



BRAVETRACE USER GROUP

Meeting 2: Wednesday, 4th December 2024

MEETING TO BE RECORDED

www.bravetrace.co.nz

Agenda



- **Administration**
- **Registry Version 2.0**
- **Date limits and repowering**
- **NZECS Principles**
- **Future topics survey results**
- **Closing remarks**



ADMINISTRATION

Laura Ferrier

APPROVAL OF MINUTES - Meeting 1, 29th August 2024

Emailed out 5th September to Members, and on BraveTrace website

Chance for feedback/corrections

The screenshot shows the BraveTrace website's resources page. The browser address bar displays 'bravetrace.co.nz/resources/'. The website header includes the BraveTrace logo and navigation links: 'WHY BRAVETRACE', 'HOW IT WORKS', 'RENEWABLE ELECTRICITY', and 'RENEWABLE GAS'. A filter bar below the header shows 'Filter by resource type:' with options: 'All', 'External', 'Guidance', 'Operational', and 'User Group' (which is selected and highlighted with a yellow box). The main content area features a grid of six resource cards, each with a 'READ MORE' button. The cards are:

- USER GROUP BraveTrace User Group Nomination Form**: All NZECS Registrants and Participants are invited to nominate a person from their organisation to be a member of the BraveTrace User Group. Please complete the Member nomination details and attach this form to an email addressed to contact@bravetrace.co.nz. If you would like to nominate multiple people from your organisation please complete a separate form for each person.
- USER GROUP BraveTrace User Group Terms of Reference**: The purpose of the BraveTrace User Group (User Group) is to provide advice to BraveTrace on the future design and operation of the NZECS, ensuring that it meets the evolving needs of its users (both direct and indirect users of the NZECS), remains consistent with international standards, integrates well with the New Zealand energy market, and leads to impactful energy procurement.
- USER GROUP BraveTrace User Group - Slidepack, August 2024**: The Slidepack from the first BraveTrace User Group meeting in August 2024.
- USER GROUP BraveTrace User Group - Minutes, August 2024**: Minutes from the first BraveTrace User Group meeting held in August 2024.
- USER GROUP BraveTrace User Group - Agenda, August 2024**: The agenda for the first BraveTrace User Group meeting that took place at the end of August 2024.

Action Point 3: Product Comparison Table

ADMINISTRATION

	Carbon Offsets	PPA's *	Supplier Specific*	I-RECs *	NZ-ECs
Can Transfer Renewable Attributes**	N/A	Yes	Yes	Yes	Yes
Issues Energy Attribute Certificates***	N/A	No	No	Yes	Yes
GHGP Precision Hierarchy	N/A	Medium	Medium	High	High
Independent Generation Verification	N/A	No	No	Yes	Yes
Independent Tracking	Yes	No	No	Yes	Yes
Double Counting/Claiming Risks	No	Yes	Yes	Yes	No
NZ Developed, Adaptable Solutions to Meet Local Market Needs	N/A	Yes	Yes	No	Yes
Included in RSM	No	No	No	No	Yes

* The table assumes these products are not tracked on NZECS. All of them could be tracked on NZECS and gain those benefits.

** RE100 proposes energy users to require EACs for all renewable energy purchases in markets where EACs are available.

*** Issuing an EAC is the only way to prove immutable legal ownership of the renewable attributes and gives detailed information for carbon reporting. GHGP Scope 2 guidance says EACs are the most precise and standardized category of market based instruments



REGISTRY V2.0

Andy Chilton

Login



Electrified Energy Certificates

Promoting visibility, transparency and choice in the New Zealand electricity system.

Email *

Password *

Log In

[Forgot password?](#)



Registrant

The screenshot displays the Brave Trace Registrant dashboard. At the top left is the Brave Trace logo. The top right navigation bar includes 'Contact us', a notification bell icon, and 'A Person | +'. Below this is a dark green navigation menu with the following items: « Dashboard, Registrant (selected), Devices, Available Generation, Embedded Generation, Held Certificates, and History. The main content area is titled 'Registrant' and features five data cards:

Metric	Value	Unit
Devices registered on the system	8	
Available Generation	102,534	MWh
Issued Volume	50,231	MWh
Currently Held Volume	0	MWh
Transferred Volume	50,231	MWh







