

THE RENEWABLE  
ENERGY LAW  
REVIEW

FOURTH EDITION

Editor  
Munir Hassan

THE LAWREVIEWS

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This article was first published in Aug 2021  
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**Editor**  
Munir Hassan

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Published in the United Kingdom

by Law Business Research Ltd, London

Meridian House, 34–35 Farringdon Street, London, EC4A 4HL, UK

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ISBN 978-1-83862-823-9

Printed in Great Britain by

Encompass Print Solutions, Derbyshire

Tel: 0844 2480 112

# ACKNOWLEDGEMENTS

The publisher acknowledges and thanks the following for their assistance throughout the preparation of this book:

ANDERSON LLOYD

ANDERSON MÔRI & TOMOTSUNE

CMS

COMMERCIAL AND ENERGY LAW PRACTICE

COVINGTON & BURLING (PTY) LTD

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# PREFACE

At the start of my career in the renewable energy industry, renewable energy generation was seen as an immature, fast-developing subsector that was seeking to get a foothold in, and be accepted within, the existing mature and stable electricity sector. Renewables focused on gaining political and social support for new or decentralised technologies that were often perceived as costly and unreliable. At that time, it was also primarily developed economies that were funding and supporting this nascent industry through feed-in tariffs or certificate schemes.

While renewable energy remains a subsector in transition, the conversation has moved on substantially. It is now largely focused on new jurisdictions, much larger projects and marginal efficiencies from technological gains. It is also about whether governments, through facilitative legal and regulatory regimes, are catalysing the development of a sufficiently long and sizeable pipeline of projects to feed the almost insatiable desire of banks, investors and developers to deploy capital and debt in the sector.

Five years on from the signing of the Paris Agreement, the world has witnessed the consequences of systemic threats on a global scale via the spread of the covid-19 pandemic. The message of the Paris Agreement was clear in that it is the shared responsibility of the global community to mitigate the impact of climate change, and those with the broadest shoulders should take the largest burden.

Despite the impact of the covid-19 pandemic, IRENA reported a record 260GW of renewable energy capacity added globally in 2020, beating previous records by almost 50 per cent. Looking ahead to COP26, which is scheduled to take place in Glasgow, United Kingdom later this year, we have seen renewed commitments and increasingly ambitious targets to deploy renewable energy from governments across the globe in the spirit of 'green recovery' in light of covid-19, as well as to respond to climate change threats. Securing the transition to a clean energy system has become less about actively facilitating or subsidising the sector and more about removing the legal, political and structural barriers to deployment.

The decarbonisation of energy systems remains fundamental in global efforts to keep the global temperature increase to below 2°C. Deployment of renewable energy across the globe will play an important role in the world's clean energy transition. However, it is not the only driver for renewable energy deployment. Renewable power is also now, in many places, the cheapest form of new capacity to add to the electricity system. This means that it also has an important role in helping post-pandemic economic recovery. In addition, many people are anticipating a very significant increase in 'clean power' consumption driven by, among other things, the electrification of transport.

This guide has been produced to provide an overview of the legal framework and current status and challenges in structuring, financing and investing in renewable energy

projects in the selected jurisdictions. Whether you are already active in the sector or simply interested in learning more about the legal framework and key developments underpinning the renewable energy industry, I hope that this guide will provide you with an insight into our exciting industry.

**Munir Hassan**

CMS

London

July 2021

# NEW ZEALAND

*Anton Trixl*<sup>1</sup>

## I INTRODUCTION

New Zealand's energy policy framework has been relatively stable for the past 25 years;<sup>2</sup> however, 2018 marked the beginning of a period of substantial policy development for the renewable energy sector. This trajectory has continued through to the first half of 2021, with numerous regulatory developments to future-proof the renewable electricity sector and address climate change, and increased renewable project development after a decade of limited activity.

New Zealand has a relatively high proportion of its energy use sourced from renewables and has long benefited from a high percentage of renewable electricity generated from hydropower, geothermal resources and, increasingly, from wind. In 2020, 80 per cent of electricity generation came from renewable sources.<sup>3</sup>

The key drivers of policy reform in New Zealand are the government's commitments to 100 per cent renewable generated electricity by 2030 and to reduce all greenhouse gases (except biogenic methane) to 'net zero' by 2050.<sup>4</sup> Those targets form part of New Zealand's broader energy transition and, with 60 per cent of energy use still coming from fossil fuels,<sup>5</sup> there is significant work to be done in transitioning fossil fuel-intensive industries to renewable energy.

