

IN-DEPTH

# Renewable Energy Law

NEW ZEALAND



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# Renewable Energy Law

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In-Depth: Renewable Energy Law (formerly The Renewable Energy Law Review) provides an insightful overview of the policies, legal structures and state of play in the renewable energy industry globally. It offers a practical guide to the legal frameworks and current status and challenges in structuring, financing and investing in renewable energy projects in key jurisdictions worldwide.

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# New Zealand

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## Introduction

New Zealand's renewable energy sector has surged over recent years. Against a backdrop of rising demand and international environmental obligations, New Zealand has committed to strengthening its renewable electricity supply, with Q4 2023 renewable electricity generation at 90.3 per cent.<sup>[1]</sup> The newly elected government, comprising the National Party, Act and New Zealand First, indicates in coalition agreements and pre-election policy, plans to double renewable energy, 'unleash investment in new renewable energy generation', 'cut red-tape' on planning barriers to electrification through fast-track consenting, and 'turbo-charge' new renewable projects. At COP28, New Zealand joined the countries pledging to triple renewable energy and double energy efficiency by 2030.<sup>[2]</sup> These targets and the government's commitment to reduce all greenhouse gases (except biogenic methane) to net zero by 2050,<sup>[3]</sup> form the foundation of New Zealand's energy transition.

While New Zealand has long benefited from a high percentage of renewable electricity generated from hydro, geothermal, and, increasingly, wind and solar sources, roughly 60 per cent of broader energy use still comes from fossil fuels.<sup>[4]</sup> Continued reliance on fossil fuels, international commitments, volatile commodity prices and direct impacts of climate change, are strong incentives for the New Zealand government to push policy change and investment in renewable energy.

## Year in review

The past year has seen significant activity in renewable energy policy and development, with the new government charting its own path for renewable energy.

The previous government committed to achieving 100 per cent renewable electricity by 2030, and to deliver a comprehensive New Zealand Energy Strategy by the end of 2024. Now, the new government has indicated an intention to change the policy direction to achieve net-zero emissions by 2050. Likely implications from the new government's policy changes are:

1. 'Cutting the red tape' and resource management changes: repealing the Natural and Built Environment Act 2023 (NBA) and Spatial Planning Act 2023, while retaining the fast-track consenting component of the NBA and passing the Fast-track Consenting Bill to fast-track consents.
2. Doubling New Zealand's renewable energy production and a new policy direction: Releasing a new National Policy Statement for renewable energy generation (NPS-REG) to make solar, wind, geothermal and biomass a controlled activity under the Resource Management Act 1991 (RMA), with these consents to be issued in one year. Consents will last 35 years and councils must update plans so consents for non-hydro renewable generation become near-automatic.
3. Ministry of Business, Innovation & Employment (MBIE) work programmes: Significant public consultations occurred in 2023 on a potential gas transition plan, an interim hydrogen road map, a regulatory framework for offshore renewable

energy, and an expanded and highly renewable electricity system. These will likely still progress under the new government, which has signalled interest in hydrogen and offshore wind development.

4. Transmission infrastructure: Consents to upgrade existing transmission infrastructure will no longer be required, to enhance grid connection and capacity.
5. Lake Onslow/NZ Battery Project: Work has stopped on this NZ\$16 billion hydroelectric battery scheme. A solution to resolve New Zealand's dry-year risk (that the lakes that supply hydropower facilities will not receive enough rainfall or snowmelt) remains an ongoing challenge.
6. Repealing the ban on oil and gas offshore mining exploration: amending the purpose of the Crown Minerals Act to 'promote' the use of Crown Minerals (not 'manage') to repeal the ban imposed by the previous government in 2018.

The Climate Change Commission advised on the second Emissions Reduction Plan in December 2023, reporting that '[e]nergy supply and industrial emissions are considerable and need to significantly reduce in the second emissions budget.'<sup>[5]</sup>

## Emergence of offshore wind

The new government has signalled interest in offshore wind development, with a regulatory framework expected later this year. The National Offshore Wind Energy Industry Impact Study released in March 2024 highlights that New Zealand will need to triple the volume of renewable energy it generates to meet its net zero targets. Recognised as having one of the best wind resources of any country in the world due to its location, New Zealand's offshore wind resource has received significant interest from developers and could be a key enabler of the energy transition. Publicly announced plans have been released by Parkwind, New Zealand Superannuation Fund, Copenhagen Infrastructure Partners (CIP), Oceanex Energy and BlueFloat among others, totalling nearly 12GW of offshore wind projects in early stages of development.<sup>[6]</sup>

Recent developments in this sector include:<sup>[7]</sup>

1. Meridian Energy and Parkwind signed a memorandum of understanding to explore the offshore wind potential in Taranaki. Parkwind and its parent company Jera, one of the world's largest power generation companies, stated an intention to find a local partner to develop a 1GW bottom fixed offshore wind farm by 2032.<sup>[8]</sup>
2. New Zealand Superannuation Fund and Copenhagen Infrastructure Partners are investigating 2GW of offshore wind, with 1GW in the South Taranaki Bight and 1GW in Waikato. This joint venture reached an agreement with Port Taranaki and BlueFloat Energy to assess how Port Taranaki can serve as a hub for offshore wind development in New Zealand.<sup>[9]</sup>
3. The Australian company Oceanex Energy is surveying up to three offshore wind farms off the coast of Waikato and Taranaki, which are at the pre-feasibility stage. Oceanex aims to generate electricity from early 2030, with 3000MW of installed capacity planned.<sup>[10]</sup>
- 4.

