



26 August 2019

Department of Environment and Science Emailed to: wastepolicy@des.qld.gov.au

To whom it may concern

Submission: Energy from Waste Policy Discussion Paper

Thank you for the opportunity to comment on the Queensland Energy from Waste (EfW) Policy Discussion Paper. This submission is made on behalf of the Queensland Conservation Council (QCC).

QCC is the state's peak non-government environment organisation, with some 50 member groups across the state including nine regional councils, as well as thousands of supporters. Our mission is to protect, conserve and sustain Queensland's unique natural environment, making sure that our wildlife and the places we love continue to thrive for future generations. A key aspect of this is the promotion of sustainability across communities and businesses, including meaningful waste and emissions prevention and reduction activities.

QCC supports the Queensland Government's vision for Queensland to become a zero-waste society and we welcome this opportunity to further explore the potential role of EfW technologies to meet the state's waste reduction targets. We also appreciate the well intended principles of the EfW Discussion Paper. However, we believe that minimising risks to human and environmental health and working to not undermine recycling and reuse will prove difficult given the nature of most EfW technologies.

We see the risk presented by proponents of EfW incineration seeking to exploit governments panicked response to China's decision to ban contaminated mixed paper and plastic recyclables from Australia. We would like to see the Queensland Government take the time to develop a rigorous EfW policy with supporting regulations that promote community and environmental interests.

This submission outlines our responses to questions from the Discussion Paper for consideration by the Department of Environment and Science (DES) in developing a rigorous EfW policy.

1. Do you agree that energy should be extracted from residual waste materials rather than disposing of those materials to landfill, if there are no other available alternatives for reusing or recycling the waste materials?

QCC is glad to see the EfW Discussion Paper recognises that avoiding, reusing and recycling materials is more important than recovering energy, and that technologies like anaerobic digestion are preferred options under the State's EfW framework. QCC agrees that technologies such as anaerobic digestion do not undermine re-use or recycling and can play a role in a circular economy. However, in some cases energy extraction from non-recyclable materials must be prevented to avoid harm.

For instance, mixed waste incineration and refuse derived fuels are not acceptable sources for energy production. Mixed waste incineration plants require large upfront and ongoing investment and therefore require large, guaranteed waste streams to maintain throughput and recoup investment. This undermines genuine recycling industries, as has been seen in Europe where plants import waste and often burn materials which could be recycled. QCC recommends that Queensland ban mixed waste incineration to prevent incentivising unsustainable resource use and poor waste management, along with the resulting toxic emissions and ash dumps. Alternatively, a tax on incinerated waste may be a useful policy instrument to ensure the hierarchy of reduce, reuse, recycle is prioritised.

Waste incineration technologies also distract from genuine renewable energy contributions towards Queensland's 50% by 2030 renewable energy target and emission reduction targets. QCC regards greenhouse gas emissions as the largest threat to environmental sustainability and would like to see the danger presented by greenhouse gas emissions from mixed waste incineration and waste derived fuels acknowledged under the EfW policy.

Another key challenge not mentioned under the EfW Policy is the loss of habitat to clearing for the development of biofuel feedstock and EfW infrastructure. QCC recommends that Queensland fully ban the use of native forest feedstocks, including clearing of high conservation value regrowth at EfW facilities. We recommend the Queensland Government conduct a comprehensive analysis for the most beneficial use of agricultural and other organic waste streams for delivering greenhouse gas emissions savings, along with waste reduction targets. For instance, there is emerging research into organic waste retention practices for improvements to carbon sequestration in soil, along with soil health and food production co-benefits. Any potential benefits to high-value agriculture and ecological assets need to be prioritised over EfW purposes.

A choice needs to be made by the Queensland Government if it will pursue genuine renewable energy, recycling and material reuse operations that will help in meeting the zero-net emissions by 2050 target, or lock in more polluting infrastructure for future generations. To be consistent with Queensland's Waste and Climate Transition strategies, we see greater potential to deliver genuine emissions reductions and achieve Queensland's 2030 waste reduction goals by investing in clean energy alternatives and promoting improvements to reuse, composting and recycling services to deliver a circular economy (Principle 2).¹

2. Does the proposed three-pathway framework for EfW technologies provide an appropriate, risk-based approach? What additional or alternative characteristics of EfW proposals should be considered?

Under Pathway 1,QCC sees a need for a compliance review of Queensland's existing and operational EfW projects. Queensland's conservation sector has witnessed breaches to conditions of existing operations and has little confidence in the existing regulatory framework. Unless we know there is adequate regulation and resourced enforcement that ensures existing EfW operations are taking steps to minimise risks to human and environmental health and to not undermine recycling and reuse, we cannot trust that new standards will be implemented for any new EfW proposals (Principle 1).

