

**Standard Report**  
**on**  
**Methods and Quality**  
**for**  
**Environmental Indicators Ireland**

This documentation applies to the reporting period:

**2020**

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# Table of Contents

## 1 Overview

## 2 General Information

- 2.1 Statistical Category
- 2.2 Area of Activity
- 2.3 Organisational Unit Responsible, Persons to Contact
- 2.4 Objectives and Purpose; History
- 2.5 Periodicity
- 2.6 Client
- 2.7 Users
- 2.8 Legal basis

## 3 Statistical Concepts, Methods

- 3.1 Subject of the Statistics
- 3.2 Units of Observation/Collection Units/Units of Presentation
- 3.3 Data Sources
- 3.4 Reporting Unit/Respondents
- 3.5 Type of Survey/Process
- 3.6 Characteristics of the Sample/Process
  - 3.6.1 Population and Sampling Frame
  - 3.6.2 Sampling Design
- 3.7 Survey Technique/Data Transfer
- 3.8 Questionnaire (including explanations)
- 3.9 Participation in the Survey
- 3.10 Characteristics of the Survey/Process and its Results
- 3.11 Classifications used
- 3.12 Regional Breakdown of Results

## 4 Production of the Statistics, Data Processing, Quality Assurance

- 4.1 Data Capture
- 4.2 Coding
- 4.3 Data Editing
- 4.4 Imputation (for Non-Response or Incomplete Data Sets)
- 4.5 Grossing and Weighting
- 4.6 Computation of Outputs, Estimation Methods Used
- 4.7 Other Quality Assurance Techniques Used

## 5 Quality

- 5.1 Relevance
- 5.2 Accuracy and Reliability
  - 5.2.1. Sampling Effects, Representativity
  - 5.2.2. Non-Sampling Effects
    - 5.2.2.1 Quality of the Data Sources used
    - 5.2.2.2 Register Coverage
    - 5.2.2.3 Non-response (Unit and Item)
    - 5.2.2.4 Measurement Errors
    - 5.2.2.5 Processing Errors
    - 5.2.2.6 Model-related Effects
- 5.3 Timeliness and Punctuality
  - 5.3.1 Provisional Results
  - 5.3.2 Final Results
- 5.4 Coherence
- 5.5 Comparability
- 5.6 Accessibility and Clarity
  - 5.6.1 Assistance to Users, Special Analyses
  - 5.6.2 Revisions
  - 5.6.3 Publications
    - 5.6.3.1 Releases, Regular Publications
    - 5.6.3.2 Statistical Reports
    - 5.6.3.3 Internet
  - 5.6.4 Confidentiality

## 6 Additional documentation and publications

# 1 Overview

This report was initiated following a request by the National Statistics Board to compile a publication containing a broad range of information on Ireland's environmental performance over time and with a comparative perspective. The report is based on the collection of administrative data rather than survey data. The outputs are a series of indicators grouped into ten different domains: Global Context, Environmental Economy, Air, Greenhouse Gases and Climate Change, Water, Land Use, Energy, Transport, Waste and Biodiversity.

## 2 General Information

### 2.1 Statistical Category

The indicators in this report are compiled using a broad range of administrative data sources rather than survey data.

### 2.2 Area of Activity

The field of activity associated with this report is the environment.

### 2.3 Organisational Unit Responsible, Persons to Contact

The Environment and Climate Division of the CSO is responsible for compiling and publishing Environmental Indicators Ireland.

Persons to contact:

Reamonn McKeever 01-4984212

Berna Lawlor 01 498 4210

Email: [environment@cs0.ie](mailto:environment@cs0.ie)

### 2.4 Objectives and Purpose; History

The purpose of compiling the Environmental Indicators Report is the development and provision of a broad range of indicators which can be used to examine Ireland's environmental performance and assist policy makers and analysts in the area of the environment.

### 2.5 Periodicity

The Environmental Indicators Report was initially published on a biennial basis, but once its sister report on Sustainable Development Indicators was discontinued it has been published on an annual basis. A new chapter on the Global Context was added last year.

### 2.6 Client

This report is carried out as a general national requirement rather than a specific client such as Eurostat. No non-CSO funding is received.

### 2.7 Users

National users include the environment sector, the government, the media, educational institutions and the public. International users include Eurostat.

### 2.8 Legal basis

This report is not a legal requirement under Irish or European law.

## 3 Statistical Concepts, Methods

### 3.1 Subject of the Statistics

The principal subject areas covered by the publication are: Global Context, Environmental Economy, Air, Greenhouse Gases and Climate Change, Water, Land Use, Energy, Transport, Waste and Biodiversity.

### 3.2 Units of Observation/Collection Units/Units of Presentation

There is no common list of units of observation, collection or presentation in the report.

### 3.3 Data Sources

The report is based on the collection of administrative rather than survey data. The main sources of administrative data are: The Central Statistics Office; the Environmental Protection Agency; the Sustainable Energy Authority of Ireland; the Department of Agriculture, Food and the Marine and the Department of Communications, Climate Action and Environment; Eurostat, the United Nations, the World Bank and the European Environment Agency.

