brave trace

ANNUAL MARKET REPORT 2026

Including Residual Supply Mix (RSM) for New Zealand

1 April 2025 - 31 March 2026 (PY26)

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WORDS FROM THE CEO

Shaun Goldsbury, BraveTrace Chief Executive Officer
Production Year 2026 (PY26) - 1 April 2025 to 31 March 2026

We are excited to announce that PY26 was another successful year, with more businesses than ever issuing and redeeming New Zealand Energy Certificates (NZ-ECs) on our system.

We now have 419 Energy Users using our system, up from 393 last year. These users redeemed 2.6m certificates, a 19% increase. BraveTrace now certifies just over 6% of the total electricity produced in New Zealand. The trend towards newer forms of generation continues with 61% of our certificates now coming from wind or solar production devices. Just three years ago only 1% of our certificates came from wind or solar, reflecting the increasing focus from businesses on complying with RE100 technical criteria.

As a result of increased redemptions, the Residual Supply Factor (RSF) of 66 kg CO2-e/MWh for PY26 is 6.5% higher than the National Supply Factor (NSF) of 62 kg CO2-e/MWh.

During PY26 we also completed a number of significant projects, most notably the launch of Registry v2 and the change to our Production Year. We also launched our first digital stamp to allow those on the BraveTrace network to show their support for renewable energy.

A huge thank you to those who have joined us on our mission to accelerate New Zealand's renewable energy transition.

BACKGROUND

NEW ZEALAND ENERGY CERTIFICATE SYSTEM (NZECS)

We all need energy, but how we use it, and how we buy it, matters. BraveTrace enables energy consumers to demonstrate they are investing in and supporting renewable energy.

Our system equips them to claim their consumption is matched with verified renewable sources through purchasing NZ-ECs (1 NZ-EC = 1 MWh). NZ-ECs are digital certificates that document the attributes of generated electricity – such as what renewable fuel is used, where the generation site is located, and how much carbon is emitted at the point of generation. By purchasing NZ-ECs and matching them to their consumption, a consumer can make credible statements about the type of energy they support. They can use NZ-ECs to meet leading international best practice, action corporate goals, or to simply strive to make a difference.

As more consumers purchase NZ-ECs, the "residual supply mix", or remaining uncertified generation, becomes more carbon intensive. This increases the incentive on other consumers to use market-based instruments to maintain a lower Scope 2 profile and avoid reputational or compliance risks.

RESIDUAL SUPPLY FOR ELECTRICITY CERTIFICATION

At BraveTrace, we strive to increase the visibility, transparency and impact of NZ-ECs. One important way we do this is by publishing information on the New Zealand electricity Residual Supply Mix, or RSM. The RSM describes the carbon intensity of the electricity used by electricity consumers who do not purchase NZ-ECs. It is a key part of how greenhouse gas emissions are accounted for in international best practice.

Several summary statistics regarding generation volumes and their emissions factors are presented in this document. Care is taken in tracking renewable energy volumes, their associated NZ-ECs, and in calculating the RSM to ensure double-counting[1] does not occur.

[1]The renewable and/or carbon zero attributes of energy production should only be sold once, otherwise the environmental impact of energy production is underestimated. This outcome is referred to as double-counting.

The Residual Supply Factor (RSF) should be used for reporting the **market-based** emissions for those organisations who have not purchased NZ-ECs, and the National Supply Factor (NSF) should be used for reporting the **location-based** emissions as part of dual reporting requirements as laid out by the Greenhouse Gas Protocol.

Purchasing NZ-ECs allows consumers to report their market-based electricity emissions as zero carbon while providing additional financial support to renewable generators:

- This helps organisations achieve their emissions reduction and sustainability goals without being impacted by activities outside of their control such as non-renewable electricity generation.
- It also accelerates the deployment of renewable energy projects and decarbonisation initiatives across Aotearoa. To learn more about the impact of NZ-ECs, explore the renewable Production Devices registered on the NZECS here.

We use independent service provider EnergyLink to calculate and review our national and residual supply statistics using provided and publicly available data. Details on a review of their methodology is here. Additional information is also in this RSM technical note.

2026 KEY NZECS CHANGES

It's been a transformative year at BraveTrace with several major initiatives reshaping how we operate the NZECS and deliver value. Registry v2 was launched and the Production Year was replaced with the Transaction Period. The new system and processes provide significantly greater transactional flexibility to Registrants and Participants. We have also developed the BraveTrace Stamp giving organisations the confidence to credibly demonstrate their commitment to renewable electricity and emissions reduction.

