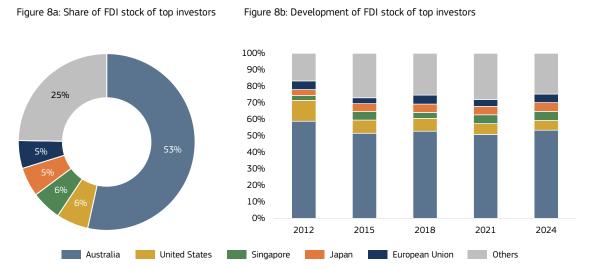
⁴⁵ New Zealand Government, "Going for Growth: Unlocking Investment in Nz."

⁴⁶ New Zealand Immigration, "Working Remotely from New Zealand," 2025, accessed March 7, 2025, https://www.immigration.govt.nz/about-us/media-centre/news-notifications/working-remotely-from-new-zealand.

4 Investment landscape

With foreign direct investment (FDI) stock of over NZD 8 billion in YE March 2024, the EU ranks fifth after Australia, the United States, Singapore, and Japan in terms of largest foreign investor, accounting for approximately 5% of the total FDI stock in New Zealand, according to StatsNZ data (see Figure 8).47

Figure 8: New Zealand's top foreign investors, YE March 2024 (Figure 8a); and their development over time, YE March 2012-2024 (Figure 8b)



Source: StatsNZ

Regarding New Zealand's overseas investment stock by sector, the financial and insurance sector held the largest share as of March 2024, accounting for 43% (NZD 68 billion). Manufacturing followed with 15%, while wholesale trade represented 7% of total investment. In terms of sectoral growth, the healthcare and social assistance sector experienced the most significant expansion between 2012 and 2024, with an increase of nearly 200%, corresponding to a compound annual growth rate (CAGR) of 31%. Wholesale trade followed closely with a CAGR of 30%, while the financial and insurance sector grew at a CAGR of 28% (see Figure 9).48

⁴⁷ Stats NZ, "International Investment Position - Bpm6 Annual Directional Basis Stock of Direct Investment by Country (Annual-Mar)," 2024, accessed December 4, 2024, https://infoshare.stats.govt.nz/.

⁴⁸ Stats NZ, "International Investment Position - Bpm6 Annual Directional Basis Stock of Direct Investment by Industry (Annual-Mar)," 2024, accessed March 9, 2025, https://infoshare.stats.govt.nz/.

180 160 140 Investments in billion NZD 120 100 80 60 40 20 O 2012 2015 2018 2021 2024 Financial and insurance services Manufacturing ■ Wholesale trade Agriculture, forestry, and fishing ■ Rental, hiring, and real estate services ■ Retail trade ■ Pro fessional, scientific, and technical services Health care and social assistance

Figure 9: New Zealand's foreign investment liabilities by sector (YE March 2012-2024)

Source: StatsNZ

4.1 Overview of EU investments in New Zealand

According to Eurostat data, the stock of EU foreign direct investment in New Zealand amounted to EUR 9.9 billion in 2023. In 2022, the majority of EU investments were concentrated in financial and insurance services, which accounted for nearly EUR 3 billion. Investments in professional, scientific, and technical activities followed, contributing EUR 1.6 billion, while manufacturing attracted EUR 1.3 billion in investment (see Figure 10). According to Eurostat data, 16 Member States had reported investments in New Zealand in 2022 and 2023 (see Table 4).49

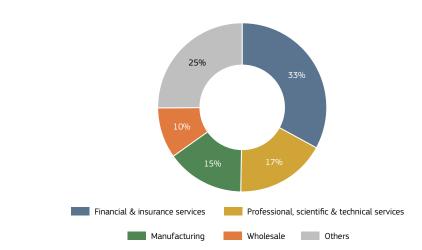


Figure 10: Share of EU investments in New Zealand, by sector, 2022, Eurostat

Source: Eurostat

⁴⁹ Eurostat, "EU Direct Investment Positions by Country, Ultimate and Immediate Counterpart and Economic Activity (Bpm6)," 2025, accessed May 3, 2025,

https://ec.europa.eu/eurostat/databrowser/view/bop_fdi6_pos__custom_16505883/default/table?lang=en.

Table 4: EU foreign direct investment stock in New Zealand by Member State (Eurostat)

Country	2022	2023	
	(in m EUR)	(in m EUR)	
Austria	Not available	Not available	
Belgium	116.0	146.0	
Bulgaria	-0.2	-0.2	
Croatia	0.0	0.0	
Cyprus	41.4	46.5	
Czechia	0.1	0.2	
Denmark	385.8	375.6	
Estonia	Confidential	Confidential	
Finland	15.0	10.0	
France	500.0	583.0	
Germany	1,540.0	1,500.0	
Greece	0.8	1.5	
Hungary	0.0	0.0	
Ireland	Confidential	Confidential	
Italy	96.6	152.9	
Latvia	0.0	0.0	
Lithuania	0.0	Confidential	
Luxembourg	474.0	523.0	
Malta	Confidential	Confidential	
Netherlands	Confidential	Confidential	
Poland	0.1	0.2	
Portugal	0.4	0.8	
Romania	0.0	0.0	
Slovakia	0.0	0.0	
Slovenia	0.1	0.1	
Spain	384.0	281.0	
Sweden	370.1	396.0	

Source: Eurostat

Based on available Eurostat data, among Member States that publish their investment figures, Germany is the leading EU investor in New Zealand in 2023. France ranks as the second-largest EU investor, followed by Luxembourg and Sweden (see Table 4).

When considering StatsNZ data, among EU Member States, the Netherlands holds the dominant position as the largest EU investor in New Zealand in the year ended March 2024, followed by Germany, France and Luxembourg.50

4.2 EU investment in sensitive assets in New Zealand

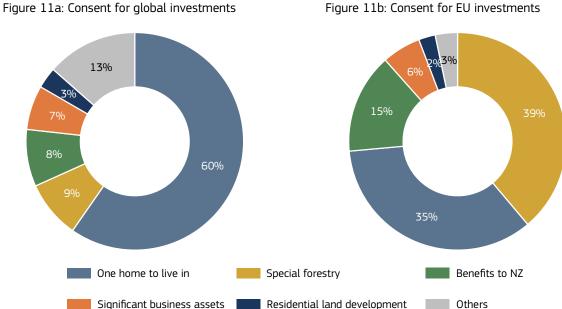
For the purpose of this study, LINZ has kindly provided an excerpt of its investment data, which is discussed in the section below. The respective analysis only focuses on investment companies with at least a 10% shareholding by an EU Member State. However, it is important to note that LINZ's data only includes companies with less than 25% New Zealand ownership.

⁵⁰ Stats NZ Non-Confidential data from EU-27, YE ended March 2024

4.2.1 Investments in sensitive assets between 2022-2023

According to 010 representatives, approximately 15% of total foreign investment in New Zealand are investments in sensitive assets. Between 2022 and 2023, there were 955 consents given for sensitive investments in New Zealand. Of those, the EU received 121 consents across 17 Member States, accounting for approximately 13% of total consents. Figure 11 highlights the share across the different pathways captured in LINZ data for both global (Figure 11a) and EU investors (Figure 11b). Half of the consents were given with respect to forestry and nearly a quarter due to the potential economic benefits of the investments to New Zealand.

Figure 11: Consents given for sensitive investments by pathway between 2022-2023; global investments (Figure 11a) and EU investments (Figure 11b)⁵¹



Source: Land Information New Zealand Data

Over 60% of the number of approvals were granted to investors from Germany and the Netherlands. When it comes to investment volume, Dutch and Luxembourg investments accounted for 63% of total EU investment in sensitive assets (see Figure 12).

Ingka Investments, a Dutch company, is particularly prominent in acquiring forestry land during this period. While all of Ingka Investments' applications focused on forestry land, the company initially entered New Zealand with the primary objective of establishing and operating IKEA stores. Notably, Luxembourg accounted for only two investments during this timeframe, yet these amounted to NZD 628.3 million. Of this total, NZD 628 million was attributed to an investment in significant business assets, while a smaller forestry investment accounted for approximately NZD 300,000. The specific details of these investments remain undisclosed.

Discussions with stakeholders highlighted EU investors' commitment to long-term investments in New Zealand, with a clear emphasis on sustainability. Regarding the regulatory framework governing investments in sensitive assets, the upcoming reform of the

⁵¹ The category "others" includes Exemptions, Intention to reside, Profit a prendre, Variation, and Pathway not indicated

Overseas Investment Act has generated optimism among investors. They anticipate that the new regime will offer a more streamlined and less bureaucratic process for future investments.

 Value of investments Number of consents issued 700 45 600 40 500 35 Number of consents 30 400 25 300 20 15 200 10 100 5

Figure 12: Approved consents for sensitive investments for EU Member States between 2022-2023

Source: Land Information New Zealand Dashboard

4.3 Overseas investor visa applications from the EU

Data from the Ministry of Business, Innovation & Employment (MBIE) indicate that, from the inception of the Active Investor Plus visa category until the end of November 2024, a total of 144 applications were submitted globally. Of these, 39 applications originated from EU countries, with Germany accounting for the vast majority (36), while the remaining three applications came from Sweden. Of the EU applications, 33 were approved, representing an approval rate of approximately 85%.52

Considering all Investor Visa categories, nearly 12,000 applications were submitted globally between 2014 and 2024. The majority of these applications were from China (57%), followed by the United States (11%). EU applications accounted for 7% of the total, with 831 applications, of which 597 were approved—a success rate of approximately 72% (see Table 5). Although applications declined during the COVID-19 pandemic, they recovered rapidly, peaking in 2023 with 144 applications (see Figure 13). Germany emerged as the leading EU country in investor visa applications, with 408 submissions between 2014 and 2024, representing nearly half of all EU applications during this period. Germany was followed by France, Austria, and the Netherlands (see Figure 14a).53

⁵² Ministry of Business Innovation & Employment, "Migration Data Explorer," 2025, accessed January 5, 2025, https://mbienz.shinyapps.io/migration_data_explorer/.

⁵³ Ministry of Business Innovation & Employment, "Migration Data Explorer."

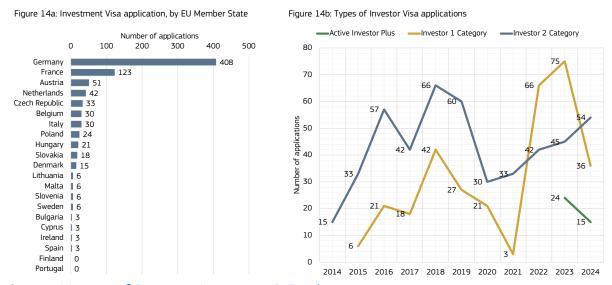
2,500 2,205 2.000 740 Number of applications 1,500 263 1,248 1,152 1,149 1,110 1,000 795 507 500 78 360 144 108 108 105 87 78 60 51 39 36 15 0 2016 2020 2014 2015 2017 2018 2019 2021 2022 2023 2024 -Total -EU

Figure 13: Investor Visa applications, 2014-2024

Source: Ministry of Business, Innovation & Employment

Regarding the distribution across Investment Visa categories, the majority of applications (477) were for the Investor 2 Visa, compared to 315 for the Investor 1 Visa. However, approval numbers for both categories were relatively comparable: 273 approvals for the Investment 1 Visa and 291 for the Investment 2 Visa (see Table 5; Figure 14b).⁵⁴ For further details, a breakdown of visa types and their respective statistics is provided in Table 5.

Figure 14: Investor Visa applications by EU Member State, 2014-2024 (Figure 14a); EU Investor Visa applications by investor visa type (Figure 14b)



Source: Ministry of Business, Innovation & Employment

⁵⁴ Ministry of Business Innovation & Employment, "Migration Data Explorer."

Table 5: Investor Visa Applications from the EU for 2014-2024

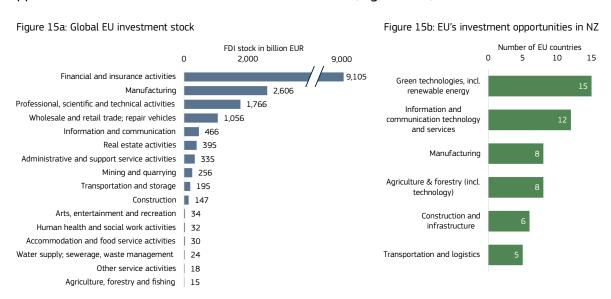
	/	Active Inve	stor Plus	5	l	nvestor 1	Category	У	ı	nvestor 2	Category	/	Total
Year	Approved	Declined	Total	Approval rate	Approved	Declined	Total	Approval rate	Approved	Declined	Total	Approval rate	
2014									9	6	15	60%	15
2015					6		6	100%	21	12	33	64%	39
2016					21		21	100%	33	24	57	58%	78
2017					9	9	18	50%	27	15	42	64%	60
2018					42		42	100%	51	15	66	77%	108
2019					27		27	100%	42	18	60	70%	87
2020					21		21	100%	24	6	30	80%	51
2021					3		3	100%	9	24	33	27%	36
2022					54	12	66	82%	27	15	42	64%	108
2023	18	6	24	75%	57	18	75	76%	18	27	45	40%	144
2024	15		15	100%	33	3	36	92%	30	24	54	56%	105
Total	33	6	39		273	42	315		291	186	477		831

Source: Ministry of Business, Innovation & Employment

5 EU's global investment

In 2022, the EU's global outward FDI stock exceeded EUR 17 trillion, with the Netherlands, Luxembourg, Germany, and France contributing 68% of the total. Financial and insurance activities accounted for 53% of the total investment stock, with over EUR 9 trillion invested (see Figure 15a), 97% of which was in financial services. Manufacturing accounted for 15% of the total stock, amounting to EUR 2.6 trillion. Within the sector, refined petroleum products, chemicals, and pharmaceuticals each contributed between 12% and 15%, while motor vehicles and machinery and equipment each made up 8%.55

Figure 15: EU FDI stock in the rest of the world, by sector (2022) (Figure 15a); Investment opportunities for EU Member States in New Zealand (Figure 15b)



Source: **Eurostat**, Interviews

Recent discussions with representatives from EU Member States have highlighted potential areas for future investment in New Zealand (see Figure 15b). A majority of Member States (15) identified green technologies, particularly renewable energy, as a promising area, with opportunities focused on solar and wind energy projects as well as support services for renewable energy operations. Additional investment potential was noted in the information and communication technology (ICT) sector, as well as in the manufacturing, agricultural, and forestry sectors.

The primary barrier to increased EU investment in New Zealand remains the limited size of available projects, which, coupled with the geographic distance, often renders them less viable for EU companies. Despite this, the discussions revealed strong interest from EU firms and investors in the identified sectors, signalling readiness to act when larger or more viable opportunities emerge. More information on the potential areas for each Member State can be seen in Table 6 below.

⁵⁵ Eurostat, "EU Direct Investment Positions by Country, Ultimate and Immediate Counterpart and Economic Activity (Bpm6)."

Table 6: Potential investment opportunities for EU Member States in New Zealand

Member States		eas for investment opportun		
Austria	Renewable energy	Forestry and agricul- tural technology	Information and communication technologies	
Belgium	Pharmaceuticals	Agricultural technology	Chemical industry	
Bulgaria	Information and communication technologies	Agriculture	Tourism	
Croatia	Financial services	Information and communication technologies	Pharmaceutical and biotechnology industry	
Cyprus	Real estate	Hospitality	Financial services	
Czech Republic	Renewable energy	Water treatment and management	Advanced manufac- turing	
Denmark	Energy	Transport and logistics services	Agriculture	
Estonia	Green technologies	Education	Digital services	
Finland	Information and communication technologies	Machinery & advanced manufacturing (incl. energy)	Forestry and agriculture	
France	Manufacturing and agricultural machinery	Aerospace	Renewable energy	
Germany	Renewable energy	Infrastructure	Digital technology	
Greece	Renewable energy	Tourism	Food and beverage industry	
Hungary	Mining and quarrying	Financial services and consulting	Vehicle production and related services	
Ireland	Agricultural technology	Financial technology	Medical technology	
Italy	Construction	Machinery services	Agricultural technology	
Latvia	Construction	Pharmaceutical and biotechnology industry	Support services for renewable energy	
Lithuania	Transportation and logistics services	Renewable energy	Financial technology and services	
Luxembourg	Financial services	Wholesale & retail trade	Information and communication technologies	
Malta	Tourism	Financial and film services	Information and communication technologies	
Netherlands	Agricultural technology	Green technologies and water management	Consulting and IT- services	
Poland	Green technologies	Information and communication technology	Construction	
Portugal	Textiles and fabrics	Software services	Renewable energy	
Romania	Renewable energy (geothermal energy)	Food processing	Transportation and logistics services	

Member States	Areas for investment opportunities					
Slovakia	Digital technologies and cybersecurity	Renewable energy	Education and research & development			
Slovenia	Advanced manufac- turing	Automotive sector	Transportation and logistics services			
Spain	Services for building and gardening activities	Insurance services	Transport services			
Sweden	Food processing and packaging	Green technologies	Infrastructure			

Source: Interviews

6 Investment opportunities in New Zealand

FDI is essential for New Zealand's economic growth, providing businesses with the capital needed to compete internationally and supporting initiatives that might otherwise lack funding.56 In addition to capital, FDI fosters productivity and innovation by facilitating the transfer of knowledge, skills, and technology, with these benefits often spreading to other firms in the economy. It is further key to building an export-led economy, enabling firms to establish international connections and integrate into global supply chains. 57 58 Recognising its significance, New Zealand Trade and Enterprise has identified seven key investment priorities (see Figure 16), which this study explores in greater depth. Drawing on industry research and insights from conversations with experts in the relevant fields, the study highlights specific investment opportunities within each prioritised sector.



Figure 16: NZTE's investment priorities

In line with the seven key investment priorities identified by NZTE, this study does not include a stand-alone section on the construction sector in New Zealand, despite acknowledging its critical role in the national economy and its relevance to foreign investors. Instead, construction-related opportunities are integrated across several priority areas—most notably in renewable energy, advanced transportation, and technology attraction—while also intersecting with themes discussed in other sectoral analyses that follow.

⁵⁶ The Treasury, "Economic Impacts of Foreign Direct Investment," 2016, accessed December 12, 2024, https://www.treasury.govt.nz/publications/research-and-commentary/rangitaki-blog/economic-impactsforeign-direct-investment?utm source=chatqpt.com.

⁵⁷ New Zealand Institute of Economic Research, "Foreign Direct Investment in New Zealand: A Brief Review of the Pros and Cons," 2016, accessed December 12, 2024, https://businessnz.org.nz/wpcontent/uploads/2022/07/Foreign-Direct-Investment-in-NZ.pdf?utm source=chatqpt.com.

