# BraveTrace NZ-EC Summary Information

## Why BraveTrace

Trusted by hundreds of prominent corporate energy users in Aotearoa, BraveTrace operates the New Zealand Energy Certificate System (NZECS) that tracks and allocates New Zealand Energy Certificates (NZ-ECs), empowering organisations to make impactful energy procurement decisions and confidently reduce reportable electricity-associated emissions in accordance with carbon accounting standards.

### NZ-ECs meet leading international standards


Since 2018, our system has ensured full traceability and prevented double-counting, giving energy users assurance that their electricity consumption is matched with verified renewable generation. This enables organisations to meet emission reduction goals, provide verifiable claims to stakeholders, and support the renewable transition by generating additional revenue for renewable generators.

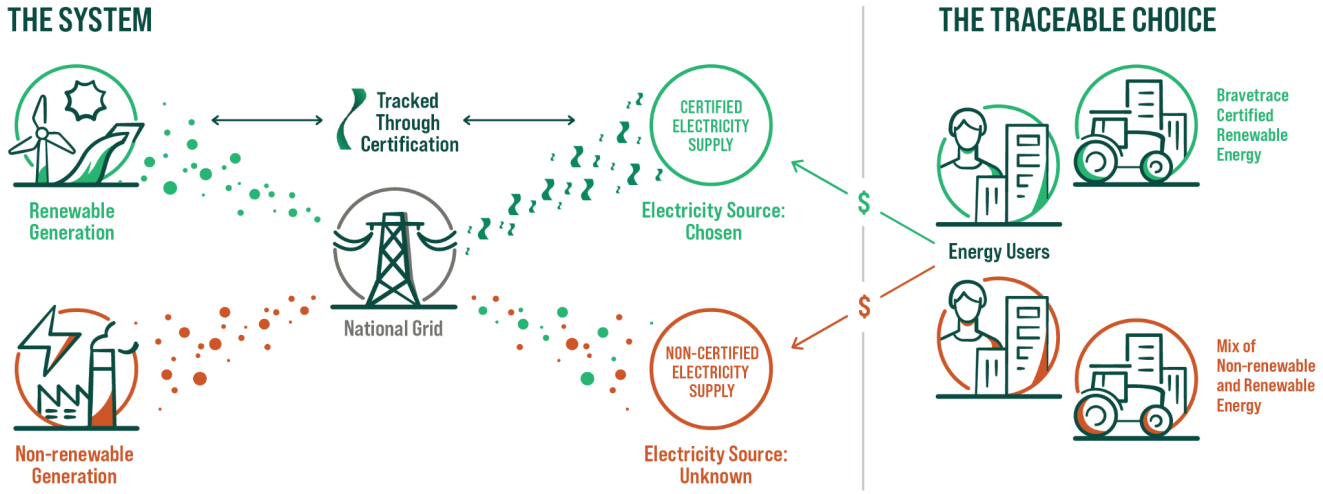
Purpose-driven, BraveTrace is backed by a rapidly growing network of registered generators, participants, and energy users, reinforcing the integrity and impact of our system. To further strengthen our position as a trusted provider, we are committed to independent external audits.

## How It Works

NZ-ECs are part of the global Energy Attribute Certificate (EAC) family, like Renewable Energy Certificates (RECs) in the United States and Guarantees of Origins (GOs) in Europe. Each certificate represents 1 MWh of electricity and records key attributes such as fuel used, generation location, and any associated carbon emissions. Since all electrons mix once in the grid, NZ-ECs can certify that you own those green attributes, allowing you to match your electricity consumption with verified renewable sources and enabling you to report your Scope 2 electricity-associated

