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Stationary source emissions - Determination of greenhouse gas (GHG) emissions in energy-intensive industries - Part 5: Lime industry

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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EUROPEAN STANDARD

EN 19694-5

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English Version

Stationary source emissions - Determination of greenhouse gas (GHG) emissions in energy-intensive industries - Part 5: Lime industry

Émissions de sources fixes - Détermination des
émissions de gaz à effet de serre (GES) dans les
industries énérgo-intensives - Partie 5: Industrie de la
chaux

Emissionen aus stationären Quellen - Bestimmung von
Treibhausgasen (THG) aus energieintensiven
Industrien - Teil 5: Kalkindustrie

This European Standard was approved by CEN on 5 May 2016.

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Contents

	Page
European foreword.....	4
1 Scope	5
2 Normative references	6
3 Terms and definitions	6
4 Symbols and abbreviations	8
5 Introduction	10
5.1 Overview of the lime manufacturing process	10
5.2 Direct greenhouse gas emissions from calcination of kiln stone (process emissions)	11
5.3 Direct greenhouse gas emissions from fuels for kiln operation (combustion emissions).....	11
5.4 Energy indirect greenhouse gas emissions	12
6 System boundaries	12
6.1 Appropriate boundaries to distinguish	12
6.2 Organizational boundaries.....	12
6.3 Operational boundaries.....	13
6.4 Sources and greenhouse gases to be included.....	14
6.5 Internal lime transfers.....	14
6.6 Assessment period.....	14
7 Principles	14
8 Determination of greenhouse gas emissions: general requirements.....	15
8.1 Monitoring Plan and other requirements for identifying, calculating and reporting of greenhouse gas emissions	15
8.2 Stack-measurement-based method or mass-balance-based method	15
9 Direct greenhouse gas emissions) and their determination.....	15
9.1 Sources of direct greenhouse gas emissions and the applicability of determination methods	15
9.2 Direct CO₂ greenhouse gas emissions from the calcination of kiln stone (process emissions) using the mass-balance-based method	16
9.3 Direct greenhouse gas emissions from kiln fuels (combustion emissions) using the mass-balance-based method.....	26
9.4 Direct greenhouse gas emissions from non-kiln fuels (combustion emissions) using the mass-balance-based method.....	30
10 Energy indirect greenhouse gas emissions and their determination.....	33
10.1 Overview of the sources of energy indirect greenhouse gas emissions.....	33
10.2 Determination of the quantity of externally generated electricity used (activity data)....	33
10.3 Determination of the emission factor for externally generated electricity.....	35
11 Other indirect greenhouse gas emissions from imported kiln stone and transport of kiln stone by third parties	35
11.1 Other indirect indirect greenhouse gas emissions, third party and of site transportation.....	35
11.2 Greenhouse gas emissions from manufacture of imported kiln stone.....	35
11.3 GHG from transport of kiln stone by third parties.....	36

12	Reporting and performance assessment	37
12.1	Reporting data to include	37
12.2	Performance assessment.....	37
13	Uncertainty of GHG inventories.....	39
13.1	General principles	39
13.2	Assessment of uncertainty for the mass-balance- base method	39
13.3	Assessment of uncertainty for the stack-measurement-based method	43
14	Verification / certification.....	43
Annex A (informative) Objective and outcome of the site trails.....		44
Annex B (normative) Minimum content of the monitoring plan.....		47
Annex C (informative) Details about the calculation of process emissions from lime kilns using the mass balance-based-method.....		50
Annex D (informative) Example of an uncertainty calculation.....		56
Bibliography		58

European foreword

This document (EN 19694-5:2016) has been prepared by Technical Committee CEN/TC 264 “Air quality”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2017, and conflicting national standards shall be withdrawn at the latest by January 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate M/478 given to CEN by the European Commission and the European Free Trade Association.

This part of EN 19694 deals with sector-specific aspects for the determination of greenhouse gas (GHG) emissions from lime manufacture.

This European Standard can be used to measure, report and compare the GHG emissions of a lime manufacturing plant. Data for individual plants, sites or works may be combined to measure, report and compare GHG emissions for an organization, corporation or group.

EN 19694, *Stationary source emissions – Determination of greenhouse gas (GHG) emissions in energy intensive industries* is a series of standards that consists of the following parts:

- *Part 1: General aspects*
- *Part 2: Iron and steel industry*
- *Part 3: Cement industry*
- *Part 4: Aluminium industry*
- *Part 5: Lime industry*
- *Part 6: Ferroalloy industry*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard provides a harmonized methodology for calculating GHG emissions from the lime industry. It includes the manufacture of lime, and any downstream lime products manufactured at the plant, such as ground or hydrated lime. This standard allows for reporting of GHG emissions for various purposes and on different basis, such as plant basis, company basis (by country or by region) or international organization basis.

Since lime is defined as the generic name for quicklime, dolime and sintered dolime, plants manufacturing at least one of these products shall be covered by this standard.

This European Standard addresses all of the following direct and indirect sources of GHG included as defined in ISO 14064-1:

- direct greenhouse gas emissions from greenhouse gas sources that are owned or controlled by the company, such as emissions resulting from the following sources:
 - calcination of carbonates and combustion of organic carbon contained in the kiln stone;
 - combustion of kiln fuels (fossil kiln fuels, alternative fossil fuels, mixed fuels with biogenic carbon content, biomass fuels and bio fuels) related to lime production and/or drying of raw materials;
 - combustion of non-kiln fuels (fossil kiln fuels, mixed fuels with biogenic carbon content, biomass fuels and bio fuels) related to equipment and on-site vehicles, heating/cooling and other on-site uses;
 - combustion of fuels for on-site power generation.
- indirect greenhouse gas emissions from the generation of imported electricity, heat or steam consumed by the organization;
- other indirect greenhouse gas emissions, other than energy indirect GHG emissions, which is a consequence of an organization's activities, but arises from greenhouse gas sources that are owned or controlled by other organizations such as from imported kiln stone.

This European Standard is to be used in conjunction with EN 19694-1, which contains generic, overall requirements, definitions and rules applicable to the determination of GHG emissions for all energy-intensive sectors, provides common methodological issues and defines the details for applying the rules. The application of this standard to the sector-specific standards ensures accuracy, precision and reproducibility of the results and is for this reason a normative reference standard.

Together these standards provide a harmonized method for:

- a) measuring, testing and quantifying methods for GHG emissions;
- b) assessing the level of GHG emissions performance of production processes over time, at production sites;
- c) establishment and provision of reliable, accurate and quality information for reporting and verification purposes.

GHG emissions offset mechanisms, including but not limited to voluntary offset schemes or nationally or internationally recognized offset mechanisms, shall not be used at any point in the GHG assessment according to this standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 459-2, *Building lime — Part 2: Test methods*

EN 932-1, *Tests for general properties of aggregates — Part 1: Methods for sampling*

EN 12485, *Chemicals used for treatment of water intended for human consumption — Calcium carbonate, high-calcium lime, half-burnt dolomite, magnesium oxide and calcium magnesium carbonate — Test methods*

EN 13639, *Determination of total organic carbon in limestone*

EN 15442, *Solid recovered fuels — Methods for sampling*

EN 19694-1:2016, *Stationary source emissions — Determination of greenhouse gas (GHG) emissions in energy-intensive industries — Part 1: General aspects*

ISO 5069-1, *Brown coals and lignites — Principles of sampling — Part 1: Sampling for determination of moisture content and for general analysis*

ISO 13909 (all parts), *Hard coal and coke — Mechanical sampling*

ISO 18283, *Hard coal and coke — Manual sampling*

ISO 14064-1, *Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*

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