⁵⁸ Business NZ, "A Future for Foreign Direct Investment into New Zealand," 2024, accessed December 12, 2024, https://businessnz.org.nz/wp-content/uploads/2024/09/240906-A-future-for-Foreign-Direct-Investment-into-NZ.pdf.

6.1 Aquaculture

New Zealand's aquaculture sector is generating over NZD 750 million in revenue annually,⁵⁹ with the government aiming to triple its revenue to NZD 3 billion by 2035.⁶⁰ Most commercial production takes place in near-shore areas, including Northland harbours, the Coromandel Peninsula, Tasman and Golden Bays, the Marlborough Sounds, Banks Peninsula, and Stewart Island. Meanwhile, a few large offshore sites in Hawke's Bay, D'Urville, and Pegasus Bay are testing mooring technology and small-scale production.⁶¹

Exports currently reach 78 countries, highlighting the sector's role in international markets. For the fiscal year ending June 30, 2024, seafood export revenue increased by 2% to NZD 2.1 billion, with aquaculture contributing NZD 573 million, rising by 9% (see Figure 17). ⁶²

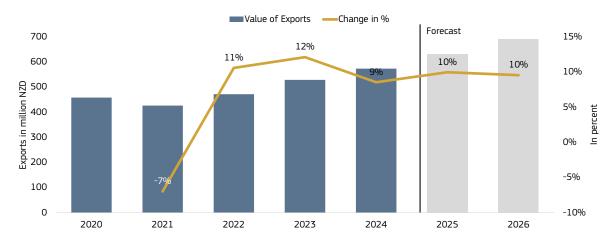


Figure 17: Development of Aquaculture Exports (2020–2026f)

Source: Ministry for Primary Industries

The sector's success stems from its diverse structure, which focuses on three primary species: King salmon, Greenshell™ mussels, and Pacific oysters. According to a recent NZTE report, New Zealand provides favourable environmental conditions for those species that require a high water quality. Emerging opportunities in seaweed, microalgae, pāua (abalone), and kingfish farming further diversify the industry and enhance its potential for innovation and sustainable growth.

King salmon is one of New Zealand's key aquaculture products, accounting for 75% of the global production. The high quality of this species is mainly attributed to the country's clean, cold waters, which are free from pests like salmon lice. This ecological advantage enables New Zealand to maintain high production standards and achieve significant economic returns, with a single 10-hectare salmon farm generating an annual value of approximately

⁵⁹ New Zealand Trade and Enterprise, "Explore New Zealand Aquaculture," 2024, accessed December 22, 2024, https://www.nzte.govt.nz/page/aquaculture.

⁶⁰ New Zealand Government, "Accelerate the Aquaculture Strategy: Investment Roadmap 2023 | Progress Update," 2023, accessed December 20, 2024, https://www.mpi.govt.nz/dmsdocument/60346-Accelerate-the-Aquaculture-Strategy-Investment-Roadmap-2023-progress-update.

⁶¹ Jeanette M. E. Stenton-Dozey et al., "New Zealand Aquaculture Industry: Research, Opportunities and Constraints for Integrative Multitrophic Farming," *New Zealand Journal of Marine and Freshwater Research* 55, no. 2 (2021), https://dx.doi.org/10.1080/00288330.2020.1752266.

⁶² Ministry for Primary Industries, "Situation and Outlook for Primary Industries," 2024, accessed December 21, 2024, https://www.mpi.govt.nz/resources-and-forms/economic-intelligence/situation-and-outlook-for-primary-industries.

NZD 140 million.⁶³ Recent innovations in salmon farming, including land-based systems and open-ocean farms, exemplify the sector's commitment to sustainability and efficiency, according to New Zealand King Salmon, a New Zealand salmon farming company. They give as an example the first open-ocean salmon farm in Cook Strait which marks a transformative step, allowing production in cooler, deeper waters while minimizing environmental impact.⁶⁴

Globally, by 2032, the consumption of aquatic foods is anticipated to reach 184 million tonnes, marking a 19-million-tonne rise from 2022. However, this growth represents a slower rate of increase – 12% compared to the 24% observed between 2012 and 2022. The deceleration is mainly linked to constraints in expanding fisheries and aquaculture output, rising costs, slower population growth, and limited growth in demand, particularly in high-income nations where consumption levels are expected to remain stable. However, aquaculture continues to grow at a faster pace, with its share of aquatic foods for human consumption projected to reach 60% by 2032, up from 57% in 2022. Most of the demand increase will come from Asia, which is expected to account for 78% of the growth and drive 73% of aquatic food consumption by 2032, compared to 72% in 2022. This trend also reflects broader consumer shifts toward healthier dietary choices, aligning with societal priorities around wellness.

New Zealand's aquaculture sector aligns with these global trends, leveraging its natural advantages and commitment to sustainability. New Zealand's vast exclusive economic zone (EEZ), the fifth largest in the world at 4.3 million square kilometres – 15 times the country's landmass⁶⁶ – offers significant opportunities for marine farming. The country's favourable environmental conditions, coupled with advancements in farming technology, are enabling sustainable expansion into open-ocean areas, as pointed out by an NZTE study on the sector.⁶⁷ To further strengthen its position as a global leader in aquaculture, the New Zealand Government has introduced a New Zealand Aquaculture Development Plan in 2025, which outlines key investment priorities.⁶⁸ Additionally, a recent policy amendment extending existing marine farming consents by 20 years is providing greater certainty and longer planning horizons for farm operators.⁶⁹

The sector's current developments illustrate its dynamic and forward-looking nature. Salmon production is projected to increase fivefold within the next two decades, capitalising on strong global demand for New Zealand's premium King salmon. Similarly, Greenshell™ mussels,

⁶³ New Zealand Trade and Enterprise, "Explore New Zealand Aquaculture."

 ⁶⁴ New Zealand King Salmon, "Nzk – Bold Endeavours – Salmon Farming in the Open Ocean," 2024, accessed December 20, 2024, https://www.kingsalmon.co.nz/nzk-bold-endeavours-salmon-farming-in-the-open-ocean/.
 ⁶⁵ Food and Agriculture Organization of the United Nations, "The State of World Fisheries and Aquaculture 2024," 2024, accessed December 20, 2024,

https://openknowledge.fao.org/server/api/core/bitstreams/66538eba-9c85-4504-8438-c1cf0a0a3903/content/sofia/2024/fisheries-aquaculture-projections.html.

⁶⁶ Ministry for the Environment, "Improving Regulation of Environmental Effects in New Zealand's Exclusive Economic Zone," 2007, accessed December 20, 2024, https://environment.govt.nz/assets/Publications/Files/nz-exclusive-economic-zone-discussion-paper-aug07.pdf.

⁶⁷ New Zealand Trade and Enterprise, "Explore New Zealand Aquaculture."

⁶⁸ Ministry for Primary Industries, "New Zealand Aquaculture Development Plan," 2025, accessed May 31, 2025, https://www.mpi.govt.nz/fishing-aquaculture/aquaculture-fish-and-shellfish-farming/new-zealand-aquaculture-development-plan/.

⁶⁹ Parliamentary Counsel Office, "Resource Management (Extended Duration of Coastal Permits for Marine Farms) Amendment Bill," 2024, accessed December 20, 2024, https://www.legislation.govt.nz/bill/government/2024/0056/latest/whole.html.

New Zealand's highest-value aquaculture export, maintain a global competitive edge due to the country's favourable cultivation conditions and increasing global demand driven by their health benefits and low carbon footprint. For oysters, there is significant potential for growth as a higher-volume export product, with ongoing advancements in farm technologies poised to enhance productivity. Furthermore, emerging opportunities in seaweed and microalgae farming reflect the sector's alignment with global trends. Seaweed holds promise as a highvalue export in nutraceutical, pharmaceutical, and protein production sectors, while microalgae are being explored for their bioactive compounds and protein content. Additional diversification is evident in the development of kingfish and paua, offering new avenues for high-value exports and reducing reliance on traditional species. 70

Investment opportunities⁷¹

The sector's ambitious growth targets offer opportunities for investment across the entire value chain, particularly in key areas essential to achieving its NZD 3 billion revenue goal by 2035. Over the next two decades, significant capital investment will be necessary to develop vital infrastructure, enhance operational efficiency, and realise the sector's full potential. Potential areas of investment include, among others:

- Inputs: A strong foundation for aquaculture production depends on high-quality inputs, making investment in hatcheries and nurseries critical. These facilities can boost the resilience and productivity of key species like Greenshell™ mussels, King salmon, and Pacific oysters. Developing locally sourced fish-feed ingredients and establishing a feed mill will help reduce import dependency, supporting sustainability objectives. Furthermore, continuous advancements in selective breeding across all species are essential to enhance yields, improve adaptability to environmental changes, and contribute to New Zealand's efforts to establish itself as a leader in breeding expertise on the global stage.
- Farming: New Zealand's aquaculture industry is evolving rapidly with the expansion into open ocean farming. Advanced net and pen systems are being developed for high-energy marine environments, complemented by land-based Recirculating Aquaculture Systems designed for large smolt production and full grow-out operations. Investments in cutting-edge "blue technology" for remote farm management are crucial to boosting efficiency and sustainability. Additionally, larger service vessels, well boats, and barges are essential to support operations in open ocean conditions.
- **Harvesting and Processing:** Maximising the value of aquaculture products depends on state-of-the-art harvesting and processing capabilities. Innovative strategies, such as converting by-products into high-value nutraceuticals, significantly enhance product value. Improved freezing technologies facilitate the broader use of sea freight, lowering carbon emissions. Advanced processing methods, including the extraction of oils and powders from mussels, along with smart packaging solutions that extend shelf life and preserve quality, are critical for catering to premium export markets.

⁷⁰ New Zealand Trade and Enterprise, "Explore New Zealand Aquaculture."

⁷¹ New Zealand Trade and Enterprise, "Explore New Zealand Aquaculture."

• Logistics: A well-structured logistics network plays a critical role in supporting the growth of the aquaculture sector. Investments in ports and landing facilities close to farming operations will optimise harvesting and transportation processes. Enhancing land transport infrastructure in key aquaculture regions and expanding airfreight capacity, especially at regional airports equipped for chilled freight, will help New Zealand to strengthen its aquaculture supply chain and improve export efficiency. Scaling up third-party logistics services and increasing cold storage facilities near transport hubs will ensure the efficient delivery of high-value aquaculture products to global markets in peak condition.

By prioritising strategic investments across inputs, farming, processing, and logistics, New Zealand's aquaculture industry is well-positioned to scale sustainably and capture a larger share of global markets. Through a focus on innovation, operational efficiency, and value addition, the sector can meet rising global demand while upholding its reputation for premium, sustainable seafood products.

6.2 Wood/Bioenergy

Biomass currently accounts for about 7% of New Zealand's primary energy consumption. The industrial sector, particularly wood product manufacturing and pulp and paper production, utilises 73% of this biomass for process heat and electricity co-generation, while 13% is utilised for residential heating. As a cost-effective and low-emission renewable energy source, biomass usage is set to expand, with projections of the Climate Change Commission indicating a potential increase of New Zealand's share from 7% in 2021 to between 10% and 14% by 2035.⁷²

The most commonly utilised biomass types in New Zealand are solid biomass, such as forestry residues, bark, and sawdust; gaseous biomass, including biogas like methane; and liquid biomass, such as biodiesel. Solid biomass is primarily used in wood processing industries, with annual consumption of approximately 35 petajoules, and to a lesser extent in residential heating and power production. Biogas has seen a gradual increase in utilisation over the past two decades and now contributes approximately 3 petajoules annually, largely sourced from agricultural waste, wastewater treatment plants, and landfills. It is primarily used for energy purposes in industrial applications, including heat production and as a substitute for natural gas use. ⁷³

In contrast, liquid biomass, such as biofuels, remains significantly underutilised. A 2021 study from the International Energy Agency (IEA) highlights that among the 24 member countries of IEA Bioenergy, New Zealand ranks high in the use of solid biofuels, moderately for biogas, and very low for liquid biofuels, only accounting for less than 0.1% of New Zealand's liquid fuel consumption (see Table 7). This underdevelopment is mainly attributed to high upfront capital costs for biorefineries and limited policy incentives in the past, despite the implementation of the New Zealand Emissions Trading Scheme (ETS) and small-scale grants.⁷⁴

⁷² Energy Efficiency & Conservation Authority, "Biomass," 2024, accessed December 20, 2024, https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/biomass/.

⁷³ International Energy Agency, "Implementation of Bioenergy in New Zealand – 2021 Update," 2021, accessed December 20, 2024, https://www.ieabioenergy.com/wp-content/uploads/2021/11/CountryReport2021_NewZealand_final.pdf.

⁷⁴ International Energy Agency, "Implementation of Bioenergy in New Zealand – 2021 Update."

Table 7: Total energy supply per capita for different bioenergy carriers (2019)

Category	New Zealand	IEA member median		
	(in GJ/capita)	(in GJ/capita)		
Bioenergy	10.4	10.6		
Solid biofuels	9.1	7.0		
Renewable MSW	0.0	0.8		
Biogas	0.7	0.7		
Liquid biofuels	0.0	1.5		

Source: International Energy Agency (IEA)

New Zealand's forestry sector plays a crucial role in supporting bioenergy production, leveraging the country's extensive forest coverage and sustainable management practices. With 2.1 million hectares of plantation forests, primarily fast-growing radiata pine, New Zealand has a renewable and consistent biomass supply. 75 The species' rapid growth cycle of approximately 25 years ensures a steady resource flow, while sustainable practices like planned replanting and efficient use of forest residues contribute to the long-term viability of biomass as an energy source. ⁷⁶

Biomass, when sustainably sourced, offers a near-carbon-neutral energy cycle, with emissions from combustion offset by carbon absorption in growing forests. 77 Additionally, replacing coal with biomass in boilers has been shown to significantly reduce greenhouse gas emissions, aligning with New Zealand's broader decarbonization efforts. Beyond sustainability, biomass also presents economic advantages. Its affordability is bolstered by resilience to rising carbon prices and the absence of reliance on electrical grid upgrades, making it an accessible option for energy transitions.⁷⁸

According to Scion, a Crown Research Institute in forestry, industrial biotechnology and advanced manufacturing, expanding the area of planted forests could present additional opportunities for both energy production and environmental gains. Increasing planted forest areas by 1.8 million hectares could supply around 60% of New Zealand's transport fuel needs by 2040. These forests, planted on low- to medium-quality land, also provide critical ecosystem services, such as erosion control and flood prevention, highlighting their multifunctional benefits.⁷⁹

Key limitations of bioenergy include the need for substantial dry storage and handling space due to its lower energy density compared to coal. Sourcing biomass can be challenging, as its low energy density requires nearby supplies to reduce transport costs and emissions, while price fluctuations and limited availability add to the complexity.80

In November 2022, the Sustainable Biofuels Obligation Bill was introduced to Parliament by the former Labour-led government with the objective of reducing annual greenhouse gas

⁷⁵ Ministry for Primary Industries, "About New Zealand's Forests," 2022, accessed December 20, 2024, https://www.mpi.govt.nz/forestry/new-zealand-forests-forest-industry/about-new-zealands-forests/.

⁷⁶ Peter Hall, "Bioenergy Options for New Zealand: Key Findings from Five Studies," Wiley Interdisciplinary Reviews: Energy and Environment 2, no. 6 (2013), https://dx.doi.org/10.1002/wene.60.

⁷⁷ International Energy Agency, "Cabron Neutrality," 2024, accessed December 20, 2024,

https://www.ieabioenergy.com/iea-publications/fag/woodybiomass/carbon-neutrality/.

⁷⁸ Energy Efficiency & Conservation Authority, "Biomass."

⁷⁹ Scion, "Bioenergy," 2021, accessed December 20, 2024,

https://www.scionresearch.com/__data/assets/pdf_file/0018/60606/Bioenergy_brochure.pdf.

⁸⁰ Energy Efficiency & Conservation Authority, "Biomass."

emissions from liquid fossil fuels by promoting the use of biofuels.81 However, on February 8, 2023, the Bill was withdrawn due to a shift in government policy priorities, prompted by concerns about potential increases in fuel prices and the associated economic pressures on households.82 83

Investment opportunities 84 85 86 87 88

In terms of investment, New Zealand's bioenergy sector offers a range of opportunities spanning feedstock production, conversion technologies, and integration into industrial processes. Potential areas of investments include, among others:

- Feedstock production: One of the most promising areas is the expansion of biomass feedstock production. Increasing the area of plantation forests on underutilized land, particularly low to medium-quality terrain, can support the growing demand for woody biomass. This approach not only supplies the bioenergy sector but also provides ecosystem services such as erosion control and flood prevention. Investors can explore partnerships with forestry operators to scale up feedstock availability while benefiting from government incentives for sustainable land use.
- **Biofuel conversion**: Facilities dedicated to transforming feedstocks into biofuels present another investment avenue. Establishing plants near feedstock sources can optimise logistics and reduce costs. These operations can support high-demand sectors by producing biofuels for aviation, marine transport, and heavy road freight. Rapid advancements in technologies such as fast pyrolysis and enzymatic conversion provide investors with opportunities to support innovative projects with long-term scalability.
- **Industrial symbiosis**: Integrating bioenergy production into existing industries creates investment opportunities through industrial symbiosis. The pulp and paper sector, for instance, produces substantial woody residues that can serve as valuable feedstock for bioenergy. Such synergies reduce waste, enhance resource efficiency, and create additional revenue streams. The central North Island, with its geothermal resources and industrial base, stands out as a prime location for projects leveraging industrial symbiosis.

⁸¹ Parliamentary Counsel Office, "Sustainable Biofuel Obligation Bill," 2022, accessed December 20, 2024, https://legislation.govt.nz/bill/government/2022/0182/latest/d2180898e2.html.

⁸² New Zealand Government, "Government Takes New Direction with Policy Refocus," 2023, accessed December 20, 2024, https://www.beehive.govt.nz/release/government-takes-new-direction-policy-refocus. 83 Ministry of Business Innovation & Employment, "Biofuels and the Sustainable Biofuel Obligation," 2023, accessed December 20, 2024, https://www.mbie.govt.nz/building-and-energy/energy-and-naturalresources/energy-generation-and-markets/liquid-fuel-market/biofuels.

⁸⁴ Bioenergy Association, "Bioenergy – the Renewable Fuel," 2024, accessed December 20, 2024, https://www.bioenergy.org.nz/.

⁸⁵ International Energy Agency, "Biofuels Production and Development in New Zealand," 2024, accessed December 20, 2024, https://www.ieabioenergy.com/blog/publications/biofuels-production-and-developmentin-new-zealand/.

⁸⁶ International Energy Agency, "Implementation of Bioenergy in New Zealand – 2021 Update."

⁸⁷ Scion. "Bioeneray."

⁸⁸ Scion, "New Zealand Biofuels Roadmap Summary Report," 2018, accessed December 20, 2024, https://www.scionresearch.com/__data/assets/pdf_file/0005/63293/Biofuels_summary_report.pdf.