## II THE YEAR IN REVIEW

The last year has seen significant amounts of activity in renewable energy policy and development. After receiving over 15,000 submissions on its draft advice,<sup>6</sup> the Climate Change Commission (CCC) released its final advice to the government in May 2021. The

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1 Anton Trixl is a partner at Anderson Lloyd. The author would like to thank Lyna Luo of Anderson Lloyd for her invaluable assistance in the preparation of this chapter.

2 Ministry of Business, Innovation and Employment, 'Regulatory Charter – Energy markets regulatory system' (August 2018), [www.mbie.govt.nz/assets/46dcfbf4e1/energy-regulatory-system-charter.pdf](http://www.mbie.govt.nz/assets/46dcfbf4e1/energy-regulatory-system-charter.pdf).

3 [www.energymix.co.nz/our-alternatives/new-zealand-in-action/](http://www.energymix.co.nz/our-alternatives/new-zealand-in-action/).

4 The Climate Change Response (Zero Carbon) Amendment Act 2019, which set the net zero emissions target, also sets a goal to reduce emissions of biogenic methane within the range of 24–47 per cent below 2017 levels by 2050, including to 10 per cent below 2017 levels by 2030.

5 Ministry of Business, Innovation and Employment, 'Briefing for Incoming Minister Energy and Resources' (November 2020) [www.beehive.govt.nz/sites/default/files/2020-12/Energy%20and%20Resources.pdf](http://www.beehive.govt.nz/sites/default/files/2020-12/Energy%20and%20Resources.pdf).

6 He Pou a Rangi Climate Change Commission, 'Ināia tonu nei: a low emissions future for Aotearoa' (31 May 2021), page iv, <https://ccc-production-media.s3.ap-southeast-2.amazonaws.com/public/Inaia-tonu-nei-a-low-emissions-future-for-Aotearoa/Inaia-tonu-nei-a-low-emissions-future-for-Aotearoa.pdf>.

CCC's final report sets out its recommended proposal on New Zealand's first three emissions budgets,<sup>7</sup> and the path to achieving 'net zero' emissions by 2050 and meeting New Zealand's commitments under the Paris Agreement. The government is expected to respond to the final advice and provide its emissions reduction plan<sup>8</sup> before the end of 2021, and thereafter begin implementing the CCC's recommendations. In the interim, the government has announced that it will ban new low and medium temperature coal-fired boilers used in manufacturing and production by 31 December 2021.<sup>9</sup> The government is also proposing to phase out existing coal boilers by 2037.<sup>10</sup>

In November 2020, the government launched the NZ\$70 million Government Investment in Decarbonising Industry Fund to help businesses decarbonise their process heat.<sup>11</sup> The first round of funding announced in April 2021 saw NZ\$22.88 million allocated across 14 companies.<sup>12</sup>

In June 2020, the government adopted notable reforms to New Zealand's emissions trading scheme (NZ ETS) and passed the Resource Management Amendment Act 2020 (RMA Amendment Act), amending the Resource Management Act 1991 (RMA) to require local governments to consider climate change issues when making planning and consent decisions.

Freshwater management policies were updated in September 2020 with the adoption of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 and the National Policy Statement for Freshwater Management 2020 (NPS FM). Importantly, the NPS FM recognises the importance of hydro generation in New Zealand's renewable electricity mix and allows consenting authorities to maintain freshwater quality below national bottom lines where necessary to secure the benefits of New Zealand's five largest hydroelectric generation schemes.<sup>13</sup>

In July 2020, the Resource Management Review released its review of New Zealand's resource management system (the Randerson Report) and recommended that the RMA should be repealed and replaced with three new pieces of legislation.<sup>14</sup> In February 2021, the government announced reforms to the RMA based on the Randerson Report, with the three bills expected to be introduced to Parliament in December 2021.<sup>15</sup>

The past year saw several renewable energy projects completed despite uncertainty and delays caused by the covid-19 pandemic. Tilt Renewables' Waipipi Wind Farm near Waverley in South Taranaki was fully commissioned in March 2021, with an installed capacity of 133MW and 455GWh of annual average output.<sup>16</sup> Construction on Mercury New Zealand's 222-MW Turitea Wind Farm in the Tararua Ranges near Palmerston North

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7 The emissions budgets set out the maximum amount of greenhouse gases New Zealand can emit over a five-year period through to 2035.

8 The Emissions Reduction Plan will set out how the first three emissions budgets will be achieved. See [www.beehive.govt.nz/release/climate-change-targets-achievable-and-affordable-experts-say](http://www.beehive.govt.nz/release/climate-change-targets-achievable-and-affordable-experts-say).

9 [www.beehive.govt.nz/release/government-delivers-next-phase-climate-action](http://www.beehive.govt.nz/release/government-delivers-next-phase-climate-action).

