



Island nations, global impact: How New Zealand and Japan are partnering for a renewable Pacific



Auckland, New Zealand's largest city, offers a vibrant, multicultural lifestyle and a diverse landscape punctuated by stunning harbors, mountain ranges, volcanoes and rainforest. SHUTTERSTOCK

Land of the Kiwis leads the charge: Taking a pioneering role in renewable energy

New Zealand, a nation synonymous with stunning landscapes and pristine wilderness, is leading the charge in a global movement toward a sustainable future.

Recent statistics from the energy sector show that up to 87% of New Zealand's electrical power generation is already from renewable sources. This highlights not only its pristine pastoral environs, but also a notable achievement. Most of the country's electricity generation comes from renewable sources, a true vanguard position.

This focus on renewable energy presents a unique opportunity for collaboration between Japan and New Zealand. While their historical trade ties have been built on primary industries like dairy and timber with the likes of **Nelson Pine Industries** — a subsidiary of Sumitomo Forestry Co. — leading the way, Japan's Ambassador to New Zealand H.E. Makoto Osawa emphasized the burgeoning partnership in the renewable energy sector.

"New Zealand's economy is complementary with that of Japan. Japan imports NZ's goods from primary industries, such as dairy and timber. In exchange, NZ imports Japanese industrial goods. More recently, the collaboration (has) extended to (the) renewable energy sector, including hydrogen and geothermal energy. Japan and New Zealand are already actively collaborating in the renewable energy sector. Japan was the first country that New Zealand signed a memorandum of cooperation on hydrogen with, back in 2018," Osawa said.

Now these trade partners are exploring the potential of joint ventures in specific areas, led by four key New Zealand companies actively driving the energy revolution.

Fueling the future with hydrogen

As touched on by the ambassador,



The Te Apiti Wind Farm, a 55-turbine facility situated north of the Manawatu Gorge, is the first wind farm built by Meridian Energy in New Zealand. SHUTTERSTOCK

both Japan and New Zealand view hydrogen as a critical energy carrier with immense potential. Japan, with its significant fuel cell expertise, and New Zealand, with its abundance of renewable resources for electrolysis, are natural partners. Companies like **Hiringa Energy**, a leading developer of large-scale green hydrogen production facilities, are at the forefront of this collaboration. Hiringa partnered with **Japan's Mitsui & Co.** to explore the feasibility of building a large hydrogen plant in Southland, New Zealand. This project exemplifies the synergy between Japanese technological know-how and New Zealand's renewable energy resources.

Tapping the Earth's power

New Zealand sits atop a geothermal wonderland, and the country has been utilizing this naturally occurring heat source to make electricity for decades. Japan, with a growing interest in energy diversification, can benefit from this expertise. Companies like **Contact Energy**, one of New Zealand's largest power companies and a significant player in the geothermal sector, present a valuable partnership opportunity.

Contact Energy possesses extensive experience in geothermal power plant operations and actively invests in research and development to optimize efficiency and explore new applications.

Harnessing the wind

Wind energy plays a crucial role in New Zealand's renewable energy

mix. Companies like **Meridian Energy**, among the country's largest wind farm operators, demonstrate the nation's commitment to this technology. Meridian Energy boasts an impressive portfolio of wind farms strategically located across the country, maximizing utilization of this clean resource. Collaboration with Japanese companies experienced in wind turbines and offshore wind farm development could further propel New Zealand's wind energy sector.

Capturing the sun's bounty

Solar energy, with its widespread applicability, is another vital component of New Zealand's strategy with renewables. Companies like **Powershop**, a subsidiary of Meridian Energy and a leading energy retailer, are actively promoting solar adoption among households and businesses. Powershop's innovative approach, which includes solar panel installation and the facilitation of peer-to-peer energy trading, can serve as a valuable model for Japan as it seeks to expand its own solar energy footprint.

Shared future powered by renewables

Osawa's remarks highlight a pivotal shift in the relationship between the nations. The closer collaboration in renewable energy signifies a shared vision for a sustainable future. By combining Japan's technological prowess with New Zealand's abundant renewable resources, this partnership has the potential to not only benefit both countries, but also serve as a beacon for other nations on the path toward the transition to clean energy.

As New Zealand continues to be a pioneer in renewables, these four companies stand as testaments to the nation's dedication to a sustainable future, paving the way for a brighter tomorrow powered by clean energy. ■

www.hiringaenergy.com
www.contact.co.nz
www.meridianenergy.co.nz
www.powershop.co.nz

Nelson Pine Industries: Champions of circularity, beyond construction

Nelson Pine Industries Ltd. is a cornerstone of New Zealand's industrial landscape for multiple reasons. As one of the world's largest single-site producers of medium density fiberboard and a wholly owned subsidiary of Japan's Sumitomo Forestry Co., it exports premium products such as GoldenEdge MDF globally. However, its distinction extends beyond production prowess; the company is renowned for its unwavering commitment to sustainability, exemplifying the essence of a circular economy.

At its core, Nelson Pine prioritizes minimizing environmental impact while optimizing resource efficiency. Since 1984, Nelson Pine has stayed true to its legacy of sustainable timber resource management, while robustly expanding into new areas of research and technology.

"We do have some new and exciting developments to share. We've continued to make progress in engineering and construction for timber buildings and timber engineering solutions," Kai Kruse, CEO of Nelson Pine, said. "We've built and supplied materials for new

construction projects using Nelson Pine LVL, our laminated veneer lumber, which is made from veneer layers of pine logs sourced sustainably from our own forests," he added.

Nelson Pine upholds circular economy principles, carefully managing its carbon footprint and enhancing



Kai Kruse, CEO of Nelson Pine Industries
NELSON PINE INDUSTRIES

environmental practices throughout manufacturing. With a focus on product life cycles, the company prioritizes sustainability at every stage — and beyond.