¹ See the QLD DES Waste Management and Resource Recovery Strategy 2019.

To deliver an EfW Policy that will meet the needs of future Queenslanders, QCC recommends that DES prioritise making existing EfW plants fit for purpose before facilitating growth in the polluting industry. We would like to see evidence of effective investigations into breaches of conditions for existing and approved operations and transparent plans for ongoing enforcement of improved standards.

QCC looks forward to seeing a clear and rigorous EfW policy, described under Pathway 2, that is effective at deterring inappropriate and risky projects and supports ongoing monitoring, including regular independent audits across the industry, in addition to proposed requirements for proponents to conduct regular environmental and health risks assessments. In response to Pathway 3, we would like to see application of the precautionary principle whereby the true nature of adverse health and environmental impacts, including greenhouse gas emissions, are considered.

Q3. How should a proposal or technology type transition from Pathway 3 (demonstration) to Pathway 2?

QCC suggests transparent and independent monitoring, reporting and evaluation over a probationary period to allow for a thorough risk analysis before any approvals to adopt new technologies are made. Proposal evaluations need to be directed by strict criteria that thoroughly accounts for environmental and human health risks and avoids any undermining of recycling and reuse, including any downstream effects, such as incentivising waste generation for fuel supply streams.

4. What role should facility operators, collection contractors and local councils be expected to play in ensuring that only appropriate residual waste is accepted for energy recovery?

The state's EfW framework needs to outline clear parameters for local councils along with processes for the identification of appropriate residual waste from the key waste streams outlined under Table 7 of the Discussion Paper. Principle 3 points to the need of a clear definition of "residual wastes" and parameters for what is "not practically or economically viable to recycle". Assistance and training for collection contractors and facility operators would be required to ensure the parameters are applied. Any sorting would need to take place well before reaching a waste incineration plant, as it would be in their interest to source a large fuel load.

QCC also recommends that more support be provided to local councils to provide community education and incentive programs to reduce waste production and to sort both domestic and commercial resource recovery streams. Greater investment is also needed for local councils and regions to monitor waste from point of entry to the recovery stage.

5. What should the requirements be for safeguarding current and future resource recovery? Does the solution involve source-segregation, pre-processing or both?

QCC would like to see Queensland's EfW policy promote waste avoidance, reuse and recycling above energy recovery to safeguard genuine resource recovery. This must involve ruling out technologies, such as mixed waste incineration, that don't support reuse and recycling. Safeguarding current and future resource recovery calls for both source-segregation and pre-processing. The EfW policy needs to implement measures to encourage separation at the source and discourage recyclable and reusable waste from going to landfill or EfW incineration facilities. QCC would also like to see the introduction of Government procurement policies and business incentives to develop further markets for recycled materials. We look forward to seeing products of the queensland material resource recovery industry development program and the creation of viable markets for remanufactured materials.

6. Should the Queensland Government ban specific materials from EfW facilities, or from both landfill and EfW facilities?

As mentioned above, QCC would like to see an EfW framework that promotes waste avoidance, reuse and recycling above energy recovery. We believe the Queensland Government must prioritise investment in viable recycling industries. Hence, bans on specific materials from EfW and landfill should apply to all materials that can serve a more beneficial use, for instance, through the production of recycled and remanufactured materials. Materials that are toxic when burned should also be banned from EfW facilities.

We also encourage the Queensland Government to advocate for a consistent national approach to reduce the production and entry of non-recoverable waste into the economy and avoid the need for landfill or the adoption of EfW incineration technologies. This could involve the establishment of product stewardship schemes under the *Product Stewardship Act 2011*.

7. Should thermal EfW processes be required to meet the European R1 Criteria? Why/why not?

8. Do you agree that the European BREF for Waste Incineration and BREF for Waste Treatment are appropriate guidance documents for Pathway 2 technologies? Why/why not?

In response to questions 7 and 8, QCC believes any risky industrial processes, including EfW, need to be held to account against international best practice environmental protection standards. Any "guidance documents" need to be backed by regulations, resourced enforcement, regular compliance checks and training programs for on-ground implementation.

We would like to see the European Environmental Bureau recommendations² on the revised BREF adopted for waste incineration and treatment processes. However, a meta.eeb.org article from July 2019 notes the revised BREF does not provide clear enough guidelines for the management of hazardous or biologically treated wastes.³ Additional measures would need to be incorporated to Queensland's standards for EfW technologies.