Liquid biofuels: In light of underutilised liquid bioenergy, liquid biofuels offer a significant investment opportunity to address New Zealand's reliance on fossil fuels. particularly in the transport sector. Advanced technologies like fast pyrolysis and lignocellulosic processing enable the production of "drop-in" fuels, compatible with existing vehicles and infrastructure, making adoption more feasible.

In conclusion, New Zealand's bioenergy sector has the potential to further drive the sustainability efforts of New Zealand. By focusing on sustainable biomass production, innovative biofuel technologies, and integrated industrial applications, the sector offers a comprehensive solution to decarbonization challenges.

6.3 Food production

New Zealand's food production sector, particularly its focus on dairy, meat, horticulture, and seafood, is pivotal to the nation's economy. In the year to June 2024, the food and fibre sector contributed NZD 53.3 billion in export revenue, representing 81.1% of New Zealand's goods exports, 89 showcasing an average annual growth over the past ten years of 3.2% compared to other goods exports' growth of 1.5%.90

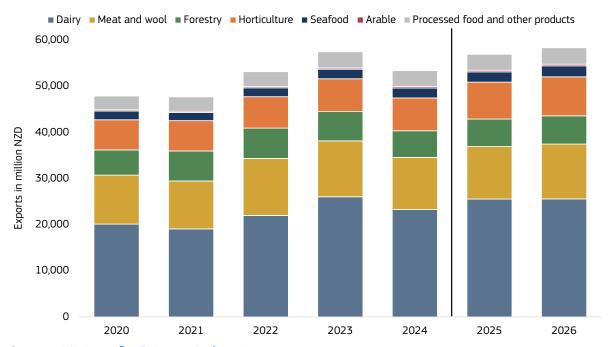


Figure 18: Development of food and fibre exports (YE June 2020-2026)

Source: Ministry for Primary Industries

The dairy industry is the largest contributor to New Zealand's food exports, generating NZD 23.2 billion in the year ending June 2024 (see Figure 18). Key exports included whole milk powder, contributing 32.1%, followed by butter, fat and cream products such as skim milk and butter milk powder, accounting for 17.8% and 8.9% respectively. Meat production follows as the second-largest sub-sector, contributing NZD 11.34 billion in 2024 (Year to June). The key exports for meat products comprised primarily beef and veal, as well as lamb products,

⁸⁹ Goods exports excluding re-exports

⁹⁰ Ministry for Primary Industries, "Situation and Outlook for Primary Industries."

contributing 38.8% and 29.7% to meat exports. Furthermore, horticulture plays a crucial role, with exports valued at NZD 7.1 billion in 2024 (Year to June). Key horticultural products included kiwifruit (40.4%), wine (29.4%), as well as apples and pears (13.1%).⁹¹

The sector's export base is anchored by major markets, including China, which makes up 32% of New Zealand's total primary export value, followed by the United States (12%), Australia (8%), the European Union (6%), and Japan (5%).⁹²

In the year to June 2024, the food and fibre sector employed approximately 360,000 employees, ⁹³ about 12.4% of the country's total employment. ⁹⁴ In terms of GDP, the sector, including the production of primary products and the subsequent processing and commercialisation industries, accounted for about 10% of the country's output. ⁹⁵ When only considering the manufacturing side of the food sector, the sector accounts for approximately 2% of GDP, generating NZD 7.6 billion in value. Of this, meat and meat product manufacturing and fruit, oil, cereal and other food product manufacturing accounted for the largest share, each contributing 0.7% to the country's GDP. ⁹⁶

Māori enterprises play a vital role in New Zealand's food production sector, with Māori collectives and businesses holding nearly NZD 40 billion in agriculture, forestry, and fishing assets as of 2023. These sectors remain foundational to the Māori businesses and their asset base, which overall is valued at NZD 126 billion.⁹⁷ Māori exports are also heavily concentrated in the primary industries, and agritech is increasingly seen as a tool to enhance productivity, resilience, and returns on Māori-owned land. While there is growing interest in innovation, barriers such as fragmented innovation pathways and limited access to capital persist.⁹⁸

New Zealand's food production systems capitalise on its natural resources, including fertile soils, abundant water, and a temperate climate that supports year-round agriculture, according to a recent report by the Ministry of Primary Industries (MPI). Advanced farming practices focused on sustainability and efficiency further enhance competitiveness. While much of the sector remains geared toward bulk commodity exports processed by international consumer-facing companies, there is a growing emphasis on building direct-to-consumer models to capture additional value within supply chains.⁹⁹

According to a 2023 PricewaterhouseCoopers study, however, the sector faces challenges despite its economic importance. Stricter environmental regulations aimed at reducing greenhouse gas emissions are increasing pressure on businesses to innovate and adopt

⁹¹ Ministry for Primary Industries, "Situation and Outlook for Primary Industries."

⁹² Ministry for Primary Industries, "Situation and Outlook for Primary Industries."

⁹³ Ministry for Primary Industries, "Food and Fibre Workforce Insights," 2024, accessed December 21, 2024, https://www.workforceinsights.govt.nz/.

⁹⁴ Ministry for Primary Industries, "Situation and Outlook for Primary Industries."

⁹⁵ Ministry for Primary Industries, "Situation and Outlook for Primary Industries."

⁹⁶ Infometrics, "Regional Economic Profile New Zealand."

⁹⁷ Ministry of Business Innovation & Employment, "Te Ōhanga MĀori 2023 the MĀori Economy 2023," 2024, accessed May 5, 2025, https://www.mbie.govt.nz/dmsdocument/30486-te-ohanga-maori-2023-report-pdf.

⁹⁸ AgriTech New Zealand, "Agritech M\u00e4ori Sector Overview Report," 2024, accessed May 5, 2025,

https://agritechnz.org.nz/wp-content/uploads/2024/07/Maori-Agritech-Ecosystem-Report-May-2024.pdf.

⁹⁹ Ministry for Primary Industries, "The Future of Aotearoa New Zealand's Food Sector: Exploring Global Demand Opportunities in the Year 2050," 2023, accessed December 21, 2024,

https://www.mpi.govt.nz/dmsdocument/56350-The-Future-of-Aotearoa-New-Zealands-Food-Sector-Exploring-Global-Demand-Opportunities-in-the-Year-2050.

sustainable practices. Chronic underinvestment, resistance to new technologies, and gaps in risk management—particularly in innovation—further exacerbate vulnerabilities, as highlighted by recent severe weather events. However, leveraging New Zealand's natural advantages, including abundant water, a highly educated workforce, and counter-seasonal positioning, presents a pathway to sustained prosperity and global competitiveness in an evolving economic landscape.¹⁰⁰

For 2025, New Zealand's food and fibre sector is expected to grow, with export revenue projected to rebound by 7% to NZD 56.9 billion in the year ending June 2025, driven by rising global demand and tighter supply for key commodities like dairy, meat, and horticulture products. Favourable production conditions, increased export volumes, and higher commodity prices are contributing factors, despite challenges such as elevated geopolitical tensions and input costs. Looking ahead, export revenue is projected to reach a record NZD 58.3 billion by June 2026, underscoring the sector's resilience and its critical role in the national economy (see Figure 18). ¹⁰¹

Investment opportunities 102 103

In this context, the sector offers several opportunities for investment, particularly in areas aligned with emerging consumer preferences and global sustainability goals. Potential areas of investment include, among others:

- Alternative proteins: The development of alternative proteins, including plantbased and lab-cultured products, is a promising avenue to meet the increasing demand for environmentally sustainable and ethical food options while aligning with the global trend of reducing meat consumption. Companies investing in this space can capitalise on the growing market for innovative and health-conscious foods.
- Regenerative agriculture: Another area ripe for investment is regenerative
 agriculture and circular economy initiatives. These practices aim to enhance soil
 health, reduce waste, and minimise environmental impacts, offering a pathway to
 sustainable intensification. Investments in these areas not only address
 environmental concerns but also align with the growing consumer demand for
 transparency and ethical production.
- Technological advancements: Opportunities arise from innovations such as smart farming solutions, blockchain applications for supply chain transparency, and precision agriculture technologies. These developments are transforming production processes by enhancing efficiency, traceability, and sustainability. Moreover, integrating artificial intelligence, big data, and biotechnology into food systems offers further potential for competitive advantage in both established and emerging markets.

¹⁰⁰ PwC, "Transforming New Zealand's Food and Fibre Sector for Global Prosperity," 2023, accessed December 21, 2024, https://www.pwc.co.nz/insights-and-publications/2023-publications/transforming-nzs-food-and-fibre-sector-for-global-prosperity.html.

¹⁰¹ Ministry for Primary Industries, "Situation and Outlook for Primary Industries."

¹⁰² Ministry for Primary Industries, "The Future of Aotearoa New Zealand's Food Sector: Exploring Global Demand Opportunities in the Year 2050."

¹⁰³ PwC, "Transforming New Zealand's Food and Fibre Sector for Global Prosperity."

In conclusion, New Zealand's advanced food production sector is well-positioned to seize opportunities through strategic investments in technology, sustainability, and market expansion.

6.4 Cleantech

The cleantech sector comprises diverse technologies and initiatives aimed at addressing environmental challenges and promoting sustainability. It includes solutions for, among others, renewable energy systems, water quality improvement, sustainable resource management, sustainable agriculture, and clean transportation. In New Zealand, the sector features over 130 companies contributing to greenhouse gas reduction, biodiversity promotion, and tackling industrial waste. The sector employed about 1,190 people, attracted more than NZD 535 million in private investments and generated in the past two financial years NZD 291 million in revenues (as of May 2024).¹⁰⁴

New Zealand is globally recognised for its renewable energy potential, with 85% of electricity already derived from renewable sources. ¹⁰⁵ This provides an advantageous starting point for scaling climate-focused innovations. Furthermore, New Zealand's goals to achieve netzero greenhouse gas emissions by 2050 and reduce biogenic methane emissions by 24-47% are likely to create a supportive environment for cleantech growth. ¹⁰⁷

Before the government's January 2025 announcement of major changes to New Zealand's science, innovation, and technology system, which includes the disestablishment of Callaghan Innovation (see Section 3 for details), ¹⁰⁸ the New Zealand CleanTech Mission, led by Callaghan Innovation and key industry partners, exemplified the country's collaborative approach. The mission aimed to build a thriving ecosystem by fostering international connections, improving access to capital, and advancing sectors like agriculture and energy, where New Zealand has global potential. ¹⁰⁹ At this stage, it remains unclear whether and in what form the CleanTech Mission will continue.

Despite its potential, New Zealand's cleantech sector faces challenges that may hinder its full development. According to Callaghan Innovation, investment is a key hurdle, with local innovators raising 95% less private capital than their counterparts in other small, advanced economies. Geographical isolation compounds this issue, limiting access to global markets and opportunities for collaboration with international investors and customers. To address these barriers, the New Zealand CleanTech Mission has proposed coordinated initiatives such as the national cleantech roadmap, which focuses on enhancing infrastructure, strengthening

¹⁰⁴ NZ CleanTech Mission Working Group, "New Zealand Cleantech Report 2024," 2024, accessed December 21, 2024, https://www.callaghaninnovation.govt.nz/assets/documents/New-Zealand-Cleantech-Report-2024.pdf

¹⁰⁵ Ministry of Business Innovation & Employment, "Electricity Statistics," 2024, accessed January 2, 2025, https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/electricity-statistics.

¹⁰⁶ Energy Efficiency & Conservation Authority, "Renewable Energy," 2024, accessed December 22, 2024, https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/.

¹⁰⁷ Callaghan Innovation, "Nz Cleantech Mission: Making It Happen for New Zealand," 2024, accessed December 22, 2024, https://www.callaghaninnovation.govt.nz/stories/nz-cleantech-mission-making-it-happen-for-new-zealand/?news=.

¹⁰⁸ New Zealand Government, "Reforms to Boost Science Sector and Economy," 2025, accessed February 8, 2025, https://www.beehive.govt.nz/release/reforms-boost-science-sector-and-economy.

¹⁰⁹ NZ CleanTech Mission Working Group, "New Zealand Cleantech Report 2024."

¹¹⁰ Callaghan Innovation, "Nz Cleantech Mission: Making It Happen for New Zealand."

partnerships, and increasing commercialisation opportunities. By prioritising these efforts, the country aims to boost the sector's profile and competitiveness on a global scale, positioning itself as a leader in cleantech innovation that combines environmental impact with economic growth. The sector's trajectory is already promising, with a revenue growth rate of 29% between 2023 and 2024, complemented by ambitious plans for capital raises totalling NZD 440 million by March 2025.¹¹¹

Investment opportunities 112 113 114

As global demand for sustainable technologies surges, cleantech represents a high-growth area, with early-stage venture funding in the sector growing five times faster globally than in other industries.¹¹⁵ Potential areas of investment include, among others:

- Energy and power: New Zealand has significant untapped potential in renewable energy sources. Geothermal resources provide an opportunity to lead in sustainable energy generation and waste-heat recovery technologies, making the sector globally competitive. Green hydrogen is also poised for growth, with advancements in storage and transportation technologies, supporting both domestic applications and international collaboration.
- **Circular economy**: This area includes innovations in waste management and recycling, such as transforming soft plastic waste into reusable materials like adhesives. Biological waste-to-value solutions offer scalable approaches to managing waste, reducing emissions, and creating export opportunities.
- Agriculture and food technology: Precision farming and innovations like lowemission fertilisers and carbon sequestration in soils align with New Zealand's reputation in sustainable agriculture. These technologies address both domestic needs and global demand for sustainable food systems, while biotechnologies offer solutions for methane reduction in livestock.
- Materials and chemicals: Developing bio-based materials and advancing chemical recycling technologies provide opportunities to reduce reliance on traditional, carbonintensive processes. These innovations address industrial waste challenges while meeting increasing regulatory and consumer demands for sustainability.
- **Transportation and logistics**: The sector offers opportunities in the development of electric and hydrogen-powered vehicles, advanced battery technologies, and smart charging infrastructure. Rural connectivity and localised solutions make New Zealand a testing ground for such technologies.

¹¹¹ NZ CleanTech Mission Working Group, "New Zealand Cleantech Report 2024."

¹¹² NZTech, "Technology for Emissions Reduction: A Framework for Aotearoa's Climate Technology Roadmap," 2024, accessed December 22, 2024, https://nztech.org.nz/wp-content/uploads/sites/8/2024/04/Technology-for-Emissions-Reduction-Report.pdf.

¹¹³ Callaghan Innovation, "Nz Cleantech Mission: Making It Happen for New Zealand."

¹¹⁴ NZ CleanTech Mission Working Group, "New Zealand Cleantech Report 2024."

¹¹⁵ PwC, "The State of Climate Tech 2020: The Next Frontier for Venture Capital," 2020, accessed December 22, 2024, https://www.pwc.com/gx/en/services/sustainability/assets/pwc-the-state-of-climate-tech-2020.pdf.

New Zealand's cleantech sector is developing amid strengths in renewable energy and sustainable technologies. Despite investment and geographical challenges, growth continues, creating opportunities in areas such as renewable energy, sustainable agriculture, and materials and chemicals. Addressing these challenges could further strengthen the sector's role in sustainable innovation.

6.5 Technology

In 2023, New Zealand's technology sector contributed NZD 22.6 billion to GDP, reflecting a 7.5% growth from the previous year and accounting for approximately 8% of the national economy. The sector encompassed 24,306 firms, marking an annual increase of over 5%. Between 2010 and 2023, the industry generated over 46,900 new jobs, raising total tech employment to 121,770, or 4.9% of the national workforce.¹¹⁶

Within the broader sector, the Māori tech ecosystem has gained prominence, with 85 Māoriowned technology firms identified in 2023. Among these, the twelve highest-earning companies collectively employed over 1,300 individuals and generated NZD 160.5 million in revenue, representing a 33% year-on-year growth.¹¹⁷

Digital technologies represent the most rapidly expanding segment of the tech sector, with the number of firms growing by 5.3% between 2022 and 2023. Much of this expansion stems from the development and export of high-value digital solutions catering to global markets. In 2023, tech exports totalled NZD 10.7 billion, accounting for 11% of New Zealand's total exports and establishing technology as the third-largest export category behind dairy and tourism. Software exports have particularly thrived, achieving a CAGR of 20% over the past decade.¹¹⁸

New Zealand's top 200 tech firms by revenue have increasingly prioritised offshore sales, which in 2023 constituted 76% of their total revenue, up from 71% in 2018. These firms collectively reported NZD 13 billion in offshore revenue in 2023, a substantial 66% increase from 2018. Notably, revenues from North America surged by 19% in 2023, rivalling Australia as the sector's most lucrative international market. Sub-sectors like healthtech, fintech, agritech, and IT services have emerged as key growth drivers, fuelled by strong global demand for innovative solutions. In 2023, healthtech and fintech alone generated NZD 979 million and NZD 660 million in revenue, respectively. This growth is further reflected in substantial overseas investments in these sectors, with the software industry leading the way, attracting NZD 553 million between July 2021 and June 2023, followed by deeptech, agritech, and cleantech (see Figure 19).¹¹⁹

The Software-as-a-Service (SaaS) segment has emerged as a cornerstone of New Zealand's tech sector's growth. ¹²⁰ Despite being relatively under-recognised, New Zealand's SaaS sector generated NZD 3.6 billion in predominantly export revenue in 2023, growing at a CAGR of 15% since 2016. High-growth SaaS firms—defined as those achieving more than NZD 10

¹¹⁶ NZTech, "The New Zealand Tech Sector Key Metrics – 2023," 2024, accessed December 23, 2024, https://nztech.org.nz/reports/the-new-zealand-tech-sector-key-metrics-2023/.

Pāua Interface, "Toi Hangarau Report," 2024, accessed December 23, 2024, https://www.toihangarau.nz/.
 NZTech, "The New Zealand Tech Sector Key Metrics – 2023."

¹¹⁹ Technology Investment Network, "Nz Tech Sector Dashboard," 2024, accessed December 23, 2024, https://tin100.com/wp-content/uploads/2024/02/TIN-Factsheet Tech-Sector-Dashboard-2024.pdf.