10 See footnote 9.

11 [www.beehive.govt.nz/release/new-fund-launched-reduce-carbon-emissions-coal-and-gas](http://www.beehive.govt.nz/release/new-fund-launched-reduce-carbon-emissions-coal-and-gas).

12 See footnote 9.

13 National Policy Statement for Freshwater Management 2020, cl 3.31.

14 Resource Management Review Panel, 'New Directions for Resource Management in New Zealand' (June 2020), <https://environment.govt.nz/assets/Publications/Files/rm-panel-review-report-web.pdf>.

15 [www.beehive.govt.nz/release/rma-be-repealed-and-replaced](http://www.beehive.govt.nz/release/rma-be-repealed-and-replaced).

16 [www.energynews.co.nz/news-story/wind-energy/84828/waipipi-fully-commissioned-tilt](http://www.energynews.co.nz/news-story/wind-energy/84828/waipipi-fully-commissioned-tilt).

continues, but has been hit by delays.<sup>17</sup> MainPower's 22 turbine Mt Cass Wind Farm in North Canterbury is aiming to reach financial close in 2021 with construction works commencing shortly afterwards.<sup>18</sup>

The Matiri hydro scheme at Murchison was completed in December 2020 and is capable of generating 28GWh annually.<sup>19</sup>

Top Energy's OEC4 power plant at the Ngawha geothermal field was commissioned in December 2020, adding 31.5MW of geothermal capacity.<sup>20</sup> Contact Energy has also announced that it will proceed with the development of a 152-MW geothermal power station at Tauhara, near Taupō, with construction expected to begin in 2021 and completion expected in mid-2023.<sup>21</sup>

Commercial solar has become increasingly popular in New Zealand: the past year saw several commercial solar projects commissioned, including the installation of a 102-KWh solar array at Lincoln University to displace some of its coal use<sup>22</sup> and New Zealand's first floating solar array on Watercare's Rosedale wastewater treatment pond.<sup>23</sup> There has also been significant interest in developing solar farms in the upper North Island, with Lodestone Energy proposing to build 229MW of utility-scale solar capacity across five solar farms in Northland, the Bay of Plenty and the Coromandel.<sup>24</sup>

The national energy centre, Ara Ake, was launched in July 2020 and will research clean energy options to help transition the oil and gas industry towards renewables.<sup>25</sup> Its three major priorities are green hydrogen production, offshore wind, and carbon capture and storage. Taranaki's first green hydrogen project was confirmed in 2019 and will see the construction of four wind turbines to power electrolyzers to produce high-purity hydrogen for use in ammonia urea or as transport fuel.<sup>26</sup> The development of New Zealand's first nationwide hydrogen refuelling station network is also underway and in its preliminary stages.<sup>27</sup>

The Electricity Authority is forecasting more volatile, and generally higher electricity prices in 2021, largely driven by a tight gas supply and low hydroelectric lake levels.<sup>28</sup> The variability of water inflows continues to be a key risk for New Zealand's electricity market, given that hydro generation contributes 55–60 per cent of the electricity supply.<sup>29</sup> This risk is likely to increase, with electricity demand projected to increase by approximately 55 per cent by 2050.<sup>30</sup> The government has allocated NZ\$30 million towards the NZ Battery Project,

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17 Mercury NZ Limited, '2021 Interim Report' (23 February 2021).

18 [www.odt.co.nz/star-news/star-districts/star-north-canterbury/construction-south-islands-largest-wind-farm-start](http://www.odt.co.nz/star-news/star-districts/star-north-canterbury/construction-south-islands-largest-wind-farm-start).

19 [www.stuff.co.nz/business/123658280/matiri-hydro-scheme-officially-opens-near-murchison](http://www.stuff.co.nz/business/123658280/matiri-hydro-scheme-officially-opens-near-murchison).

20 [www.energynews.co.nz/featured-content/electricity-generation/78344/year-review-new-generation-new-zealand](http://www.energynews.co.nz/featured-content/electricity-generation/78344/year-review-new-generation-new-zealand).

21 Contact Energy Limited, 'NZX Release: Contact Energy FY21 Interim Result' (15 February 2021).

22 Meridian Limited, 'Integrated Report 2020' (30 June 2020).

23 Vector Limited, 'Annual Report 2020' (26 August 2020).

24 [www.energynews.co.nz/news/solar/92339/lodestone-launches-229-mw-solar-project](http://www.energynews.co.nz/news/solar/92339/lodestone-launches-229-mw-solar-project).

25 [www.rnz.co.nz/news/business/438988/ara-ake-signs-deal-for-energy-start-ups-to-access-global-resources](http://www.rnz.co.nz/news/business/438988/ara-ake-signs-deal-for-energy-start-ups-to-access-global-resources).

