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NSAI Standards

Irish Standard
I.S. EN 19694-4:2016

Stationary source emissions - Determination of greenhouse gas (GHG) emissions in energy-intensive industries - Part 4: Aluminium industry

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NSAI	T +353 1 807 3800	Sales:
1 Swift Square,	F +353 1 807 3838	T +353 1 857 6730
Northwood, Santry	E standards@nsai.ie	F +353 1 857 6729
Dublin 9	W NSAI.ie	W standards.ie

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National Foreword

I.S. EN 19694-4:2016 is the adopted Irish version of the European Document EN 19694-4:2016, Stationary source emissions - Determination of greenhouse gas (GHG) emissions in energy-intensive industries - Part 4: Aluminium industry

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 19694-4

July 2016

ICS 13.040.40

English Version

Stationary source emissions - Determination of greenhouse gas (GHG) emissions in energy-intensive industries - Part 4: Aluminium industry

Émissions de sources fixes - Détermination des émissions de gaz à effet de serre (GES) dans les industries énergo-intensives - Partie 4: Industrie de l'aluminium

Emissionen aus stationären Quellen - Bestimmung von Treibhausgasen (THG) aus energieintensiven Industrien - Teil 4: Aluminiumindustrie

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

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European foreword

This document (EN 19694-4:2016) 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of an identical text or by endorsement, at the latest by January 2017, and conflicting national standards shall be withdrawn at the latest by January 2017.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.

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*

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Introduction

This European Standard serves the following purposes:

— measuring, testing and quantifying GHG emissions from the aluminium industry;

— assessing the level of GHG emissions performance of production processes over time, at production sites;

— establishing and providing reliable, accurate and quality information for reporting and verification purposes.

This European Standard can be used to measure, report and compare the GHG emissions of an aluminium production facility. Data for individual facilities, sites or works may be combined to measure, report and compare GHG emissions for a company, corporation or group.

Direct fuel based emissions are not included; for calculation of this part of the GHG emissions, see EN 19694–1.

The European Standard deals with sector-specific aspects for the determination of greenhouse gas (GHG) emissions from aluminium production and is based on documents mentioned under tier 3 of Section 4.4.2.4 of the 2006 IPCC guidelines [6].

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1 Scope

This European Standard specifies a harmonized method for calculating the emissions of greenhouse gases from the electrolysis section of primary aluminium smelters and aluminium anode baking plants. It also specifies key performance indicators for the purpose of benchmarking of aluminium. This also defines the boundaries.

NOTE Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of 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 19694-1, *Stationary source emissions — Determination of greenhouse gas (GHG) emissions in energy-intensive industries — Part 1: General aspects*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 19694-1 and the following apply.

3.1
aluminium electrolysis
section of an aluminium primary smelter where aluminium is converted from aluminium oxide to aluminium metal in electrolysis cells

3.2
anode baking plant
production of carbon anodes for use in aluminium prebake electrolysis cells

3.3
PFC gases
gas emitted from aluminium electrolysis consisting of CF_4 and C_2F_6

3.4
grid specific CO_2 factor
CO_2 factor (t CO_2/MWh) associated with the electricity delivered to a specific aluminium smelter from their supplier

4 List of abbreviated terms

AE Anode effect

CWPB Centre-Worked prebake

DAE Direct anode emissions

DEE Direct electrolysis emissions

GHG Green House Gas

SAI GLOBAL

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