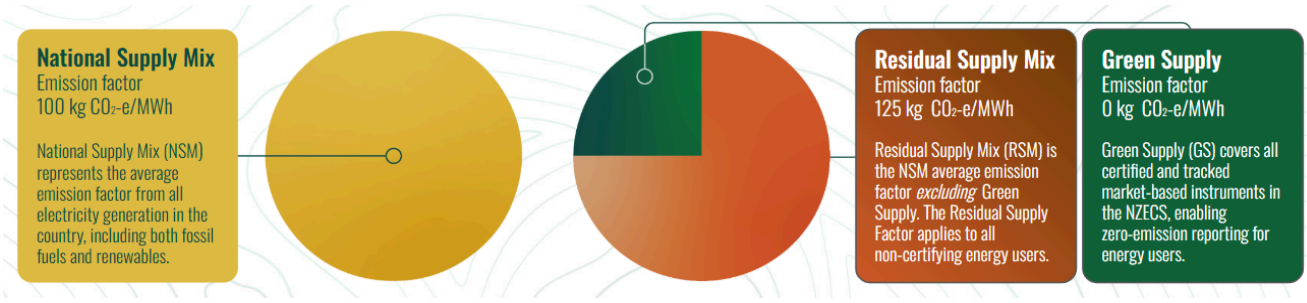
emissions as zero. NZ-ECs may also be used to cover your Scope 3 Category 3 emissions, including electricity Transmission & Distribution losses. Additionally, BraveTrace certifies and tracks renewable gas certificates, though availability is currently limited.

## BraveTrace NZECS




## Residual Supply Mix

To help organisations understand their impact on greening the grid, BraveTrace also calculates and publishes New Zealand's Residual Supply Mix (RSM). The Residual Supply Factor is essential for dual reporting (location-based and market-based methods) to ensure a GHG inventory aligns with the GHG Protocol Scope 2 Guidance and, by extension, the GHG Protocol Corporate Standard.




The NSM and RSM figures provided above are for illustrative purposes only; the actual data can be accessed here.

## A Couple of Things You Need to Know Before Purchasing NZ-ECs

In New Zealand, organisations can voluntarily purchase NZ-ECs. As the provider of the NZECS Registry, BraveTrace does not sell energy certificates; we provide the system whereby energy certificates are recorded and tracked. If you are seeking to report zero emissions for all your electricity consumption (and any related T&D losses), you will need to purchase an equivalent volume of energy certificates (1 MWh = 1 NZ-EC). Under market-based reporting, any electricity usage not covered by NZ-ECs will use the higher Residual Supply Factor.

You can purchase NZ-ECs at any time and for whatever period you prefer, but you can only purchase NZ-ECs from the beginning of the current BraveTrace Transaction Period.

- For example, if today is 28 November 2026, the current quarter runs from 1 October 2026 to 31 December 2026. In this case, the earliest date you can cover your electricity consumption with NZ-ECs is 1 October 2025 (one year prior to the start of the current quarter).
- Therefore, if you require NZ-ECs from 1 October 2025, your Participant must register your purchase by 31 December 2026 (i.e. the end of the current quarter), although we strongly recommend completing this earlier to avoid any last-minute issues.
- You may purchase NZ-ECs for any length of time in the future, multi-year contracting is a common practice. The redemption of NZ-ECs will typically occur when your actual electricity consumption is known but can be based on forecast consumption.
- To meet current annual GHG Protocol reporting requirements, renewable generation and electricity consumption must occur within the same 12-month period. Saying that, BraveTrace's NZECS allows energy users to voluntarily match on a monthly or quarterly basis if they choose, and could work off even shorter periods if required by customer demand or changes in international standards.

At the end of every quarter, all issued certificates will be either redeemed or cancelled, both actions remove them from circulation so we can finalise New Zealand's quarterly and annual Residual Supply Mix (RSM) calculations. "Redeeming" a NZ-EC means that you retain and claim its renewable attributes forever (i.e., it cannot be sold to someone else) preventing any double counting or double-claiming risks.

BraveTrace will provide your Participant with a report (Statement of Position or Redemption Receipt) aligned with your carbon reporting period, which can be used for assurance purposes.

## Where Does the NZ-EC Revenue Go

No certificate system in the world mandates how energy certificate revenue must be used. However, at BraveTrace, we encourage all registered NZ-EC generators to be open and transparent about how they use their NZ-EC revenue. Is the revenue reinvested in renewable energy growth, or decarbonisation efforts, or other projects with social and environmental benefits? In many cases, the sale of certificates will have been factored into calculations on a project return-on-investment, helping the project get established in the first place. This transparency provides greater information and offers meaningful choice to energy users that purchase NZ-ECs. Below are some revenue use examples:

| Generator | Projects |
|---|---|
| Kawatiri Energy | Efficiency upgrades, increased lake storage |
| Lodestone Energy | Existing grid solar, new developments |
| Mercury | New renewable electricity generation developments |
| Meridian Energy | Community Decarbonisation Fund, EV chargers, solar PV |
| NZ Windfarms | Repower Te Rere Hau, new developments |
| Pioneer Energy | Site upgrades, food waste-to-bioenergy |

To better understand the meaningful impact of your NZ-EC contributions, make sure you explore the Production Devices currently registered with BraveTrace.

