Scottish Environment Protection Agency
Buidheann Dìon Àrainneachd na h-Alba

2020 WASTE DATA QUALITY REPORT

WASTE INCINERATED IN SCOTLAND

7th December 2021

Every day SEPA works to protect and enhance Scotland's environment, helping communities and businesses thrive within the resources of our planet.

We call this **One Planet Prosperity**



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Introduction

This report describes the methodologies to produce summary waste incinerated in Scotland data for the 2020 calendar year. The report should be used alongside the 2020 Waste incinerated in Scotland official statistics and associated data tables

The 2020 data are presented as follows:

- The Waste incinerated in Scotland and associated data tables are presented in a summary and commentary document. This narrative describes the major trends and provides an interpretation of the data. They are located at www.sepa.org.uk/environment/waste/waste-data/waste-data-reporting/waste-data-for-scotland/.

- Scotland's Environment Waste Discover Data tool presents the waste from all sources (WFAS) in an interactive and visual format and is found on Scotland's Environment web at www.environment.scotland.gov.uk/get-interactive/data/waste-from-all-sources/. This tool covers the total waste managed, whether it be waste from households, waste from construction and demolition, or waste from commerce and industry. This tool includes the incineration dataset, and includes waste generated and waste management methods including waste recycled, incinerated, composted as well as waste incinerated.

- It should be noted that to provide consistency across the datasets for the WFAS Discover tool, additional years of waste generation and management data, including incineration data, are updated at the same time. The statistical release and excel landfill data tables are released about six months before the annual update of the WFAS Discover tool. This is because the incineration data comes primarily from one discrete dataset and can be prepared and published earlier.

Data sources referred to at various parts of the document are listed below. The agency that carries out the analysis of the dataset is provided in brackets.

- Scottish licensed/permitted site returns (SEPA)

Appendix 1 provides a fuller description of the dataset(s) listed above, including any links to return forms and guidance.

Appendix 2 provides a brief summary of the coding of waste using European Waste Catalogue (EWC) and European Waste Catalogue for Statistics (EWC-STAT), which are used throughout this document.

Appendix 3 provides a glossary of terms.

Appendix 4 provides a list of acronyms.

Revisions Policy

Revisions could occur for various reasons, including when data from third parties is unavailable or provisional at the time of publishing or if there are subsequent methodological improvements or refinements.

The figures are accurate at the time of publication. However the data may be updated if further revisions are necessary. Normally these revisions will be published concurrent with the next release.

Where there have been changes in methodology for the waste data tables, the complete dataset is to be revised for all years to ensure that comparisons between years are valid.

Contacting Us

If you have any queries on the contents of this document or the accompanying waste data tables, please contact the Dataflows Unit by email, phone or in writing.

By Email

waste.data@sepa.org.uk

Note During the COVID 19 emergency SEPA offices have been closed. Please refer all correspondence to the email address above.

By Phone

Telephone 03000 99 66 99

Waste Incinerated in Scotland

Introduction

This section describes how we report waste incinerated in Scotland.

A list of Scottish incinerators is maintained and checked with SEPA regulatory staff annually, prior to starting the analysis. For co-incinerators, we exclude any non-waste fuels from our analysis. There were 15 operational sites used in the final 2020 analysis. These sites vary significantly in size, with 4 sites having incinerated under 500 tonnes of waste in 2020 and 6 sites incinerated over 100,000 tonnes in 2020.

Waste data are supplied as EWC codes, which are aggregated into final reporting categories. Waste type descriptions are separated into non-hazardous/hazardous using European Waste Catalogue (EWC) codes.

The origin of waste incinerated (i.e. Scottish/non-Scottish) is only reported for sites using the licensed/permitted site returns. The origin of the waste is reported in Table B (Waste inputs to site) of the licensed/permitted site return. For any sites that complete Table C4 of the licensed/permitted site return, to report on wastes incinerated after being treated on-site, the waste origin is not reported. It was assumed that wastes reported in table C4 had an origin of Scotland. In 2020 there were no sites that reported waste incinerated in table C4, compared to 2019 where there was one site that reported waste incinerated in table C4.

Recovery by incineration and co-incineration within Scotland

In the waste data tables, “Recovered by incineration” means that waste has been incinerated at a facility that has been accredited as meeting the energy efficiency standard of a recovery facility (R1 facility) as defined in the Waste Framework Directive. “Recovered by co-incineration” means waste incinerated at a facility that normally generates energy from incineration of non-waste sources such as coal or gas. This may include, for example, a cement kiln that normally uses natural gas as an energy source. While there are no municipal waste incineration facilities in Scotland that are classified as R1, it is thought that the five municipal waste incinerators in Scotland likely meet the efficiency standard of the Directive but the operator has not applied for

the accreditation. Consequently, all waste incinerated in Scotland is either classified as waste disposed by incineration or waste recovered by co-incineration.