BlueFloat Energy and Elemental Group, have proposed two first phase projects to develop up to 3GW of offshore wind, in South Taranaki and Waikato.<sup>[11]</sup>

The government has proposed two approaches for facilitating offshore wind development; issuing companies with permits to engage in offshore feasibility studies; or a collaborative exercise where developers and stakeholders share information on the feasibility of offshore development.<sup>[12]</sup> Long-term power purchase agreements (PPAs) are being considered to encourage offshore wind development.<sup>[13]</sup>

## Changes to electricity transmission

The government and industry have identified constraints in transmission infrastructure and challenges in consenting new infrastructure as limitations in New Zealand's energy transition. Transpower (New Zealand's state-owned electricity distributor) indicated New Zealand's grid is near end of life and needs billions of dollars' worth of upgrades.<sup>[14]</sup> MBIE consulted with the aim of strengthening the NPS-REG and electricity transmission in April 2023. The Electricity Authority then sought feedback on challenges and opportunities with power system operation in New Zealand in April 2024.<sup>[15]</sup> The new government is considering its approach, with the intention to remove the need for resource consents for transmission upgrades.<sup>[16]</sup>

The Commerce Commission has approved Transpower's Net-Zero Grid Pathways Phase One proposal,<sup>[17]</sup> a near NZ\$400-million upgrade to the Central North Island lines and Cook Strait undersea link.<sup>[18]</sup> The Commerce Commission and Transpower anticipate these investments will be sufficient to strengthen the electricity transmission system over the next decade.<sup>[19]</sup>

## Onshore wind

Onshore wind contributes approximately 10 per cent of the New Zealand's installed generation capacity, marking a significant increase from the 6 per cent recorded in 2019.<sup>[20]</sup> In 2023, the following major wind farms were completed:

1. Mercury's Turitea Wind Farm became operational in June 2023 and has a site capacity of approximately 221MW.<sup>[21]</sup>
2. Stage I of Mercury's Kaiwera Downs Wind Farm was completed in November 2023, with a capacity of 43MW. Stage II of the project has recently started, which will bring the total site capacity to 198MW.<sup>[22]</sup>
3. As of April 2024, half of Meridian Energy's 41 turbines at the 176MW Harapaki Wind Farm are generating electricity. The Harapaki Wind Farm is expected to be fully operational in September 2024.<sup>[23]</sup>

The wind sector continues to grow in New Zealand, with several major wind projects in development, including those in the table below.

Developer	Wind farm	Capacity	Stage

Contact Energy	Wyndham	300MW	Consenting
Genesis Energy <sup>[24]</sup>	Castle Hill	300MW	Consenting
LET Capital Number 3 Limited Partnership <sup>[25]</sup>	Waiuku	80MW	Development
MainPower New Zealand <sup>[26]</sup>	Mt Cass	95MW	Development
Manawa Energy <sup>[27]</sup>	Hapuakohe	230MW	Planning
	Huriwaka	250MW	Planning
	Ototoka	150MW	Planning
Manawa Energy in Joint Venture with Pioneer Energy <sup>[28]</sup>	Kaihiku	300MW	Consenting
Mercury <sup>[29]</sup>	Kaiwaikawe	73MW	Development
	Kaiwera Downs I	43MW	Completed
Kaiwera Downs II	196MW	Construction	
Mahinerangi (Phase 2)	164MW	Development	
Puketoi	228MW	Development	
Turitea South	222MW	Completed	
Meridian Energy <sup>[30]</sup>	Harapaki	176MW	Construction
	Mt Munro	60MW	Consenting
NZ Windfarms and Meridian Energy <sup>[31]</sup>	Repowering of the Te Rere Hau wind farm	170MW	Development

Ventus Energy <sup>[32]</sup>	Taumatotara	48.4MW	Development
Kaimai	155MW	Consenting	

### Geothermal Energy

Geothermal energy development is increasing, accounting for approximately 18 per cent of New Zealand's electricity generated, with total geothermal electricity capacity at over 900MW.<sup>[33]</sup> In March 2021, Contact Energy began construction on Tauhara, a 174MW geothermal development near Taupō.<sup>[34]</sup> The project has been subject to delays and costs overruns, but is expected to be operational by the third quarter of 2024.<sup>[35]</sup>

Eastland Generation, a leading geothermal generation company based in Gisborne, is developing Taheke, a 40MW geothermal project near Kawerau which was granted resource consent in June 2023 and is currently in construction, and TOPP2, a 49MW geothermal project near Kawerau, which is currently at the consenting phase.

Obayashi Corporation of Japan agreed to acquire a 50 per cent stake in Eastland Generation in 2023 to support Eastland Generation's development goals, including TOPP2. Completion of the transaction is conditional on receiving Overseas Investment Office (OIO) approval which is expected in the coming months.

Top Energy Limited, an electricity distribution business based in Kerikeri, and Ngāwhā Generation Limited, its subsidiary, gained consent to expand the Northland Ngāwhā Springs geothermal power station from 32MW to 42MW, with commissioning expected in 2028.<sup>[36]</sup>

### Solar generation

New Zealand has seen a significant increase of solar projects in development. The past year marked numerous consenting decisions for solar development, and saw the completion of Lodestone Energy's Kohira, a 33MW solar farm, and Rangitaiki a 32MW solar farm, both of which are now operational.<sup>[37]</sup>

There has been a large increase in the number of medium to large scale solar farms in development, which include those in the table below.

