



Standard SIMS Report: Networked Gas Consumption





Single Integrated Metadata Structure (SIMS) Report

For

Networked Gas Consumption

This documentation applies to the reporting period: **2021**

Last edited: 25th August 2022



1. Table of Contents

1.	Table	e of Contents	. 3
2.	Intro	duction	. 5
3.	Conta	act	. 5
4.	Meta	data Update	. 5
	4.1.	Metadata last certified	. 5
	4.2.	Metadata last posted	
	4.3.	Metadata last update	. 5
5.	Statis	stical Presentation	. 5
	5.1.	Data Description	
	5.2.	Classification System	
	5.3.	Sector Coverage	
	5.4.	Statistical Concepts and definitions	
	5.5.	Statistical Unit	
	5.6.	Statistical Population	
	5.7.	Reference Area	
	5.8.	Time Coverage	
	5.9.	Base period	
6.		of Measure	
7.		ence Period	
8.		rutional Mandate	
Ο.	8.1.	Legal Acts and other agreements	
	8.2.	Data Sharing	
q		dentiality	
٦.	9.1.	Confidentiality – policy	
	9.2.	Confidentiality – data treatment	
10		lease Policy	
10	10.1.	Release Calendar	
	10.2.	Release calendar access	
	10.3.	User access	
11		equency of Dissemination	
		cessibility and clarity	
12	12.1.	News release	
	12.2.	Publications	
	12.3.	On-line database	
		AC 1. Data tables -consultations	
	12.4.	Micro-data Access	
	12.5.	Other	
		AC2. Metadata consultations	
	12.6.	Documentation on Methodology	
	12.6.1		
	12.7.	Quality Documentation	
13		ality Managementality Management	
10		Quality Assurance	
	13.2.	Quality Assessment	
14		levance	
14	. Ke. 14.1.	User Needs	
	14.1.1		
	14.1.2		
	14.1.2	User Satisfaction	
	17.4.	OUC1 OUUU1U0UUII	. 9

14.3. Data Completeness	
14.3.1. Data Completeness rate	
15. Accuracy and reliability	
15.1. Overall accuracy	
15.2. Sampling Error	
15.2.1. A1.Sampling error indicator	
15.3. Non-sampling Error	10
15.3.1. Coverage error	10
15.3.2. Measurement error	10
15.3.3. Non-Response Error	10
15.3.4. Processing error	10
15.3.5. Model assumption error	
16. Timeliness and punctuality	10
16.1. Timeliness	10
16.1.1. TP1. Time lag – First results	10
16.1.2. TP2. Time lag – Final results	11
16.2. Punctuality	11
16.2.1. TP3. Punctuality – Punctuality - delivery and publication	11
17. Comparability	11
17.1. Comparability – Geographical	11
17.1.1. CC1. Asymmetry for mirror flow statistics	11
17.2. Comparability over time	11
17.2.1. Length of Comparable Time series	11
17.3. Coherence – cross domain	11
17.3.1. Coherence – Sub annual and annual statistics	
17.3.2. Coherence with National Accounts	
17.4. Coherence – internal	
18. Cost and Burden	
19. Data Revision	12
19.1. Data Revision Policy	12
19.2. Data Revision Practice	
19.2.1. Data Revision – Average size	12
20. Statistical processing	
20.1. Source Data	12
20.1.1. Population and sampling frame	12
20.1.2. Sampling design	
20.1.3. Survey size	
20.1.4. Survey technique	
20.2. Frequency of data collection	
20.3. Data Collection	
20.3.1. Type of Survey/Process	
20.3.2. Questionnaire (including explanations)	
20.3.3. Survey Participation	
20.3.4. Data Capture	
20.4. Data Validation	
20.5. Data Compilation	
20.5.1. Imputation (for Non-Response or Incomplete Data Sets)	
20.5.2. Grossing and Weighting	
20.6. Adjustment	
20.6.1. Seasonal Adjustment	
21. Comment	



2. Introduction

The CSO has produced a statistical release on metered consumption of users connected to the natural gas mains in Ireland.