Devices

brave trace Contact us A Person | +




« Dashboard Registrant **Devices** Available Generation Embedded Generation Held Certificates History

Production Devices

[New Production Device](#)

 Sunny Hill  Auckland Available Generation 10,268	 Hilltop Farm Wind  Wellington Available Generation 76,099	 Gordon's Forest  Christchurch Available Generation 7,378
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Available Generation

Contact us  A Person | 

[« Dashboard](#) [Registrant](#) [Devices](#) [Available Generation](#) [Embedded Generation](#) [Held Certificates](#) [History](#)

Production Device

- Sunny Hill
- Hilltop Farm Wind
- Gordon's Forest

[Apply](#)

Available Generation

Period	Year	Production Device	Type	Technology Type	Units (MWh)	Action
11	2024	Sunny Hill	Hydro	Storage head installation	45,092	[Issue]
11	2024	Hilltop Farm Wind	Wind	Horizontal-axis	10,923	[Issue]
11	2024	Gordon's Forest	Wind	Horizontal-axis	7,373	[Issue]

Participant

The screenshot displays the Brave Trace web interface. At the top left is the Brave Trace logo. The top right navigation bar includes 'Contact us', a notification bell icon, and 'A Person' with a share icon. Below this is a dark green navigation bar with links for 'Dashboard', 'Participant' (which is underlined), 'Energy Users', 'Held Certificates', and 'History'. The main content area is titled 'Participant' and features four data cards:

Metric	Value	Unit / Detail
Energy Users	20	19 EUs + 1 Sub-ICP EUs
Transferred to You	4,253	MWh
Currently Held Volume	0	MWh
Redeemed Volume	4,253	MWh

Energy Users

brave trace Contact us A Person | +

« Dashboard Participant **Energy Users** Held Certificates History

Energy Users




[New Energy User](#)

 ABC Corp AB123456 View Edit	 Bee Company BE837463 View Edit	 Creative Inc CR376253 View Edit	 Dogs'R'Us DG773643 View Edit
-----------------------------------------------------------------------	--------------------------------------------------------------------------	---------------------------------------------------------------------------	------------------------------------------------------------------------

Sub-ICP Energy Users

 MoneyBank DL377345 View Edit


Redeem

Contact us  A Person 

« Dashboard Participant Energy Users Held Certificates History

Certificate redemption

Recipient
Who do you want to redeem these certificates for?

Energy User
ABC Corp (AB123456) 

Certificates
You may redeem against any of your currently held certificates as shown here.

Hilltop Farm Wind - Oct 2024 (HTP01-10-2024-0010000)
90
100 MWh available

Metadata
Other info that can be stored against this transaction.

Reference
Reason ...

Cancel Validate Redemption

Future

- **Ongoing and more frequent improvements, bug fixes, enhancements**
- **Multiple Members per Organisation / Registrant / Participant**
- **Review of top Navigation, perhaps a left hand side vertical Menu**
- **Self-Service “Statements of Position” / “Redemption Receipts”**
- **Better “Application” process (PDs, EUs, etc)**
- **Parallel deployment of v2 and v1 - same database and data**
- **Preview logins welcome & happy to receive feedback**



DATE LIMITS, REPOWERING AND SUSTAINABLE HYDRO

Tim Street

BACKGROUND

INTERLINKED

1. IMPACTFUL ENERGY PROCUREMENT

The key overarching principle that the GHG Protocol and targets such as RE100 stress is the need for impactful energy procurement to accelerate the transition to zero-carbon grids.

RE100: *Corporate buyers should engage with suppliers and policymakers to remove barriers to impactful procurement and otherwise procure renewable electricity with the highest impact possible where they operate.*

2. DATE LIMITS

RE100: Imposing a date limit is a form of proxy for impactful procurement.

3. REPOWERING

RE100: Date limits are applied to the latter of a commissioning date or **repowering** date (if any)

3. SUSTAINABLE

RE100: Additional requirement that hydropower and biomass (including biogas) are **sustainable**.

The difference between Renewable vs Sustainable Energy

Renewable energy ...

