

Aotearoa New Zealand Sustainable Finance Taxonomy (NZ Taxonomy) Energy criteria public consultation survey questions – June 2026

*: Denotes a required field.

Red text: Provides functionality explanations and will not be text in the survey.

1. **Full name***

____Brian Cox____

2. **Email address***

You may be contacted in relation to your submission, or to receive updates on this consultation and process.

____brian.cox@bioenergy.org.nz____

3. **Do you represent your organisation's collective view or your personal view?*** *(single-choice)*

☒ I represent my organisation's collective view

☐ I represent my personal view

4. **Organisation*** **Bioenergy Association**

5. *(If representing organisation's collective view)* **Position held**

____Executive Officer____

6. **Which component(s) of the Taxonomy would you like to comment on? Please select all that apply.*** *(multiple-choice)*

☒ Climate change mitigation Substantial Contribution (SC) criteria

☐ Climate change adaptation and resilience (A&R) Whitelist

☒ Activity-specific Do No Significant Harm (DNSH) criteria

☒ Guidance on the role of fossil gas generation activities in a credibly transitioning portfolio

7. **Please select the area(s) that best match your expertise:*** *(multiple-choice)*

☐ Finance (including sustainable finance)

☐ Insurance

☐ Energy

☐ Environmental NGO

☐ Academia

☐ Legal

☐ Government

☒ Other (please specify) ____Energy NGO____

Energy sector climate change mitigation Substantial Contribution (SC) criteria

The climate change mitigation Substantial Contribution (SC) criteria set out the thresholds and requirements an economic activity or measure must meet to be considered as making a substantial contribution to the climate change mitigation objective.

In this consultation, we are seeking feedback on the criteria, particularly regarding their suitability for achieving the purpose of the NZ Taxonomy, as well as their credibility, usability and interoperability.

12. **Are there any activities that do not substantially contribute to climate change mitigation which should be removed?** *(single-choice)*

☐ Yes (please specify which activities and explain why they should be removed)

☐ No

13. **Are there any additional activities that should be considered for inclusion?** Note: Please consider whether these activities are in line with the agreed [methodological approach](#) for activity inclusion and classification *(single-choice)*

☒ Yes (please specify which activities and provide supporting evidence for their inclusion) _

Production and Manufacturing of Sustainable Bioenergy Fuels

The current methodology excludes fuel manufacturing activities from the Energy Taxonomy. However, for bioenergy, fuel production is an integral component of the renewable energy value chain and a prerequisite for the deployment of bioenergy technologies. Excluding fuel production creates a disconnect between sustainable fuel supply and eligible end-use activities, limiting the taxonomy's ability to support investment across the full bioenergy ecosystem.

The production of sustainable bioenergy fuels—including solid biomass fuels, biogas, biomethane, renewable bioliquids, and other biofuels produced from sustainable biomass and organic waste streams—is essential to achieving New Zealand's decarbonisation objectives. These fuels provide renewable alternatives for electricity generation, industrial process heat, transport, and renewable gas networks, while supporting the transition away from fossil fuels.

Investment in biofuel production facilities is also necessary to unlock wider emissions reductions. Without sufficient domestic production capacity, investment in downstream bioenergy generation, heating, and industrial fuel switching will remain constrained by fuel availability.

Given the gap in sequencing activity 14 essentially weighs heavily on the implementation fuel creation and is such unusable until production criteria exists.

Accordingly, consideration should be given to either:

- Including the production and upgrading of sustainable bioenergy fuels within the Energy Taxonomy, subject to robust sustainability and lifecycle greenhouse gas emissions criteria; or
- Fast-tracking the development of a complementary biofuel production taxonomy that is fully aligned and interoperable with the Energy Taxonomy.

Recognising sustainable bioenergy production would:

- Support investment across the complete bioenergy value chain, from feedstock to end use;
- Improve investment certainty for projects that require coordinated investment in both fuel production and energy conversion infrastructure;
- Better reflect lifecycle emissions by recognising that fuel production is a key determinant of overall environmental performance; and
- Accelerate the development of domestic renewable fuel markets, supporting New Zealand's transition to a resilient, low-emissions energy system.

