

National Direction for Greenhouse Gas Emissions from Industrial Process Heat

Attributes of a suitably qualified person

Introduction

This information sheet has been created for council and industry use. This guidance will help industry and regional councils identify the attributes of suitably qualified persons to review emissions plans, required in the [National Environmental Standards for Greenhouse Gas Emissions from Industrial Process Heat](#) (NES-IGHG).

It will also allow consent authorities to assess if an emissions plan has been reviewed by a suitably qualified person with the relevant knowledge and expertise.

Policy intent

Preparing an emissions plan is a complex and technical exercise, particularly for larger or high-emissions sites.¹

Regulation 14 in the NES-IGHG requires a 'suitably qualified person' to review the emissions plan of a high-emissions site. This person should be a practitioner who has expertise in the technology and practices of industrial process heat and is suitably qualified to review and provide recommendations on reducing greenhouse gas emissions.

Whether a consent authority decides to grant or decline a consent application is subject to 'matters of discretion' outlined in the NES-IGHG. These include applying the 'best practicable option' to reduce emissions, the content and quality of the emissions plan, and monitoring, reporting and review requirements.

The applicant is responsible for obtaining a review and recommendations from a suitably qualified person on the emissions plan.

¹ High-emissions sites emit more than 2,000 tonnes of carbon dioxide equivalent greenhouse gas emissions (CO₂-e) of total thermal demand per annum.

This review must give recommendations about:

- whether the emissions plan meets the requirement in Regulation 15 of the NES-IGHG
- whether the assessment of the best practicable option is appropriate for the type and scale of activity and discharge.

The report and recommendations must then be provided to the consent authority as part of the resource consent application. The intent of these requirements is to ensure that emissions plans for high-emissions sites are robust and have been independently tested and to give consent authorities quality assurance when assessing these plans.

The consent authority must have certainty that the emissions plan is appropriate for the site and scale of the emissions.

Purpose and scope of the review of emissions plans

The purpose and scope of the emissions plan review is to:

- determine whether the contents and requirements for emissions plan prescribed in Regulation 15 of the NES have been met
- assess the extent to which relevant best practicable options have been applied
- assess the effectiveness and achievability of actions set out in the plan to reduce emissions (and meet emissions reduction targets where applicable).

Content

Content for emissions plans is prescribed under Regulation 15 (3) and includes matters such as the purpose of the activity, the number of heat devices on a site, the thermal heat that is to be produced, and is able to be produced from one or more heat devices on a site, fuels to be used, the best practicable option to be applied, any efficiency measures and emission reduction targets for the site if relevant.

For new heat devices, the emissions plan must include an assessment of the technical feasibility and financial viability of lower-emission heating devices.

In reviewing the content of an emissions plan the suitably qualified person may consider:

- whether the energy data and units are plausible
- the pathway set out in the plan that lists emissions reduction opportunities
- the appropriateness of the estimated emission reductions and the relevant target
- whether the appropriate emission factors have been applied
- actions to be taken to measure and monitor emissions, and compliance with the emissions plan
- timeframes for reporting on and reviewing emissions plans.

Guidance on suitably qualified competencies

A suitably qualified person means a person with a tertiary qualification in a relevant subject AND:

- a. is a certified energy and carbon professional AND has an advanced industrial energy systems optimisation endorsement, certified and endorsed by the Carbon and Energy Professionals; **OR**
- b. has a recognised international certification in energy and carbon management AND has a minimum of five years' experience in the field of energy and carbon management AND can demonstrate the required suitably qualified person competencies; **OR**
- c. has a minimum of ten years' experience in the field of energy and carbon management AND can demonstrate the required suitable qualified competencies.

Technical capability

A suitably qualified person needs to have the below technical skills and experience.

- High level of technical, analytical and practical skills and experience in relevant (largely manufacturing or industrial) business sectors and industrial processes.
- Significant proven expertise in identifying energy usage issues in an organisation, including working with a range of fuel types and technologies and on complex systems.
- Proven ability to provide robust and actionable options analysis, pragmatic solutions, advice and planning to enable clients to identify technically and economically viable investments for their businesses.
- Experience in using relevant tools and indicators such as: process integration (pinch analysis), marginal abatement cost curves (MACC), levelised cost of energy (LCOE) calculations.
- Proven ability to support identified options with robust capital and operating cost estimates, ideally by providing evidence of projects built delivering to estimates/business case outcomes.
- Proven ability to focus on short-term initiatives but equally on medium and long-term planning.
- Demonstrates the ability to apply an innovative perspective and to support a move from standard practices to this wider, strategic perspective.

Financial analytical and modelling capability

A suitably qualified person needs to have the below financial expertise.

- Evidence of extensive skills and experience in developing business plans and costing for industrial projects relating to energy emissions or usage, within an industrial, manufacturing or otherwise relevant context, including calculating key indicators such as: net present value (NPV), internal rate of return (IRR), levelised cost of energy (LCOE), marginal abatement cost (MAC).
- Robust and well substantiated example(s) of discounted cashflow analysis for a relevant project.
- Evidence of savings reports produced for clients.
- Clear evidence of familiarity with the New Zealand business financial and regulatory environment.