### 3.4 Reporting Unit/Respondents

The reporting units vary by indicator. There is no common standard applicable across different indicators.

### **3.5 Type of Survey/Process**

Administrative data was collected from the organisations mentioned in item 3.3 above. Survey data was not used.

### **3.6 Characteristics of the Sample/Process**

The processes used to calculate indicators in the Report are set out in the Background Notes published on the CSO website.

#### **3.6.1 Population and Sampling Frame**

Not applicable.

#### **3.6.2 Sampling Design**

Not applicable.

### **3.7 Survey Technique/Data Transfer**

Not applicable.

### **3.8 Questionnaire (including explanations)**

Not applicable.

### **3.9 Participation in the Survey**

Not applicable.

### **3.10 Characteristics of the Survey/Process and its Results**

The processes used to calculate indicators in the Report are set out in the Background Notes published on the CSO website.

### **3.11 Classifications used**

Not applicable.

### **3.12 Regional Breakdown of Results**

The indicators used in the Report refer to Ireland as a single geographic unit.

## **4 Production of the Statistics, Data Processing, Quality Assurance**

### **4.1 Data capture**

Not applicable.

### **4.2 Coding**

Not applicable.

### **4.3 Data Editing**

Data are edited manually. Implausible or erroneous data are interrogated using checks over time, comparison with other data sources and through follow up calls and emails with data sources. No special IT tool such as BOPFACTS or SAS is used.

### **4.4 Imputation (for Non-Response or Incomplete Data Sets)**

Imputation is based on carrying forward the latest available data in Excel.

### **4.5 Grossing and Weighting**

Not applicable.

### **4.6 Computation of Outputs, Estimation Methods Used**

Excel data are checked against output data used in the previous year and from other sources; missing data is imputed; and data sources are contacted via email and telephone to check that the data is accurate.

### **4.7 Other Quality Assurance Techniques Used**

See section 4.6 above

## **5 Quality**

### **5.1 Relevance**

National users of these statistics include the environment sector, the government, the media, educational institutions and the general public, while international users include Eurostat.

### **5.2 Accuracy and Reliability**

#### **5.2.1. Sampling Effect & Representativeness**

Figures can be regarded as quite accurate and reliable given the internal quality checks conducted by our data sources.

#### **5.2.2. Non-Sampling Effects**

##### **5.2.2.1 Quality of the Data Sources used (other than survey register)**

Figures can be regarded as quite accurate and reliable given the internal quality checks conducted by our data sources.

##### **5.2.2.2 Register Coverage**

Not applicable. No register was used to identify sample data. Statistics are based on administrative rather than survey data.

##### **5.2.2.3 Non-response (Unit and Item)**

Non-response is corrected by imputing data based on carrying last year's figures forward for example.

##### **5.2.2.4 Measurement Errors**

Not applicable. Statistics are based on administrative rather than survey data.

##### **5.2.2.5 Processing Errors**

In order to address processing errors, the data are checked by more than one person, compared with other data sources and clarified by contacting data sources to confirm if errors have occurred in the process.

##### **5.2.2.6 Model-related Effects**

Not applicable.

### **5.3 Timeliness and Punctuality**

#### **5.3.1 Provisional Results**

Provisional or preliminary results are not produced.

#### **5.3.2 Final Results**

Data are published on an annual basis using the most up-to-date figures that are available. The 2019 Report was published on August 26<sup>th</sup>, 2019.

### **5.4 Coherence**

There is a high degree of coherence between the CSO's Environmental Indicators Ireland Report and the figures published elsewhere by the CSO and by the other data sources. Some minor timing issues may arise in comparing Irish and Eurostat data for instance with air pollutant information. There are also slight methodological issues between Irish and EU data on Forest and Fertiliser indicators.

### **5.5 Comparability**

Some data published in the Report are revised over time (e.g. Greenhouse Gas emissions), but most figures show a high degree of comparability over time as they are calculated using the same methodology from year to year.

### **5.6 Accessibility and Clarity**

#### **5.6.1 Assistance to Users, Special Analyses**

Data users sometime make requests for figures to be provided or explained and we respond courteously and efficiently to these.

#### **5.6.2 Revisions**

Revisions are published on an annual basis when the whole report is updated. Generally, these revisions are quite minor as the quality of the data is good.

### **5.6.3 Publications**

#### **5.6.3.1 Releases, Regular Publications**

The information compiled in this publication are published as the “Environmental Indicators Ireland” Report.

#### **5.6.3.2 Statistical Reports**

Not applicable.

#### **5.6.3.3 Internet**

The 2020 Environmental Indicators Ireland Report is published electronically on the CSO website at the following address:

<https://www.cso.ie/en/statistics/environmentindicators/environmentalindicatorsireland/>

However, these figures are not published on STATBANK.

### **5.6.4 Confidentiality**

Confidentiality is not a problem as these statistics are publicly available on relevant websites for example.

## **6 Additional documentation and publications**

Not applicable