



## Calculating emissions produced by industrial process heat

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The NZ Government has released a National Policy Statement (NPS) and National Environmental Standard (NES) for Greenhouse Gas (GHG) Emissions from Industrial Process Heat, that came into force 27 July 2023. Councils are now required to factor in emissions produced by industrial process heat when assessing air discharge resource consent applications. The regulations provide a nationally consistent framework for reducing greenhouse gas emissions from industrial process heat.

### National Policy Statement for Greenhouse Gas Emissions from Industrial Process Heat 2023

The National Policy Statement for Greenhouse Gas Emissions from Industrial Process Heat<sup>1</sup> was notified in the New Zealand Gazette on 29 June 2023 and comes into force on 27 July 2023. Its objective is to reduce greenhouse gas emissions by managing the discharge to air from the production of heat for industrial processes. The NPS sets out the national objective and supporting policy framework to guide decisions on resource consents required under the National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat.

### National environmental standards for greenhouse gases from industrial process heat

Changes were made to the Resource Management Act 1991 (RMA) in November 2022 to enable regional and local authorities to consider the effects of greenhouse gas emissions on climate change from industrial heat plant.

The National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat<sup>2</sup> will support councils in their decision-making on discharges to air of greenhouse gas emissions from industrial sectors using process heat. The standards set out nationally consistent rules for specific greenhouse gas emitting activities from industrial process heat. They also set out requirements for granting resource consents and setting resource consent conditions. They also describe specific requirements for the purpose, content and review of an 'emissions plan'.

The standards provide nationally consistent policies and requirements for reducing greenhouse gas emissions from industries using process heat by:

- prohibiting discharges of greenhouse gases from new low to medium temperature coal boilers immediately and from existing coal boilers after 2037 (after this date no further consents can be issued)

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<sup>1</sup> <https://environment.govt.nz/publications/national-policy-statement-for-greenhouse-gas-emissions-from-industrial-process-heat-2023/>

<sup>2</sup> National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat) Regulations 2023 <https://www.legislation.govt.nz/regulation/public/2023/0165/latest/LMS605249.html>

- requiring resource consent to be held for new and existing fossil fuel boilers that emit 500 tonnes and above of CO<sub>2</sub>-e per year, per site.
- requiring resource consent applicants to prepare and implement greenhouse gas emission plans and set out actions to reduce emissions.

The standards work alongside the National Policy Statement for Greenhouse Gases from Industrial Process Heat (NPS).

#### Industrial process heat

- a) means thermal energy that is used
  - (i) in industrial processes, including in manufacturing and in the processing of raw materials;  
or
  - (ii) to grow plants or other photosynthesising organisms indoors; but
- b) does not include thermal energy used in the warming of spaces for people's comfort (for example, heating of commercial offices).

Solid biofuel (Wood fuel) is produced from a wide range of sources of biomass. Biomass as sourced will usually require some treatment before it is a fuel suitable for combustion in specific heat plant. Once treated It is often referred to as wood fuel as wood is the most common source of biomass for producing solid biofuels.