REGISTRY V2

During 2026, the NZECS Registry successfully transitioned from Registry v1 to Registry v2 following approximately two years of development. While the new platform delivers improvements in performance, reliability, and user experience, its most significant benefit is the modernised architecture that provides a flexible and scalable foundation for future development. This enables changes and enhancements to be implemented more quickly, efficiently, and with lower risk than was possible under the previous system.

The transition to Registry v2 has already strengthened our ability to respond to evolving market and regulatory requirements. In particular, the new platform was a key enabler for the introduction of the Transaction Period process, providing the technical capability and development agility needed to deliver this significant change. With enhanced automated testing, streamlined release processes, and a more maintainable codebase, Registry v2 positions the NZECS Registry to deliver ongoing improvements and new functionality at a faster pace in the years ahead.

TRANSACTION PERIOD

On 1st May 2026, the **Transaction Period** went live. The Transaction Period consists of eight concurrently open Quarter Periods spanning 24 months: the current quarter period, the previous four, and the future three. This replaces the previous Production Year model, which ran from a fixed annual period (1 April - 31 March) and closed 30 April each year.

The change gives more time to issue, transfer and redeem NZ-ECs, while continuing to support current annual GHG Protocol reporting requirements. To meet current carbon accounting standards, an **alignment period** has also been introduced; While a 24-month period is now open to transact NZ-ECs, the consumption and generation must at a minimum align within a 12-month period.

This added flexibility reflects how the market is evolving and responds to three practical needs

- **Unlocking value for renewable generators:** Under the old system, high-solar generation months (January-March) could not be sold after the 30 April closing date. The flexible Transaction Period gives generators a longer window to sell and realise value from that generation.
- **Making early participation easier for energy users:** Under the old system, Participants relied on the 'early cancellation' process to register and redeem NZ-ECs early. The flexible Transaction Period allows earlier registration and redemption without administrative workarounds.
- **Supporting specific carbon reporting periods:** Under the old system, the April-March Production Year did not always align with organisations' reporting periods. The flexible Transaction Period allows Participants to record reporting periods and generate matching reports.

If you'd like to read more about the Transaction Period change there is more information on our website:
NZECS Electricity Transaction Period Change – What does it mean for you?
NZECS Electricity – Transition to the Transaction Period Process

BRAVETRACE STAMP

During 2026, BraveTrace introduced the BraveTrace Stamp, a new recognition and communications tool that provides organisations with visible assurance that their renewable claims are independently traceable, reliable, and verifiable.

When an organisation purchases, tracks and redeems NZ-ECs against its electricity consumption through the NZECS registry, they become eligible to use the BraveTrace

Stamp across all their digital marketing and communications. Before issuing the Stamp, BraveTrace will confirm their eligibility and provide:

- The official digital BraveTrace Stamp assets
- The BraveTrace Stamp & Marketing Guidelines
- The NZ-EC Claims Guidance

We have already seen strong interest and use in the BraveTrace Stamps among NZECS Registrants, Participants, and Energy Users - including requests for high-resolution versions of the BraveTrace Stamp for use in commercial print materials and on products.

Learn more about the BraveTrace Stamp here.

2026 RESULTS

PY26 RESIDUAL SUPPLY MIX

With the change from Production Year to Transaction Period, this has affected how and when we calculate and publish the Residual Supply Mix. The RSM is now calculated each quarter, with a final RSM and subsequent interim RSM released. The two RSM values are to meet the needs of achieving flexibility, accuracy and timeliness. They are also designed to align with other relevant information, such as those numbers released by MBIE and MfE. Details on the changes and how the quarters work in the NZECS are here.

Below is an annual update on the RSM. It is important to note that figures for Q2 2025 - Q1 2026 (or rolling 12-monthly results for **PY26**) are **based on interim results**, as transactions for this period can now continue to occur through to 31 March 2027. Therefore the number of NZ-ECs redeemed, and the carbon intensity of the RSM for PY26 will continue to increase.

TABLE 1: ANNUAL RESIDUAL SUPPLY MIX RESULTS

NZECS PRODUCTION YEAR[2]	PY20	PY21	PY22	PY23	PY24	PY25	PY26
STATUS	FINAL	FINAL	FINAL	FINAL	FINAL	FINAL	INTERIM
National Supply Mix (MWh)	42,273,518	41,490,913	41,881,730	41,519,448	41,862,459	41,649,794	42,196,681
NZ-ECs Redeemed (MWh)	51,577	228,741	734,700	1,265,475	1,785,921	2,159,123	2,578,173
Residual Supply Mix (MWh)	42,221,941	41,262,172	41,147,030	40,253,973	40,076,538	39,490,671	39,618,508
NZ-ECs Redeemed (% of NSM)	0.12%	0.55%	1.75%	3.05%	4.27%	5.18%	6.11%
National Supply Factor (kg CO2-e/MWh)	99.16	124.00	108.83	67.50	74.63	107.59	62.02
Residual Supply Factor (kg CO2-e/MWh)	99.28	124.69	110.77	69.62	77.95	113.47	66.05
Factor of Difference (% of kg CO2-e/MWh)	0.12%	0.56%	1.77%	3.14%	4.46%	5.47%	6.51%

