

CONSULTATIONS ON PROPOSED CHANGES FOR 2022 AND 2023 REPORTING OF GREENHOUSE GASES

RESPONSE DOCUMENT

January, 2023



Cat. No.: En84-325/2023E-PDF
ISBN: 978-0-660-47182-2

This report is available in HTML at: canada.ca/ghg-reporting.

Unless otherwise specified, you may not reproduce materials in this publication, in whole or in part, for the purposes of commercial redistribution without prior written permission from Environment and Climate Change Canada's copyright administrator. To obtain permission to reproduce Government of Canada materials for commercial purposes, apply for Crown Copyright Clearance by contacting:

Environment and Climate Change Canada
Public Inquiries Centre
12th Floor, Fontaine Building
200 Sacré-Coeur Boulevard
Gatineau QC K1A 0H3
Telephone: 819-938-3860
Toll Free: 1-800-668-6767 (in Canada only)
Email: enviroinfo@ec.gc.ca

© His Majesty the King in Right of Canada, represented by the Minister of Environment and Climate Change, 2023

Aussi disponible en français

*Consultations sur les modifications proposées concernant la déclaration des gaz à effet de serre pour 2022–2023 :
Document de réponse*

Contents

I. Introduction	2
II. Overview of the Consultation Process	3
III. Stakeholder Feedback and ECCC Responses.....	4
1) Publication and Use of Facility Emissions by Source Category	4
2) Removal of Option to Upload Provincial Reports	5
3) Update of Global Warming Potential Values	5
4) Changes to Technical Requirements.....	6
a. Natural Gas Combustion Emissions Quantification	6
b. Industrial Wastewater Emissions Quantification	7
c. Nitric Acid Production Reporting and Emissions Quantification	7
d. Ammonia and Hydrogen Production Reporting Requirements.....	7
IV. Next Steps	8

I. Introduction

Environment and Climate Change Canada’s (ECCC) Greenhouse Gas Reporting Program (GHGRP) collects data on greenhouse gas (GHG) emissions from facilities across the country, under the authority of section 46 of the *Canadian Environmental Protection Act, 1999* (CEPA). Introduced in 2004, the GHGRP has provided a way for the Government of Canada to continuously track GHG emissions from individual facilities to inform the public, the National GHG Inventory¹ and regulatory initiatives.

While it has played an important role in monitoring emissions from the largest GHG emitting operations in Canada, the level of detail collected from facilities has limited the use of the data (e.g. for incorporation into the National GHG Inventory) and inconsistency in certain reporting requirements among the federal and several provincial GHG reporting programs has hindered the comparability of data. In 2017, ECCC launched a phased expansion to the GHGRP to both increase the utility of the data being collected and improve the consistency of GHG data reported across federal programs and provincial jurisdictions. The expansion of the program includes additional reporting requirements and prescribed quantification methods for facilities within specific sectors (Table 1).

Table 1: Sectors/Activities Subject to Expanded Reporting

CO ₂ from carbon capture, transport and/or storage (CCTS)
Cement production
Lime production
Aluminium production
Iron and steel production
Mining
Ethanol production
Electricity and heat generation
Ammonia production
Nitric acid production
Hydrogen production
Petroleum refining
Pulp and paper production
Base metal production

1 The national GHG inventory is Canada’s official inventory covering anthropogenic emissions by sources and removals by sinks, prepared and submitted annually by ECCC to the United Nations Framework Convention on Climate Change.

While this expansion to date has been effective in reaching its objectives, some limiting factors exist in the additional data received through the expanded reporting requirements and in specific program processes. This supports the need to further improve the existing reporting requirements and/or adjust certain processes to maximize the utility and consistency of the data being collected. ECCC has therefore proposed several changes to GHG reporting requirements, including:

1. Publication and use of facility emissions by source category;
2. Removal of option for facilities to upload provincial reports;
3. Update of global warming potential values; and,
4. Specific changes to existing technical requirements.

Purpose: The purpose of this document is to provide an overview of stakeholder consultations and feedback received relating to ECCC's proposed changes to the GHGRP, and to summarize the resulting adjustments that will be made.

II. Overview of the Consultation Process

On August 10th, 2022 ECCC circulated a consultation document to stakeholders for comment. This began a four-week consultation, ending on September 9, 2022. The consultation period was intended to solicit feedback on proposed changes to the GHGRP. The consultation documents provided an overview of the proposed changes and the manner in which they would be implemented, via a 2-year notice covering 2022 and 2023 calendar years.

ECCC sought broad participation in this consultation; the program team held two virtual information sessions in both official languages to present information about the proposed changes and to answer questions². In addition, ECCC conducted a separate information session with provinces and territories to ensure they were aware of the proposed changes and to request their feedback. The Department also responded to many questions posed via the program's general helpline and email service. Stakeholders were able to provide written comments and/or suggestions until the close of the consultation period on September 9th, 2022.

ECCC received significant input from a range of stakeholders including individual facilities, industry associations, provincial/territorial governments, consultants and data users. ECCC thanks all those who participated in this process and shared their views on the proposed changes to the GHGRP.

