



**International  
Standard**

**ISO 6338-2**

**Calculations of greenhouse gas  
(GHG) emissions throughout the  
liquefied natural gas (LNG) chain —**

**Part 2:  
Natural gas production and  
transport to LNG plant**

*Calcul des émissions de gaz à effet de serre (GES) dans la chaîne  
gaz naturel liquéfié (GNL) —*

*Partie 2: Production du gaz naturel et transport à l'usine GNL*

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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 67, *Oil and gas industries including lower carbon energy*, Subcommittee SC 9, *Production, transport and storage facilities for cryogenic liquefied gases*.

A list of all parts in the ISO 6338 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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## Introduction

Natural gas will play a key role in the energy transition (e.g. by replacing coal to produce electricity) and the use of liquefied natural gas (LNG) to transport natural gas is expected to increase. The process of liquefying natural gas is energy-intensive. Gas producers are increasingly accountable for their greenhouse gas (GHG) emissions and the ambition to reduce them. Furthermore, there is an emerging marketing demand for GHG data to enable commercial mechanisms such as offsetting to be utilized.

There is no standardized and auditable methodology to calculate the carbon footprint of the whole LNG chain (including but not limited to the well, upstream treatment, transportation, liquefaction, shipping, regasification and end user distribution). Various standards indicate possible approaches but are inconsistent in their results or not easily applicable.

The ISO 6338 series covers each part of the LNG chain and enables a consistent GHG inventory.

The KPIs and related requirements to access to key international initiatives, agreements and reporting/accounting standards on climate ambitions and zero carbon emission strategies are given in ISO 6338-1:2024, Annex B.

Attention should be paid to activities that can occur in different parts (e.g. gas treatment and distribution upstream of the liquefaction plant).

NOTE It is not possible to make like-for-like comparisons, or define a certification scheme, for one block only.

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