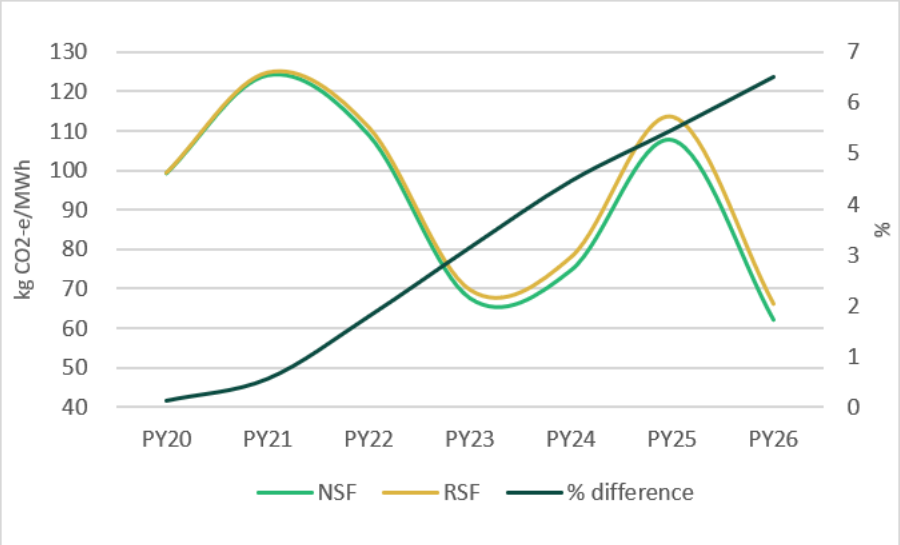
National Supply Mix (NSM): *the total mix of electricity generation supplying New Zealand's domestic demand.*
National Supply Factor (NSF): *the emissions factor of the National Supply Mix.*
Residual Supply Mix (RSM): *the National Supply Mix minus the volume of NZ-ECs redeemed.*
Residual Supply Factor (RSF)*: the emissions factor of the Residual Supply Mix.*

The difference between the RSM and NSM has continued to grow (6.51%, up from 5.47%) for a seventh consecutive year. It has been a challenging economic period for many

[2] NZECS Production Year is April-March, these figures align to the rolling 12-monthly results for each respective Q1 in the new Quarterly RSM dataset. PY20-25 are consistent with previously finalised results.

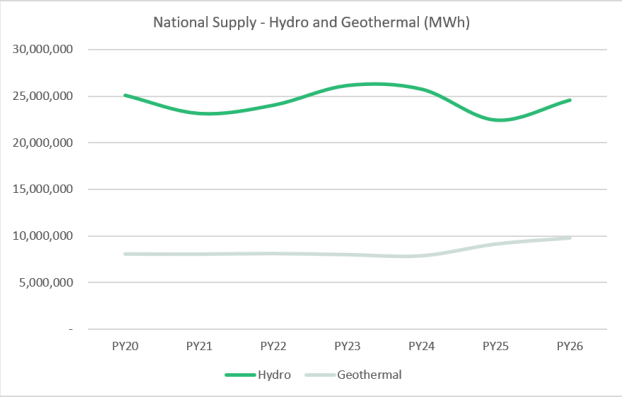
businesses, both in Aotearoa and globally. It is therefore encouraging that organisations remained focused on reducing emissions and making a difference.

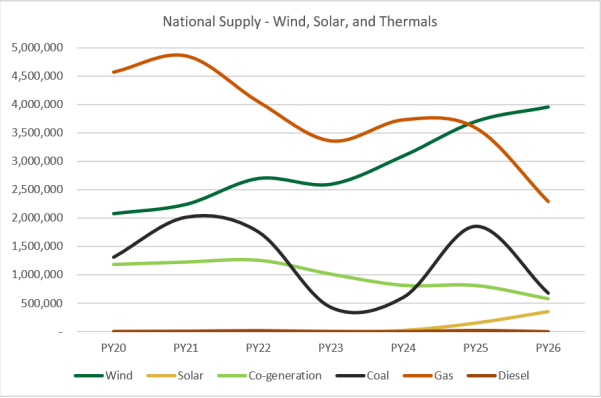
FIGURE 1: CARBON INTENSITY DIFFERENCE BETWEEN THE NSM AND THE RSM



The NSF for PY26 is 62.02 kg CO_2-e/MWh, back down this year following strong levels of renewables in the grid. With hydro recovering (up 9.6%), geothermal up (7.2%), wind trending up (6.8%) and a significant increase in solar (136.1%). An ongoing downward trend of gas (down 36.2%). And a reduction in coal (down 63.8%), and diesel (down 98.0% from last year, or down 59.0% from PY24). Wind generation has moved ahead of gas, making it the third-largest generation source in the NSM.