¹²⁰ Ministry of Business Innovation & Employment, "Digital Technologies Industry Transformation Plan," 2023, accessed December 23, 2024, https://www.mbie.govt.nz/assets/digital-technologies-industry-transformation-plan.pdf.

million in annual recurring revenue—are expanding at an even faster CAGR of 18%. These 75 high-growth companies, representing only 10% of the sector, contribute a disproportionate 68% of total SaaS revenue. Comparatively, the sector's inflation-adjusted export growth rate of 8.7% over the past two decades significantly outpaces the 3.4% growth of New Zealand's overall export sector. 121

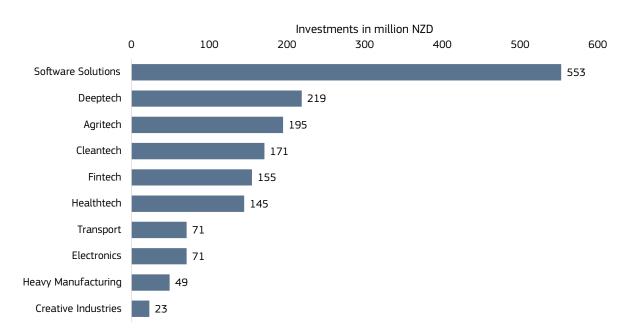


Figure 19: Tech investments by sub-sector (July 2021 – June 2023)

Source: Technology Investment Network

The interactive media and game development industry represents another promising area within New Zealand's tech ecosystem. 122 In 2024, the industry generated NZD 548 million in revenue, with 97% derived from exports. Comprising approximately 100 game development studios, the sector includes a diverse range of entities, from small independent firms to globally recognised leaders. Its growth rate of 26% in 2023 far outpaced the global industry growth of 4% during the same period, underscoring the sector's potential in areas such as video games, augmented reality applications, and virtual simulations. 123

Addressing the surging demand for Al-driven computing, New Zealand's data centre sector is undergoing transformative growth, driven by global tech giants seeking sustainable solutions. With most facilities concentrated in Auckland and Wellington, capacity constraints are also emerging in New Zealand due to global shortages of critical server capacity and the rising demand for high-performance computing and cloud services. 124 Vacancy rates for data

¹²¹ KiwiSaaS, "Aotearoa New Zealand's Saas Sector: 2024 Insights from the Cloud," 2024, accessed December 23, 2024, https://www.kiwisaas.com/aotearoa-new-zealands-saas-sector-2024-insights-from-the-cloud.

¹²² Ministry of Business Innovation & Employment, "Digital Technologies Industry Transformation Plan."

¹²³ New Zealand Game Developers Association, "Nz Games Industry 2024 Survey Results," 2024, accessed December 23, 2024, https://nzgda.com/news/2024-industry-survey-results/.

¹²⁴ EY, "How New Zealand Can Power Sustainable Data Centres While the World Sleeps," 2024, accessed December 23, 2024, https://www.ey.com/en_nz/insights/energy-resources/how-new-zealand-can-powersustainable-data-centres-while-the-world-sleeps.

centres have dropped to as low as 1% in certain international markets, amplifying a global urgency for infrastructure expansion. 125

New Zealand offers favourable conditions for sustainable data centre operations, with a high share of renewable energy, a cool climate, and political stability. 126 Its connectivity infrastructure, supported by multiple submarine fibre optic cables, provides high-capacity links to key markets in Australia, the United States, and the Asia-Pacific region. 127 However, challenges such as elevated electricity costs and insufficient water infrastructure must be addressed to unlock the sector's full potential. 128

Despite its successes, the tech sector faces a number of challenges, according to the MBIE-led 2023 "Digital Technologies Industry Transformation Plan", particularly in talent acquisition and funding. A persistent shortage of skilled professionals, especially in areas like cybersecurity and software engineering, hampers growth. While immigration policies and targeted training programs are being implemented to bridge this gap, sustained efforts are needed. Initiatives such as SaaS-focused short courses aim to reskill workers from other industries, creating pathways into high-value tech roles. Access to capital represents another critical bottleneck, particularly for early-stage startups and scaling ventures. Although tech investment has grown significantly since 2020, the availability of scale-up capital remains limited, posing challenges to firms transitioning to global competitiveness. 129

Investment opportunities 130 131 132 133

New Zealand's technology sector has seen strong growth and diversification, becoming a key contributor to the national economy and a competitive player globally. The following opportunities showcase the sector's strengths and areas for investment. Potential areas of investment include, among others:

• Green data centres: The globally growing demand for sustainable data solutions positions New Zealand as a potential hub for green data centres, leveraging its abundant renewable electricity and favourable climate conditions. While the distance to global markets presents challenges due to latency, this makes New Zealand particularly well-suited for processing facilities focused on training large language models (LLMs). If frequent updates for LLMs become more common in the future, New Zealand's data centres could efficiently handle these tasks during off-peak hours in major markets like Europe and North America.

¹²⁵ CBRE Group, "Global Data Center Trends 2024," 2024, accessed December 23, 2024, https://www.cbre.com/insights/reports/global-data-center-trends-2024.

¹²⁶ EY, "How New Zealand Can Power Sustainable Data Centres While the World Sleeps."

¹²⁷ New Zealand Trade and Enterprise, "Opportunity for New Zealand to Become International Data Centre Hub," 2022, accessed December 23, 2024, https://www.nzte.govt.nz/blog/opportunity-for-new-zealand-to-become-international-data-centre-hub.

¹²⁸ EY, "How New Zealand Can Power Sustainable Data Centres While the World Sleeps."

¹²⁹ Ministry of Business Innovation & Employment, "Digital Technologies Industry Transformation Plan."

¹³⁰EY, "How New Zealand Can Power Sustainable Data Centres While the World Sleeps."

¹³¹ New Zealand Trade and Enterprise, "Opportunity for New Zealand to Become International Data Centre Hub."

¹³² New Zealand Trade and Enterprise, "Report on the Impact of Ai for Data Centre Demand in New Zealand," 2024, accessed December 23, 2024, https://www.nzte.govt.nz/blog/report-on-the-impact-of-ai-for-data-centre-demand-in-new-zealand.

¹³³ NZTech, "The New Zealand Tech Sector Key Metrics - 2023."

- Artificial Intelligence solutions: AI-driven technologies are a potentially transformative area within New Zealand's digital sector. Opportunities exist in applying AI to sectors such as agritech, healthcare, and manufacturing, offering innovations like predictive analytics, automated systems, and AI-enhanced decisionmaking tools.
- **Supportive infrastructure**: New Zealand's infrastructure needs substantial enhancements to keep pace with the growing demands of the digital sector. Key areas for investment include expanding renewable energy capacity to secure a sustainable power supply and upgrading water infrastructure to support energy-intensive facilities, such as data centres, which depend on efficient cooling systems. Additionally, strengthening global connectivity through the development of undersea cables is essential for boosting international competitiveness and accommodating the expansion of the data-driven economy.
- **Cleantech**: New Zealand offers diverse opportunities in the cleantech sector aimed at reducing greenhouse gas emissions. Details on investment prospects in this area are available in the *Cleantech* section.

New Zealand's technology sector is a vital economic driver, contributing significantly to GDP and achieving robust growth across various sub-sectors. Its digital economy, characterised by its rapid expansion, global competitiveness, and strong export performance, underscores the sector's strategic importance. Prominent areas such as SaaS or the media and game development sector illustrate the industry's innovation and growth potential. Despite its achievements, the sector faces important challenges, including talent shortages and capital constraints, which must be addressed to sustain momentum. Investment opportunities in green data centres, AI solutions, and supportive infrastructure highlight the sector's potential for continued growth and global competitiveness.

6.6 Renewable energy

With 85% of its electricity already generated from renewable sources, ¹³⁴ New Zealand is among the top countries in the OECD for clean energy usage. ¹³⁵ The country's primary source of electricity is hydro energy, which accounted for 54% of total electricity generation in the year to September 2024, followed by geothermal and wind energy (see Figure 20a). A different trend emerges when examining recent growth rates across energy sources. Solar energy has experienced the most significant growth in net electricity generation in recent years, with over 50% growth for 2024, followed by wind and geothermal energy (see Figure 20b). ¹³⁶

With over 2,000 Megawatts (MW) of additional wind generation already consented and an estimated 14,700 MW of untapped renewable potential, the country offers significant opportunities for investment across the clean energy value chain. This progress is supported

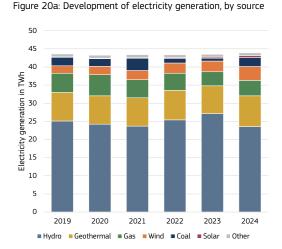
¹³⁴ Ministry of Business Innovation & Employment, "Electricity Statistics."

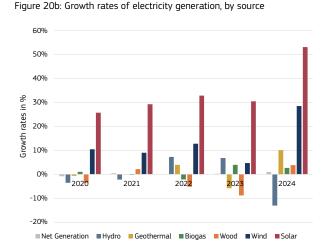
¹³⁵ Organisation for Economic Co-operation and Development, "Renewable Energy," 2025, accessed January 5, 2025, https://www.oecd.org/en/data/indicators/renewable-energy.html.

¹³⁶ Ministry of Business Innovation & Employment, "Electricity Statistics."

by government initiatives and other investments aimed at fostering a carbon-neutral economy by 2050.¹³⁷

Figure 20: Development of electricity generation, by source (2019-2024) (Figure 20a) and growth rates of different renewable energy sources (2020- 2024) (Figure 20b)





Source: Ministry of Business, Innovation and Employment

6.6.1 Wind energy

New Zealand's wind energy sector generated 3.8 Terawatt hours (TWh) between September 2023 and September 2024, representing approximately 9% of the country's total electricity production. This marks an increase of nearly 30% compared to the previous 12 months. The onshore wind energy infrastructure comprises 21 operational wind farms with an installed capacity of 1,263 MW, capable of powering over 553,000 households annually. The sector has experienced robust growth, driven by advancements in turbine technology that have improved efficiency and reduced costs. New Zealand's onshore wind farms often achieve capacity factors exceeding global averages, reaching up to 50%, underscoring their superior performance compared to other renewable sources such as solar photovoltaic (PV). 139

Offshore wind energy is an emerging sector with transformative potential in the domestic energy sector, offering a sustainable solution to enhance energy security and support New Zealand's transition to renewable power. New Zealand's vast EEZ, particularly areas like South Taranaki and the Cook Strait, offers favourable conditions for offshore wind farms. Feasibility and design studies are underway for nearly 12 Gigawatts (GW) of announced offshore wind projects, with the first offshore wind farm expected to be operational in the early 2030s. 140

¹³⁷ New Zealand Trade and Enterprise, "Renewable Energy," 2025, accessed January 2, 2025, https://www.nzte.govt.nz/page/renewable-energy.

¹³⁸ Ministry of Business Innovation & Employment, "Electricity Statistics."

¹³⁹ New Zealand Wind Energy Association, "Onshore Wind," 2025, accessed January 2, 2025, https://www.windenergy.org.nz/onshore-wind/.

¹⁴⁰ PwC, "National Impact Study: New Zealand Offshore Wind Industry," 2024, accessed January 2, 2025, https://www.pwc.co.nz/industry-expertise/energy-and-utilities/new-zealand-offshore-wind-industry-national-impacts-study.html.

Offshore wind projects hold the potential to support decarbonization efforts in sectors such as transport and industrial feedstocks through green hydrogen integration. While challenges remain concerning infrastructure, environmental considerations, and regulatory frameworks, ongoing policy development and investment planning now seek to address these issues. However, uncertainty remains due to competing policy priorities, including seabed mining. Leconomically, the offshore wind industry is projected to contribute between NZD 12 billion and NZD 94 billion to GDP over the lifespan of its projects, with economic benefits equally distributed across construction and operational phases. By 2050, its economic impact could rival that of today's oil and gas sectors. Additionally, offshore wind projects are forecast to create 5,000 to 30,000 skilled jobs during peak construction, leveraging workforce synergies from existing industries such as oil and gas, particularly in regions like Taranaki affected by the energy transition. Many of these jobs will leverage existing skills from industries such as oil and gas, helping workers transition to renewable energy roles. Leconomical representations are construction as a silland gas, helping workers transition to renewable energy roles.

In total, 27 onshore wind energy projects are currently in the pipeline, with a combined potential grid capacity of 3.9 GW. Of these, seven wind farms, with a potential contribution of 1.36 GW, are included in the government's fast-track approvals process¹⁴³. If approved, these farms could produce up to 4,600 Gigawatt hours (GWh) annually, effectively doubling the wind energy currently fed into the grid.¹⁴⁴

New Zealand's unique geographic and climatic conditions make it exceptionally suited for wind energy generation. Located in the 'Roaring Forties,' a zone of prevailing westerlies, the country benefits from largely consistent, unobstructed winds across the ocean, free from major landform disturbances. These favourable natural conditions create substantial potential for wind energy generation and enable New Zealand's wind farms to achieve an average capacity factor of around 40%—nearly double the global average.¹⁴⁵

6.6.2 Solar energy

As of December 2024, solar capacity in New Zealand had risen by 47.1% compared to the previous year, reaching 539 MW, with 173 MW added in the previous 12 months. During the same period, the number of solar systems installed increased by over 20% across the country, with over 67,000 solar systems installed in December 2024. Notably, New Zealand's first utility-scale solar farm became operational in 2023 in Kaitaia, adding 33 MW

¹⁴¹ Newsroom, "Offshore Wind Developer Pulls out of Nz Amid Seabed Mining Concerns," 2024, accessed February 8, 2025, https://newsroom.co.nz/2024/10/24/offshore-wind-developer-pulls-out-of-nz-amid-seabed-mining-concerns/.

¹⁴² PwC, "National Impact Study: New Zealand Offshore Wind Industry."

¹⁴³ The Fast-track Approvals Bill was introduced to Parliament under urgency in March 2024 as part of the Coalition Government's plan for its first 100 days in office. The Bill passed its third reading on 17 December 2024. The Fast-track Approvals Act came into force on 23 December. The fast-track process is a streamlined, one-stop approval pathway that consolidates resource consents, notices of requirement, and compliance certificates into a single application, enabling quicker decisions on infrastructure and development projects with significant regional or national benefits.

¹⁴⁴ New Zealand Wind Energy Association, "Nzwea Welcomes Fast Track Approvals Bill Renewable Energy Announcement," 2024, accessed January 2, 2025, https://www.windenergy.org.nz/news/nzwea-welcomes-fast-track-approvals-bill-renewable-energy-announcement/.

 ¹⁴⁵ Zhiguo Zhang et al., "Overview of the Development and Application of Wind Energy in New Zealand,"
 Energy and built environment 4, no. 6 (2023), https://dx.doi.org/10.1016/j.enbenv.2022.06.009.
 146 Electricity Authority, "Installed Distributed Generation Trends," 2025, accessed January 2, 2025, https://www.emi.ea.govt.nz/Retail/Reports.

to the total capacity. 147 This was followed by another utility-scale farm in the Bay of Plenty, which became operational in 2024, contributing an additional 32 MW. 148 Solar energy generation also saw a significant increase, growing by over 50% between September 2023 and September 2024, with its share of total electricity generation rising from 0.8% to 1.2% with an output of 514 GWh. 149

By the end of 2023, at least five solar farms were under construction on the North Island, poised to collectively contribute over 200 MW of new generation capacity, with additional projects having started construction in 2024. These include developments in Edgecumbe, Waiotahe, and Foxton. Meanwhile, construction also began in 2024 on solar farms in the South Island, near Lauriston and Christchurch. 150 151 152

Furthermore, the New Zealand Government has prioritised solar energy within its Fast-track Approvals Act, which includes 10 large-scale solar farms among 22 renewable energy projects. This initiative aims to streamline planning processes and accelerate renewable energy development. Notable solar projects under this bill include the 420 MW Point Solar Farm in Canterbury, the 76 MW Wellsford Solar Farm near Auckland, and the 220 MW Haldon Station Solar Project by Lodestone Energy. Together, these projects form a significant part of the 3 GW combined capacity outlined in the Act, with installations spread across both islands, showcasing the government's commitment to leveraging New Zealand's abundant solar potential. ¹⁵³

As of December 2024, Transpower, New Zealand's national electricity grid operator, had received connection inquiries for over 9,000 MW in solar projects, signalling a growing interest in solar energy development. This potential is bolstered by declining capital costs, particularly for utility-scale solar. Between 2022 and 2023, utility-scale solar PV projects recorded the largest cost reduction amongst renewable energy projects, with a 12% decrease. Section 155

The increased interest in solar farm development reflects New Zealand's growing emphasis on renewable energy. Solar photovoltaics offer substantial environmental benefits,

149 Ministry of Business Innovation & Employment. "Electricity Statistics."

¹⁴⁷ Ministry of Business Innovation & Employment, "Energy in New Zealand 2024," 2024January 2, 2025, https://www.mbie.govt.nz/assets/energy-in-nz-2024.pdf.

¹⁴⁸ Lodestone Energy, "Rangitaiki," 2025, accessed January 2, 2025,

https://lodestoneenergy.co.nz/edgecumbe/.

¹⁵⁰ Electricity Authority, "Let the Sun Shine!," 2023, accessed January 2, 2025,

https://www.ea.govt.nz/news/eye-on-electricity/let-the-sun-shine/.

¹⁵¹ The New Zealand Herald, "Christchurch Airport Solar Project: Contact Energy Pushes 'Go'," 2024, accessed January 2, 2025, https://www.nzherald.co.nz/business/companies/energy/christchurch-airport-solar-project-contact-energy-pushes-go/VOUBUWQF3RD07KT4NMHWV5624I/.

¹⁵² The New Zealand Herald, "Govt-Owned Genesis, Saudis and Canadians Building \$104m Solar Farm," 2024, accessed January 2, 2025, https://www.nzherald.co.nz/business/companies/energy/govt-owned-genesis-saudis-and-canadians-building-104m-solar-farm/054T3MCZOVFQTNMTRQDCI37KGE/.

¹⁵³ PV Magazine, "New Zealand Steps up Approvals Process for Large-Scale Pv Projects," 2024January 2, 2025, https://www.pv-magazine.com/2024/10/09/new-zealand-steps-up-approvals-process-for-large-scale-pv-projects/.

¹⁵⁴ Transpower, "Connection Enquiry Information," 2024, accessed January 2, 2025, https://www.transpower.co.nz/connect-grid/connection-enquiry-information.