3. Contact

Contact Organisation: Central Statistics Office

Contact Organisation Unit: Environment and Climate Division

Contact Name: Dympna Corry
Contact person function: Statistician

Contact Mail address: Central Statistics Office, Ardee Road, Rathmines, Dublin 6, D06 FX52

Contact email address: <u>environment@cso.ie</u>

Contact Phone Number: (01)498 4000

Contact Fax Number:

4. Metadata Update

4.1. Metadata last certified

25th August 2022.

4.2. Metadata last posted

29th August 2022.

4.3. Metadata last update

25th August 2022.

5. Statistical Presentation

5.1. Data Description

Data on energy use are important for environmental, social and economic purposes. The data are classified according to category of consumer and geographical location. The data provide insights into trends in consumption by power plants, the non-residential sector, and the residential sector. The data can be used indirectly to make estimates of the amount of natural gas used by dwellings for heating. Similarly, lower-than-average seasonality may indicate that other fuel sources are being used for heating purposes, or that affordability is having an effect on consumption.

5.2. Classification System

The data have been classified into three sectors: power plants; non-residential; and residential. Gas Networks Ireland (GNI) classified the data as residential or non-residential. Their classification is partly based on the consumption figure. The CSO made a small number of adjustments to recode some meters in a consistent way for all years. The CSO classified a small number of customers as power plants. These included one enterprise that had very large consumption in a combined heat and power (CHP) plant.

5.3. Sector Coverage

There are around 29,000 non-residential customers. The CSO will try to add NACE Rev. 2 codes to the file, as NACE would provide a more detailed analysis of the non-residential customers.



5.4. Statistical Concepts and definitions

The data cover all customers connected to the natural gas network. This includes power plants, non-residential, and residential customers. Three counties (Donegal, Leitrim, and Sligo) had no meter connections. The 2016 Census of Population showed that there were around two million households in Ireland of which 1.7 million were occupied. This release showed that there were 691,332 residential gas meters in 2021.

5.5. Statistical Unit

Power plants, residential and non-residential dwellings.

5.6. Statistical Population

All consumers connected to the natural gas network.

5.7. Reference Area

Networked gas consumption data can be compiled on a county level, with additional detail available for the Dublin region. The county was extracted by the CSO from the postal address of the customer. Geospatial data are available for the domestic and smaller non-domestic customers and these could be used to aggregate the data into different geographical reporting units e.g. square kilometre grids.

5.8. Time Coverage

2011-2021.

5.9. Base period

Not applicable.

6. Unit of Measure

The data are gross calorific values expressed in kilowatt hours (kWh) or gigawatt hours (GWh). A kilowatt hour is a unit of energy equivalent to one kilowatt of power sustained over an hour. A gigawatt hour is equivalent to one million kWh.

Kilowatt hours is used for presenting median figures and gigawatt hours for presenting aggregates. The data were originally collected as meter readings.

7. Reference Period

2021.

8. Institutional Mandate

8.1. Legal Acts and other agreements

National reporting of networked gas consumption data is done on a voluntary basis. The methodology for the energy consumption of households, which is reported to Eurostat under a legal obligation, is due to be reviewed. The networked gas consumption data will be an input into the energy consumption of households.



8.2. Data Sharing

The CSO obtained access to the domestic and non-domestic GPRN metering data collected by GNI under Section 30 of the Statistics Act, 1993.

9. Confidentiality

9.1. Confidentiality - policy

All information supplied to the CSO is treated as strictly confidential. The Statistics Act, 1993 sets stringent confidentiality standards: Information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business undertaking may be divulged to any other government department or body.

These national statistical confidentiality provisions are reinforced by the following EU legislation: Council Regulation (EC) No 223/2009 on European statistics for data collected for EU statistical purposes. Further details are outlined in the CSO's Code of Practice on Statistical Confidentiality.