Developer	Solar farm	Capacity	Stage
Channel Infrastructure NZ <sup>[38]</sup>	Maranga Ra	26MW	Development
Contact Energy and Lightsource BP JV- <sup>[39]</sup>	Glorit solar	160MW	Planning
Kōwhai Park	170MW	Development	

Energy Bay Limited (trading as Solar Bay Energy) <sup>[40]</sup>	Albury	20MW	Planning
Fennessy Road, Naseby	50MW	Development	
Maungaturoto	20MW	Development	
Energy Farms <sup>[41]</sup>	Marton	84MW	Planning
Far North Solar Farm and Aquila Capital Holding <sup>[42]</sup>	Canterbury	135MW	Planning
Edgecumbe	38MW	Consented	
Foxton	42MW	Consented	
Greytown	175MW	Consenting	
Marton	41MW	Consented	
Ohau A	278MW	Planning	
Pukenui	22MW	Construction	
Tasman	130MW	Planning	
The Point	420MW	Consenting	
Waiotaha	81MW	Consented	
Waitara	72MW	Consenting	
Genesis Energy and FRV Australia JV <sup>[43]</sup>	Lauriston	60MW	Construction
Harmony Energy NZ <sup>[44]</sup>	Tauhei	147MW	Development
Carterton	133MW	Development	

Marton	Unconfirmed	Development	
Ōpunake	Unconfirmed	Development	
Hawke's Bay Airport and Manawa Energy JV <sup>[45]</sup>	Hawke's Bay Airport	24MW	Planning
Helios Energy <sup>[46]</sup>	Edgecumbe	115MW	Development
	Greytown	100MW	Planning
Ongaonga	100MW	Planning	
Manioto Plain	300MW	Planning	
Island Green Power (trading as Waikato Solar Farms) <sup>[47]</sup>	Rangiriri	146MW	Consenting
	Waerenga	180MW	Consenting
Waiterimu Valley	140MW	Consenting	
KeaX <sup>[48]</sup>	Rolleston	160MW	Consenting
Kiwi Solar Farms <sup>[49]</sup>	Kairanga - Bunnythorpe	28MW	Planning
Lodestone Energy <sup>[50]</sup>	Bunnythorpe	20MW	Planning
	Clandeboye	24MW	Planning
Dargaville	Unconfirmed	Development	
Dunsandel	80GWh per year	Planning	
Edgecumbe	32MW	Completed	
Helensville	70MW	Consenting	

Kaitiāia	39MW	Completed	
Waiotāhe Valley	30MW	Development	
Whitiānga	51MW	Development	
Manawa Energy <sup>[51]</sup>	Argyle	65MW	Planning
Meridian Energy <sup>[52]</sup>	Ruakākā Energy Park	120MW	Development
Nova Energy and The Todd Corporation <sup>[53]</sup>	Taupō	400MW	Consenting
Rānui Generation <sup>[54]</sup>	Skinner Road - Stratford	40MW	Consenting
	Three Streams - Kaponga	38MW	Consented
Tikokino	55MW	Planning	
Twin Rivers	30MW	Development	

Transpower expects that approximately 7.36GW of solar-produced electricity will be added to the national network by the end of the decade, warning that the industry needs to invest and plan to manage the pressure on the system, market infrastructure and regulatory framework from the increase in supply.<sup>[55]</sup>

### Hydrogen production

MBIE is developing a road map to provide direction on the future role of hydrogen in New Zealand and a pathway for establishing a hydrogen industry.<sup>[56]</sup> This policy development provides confidence for investors, with growing investment in hydrogen, evident in the following examples:

1. The initial stations in Hiringa Energy's nationwide refuelling station network are now open, with the first station having opened in April 2024.<sup>[57]</sup>
2. In December 2023, the Court of Appeal of New Zealand dismissed an appeal and upheld a consent for Hiringa Energy and Ballance Agri-Nutrients' proposed NZ\$70 million Kapuni Green Hydrogen Project.<sup>[58]</sup> The hydrogen plant will be used to power heavy vehicles and construction is expected to start in 2024.<sup>[59]</sup>
- 3.

Meridian Energy is formalising partnership agreements with Woodside Energy and Japan-based Mitsui & Co for the development of the Southern Green Hydrogen project, a 600MW green hydrogen and ammonia facility.<sup>[60]</sup> The project is forecast to provide regular supply for 40 per cent of New Zealand's dry-year needs for electricity and aims to produce ammonia for international export. However, Meridian Energy's new deal with the Tiwai Point aluminium smelter may delay further development of this project.<sup>[61]</sup>

### Trends in the electricity market

New Zealand's electricity demand continues to grow with demand in December 2023 up 2.4 per cent on the previous year.<sup>[62]</sup> Wholesale electricity prices rose over the last year, with the average price in March 2023 of NZ\$148.54/MWh, compared to the average price in March 2024 of NZ\$220.62/MWh.<sup>[63]</sup> Wholesale electricity prices saw significant growth in December 2023 and have remained high due to a drop in hydro-lake inflows.<sup>[64]</sup>

Energy Link, New Zealand's leading electricity price forecaster, forecasts an increase in wholesale spot energy prices in the coming year, while long-term wholesale contract prices will align closely with the expense of new generation, plus an allowance for risk.<sup>[65]</sup> Forsyth Barr expects wholesale spot prices to rise as the electricity demand steps up in key parts of the economy, lifting long-term wholesale pricing forecasts by NZ\$10 to NZ\$110 a megawatt-hour in April 2024.<sup>[66]</sup>

### Energy storage and risk mitigation

Security of electricity supply is a major concern for the New Zealand market, particularly to cope with potential inclement weather and natural disasters. Transpower has warned of possible power cuts this winter if supply and demand cannot be managed to cope with extreme conditions.<sup>[67]</sup> The variability of water inflows and the dry-year risk continue to be New Zealand's key concerns for the stability of the New Zealand electricity system.