- Comes from sources that naturally renew themselves at a rate that allows us to meet our energy needs
- Includes biomass, geothermal, hydropower, solar and wind
- Not all renewable energy is also sustainable, but improving the sustainability of renewables and fossil fuels can have environmental benefits

Sustainable energy ...

- Comes from sources that can fulfill our current energy needs without compromising future generations
- Also involves collection and distribution; the energy must be efficiently acquired and distributed in order to be sustainable

Source:
<https://energy.sais.jhu.edu/articles/renewable-energy-vs-sustainable-energy/#:~:text=Sustainable%20energy%20is%20derived%20from,and%20hydropower%2C%20are%20also%20renewable.>

RE100 TECHNICAL CRITERIA

Dec 12 - RE100 technical criteria + appendices - Published 12 December 2022

"The technical criteria are mostly an interpretation of the GHG Protocol Corporate Standard market-based scope 2 accounting guidance."

"The RE100 technical criteria are reviewed and updated every two years."

ENERGY RESOURCES CONSIDERED RENEWABLE

FUEL TYPES:

- Wind
- Solar
- Geothermal
- Sustainably sourced biomass (including biogas)
- Sustainable hydropower

Hydrogen and energy storage are only considered renewable if the energy resource used in its manufacture and charge respectively is renewable.

Sustainability proven through third-party certification. Standards and certifiers listed, ISO 13065:2015, Green-e® Renewable Energy Standard for Canada and the United States, The Low Impact Hydropower Institute, Hydropower Sustainability Council's Hydropower Sustainability Standard.

RE100 DATE LIMIT - APPLICATION

COMMISSIONING OR REPOWERING DATE LIMIT FOR PROCUREMENT OF RENEWABLE ELECTRICITY

RE100 requires corporate buyers' procurement of renewable electricity to observe a fifteen-year date limit.

- *Fifteen years' is defined as on or after 1 January of the year fifteen years prior to the claim to use of renewable electricity. For example, a claim to use of renewable electricity over January - December 2025 must be based on procurement from projects commissioned or re-powered on or after 1 January 2010.*
- **Our rule of thumb:** Commissioning date, say 9 May 2009, add 15 to year = 2024, acceptable to redeem NZ-ECs issued from this device against consumption that occurred up until and including 31 December 2024.
- ***Corporate buyers should insist that their suppliers improve the transparency of such products so that they can use commissioning or re-powering dates as a selection criterion when choosing which suppliers to contract with.***
- *Where members cannot or do not wish to disaggregate their reporting by commissioning or re-powering date, they must report the commissioning or re-powering date of the oldest project in a given supply.*

RE100 DATE LIMIT - EXCLUSIONS AND EXEMPTIONS

EXCEPTION CONDITIONS

EXCLUSIONS FROM *RE100 TARGET COVERAGE* [100% renewable electricity purchases]

- Exclusions do not apply in markets where it is technically feasible to procure renewable Electricity
 - 'Technically feasible' is not defined, RE100 refers to the countries where I-RECs are issued.
- Exclusions
 - Can exclude small loads up to 100 MWh/year, per market
 - Can claim exclusions up to 500 MWh/year.

DATE LIMIT EXEMPTIONS

- Fifteen-year date limit does not apply if:
 - Self-generation
 - Physical PPAs with on-site projects or off-site projects to which there is a direct line (no grid transfers)
 - Long-term project-specific contracts where the corporate buyer is the original offtaker for the project, and extensions of those contracts, even if they exceed fifteen years, including:
 - Physical PPAs with off-site grid-connected projects
 - Financial PPAs
 - Project-specific contracts with electricity suppliers
 - Project-specific contracts for unbundled EACs
 - Claims to default delivered renewable electricity [Supported by EACs]
 - Grandfathered contracts with operational commencement dates before 1 January 2024.
- Corporate buyers may exempt procurement of renewable electricity up to a threshold of 15% of their total electricity consumption
 - RE100 recommends that corporate buyers voluntarily phase-out their use of the 15% threshold as quickly as possible.
 - If a commissioning or re-powering date is unknown or not reported, the procurement counts towards the 15% threshold.