For more information on the CSO confidentiality policy please visit: https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/statisticalconfidentiality/

9.2. Confidentiality - data treatment

All confidential data are treated in accordance with Part V of the Statistics Act, 1993.

10. Release Policy

10.1. Release Calendar

The date of dissemination of all statistics released by the CSO can be found in the Release Calendar published by the CSO. This calendar is regularly updated.

10.2. Release calendar access

The release calendar can be accessed via the CSO website, www.cso.ie, or directly from this link: https://www.cso.ie/en/csolatestnews/releasecalendar/

10.3. User access

In accordance with Principle 6 of the European Statistics Code of Practice all users of CSO statistics have equal access via the CSO website at the same time of 11 am. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.

The CSO recognises that in very limited circumstances a business need for pre-release access may be substantiated. Any form of pre-release access is a privilege and a strict CSO pre-release access policy is adhered to for these special requests. The full pre-release access policy can be accessed at https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/

The various results are published nationally in statistical release format on the CSO website (www.cso.ie). Selected extracts from the results are posted on the CSO's data dissemination database, PxStat.



11. Frequency of Dissemination

Networked gas consumption data is published annually by the CSO. The microdata was converted from meter readings to monthly (largest consumers) and quarterly estimates by GNI.

12. Accessibility and clarity

12.1.News release

Not applicable.

12.2. Publications

The release is available on the CSO website via this link: https://www.cso.ie/en/statistics/energy/networkedgasconsumption/

12.3. On-line database

Metered gas consumption data (County and Dublin postal district, Sector and Quarter) are also accessible from the CSO dissemination database, PxStat, via this link https://data.cso.ie/product/mgc

12.3.1.1. AC 1. Data tables - consultations

Not calculated.

12.4. Micro-data Access

Not applicable.

12.5. Other

Background notes are provided with each release on the CSO website.

12.5.1.1. AC2. Metadata consultations

Not calculated.

12.6. Documentation on Methodology

Further information on the methodology used for the compilation of this release can be found on the CSO Methods page https://www.cso.ie/en/methods/climateandenergy/networkedgasconsumption/

12.6.1.1. AC3 - Metadata completeness - rate

Not calculated.

12.7. Quality Documentation

For more information on documentation associated with this release please check the CSO Methods page https://www.cso.ie/en/methods/climateandenergy/networkedgasconsumption/



13. Quality Management

13.1.Quality Assurance

Quality Management Framework

The CSO avails of an office wide Quality Management Framework (QMF). This framework allows all CSO processes and outputs to meet the required standard as set out in the European Statistics Code of Practice (ESCOP). The QMF foundations are based on establishing the UNECE's Generic Statistical Business Process Model (GSBPM) as the operating statistical production model to achieve a standardised approach to Quality Management. All and any changes implemented to CSO processes and outputs require adherence to the QMF.

13.2. Quality Assessment

A Quality Management Self-Assessment (QMSA) was carried out in 2021.

14 Relevance

14.1. User Needs

Data on energy use are important for national environmental, social and economic purposes. The data are classified according to category of consumer and geographical location and can be used to evaluate environmental, social and economic policy over time.

14.1.1. Main National Users

Sustainable Energy Authority of Ireland.

14.1.2. Principal External Users

National and international users of statistics on energy use include the SEAI, the government, researchers, the media, and the public.

14.2. User Satisfaction

Not measured.

14.3. Data Completeness

Not measured.

14.3.1. Data Completeness rate

Not measured.

15. Accuracy and reliability

15.1. Overall accuracy

Administrative data were provided by GNI. The data are considered to be reliable. The meter readings data were converted to monthly and quarterly consumption estimates by GNI. Meter readings can be actual or estimated. In some cases, an estimated reading that was too high results in a negative reading for a subsequent period i.e. no attempt was made to adjust the earlier over- or under-estimate. The data file provided to the CSO did not provide information on whether the consumption in a period was based on an estimated reading. The results are broadly consistent with GNI reports and with the SEAI energy balances (after adjustments were made for CHP plants).