¹⁵⁵ International Renewable Energy Agency, "Renewable Power Generation Costs in 2023," 2024, accessed January 2, 2025, https://www.irena.org/-

[/]media/Files/IRENA/Agency/Publication/2024/Sep/IRENA_Renewable_power_generation_costs_in_2023.pdf.

generating electricity without greenhouse gas emissions during operation and allowing for versatile installations on various surfaces and scales. However, challenges persist, including intermittency, relatively low energy return on investment, and embodied emissions from manufacturing processes. Efforts to integrate battery storage aim to address intermittency issues, although such systems add to costs. 156

Looking ahead, projections by the Climate Change Commission in 2021 indicate that solar energy could account for up to 6% of New Zealand's electricity supply by 2035. This anticipated growth is underpinned by advancements in technology and supportive policy measures, underscoring the role of solar energy in achieving the country's climate goals. 157

6.6.3 Geothermal energy

Geothermal energy accounted for approximately 19% of New Zealand's total electricity generation between September 2023 and September 2024, producing 8.5 TWh—an increase of about 10% compared to the previous year. 158 This positioned New Zealand as the fifthlargest geothermal electricity generator globally, according to New Zealand's Energy Efficiency & Conservation Authority. 159

With over 1,050 MW of installed capacity, geothermal plants provide reliable baseload power, unaffected by weather conditions, unlike wind or solar energy sources. 160 In November 2024, Contact Energy (one of New Zealand's electricity providers) inaugurated the 174 MW Tauhara geothermal power plant; 161 while another project, the Taheke geothermal plant in the Bay of Plenty, has received consent for development. 162

The sector, primarily concentrated in the Taupō Volcanic Zone and Northland's Ngāwhā system, continues to expand through projects like Tauhara, which will significantly boost generation capacity. Meanwhile, Mercury Energy, a New Zealand electricity generator and retailer, has increased output at Rotokawa and Nga Awa Purua by 2 MW and 3 MW, respectively, through steam field reconfiguration, further strengthening the sector. By 2026, geothermal electricity output is projected to exceed 9,600 GWh, driven by technological advancements and the expansion of existing sites. 163

Beyond electricity, geothermal energy supports various industrial applications. For example, New Zealand company Geo40 operates the world's first commercial-scale silica recovery plant, processing separated geothermal water to extract silica for colloidal and precipitated silica products. Similarly, Halcyon Power, New Zealand's first green hydrogen production plant, uses geothermal energy to power water electrolysis for hydrogen generation. The He

¹⁵⁶ Energy Efficiency & Conservation Authority, "Solar Energy in New Zealand," 2025, accessed January 2, 2025, https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/solar/.

¹⁵⁷ Energy Efficiency & Conservation Authority, "Solar Energy in New Zealand."

¹⁵⁸ Ministry of Business Innovation & Employment, "Electricity Statistics."

¹⁵⁹ Energy Efficiency & Conservation Authority, "Geothermal Energy in New Zealand," 2025, accessed March 8, 2025, https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/geothermal/.

¹⁶⁰ Katie McLean et al., 2020-2023 New Zealand Country Update, World Geothermal Congress (Beijing, China: 2023).

¹⁶¹ Waikato Herald, "Tauhara Power Station Now Fully Operational," 2024, accessed January 3, 2025, https://www.nzherald.co.nz/waikato-news/news/tauhara-power-station-now-fullyoperational/2WSZF6S4ZFF2ZMKBYFRKOJ5LWE/#google_vignette.

¹⁶² Rotorua Daily Post, "Power Station at Ōkere Falls near Rotorua Granted Resource Consent," 2024, accessed January 3, 2025, https://www.nzherald.co.nz/rotorua-daily-post/news/power-station-at-okere-falls-nearrotorua-granted-resource-consent/XULCXWTSUVDGPNYDXZHSEZONKE/.

¹⁶³ McLean et al., "2020-2023 New Zealand Country Update."

Ahi Clean Energy Park in Taupō further demonstrates geothermal energy's integration into local economies, providing businesses with access to clean, reliable energy.¹⁶⁴

Emerging technologies, such as supercritical geothermal technology (SCGT), could revolutionise the sector. By accessing heat at depths of 4–6 kilometres, SCGT offers energy outputs up to three times higher than conventional systems. This advancement could add 30,000 GWh annually to New Zealand's energy supply, meeting growing demand and supporting climate goals. Research led by GNS Science, a New Zealand geological research institute, is advancing SCGT, addressing challenges such as deep drilling and high-temperature energy conversion. To support this, the government has allocated up to NZD 60 million from the Regional Infrastructure Fund to explore SCGT's potential, aiming to secure the country's future energy needs.

Despite its vast potential, the geothermal sector also faces challenges, including high costs, long development timelines, and competition from other renewable energy sources. Continued government support, investment in research, and collaboration with local stakeholders will be essential to overcoming these barriers and unlocking geothermal energy's full potential.¹⁶⁷

6.6.4 Green Hydrogen

The green hydrogen market in New Zealand is emerging as a key component of the country's decarbonization strategy. With demand projected to reach 640,000 to 1,200,000 tonnes annually by 2050, this sector offers substantial opportunities in both domestic and export markets. 168

Currently, the market is driven by early-stage projects that received NZD 186.3 million in government funding between 2017 and 2023. Notable initiatives include Hiringa Energy's hydrogen refuelling network and the Hiringa/Ballance green urea plant. These projects underscore hydrogen's potential to address challenges where direct electrification is impractical, such as high-temperature industrial processes and energy-dense transport applications, including heavy transport and shipping. To

New Zealand has strong potential for green hydrogen production, thanks to its abundant renewable energy resources. Around 85% of the country's electricity is already generated from hydro, wind, and geothermal energy, offering a cost-effective and sustainable base for

Investment opportunities in New Zealand | 51

¹⁶⁴ McLean et al., "2020-2023 New Zealand Country Update."

 ¹⁶⁵ Castalia, "Supercritical Geothermal in New Zealand: Economic Opportunity in Renewable Electricity
 Generation and for Off-Grid Energy," 2023, accessed January 3, 2025, https://castalia-advisors.com/wp-content/uploads/2023/12/02112023-Final-Report-Economic-Value-of-Supercritical-Geothermal-updated.pdf.
 166 New Zealand Government, "Government Exploring New Energy Source," 2024, accessed January 3, 2025, https://www.beehive.govt.nz/release/government-exploring-new-energy-source.

¹⁶⁷ 1News, "Scientists Hoping to Maximise Nz's Geothermal Energy Potential," 2024, accessed January 3, 2025, https://www.1news.co.nz/2024/10/15/scientists-hoping-to-maximise-nzs-geothermal-energy-potential/. ¹⁶⁸ Ministry of Business Innovation & Employment, "Hydrogen Action Plan," 2024, accessed January 3, 2025, https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-generation-and-markets/hydrogen.

¹⁶⁹ The Conversation, "Hope or Hype? Nz Needs to Be Realistic About the Clean Energy Potential of Green Hydrogen," 2024, accessed January 3, 2025, https://theconversation.com/hope-or-hype-nz-needs-to-be-realistic-about-the-clean-energy-potential-of-green-hydrogen-234137.

 $^{^{}m 170}$ Ministry of Business Innovation & Employment, "Hydrogen Action Plan."

producing green hydrogen through electrolysis. ¹⁷¹ Additionally, New Zealand's untapped renewable energy capacity provides further opportunities to meet the growing energy demands of hydrogen production.

However, the sector also faces considerable challenges. Currently, high production costs hinder competitiveness compared to alternatives like electrification or natural gas. Additionally, infrastructure for production, storage, and distribution is underdeveloped, while energy inefficiencies during hydrogen conversion result in losses of 20–60%. Meeting future demand will also require significant investment, including an estimated 12.5 GW of additional renewable electricity capacity to support hydrogen production. 174

Despite these obstacles, the green hydrogen market is positioned for growth, bolstered by government initiatives such as the Hydrogen Action Plan, aiming to streamline regulations and attract private investment, creating a supportive environment for the sector's expansion. The Hydrogen Action Plan, presented in November 2024, outlines the New Zealand Government's approach to unlocking private investment in hydrogen as part of the transition to a low-emissions economy. It focuses on removing regulatory barriers, particularly in health and safety regulations, consenting processes, and vehicle standards, to enable hydrogen production and use. The plan supports a market-led approach, emphasising that private sector investment will drive the sector's development, while the government facilitates this through regulatory adjustments and international cooperation. Additionally, it prioritises international investment and market access, including internationally recognised certification schemes and bilateral agreements, to ensure New Zealand's hydrogen sector remains competitive. Certification schemes help verify the emissions intensity of hydrogen production, aligning with global standards to facilitate exports and meet the sustainability criteria of key trading partners. Bilateral agreements, such as those already established with Japan and Singapore, support cooperation on hydrogen trade, regulatory alignment, and investment opportunities, strengthening New Zealand's position in the international hydrogen economy. 175

Investment Opportunities:

New Zealand's renewable energy sector plays a key role in advancing the country's clean energy transition. Investment opportunities include, among others:

Wind energy¹⁷⁶

• **Offshore Wind Energy**: New Zealand's offshore wind potential remains largely untapped, with key regions such as South Taranaki, West Auckland-Waikato, Cook Strait, and Foveaux Strait identified for development. Offshore sites benefit from stronger and more consistent winds compared to onshore locations, enabling higher

¹⁷¹ Ministry of Business Innovation & Employment, "Electricity Statistics."

¹⁷² Concept Consulting Group, "Hydrogen in New Zealand Report 1 – Summary," 2019, accessed January 3, 2025, https://www.concept.co.nz/uploads/1/2/8/3/128396759/h2_report1_summary_v4.pdf.

¹⁷³ Energy Efficiency & Conservation Authority, "Green Hydrogen," 2025, accessed January 3, 2025, https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/hydrogen/.

¹⁷⁴ Ministry of Business Innovation & Employment, "Hydrogen Action Plan."

¹⁷⁵ Ministry of Business Innovation & Employment, "Hydrogen Action Plan."

¹⁷⁶ PwC, "National Impact Study: New Zealand Offshore Wind Industry."

electricity generation efficiency. This creates promising opportunities for large-scale energy production.

 Supporting Infrastructure: Infrastructure investments are critical to enable wind energy development. Upgrading ports to handle turbine assembly and installation, expanding energy transmission networks to deliver electricity to demand centres, and establishing advanced storage solutions offer significant investment opportunities. These enhancements will ensure efficient operation and scalability of New Zealand's wind energy projects.

Solar energy 177 178

- **Commercial-Scale Rooftop Solar Installations**: Businesses in New Zealand, particularly in sectors like food processing, retail, and manufacturing, are increasingly considering rooftop solar systems. These systems provide an attractive opportunity due to their modularity, ease of installation, and capacity to reduce electricity costs by leveraging daytime energy use and local solar resources.
- **Utility-Scale Solar Farms**: Large-scale solar farms are becoming increasingly viable as capital costs decline. Regions like the Mackenzie District, Tasman, and Marlborough offer high solar irradiance and relatively low land costs, making them prime locations for solar farm development.

Geothermal 179 180

- Supercritical Geothermal Technology Development: New Zealand presents a
 promising opportunity to explore and commercialise supercritical geothermal
 resources, which have the potential to generate up to three times the capacity of
 conventional geothermal. Investments are needed to develop the technology, conduct
 exploratory deep drilling, and build infrastructure capable of handling the higher
 temperatures and pressures involved.
- Expansion of Brownfield Geothermal Power Plants: Significant potential exists to enhance the output of existing geothermal fields through incremental expansions. For instance, projects like the Tauhara geothermal power station and upgrades at Nga Awa Purua and Rotokawa have shown that brownfield developments can provide cost-effective increases in generation capacity with lower environmental impact. Investors can capitalise on proven resources while contributing to New Zealand's renewable energy targets.

¹⁷⁷ Allan Miler Consulting, "Economics of Utility-Scale Solar in Aotearoa New Zealand," 2020, accessed January 2, 2025, https://www.mbie.govt.nz/assets/utility-scale-solar-forecast-in-aotearoa-new-zealand-v3.ndf

¹⁷⁸ Energy Efficiency & Conservation Authority, "Commercial-Scale Solar in New Zealand: An Analysis of the Financial Performance of on-Site Generation for Businesses," 2021, accessed January 2, 2025, https://www.eeca.govt.nz/assets/EECA-Resources/Research-papers-guides/Commercial-scale-solar-in-New-Zealand.pdf.

¹⁷⁹ Castalia, "Supercritical Geothermal in New Zealand: Economic Opportunity in Renewable Electricity Generation and for Off-Grid Energy."

¹⁸⁰ McLean et al., "2020-2023 New Zealand Country Update."

- **Electrolysis and Storage Facilities**: Investing in advanced electrolysis facilities and innovative storage methods, such as cryogenic liquefaction or solid-state solutions, can drive cost reductions, enhancing green hydrogen viability and competitiveness compared to alternative energy carriers.
- **Supportive Infrastructure**: Developing hydrogen-specific infrastructure, such as refuelling stations, pipelines, and transportation networks, is essential for scaling the sector. Upgrading existing gas pipelines for hydrogen use and building dedicated hydrogen hubs will enhance the supply chain efficiency.

New Zealand's renewable energy sector continues to expand and diversify, driven by climate targets and natural resource availability. Advancements in wind, solar, geothermal, and green hydrogen technologies contribute to the country's transition toward a lower-emissions energy system. With significant untapped potential, these developments present opportunities for investment across various energy sources and infrastructure.

6.7 Advanced transportation

Advanced transportation encompasses a diverse array of activities, including urban mobility solutions, marine transport, and aerospace. These sectors are instrumental in meeting practical challenges such as reducing emissions, improving infrastructure, and supporting economic development.

6.7.1 Urban mobility

In New Zealand, the urban mobility sector is at a critical juncture, grappling with challenges such as decarbonization, congestion management, and equitable access while striving for sustainable growth. Major urban centres like Auckland, Wellington, Christchurch, and Hamilton exemplify these dynamics, serving as microcosms of broader national trends. Travel behaviour in New Zealand remains heavily reliant on private vehicles, with the majority of trips completed by car. Among the major cities, Wellington has the lowest share of carbased transport at 70%, compared to 83% in Auckland, 83% in Christchurch, and 87% in Hamilton. Conversely, public transport usage remains limited, with Wellington leading at just 5%, followed by Auckland at 4%, Christchurch at 2%, and Hamilton at 1% (see Figure 21). 184 A key factor behind the low public transport uptake is its relative inefficiency compared to private vehicles, particularly in travel time to central business districts (CBDs). In Wellington, public transport journeys to the CBD take, on average, 2.13 times longer than car journeys, making it the best-performing city in this regard. By contrast, public transport commutes in Auckland take 2.55 times longer, while in Hamilton, they are 2.29 times longer. Although private vehicles offer faster commute times, they come with significantly higher costs. In

¹⁸³ GNS Science, "2024 Annual Nz Hydrogen Ecosystem Update," 2024, accessed January 3, 2025, https://www.gns.cri.nz/our-science/energy-futures/green-hydrogen/2024-annual-nz-hydrogen-ecosystemupdate/.

¹⁸¹ Concept Consulting Group, "Hydrogen in New Zealand Report 1 – Summary."

¹⁸² Energy Efficiency & Conservation Authority, "Green Hydrogen."

¹⁸⁴ NZ Transport Agency, "Sustainable Urban Mobility Benchmarking," 2022, accessed December 27, 2024, https://www.nzta.govt.nz/resources/sustainable-urban-mobility-benchmarking/.

Auckland and Christchurch, the cost of using private vehicles—including fuel, parking, and maintenance—can be up to six times higher than public transport. In Hamilton and Wellington, this cost disparity rises to eight times, highlighting a substantial financial burden for private vehicle users. 185

The inefficiencies in New Zealand's public transport system stem from a combination of historical, infrastructural, and policy-related challenges. A key issue is the limited public transport networks and infrastructure, exacerbated by chronic underinvestment in land transport development. 186 In 2021, New Zealand allocated just 0.5% of its GDP to land transport infrastructure, below the OECD average of over 0.8% (see Figure 22).187 This funding gap restricts efforts to modernise and expand the transport system, hindering its ability to address growing urban mobility demands effectively.

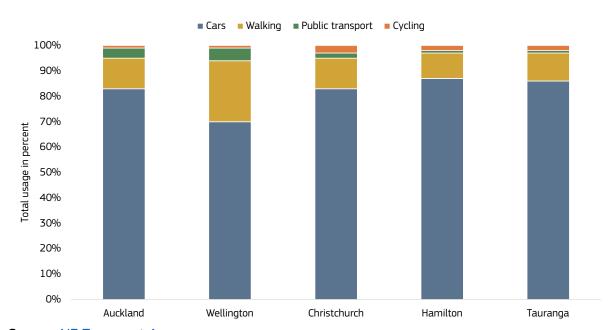


Figure 21: Travel behaviour in major cities – mode share across all trips 188

Source: NZ Transport Agency

Urban planning has further compounded these challenges. Historical development policies favoured dispersed urban growth and car-centric designs, resulting in sprawling suburban landscapes that are inherently difficult to serve with efficient public transport. This spatial configuration reinforces reliance on private vehicles, perpetuating a cycle of car dependency and underutilised public transport systems. The lack of multimodal transport options further undermines efforts to promote sustainable mobility. While cycling and walking infrastructure has seen some growth, active transport modes remain underutilised due to insufficient integration with public transport. Nationally, infrastructure includes approximately 110 kilometres of separated cycleways, 550 kilometres of on-road cycleways, and 1,311

¹⁸⁵ NZ Transport Agency, "Sustainable Urban Mobility Benchmarking."

¹⁸⁶ New Zealand Infrastructure Commission, "Sector State of Play: Transport," 2021, accessed December 27, 2024, https://tewaihanga.govt.nz/our-work/research-insights/sector-state-of-play-transport.

¹⁸⁷ Organisation for Economic Co-operation and Development, "Infrastructure Investment," 2024, accessed December 28, 2024, https://www.oecd.org/en/data/indicators/infrastructure-investment.html.

¹⁸⁸ Three-year moving average from 2015–2018

kilometres of shared pathways. Despite increased investment over the past decade, these figures highlight the fragmented and limited nature of active transport facilities. 189

In urban areas, the integration of bus services with active transport infrastructure remains particularly problematic. Buses often share congested road space with general traffic, with most priority measures limited to bus lanes within existing roadways. Notable exceptions, such as Auckland's Northern Busway—a dedicated corridor that significantly improves efficiency—and the under-construction Eastern Busway, illustrate the potential of dedicated infrastructure. However, these isolated successes underscore the broader need for comprehensive investment in multimodal and separated transport options to enhance the overall effectiveness and appeal of sustainable urban mobility. 190

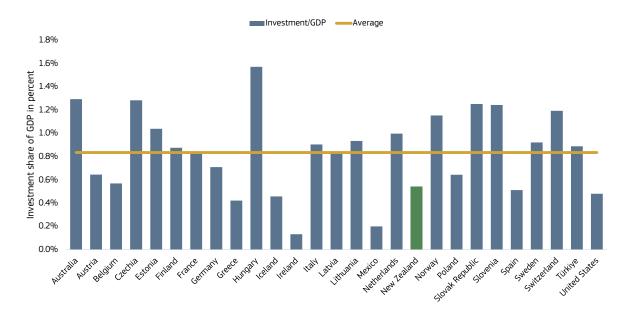


Figure 22: Inland transport infrastructure investment across the OECD (2021)

Source: Organisation for Economic Co-operation and Development

The 2024 Budget demonstrates the New Zealand Government's commitment to revitalising transport infrastructure with an NZD 2.68 billion investment in roads, rail, and public transport. This includes NZD 1 billion for priority projects such as the Roads of National Significance, NZD 939.3 million for repairing weather-damaged roads, and funding for upgrading Auckland and Wellington's metropolitan rail networks. A further NZD 59.7 million has been allocated to decarbonise the bus fleet, supporting zero-emissions buses and improving driver safety. These investments aim to modernise infrastructure, enhance resilience, and prepare the rail system for the City Rail Link, Auckland's underground rail, 191 improving reliability and reducing delays. Additionally, the government has committed to NZD 20.7 billion in longer-term projects, including a Pothole Prevention Fund, regional road programs, and new train procurement. This comprehensive approach seeks to boost

¹⁸⁹ New Zealand Infrastructure Commission, "Sector State of Play: Transport."

