

Energy (Renewable Transformation and Jobs) Bill 2023

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Committee Secretary
Transport and Resources Committee
Parliament House
George Street
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Dear Committee Secretary

RE: Energy (Renewable Transformation and Jobs) Bill 2023

On behalf of ResourceCo Energy, please accept our submission to the Transport and Resources Committee's inquiry into the *Energy (Renewable Transformation and Jobs) Bill 2023*.

Founded in Adelaide and Australian-owned, ResourceCo is a global leader in the recovery and re-manufacturing of primary resources, extracting maximum value from materials otherwise destined for landfill, working in four sectors – energy, recycling and waste, soil reuse and recycling, and tyre recycling.

ResourceCo has an established and growing presence in Queensland. ResourceCo is developing a resource recovery facility (RRF) at Hemmant in the Lytton electorate, with the support of a grant from the Queensland Government's Resource Recovery Industry Development Program (RRIDP), and it has secured an approval for an energy recovery facility (ERF) adjacent to the RRF. The ERF has been developed in accordance with the Waste from Energy guidelines released by the Queensland Government in late 2021 and is the only plant approved under the guidelines.

<https://resourceco.com.au/what-we-do/energy/>

The ERF would use Process Engineered Fuel (PEF), a largely biogenic feedstock that mainly consists of residual timber, paper, plastic and cardboard waste produced from dry construction and demolition (C&D), and commercial and industrial (C&I) waste materials.

The 14-megawatt ERF will generate renewable electricity for export to electricity distribution network and nearby industry; with 70% derived from renewable biomass.

The ERF will divert approximately 130,000 tonnes of waste from landfill and provide an overall carbon emissions reduction of 100,000 tonnes of CO₂-e each year. It will create 260 direct and 290 indirect jobs during construction phase and up to 20 operational jobs.

Queensland Energy and Jobs Plan and *Energy (Renewable Transformation and Jobs) Bill 2023*

ResourceCo commends the Queensland Government on the development of the Queensland Energy and Jobs Plan (QEJP) and its commitment to 50% renewable energy by 2030, 70% by 2032 and 80% by 2035 and the phase out of publicly owned coal-fired power generation by 2035.

Through its legislation – the *Energy (Renewable Transformation and Jobs) Bill 2023* – the Government is legislating the renewable energy targets, as well as public ownership targets and other pillars for delivery of QEJP's renewable energy transition.



ResourceCo Energy recommends the Bill adopt the current and longstanding definition of “renewable energy source” from the Commonwealth *Renewable Energy (Electricity) Act*.

Definition of renewable energy source

Energy from waste is a renewable energy source. The Queensland Government’s Waste and Resource Recovery Strategy acknowledged that: *“The deployment of certain types of energy recovery technology may also contribute to achieving the goal of powering Queensland with 50 per cent renewable energy by 2030.”*

The Energy from Waste Guidelines (2021) were more explicit where it stated on page 3 that: *“The path to achieving a zero net emissions future includes a commitment to generate 50 per cent of Queensland’s energy from renewable sources by 2030. Under the Commonwealth Renewable Energy (Electricity) Act 2000, energy derived from organic wastes may be regarded as renewable energy. This includes energy derived from wood waste, agricultural waste, food and food processing waste, biomass-based components of municipal waste, landfill gas, sewage gas, and biomass-based components of sewage. This type of energy is also referred to as ‘bioenergy’. To the extent that electricity generated from waste meets this definition, it will contribute to the Queensland Government’s commitment to reach 50 per cent renewable electricity generation by 2030. Energy derived from waste products made from fossil fuels (e.g. traditional plastics) does not count as renewable energy or bioenergy and would not contribute to the renewable energy target.”*

The Bill before the Parliament and the Committee proposes to define “renewable energy source” in Schedule 1 on page 131 of the Bill to be:

“renewable energy source means any of the following sources of renewable energy—
(a) solar;
(b) wind;
(c) biomass;
(d) geothermal;
(e) hydropower, other than pumped hydro energy storage;
(f) another source prescribed by regulation.”

This is a more expansive definition than on page 97 of the Exposure Draft of the Bill that proposed define “renewable energy source” as:

“renewable energy source means any of the following sources of energy—
(a) solar;
(b) wind;
(c) biomass;
(d) another source prescribed by regulation”

ResourceCo Energy urges the Committee to consider adopting the Commonwealth legislation definition – Section 17 of the *Renewable Energy (Electricity) Act 2000*, consistent with the Queensland Government’s Energy from Waste Guidelines and to provide maximum cohesion between State and Federal Government laws, policies and programs.

17 What is an eligible renewable energy source?

- (1) The following energy sources are eligible renewable energy sources:*
 - (a) hydro;*



- (b) wave;*
- (c) tide;*
- (d) ocean;*
- (e) wind;*
- (f) solar;*
- (g) geothermal aquifer;*
- (h) hot dry rock;*
- (i) energy crops;*
- (j) wood waste;*
- (k) agricultural waste;*
- (l) waste from processing of agricultural products;*
- (m) food waste;*
- (n) food processing waste;*
- (o) bagasse;*
- (p) black liquor;*
- (q) biomass based components of municipal solid waste;*
- (r) landfill gas;*
- (s) sewage gas and biomass based components of sewage;*
- (t) any other energy source prescribed by the regulations.*

The key advantage would be to ensure Government-owned corporations, who will deliver the QEJP targets for renewable energy generation, will be able to choose from the maximum sources of renewable energy, including energy from waste assets that produce baseload renewable electricity in metro locations close to load requirements such as ResourceCo's Hemmant based ERF development.

Public ownership strategy

The Bill – Section 13 - stipulates that for electricity generation assets the public ownership strategy will target by 2035 “a stated percentage that is equal to or more than 54%”.

The Bill defines “generation assets” to be:

“assets that constitute a generating system for which a person is registered as a generator or intermediary under the National Electricity Rules, other than the following—

(a) assets that are—

(i) predominantly used to generate electricity for conversion to a form of energy suitable for export; and

(ii) prescribed by regulation;

(b) a generating system with a nameplate rating of less than 30MW;

(c) a generating system comprised of generating units with a combined nameplate rating of less than 30MW;

(d) an asset used for pumped hydro energy storage, including a deep storage asset;

(e) another asset that directly or indirectly uses electricity to create a stored source of energy that may later be converted by the generating system to electricity.”

ResourceCo Energy recommends the Government clarify, in the Bill and/or the Third Reading Speech, that ownership includes generation assets that utilise biomass/bioenergy based feedstock generation assets such as ResourceCo's approved ERF as it satisfies the Bill definition of generation assets, is located in a metro area and can provide 24 hours per day of baseload renewable electricity to the grid whilst does not require any transmission upgrades.



If ResourceCo can provide further information or clarification, please contact me via the contact details below. We would appreciate the ongoing engagement.

Henry Anning CEO - ResourceCo Energy Systems

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