26 <https://ballance.co.nz/Kapuni-hydrogen-project>.

27 [www.hiringa.co.nz/refuelling-network](http://www.hiringa.co.nz/refuelling-network).

28 [www.energynews.co.nz/news-story/electricity-regulation/81729/hydro-gas-shortfalls-drive-price-volatility](http://www.energynews.co.nz/news-story/electricity-regulation/81729/hydro-gas-shortfalls-drive-price-volatility).

29 Ministry of Business, Innovation and Employment, 'Energy in New Zealand 2020: 2019 Calendar Year Edition' (August 2020), [www.mbie.govt.nz/dmsdocument/11679-energy-in-new-zealand-2020](http://www.mbie.govt.nz/dmsdocument/11679-energy-in-new-zealand-2020).

30 Transpower, 'Briefing to the incoming Minister: Minister of Finance and Minister for State-Owned Enterprises' (November 2020), [www.transpower.co.nz/sites/default/files/publications/resources/2020%20Transpower%20Briefing%20to%20the%20Incoming%20Minister.pdf](http://www.transpower.co.nz/sites/default/files/publications/resources/2020%20Transpower%20Briefing%20to%20the%20Incoming%20Minister.pdf).

which will evaluate the viability of pumped hydro schemes of various sizes at Lake Onslow and elsewhere to address New Zealand's dry-year problem.<sup>31</sup> However, industry participants have raised concerns that building pumped hydro at Lake Onslow would be an inefficient use of funds when there are more affordable low-carbon dry-year solutions,<sup>32</sup> expressing a preference for market-driven solutions.<sup>33</sup>

In July 2020, Rio Tinto announced that it would close the Tiwai Point aluminium smelter,<sup>34</sup> but it will continue to operate the smelter until at least December 2024.<sup>35</sup> The smelter is directly connected to the Manapōuri hydropower station and is New Zealand's single largest electricity consumer, consuming about 12 per cent of total electricity demand.<sup>36</sup> When the smelter is decommissioned, the electricity it currently consumes will be redirected into the national grid and the increased supply is expected to reduce electricity prices. However, Meridian is currently pursuing options for absorbing the surplus supply from its Manapōuri hydropower station, including a large data centre, green hydrogen production and industrial heat options.<sup>37</sup>

New Zealand's renewable energy sector has not been exempt from the global impact of the covid-19 pandemic. The government-imposed nationwide lockdown saw an inevitable decline in electricity demand, delays to the construction of Turitea Wind Farm and other projects, and construction of Refining NZ's 31-hectare solar plant at the Marsden Point Oil Refinery put on hold.<sup>38</sup> In July 2020, the government enacted the COVID-19 Recovery (Fast-track Consenting) Act 2020 to expedite the consenting process for projects that could increase employment and facilitate New Zealand's economic recovery following the pandemic. Transpower advanced its Clutha Upper Waitaki Lines Project under this fast-track consenting process after the smelter's exit was announced.<sup>39</sup>

### III THE POLICY AND REGULATORY FRAMEWORK

#### i The policy background

As the government approaches the end of its existing energy strategy,<sup>40</sup> there has been a notable shift in policy from developing all New Zealand's diverse energy resources (including oil, gas and coal), to an emphasis on accelerating investment in renewable energy generation, including the electrification of transport and process heat to help reduce New Zealand's energy-related emissions.

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31 [www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/low-emissions-economy/nz-battery/](http://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/low-emissions-economy/nz-battery/).

32 [www.energynews.co.nz/news/pumped-hydro/90350/dont-ignore-lessons-history-onslow-mercury](http://www.energynews.co.nz/news/pumped-hydro/90350/dont-ignore-lessons-history-onslow-mercury).

33 Electricity Authority, 'Briefing to the incoming Minister' (November 2020), [www.beehive.govt.nz/sites/default/files/2021-01/Electricity%20Authority%20BIM.pdf](http://www.beehive.govt.nz/sites/default/files/2021-01/Electricity%20Authority%20BIM.pdf).

34 [www.rnz.co.nz/news/business/420817/rio-tinto-announces-plans-to-close-tiwai-point-smelter](http://www.rnz.co.nz/news/business/420817/rio-tinto-announces-plans-to-close-tiwai-point-smelter).

35 [www.rnz.co.nz/news/national/434490/tiwai-point-aluminium-smelter-to-keep-operating-until-end-of-2024](http://www.rnz.co.nz/news/national/434490/tiwai-point-aluminium-smelter-to-keep-operating-until-end-of-2024).