As Kruse explained: "Beyond construction, we emphasize a circular economy. We grow trees, log them, process them into products and use these products for construction and furniture. Once buildings reach the end of their life cycle, materials can be repurposed or used as biofuel in our biomass power plants in Japan, creating a closed-loop system that supports carbon neutrality."

Leveraging top-tier technology, Nelson Pine expands its sustainable footprint with groundbreaking projects underway. These include supplying materials for New Zealand's largest timber building, for the construction of a hangar for Air New Zealand using LVL, for the development of New Zealand's Parliament buildings, and meeting the stringent requirements of the Living Building Challenge at a Wellington project.

As a key player within the Sumitomo Forestry global network and a



Architectural impression of New Zealand's largest timber office building WILLIS BOND

cross-cultural success story, Nelson Pine Industries not only sets a benchmark for sustainable practices within New Zealand, but also contributes significantly to the broader global sustainability agenda.

"We've been a leader in adopting the latest approaches in

efficiencies, performance management, environmental performance and safety. For instance, Sumitomo Forestry holds the license for One Click LCA (life cycle assessment) software in Japan, and Nelson Pine was the first to use this platform for our products, resulting in international certified sustainability and environmental declarations for our MDF and LVL products," Kruse said.

The company's expertise and ethos in fostering a circular economy resonate far beyond national borders, positioning them as a benchmark of sustainable enterprise on the global stage. ■

www.nelsonpine.co.nz



Shared principles: Two nations navigating Pacific cooperation

Ahead of the upcoming 10th Pacific Island Leaders Meeting, where Japan and New Zealand will reaffirm their commitment to Pacific regional cooperation, the bilateral relationship between these nations is at a pivotal juncture.

Over the years, the partnership has evolved beyond economic ties to encompass shared interests in regional stability, sustainability and innovation. With both countries looking to strengthen their engagement in the Pacific, PALM 10 represents a crucial platform for deepening collaboration on issues ranging from climate change resilience and technological advancement to economic development and security. Since its inception, PALM has largely been viewed as the cornerstone of Japan's diplomatic efforts toward Pacific island nations.

Japan's Ambassador to New Zealand H.E. Makoto Osawa recently provided insights into the current state and future potential of relations between the countries. He highlighted existing ties and identified promising areas for growth, particularly in avenues of continued collaboration in technology transfer and innovation, enhanced teamwork in renewable energy and a more robust partnership in the public sector.

Osawa suggested leveraging the existing assets between Japan and

New Zealand to strengthen bilateral ties within the Asia-Pacific context. Looking forward, he articulated a vision for greater cultural exchange and deeper cooperation across traditional and emerging areas. He expressed confidence in the future trajectory of the Japan-New Zealand relationship, underscoring the potential for continued growth and mutual benefit in addressing regional and global challenges.

Bridges: Ambassador, how can we deepen cooperation in clean tech, trade or security?

Osawa: We call the relationship between Japan and New Zealand a strategic cooperative partnership, which means we share common values and interests — including democracy, the rule of law, human rights and human dignity — and contribute together to regional and international peace and prosperity.

New Zealand's economy is complementary with that of Japan. Japan imports NZ's goods from primary industries, such as dairy and timber. In exchange, NZ imports Japanese industrial goods. More recently, the collaboration (has) extended to (the) renewable energy sector, including hydrogen and geothermal energy.

This relationship is reconfirmed and



Makoto Osawa, Japan's Ambassador to New Zealand JAPANESE EMBASSY

further strengthened by Prime Minister (Christopher) Luxon's recent successful visit to Japan.

How can New Zealand and Japan work together to achieve net zero, including via shared expertise?

Japan and New Zealand are already actively collaborating in the renewable energy sector. Japan was the first country that New Zealand signed a memorandum of cooperation on hydrogen with, back in 2018.

Since my arrival in March, I have attended two opening ceremonies of hydrogen stations (Halcyon Power and Hiringa Energy) on the North Island, which Japanese companies (Obayashi and Mitsui) are investing in.

A typical example of technology transfer is the case of Sumitomo and Fuji Electronic. They constructed Contract Energy's Tauhara geothermal power station this year, which will generate 174 megawatts of electricity (enough to power 200,000 households). This joint project contributes a lot for a greener, more sustainable future of the Asia-Pacific region.

How can New Zealand's strengths in renewables, agriculture and innovation benefit both countries?

New Zealand has close relationships with the Pacific island countries. There are lots of "PIC people" living in New Zealand, sometimes (in) higher numbers than (in) their original islands. As another island in the Pacific Ocean, Japan also has a keen interest in peace, security and economic development in this region. I am sure we can further collaborate for the development of PICs.

A typical example is a pilot project of Obayashi Corp. It produces geothermal-derived green hydrogen in New Zealand,

with the collaboration of a NZ company and exports it to Fiji. This joint project contributes a lot for a greener, more sustainable future of the Asia-Pacific region.

What's your vision for the future of the NZ-Japan partnership?

I hope that the governments of Japan and New Zealand, as well as the people of the two countries, will deepen mutual understanding and cooperation in all areas. I think the areas we cooperate in will be extended in the future. We can distinguish three areas: traditional areas of cooperation, such as agriculture, forestry and fisheries; emerging areas such as renewable energies; and new areas such as space industry and (the) digital creation sector.

A good example of a new area of collaboration was exemplified when Prime Minister Luxon was in Japan. Japanese company Syspective signed a deal with Rocket Lab to launch 10 Electron rockets, which is the largest launch agreement for Rocket Lab to date.

I hope that these collaborations will lead to the creation of innovative technology and spread to the rest of the world. I am more than happy to do my best in supporting the development of these collaborations. ■