## Three Simple Steps to Purchasing NZ-ECs

### 1. Select your Participant

The first step in the process is for you to select a Participant who will act on your behalf throughout the process. They will register you on the NZECS and procure NZ-ECs for you. You may select a Participant that is your energy retailer (if they are not registered on the NZECS yet, you could suggest to them that they do), or any registered independent Participant.

*Note for small electricity users:*

- Some Participants require a minimum MWh usage (typically 1 GWh per year) to supply NZ-ECs. 1 GWh = 1,000 MWh = 1,000,000 kWh.
- Some Participants can assist by aggregating energy users' demand, combining these Request For Proposals (RFPs) on behalf of their NZ-EC clients. This approach ensures competitive pricing - often

reducing per-unit NZ-EC costs to less than half of what an individual entity would pay when seeking direct supply.

### 2. Complete the Form

Your Participant will then share and assist you to complete the 'BraveTrace NZECS Energy User Registration Form' and purchase NZ-ECs for you. Once your registration has been approved by BraveTrace, you have officially joined a network of hundreds of forward-thinking organisations committed to accelerating the renewable transition!

### 3. Enjoy the Benefits!

## NZ-EC Fees and Costs

The price of NZ-ECs are negotiated between buyers and sellers, so are commercial in confidence. BraveTrace is not involved in this negotiation and is not notified of the price of NZ-ECs. However, information from the market indicates that energy certificates in New Zealand typically trade between NZ$3 up to around NZ$15 (as of December 2024). The following factors influence the price of NZ-ECs:

- Supply and demand for NZ-ECs at the time
- Cost of carbon in the NZ-ETS
- Smaller volumes often trade at higher prices due to fixed transaction costs
- NZ-ECs from newer production devices (e.g., RE100-aligned) often sell at a premium
- Prices may also vary based on energy users' requirements (new-build projects, local sourcing, community and nature co-benefits, decarbonisation funds, etc)

Contact details of NZ-ECs sellers are listed in the BraveTrace Network under the 'Participant' category. One Participant has publicly disclosed the price they charge for NZ-ECs.

BraveTrace charges fees to Registrants (generators) and to Participants acting on behalf of energy users. Participants typically recover these fees through the price charged to the energy users for energy certificates. Our fees support the operation and ongoing improvements of the NZECS Registry where energy certificates are issued, allocated, and redeemed. They also cover the use of our logo and digital stamp, assistance for generators in ring-fencing NZ-EC revenue, and our impact quantification methodology. Additionally, our fees fund the calculations and publication of the New Zealand Residual Supply Mix (RSM). Our fee structure consists of a fixed monthly fee and a variable fee per MWh/NZ-EC. For more details, see the full BraveTrace Fees Schedule here.

## Examples of NZ-EC Annual Cost based on GHG Inventory

| Annual Usage (kWh) | Equivalent MWh / NZ-EC | Price per NZ-EC | NZ-EC cost to cover full usage | BraveTrace Fixed Fees | BraveTrace Variable Fees | Total Cost Per Year |
|---|---|---|---|---|---|---|
| 25,000 | 25 | $5 | $125 | $1,740 | $7.25 | $1,872.25 |
| 50,000 | 50 | $5 | $250 | $1,740 | $14.50 | $2,004.50 |
| 100,000 | 100 | $5 | $500 | $1,740 | $29 | $2,269 |
| 500,000 | 500 | $5 | $2,500 | $1,740 | $145 | $4,385 |
| 1,000,000 | 1,000 | $5 | $5,000 | $1,740 | $290 | $7,030 |
| 1,500,000 | 1,500 | $5 | $7,500 | $1,740 | $435 | $9,675 |