Even with best practice standards, as has been seen in Europe where the technology is considered mature, there are recurring exceedances and breaches of emissions and pollution limits. There must be a clear resource commitment from Government to support meaningful implementation of standards. Again, we recommend that funding be directed to genuine clean energy and resource recovery projects in place of polluting EfW technologies.

² Implementing EU environmental standards for waste treatment, Guidance for Non-governmental Organisations on the EU Waste Treatment BREF

³ https://meta.eeb.org/2019/07/25/how-to-be-a-waste-watchdog/

9. What aspects of the current planning and assessment framework do you think require clarification?

QCC is concerned by references in the EfW Discussion Paper to "streamlining" approvals processes, highlighting the Government's desire to push through EfW proposals as quickly as possible. Across the state, we are witnessing communities becoming increasingly frustrated and discontented with assessment against performance- based planning codes.

QCC notes that the majority of EfW facilities are either new technology or new to Queensland and demand rigorous assessment rather than "streamlined approvals". We would like to see a whole-of-government approach to assessing EfW proposals that accounts for community and environmental, not just State Development, interests.

Environmentally Relevant Activities (ERAs) should be more nuanced and should not be permitted in areas where the activities are likely to adversely impact sensitive receivers such as residential communities in the ordinary course of operation or where an accident has catastrophic potential including property damage, serious adverse health outcomes or fatality.

Environmental authority conditions which put the onus on sensitive receivers such as residents to prove that a nuisance is coming from a particular source should be abandoned in favour of conditions which state that operators are responsible for not permitting a nuisance to leave their boundaries. This should be backed up by effective, regular and independent monitoring and the application of adequate penalties that discourage continued offence.

We would also like to see EfW facility's Site Based Management Plan's (SBMP) become relevant working documents that are demonstrably and consistently adhered to and regularly tested by Council and DES.

10. How can the planning process support effective community engagement?

Queensland's future EfW policy needs the support of a regulatory framework that promotes the fair treatment of people and the environment throughout the planning and development process. Effective community engagement not only requires early opportunities for community input, but also transparent sharing of information and education opportunities for members of the community to develop an understanding of the workings of a proposal and any associated risks. For any EfW proposals, QCC recommends establishing broad-based citizens' panels to participate in the planning, development and review processes and provide voices for environmental and community interests.

11. What role should the government play in assessing significant EfW proposals?

Government should facilitate a transparent assessment process that allows for public scrutiny. EfW proposals must not be code assessable under the current framework, but regulated as impact assessable under the State Government administered ERAs (as noted under question 9). Any assessment should also evaluate potential impacts throughout the life of the project, including downstream impacts such as from potential fuel sources (i.e. the use of native forestry bi-products).

12. Do you agree with the proposed stakeholder engagement principles and responsibilities? Is there anything you would add or change?

QCC agrees that "proponents of EfW facilities must demonstrate that they have engaged appropriately and transparently with communities impacted by the proposed facilities." However, we would like to see a requirement for all proponents to deliver a clear and detailed engagement plan that supports early and genuine engagement and steps to keep impacted communities informed for the lifetime of the project. Also, as mentioned in response to question 10, QCC recommends the establishment of citizens' panels with their meaningful participation in EfW development processes supported.

13. How could proponents demonstrate that they have followed the proposed principles of engagement?

We suggest that proponents achieve endorsement from the citizens panel and illustrate how the engagement process influenced or changed their initial EfW proposal.

14. Should proponents of EfW facilities be required to demonstrate that they have obtained a social licence to operate the proposed facility? How would this be demonstrated?

Social licence should always be obtained by proponents of potentially harmful developments. We suggest that strict rules of engagement, together with penalties for misleading the public would be needed to safeguard the integrity of the assessment process. A citizens' panel, mentioned in response to earlier questions, could assist with demonstrating any proponents achievement of social licence.

QCC sees the potential for a rigorous EfW policy to contribute to delivering a zero-waste society and circular economy in Queensland. Our vision is for national recycling conditions on all manufactured goods and packaging and proactive local material recovery and collection systems with thriving secondary resource markets. We encourage investment in genuine resource recovery and recycling processes and truly clean energy (such as solar and wind) rather that EfW incineration technologies.

We ask that QCC be informed of any developments and further consultation on Queensland's future EfW Policy. Should you wish to discuss any aspect of this submission or contact us, please phone 07 3846 7833 or email lisa.cliff@qldconservation.org.au.

Yours Sincerely

Linally

Lisa Cliff Project Officer Queensland Conservation Council