RE100 - REPOWERING PROJECTS

REQUIREMENTS

Project = Production Device (generation facility)

RE100 considers projects which meet one of the following four conditions in the last fifteen years as re-powered:

1. FAIR MARKET VALUE
2. NEW INCREMENTAL - HYDROPOWER
3. NEW INCREMENTAL - COMPLETELY SEPARABLE
4. TRANSITION TO BIOMASS

Uncertain whether hydropower can apply to options 1 & 3.

RE100 - REPOWERING PROJECTS

FOUR OPTIONS IN MORE DETAIL

1. FAIR MARKET VALUE
 - a. The facility has been re-powered such that 80 percent of the fair market value of the project stems from new generation equipment installed as part of the re-powering.
2. NEW INCREMENTAL - HYDROPOWER
 - a. Routine maintenance is excluded
 - b. Increase electrical energy output due to efficiency improvements, may include:
 - i. Rewinding of existing turbines
 - ii. Replacement with new turbines
 - iii. New turbine additions
 - c. Improvements must not:
 - i. Increase water storage capacity or the head
 - ii. Change the riverflow
 - d. Amount credited
 - i. Increase in capacity/total capacity x generation output (MWh)
 - ii. Regardless of the level of generation from the project
 - iii. RE100 may request corporate buyers to present an independent third-party report
3. NEW INCREMENTAL - COMPLETELY SEPARABLE
 - a. The facility has been improved to provide incremental generation that is separately metered from the existing generation at the facility.
4. TRANSITION TO BIOMASS
 - a. The facility has begun co-firing sustainable biomass with non-renewable fuels or has transitioned to firing 100% sustainable biomass.

NEXT STEPS

AWAITING A RESPONSE FROM CDP ON THE APPLICATION OF THE TECHNICAL CRITERIA

1. Do conditions 1 & 3 apply to all forms of renewable electricity generation or do they exclude hydropower?
2. Under option 2, when establishing the fixed amount of the facility improvement, should this be based on a normal hydrological year and measured over a calendar year?
3. To what degree does CDP allow parties like BraveTrace (NZECS) to adapt guidance on the application of the RE100 technical criteria to the situation in our own marketplace (country)?

We are considering options to escalate a response from CDP.

WE WILL CONTINUE TO MAKE PROGRESS IN THE MEANTIME

1. Draft BraveTrace Technical Guidance on repowering, sustainability and application of date limits.
 - a. Assume a conservative interpretation of the RE100 Technical Criteria.
 - b. Update this when we receive a response from CDP.
2. Develop an application form for repowering and sustainability.
 - a. This form will include provision of information (allowing for attachments) we would need to process an application.
3. Seek feedback from the BraveTrace User Group on these documents before they are finalised.



NZECS Principles

Tim Street

NZECS Principles - Background and Purpose

BraveTrace (formerly Certified Energy) has consulted on, and made, numerous changes to the NZECS Rules

To enable consistent evaluation of Rule change proposals BraveTrace developed and consulted on the NZECS Principles

We consider that NZECS developments (not just Rule changes) should be evaluated using the NZECS Principles

The BraveTrace User Group Terms of Reference requests that members consider the NZECS Principles when providing advice and feedback

We also intend to publish the NZECS Principles on the BraveTrace website

In advance of this, we seek feedback from the User Group

Current NZECS Principles

As described in most recent Rule change consultation paper

Proposed changes to the NZECS should be assessed using the NZECS Principles described below:

- **Impact:** Does the change increase the level of support Energy Users can provide to Registrants (renewable energy producers registered on the NZECS) and does the change increase the level of Energy User confidence that greenhouse gas (GHG) emissions will reduce because of that support.
- **Robustness:** Does the change improve the robustness and credibility of the NZECS, including consistency with relevant standards, such as the GHG protocol.
- **Participation:** Does the change promote participation by lowering transaction costs, making the NZECS easier to use, or providing a more useful product.

When assessing a change to the NZECS each of the NZECS Principles should be assigned an equal weighting.

User Group feedback/advice on the NZECS Principles

Key questions:

- Do you agree that the use of the NZECS Principles adds value to the NZECS development process?
- Do you agree that Impact, Robustness and Participation are the correct three Principles that should be applied?
- Are there any further clarifications that should be captured within the definition of these Principles?
- Are there other Principles that should also be included?
- Do you agree that each of the Principles should be given an equal weighting?
- Where the benefits of two or more Principles intersect do you agree the benefits should not be double counted?
- Is a net benefit across the three Principles acceptable?
- Do you agree that BraveTrace should publish the NZECS Principles?
- Do you have a view on the process that should be followed to amend the NZECS Principles?