The new government has scrapped the New Zealand Battery Project, which was investigating options for a renewable dry-year storage, including a pumped hydropower scheme at Lake Onslow.<sup>[68]</sup> The new government is refocussing work on the dry-year risk and electricity security including firming.<sup>[69]</sup>

To help address dry-year risk, Meridian Energy and New Zealand's Aluminium Smelter (NZAS) have entered into an additional new peak demand response agreement, covering a 12-week period spanning the 2024 winter.<sup>[70]</sup> Commencing in June 2024, the agreement enables Meridian Energy to call upon NZAS to reduce its electricity usage at the Tiwai Point Smelter by up to 20MW during four trading periods per day, and up to 20 trading periods a fortnight, easing pressure on the electricity system during peak periods.

New Zealand has welcomed its first utility-scale battery energy storage system to the national grid.<sup>[71]</sup> WEL Networks has confirmed that its 35MW/35MWh Rotohiko battery facility has completed testing and commissioning.<sup>[72]</sup> The storage project now offers injectable reserves into the electricity market for the first time.

### Future of Tiwai Point

The future of the Tiwai Point aluminium smelter has been confirmed, with a new 20-year deal announced on 31 May 2024 between the smelter, Meridian Energy, Contact Energy and Mercury.<sup>[73]</sup> The deal is subject to regulatory approvals, has a minimum term of 10 years, and is considered to be a boon for investment in new generation in New Zealand.<sup>[74]</sup> The smelter is New Zealand's largest electricity consumer, consuming around 12 per cent of total electricity demand.<sup>[75]</sup>

### Interruptions in the market

Supply chain delays and cost escalations following the war in Ukraine, COVID-19 pandemic and global inflationary pressures continue to be key challenges faced by renewable energy project developers.<sup>[76]</sup> These interruptions in the market have been cited as key challenges in the development of the Mt Cass Wind Farm, Huntly BESS project and Tauhara Geothermal Power Station, among others.

### Mergers and acquisitions

Recent M&A activity in the renewables sector includes:

1. In August 2023, BlackRock announced plans for a NZ\$2 billion New Zealand climate investment fund, with the goal of enabling New Zealand to become one of the first countries worldwide to reach 100 per cent renewable electricity. The New Zealand Net Zero Fund is proceeding despite the change in government, and BlackRock looks to make its first investments for this fund in 2024.
2. In October 2023 Lodestone announced it has partnered with HES Aotearoa in a venture to develop nine solar farms,<sup>[77]</sup> collectively generating 500GWh of electricity a year.<sup>[78]</sup>
3. In October 2023, Meridian Energy announced that it was partnering with Parkwind to explore off-shore wind in New Zealand. In July 2023, Jera, Japan's largest electricity company with extensive generation, transmission, and distribution infrastructure assets, acquired Parkwind in a €1.55 billion transaction from its previous owner, Virya Energy.<sup>[79]</sup>
4. In November 2023, Eastland Group sold 50 per cent of its electricity generation business; Eastland Generation to Japan-based Obayashi Corporation.<sup>[80]</sup>
5. In December 2023 Meridian Energy and NZ Windfarms agreed to form a 50-50 joint venture to repower and extend the Te Rere Hau wind farm in the Tararua District.<sup>[81]</sup>
6. In January 2024, Harmony Energy and First Renewables announced a joint venture for the development of the Tauhei solar farm near Te Aroha, which will become New Zealand's largest solar farm.<sup>[82]</sup>

## Policy and regulatory framework

### The policy background

The previous government commenced development of a 'New Zealand Energy Strategy' to set the policy direction and priorities for the energy sector, with targets of 100 per cent renewable electricity by 2030 and 50 per cent of total energy consumption to be from renewable sources by 2035.<sup>[83]</sup> Public consultation on this strategy closed in November 2023 and the final strategy was signalled to be released in late 2024. It is unclear whether the new government will progress this, as it has indicated that it will implement different policies.

The new government's policy objectives include:

1. turbo-charging new renewable power projects, including solar, wind and geothermal projects, by requiring decisions on resource consents to be issued in one year and consents to last for 35 years; and
2. unleashing investment in transmission and local lines by eliminating consents for upgrades to existing infrastructure and most new infrastructure.

The likely implications of these policy objectives are set out in the Year in review section.