2 The presentation portion of these sessions is available by contacting the program team: GES-GHG@ec.gc.ca.

III. Stakeholder Feedback and ECCC Responses

Stakeholder feedback was received on all of the proposed changes:

1. Publication and use of facility emissions by source category;
2. Removal of option to upload provincial reports;
3. Update of global warming potential values; and,
4. Changes to technical requirements:
 - a. Natural gas combustion emissions quantification
 - b. Industrial wastewater emissions quantification
 - c. Nitric acid production reporting and emissions quantification
 - d. Ammonia and hydrogen production reporting requirements

1) Publication and Use of Facility Emissions by Source Category

ECCC proposed to publish emission totals by gas and by source category per facility. The intention is to increase transparency and support the use of the data in the National GHG Inventory as well to publish more detailed facility data.

Stakeholder Feedback: A total of 21 comments were received related to this proposal. The majority of comments indicated concern related to the risk of releasing proprietary or business confidential information (e.g., production volumes) and the need to readily grant confidentiality. Other feedback received indicated concern for publishing inconsistent information between federal and provincial programs and others expressed support for increasing the level of detail in the published dataset.

ECCC Response: The Department will move forward with this proposal. The risk of publishing confidential business information will be addressed through maintaining the ability for facilities to request confidentiality. However, ECCC will not readily grant confidentiality simply because it is requested. Confidentiality requests need to include sufficient and explicit justification and must be based on the reasons set out in Section 52 of the *Canadian Environmental Protection Act, 1999* with appropriate explanations to support why emissions reported by source category should not be publicly released. ECCC will evaluate requests received in accordance with Sections 51 to 53 of CEPA. ECCC also believes that publishing facility data at this level would not increase inconsistency in published data, rather it should increase transparency so that inconsistencies may be better understood. Options for different approaches to the publication of facility emissions by source category will be considered by ECCC taking into consideration confidentiality requests that are deemed well-founded.

2) Removal of Option to Upload Provincial Reports

ECCC proposed to remove the provisional option to allow specific facilities to upload their provincial GHG reports in lieu of reporting federal expanded data. The Department has found that accepting provincial GHG reports has not been successful as a data collection mechanism in meeting the federal expanded reporting requirements. Specifically, it has led to incomplete and inconsistent data as well as significant delays due to the required follow up with facilities.

Stakeholder Feedback: A total of 16 comments were received on this proposal. The majority of comments focused on the need to align federal and provincial reporting requirements or requested allowing provincial methods to be used for federal reporting. Some feedback indicated support for the proposal.

ECCC Response: The Department will move forward with this proposal. Facilities will no longer have the option of uploading provincial GHG reports in lieu of completing federal expanded reporting. All facilities subject to expanded reporting requirements will be required to complete the relevant reporting screens. ECCC has been working with some provincial programs to attempt to harmonize requirements as much as possible. However, it is clear that a more focused effort on this is required in collaboration with other provincial jurisdictions. The Department will endeavour to pursue a systematic and ongoing process to work with provincial programs to achieve more alignment in methodological and GHG reporting requirements.

With respect to allowing provincial methods to be used for federal GHG reporting, this would lead to inconsistent reporting in cases where methods are not currently aligned. Consistency in the data reported by facilities located across jurisdictions is important for comparability and a key goal of the program expansion. There are many cases where federal methods are aligned with those required for provincial programs. In particular, where there are multiple methodologies offered for calculating emissions from a given source, one or more are often common between federal and provincial requirements (e.g., use of carbon content to calculate CO₂ emissions from fuel combustion). In these cases, ECCC expects facilities to use methods that are common between programs and hence, should support their compliance with both the federal and provincial requirements and reporting of consistent data.

3) Update of Global Warming Potential Values

ECCC proposed to update global warming potential values used under the GHGRP to reflect updated values adopted for use under the United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines (presented in the Intergovernmental Panel on Climate Change's 5th Assessment Report (AR5)). The intention is to maintain alignment with international GHG reporting.

Stakeholder Feedback: ECCC received 25 comments on this proposed change. The majority of comments indicated the need for values to be aligned across federal and provincial programs.

Concern was expressed that different emissions values being published (due to different GWP values) could lead to confusion. Other comments expressed support for the update and others recommended using values from the IPCC's 6th Assessment Report.

ECCC Response: The Department will move forward with this proposal. While ECCC encourages alignment between programs, it is very difficult to align all programs at once. Global warming potential values presented in AR5 have been adopted for international GHG reporting and some programs have indicated that they will adopt the same update for 2022. Therefore, making the update to values presented in AR5 as proposed, for 2022, will maintain alignment between the GHGRP and Canada's National GHG Inventory as well as with some provincial level GHG reporting programs. Other programs have indicated that they will follow in the coming years (e.g., the federal Output Based Pricing System will make this update in 2023). To reduce potential confusion when emissions data is publicly released through the GHGRP, ECCC will include explanations to highlight that updated AR5 GWP values were applied.

4) Changes to Technical Requirements

a. Natural Gas Combustion Emissions Quantification

ECCC proposed an update to one of the methodologies prescribed for calculating CO₂ emissions from the combustion of natural gas. The update proposed is based on natural gas data collected at key points from 2005 to 2018 through an ECCC-led study, improving the accuracy of the original methodology.