FIGURES 2 & 3: NATIONAL SUPPLY MIX (NSM)





PY26 BRAVETRACE NETWORK TRENDS

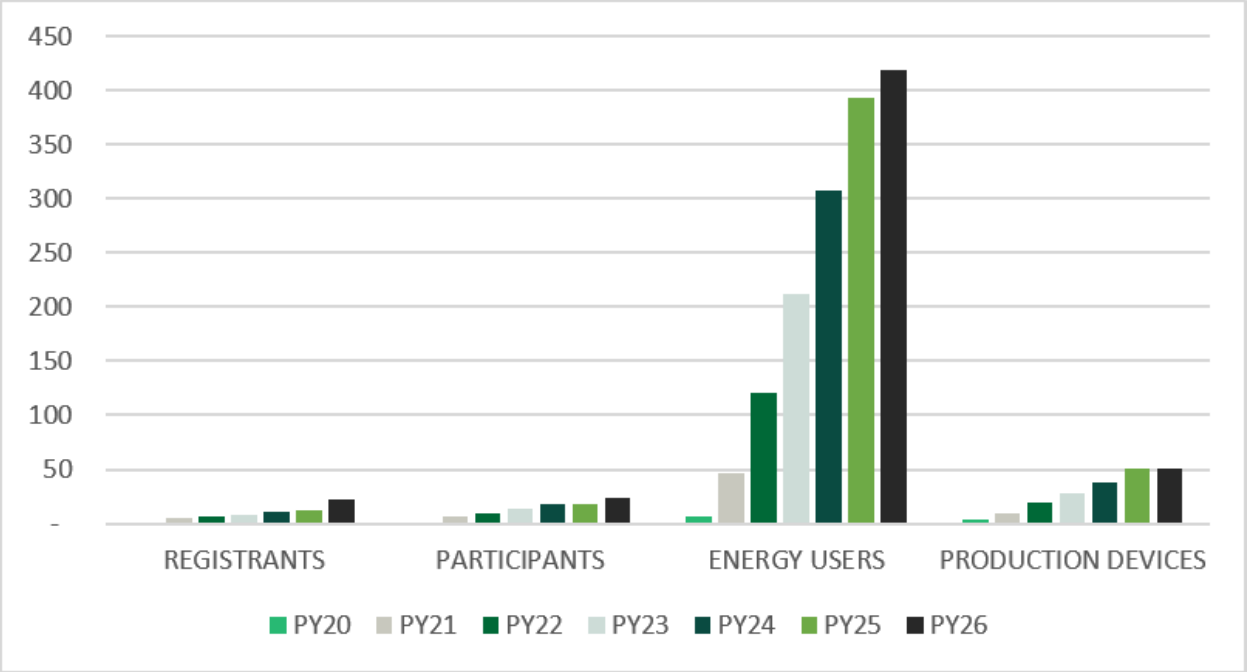
Different organisations or users of the NZECS make up the BraveTrace network:

- Registrants: organisations that have the authority to create NZ-ECs from registered Production Devices
- Participants: organisations that arrange and manage transactions of NZ-ECs between Registrants and Energy Users
- Energy Users: organisations that have purchased NZ-ECs

Production Devices are verified renewable energy generation facilities. Currently four types of electricity generation devices are accepted into the NZECS system: wind, hydro, solar, and landfill gas.

The BraveTrace Network continues to show strong steady growth. Energy User numbers grew by 7%, Participants by 28%, and Registrants most notably by 83%. Production Device levels remained the same; however, there were a number of deactivations and newly registered. Many of the new devices are of a younger age, which has maintained the total available RE100 generation for PY26, offsetting a number of devices that deregistered or aged out.

FIGURE 4: BRAVETRACE NETWORK FIGURES



An increasing trend within the NZECS is the movement of Energy Users between Participants. Some of this activity reflects the natural maturation of the NZECS, particularly where Energy Users participate through their electricity retailer. In these cases, a change in retailer often results in a change of Participant. At the same time, switching is also becoming more common among Energy Users who procure NZ-ECs through independent Participants. This growing mobility suggests a maturing market, with increasing competition and greater choice for Energy Users.