36 See footnote 30.

37 New Zealand Wind Energy Association, 'The year in review / Membership year – April 2020 to March 2021', [www.windenergy.org.nz/store/doc/NZWEA-2020-2021-year-in-review.pdf](http://www.windenergy.org.nz/store/doc/NZWEA-2020-2021-year-in-review.pdf).

38 [www.stuff.co.nz/business/green-business/124821191/marsden-point-oil-refinery-could-become-green-energy-hub-in-bid-to-futureproof](http://www.stuff.co.nz/business/green-business/124821191/marsden-point-oil-refinery-could-become-green-energy-hub-in-bid-to-futureproof).

39 [www.transpower.co.nz/clutha-upper-waitaki-lines-project-faqs#What\\_Work?](http://www.transpower.co.nz/clutha-upper-waitaki-lines-project-faqs#What_Work?)

40 New Zealand Government, 'New Zealand Energy Strategy 2011–2021 – Developing our Energy Potential' (August 2011), [www.mbie.govt.nz/assets/55f3c6780c/nz-energy-strategy-lr.pdf](http://www.mbie.govt.nz/assets/55f3c6780c/nz-energy-strategy-lr.pdf).

The primary driver of investment in renewable energy projects in New Zealand remains the NZ ETS. The NZ ETS incentivises investment in renewable energy ahead of fossil fuels by requiring carbon emitters to obtain and surrender emissions units to match the emissions from their operating activities. Emitters can obtain units through the government's industrial allocation, sequestration, purchasing units through the government's quarterly auctions, on the secondary market or from the government at a fixed price.<sup>41</sup>

The Climate Change Response (Emissions Trading Reform) Amendment Act 2020 (the ETS Act) introduced notable amendments to the NZ ETS, including an overall cap on units available under the scheme, removing emitters' ability to purchase units from the government at a fixed price from 2021, and a phase-down of all industrial allocations.<sup>42</sup> The quarterly auctions were also introduced under the ETS Act and will see the government offer 4.75 million units at each auction with a price floor of NZ\$20 and a cost containment reserve of NZ\$50.<sup>43</sup> If the clearing price during an auction exceeds the cost containment reserve, the government can release more units to reduce the price. The first auction under the ETS Act was held in March 2021, with 408 bids from 40 participants seeking 11,626,500 units and a unit price of approximately NZ\$36.<sup>44</sup>

The ETS Act has formed part of the government's renewable energy work programme that also included the CCC's advice. The CCC has made several recommendations to strengthen the NZ ETS scheme, including increasing the price floor to NZ\$30 and then increasing it every year by 5 per cent plus inflation, increasing the cost containment reserve to NZ\$70 and then increasing it every year by 10 per cent plus inflation, and continuing to phase out the industrial allocation.<sup>45</sup>

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). While the government continues to champion the NZ ETS as a primary component of New Zealand's strategy to drive the renewable energy sector, the industry and the government has recognised that it cannot be the only driver.

## **ii The regulatory and consenting framework**

The Ministry for Business, Innovation and 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 (EA) oversees the efficient operation of the electricity industry, undertakes market facilitation measures and monitors and enforces compliance with electricity market rules. The EA 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.

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41 [www.stuff.co.nz/business/8252659/Carbon-credit-price-meltdown](http://www.stuff.co.nz/business/8252659/Carbon-credit-price-meltdown).

42 [www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL\\_92847/climate-change-e-response-emissions-trading-reform-amendment](http://www.parliament.nz/en/pb/bills-and-laws/bills-proposed-laws/document/BILL_92847/climate-change-e-response-emissions-trading-reform-amendment).

43 [www.newsroom.co.nz/emissions-trading-scheme-nzs-carbon-market-explained](http://www.newsroom.co.nz/emissions-trading-scheme-nzs-carbon-market-explained).

44 See footnote 43.

45 See footnote 6.

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 RMA and the NZ ETS.

The Code governs the operations 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 EA as a market participant and comply with the Code.

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

- a* Transpower owns and operates New Zealand's national grid. Transpower acts as 'system operator' and has the role of coordinating the real-time transmission of electricity as a contracted service provider to the EA.
- b* Contact Energy, Genesis Energy, Mercury NZ, Meridian Energy and Trustpower (together, the large 'gentailers') collectively own and operate 179 power stations that produce about 90 per cent of New Zealand's electricity.<sup>46</sup> There are 40 other companies that own and operate about 90 other power stations; these are mostly distributed generation.
- c* There are 29 local electricity distribution businesses (EDBs) that transport electricity from the national grid, or from distributed generation, to end users. Significant restrictions prevent EDBs from also engaging in retailing or generation of more than 250MW of electricity directly connected to the national grid (among other restrictions).<sup>47</sup>
- d* About 30 electricity retailers sell electricity to end users. However, about 90 per cent of end users buy their electricity from the five large gentailers.

