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## **Bioenergy Australia Submission – Energy Savings Scheme: 2022 Rule Change**

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.

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 bioenergy technologies under the LETS, demonstrating confidence and driving investment.

Bioenergy Australia thank the NSW Office of Energy and Climate Change for the opportunity to provide feedback on the proposed rule change for the Energy Savings Scheme. We are highly supportive of the inclusion of new definitions for biofuels, biogas and biomass and have responded to the relevant consultation questions below.

### *Question 5: Do you agree with the proposed fuels?*

Bioenergy Australia are supportive of the inclusion of biofuel, biogas, biomass and on-site renewables as fuels under the Energy Savings Scheme. This is important to enabling financial incentives for investment in energy saving projects that rely on these technologies and will assist the development of the bioenergy sector in New South Wales.

### *Question 6: Do you agree with the proposed fuel definition?*

Bioenergy Australia are highly supportive of the inclusion of definitions for biofuel, biogas, biomass and on-site renewables under the ESS, however, these definitions should be more detailed to better guide investment. For example, biogas is a renewable source of energy produced from the anaerobic (oxygen free) digestion of organic matter and can be made from a variety of organic resources, including industrial waste, agricultural waste, and biomass.<sup>1</sup> Furthermore, it would be beneficial to include biomethane in the definition of biogas.<sup>2</sup> Biogas can be upgraded by removing the CO<sub>2</sub>

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<sup>1</sup> Enea Consulting for Bioenergy Australia, 2019, "[Biogas opportunities for Australia](#)"

<sup>2</sup> Enea Consulting and Deloitte for ARENA, 2021, "[Australia's Bioenergy Roadmap](#)"

alongside other components to leave only methane, which is the main component of natural gas.<sup>3</sup> This product is called biomethane and can be delivered to consumers through the natural gas grid to decarbonise their energy supply. Biofuels should also be defined in more detail. For example, conventional biofuels are usually considered to be biodiesel produced from vegetable oils or ethanol produced from sugarcane, corn or wheat.<sup>4</sup> Whereas, advanced biofuels include renewable diesel, green diesel, Fischer-Tropsch diesel, bio-jet fuel and bio-gasoline and are compatible with the existing petroleum infrastructure.<sup>5</sup>

*Question 7: Do you agree with the proposed amendment to clause 5.4(f)?*

BA agree with the proposed amendment to clause 5.4(f) to ensure financial incentives are directed at activities that increase energy consumption of renewable fuels rather than non-renewable energy where possible.

*Question 8: Do you agree with the proposed deletion of clause 5.4(g)?*

BA are supportive of allowing projects that can create tradeable certificated under the *Renewable Energy (Electricity) Act 2000 (Cth)* to also partake in the ESS.

*Question 9: Do you agree with the proposed amendment to clause 5.4(h)?*

As identified by Australia's Bioenergy Roadmap, released by the Australia Government in 2021, all biogas produced in Australia is currently vented, flared or used for heat and electricity generation. Until there is a regulatory environment in which biogas can be upgraded to biomethane for injection into the gas grid, clause 5.4(h) should not be amended.

*Question 11: Do you agree with the inclusion of the proposed clause 5.4(m)?*

Bioenergy Australia recommend that projects should be rewarded for the export of renewable energy to the grid to encourage the widespread use of renewable energy. Biomethane is a critical renewable gas that will be key to the rapid decarbonisation of hard-to-abate sectors as it is immediately deployable using existing gas infrastructure.<sup>6</sup> This renewable gas can be captured from biogas that is produced through the natural breakdown of organic wastes in landfills or in anaerobic digestion facilities, which aid the speed and control of material decomposition.<sup>7</sup> Australia's Bioenergy Roadmap identified that bioenergy could account for 23% of the total pipeline gas market by 2030.<sup>8</sup> It is critical that the Energy Saving Scheme encourages the development of the biomethane industry to facilitate its use as an immediately injectable renewable gas for the hard-to-abate gas network.

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<sup>3</sup> GHD for Bioenergy Australia, 2022, ["Fertile Ground: The role of digestate in Australia's circular economy"](#)

<sup>4</sup> CEFC and ARENA, 2019, ["Biofuels and Transport: An Australian opportunity"](#)

<sup>5</sup> Ibid.

<sup>6</sup> Helmont Energy for Bioenergy Australia, 2022, ["Gas Injection Review"](#)

<sup>7</sup> GHD for Bioenergy Australia, 2022, ["Fertile Ground: The role of digestate in Australia's circular economy"](#)

<sup>8</sup> Enea Consulting and Deloitte for ARENA, 2021, ["Australia's Bioenergy Roadmap"](#)

*Question 12: Do you agree with the inclusion of the proposed clause 5.4(n)?*

Bioenergy Australia support the requirement that gaseous fuel purchased or supplied by the Gas Network is under the representation from the seller that there will be a reduction in greenhouse gas emissions due to particular properties of the fuel.

*Question 13: Do you agree with the inclusion of the proposed clause 5.4(o)?*

BA do not support the exclusion of native forest bio-materials from clause 5.4(o). Bioenergy Australia recommend that native forest biomass “waste,” i.e., residues from sustainable forest management activities, remains an eligible feedstock under the Energy Savings Scheme. As identified by the United Nations’ Intergovernmental Panel on Climate Change, “the use of residues and organic waste as bioenergy feedstock can mitigate land use change pressures associated with bioenergy deployment.”<sup>9</sup> We emphasise that this native forest biomass residue must be collected sustainably in accordance with the Renewable Energy (Electricity) Regulations 2001 (REE Regulations) amongst other frameworks. This ensures sustainable forest management strategies contribute both to the maintenance and improvement of forest carbon stocks and utilisation of waste for energy.<sup>10</sup> To achieve Australia’s ambitious decarbonisation goals, it is critical that all available feedstocks are used in a sustainable manner to generate renewable energy and should be included in the Energy Saving Scheme.

Thank you for the opportunity to comment on the consultation for the Energy Savings Scheme 2022 Rule Change. Please send any comments or queries to myself at [shahana@bioenergaustralia.org.au](mailto:shahana@bioenergaustralia.org.au) or 0439 555 764.

Sincerely,



Shahana McKenzie, CEO Bioenergy Australia

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<sup>9</sup> Intergovernmental Panel on Climate Change, 2019, [“Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems”](#)

<sup>10</sup> Intergovernmental Panel on Climate Change, 2007, [“Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change”](#)