

ISO 19694-7:2024-02 (E)

Stationary source emissions - Determination of greenhouse gas emissions in energy-intensive industries - Part 7: Semiconductor and display industries

Contents	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Abbreviated terms	6
5 Determination of GHG emissions principles	7
5.1 General	7
5.2 Major GHG emissions in semiconductor and display	7
5.3 Determination based on mass balance	7
5.4 Determination based on stack emission measurements	8
6 Inventory boundaries	8
6.1 General	8
6.2 Organizational boundaries	8
6.3 Reporting boundaries	9
7 Direct GHG emissions and their determination	9
7.1 General	9
7.2 Direct GHG emissions from combustion and transportation	10
7.3 Direct GHG emissions from process emissions	10
7.3.1 General	10
7.3.2 Tier 1	13
7.3.3 Tier 2a	14
7.3.4 Tier 2b	15
7.3.5 Tier 2c	15
7.3.6 Tier 3a -- Measured process-specific parameters	19
7.3.7 Tier 3b -- Stack testing	19
7.3.8 Fluorinated liquids	22
8 Indirect emissions from imported energy and their determination	23
8.1 General	23
8.2 GHG emissions from imported electricity	23
8.3 GHG emissions from external fossil and alternative fuels production and processing	24
9 General requirements for identifying, calculating and reporting of GHG emissions	24
10 Baselines, acquisitions and disinvestments	25
11 Reporting and performance assessment	25
11.1 General	25
11.2 Corporate environmental reporting	26
11.3 Reporting periods	26
11.4 Performance assessment	26

12	Uncertainty of GHG inventories	27
12.1	General	27
12.2	Assessment of uncertainty of the mass balance based method	28
12.2.1	Major sources of uncertainty	28
12.2.2	Uncertainty of activity data	28
12.2.3	Aggregated uncertainties of activity data	29
12.2.4	Application of default values instead of analytical results	30
12.2.5	Evaluation of the overall uncertainty of a GHG inventory	30
12.3	Assessment of the uncertainty for the stack-measurement method	30
Annex A (informative)	Content of the monitoring plan	31
Annex B (informative)	Default emission factors	32
Bibliography		40