Also driving policy and investment in renewable energy projects is the net zero 2050 target and the emissions trading scheme (ETS). The ETS incentivises investment in renewable energy by requiring carbon emitters to obtain and surrender emissions units to match the emissions from their operating activities. There is an overall cap on available units under the ETS and emitters can obtain units through the government's industrial allocation, sequestration, the government's quarterly auctions or on the secondary market.<sup>[84]</sup> The ETS applies unit surrender obligations to about 52 per cent of New Zealand's gross emissions.<sup>[85]</sup> The first NZ ETS auction for 2024 resulted in a partial clearance with 2,974,300 units sold of 3,525,000 units available. This marked the first time New Zealand Units (NZUs) have sold at auction since December 2022. This inability to clear available NZUs in recent auctions signals there is work required to restore confidence in and stability to the ETS.

The renewable energy sector in New Zealand is not otherwise subject to any sector-specific support or fiscal mechanisms (including feed-in tariffs or renewable portfolio standards).

## The regulatory and consenting framework

The Ministry of Business, Innovation & Employment (MBIE) acts as the regulatory steward of New Zealand's energy regulatory system and is responsible for developing regulatory policy in the energy sector. The Electricity Authority oversees the efficient operation of the electricity industry, undertakes market facilitation measures and monitors and enforces compliance with electricity market rules. The Electricity Authority is also responsible for the Electricity Industry Participation Code 2010 (the Code).

New Zealand's Commerce Commission promotes competition in New Zealand markets and is responsible for the economic regulation of natural monopolies, including Transpower and other electricity lines services under the Commerce Act 1986.

New Zealand's renewable energy environment is governed by a series of regulations designed to ensure security of supply, encourage renewable generation and keep renewable energy assets safe. The central regulatory tools governing the operation of New

Zealand's renewable energy system are the Code, the Resource Management Act 1991 (RMA) and the emissions trading scheme (ETS).

The Code governs the operation of electricity market participants. Each person who buys or sells electricity on the wholesale spot market, or who sells electricity to end users in the retail market, must register with the Electricity Authority as a market participant and comply with the Code.

New Zealand's electricity system consists of the following key participants:

1. Transpower owns and operates New Zealand's national grid. It acts as 'system operator' and has the role of coordinating the real-time transmission of electricity as a contracted service provider to the Electricity Authority.
2. Contact Energy, Genesis Energy, Mercury, Meridian Energy (together, the large 'gentailers') and Manawa Energy (which only generates electricity) collectively provide around 82.1 per cent of New Zealand's total electricity.<sup>[86]</sup>
3. There are 31 local electricity distribution businesses (EDBs) that transport electricity from the national grid or distributed generation to end users.<sup>[87]</sup> Among the restrictions that apply to EDBs, they are prevented from engaging in the retail or generation of more than 250MW of electricity directly connected to the national grid.<sup>[88]</sup>
4. Over 30 electricity retailers sell electricity to end users. However, about 83 per cent of end users buy their electricity from the four large gentailers.<sup>[89]</sup>

Generators and retailers must participate in the spot market for wholesale supply and purchase of electricity, which is administered by the Electricity Authority and hosted on the Australian Securities Exchange (ASX).

The RMA plays a central role in regulating the development of renewable energy generation in New Zealand. The RMA aims to ensure that natural and physical resources such as soil, air, water and buildings are managed sustainably. The effects that certain activities may have on resources are managed through a hierarchy of planning documents developed under the RMA. Those documents contain policies, standards and rules that prescribe whether an activity is permitted, requires resource consent or, in rare cases, is prohibited.

Renewable energy projects require resource consents from consenting authorities (which are predominantly regional and district councils) to commence a development or undertake activities not otherwise permitted under those rules or standards. The RMA is the primary statute that regulates the process for obtaining a resource consent through a standard consenting process. In making resource consent decisions, consenting authorities must consider the environmental impacts of allowing the activity, any mitigating or offsetting proposals and the relevant provisions of the hierarchy of planning documents, which include standards and regulations, national and regional policy statements, and regional and district plans. There is a suite of national directions which specifically apply to renewable energy generation.

The RMA places obligations on local and regional councils to consider climate change matters when preparing or changing their planning documents and when considering consent applications. For renewable energy projects, this means that a decision by the

consent authority may also take into account the benefits that are likely to ensue from the new renewable project. There are several common hurdles to obtaining resource consents for renewable energy projects in New Zealand. The inherent sensitivity of the sites proposed for renewable energy project developments such as wind farms or hydro generation, together with the public participatory regime of the RMA, means that projects can attract significant opposition that can result in protracted hearing and appeal processes. For example, in respect of wind farm developments, objections have focused on factors such as landscape effects, ecology, visual impacts, blade reflections and turbine noise.

The RMA also requires consideration of Māori values and interests when determining applications for resource consents. When exercising functions and powers under the RMA, decision makers must recognise the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu<sup>[90]</sup> and other taonga,<sup>[91]</sup> as a matter of national importance; to have particular regard to kaitiakitanga;<sup>[92]</sup> and to consider the principles of the Treaty of Waitangi.<sup>[93]</sup> These obligations will often be further articulated and directed through the relevant planning documents and need to be considered when commencing a new project or for any major maintenance work.

Of particular relevance to the renewable energy sector is the significant role of the National Policy Statement for Renewable Electricity Generation 2011 (NPS REG 2011) in promoting renewable energy project development in resource consents. The NPS REG sets out the objectives and policies for renewable electricity generation under the RMA and requires recognition of the benefits of renewable electricity generation activities. Notably, the NPS REG acknowledges that decision-makers should have particular regard to locating where the resource is available for the renewable electricity generation activity, and considering whether connection to existing infrastructure, especially the national grid is viable.