L

15.2. Sampling Error

Not applicable.

15.2.1.1. A1. Sampling error indicator

Not applicable.

15.3. Non-sampling Error

Not applicable.

15.3.1. Coverage error

Not applicable.

15.3.1.1. A2. Over coverage rate

Not applicable.

15.3.1.2. A3. Common units - proportion

Not applicable.

15.3.2. Measurement error

Not applicable.

15.3.3. Non-Response Error

Not applicable.

15.3.3.1. Unit non-response rate

Not applicable.

15.3.3.2. Item non-response rate

Not applicable.

15.3.4. Processing error

Not applicable.

15.3.5. Model assumption error

Not applicable.

16. Timeliness and punctuality

16.1.Timeliness

Future releases will be published with a time-lag of around eight months.

16.1.1. TP1. Time lag - First results

Not applicable.

H

16.1.2. TP2. Time lag - Final results

7 months 29 days.

16.2. Punctuality

The release was published on time according to the dates specified in the CSO release calendar.

16.2.1. TP3. Punctuality - Punctuality - delivery and publication

0 days.

17. Comparability

17.1.Comparability - Geographical

Not applicable.

17.1.1.1. CC1. Asymmetry for mirror flow statistics

Not applicable.

17.2. Comparability over time

No breaks in series have taken place since the beginning of this publication. Data are reviewed in relation to amounts from previous years to assess consistency.

17.2.1. Length of Comparable Time series

11 years.

17.3. Coherence – cross domain

Not applicable.

17.3.1. Coherence - Sub annual and annual statistics

Not applicable.

17.3.2. Coherence with National Accounts

Not applicable.

17.4. Coherence – internal

Not applicable.

18. Cost and Burden

The Networked Gas Consumption release reuses data collected by GNI. There is no additional cost and burden.



19. Data Revision

19.1.Data Revision Policy

Revisions refer to changes made to published statistical data when the information used in its production has been updated or corrected. This information includes all data used in compiling the statistic e.g. respondent data, administrative data, weights and factors, methodology, classifications, definitions, modifications to survey questionnaires, survey scope and data collection methods.

The data revision policy that CSO statistics adheres to can be found via the following link: https://www.cso.ie/en/methods/quality/treatmentofrevisions/

19.2. Data Revision Practice

Revisions will be made in the case that further data become available or in the case of assigning non-residential users to NACE Rev. 2 sectors.

19.2.1. Data Revision - Average size

Not calculated.

20. Statistical processing

20.1. Source Data

The data are based on a mixture of actual and estimated meter readings.

20.1.1. Population and sampling frame

Not applicable.

20.1.2. Sampling design

Not applicable.

20.1.3. Survey size

Not applicable.

20.1.4. Survey technique

Not applicable.

20.2. Frequency of data collection

Annual.

20.3. Data Collection

The CSO received the administrative microdata from GNI under Section 30 of the Statistics Act, 1993.

20.3.1. Type of Survey/Process

Administrative data.



20.3.2. Questionnaire (including explanations)

Not applicable.

20.3.3. Survey Participation

Not applicable.

20.3.4. Data Capture

The CSO received data for 2011-2021 for all customers and for 2006 for residential and smaller non-residential customers.

20.4. Data Validation

The results have been compared with GNI reports and with the SEAI energy balances.

20.5. Data Compilation

Not applicable.

20.5.1. Imputation (for Non-Response or Incomplete Data Sets)

Not applicable.

20.5.1.1. A7. Imputation rate

Not applicable.

20.5.2. Grossing and Weighting

Not applicable.

20.6. Adjustment

Not applicable.

20.6.1. Seasonal Adjustment

Not applicable.

21. Comment