¹⁹⁰ New Zealand Infrastructure Commission, "Sector State of Play: Transport."

¹⁹¹ The City Rail Link (CRL) is a large-scale underground railway project in Auckland, New Zealand, designed to improve public transport efficiency. It includes twin underground tunnels (3.45 km) connecting Britomart to Mt Eden, enabling faster, more frequent, and direct train services across the city. The CRL aims to reduce congestion, increase capacity, and support urban growth.

economic growth, enhance safety, and promote sustainable urban mobility across New Zealand.¹⁹² ¹⁹³

In addition, the government has prioritised 149 infrastructure projects under the Fast Track Approvals Act adopted in December 2024 to drive economic growth, enhance connectivity, and strengthen energy security. Covering key sectors such as transport, housing, renewable energy, and regional development, the bill aims to streamline approval processes, ensuring that critical investments can move forward without unnecessary delays. Further reinforcing its infrastructure agenda, the government established National Infrastructure Funding and Financing (NIFFCo) in December 2024 as the central agency for infrastructure funding and financing. NIFFCo's mandate is to leverage private capital, support large-scale infrastructure projects, and connect investors to New Zealand's infrastructure pipeline, addressing the country's long-standing infrastructure deficit. 195 196

6.7.2 Shipping

New Zealand's shipping sector is integral to its economy, with maritime transport facilitating 99% of the country's international trade. 197 Domestically, coastal shipping accounts for approximately 3.5% of freight movement by volume. This equates to around 10 million tonnes of cargo annually, including significant quantities of bulk goods such as 2.7 million tonnes of petroleum products and 1.3 million tonnes of cement. Containerised cargo is also substantial, with 278,440 twenty-foot equivalent units (TEUs) of domestic goods transported annually, complemented by 140,030 TEUs of export and import transshipments. Coastal shipping is particularly important for connecting New Zealand's North and South Islands. The Cook Strait ferry services manage approximately 4 million tonnes of cargo annually, divided between rail (700,000 tonnes) and road transport (3.3 million tonnes) as of 2020. 198 The Interislander and Bluebridge services provide critical capacity for this connection. Following the cancellation of the iReX project in late 2023, the New Zealand Government announced in March 2025 that it will procure two new rail- and road-capable ferries, each able to carry up to 40 rail wagons and 1,500 passengers. This replaces the previous iReX plan for larger vessels and costly terminal upgrades. The new approach focuses on pragmatic infrastructure reuse, such as upgrading existing port facilities rather than rebuilding them entirely. The decision aims to maintain rail freight capacity across the Strait, ensuring a continued modal

[.]

¹⁹² The Treasury, "Budget 2024," 2024, accessed December 27, 2024, https://budget.govt.nz/index-budget2024.htm.

¹⁹³ New Zealand Government, "Investing in Transport for Growth," 2024, accessed December 27, 2024, https://www.beehive.govt.nz/release/investing-transport-growth.

¹⁹⁴ New Zealand Government, "Fast-Track Projects Released," 2024, accessed February 8, 2025, https://www.beehive.govt.nz/release/fast-track-projects-released.

¹⁹⁵ National Infrastructure Funding and Financing, "National Infrastructure Funding and Financing," 2025, accessed February 8, 2025, https://nationalinfrastructure.govt.nz/.

¹⁹⁶ New Zealand Government, "New Infrastructure Agency up and Running," 2024, accessed February 8, 2025, https://www.beehive.govt.nz/release/new-infrastructure-agency-and-running.

¹⁹⁷ New Zealand Shipping Federation, "Full Steam Ahead," 2015, accessed December 29, 2024, https://nzsf.org.nz/wp-content/uploads/2022/09/2015_12_04_FULL_STEAM_AHEAD_Final.pdf.

¹⁹⁸ NZ Transport Agency, "Coastal Shipping Investment Approach Report 1 - State-of-Play," 2021, accessed December 29, 2024, https://www.nzta.govt.nz/assets/resources/coastal-shipping-research/nzta-coastal-shipping-state-of-play-report.pdf.

balance and improving cost-efficiency, while still enabling long-term infrastructure adaptability. 199 200

The environmental advantages of coastal shipping are significant. Emitting only 8–15 grams of CO₂ per tonne-kilometre, it is markedly more efficient than rail (20–25 grams) and road transport (90-120 grams). A shift of just 2% of freight from road to coastal shipping could reduce New Zealand's total transport emissions by up to 16%. Further decarbonization opportunities exist through emerging technologies, including electrification, hybrid drives, and biofuels.²⁰¹

Despite these benefits, the sector faces considerable challenges. A workforce shortage is a critical concern, with an estimated gap of 200 seafarers. This issue is compounded by an ageing workforce, where the number of active seafarers in their 70s exceeds those in their 20s.²⁰² Infrastructure limitations further hinder the sector's growth, as ports require upgrades to accommodate increasing freight volumes and larger vessels. Additionally, the lack of sufficient drydock facilities to maintain vessels exacerbates operational constraints.²⁰³ ²⁰⁴ Regulatory and competitive pressures also weigh heavily on coastal operators. Higher costs stem from double levies under the ETS, while international vessels, leveraging economies of scale, can underprice coastal cargo as part of their global operations.²⁰⁵

Ensuring the resilience of New Zealand's coastal shipping sector is essential, especially as total freight volumes are projected to rise by 50% by 2040. At the same time, industry experts anticipate that international shipping operators will visit New Zealand less frequently, while trade between Australia and New Zealand is expected to increase due to shifts in global supply chains. Strengthening domestic coastal shipping capacity is imperative to meet these challenges and maintain New Zealand's economic and environmental sustainability. 206

6.7.3 Aerospace

New Zealand's aerospace sector is emerging as a significant contributor to the national economy, with activities spanning two core domains: advanced aviation and space. In the 2024 financial year, the sector generated an estimated NZD 3.2 billion in combined revenue and supported around 20,000 direct and indirect jobs.²⁰⁷ Recognising its strategic potential, the government has set an ambitious target to grow sector revenue to NZD 10 billion by 2030.208

¹⁹⁹ RNZ, "Advocates Divided as Government Unveils Cook Strait Ferry Plan," 2024, accessed February 8, 2025, https://www.rnz.co.nz/news/political/536291/advocates-divided-as-government-unveils-cook-strait-ferry-plan. ²⁰⁰ New Zealand Government, "Rail Ferries and Straightforward Infrastructure," 2025, accessed May 5, 2025, https://www.beehive.govt.nz/speech/rail-ferries-and-straightforward-infrastructure.

²⁰¹ New Zealand Shipping Federation, "Full Steam Ahead."

²⁰² New Zealand Shipping Federation, "New Zealand Shipping Federation Policy Ask," 2023, accessed December 29, 2024, https://nzsf.orq.nz/wp-content/uploads/2023/05/NZ-Shipping-Federation-policy-ask-forelection-2023.pdf.

²⁰³ New Zealand Shipping Federation, "Full Steam Ahead."

²⁰⁴ NZ Transport Agency, "Coastal Shipping Investment Approach Report 1 - State-of-Play."

²⁰⁵ New Zealand Shipping Federation, "Full Steam Ahead."

²⁰⁶ New Zealand Shipping Federation, "New Zealand Shipping Federation Policy Ask."

²⁰⁷ Deloitte Access Economics, "Innovation for Growth Charting the Space and Advanced Aviation Sectors," 2025, accessed May 10, 2025, https://www.mbie.govt.nz/dmsdocument/30716-innovation-for-growthcharting-the-space-and-advanced-aviation-sectors-pdf.

²⁰⁸ Ministry of Business Innovation & Employment, "Briefing for the Incoming Minister for Space," 2023, accessed December 30, 2024, https://www.mbie.govt.nz/about/who-we-are/our-ministers/briefings-toincoming-ministers.

Advanced aviation drives innovation in aerial technologies, moving beyond conventional aviation systems. This includes autonomous aerial vehicles such as drones and urban air mobility solutions, as well as electric and hybrid propulsion systems. These innovations support a shift toward more sustainable aviation, addressing global challenges like emissions reduction and urban congestion while enabling new industrial applications in logistics, agriculture, and disaster response. 209

In 2024, New Zealand's advanced aviation industry generated an estimated NZD 530 million in revenue and supported approximately 3,700 direct and indirect full-time equivalents. Most firms operate across both the space and advanced aviation sectors, with a strong presence in Auckland, Christchurch, and Wellington. The industry is marked by high research and development intensity, with R&D accounting for 21% of total revenue—15 times the national average. It also demonstrates a growing international footprint, with exports making up 16% of revenue across key markets such as the USA, Australia, Canada, Israel, and the Pacific Islands.²¹⁰

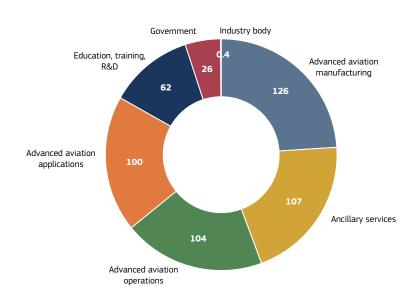


Figure 23: Breakdown of advanced aviation sub-sectors (2024), in m NZD (Deloitte Survey)

Source: Deloitte Access Economics

The advanced aviation sector is primarily driven by advanced aviation manufacturing, ancillary services, and aviation operations (see Figure 23). Together, these three segments generate NZD 337 million, accounting for approximately 64% of the sector's total revenue.²¹¹ Underscoring the sector's transformative potential, MBIE estimates that drone technologies alone could contribute between NZD 4.6 and NZD 7.9 billion to New Zealand's economy over the next 25 years.²¹²

²⁰⁹ Ministry of Business Innovation & Employment, "New Zealand Space and Advanced Aviation Strategy 2024 to 2030," 2024, accessed December 30, 2024, https://www.mbie.govt.nz/science-and-technology/space/newzealand-space-and-advanced-aviation-strategy.

²¹⁰ Deloitte Access Economics, "Innovation for Growth Charting the Space and Advanced Aviation Sectors."

²¹¹ Deloitte Access Economics, "Innovation for Growth Charting the Space and Advanced Aviation Sectors."

²¹² Ministry of Business Innovation & Employment, "New Zealand Space and Advanced Aviation Strategy 2024 to 2030."

Space activities form the second critical pillar of the aerospace industry, catalysed by Rocket Lab USA's commercial activity starting in 2016.²¹³ The sector encompasses satellite development and operations, launch services, high-altitude technologies, and aerospace-enabled data applications. New Zealand's leadership in launch capabilities, led by Rocket Lab, has positioned the country as a significant player in global space activities, accounting for the fourth most orbital launches in 2024, after the United States, China, and Russia.²¹⁴

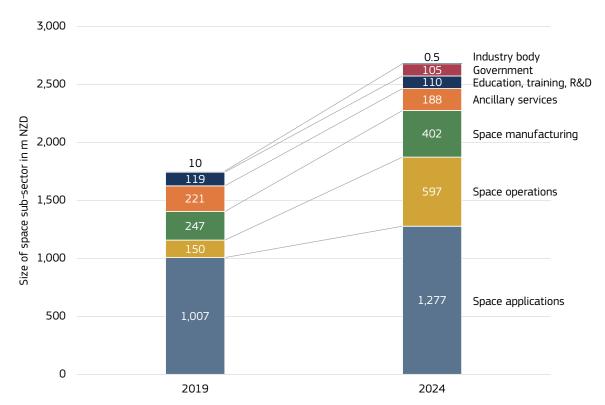


Figure 24: Breakdown of space sub-sectors for 2019 and 2024 (Deloitte Survey)

Source: Deloitte Access Economics 2019, Deloitte Access Economics 2025

Since 2019, New Zealand's space sector has experienced rapid growth, expanding from an estimated NZD 1.75 billion to NZD 2.68 billion in 2024—an increase of 53%, outpacing the global sector's growth of 40.6% over the same period. This growth reflects a maturing industry, with several established companies from other sectors diversifying into space-related activities. Similar to the advanced aviation sector, the space sector is geographically concentrated in Auckland, Christchurch and Wellington. It also demonstrates robust research and development capacity, with R&D expenditure accounting for 11% of total revenue compared to the New Zealand average of 1.4%. Furthermore, exports play a vital role in the sector's success, generating nearly 29% of total revenue in 2024. Key export destinations include the USA, Canada, Europe, Singapore, India, Japan, and Korea.²¹⁵

²¹³ Malcolm Scott, "A Space Tourism Destination: Environmental, Geopolitical and Tourism Branding Considerations for New Zealand as a 'Launch State'," *Journal of Sustainable Tourism* 30, no. 9 (2022), https://dx.doi.org/10.1080/09669582.2020.1817049.

²¹⁴ Payload, "2024 Orbital Launch Attempts by Country," 2025, accessed March 8, 2025, https://payloadspace.com/2024-orbital-launch-attempts-by-country/.

²¹⁵ Deloitte Access Economics, "Innovation for Growth Charting the Space and Advanced Aviation Sectors."

Core areas of activity include space applications, operations, and manufacturing, all of which have seen substantial growth since 2019 (see Figure 24), highlighting New Zealand's growing capability in both upstream and downstream activities, supported by advances in satellite subsystems, high-altitude technologies, and ancillary services.²¹⁶ ²¹⁷

Geographic advantages have been pivotal to New Zealand's aerospace success. The country's clear skies, low population density, and remote location create an optimal setting for testing and advancing aerospace technologies. ²¹⁸ Furthermore, the government also plays an important role in driving the sector's development, for example by introducing relevant legislation. In 2024, the New Zealand Government committed to establishing the world's leading regulatory framework for advanced aviation by the end of 2025. This initiative is designed to unlock commercial opportunities by providing a clear, innovation-friendly pathway for testing and deploying cutting-edge aviation technologies. By coupling regulatory agility with geographic advantages, New Zealand aims to become a global hub for aerospace innovation. ²²⁰

By 2030, the aerospace sector is projected to support tens of thousands of high-quality jobs and contribute billions of dollars to GDP.²²¹ Achieving these ambitious goals, however, demands substantial capital, and the industry is actively seeking investments that will help companies incubate and scale.

Investment Opportunities

Urban mobility, shipping, and aerospace are vital sectors that not only underpin New Zealand's economic infrastructure but also offer transformative potential for addressing pressing global challenges such as decarbonization, technological advancement, and sustainable development. Investment opportunities for the areas include, among others:

Urban mobility^{222 223}

 Public Transport Expansion Projects: The budget allocations for major urban transport projects, such as the construction of Auckland's City Rail Link and the expansion of the Northern and Eastern Busways, present opportunities for private investors in construction, technology integration, and operational services. These projects aim to improve connectivity and reliability, making them attractive long-term investments with consistent demand.

²¹⁶ Deloitte Access Economics, *New Zealand Space Economy: Its Value, Scope and Structure* (Ministry of Business, Innovation and Employment, 2019), https://www.mbie.govt.nz/assets/new-zealand-space-sector-its-value-scope-and-structure.pdf.

²¹⁷ Deloitte Access Economics, "Innovation for Growth Charting the Space and Advanced Aviation Sectors."

²¹⁸ Ministry of Business Innovation & Employment, "New Zealand Space and Advanced Aviation Strategy 2024 to 2030."

²¹⁹ Ministry of Business Innovation & Employment, "Aotearoa New Zealand Aerospace Strategy 2023-2030," 2023, accessed December 30, 2024, https://www.mbie.govt.nz/assets/te-rautaki-atea-a-rangi-o-aotearoa-2023-2030-aotearoa-new-zealand-aerospace-strategy.pdf.

²²⁰ Ministry of Business Innovation & Employment, "New Zealand Is Open for Business," 2024, accessed May 5, 2025, https://www.mbie.govt.nz/science-and-technology/space/new-zealand-space-and-advanced-aviation-strategy/new-zealand-is-open-for-business.

²²¹ Ministry of Business Innovation & Employment, "Aotearoa New Zealand Aerospace Strategy 2023-2030."

²²² New Zealand Infrastructure Commission, "Sector State of Play: Transport."

²²³ NZ Transport Agency, "Sustainable Urban Mobility Benchmarking."

- Active Transport and Sustainable Mobility Solutions: With increasing investment in cycling and pedestrian infrastructure, including over 1,300 kilometres of shared pathways and cycleways, opportunities exist in the design, construction, and management of these systems. Public-private partnerships could further enhance the infrastructure's quality and accessibility, especially in urban centres prioritising sustainability and multimodal transport.
- Development of Electric Vehicle Infrastructure: With a growing emphasis on decarbonising urban transport, investments in EV charging networks and related technologies offer significant potential. Auckland's targeted densification and the push toward increased EV adoption create a fertile ground for private sector involvement in charging stations, battery technology, and associated services.

Shipping²²⁴ ²²⁵

- Alternative Fuel Infrastructure Development: The transition to low- and zeroemission fuels is a critical goal for New Zealand's shipping sector. The International
 Maritime Organization (IMO) mandates significant emissions reductions, making
 alternative fuels such as biofuels, hydrogen, and ammonia viable opportunities.
 Investment is needed to develop bunkering infrastructure for these fuels, which are
 currently limited in New Zealand. Given the country's high renewable electricity
 capacity, the production of green hydrogen or ammonia presents an attractive longterm investment.
- Port and Terminal Upgrades: New Zealand's port infrastructure requires substantial upgrades to accommodate larger vessels and improve efficiency. For instance, many ports lack dry docking facilities capable of servicing larger ships, forcing vessels to undergo repairs overseas, which is both costly and time-consuming. Additionally, investment in enhanced wharf facilities, crane capacity, and specialised bulk handling infrastructure can support increased freight volumes and improve operational capabilities.
- **Expansion of Coastal Shipping Services**: With freight volumes expected to grow by 50% by 2040, coastal shipping is poised for expansion. Currently, the sector carries about 11 million tonnes of freight annually, representing only 3.5% of the total freight task. Investments in modern coastal vessels, including hybrid or fully electric ships, can capture this growing demand while aligning with the government's emissions reduction goals.

²²⁴ New Zealand Shipping Federation, "New Zealand Shipping Federation Policy Ask."

²²⁵ NZ Transport Agency, "Coastal Shipping Investment Approach Report 1 - State-of-Play."