The Bioenergy Association considers that sustainable bioenergy fuel production is an enabling activity that is fundamental to the deployment of renewable bioenergy technologies and should be recognised within the taxonomy framework, either directly or through a complementary taxonomy developed in parallel.

☐ No

14. Please provide specific feedback you have on any activities' criteria. When responding, please specify the activity you are commenting on using the following format: Activity #16 storage of energy > Green Criterion #A. (open comment box)

You may want to give consideration to whether the criteria are clear, usable, assessing credible substantial contribution, appropriately drawing on existing frameworks, and whether any additional ineligible cases/protections should be included, etc.

Please provide reference to any supporting evidence for suggested changes.

Activity #6 Electricity Generation, Including Cogeneration of Heating/Cooling and Power, from Bioenergy > Green Criteria

The Bioenergy Association supports the inclusion of electricity generation from bioenergy within the Energy Taxonomy. However, further refinement of the Green Criteria is required to ensure they can be applied consistently across the full range of sustainable bioenergy technologies and fuel pathways.

The concept of "substantial contribution" requires greater clarity. While the criteria specify a lifecycle emissions intensity threshold of less than 100 gCO₂e/kWh, it is not clear whether this threshold alone demonstrates substantial contribution or whether additional qualitative criteria are intended. Clear lifecycle assessment boundaries should be established to provide certainty for project developers, investors, and financiers, as currently the methodology has a high sector boundary risk.

This is particularly important given that the methodology excludes fuel production activities from the Energy Taxonomy. Fuel characteristics and upstream emissions are fundamental determinants of the lifecycle performance of bioenergy projects. Without clearly defining where the lifecycle assessment begins and ends, it will be difficult to consistently assess compliance across different bioenergy pathways.

The Association also recommends that the criteria explicitly recognise transitional fuel pathways. Many bioenergy technologies are expected to transition progressively towards higher proportions of renewable fuels as supply chains mature. The criteria should therefore clarify that eligible facilities may utilise defined renewable fuel blends, such as:

- Co-firing sustainably sourced biomass with fossil fuels;
- Blending biomethane within existing natural gas networks; and
- Other approved renewable fuel blending pathways that demonstrate progressively improving emissions performance.

Recognising transitional fuel blending would better reflect the practical realities of developing domestic renewable fuel markets while remaining consistent with New Zealand's decarbonisation objectives.

The feedstock criteria would also benefit from further clarification to ensure they are appropriate across the diversity of bioenergy technologies.

In particular:

- The criteria should be technology-neutral and distinguish between solid biomass, biogas, biomethane, and sustainable bioliquid fuels, rather than applying a single approach across all bioenergy pathways.
- Criteria B1 and B2 appear to unintentionally exclude some sustainable bioliquid fuels, despite these pathways being capable of meeting robust lifecycle greenhouse gas emissions and sustainability requirements.
- The definition of "organic waste" should be expanded to explicitly include eligible industrial organic waste streams, recognising their important role in supporting New Zealand's circular economy and reducing methane emissions from waste.
- Criterion C relating to methane leak detection is appropriate for biomethane projects but is not relevant to solid biomass pathways. The criteria should therefore be pathway-specific or provide alternative compliance mechanisms where methane leakage is not a material project risk.

Overall, the Green Criteria should better reflect the diversity of sustainable bioenergy technologies while maintaining robust environmental safeguards.

Activity #12 Production of Heating or Cooling from Bioenergy > Green Criteria

The Bioenergy Association considers that the comments above for Activity #6 apply equally to the production of heating and cooling from bioenergy.

In particular, further clarification is required regarding

- The definition of "substantial contribution";
- Lifecycle assessment boundaries;
- Recognition of transitional renewable fuel blending;
- Technology-neutral treatment of different bioenergy pathways; and
- Feedstock eligibility and pathway-specific sustainability requirements.

Given process heat represents one of New Zealand's largest opportunities for emissions reduction, it is important that the criteria are sufficiently clear and practical to support investment across the full range of sustainable bioenergy technologies.

Activity #14 Transmission and Distribution of Renewable and Low-Carbon Gases > Green Criteria

The Bioenergy Association supports the inclusion of renewable and low-carbon gas infrastructure within the Energy Taxonomy. However, the assessment boundary for this activity requires further clarification.