Generators and retailers are required to participate in the spot market for wholesale supply and purchase of electricity administered by the EA.

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 RMA does this by restricting activities that interfere with those natural and physical resources and that are not otherwise permitted by rules or standards developed pursuant to the RMA.

Renewable energy projects require resource consents from consenting authorities<sup>48</sup> to undertake activities that are not otherwise permitted under those rules or standards. The RMA regulates the process for obtaining a resource consent.

In making resource consent decisions, consenting authorities are required to consider the environmental impacts of allowing the activity, any mitigating or offsetting proposals and the relevant provisions of statutory planning documents, including national and regional policy statements and regional and district plans.

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46 Interim Climate Change Committee, 'Accelerated electrification – Evidence, analysis and recommendations' (30 April 2019), [www.iccc.mfe.govt.nz/assets/PDF\\_Library/daed426432/FINAL-ICCC-Electricity-report.pdf](http://www.iccc.mfe.govt.nz/assets/PDF_Library/daed426432/FINAL-ICCC-Electricity-report.pdf).

47 Electricity Industry Act 2010, s 75.

48 Consenting authorities are predominantly regional and district councils.

There are a number of common hurdles to obtaining resource consents for renewable energy projects in New Zealand. The inherent sensitivity of the sites proposed for renewable energy developments such as wind farms or hydro generation, together with the public participatory regime of the RMA, means that projects often attract significant opposition and this 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 and visual impacts, blade reflections, turbine noise and ecology.

The RMA also requires particular consideration of Māori values and interests when determining applications for resource consents. Decision makers are required, when exercising functions and powers under the RMA, to recognise the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, *wāhi tapu*<sup>49</sup> and other *taonga*,<sup>50</sup> as a matter of national importance; to have particular regard to *kaitiakitanga*;<sup>51</sup> and to take into account the principles of the Treaty of Waitangi.<sup>52</sup> Consents for some renewable energy projects have been refused following court assessments of the adverse effects the proposed land use would have on Māori values, interests and the relationship to their ancestral land.<sup>53</sup>

Of particular relevance to the renewable energy sector is the role of the National Policy Statement for Renewable Electricity Generation 2011 (NPS REG) in resource consents. As discussed above, consenting authorities are required to have regard to any relevant national policy statements (NPSs) when making consent decisions. NPS REG came into effect on 13 May 2011 and has played a significant role in promoting renewable energy development. 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 the need to locate the renewable electricity generation activity where the resource is available and the connection to existing infrastructure, especially the national grid, is viable.

There is potential for tension between competing policies in NPSs. The NPS FM has created some consistency with the NPS REG, allowing consenting authorities to give appropriate consideration to the benefits of hydro generation when setting limits on water use (as discussed above).

As discussed above, the RMA Amendment Act has removed the statutory barriers to considering the effects of activities on climate change under the RMA and places positive obligations on local and regional councils to consider climate change matters when preparing or changing their plans and considering consent applications. We expect these changes

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49 *Wāhi tapu* means a sacred place, sacred site or a place subject to long-term ritual restrictions on access or use (e.g., a burial ground, a battle site or a place where *tapu* (sacred) objects were placed).

50 *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, phenomenon, ideas and techniques.

51 *Kaitiakitanga* means the exercise of guardianship.

52 The relationship between the Crown and Māori 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 Māori 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.

53 *Unison Networks Ltd v. Hastings District Council* [2011] NZRMA 394 (HC).

will be positive for renewable energy generation developments. However, significant RMA reform is expected in late 2021 and it is unclear how this will impact the development of future projects.

#### IV RENEWABLE ENERGY PROJECT DEVELOPMENT

##### i Project finance transaction structures

Limited recourse project financing has been relatively limited in the New Zealand renewable energy market. The large gentailers have historically been responsible for the majority of new renewables developments and they have primarily financed their projects on a corporate-financed or 'on-balance-sheet' basis.

To the extent that there has been project financing of renewables projects in New Zealand, it has been driven largely by independent developers. Independents have found it relatively difficult to get renewables projects banked over the past decade because of difficulties creating projects of sufficient scale; difficulties attracting offtakers that will offer a sustained and satisfactory price; and the distance of the renewables projects from the national grid. However, the past few years have seen an increasing number of renewables projects banked on a limited recourse basis, mostly geothermal and wind projects.

The principal developers of project financed renewable energy projects have been:

- a* in wind, solar and hydro projects, independent energy companies and developers, such as Tilt Renewables, Nova Energy, Pioneer Energy, Ventus Energy, and EDBs such as MainPower and, recently, Lodestone Energy<sup>54</sup>; and
- b* in geothermal projects, Māori land settlement trusts that have ownership of or access to geothermal resources (often in partnership with the large gentailers) and TOP Energy in Northland.

