

Response to the Energy from Waste report from the NSW Chief Scientist and Engineer

The NSW Government supports the recommendations of the Chief Scientist and Engineer's Energy from Waste report

The NSW Government welcomes the Chief Scientist and Engineer's report on energy from waste. The report was commissioned by the NSW Government to ensure that energy from waste proposals adopt international best practice standards and controls to protect human health and the environment.

The report responds to the NSW Legislative Council's recommendation that the NSW Government establish an expert advisory body on energy from waste chaired by the Chief Scientist to examine and report on the energy from waste regulatory framework. This is to create certainty for the market and communities (Recommendation 19 of the final report of NSW Legislative Council Parliamentary Inquiry into Energy from Waste technology, March 2018).

The Chief Scientist and Engineer commissioned an independent review by Sydney University of proposed best practice air emissions limits for energy from waste in NSW. Advice was also sought from Sydney University on technological challenges and developments in aligning energy from waste facilities with NSW government policies relating to waste, recycling, and net-zero emissions. The outcomes of this review and expert advice are attached to the Chief Scientist and Engineer's report. The Chief Scientist and Engineer has also provided additional advice (November 2020) on the recommendations of his Energy from Waste report (May 2020).

The NSW Government supports the recommendations of the Chief Scientist and Engineer's report and additional advice provided.

The NSW Government commits to implementing the recommendations as outlined in Table 1 attached.

Table 1. Implementation of the Chief Scientist and Engineer’s Energy from Waste report recommendations

Recommendation	Government response	Timing
<p>1 Following expert review, Figure 1 (the framework) and Figure 2 are finalised and are:</p> <ul style="list-style-type: none"> • recognised as a current description of the baseline assessment requirements and regulatory processes for energy from waste (EFW) facilities in NSW • used as working documents that are updated as required • made publicly available, including through relevant government agency websites. <p>The Chief Scientist and Engineer’s additional advice (November 2020) recommends the explanatory guide to the assessment requirements and regulatory processes for EFW projects in NSW should be made available on relevant agency websites.</p>	<p>The guide to the NSW Energy from Waste Framework, including Figures 1 and 2, will be published on the NSW Environment Protection Authority (EPA) website, and a link to the EPA website will be made available on the Department of Planning, Industry and Environment website.</p>	<p>In progress</p>
<p>2 That the NSW Environment Protection Authority sets out in writing the process for establishing and updating best practice air emission limits for EFW facilities and makes this information publicly available. This process should include reference to guidance on international best practice for plant design and operation, including flue gas technologies, to achieve these limits and clarity on the frequency with which limits are reviewed.</p> <p>The draft best practice air emission limits are stated in the upper right of Figure 1.</p>	<p>The Energy from Waste Policy Statement will be updated to incorporate the air quality recommendations including best practice air emission limits.</p> <p>Air emission limits will also be implemented in conditions of an environment protection licence issued under the <i>Protection of the Environment Operations Act 1997</i> and supported by conditions of the development consent.</p>	<p>In progress</p> <p>Ongoing</p>
<p>3 Expert technical advice is sought on NSW requirements as set out in Figure 1, Table 1 and Table 2, including the draft best practice air emission limits for EFW facilities and whether these draft limits are best practice. The advice should have regard to the approved methods for the sampling and analysis of air pollutants in NSW (2007), any updates to this as they emerge, and any technical impacts or changes of note arising from the 2019 European Commission Best Available Techniques (2019 EU BAT).</p> <p>The Chief Scientist and Engineer’s additional advice (November 2020) recommends the limits should be reviewed within three years.</p>	<p>The independent expert review of the draft NSW best practice air emission limits for EFW plants has been completed.</p>	<p>Completed</p> <p>Review by end 2023</p>

Recommendation	Government response	Timing
4 Work is undertaken to understand the mix of incentives influencing consumer and industry behaviours to promote adherence to the waste hierarchy. This could potentially be addressed through the development of the 20-Year Waste Strategy.	This will be delivered to align with the outcomes of the 20 Year Waste Strategy.	Ongoing
5 A life cycle assessment is made a requirement for all proposed EFW facilities and the findings considered in the regulatory assessment process.	This will be addressed by requiring further information for current projects and in the Planning Secretary's Environmental Assessment Requirements for future projects	Ongoing
6 Approved NSW EFW proposals are required to develop a sampling and reporting program for waste inputs. The Chief Scientist and Engineer's additional advice (November 2020) recommends that ideally, this requirement would form part of the SEARs. Alternatively, these plans should be required to be developed and approved prior to a plant being commissioned.	This will be addressed by requiring further information for current projects and in the Planning Secretary's Environmental Assessment Requirements for future projects. A sampling and reporting program for waste inputs will be implemented in conditions of an environment protection licence issued under the <i>Protection of the Environment Operations Act 1997</i> and supported by conditions of a development consent.	Ongoing
7 A pathway is established and communicated to enable asset and process innovations to be tested and trialled. Requirements should be commensurate with the level and impact of the proposed innovation. Any innovation must align with NSW policies relating to waste, decarbonisation and the circular economy.	This will be delivered to align with the outcomes of the 20 Year Waste Strategy.	2022

© State of New South Wales through Department of Planning, Industry and Environment 2021. The information contained in this publication is based on knowledge and understanding at the time of writing (March 2021). However, because of advances in knowledge, users should ensure that the information upon which they rely is up to date and to check the currency of the information with the appropriate departmental officer or the user's independent adviser.