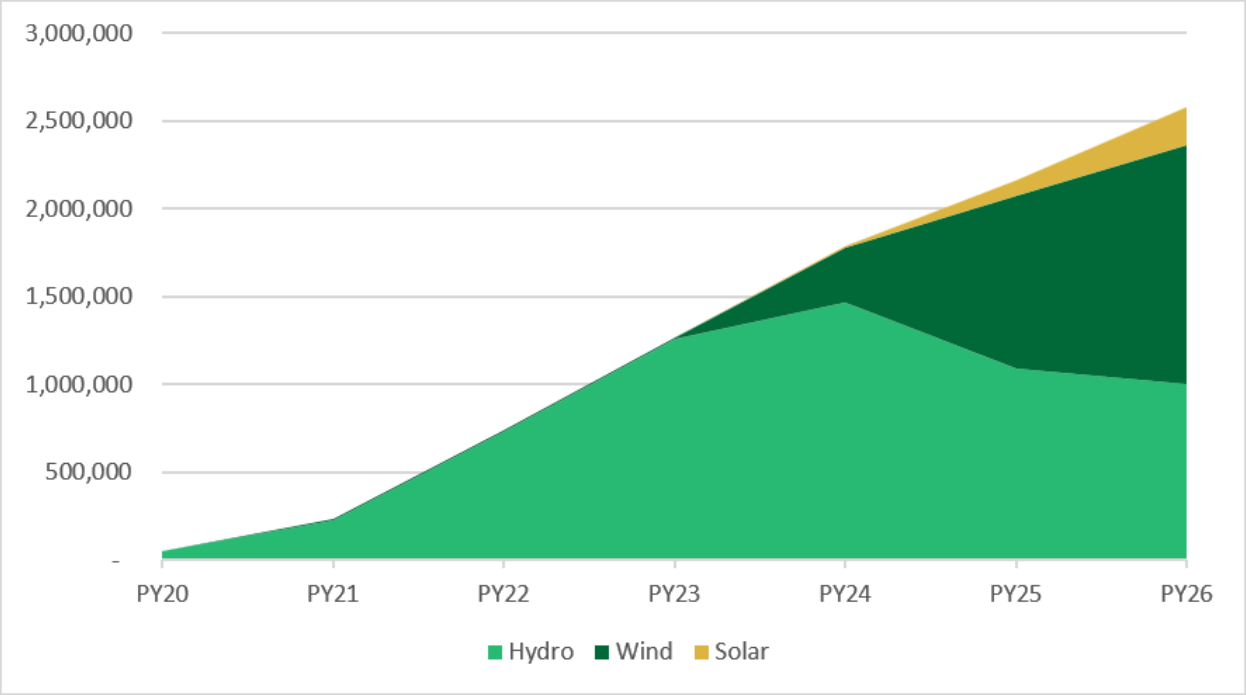
PY26 CERTIFICATION TRENDS

We have continued to see increased growth in certification in Aotearoa. Redemptions for PY26 are up 419,050 NZ-ECs on the previous year (19.4%). The trend of newer generation has continued, with Wind alone now surpassing Hydro to become the largest fuel source making up 52.9% of total redeemed NZ-ECs. Hydro declined to (38.8%), and Solar increased by 149.5%, now accounting for 8.3% of redeemed NZ-ECs.

TABLE 2: NZ-EC REDEMPTIONS BY FUEL TYPE

NZECS PRODUCTION YEAR	PY20	PY21	PY22	PY23	PY24	PY25	PY26
STATUS	FINAL	FINAL	FINAL	FINAL	FINAL	FINAL	INTERIM
Hydro	51,295	227,046	730,580	1,258,465	1,462,297	1,089,939	999,374
Wind	282	1,448	2,048	4,570	314,318	983,113	1,364,073
Solar	0	247	2,072	2,440	9,306	86,071	214,726
Landfill Gas	0	0	0	0	0	0	0
TOTAL	**51,577**	**228,741**	**734,700**	**1,265,475**	**1,785,921**	**2,159,123**	**2,578,173**

FIGURE 5: NZ-EC VOLUME BY FUEL TYPE



Redemptions from both older and younger Production Devices increased. Non-RE100 by 13.9%, and RE100 by 20.0%. The total generation across the Non-RE100 supply increased by 23.2%, while the RE100 supply decreased slightly by 1.7%. This continues the trend of strong demand for RE100 NZ-ECs.

FIGURE 6: NZ-EC VOLUME BY RE100 AGE CRITERION