The lenders most active in New Zealand renewables energy project financings have been three of the four 'major' New Zealand banks: ANZ Bank New Zealand, Bank of New Zealand and Westpac New Zealand. However, the recent Waipipi Wind Farm financing saw international banks project finance a wind project in New Zealand for the first time.

The primary offtakers of power generated from renewable energy projects in New Zealand have been the large gentailers. They have been the offtakers under power purchase agreements (PPAs) or counterparties on hedging contracts in the wholesale market. Recently, we have seen four major electricity users collaborate on the New Zealand Renewable Energy Project, which is seeking 2,000GWh of electricity from new renewable generation projects.<sup>55</sup> While several projects have been shortlisted, no PPAs have been signed and announced to the market to date under this process.

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

- a* a PPA or hedge contract to fix long-term pricing for the output from the project;
- b* an engineering, procurement and construction contract for the construction of the project. However, we are beginning to see disaggregated construction arrangements with

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<sup>54</sup> See footnote 24.

<sup>55</sup> <https://onestepoffthegrid.com.au/nz-biggest-corporate-ppa-seeks-up-to-2000gwh-a-year-of-new-renewables/>.

- the project bearing a greater degree of integration risk (for example, the construction contracts for the Waipipi Wind Farm were split between turbine supply, civil balance of plant and electrical balance of plant contracts);
- c* a long-term operation and maintenance agreement, particularly for wind and geothermal projects;
  - d* land rights agreements, which often take the form of leases or easements, depending on the nature of the project;
  - e* 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 connection agreement with an EDB for access to a distribution network; and
  - f* 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 and 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 financings of renewables projects in New Zealand over the past few years have typically been in the range of three to 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 tends to have its own unique features. We highlight below some impediments new renewables projects may face:

- a* 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 regulations. In addition, Transpower does not generally agree to enter into direct deeds.
- b* 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.
- c* Where the project involves land that is not registered under New Zealand's Torrens land registration system (such as Māori land) or 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.
- d* 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 that the project will be able to access the geothermal resource after the security has been enforced.

## ii Non-project finance development

Most renewables 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.

## V DISTRIBUTED AND RESIDENTIAL RENEWABLE ENERGY

Distributed solar energy and storage is beginning to play a greater role in New Zealand's energy mix,<sup>56</sup> but it is starting from a relatively low base, particularly compared to Australia.<sup>57</sup> Until recently, in large parts of New Zealand, solar energy alone was not economically viable as peak electricity demand tends to be in the evening and in winter when solar energy is not available. However, we noted some recent large distributed solar projects in Section II and we expect to see increasing numbers of these rooftop solar projects over the medium term.

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.<sup>58</sup>

Key participants in this market include Mercury NZ, Sunergise, Solarcity NZ, Vector Powersmart, Sky Solar, Harrison's Energy Solutions and CPS Solar. However, Mercury NZ recently announced that it will be exiting its retail solar business.<sup>59</sup>

## VI MERGERS AND ACQUISITIONS

In April 2021, Mercury NZ and PowAR (an Australian renewable energy investment fund) made a successful takeover offer to Tilt Renewables.<sup>60</sup> The acquisition will see Mercury NZ acquire Tilt Renewables' New Zealand assets for approximately NZ\$770 million, while PowAR will acquire Tilt Renewables' Australian assets. Tilt Renewables itself was the product of a demerger from Trustpower in October 2016, which saw Tilt Renewables take ownership of all wind assets and the wind and solar development pipeline, while Trustpower retained the hydroelectricity generation assets.<sup>61</sup> The success of Tilt Renewables' wind operations over the last five years since its demerger is reflected in the final takeover offer of NZ\$8.10 per share – a 106.6 per cent premium above Tilt Renewables' share price in early December 2020,<sup>62</sup> which was trading around NZ\$3.92 per share.<sup>63</sup> The sale of Tilt Renewables and the high price offered reflects the success of renewable electricity generation in Australasia and is further driving growth in renewable generation development in New Zealand.

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56 Total solar generation in 2019 was 126GWh, a 27 per cent increase over 2018, see footnote 29, page 13.

57 Australia has almost 14,000MW of installed solar capacity as at September 2019, <https://pv-map.apvi.org.au/analyses>.

58 [www.solarcity.co.nz/solarzero](http://www.solarcity.co.nz/solarzero) and <https://powersmartsolar.co.nz/fixing-costs>.

59 See footnote 17, page 3.

60 [www.energynews.co.nz/news/acquisitions/89397/mercury-lifts-tilt-offer-repel-canadian-bid](http://www.energynews.co.nz/news/acquisitions/89397/mercury-lifts-tilt-offer-repel-canadian-bid).