Stakeholder Feedback: Stakeholders have indicated the need to align methods across all GHG reporting programs to reduce reporting burden and inconsistency. Some have also indicated that given the small change in emissions, the change does not seem necessary.

ECCC response: The Department will move forward with this proposal. ECCC agrees that there is a need for further alignment between programs, reflecting a common theme amongst feedback received on other proposed changes. As indicated in the response provided in Section 2, ECCC is considering to set up a process with relevant provincial programs to focus on alignment opportunities. With respect to this particular technical change, the option to calculate CO₂ emissions from natural gas combustion using the carbon content, instead of the updated higher heating value methodology, will remain. This methodology aligns with other GHG reporting programs. Therefore, the Department recommends that facilities use the carbon content methodology in cases where other methodologies are not aligned.

With respect to the need for the change despite a small change in the magnitude of overall emissions, it should be noted that the change in emissions is more substantial at the individual facility level and, in particular, when considering a facility's emissions from natural gas combustion only.

b. Industrial Wastewater Emissions Quantification

ECCC proposed a number of updates to the quantification methods for calculating methane emissions from industrial wastewater as well as inclusion of a methodology to determine CO₂ emissions. Updates were proposed to improve accuracy and completeness of reporting.

Stakeholder Feedback: Similar to feedback on other proposals, the majority of feedback indicates the need to further align GHG reporting requirements across programs. In addition, comments and questions indicated the need for some guidance around the calculation of industrial wastewater emissions.

ECCC Response: The Department will move forward with this proposal and agrees that there is a need to further align GHG reporting, wherever possible (as per response provided in Section 2). The Department will also endeavour to provide additional guidance for quantification of industrial wastewater emissions. Some clarifications will also be added to Canada's Greenhouse Gas Quantification Requirements document.

c. Nitric Acid Production Reporting and Emissions Quantification

ECCC proposed a number of changes to the reporting requirements for nitric acid production. Proposed changes included reporting per nitric acid train, increasing the emission parameter sampling frequency and reporting of CO₂ and CH₄ emissions from the use of reducing agents.

Stakeholder Feedback: The feedback received has indicated that there could be some issues with several of the proposed changes, including health and safety concerns. It was noted that for some of the changes, they would be impossible to implement for 2022 as the sampling period has already past.

ECCC Response: ECCC will move forward with the proposal to require reporting by nitric acid train (for which no concerns were indicated), but will not move forward with the other proposed changes for nitric acid production at this time. Feedback suggests that it would be prudent to gather more information prior to implementing changes related to the frequency of emission parameter sampling as well as the methodologies for calculating CO₂ and CH₄ emissions from the use of reducing agents. ECCC plans to have further discussions with provinces and facilities over the coming year to determine how best to achieve the intended results of the proposed changes.

d. Ammonia and Hydrogen Production Reporting Requirements

ECCC proposed a change to the reporting of emissions from ammonia and hydrogen production. The current reporting requirements (2021) require facilities to deduct the appropriate values for recovered quantities of CO₂ from calculated gross emissions and report the amount for net emissions. Instead, ECCC proposed reporting of both parameters (i.e. gross emissions, recovered amounts) so that the net emissions do not have to be calculated and reported by the facility as this has caused some confusion in the past. Net emissions will instead be automatically calculated in the system using the other reported amounts.

Stakeholder Feedback: The only feedback received suggested a potential misunderstanding of what was being proposed or simply that stakeholders were seeking a better understanding of the proposal.

ECCC Response: The Department will move forward with this proposal. As noted above, the change will not alter the data required to be gathered by facilities, nor should it result in differences to facility total emissions reported. ECCC expects that the appropriate amounts to be reported will be clear through updates made in both the 2022-2023 notice as well as the reporting system itself. Additional guidance will also be prepared to assist facilities when reporting.

IV. Next Steps

ECCC has integrated the changes it is moving forward with into the reporting requirements. It is expected that the *Notice with respect to reporting of greenhouse gases (GHGs) for 2022 and 2023* will be published in the *Canada Gazette* by the end of January 2023, along with the publication of an update to Canada's Greenhouse Gas Quantification Requirements. The Department also intends to publish updates to technical guidance available under the GHGRP to reflect the final requirements for 2022 and 2023.

The Single Window reporting system is expected to open to facility reporters in March, 2023. At this time, ECCC also intends to update Single Window reporting guidance and help desk assistance will be provided during the reporting period. The deadline for facilities to complete their reports to the GHGRP remains June 1st.

Over the coming year, the Department plans to pursue targeted consultation related to proposed changes that are not being implemented via the 2022-2023 notice (i.e., changes to requirements for nitric acid production). ECCC will also evaluate options for publishing emissions by source category following the assessment of confidentiality requests. Further collaboration with provinces and internal programs, where reporting requirements overlap, will be undertaken with the intention of improving alignment between GHG reporting programs.

If you have questions on the content of this document, you may contact the GHGRP at GES-GHG@ec.gc.ca.