The government is expected to release a consultation draft for a new NPS-REG 2011 in May 2024 seeking to make the consent process for renewable energy (solar, wind, hydro, geothermal, biomass, tidal and wave/current) more efficient, certain and environmentally sustainable. New renewable energy generation standards are expected to be developed to support the new NPS-REG 2011 along with a new national policy statement for the distribution of electricity. A new NPS-REG 2011 is anticipated by November 2024.

Significant reform of the resource management framework is underway, with the new government repealing the previous government's new resource management laws (the Natural and Built Environment Act (NBA) and Spatial Planning Act (SPA)) in December 2023. Currently, the RMA framework described above remains in place, with the new government signalling this will eventually be repealed.

The government introduced a Fast-Track Approvals Bill in March 2024. The Bill passed its first reading under urgency and has been referred to the environment select committee. The Bill proposes to facilitate infrastructure and development projects with significant regional or national benefits, intending to be a one-stop shop fast-track consenting regime.<sup>[94]</sup> In the interim while this legislation is developed, the Resource Management (Natural and Built Environment and Spatial Planning Repeal and Interim Fast-track Consenting) Act 2023, retains the fast track process from the NBA for eligible activities. Eligible activities for renewable energy include: electricity or gas distribution or an electricity transmission network; a consent renewal for renewable energy generation (including hydro-electricity); and a facility for wind or solar energy generation.

The Overseas Investment Office (OIO) regulates overseas investment in New Zealand under the Overseas Investment Act 2005 (OIA) and will be relevant to renewable energy project developments with over 25 per cent ownership or control by overseas persons. Renewable energy projects with over 25 per cent ownership or control by overseas persons, that involve investment in sensitive land or significant business assets may require a consent from the OIO before the investment can proceed. Whether land is sensitive land under the OIA will depend on the area of land being acquired and the land type. For example, all non-urban land larger than five hectares is considered sensitive land.<sup>[95]</sup> Temporary interests in sensitive land may also require consent, for example, where a lease has a term of 10 years or more. Leases of rural land with a term of less than 10 years and true easements are not considered interests in land under the OIA and do not require OIO consent. Where the investment involves farm land, the landowner must advertise the farm land to the market (to allow New Zealanders an opportunity to acquire the land) before contracting with the overseas person, but exemptions to this requirement may be obtained from the OIO. Overseas investment in 'significant business assets', being acquisitions in assets exceeding NZ\$100 million (or higher for certain jurisdictions), will also require consent from the OIO.<sup>[96]</sup>

Additionally, investments in 'strategically important businesses' may need to be notified to the OIO. Strategically important businesses include businesses involved in electricity generation, distribution, metering, or aggregation if the business is a generator with a total nominal capacity in a financial year exceeding 250MW. These transactions may be blocked, or have conditions imposed, if it is considered necessary to manage significant national security and public order risks.

## Renewable energy project development

### Project finance transaction structures

Until recently, limited recourse project financing in New Zealand renewable energy had been relatively limited. The large gentailers have historically been responsible for most new renewable energy projects, and have primarily financed their projects on a corporate-financed or 'on-balance sheet' basis.<sup>[97]</sup>

To the extent that there has been project financing of renewable energy projects in New Zealand, it has been driven largely by independent developers. Independent developers have found it relatively difficult to get renewable energy projects banked over the past decade because of difficulties creating projects of sufficient scale; difficulties attracting off-takers that will offer a sustained and satisfactory price; and the distance of the renewable energy projects from the national grid. However, the past few years have seen more renewable energy projects banked on a limited recourse basis, mostly geothermal and wind projects, with solar increasingly joining the mix. The principal developers of project financed renewable energy projects have been:

1. wind, solar and hydro projects: independent energy companies and developers, such as Contact Energy and Lightsource BP JV, Far North Solar Farms and Aquila Capital JV, Genesis Energy and FRV Australia JV, Harmony Energy, Helios Energy,

Lodestone Energy, MainPower, Manawa Energy, NZ Windfarms, Solar Bay and Todd Energy/Nova Energy; and

2. geothermal projects: Māori land settlement trusts with ownership of or access to geothermal resources (often in partnership with the large gentailers), Eastland Generation, and Top Energy in Northland.

The lenders most active in New Zealand renewable energy project financing have been three of the major New Zealand banks: ANZ Bank New Zealand, Bank of New Zealand, and Westpac New Zealand. International lenders have also been involved in financing some recent New Zealand projects.<sup>[98]</sup>

The New Zealand Green Investment Finance Solar Finance programme has raised NZ\$90 million of private capital from international investors First Sentier Investors and Natixis Investment Managers, demonstrating the growth of international investment in New Zealand renewable energy.<sup>[99]</sup>

The primary off-takers of power generated from renewable energy projects in New Zealand have been the large gentailers. They have been the off-takers under power purchase agreements (PPAs) or counterparties on hedging contracts in the wholesale market. Ryman Healthcare, Solar Bay and Mercury entered into a 10-year PPA enabling Ryman Healthcare to procure up to 20MW of the electricity produced at the Maungaturoto Solar Farm in March 2023.<sup>[100]</sup> In April 2023, Amazon Web Services entered into a 15-year PPA with Mercury New Zealand to purchase half (approximately 51MW) of the electricity generated at the Turitea South Wind Farm.<sup>[101]</sup> The electricity purchased will be used to operate Amazon's data centres throughout the North Island. The Warehouse Group and Lodestone Energy have entered into a long-term PPA for solar electricity from 2026.<sup>[102]</sup> Prime Energy partnered with Lightyears Solar to purchase the output from Lightyears' Waiuku Solar Farm under a long-term PPA.<sup>[103]</sup>