61 [www.trustpower.co.nz/investor-centre/demerger#:~:text=Trustpower%20underwent%20a%20demerger%20on,Ltd\)%20and%20Tilt%20Renewables%20Limited.&text=The%20demerger%20was%20effected%20by,required%20shareholder%20and%20Court%20approval](http://www.trustpower.co.nz/investor-centre/demerger#:~:text=Trustpower%20underwent%20a%20demerger%20on,Ltd)%20and%20Tilt%20Renewables%20Limited.&text=The%20demerger%20was%20effected%20by,required%20shareholder%20and%20Court%20approval).

62 [www.energynews.co.nz/news/wind-energy/92917/tilt-posts-results-offers-nz-guidance](http://www.energynews.co.nz/news/wind-energy/92917/tilt-posts-results-offers-nz-guidance).

63 [www.nzx.com/instruments/TLT](http://www.nzx.com/instruments/TLT).

## **VII RENEWABLE ENERGY SUPPLY CHAINS**

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

In recent years, New Zealand's limited manufacturing sector has suffered some key losses. In 2017, HydroWorks, which specialised in the design and manufacture of water turbines and pumps for hydro generation, was put into liquidation by its major shareholder. In addition, Windflow Technologies, a publicly listed company manufacturing two-bladed wind turbines, was delisted in 2018 and put into liquidation at the end of 2019.<sup>64</sup>

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

In 2019, the government established New Zealand Green Investment Finance Limited (NZGIF). While the focus of this NZ\$100 million fund is to accelerate low emissions investment in New Zealand, the entity has a broad mandate that could capture early-stage companies looking to develop renewable energy products, particularly in the areas of transport, process heat and agriculture. To date, it has invested NZ\$34.6 million of debt and equity in five companies across various sectors including transport, distributed energy and energy efficient services.<sup>65</sup> In May 2021, the government announced that NZGIF would receive an additional NZ\$300 million of funding under the 2021 fiscal budget.<sup>66</sup>

New Zealand is presently a party to 10 free trade agreements with several countries and does not impose any specific tariffs on renewable energy equipment from its trading partners.

## **VIII CONCLUSIONS AND OUTLOOK**

The government has recognised that significant investment in New Zealand's renewable energy generation capacity is required if New Zealand is to maintain energy security, affordability and environmental sustainability while pursuing the government's ambitious renewable electricity and climate change goals.

The CCC has also warned that current government policies are insufficient to achieve its emissions targets, and more robust government incentives will be required to drive New Zealand's transition to a low-emissions economy. The government's Emissions Reduction Plan is expected to give a clearer indication of future policy reform and set the path for New Zealand's climate future. In the interim, the government continues to introduce policies and investigate options outside the CCC's recommendations.

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64 [www.stuff.co.nz/business/118409446/wind-turbine-maker-windflow-technology-put-into-liquidation](http://www.stuff.co.nz/business/118409446/wind-turbine-maker-windflow-technology-put-into-liquidation).

65 <https://nzgif.co.nz/investing/our-investments/>.

66 [www.energynews.co.nz/news/climate-change/93981/govt-adds-300m-green-investment-fund?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=energy-news-newsletter](http://www.energynews.co.nz/news/climate-change/93981/govt-adds-300m-green-investment-fund?utm_source=newsletter&utm_medium=email&utm_campaign=energy-news-newsletter).

# ABOUT THE AUTHORS

## **ANTON TRIXL**

*Anderson Lloyd*

Anton is a specialist in the energy, natural resources and infrastructure sectors. Since 2004 he has been advising clients on transactions in these sectors, in over 30 countries, including project development and project financing, M&A, joint ventures, and construction.

Recent projects that Anton has advised on include Tilt Renewables' Waipipi Wind Farm and Omamari Wind Farm, Hiringa Energy and Ballance Agri-Nutrients' Kapuni wind farm and hydrogen production project, generator and turbine upgrades across Trustpower's portfolio of hydro-generation assets, a greenfield solar project in Northland, and the arrangements for a roof-top solar platform.

Anton is internationally recognised in the current editions of top global legal directories for his expertise advising on construction, project development and infrastructure matters, including being ranked as Highly Regarded by the *IFLR1000* guide and recognised by Chambers & Partners.

## **ANDERSON LLOYD**

Level 3, Australis Nathan Building  
37 Galway Street  
Britomart  
Auckland 1010  
New Zealand  
Tel: +64 9 338 8313  
Fax: +64 9 337 1115  
anton.trixl@al.nz  
www.al.nz

an LBR business

ISBN 978-1-83862-823-9