It is currently unclear whether the activity encompasses only transmission and distribution infrastructure, or whether it also includes the enabling infrastructure necessary to deliver renewable gases to the network. This includes activities such as:

- Biogas upgrading to biomethane;
- Gas cleaning and conditioning;
- Compression;
- Grid injection infrastructure; and
- Other pre-distribution infrastructure required to safely inject renewable gas into transmission or distribution networks.

These activities are integral components of the renewable gas value chain and are necessary to enable biomethane injection into existing gas networks. If they are excluded from the activity definition, there is a risk that essential enabling infrastructure will fall outside the taxonomy despite being fundamental to the deployment of renewable gas.

- To improve clarity and ensure consistent application of the taxonomy, the Bioenergy Association recommends that the activity boundary be explicitly expanded to include enabling infrastructure associated with renewable gas injection. Specifically, the activity description should include:
- "Construction or operation of injection, blending, metering and connection infrastructure enabling eligible renewable gases to be supplied into existing transmission and distribution networks."

- Including this additional limb would provide a clear and practical boundary for investors and project developers, recognising that injection infrastructure is an essential part of the renewable gas value chain rather than a separate activity.
- This amendment would improve investment certainty, support the deployment of biomethane and other eligible renewable gases, and ensure the taxonomy appropriately recognises the infrastructure required to decarbonise New Zealand's existing gas networks.

Energy sector Whitelist for climate change adaptation and resilience (A&R) criteria

The climate change adaptation and resilience (A&R) Energy-sector Whitelist provides a list of low-risk, pre-approved climate change A&R measures that can be applied to an activity to substantially increase its adaptive capacity and resiliency.

Measures included on the Whitelist are automatically deemed eligible for NZ Taxonomy Green-alignment and do not require a full assessment against the Process-Based Approach (PBA) or the Do No Significant Harm (DNSH) criteria.

For more information on the NZ Taxonomy's two-pronged approach to climate change A&R – including what the Whitelist is, what it is not, and how it differs from the PBA – please review the introduction to these criteria [here](#).

In this consultation, we are seeking feedback on the suitability of the proposed whitelisted measures for NZ's Energy sector, as well as any additional measures that should be considered.

15. **Are there any measures on the Whitelist that pose risks of maladaptation/significant environmental harm, which should therefore be removed?** *(single-choice)*

☐ Yes (please specify which measures and explain why they should be removed)

☐ No

16. **Are there any additional measures that substantially contribute to climate change A&R, with minimal risk of maladaptation/significant environmental, that are missing from the Whitelist and should be added?** *(single-choice)*

☐ Yes (please specify which measures and provide supporting evidence for their inclusion)

☐ No

17. **Please provide any further feedback you have on the Energy sector climate change A&R Whitelist.** *(open comment box)*

You may want to give consideration to whether the measures, as drafted, are clear and usable. The technical groups are also interested in ways to ensure Whitelist measures do substantially contribute to climate change A&R. Suggestions to strengthen how the NZ Taxonomy ensures this in the context of a Whitelist, are welcome.

Energy sector activity-specific Do No Significant Harm (DNSH) criteria

These criteria ensure that activities making a substantial contribution to an environmental objective (e.g., climate change mitigation) do not pose significant harm to other environmental objectives.

They function as a risk management tool, ensuring activities aligned with the NZ Taxonomy do not create unintended or adverse environmental consequences. While Substantial Contribution (SC) criteria aim to achieve positive environmental outcomes, Do No Significant Harm (DNSH) criteria are not intended to deliver net-positive impacts – their role is to prevent harm.

The activity-specific DNSH provide specific protections relevant to Energy sector activities.

Read more on what DNSH is (and is not) [here](#).

18. Please provide any feedback you have on any of the activity-specific DNSH criteria.

When responding, please specify the relevant activity and environmental objective using the following format: Activity #16, storage of energy > Environmental Objective #1, climate change mitigation. (open comment box)

You may wish to give consideration to: i) Whether the protections proposed for the activity are sufficient and appropriately targeted; ii) whether the criteria, as drafted, are clear and practical to apply; iii) whether there are any relevant industry commitments, standards, or established frameworks that could be recognised as proxies for meeting particular criteria to help reduce compliance burden.