- Autonomous Aerial Vehicles: New Zealand's aerospace strategy includes ambitious goals to safely integrate autonomous aerial vehicles (e.g., drones) into its airspace. The increasing global demand for drones in logistics, agriculture, and surveillance creates significant opportunities for investment in manufacturing, operations, and related data services.
- **Space and Advanced Aviation Testing Zones**: New Zealand's unique geography offers opportunities to establish dedicated testing zones for aerospace technologies. With the government actively working to ease restrictions on advanced aviation testing, these zones could streamline compliance and regulatory processes, attract international firms, and support innovative testing environments for rockets, drones, and high-altitude activities. One prominent example is Tāwhaki Aerospace Centre, which is designed to support the testing and development of aerospace and advanced aviation technologies, such as unmanned aircraft, eVTOL (electric vertical take-off and landing) vehicles, and potentially other space-related projects.
- **Satellite and Data Applications**: The growing global demand for satellite data in fields like environmental monitoring, disaster recovery, and agriculture presents significant opportunities. New Zealand's existing strengths in Earth observation and satellite data applications make it a promising area for investment.

Advanced transportation, including urban mobility, shipping, and aerospace, presents substantial opportunities to support New Zealand's economic development and sustainability goals. Investments in areas such as public transport expansion, green shipping infrastructure, and aerospace innovation can deliver improved connectivity, reduced emissions, and long-term economic benefits. These sectors offer a strong foundation for transformative growth and sustainable progress.

²²⁶ Ministry of Business Innovation & Employment, "New Zealand Space and Advanced Aviation Strategy 2024 to 2030."

²²⁷ Ministry of Business Innovation & Employment, "Aotearoa New Zealand Aerospace Strategy 2023-2030."

²²⁸ Ministry of Business Innovation & Employment, "Briefing for the Incoming Minister for Space."

²²⁹ Deloitte Access Economics, "Innovation for Growth Charting the Space and Advanced Aviation Sectors."

7 Contacts

New Zealand Government Institutions

Website Organisation New Zealand Trade and Enterprise https://www.nzte.govt.nz/ https://www.nzte.govt.nz/page/invest-or-raise-capital-Invest New Zealand²³⁰ with-nzte https://www.linz.govt.nz/quidance/overseas-Land Information New Zealand investment https://www.mfat.govt.nz/en/ Ministry of Foreign Affairs and Trade Ministry of Business, Innovation and Employment https://www.mbie.govt.nz/ Ministry for Primary Industries https://www.mpi.govt.nz/ New Zealand Customs Service https://www.customs.govt.nz/ New Zealand Commerce Commission https://comcom.govt.nz/ New Zealand Government Procurement https://www.procurement.govt.nz/ Intellectual Property Office of New Zealand https://www.iponz.govt.nz/ New Zealand Companies Office https://www.companiesoffice.govt.nz/ https://www.business.govt.nz/ Business.govt platform National Infrastructure Funding and Financing https://nationalinfrastructure.govt.nz/

Relevant New Zealand Industry Associations

Organisation	Website
Energy	
New Zealand Wind Energy Association	https://www.windenergy.org.nz/
Hydrogen New Zealand	https://www.nzhydrogen.org/
Sustainable Business Council	https://sbc.org.nz/
BusinessNZ Energy Council	https://bec.org.nz/
Bioenergy Association New Zealand	https://www.bioenergy.org.nz/
Food and Aquaculture	
New Zealand Food and Grocery Council	https://www.fgc.org.nz/
Aquaculture New Zealand	https://www.aquaculture.org.nz/
Technology and Manufacturing	
NZTech	https://nztech.org.nz/
BusinessNZ	https://businessnz.org.nz/
ManufacturingNZ	https://manufacturingnz.org.nz/

²³⁰ URL is subject to change

Contacts | 64

Organisation Website

Advanced Manufacturing Aotearoa https://www.amanz.nz/

Transportation

Aerospace New Zealand https://www.aerospace.org.nz/
Marine Transport New Zealand https://www.marinetransport.co.nz/

New Zealand Shipping Federation https://nzsf.org.nz/

NZ Transport Agency https://www.nzta.govt.nz/

Other

Te Taumata https://www.tetaumata.com/
Infrastructure New Zealand https://infrastructure.org.nz/

Construction Industry Council https://nzcic.co.nz/

Regional Chambers of Commerce

Auckland Chamber https://aucklandchamber.co.nz/

Employer and Manufacturers Association https://ema.co.nz/

Business Central https://www.businesscentral.org.nz/

Business Canterbury

https://www.cecc.org.nz/business-canterbury-your-

Business South chamber-of-commerce-home
https://business-south.org.nz/

EU-New Zealand/Australia Business Chambers

Organisation Website

New Zealand Europe Business Council https://www.nzebc.org.nz/

Advantage Austria https://www.advantageaustria.org/au/Startseite.en.html

Wallonia Brussels Australia/New Zealand https://www.investinwallonia.be/home

FIT Flanders Investment & Trade - Australia https://corporate.flandersinvestmentandtrade.com/en

Bulgarian Australian Business Council http://babc.biz/

Czech New Zealand Business Association https://www.cnzba.co.nz/

Czech Trade Promotion Agency | CzechTrade http://www.czechtradeoffices.com/en/us

Trade Council of Denmark

https://australien.um.dk/en/trade-council

Estonian Australian Chamber of Commerce and

Industry

https://www.eacci.com.au/

French New Zealand Chamber of Commerce https://www.fnzcci.org.nz/

Business France https://www.businessfrance.fr/

German-New Zealand Chamber of Commerce https://neuseeland.ahk.de/en/

Enterprise Ireland http://www.enterprise-ireland.com/en/

Irish Business Network of New Zealand https://www.ibnnz.com/

Italian Chamber of Commerce in New Zealand https://iccnz.com/

Italian Trade Agency http://www.ice.it/

Organisation

Dutch Business Association NZ

Polish-New Zealand Business Association

Polish Investment and Trade Agency

New Zealand Scandinavia Business Association

Slovenian Australian Chamber of Commerce

ICEX Spain Trade & Investment

Business Sweden

Website

https://dutchbusinessassociation.co.nz/

https://polanz.nz/

https://www.paih.gov.pl/en/

https://www.nzsba.nz/

http://slovenianaustralianchamber.com.au/

https://www.spainbusiness.com/

https://www.business-sweden.com

References

- 1News. "Scientists Hoping to Maximise Nz's Geothermal Energy Potential." 2024. Accessed January 3, 2025. https://www.1news.co.nz/2024/10/15/scientists-hoping-to-maximise-nzs-geothermal-energy-potential/.
- AgriTech New Zealand. "Agritech M\u00e1ori Sector Overview Report." 2024. Accessed May 5, 2025. https://agritechnz.org.nz/wp-content/uploads/2024/07/Maori-Agritech-Ecosystem-Report-May-2024.pdf.
- Allan Miler Consulting. "Economics of Utility-Scale Solar in Aotearoa New Zealand." 2020. Accessed January 2, 2025. https://www.mbie.govt.nz/assets/utility-scale-solar-forecast-in-aotearoa-new-zealand-v3.pdf.
- ANZ. "Anz Economic Outlook." 2024. Accessed December 5, 2024. https://www.anz.co.nz/about-us/economic-markets-research/economic-outlook/.
- Bell Gully. "Government's Positive Signals for Overseas Investments into New Zealand." 2024. Accessed January 4, 2025. https://www.bellgully.com/insights/government-s-positive-signals-for-overseas-investments-into-new-zealand/.
- Bioenergy Association. "Bioenergy the Renewable Fuel." 2024. Accessed December 20, 2024. https://www.bioenergy.org.nz/.
- Business NZ. "A Future for Foreign Direct Investment into New Zealand." 2024. Accessed December 12, 2024. https://businessnz.org.nz/wp-content/uploads/2024/09/240906-A-future-for-Foreign-Direct-Investment-into-NZ.pdf.
- Callaghan Innovation. "Nz Cleantech Mission: Making It Happen for New Zealand." 2024. Accessed December 22, 2024. https://www.callaghaninnovation.govt.nz/stories/nz-cleantech-mission-making-it-happen-for-new-zealand/?news=.
- Castalia. "Supercritical Geothermal in New Zealand: Economic Opportunity in Renewable Electricity Generation and for Off-Grid Energy." 2023. Accessed January 3, 2025. https://castalia-advisors.com/wp-content/uploads/2023/12/02112023-Final-Report-Economic-Value-of-Supercritical-Geothermal-updated.pdf.
- CBRE Group. "Global Data Center Trends 2024." 2024. Accessed December 23, 2024. https://www.cbre.com/insights/reports/global-data-center-trends-2024.
- Concept Consulting Group. "Hydrogen in New Zealand Report 1 Summary." 2019.

 Accessed January 3, 2025.

 https://www.concept.co.nz/uploads/1/2/8/3/128396759/h2 report1 summary v4.pd f.

- Deloitte Access Economics. "Innovation for Growth Charting the Space and Advanced Aviation Sectors." 2025. Accessed May 10, 2025. https://www.mbie.govt.nz/dmsdocument/30716-innovation-for-growth-charting-the-space-and-advanced-aviation-sectors-pdf.
- Deloitte Access Economics. *New Zealand Space Economy: Its Value, Scope and Structure.*Ministry of Business, Innovation and Employment, 2019.
- Electricity Authority. "Installed Distributed Generation Trends." 2025. Accessed January 2, 2025. https://www.emi.ea.govt.nz/Retail/Reports.
- Electricity Authority. "Let the Sun Shine!", 2023. Accessed January 2, 2025. https://www.ea.govt.nz/news/eye-on-electricity/let-the-sun-shine/.
- Energy Efficiency & Conservation Authority. "Biomass." 2024. Accessed December 20, 2024. https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/biomass/.
- Energy Efficiency & Conservation Authority. "Commercial-Scale Solar in New Zealand: An Analysis of the Financial Performance of on-Site Generation for Businesses." 2021. Accessed January 2, 2025. https://www.eeca.govt.nz/assets/EECA-Resources/Research-papers-quides/Commercial-scale-solar-in-New-Zealand.pdf.
- Energy Efficiency & Conservation Authority. "Geothermal Energy in New Zealand." 2025. Accessed March 8, 2025. https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/geothermal/.
- Energy Efficiency & Conservation Authority. "Green Hydrogen." 2025. Accessed January 3, 2025. https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/hydrogen/.
- Energy Efficiency & Conservation Authority. "Renewable Energy." 2024. Accessed December 22, 2024. https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/.
- Energy Efficiency & Conservation Authority. "Solar Energy in New Zealand." 2025. Accessed January 2, 2025. https://www.eeca.govt.nz/insights/energy-in-new-zealand/renewable-energy/solar/.
- European Commission. "EU-New Zealand Trade Agreement Enters into Force, Opening New Opportunities for EU Exporters." 2024. Accessed December 4, 2024. https://ec.europa.eu/commission/presscorner/detail/en/ip_24_2388.
- Eurostat. "EU Direct Investment Positions by Country, Ultimate and Immediate Counterpart and Economic Activity (Bpm6)." 2025. Accessed May 3, 2025. https://ec.europa.eu/eurostat/databrowser/view/bop-fdi6-pos-custom-16505883/default/table?lang=en.

- EY. "How New Zealand Can Power Sustainable Data Centres While the World Sleeps." 2024. Accessed December 23, 2024. https://www.ey.com/en_nz/insights/energy-resources/how-new-zealand-can-power-sustainable-data-centres-while-the-world-sleeps.
- Food and Agriculture Organization of the United Nations. "The State of World Fisheries and Aquaculture 2024." 2024. Accessed December 20, 2024. https://openknowledge.fao.org/server/api/core/bitstreams/66538eba-9c85-4504-8438-c1cf0a0a3903/content/sofia/2024/fisheries-aquaculture-projections.html.
- GNS Science. "2024 Annual Nz Hydrogen Ecosystem Update." 2024. Accessed January 3, 2025. https://www.gns.cri.nz/our-science/energy-futures/green-hydrogen/2024-annual-nz-hydrogen-ecosystem-update/.
- Hall, Peter. "Bioenergy Options for New Zealand: Key Findings from Five Studies." *Wiley Interdisciplinary Reviews: Energy and Environment* 2, no. 6 (2013). https://dx.doi.org/10.1002/wene.60.
- Heritage Foundation. "Index of Economic Freedom." 2024. Accessed January 5, 2025. https://www.heritage.org/index/pages/all-country-scores.
- Infometrics. "Regional Economic Profile New Zealand." 2024. Accessed December 2, 2024. https://rep.infometrics.co.nz/new-zealand/economy/structure.
- International Energy Agency. "Biofuels Production and Development in New Zealand." 2024.

 Accessed December 20, 2024.

 https://www.ieabioenergy.com/blog/publications/biofuels-production-and-development-in-new-zealand/.
- International Energy Agency. "Cabron Neutrality." 2024. Accessed December 20, 2024. https://www.ieabioenergy.com/iea-publications/faq/woodybiomass/carbon-neutrality/.
- International Energy Agency. "Implementation of Bioenergy in New Zealand 2021 Update." 2021. Accessed December 20, 2024. https://www.ieabioenergy.com/wp-content/uploads/2021/11/CountryReport2021 NewZealand final.pdf.
- International Monetary Fund. "World Economic Outlook Database." 2024. Accessed November 27, 2024. https://www.imf.org/en/Publications/WEO/weo-database/2024/October.
- International Renewable Energy Agency. "Renewable Power Generation Costs in 2023." 2024. Accessed January 2, 2025. https://www.irena.org/
 https://www.irena.org/
 https://media/Files/IRENA/Agency/Publication/2024/Sep/IRENA Renewable power generation costs in 2023.pdf
 <a href="mailto://media/Files/IRENA/Agency/Publication/2024/Sep/IRENA/Agency/Publication/2024/Sep/IRENA/Agency/Publication/2024/Sep/IRENA/Agency/Publication/2024/Sep/IRENA/Agency/Publication/2024/Sep/IRENA/Agency/Publication/2024/Sep/IRENA/Agency/Publication/Agency/
- Kahiya, Eldrede T. "Context in International Business: Entrepreneurial Internationalization from a Distant Small Open Economy." *International Business Review* 29, no. 1 (2020): 101621. https://dx.doi.org/10.1016/j.ibusrev.2019.101621.

- KiwiSaaS. "Aotearoa New Zealand's Saas Sector: 2024 Insights from the Cloud." 2024. Accessed December 23, 2024. https://www.kiwisaas.com/aotearoa-new-zealands-saas-sector-2024-insights-from-the-cloud.
- Land Information New Zealand. "Overseas Investment." 2025. Accessed January 5, 2025. https://www.linz.govt.nz/quidance/overseas-investment.
- Land Information New Zealand. "Reform of the Overseas Investment Act." 2024. Accessed January 4, 2025. https://www.linz.govt.nz/our-work/overseas-investment-regulation/reform-overseas-investment-act.
- Lodestone Energy. "Rangitaiki." 2025. Accessed January 2, 2025. https://lodestoneenergy.co.nz/edgecumbe/.
- McLean, Katie, Ted Montague, Samantha Alcaraz, Stephen Daysh, Penny Doorman, Katherine Luketina, Kennie Tsui, Brian White, and Sadiq J. Zarrouk. *2020-2023 New Zealand Country Update*. World Geothermal Congress. Beijing, China, 2023.
- Ministry for Primary Industries. "About New Zealand's Forests." 2022. Accessed December 20, 2024. https://www.mpi.govt.nz/forestry/new-zealand-forests-forest-industry/about-new-zealands-forests/.
- Ministry for Primary Industries. "Food and Fibre Workforce Insights." 2024. Accessed December 21, 2024. https://www.workforceinsights.govt.nz/.
- Ministry for Primary Industries. "The Future of Aotearoa New Zealand's Food Sector: Exploring Global Demand Opportunities in the Year 2050." 2023. Accessed December 21, 2024. https://www.mpi.govt.nz/dmsdocument/56350-The-Future-of-Aotearoa-New-Zealands-Food-Sector-Exploring-Global-Demand-Opportunities-in-the-Year-2050.
- Ministry for Primary Industries. "New Zealand Aquaculture Development Plan." 2025. Accessed May 31, 2025. https://www.mpi.govt.nz/fishing-aquaculture/aquaculture-fish-and-shellfish-farming/new-zealand-aquaculture-development-plan/.
- Ministry for Primary Industries. "Situation and Outlook for Primary Industries." 2024. Accessed December 21, 2024. https://www.mpi.govt.nz/resources-and-forms/economic-intelligence/situation-and-outlook-for-primary-industries.
- Ministry for the Environment. "Improving Regulation of Environmental Effects in New Zealand's Exclusive Economic Zone." 2007. Accessed December 20, 2024. https://environment.govt.nz/assets/Publications/Files/nz-exclusive-economic-zone-discussion-paper-aug07.pdf.
- Ministry of Business Innovation & Employment. "Aotearoa New Zealand Aerospace Strategy 2023-2030." 2023. Accessed December 30, 2024. https://www.mbie.govt.nz/assets/te-rautaki-atea-a-rangi-o-aotearoa-2023-2030-aotearoa-new-zealand-aerospace-strategy.pdf.

- Ministry of Business Innovation & Employment. "Biofuels and the Sustainable Biofuel Obligation." 2023. Accessed December 20, 2024. https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-generation-and-markets/liquid-fuel-market/biofuels.
- Ministry of Business Innovation & Employment. "Briefing for the Incoming Minister for Space." 2023. Accessed December 30, 2024. https://www.mbie.govt.nz/about/who-we-are/our-ministers/briefings-to-incoming-ministers.
- Ministry of Business Innovation & Employment. "Digital Technologies Industry Transformation Plan." 2023. Accessed December 23, 2024. https://www.mbie.govt.nz/assets/digital-technologies-industry-transformation-plan.pdf.
- Ministry of Business Innovation & Employment. "Electricity Statistics." 2024. Accessed January 2, 2025. https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/electricity-statistics.
- Ministry of Business Innovation & Employment. "Energy in New Zealand 2024." 2024January 2, 2025. https://www.mbie.govt.nz/assets/energy-in-nz-2024.pdf.
- Ministry of Business Innovation & Employment. "Hydrogen Action Plan." 2024. Accessed January 3, 2025. https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-generation-and-markets/hydrogen.
- Ministry of Business Innovation & Employment. "Migration Data Explorer." 2025. Accessed January 5, 2025. https://mbienz.shinyapps.io/migration_data_explorer/.
- Ministry of Business Innovation & Employment. "New Zealand Is Open for Business." 2024. Accessed May 5, 2025. https://www.mbie.govt.nz/science-and-technology/space/new-zealand-space-and-advanced-aviation-strategy/new-zealand-is-open-for-business.
- Ministry of Business Innovation & Employment. "New Zealand Space and Advanced Aviation Strategy 2024 to 2030." 2024. Accessed December 30, 2024. https://www.mbie.govt.nz/science-and-technology/space/new-zealand-space-and-advanced-aviation-strategy.
- Ministry of Business Innovation & Employment. "Reform of New Zealand's Science, Innovation and Technology System." 2025. Accessed March 9, 2025. https://www.mbie.govt.nz/about/news/reform-of-new-zealands-science-innovation-and-technology-system.
- Ministry of Business Innovation & Employment. "Te Ōhanga Māori 2023 the Māori Economy 2023." 2024. Accessed May 5, 2025. https://www.mbie.govt.nz/dmsdocument/30486-te-ohanga-maori-2023-report-pdf.

