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Bioenergy Australia Submission
2023 National Greenhouse and Energy Reporting (NGER) Scheme updates

Bioenergy Australia (BA) is the national industry association committed to accelerating Australia's bio economy. Our mission is to foster the bioenergy sector to generate jobs, secure investment, maximise the value of local resources, minimise waste and environmental impact, and develop and promote national bioenergy expertise into international markets.

This submission from Bioenergy Australia is on behalf of the Sustainable Aviation Fuel Alliance of Australia and New Zealand (SAFAANZ) and the Cleaner Fuels Alliance (CFA). These alliances were founded to accelerate the development and deployment of Renewable Liquid Fuels including sustainable aviation fuel (SAF) for deployment in Australia. Individual members of the alliances will be providing more detailed submissions specific to their business and expertise.

Australia's Bioenergy Roadmap (ARENA, November 2021) outlines how, by the start of the next decade, Australia's bioenergy sector could contribute to around $10 billion in extra GDP per annum and 26,200 new jobs, reduce emissions by about 9 per cent, divert an extra 6 per cent of waste from landfill, and enhance fuel security. Now is the time to capitalise on these opportunities by prioritising key opportunities within the National Greenhouse and Energy Reporting (NGER) Scheme.

Sustainable Aviation Fuel (SAF) and renewable diesel offer a critical opportunity for rapid decarbonisation efforts across hard-to-abate business and industry sectors. The creation of these renewable fuel industries can ensure that market development is done in such a way that not only prioritises domestic uplift and consumption, but also future proofs Australia's fuel security and resilience.

SAF is widely accepted today as a drop-in replacement for fossil jet fuel that works with existing airplanes and associated refuelling infrastructure and offers the largest potential to reduce carbon emissions over the next 20 to 30 years in all aviation segments. SAF is certified technology ready to scale and depending on the pathway, SAF can reduce emissions across the lifecycle by up to 80%, compared to fossil jet fuel.[*] Developing a domestic SAF industry is a significant opportunity for Australia if we prioritise its growth and innovation.

Additionally, renewable diesel is key to Australia's decarbonisation ambitions as it is suitable for use as a 'drop-in' equivalent to diesel oil and can be used without blending limit. It is cost-effective, readily deployable and has convenient storage and handling properties that does not require changes to the existing infrastructure. The onshore production of renewable diesel will enhance Australia's overall fuel security and reduce reliance on imported fuels, while also providing a commercially viable and urgent pathway to net-zero for many hard to abate sectors.

[*] *When used in neat form (i.e. unblended) and calculated with established life cycle assessment (LCA) methodologies, such as CORSIA methodology.*

We thank the Department of Climate Change, Energy, the Environment and Water (DCCEEW) for the opportunity to provide feedback on the proposed NGER Scheme updates and make the following comments and recommendations:

1. Inclusion of RPD and RPK

   We strongly welcome the inclusion of Renewable Paraffinic Diesel (RPD) and Renewable Paraffinic Kerosene (RPK) as fuel types under the NGER Regulations. RPD is commonly referred to as 'renewable diesel', while RPK falls within a class of fuels commonly referred to as SAF. Under the proposed amendments, RPD and RPK are noted as having the same technical parameters as their respective petroleum-derived equivalents, except both RPD and RPK are assigned a zero carbon dioxide emission factor. This approach is consistent with other biogenic fuel types and reflects the fact that their combustion releases carbon which is absorbed by their biogenic source materials from the atmosphere during their life.

   The inclusion of RPD and RPK within the NGER Regulations will enable the consumption of these biofuels to be reportable which can serve as a key market signal to encourage both industry and government stakeholders to support the development, uptake and progression of these fuels.

2. Definitions of RPD and RPK

   The following definitions are proposed to be included in the NGER Regulations:

   > *renewable paraffinic diesel* means a biofuel that:
   > (a) is produced by hydrotreatment, gasification, pyrolysis or other chemical, biochemical and thermochemical pathways; and
   > (b) consists mainly of alkane hydrocarbons; and
   > (c) is suitable for use as a substitute for diesel oil.
   > Note: Renewable paraffinic diesel is not biodiesel.
   >
   > *renewable paraffinic kerosene* means a biofuel that:
   > (a) is produced by hydrotreatment, gasification, pyrolysis or other chemical, biochemical and thermochemical pathways; and
   > (b) consists mainly of alkane hydrocarbons; and
   > (c) is suitable for use as a substitute for kerosene for use as fuel in an aircraft.

   We recommend the DCCEEW considers expanding the above definitions so that they can be interpretated to include emerging technology, feedstock options and production pathways. A broad definition of these fuel types could lower the barrier to entry and attract investment that supports these nascent industries through to maturation.

   It is also recommended that the term "Paraffinic" be removed from the titles "Renewable Paraffinic Diesel" and "Renewable Paraffinic Kerosene". This term could be interpreted as an additional requirement that these emerging fuel types must meet, potentially deterring some stakeholders from entering the market. Hence, they should not be defined as "consisting mainly of alkane hydrocarbons". Given there is an approved pathway under ASTM D 7566 for jet fuels containing aromatics (Annex 4 SPK/A). It would be preferable to describe their composition as "consisting mainly of hydrocarbons" or in the alternative "consisting mainly of alkanes and other hydrocarbons".

3. Inclusion of Renewable Fuel Oil

   We recommend the addition of Renewable Fuel Oil in the NGER Regulations.

Renewable very low sulphur fuel oil (VLSFO) used for marine and land based applications growing in demand domestically and should be added to the current workplan. Renewable VLSFO are well suited to meeting the new low sulphur requirements for fuels as stipulated by the IMO due to the low sulphur content in the renewable feedstocks.

Definitions of Renewable Fuel Oil

The following definition is proposed to be included in the NGER Regulations:

renewable fuel oil means a biofuel that:

(a) is produced by hydrotreatment, gasification, pyrolysis, hydrothermal liquefaction or other chemical, biochemical and thermochemical pathways; and

(b) is suitable for use as a substitute for fuel oil in marine and land based applications.

4. Adoption of market- based accounting

We strongly urge the DCCEEW to adopt a market-based accounting process, as it is a crucial step for successful investment and uptake of renewable fuels. We recommend that consumers who purchase renewable fuel receive the "Scope 1" emissions benefit since they pay a premium to purchase the fuel directly. Without a market-based approach, influential industry players will not receive the emission benefits, making the industry prohibitively expensive to enter. The success of the renewable fuels industry depends heavily on the implementation of a market-based approach. Excluding this approach from the NGER update would seriously impede the progress of renewable fuels and hinder Australia's decarbonisation efforts.

Bioenergy Australia encourages the DCCEEW to look out to 2050 and ensure all policy and programs are not restrictive in their nature, but inclusive of all significant current and future opportunities.

Australia is uniquely placed to benefit from the development of SAF and renewable diesel, but it must act swiftly to maximise its domestic potential as well as strategically positioned itself to achieve net zero carbon emissions by 2050. Australia must reduce its reliance on traditional energy sources and fast-track emissions reduction, making the pursuit, development, and deployment of renewable liquid fuel, in Australia, of critical importance.

Thank you for taking the time to consider our submission. Any questions or request for further assistance are welcome and can be directed to shahana@bioenergyaustralia.org.au.

Sincerely,

Shahana McKenzie, CEO Bioenergy Australia