Activity #6, Electricity Generation, Including Cogeneration of Heating/Cooling and Power, from Bioenergy > Environmental Objective #3, Protection and Restoration of Biodiversity and Ecosystems

The Bioenergy Association supports the inclusion of robust biodiversity safeguards within the DNSH framework. However, the current criteria require further refinement to ensure they are applicable across the full range of sustainable bioenergy pathways.

The feedstock sustainability requirements appear to have been developed primarily with solid biomass in mind and may not be appropriate for other bioenergy pathways, including biogas and biomethane produced from organic waste streams, or other renewable gaseous fuels. Applying the same biodiversity requirements across fundamentally different feedstocks risks creating unnecessary barriers for technologies that have different environmental characteristics and sustainability considerations.

The Association recommends that the biodiversity criteria adopt a pathway-specific approach that distinguishes between sustainably sourced biomass, organic waste-derived bioenergy, biomethane, and other renewable bioenergy fuels. This would maintain strong biodiversity protections while ensuring the criteria remain proportionate, practical, and technology neutral.

Activity #6, Electricity Generation, Including Cogeneration of Heating/Cooling and Power, from Bioenergy > Environmental Objective #5, Pollution Prevention and Control

The Bioenergy Association considers that the pollution prevention criteria should more clearly distinguish between fuel production activities and electricity generation activities.

The current references to anaerobic digestion appear to assess elements of fuel production, despite fuel manufacturing being outside the stated scope of the Energy Taxonomy. The DNSH criteria should instead focus on the environmental impacts directly associated with the electricity generation facility being assessed.

The Association also notes that the criteria do not address the management of combustion by-products associated with biomass generation. Appropriate management and beneficial use or disposal of bioash can represent an important environmental consideration and should be recognised within the pollution prevention criteria where relevant to biomass projects.

A more pathway-specific approach would improve the usability of the criteria while ensuring that the material environmental risks associated with each bioenergy technology are appropriately addressed.

Activity #12, Production of Heating or Cooling from Bioenergy > Environmental Objective #3, Protection and Restoration of Biodiversity and Ecosystems

The Bioenergy Association considers that the comments provided under Activity #6 apply equally to the production of heating and cooling from bioenergy.

The biodiversity criteria should recognise the diversity of bioenergy pathways and ensure that feedstock sustainability requirements are appropriate for the specific technology and fuel type. Pathway-specific criteria would improve clarity, support consistent application, and avoid unintended barriers to the uptake of sustainable bioenergy solutions.

Activity #12, Production of Heating or Cooling from Bioenergy > Environmental Objective #5, Pollution Prevention and Control

The Association recommends that the pollution prevention criteria remain focused on the operational impacts of the heating or cooling activity rather than upstream fuel production processes that fall outside the scope of the Energy Taxonomy.

As with electricity generation, consideration should also be given to recognising the management of bioash and other combustion by-products where biomass fuels are utilised. This would ensure the DNSH criteria address the material environmental considerations relevant to biomass heating while remaining proportionate for other bioenergy pathways.

Activity #16, Storage of Energy > Environmental Objective #5, Pollution Prevention and Control

The Bioenergy Association supports robust pollution prevention requirements for energy storage but considers that the current criterion requires further clarification regarding its intended scope and application.

It is unclear whether the requirement for compliance with international standards for storage systems exceeding five tonnes applies to all storage technologies or is intended specifically for gaseous energy storage systems. Greater clarity is required regarding the technologies covered, the applicable standards, and the means by which compliance can be demonstrated.

For renewable gas and biomethane storage infrastructure, the Association supports the explicit recognition of gas leak detection, monitoring, and management systems as appropriate pollution prevention and operational safety measures. These controls are well established within industry practice and are critical to ensuring the environmental integrity of renewable gas infrastructure.

To minimise unnecessary compliance costs, the taxonomy should also recognise compliance with established international standards, recognised industry codes of practice, and existing regulatory requirements as acceptable evidence of meeting the DNSH criteria, where those frameworks already address leak prevention, environmental protection, monitoring, and operational safety. This approach would reduce duplication while maintaining high environmental standards.