Documentation for the project financing of renewable energy projects in New Zealand largely follows international norms. The key documentation includes:

1. A PPA or hedge contract to fix long-term pricing for the output from the project.
2. An engineering, procurement and construction contract to construct the project (EPC contract). However, we are seeing disaggregated construction arrangements with the project sponsors bearing a greater degree of integration risk (e.g. the construction contracts for the Kaiwera Downs I Wind Farm, Harapaki Wind Farm and Waipipi Wind Farm were split between turbine supply, and various balance of plant contracts. Several other project sponsors have used or are considering similar models for their renewable energy projects, including the construction of Lodestone's five solar farms).
3. A long-term operation and maintenance agreement, particularly for wind and geothermal projects.
4. Land rights agreements, which often take the form of leases or easements, depending on the nature of the project.
5. A transmission services agreement (TSA) and a connection works agreement each with Transpower, to allow connection to the national grid and transmission of output

from the projects, or a final connection approval, connection agreement and a connection works agreement with an EDB for access to a distribution network.

6. A resource consent for the project.

Security structures generally follow international standards with security being held by the financier directly or (where there are multiple financiers) by a security trustee under a security trust structure. Security typically comprises all-asset security provided by the project vehicle (including over rights under project contracts, interests in land, consents and licences) and share security given by the holding entity. In addition, financiers will normally have the benefit of direct deeds with project contract counterparties.

Bank debt tenors for project financing of renewable energy projects in New Zealand over the past few years have typically been between three and seven years, with most around five years.

As project financing of renewable energy projects is not a standard practice in New Zealand, as in many other countries, each project usually has its own unique features. We highlight below some impediments new renewable energy projects may face:

1. Under the Code, it is not possible to enter into a TSA with Transpower until the project is connected to the national grid (which is usually well after financial close). The Code addresses this issue by requiring Transpower to offer a default transmission agreement to the project, which is found in the Code. In addition, Transpower rarely agrees to enter into direct deeds.
2. A renewable energy project will require resource consents (as described above). Depending on the level of local opposition, it can take a prolonged period to obtain suitable resource consents and this must be factored into any project programme.
3. Where the project involves land not registered under New Zealand's Torrens land registration system (such as Māori land) or that is not held privately (such as land owned by government entities or utilities), obtaining the necessary land rights to conduct the project, and formulating and registering an appropriate security package for the particular land, can be complex and time-consuming.
4. Geothermal projects rely on access to the geothermal resource, which is often held by Māori land settlement trusts. Care needs to be taken when structuring security arrangements so the project can access the geothermal resource after the security has been enforced.

## Non-project finance development

Most renewable energy projects in New Zealand are funded by the large gentailers on balance sheet using corporate-financed structures. We have, however, seen some hybrid structures under which a form of limited parent guarantee or underwriting has been provided to ensure the project is bankable.

## Distributed and residential renewable energy

Distributed solar energy and storage is playing a greater role in New Zealand's energy mix. The New Zealand solar market has undergone a notable expansion, with installed capacity tripling from 90MW in 2018 to around 270MW by 2023. This substantial increase is largely credited to the emergence of 'distributed generation', wherein many solar installations directly supply power to the local distribution network.<sup>[104]</sup>

Structures for rooftop solar projects range from standard supply and installation packages, where end users connect to the distribution network as a distributed generator, to fixed-price solar and battery packages with no upfront costs but a long-term fixed-price commitment. Key participants in this market include Sunergise, solarZero, Vector Powersmart, Sky Solar, Harrison's Energy Solutions, Trilect Solar and CPS Solar.

Many entities are developing small scale commercial solar networks on their premises for their own consumption. Kāinga Ora, the New Zealand state housing operator, is seeking bids to install solar power generation facilities on 100 state homes in Counties Manukau, which will be its second largest solar roll out to date. This aims to help tenants who cannot afford heating and to incorporate sustainable living into public housing.<sup>[105]</sup>

## Renewable energy supply chains

On a global scale, New Zealand has a relatively small renewable energy manufacturing sector limited to discrete, small to medium-sized businesses that focus on developing novel product technologies and intellectual property, as opposed to mass-scale manufacturing.

The government does not offer sector-specific subsidies for manufacturing renewable energy products in New Zealand. While it continues to emphasise the importance of growth in renewable energy generation and investment in emerging renewable energy technologies, the role of New Zealand renewable energy product manufacturers has rarely been a major consideration.