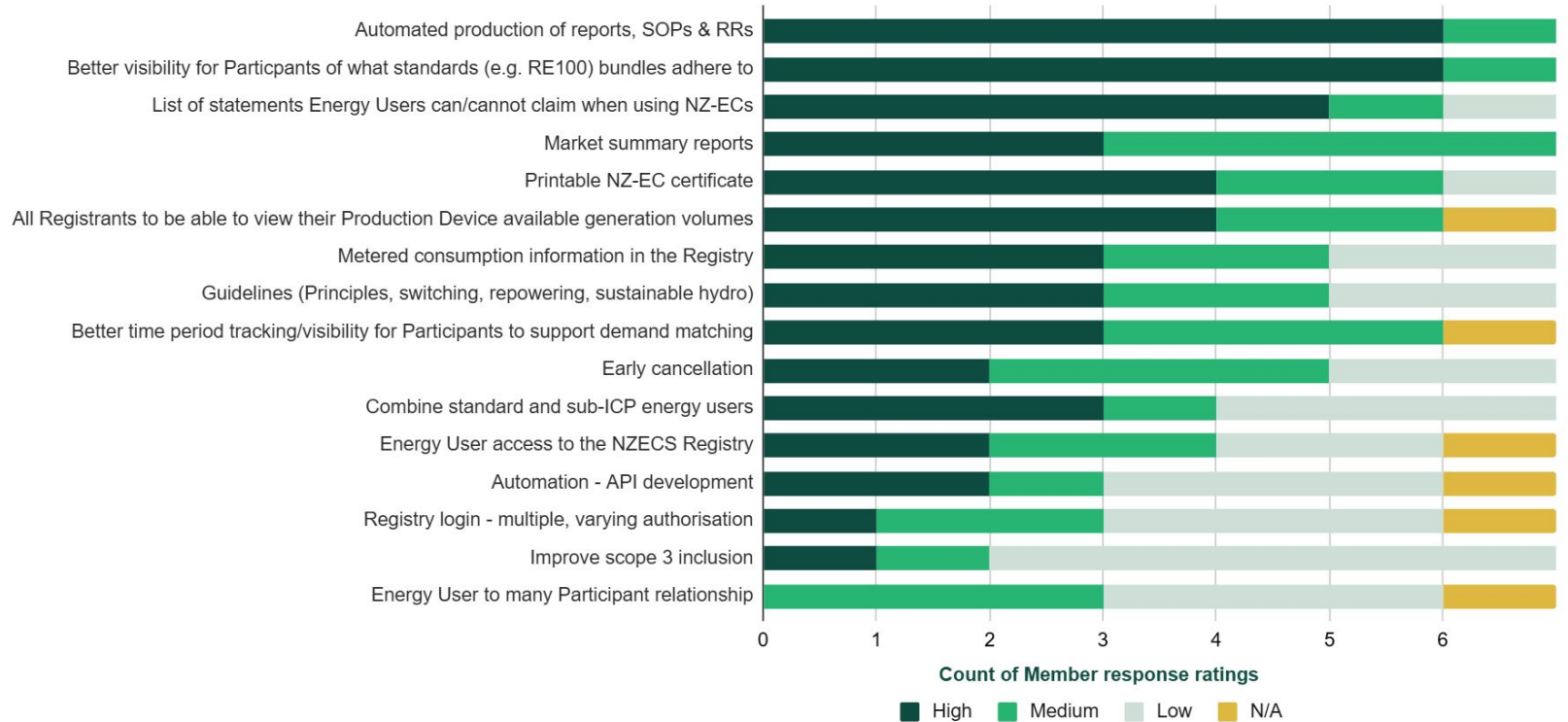


FUTURE TOPICS SURVEY RESULTS

Laura Ferrier

FUTURE TOPICS - MEMBER FEEDBACK

Future Topic





CLOSING REMARKS AND THANK YOU

bravetrace.co.nz

contact@bravetrace.co.nz

THE LEGACY WE LEAVE IS A TRACEABLE CHOICE