19. **Are there any other activities contained in the SC criteria that require additional activity-specific DNSH criteria to be developed for – i.e., activities that may pose risks of significant environmental harm not currently addressed by the activity-specific DNSH criteria?** *(single-choice)*

☐ Yes (please specify the activity, associated risks, and propose criteria to address them)

☐ No

20. **Please provide any other feedback on the proposed activity-specific DNSH framework, with supporting evidence where possible.** *(open comment box)*

Guidance on the role of fossil gas generation activities in a credibly transitioning portfolio

While the NZ Taxonomy is a framework for assessing environmental performance, issues of security are of particular relevance to the Energy sector. As such, the technical groups have considered including guidance for sustainable finance investments in entities that are providing system firming and peaking services, as a supporting document.

This document provides guidance on the role of fossil gas in the context of a credibly transitioning Energy portfolio. It outlines the key considerations in including fossil gas for firming (rather than baseload) purposes in a primarily renewable portfolio. It does not form part of the NZ Taxonomy criteria and gas firming is not considered a NZ Taxonomy-aligned activity.

21. **Do you agree with including guidance of this nature in the Energy sector report for the NZ Taxonomy?** *(single-choice)*

☐ Yes (please explain) _____

☒ No (please explain) _____

The Bioenergy Association supports the inclusion of guidance on firming and security of supply within the Energy sector report. However, the current guidance is too narrowly focused on the role of fossil gas and does not adequately reflect New Zealand's renewable energy transition or the critical role that sustainable bioenergy can play in providing dispatchable, low-emissions generation.

New Zealand's electricity system is fundamentally different from many international markets. As renewable generation increases, maintaining system reliability will require firming technologies that are capable of responding to dry-year events, seasonal variability, renewable intermittency, and peak demand. The guidance should therefore be framed around renewable firming solutions, rather than fossil gas.

Sustainable bioenergy—including biomass and renewable gases such as biogas and biomethane—offers a proven, dispatchable, and renewable source of firming capacity. Unlike intermittent renewable generation, bioenergy can provide electricity and process heat on demand, support peaking generation, and utilise existing thermal generation and gas infrastructure while progressively displacing fossil fuels. This makes bioenergy an important enabler of a secure, highly renewable electricity system.

The current guidance appears to draw heavily on international frameworks developed for jurisdictions with extensive LNG supply chains and materially different market conditions. It does not adequately reflect New Zealand's resource base, where sustainable biomass residues,

organic waste streams, and renewable gas production represent significant domestic energy resources capable of contributing to energy security, emissions reduction, and regional economic development.

Focusing the guidance solely on fossil gas risks overlooking investment in renewable firming technologies that are consistent with New Zealand's long-term decarbonisation objectives. Sustainable finance guidance should encourage investment in solutions that both maintain system reliability and reduce emissions over time.

The Bioenergy Association recommends that the guidance be broadened from the role of fossil gas generation to the role of dispatchable renewable energy and firming technologies in a credibly transitioning electricity system. In particular, the guidance should explicitly recognise the contribution of:

- Sustainable biomass generation;
- Biogas and biomethane for electricity generation and cogeneration;
- Renewable gaseous fuels as replacements for fossil gas in existing generation assets;
- Combined heat and power (CHP) using sustainable bioenergy;
- Long-duration energy storage;
- Flexible hydro generation;
- Demand-side flexibility and demand response; and
- Other emerging low-emissions firming technologies.

A technology-neutral framework that recognises renewable firming solutions would better align with the objectives of the NZ Taxonomy by supporting investment in infrastructure that delivers both system resilience and long-term emissions reductions.

Alternatively, the guidance should be reframed as "Firming and Security of Supply in a Highly Renewable Energy System", with bioenergy recognised as a key renewable firming technology alongside storage, hydro, and demand response. This would provide a more balanced, New Zealand-specific framework for sustainable finance and better reflect the role of bioenergy in achieving a secure, resilient, and low-emissions energy system.

22. If this guidance is included, please provide any comments or suggested revisions to the draft. *(open comment box)*

You may want to give consideration to the purpose of the guidance, the appropriate scope, and any additional clarity or information needed to make the guidance useful.



CENTRE FOR
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Finance**
TOITŪ TAHUA

If you have any questions about the survey or the consultation, please contact
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