- Ministry of Foreign Affairs & Trade. "Free Trade Agreements in Force." 2024. Accessed December 4, 2024. https://www.mfat.govt.nz/en/trade/free-trade-agreements/free-trade-agreements-in-force.
- Ministry of Foreign Affairs & Trade. "New Zealand's Association to Horizon Europe: Twelve Months On." 2024. Accessed January 5, 2025. https://www.mfat.govt.nz/assets/Trade-General/Trade-Market-reports/New-Zealands-Association-to-Horizon-Europe-Twelve-Months-On-March-2024.pdf.
- Ministry of Foreign Affairs & Trade. "Nz Trade Policy." 2024. Accessed December 4, 2024. https://www.mfat.govt.nz/en/trade/nz-trade-policy.
- MinterEllisonRuddWatts. "Open for Business? New Zealand Set to Relax Foreign Direct Investment Regulation." 2024. Accessed January 4, 2025. https://www.minterellison.co.nz/insights/open-for-business-new-zealand-set-to-relax-foreign-direct-investment-regulation.
- National Infrastructure Funding and Financing. "National Infrastructure Funding and Financing." 2025. Accessed February 8, 2025. https://nationalinfrastructure.govt.nz/.
- New Zealand Game Developers Association. "Nz Games Industry 2024 Survey Results." 2024. Accessed December 23, 2024. https://nzgda.com/news/2024-industry-survey-results/.
- New Zealand Government. "Accelerate the Aquaculture Strategy: Investment Roadmap 2023 | Progress Update." 2023. Accessed December 20, 2024. https://www.mpi.govt.nz/dmsdocument/60346-Accelerate-the-Aquaculture-Strategy-Investment-Roadmap-2023-progress-update.
- New Zealand Government. "Economic Growth the Key to Better Days Ahead." 2025.

 Accessed March 4, 2025. https://www.beehive.govt.nz/release/economic-growth-key-better-days-ahead.
- New Zealand Government. "Economic Growth the Key to Better Days Ahead." 2025. Accessed February 8, 2025. https://www.beehive.govt.nz/release/economic-growth-key-better-days-ahead.
- New Zealand Government. "Fast-Track Projects Released." 2024. Accessed February 8, 2025. https://www.beehive.govt.nz/release/fast-track-projects-released.
- New Zealand Government. "Going for Growth: Unlocking Investment in Nz." 2025. Accessed February 9, 2025. https://www.beehive.govt.nz/release/going-growth-unlocking-investment-nz.
- New Zealand Government. "Government Exploring New Energy Source." 2024. Accessed January 3, 2025. https://www.beehive.govt.nz/release/government-exploring-new-energy-source.

- New Zealand Government. "Government Takes New Direction with Policy Refocus." 2023. Accessed December 20, 2024. https://www.beehive.govt.nz/release/government-takes-new-direction-policy-refocus.
- New Zealand Government. "Investing in Transport for Growth." 2024. Accessed December 27, 2024. https://www.beehive.govt.nz/release/investing-transport-growth.
- New Zealand Government. "New Infrastructure Agency up and Running." 2024. Accessed February 8, 2025. https://www.beehive.govt.nz/release/new-infrastructure-agency-and-running.
- New Zealand Government. "Rail Ferries and Straightforward Infrastructure." 2025. Accessed May 5, 2025. https://www.beehive.govt.nz/speech/rail-ferries-and-straightforward-infrastructure.
- New Zealand Government. "Reforms to Boost Science Sector and Economy." 2025. Accessed February 8, 2025. https://www.beehive.govt.nz/release/reforms-boost-science-sector-and-economy.
- New Zealand Government. "State of the Nation 2025." 2025. Accessed March 4, 2025. https://www.beehive.govt.nz/speech/state-nation-2025.
- New Zealand Immigration. "Investor 1 Resident Visa." 2025January 5, 2025. https://www.immigration.govt.nz/new-zealand-visas/vis
- New Zealand Immigration. "Investor 2 Resident Visa." 2025. Accessed January 5, 2025. https://www.immigration.govt.nz/new-zealand-visas/visas
- New Zealand Immigration. "Working Remotely from New Zealand." 2025. Accessed March 7, 2025. https://www.immigration.govt.nz/about-us/media-centre/news-notifications/working-remotely-from-new-zealand.
- New Zealand Infrastructure Commission. "Sector State of Play: Transport." 2021. Accessed December 27, 2024. https://tewaihanga.govt.nz/our-work/research-insights/sector-state-of-play-transport.
- New Zealand Institute of Economic Research. "Foreign Direct Investment in New Zealand: A Brief Review of the Pros and Cons." 2016. Accessed December 12, 2024. https://businessnz.org.nz/wp-content/uploads/2022/07/Foreign-Direct-Investment-in-NZ.pdf?utm_source=chatqpt.com.
- New Zealand King Salmon. "Nzk Bold Endeavours Salmon Farming in the Open Ocean." 2024. Accessed December 20, 2024. https://www.kingsalmon.co.nz/nzk-bold-endeavours-salmon-farming-in-the-open-ocean/.

- New Zealand Shipping Federation. "Full Steam Ahead." 2015. Accessed December 29, 2024. https://nzsf.org.nz/wp-content/uploads/2022/09/2015 12 04 FULL STEAM AHEAD Final.pdf.
- New Zealand Shipping Federation. "New Zealand Shipping Federation Policy Ask." 2023.

 Accessed December 29, 2024. https://nzsf.org.nz/wp-content/uploads/2023/05/NZ-Shipping-Federation-policy-ask-for-election-2023.pdf.
- New Zealand Trade and Enterprise. "Explore New Zealand Aquaculture." 2024. Accessed December 22, 2024. https://www.nzte.govt.nz/page/aquaculture.
- New Zealand Trade and Enterprise. "Opportunity for New Zealand to Become International Data Centre Hub." 2022. Accessed December 23, 2024. https://www.nzte.govt.nz/blog/opportunity-for-new-zealand-to-become-international-data-centre-hub.
- New Zealand Trade and Enterprise. "Renewable Energy." 2025. Accessed January 2, 2025. https://www.nzte.govt.nz/page/renewable-energy.
- New Zealand Trade and Enterprise. "Report on the Impact of Ai for Data Centre Demand in New Zealand." 2024. Accessed December 23, 2024. https://www.nzte.govt.nz/blog/report-on-the-impact-of-ai-for-data-centre-demand-in-new-zealand.
- New Zealand Wind Energy Association. "Nzwea Welcomes Fast Track Approvals Bill Renewable Energy Announcement." 2024. Accessed January 2, 2025. https://www.windenergy.org.nz/news/nzwea-welcomes-fast-track-approvals-bill-renewable-energy-announcement/.
- New Zealand Wind Energy Association. "Onshore Wind." 2025. Accessed January 2, 2025. https://www.windenergy.org.nz/onshore-wind/.
- Newsroom. "Offshore Wind Developer Pulls out of Nz Amid Seabed Mining Concerns." 2024. Accessed February 8, 2025. https://newsroom.co.nz/2024/10/24/offshore-wind-developer-pulls-out-of-nz-amid-seabed-mining-concerns/.
- NZ CleanTech Mission Working Group. "New Zealand Cleantech Report 2024." 2024.

 Accessed December 21, 2024.

 https://www.callaghaninnovation.govt.nz/assets/documents/New-Zealand-Cleantech-Report-2024.pdf.
- NZ Transport Agency. "Coastal Shipping Investment Approach Report 1 State-of-Play." 2021. Accessed December 29, 2024. https://www.nzta.govt.nz/assets/resources/coastal-shipping-research/nzta-coastal-shipping-state-of-play-report.pdf.
- NZ Transport Agency. "Sustainable Urban Mobility Benchmarking." 2022. Accessed December 27, 2024. https://www.nzta.govt.nz/resources/sustainable-urban-mobility-benchmarking/.

- NZTech. "The New Zealand Tech Sector Key Metrics 2023." 2024. Accessed December 23, 2024. https://nztech.org.nz/reports/the-new-zealand-tech-sector-key-metrics-2023/.
- NZTech. "Technology for Emissions Reduction: A Framework for Aotearoa's Climate Technology Roadmap." 2024. Accessed December 22, 2024. https://nztech.org.nz/wp-content/uploads/sites/8/2024/04/Technology-for-Emissions-Reduction-Report.pdf.
- Organisation for Economic Co-operation and Development. "Infrastructure Investment." 2024. Accessed December 28, 2024. https://www.oecd.org/en/data/indicators/infrastructure-investment.html.
- Organisation for Economic Co-operation and Development. "Oecd Economic Surveys: New Zealand 2024." 2024. Accessed December 4, 2024. https://www.oecd.org/en/publications/oecd-economic-surveys-new-zealand-2024-603809f2-en.html.
- Organisation for Economic Co-operation and Development. "Renewable Energy." 2025. Accessed January 5, 2025. https://www.oecd.org/en/data/indicators/renewable-energy.html.
- Parliamentary Counsel Office. "Overseas Investment Act 2005." 2005. Accessed January 3, 2025. https://www.legislation.govt.nz/act/public/2005/0082/latest/DLM356881.html?
- Parliamentary Counsel Office. "Resource Management (Extended Duration of Coastal Permits for Marine Farms) Amendment Bill." 2024. Accessed December 20, 2024. https://www.legislation.govt.nz/bill/government/2024/0056/latest/whole.html.
- Parliamentary Counsel Office. "Sustainable Biofuel Obligation Bill." 2022. Accessed December 20, 2024. https://legislation.govt.nz/bill/government/2022/0182/latest/d2180898e2.html.
- Pāua Interface. "Toi Hangarau Report." 2024. Accessed December 23, 2024. https://www.toihangarau.nz/.
- Payload. "2024 Orbital Launch Attempts by Country." 2025. Accessed March 8, 2025. https://payloadspace.com/2024-orbital-launch-attempts-by-country/.
- PV Magazine. "New Zealand Steps up Approvals Process for Large-Scale Pv Projects." 2024January 2, 2025. https://www.pv-magazine.com/2024/10/09/new-zealand-steps-up-approvals-process-for-large-scale-pv-projects/.
- PwC. "National Impact Study: New Zealand Offshore Wind Industry." 2024. Accessed January 2, 2025. https://www.pwc.co.nz/industry-expertise/energy-and-utilities/new-zealand-offshore-wind-industry-national-impacts-study.html.
- PwC. "The State of Climate Tech 2020: The Next Frontier for Venture Capital." 2020. Accessed December 22, 2024.

- https://www.pwc.com/gx/en/services/sustainability/assets/pwc-the-state-of-climate-tech-2020.pdf.
- PwC. "Transforming New Zealand's Food and Fibre Sector for Global Prosperity." 2023. Accessed December 21, 2024. https://www.pwc.co.nz/insights-and-publications/2023-publications/transforming-nzs-food-and-fibre-sector-for-global-prosperity.html.
- RNZ. "Advocates Divided as Government Unveils Cook Strait Ferry Plan." 2024. Accessed February 8, 2025. https://www.rnz.co.nz/news/political/536291/advocates-divided-as-qovernment-unveils-cook-strait-ferry-plan.
- Rotorua Daily Post. "Power Station at Ōkere Falls near Rotorua Granted Resource Consent." 2024. Accessed January 3, 2025. https://www.nzherald.co.nz/rotorua-daily-post/news/power-station-at-okere-falls-near-rotorua-granted-resource-consent/XULCXWTSUVDGPNYDXZHSEZONKE/.
- Russell McVeagh. "Investing in New Zealand." 2024. Accessed January 4, 2025. https://www.russellmcveagh.com/media/oxikm12h/investing-in-new-zealand-2024-master-20240522 150651.pdf.
- Science New Zealand. "Basis of New Zealand's Science System." 2025April 26, 2025. https://sciencenewzealand.org/about/new-zealand-science-systems.
- Science System Advisory Group. "Science System Advisory Group Report an Architecture for the Future." 2024. Accessed April 26, 2025. https://www.mbie.govt.nz/assets/science-system-advisory-group-report.pdf.
- Scion. "Bioenergy." 2021. Accessed December 20, 2024.

 https://www.scionresearch.com/ data/assets/pdf file/0018/60606/Bioenergy broch ure.pdf.
- Scion. "New Zealand Biofuels Roadmap Summary Report." 2018. Accessed December 20, 2024.

 https://www.scionresearch.com/ data/assets/pdf file/0005/63293/Biofuels summary report.pdf.
- Scott, Malcolm. "A Space Tourism Destination: Environmental, Geopolitical and Tourism Branding Considerations for New Zealand as a 'Launch State'." *Journal of Sustainable Tourism* 30, no. 9 (2022): 2240–53. https://dx.doi.org/10.1080/09669582.2020.1817049.
- Stats NZ. "Annual Inflation at 2.2 Percent." 2024. Accessed December 5, 2024. https://www.stats.govt.nz/news/annual-inflation-at-2-2-percent/.
- Stats NZ. "Gross Domestic Product (Gdp)." 2024. Accessed February 1, 2025. https://www.stats.govt.nz/indicators/gross-domestic-product-gdp/.

- Stats NZ. "International Investment Position Bpm6 Annual Directional Basis Stock of Direct Investment by Country (Annual-Mar)." 2024. Accessed December 4, 2024. https://infoshare.stats.govt.nz/.
- Stats NZ. "International Investment Position Bpm6 Annual Directional Basis Stock of Direct Investment by Industry (Annual-Mar)." 2024. Accessed March 9, 2025. https://infoshare.stats.govt.nz/.
- Stats NZ. "New Zealand International Trade." 2025. Accessed April 26, 2025. https://statisticsnz.shinyapps.io/trade_dashboard/.
- Stenton-Dozey, Jeanette M. E., Philip Heath, Jeffrey S. Ren, and Leonardo N. Zamora. "New Zealand Aquaculture Industry: Research, Opportunities and Constraints for Integrative Multitrophic Farming." *New Zealand Journal of Marine and Freshwater Research* 55, no. 2 (2021). https://dx.doi.org/10.1080/00288330.2020.1752266.
- Technology Investment Network. "Nz Tech Sector Dashboard." 2024. Accessed December 23, 2024. https://tin100.com/wp-content/uploads/2024/02/TIN-Factsheet_Tech-Sector-Dashboard-2024.pdf.
- The Conversation. "Hope or Hype? Nz Needs to Be Realistic About the Clean Energy Potential of Green Hydrogen." 2024. Accessed January 3, 2025. https://theconversation.com/hope-or-hype-nz-needs-to-be-realistic-about-the-clean-energy-potential-of-green-hydrogen-234137.
- The New Zealand Herald. "Christchurch Airport Solar Project: Contact Energy Pushes 'Go'." 2024. Accessed January 2, 2025. https://www.nzherald.co.nz/business/companies/energy/christchurch-airport-solar-project-contact-energy-pushes-go/VOUBUWQF3RD07KT4NMHWV56241/.
- The New Zealand Herald. "Govt-Owned Genesis, Saudis and Canadians Building \$104m Solar Farm." 2024. Accessed January 2, 2025. https://www.nzherald.co.nz/business/companies/energy/govt-owned-genesis-saudis-and-canadians-building-104m-solar-farm/054T3MCZOVFQTNMTRQDCI37KGE/.
- The Treasury. "Budget 2024." 2024. Accessed December 27, 2024. https://budget.govt.nz/index-budget2024.htm.
- The Treasury. "Cabinet Paper Cab-25-Sub-0013: Detailed Policy Decisions for the Overseas Investment Act Reform Information Release." 2025. Accessed May 3, 2025. https://www.treasury.govt.nz/publications/cabinet-paper/cabinet-paper-cab-25-sub-0013-detailed-policy-decisions-overseas-investment-act-reform-information-release.
- The Treasury. "Competition Policy in Small Distant Open Economies: Some Lessons from the Economics Literature." 2003. Accessed November 27, 2024.

 https://www.treasury.govt.nz/publications/wp/competition-policy-small-distant-open-economies-some-lessons-economics-literature-wp-03-31#abstract-01.

- The Treasury. "Economic Impacts of Foreign Direct Investment." 2016. Accessed December 12, 2024. https://www.treasury.govt.nz/publications/research-and-commentary/rangitaki-blog/economic-impacts-foreign-direct-investment?utm_source=chatgpt.com.
- The Treasury. "Guidance Note: Foreign Investment Policy and National Interest Guidance." 2021. Accessed May 31, 2025. https://www.treasury.govt.nz/sites/default/files/2021-06/for-invest-pol-nat-interest-quidance-jun21.pdf.
- The Treasury. "Half Year Economic and Fiscal Update 2024." 2024. Accessed March 5, 2025. https://www.treasury.govt.nz/publications/efu/half-year-economic-and-fiscal-update-2024.
- The Treasury. "Ministerial Directive Letter Dated 6 June 2024 under Section 34 of the Overseas Investment Act 2005." 2024. Accessed May 31, 2025. https://www.treasury.govt.nz/sites/default/files/2024-06/ministerial-directive-letter-june-2024.pdf.
- Transpower. "Connection Enquiry Information." 2024. Accessed January 2, 2025. https://www.transpower.co.nz/connect-grid/connection-enquiry-information.
- Waikato Herald. "Tauhara Power Station Now Fully Operational." 2024. Accessed January 3, 2025. https://www.nzherald.co.nz/waikato-news/news/tauhara-power-station-now-fully-operational/2WSZF6S4ZFF2ZMKBYFRKOJ5LWE/#google_vignette.
- World Bank Group. "Doing Business 2020." 2020. Accessed January 5, 2025. https://documents1.worldbank.org/curated/fr/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf.
- World Bank Group. "World Development Indicators." 2025. Accessed April 26, 2025. https://databank.worldbank.org/indicator/NY.GDP.PCAP.CD/1ff4a498/Popular-Indicators.
- World Intellectual Property Organization. "Global Innovation Index 2024, 17th Edition: Unlocking the Promise of Social Entrepreneurship." 2024. Accessed January 5, 2025. https://www.wipo.int/publications/en/details.jsp?id=4756.
- Zhang, Zhiguo, Xiran Liu, Dan Zhao, Scott Post, and Jiasen Chen. "Overview of the Development and Application of Wind Energy in New Zealand." *Energy and built environment* 4, no. 6 (2023): 725-42. https://dx.doi.org/10.1016/j.enbenv.2022.06.009.