Disposal by incineration in Scotland

In the waste data tables, “Disposed by incineration” means waste incinerated at an incineration facility that is not accredited as meeting the energy efficiency standard of a recovery facility (D10 facility). All five municipal waste incinerators in Scotland fall into this category.

Further information

Contacting Us

If you have any queries on the contents of this document or the accompanying waste data tables, please contact the Dataflows Unit by email, phone or in writing.

By Email

waste.data@sepa.org.uk

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Appendix 1

Datasets used in the 2020 methodology

Scottish licensed/permitted site returns

Approximately 940 individual licences submit quarterly returns to SEPA via email or post, of which 15 sites were operational incineration sites. A copy of the return form can be downloaded from the SEPA website[1]. The returns dataset is managed and checked by SEPA. The return form consists of Table B (Waste inputs to site), Table C (Waste treated on site), Table C4 (Waste landfilled or incinerated after treatment on-site – landfill or incineration sites only) and Table D (Waste sent off site).

SEPA carried out quality assurance of the dataset that included comparing individual site data with previous quarters/years, consistency of EWC codes with the description of waste provided by the operator and missing data. Submissions were collected, uploaded and checked by SEPA staff with the assistance of various automation and visual tools throughout the process.

[1] http://www.sepa.org.uk/environment/waste/waste-data/guidance-and-forms-for-operators/licensed-and-permitted-sites/

Appendix 2

European Waste Catalogue

Throughout this document reference is made to both the European Waste Catalogue (EWC) list of wastes and European Waste Catalogue for Statistics (EWC-STAT). A brief explanation of each is given below, along with links to further information.

European Waste Catalogue List of Waste (EWC 2000)

The EWC 2000 is a harmonised, non-exhaustive list of waste types established by the European Commission (2000/532/EC). The list is used to categorise waste based on a combination of what they are, and the process or activity that produces them.

The full EWC 2000 list and further information is available here:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2000D0532:20020101:EN:PDF

The list is divided into 20 chapters, most of which are industry-based, although some are based on materials and processes. Each chapter is represented by a two-digit code between 01 and 20 and comprises one or more subchapters. Individual waste types are detailed in the subchapters and are assigned a six-digit code that comprises two digits for the chapter, two for the subchapter and two specific to the waste type.

Hazardous wastes are signified by entries where the EWC code is marked by an asterisk (*).

The use of EWC codes to describe waste on waste transfer notes in Scotland has been statutory since April 2004. The majority of statutory waste data returns received by SEPA, including licensed/permitted site returns, exempt activity returns and special waste consignment notes require waste to be classified according to the EWC 2000.

European Waste Catalogue for Statistics (EWC-STAT)

The EWC-Stat is a (mainly) substance-oriented statistical classification of waste established by the European Commission (2004/574/EC). The EWC-STAT contains 13 categories, each represented by a two-digit code between 01 and 13. These are subdivided into individual waste types.

A table of equivalence allows wastes coded in the EWC 2002 to be converted into the EWC-Stat. However, because of the way the coding system operates, it is not possible to do the reverse conversion. The table of equivalence and further information is available here:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:253:0002:0041:EN:PDF

Appendix 3

Glossary

EWC Code	European Waste Catalogue code
Hazardous Waste	Waste with hazardous properties which may render it harmful to human health or the environment. Hazardous waste is also called Special Waste in Scotland, as defined in the Special Waste Regulations 1996 (and amendments).
WFAS	Waste from all sources. This includes commercial and industrial sources, construction and demolition sources as well as from household sources.
Waste incinerated by co-incineration	Wastes used primarily as a fuel and incinerated at an incineration facility in which the main purpose is the generation of energy or production of material products (e.g. cement), and which uses waste as an additional fuel.
Waste incinerated by disposal	Wastes incinerated at an incineration facility where the energy efficiency has not been demonstrated to meet the R1 criteria specified in the EU Waste Framework Directive (Directive 2008/98/EC).
Waste incinerated by recovery	Wastes used principally as a fuel to generate energy and incinerated at an incineration facility where the energy efficiency has been demonstrated to meet the R1 energy efficiency criteria specified in the EU Waste Framework Directive (Directive 2008/98/EC).
Waste recovered by incineration	Wastes incinerated by co-incineration and waste incinerated by recovery.
Waste incinerated	WFAS that is incinerated in Scotland including waste incineration by disposal and waste incineration by recovery.

Appendix 4

Acronyms

C&D	Construction and Demolition
C&I	Commercial and Industrial
EWC	European Waste Catalogue
EWC-STAT	European Waste Catalogue for Statistics
SEPA	Scottish Environment Protection Agency
WFAS	Waste From All Sources

Version Control

Version	Description	Date
1	Initial published report	29/9/2020

For information on accessing this document in an alternative format or language please contact SEPA by email at equalities@sepa.org.uk

If you are a user of British Sign Language (BSL) the Contact Scotland BSL service gives you access to an online interpreter enabling you to communicate with us using sign language.

http://contactscotland-bsl.org/

www.sepa.org.uk