In April 2019, the government established New Zealand Green Investment Finance Limited (NZGIF), a green investment bank with an initial NZ\$100 million of investment capital with further investments of NZ\$300 million in May 2021 and NZ\$300 million in May 2023.<sup>[106]</sup> The focus of the NZ\$700 million fund is to accelerate investment in low carbon solutions in New Zealand, and attract larger sums of private capital focused on developing renewable energy products.<sup>[107]</sup> NZGIF has investment capital of NZ\$700 million and makes equity and debt investments in projects that support decarbonisation across various sectors including transport, agriculture, distributed energy and energy efficient services, including:<sup>[108]</sup>

1. A NZ\$25 million debt facility to Eastland Generation to support the connection assets for Eastland's geothermal plants in the Eastern Bay of Plenty Region.<sup>[109]</sup>
2. A NZ\$15 million debt facility with Lightyears Solar to construct a pipeline of consented, ground-mounted solar farm projects.<sup>[110]</sup>
3. A NZ\$15 million working capital facility for Lodestone Energy, one of New Zealand's leading grid-scale solar developers.<sup>[111]</sup>

4. A NZ\$8 million debt facility (combined with NZ\$10 million in reserve) to solarZero Schools to provide solar facilities for schools across New Zealand.<sup>[112]</sup>

New Zealand is party to 14 free trade agreements with several countries and does not impose any specific tariffs on renewable energy equipment from its trading partners.

## Outlook and conclusions

Significant investment in New Zealand's renewable energy generation capacity is required if it is to maintain energy security, affordability and environmental sustainability, while pursuing the government's ambitious renewable energy and climate change targets. The new coalition government has signalled that it remains committed to international obligations and targets, indicating a surge of new projects in the near future.

The new government's ambition to double renewable energy and its Fast-track Approvals Bill, which aims to engender faster development of energy projects, provide strong signals that the New Zealand government is committed to its net zero transition. Increased activity in the renewable energy generation sectors and impending policy developments suggest that the sustained growth of New Zealand's renewable energy sector is likely to continue in the coming years.

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- 88** Electricity Industry Act 2010, section 73. ^ [Back to section](#)
- 89** See footnote 86. ^ [Back to section](#)
- 90** 'Wāhi tapu' means a sacred place, sacred site or a place subject to long-term ritual restrictions on access or use (e.g., burial grounds, battle sites or places where 'tapu' (sacred) objects were placed). ^ [Back to section](#)
- 91** 'Taonga' means treasure or anything prized and is a term often applied to anything considered to be of value including socially or culturally valuable objects, resources, phenomena, ideas and techniques. ^ [Back to section](#)
- 92** 'Kaitiakitanga' means the exercise of guardianship. ^ [Back to section](#)
- 93** The relationship between the Crown and M ori is founded on the Treaty of Waitangi. Investigations of claimed breaches of the Treaty are provided for under the Treaty of Waitangi Act 1975. Settlement of Treaty claims is a process between M ori and the Crown and involves both acknowledgement of and apology for breaches. It also sets out mechanisms to provide redress. Redress may involve vesting of Crown land or statutory acknowledgements or deeds of recognition in relation to Crown land or water bodies. Statutory acknowledgements apply to areas or sites with which iwi have a special relationship and will be recognised in any relevant proceedings under the RMA. ^ [Back to section](#)
- 94** Including resource consents, notices of requirement, and certificates of compliance under the RMA, and approvals required under the Wildlife Act 1953; the Conservation Act 1987; the Reserves Act 1977; the Freshwater Fisheries Regulations 1983; the Heritage New Zealand Pouhere Taonga Act 2014; the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012; the Crown Minerals Act 1991; the Public Works Act 1981 and the Fisheries Act 1996. ^ [Back to section](#)
- 95** Toitk Te Whenua Land Information New Zealand, 'Identifying sensitive 'land' [www.linz.govt.nz/overseas-investment/discover/our-investment-pathways/investing-land-provide-benefit-new-zealand/identifying-sensitive-land](http://www.linz.govt.nz/overseas-investment/discover/our-investment-pathways/investing-land-provide-benefit-new-zealand/identifying-sensitive-land)>. ^ [Back to section](#)
- 96** Overseas Investment Act 2005, Section 13. ^ [Back to section](#)
- 97** Contact Energy, Genesis Energy, Mercury and Meridian Energy. ^ [Back to section](#)

- 98** For example, the Lauriston solar project was financed by Bank of New Zealand and MUFG Bank Ltd, and Waipipi Wind Farm was financed by Commonwealth Bank of Australia, Credit Agricole CIB, MUFG Bank and Siemens Bank GmbH. See Genesis Energy 'Financial close reached on large scale solar farm' (15 January 2024) [www.genesisenergy.co.nz/about/news/financial-close-reached-on-large-scale-solar-farm](http://www.genesisenergy.co.nz/about/news/financial-close-reached-on-large-scale-solar-farm)> and Tilt Renewables 'Waipipi Wind Farm Financial Close' (6 September 2019) [www.tiltrenewables.com/documents/401/Waipipi\\_Wind\\_Farm\\_Financial\\_Close - 6 September 2019.pdf](http://www.tiltrenewables.com/documents/401/Waipipi_Wind_Farm_Financial_Close_-_6_September_2019.pdf)>. ^ [Back to section](#)
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- 100** Jacob McSweeney, 'Ryman secures Solar Bay output', (March 2023), Energy News [www.energynews.co.nz/news/solar/135279/ryman-secures-solar-bay-output](http://www.energynews.co.nz/news/solar/135279/ryman-secures-solar-bay-output)>. ^ [Back to section](#)
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- 103** Lightyears Solar 'Waiuku Solar Farm' [www.lightyearssolar.co.nz/lightyearssolarnews-](http://www.lightyearssolar.co.nz/lightyearssolarnews-)>. ^ [Back to section](#)
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- 107** See footnote 106. ^ [Back to section](#)
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