



**Carbon dioxide capture, transportation
and geological storage—Vocabulary—
Cross cutting terms**

STANDARDS
Australia



Currently in preview, click buy full version

AS ISO 27917:2019

This Australian Standard® was prepared by EE-002, Carbon dioxide capture, transportation, and geological storage. It was approved on behalf of the Council of Standards Australia on 1 February 2019.

This Standard was published on 5 March 2019.

The following are represented on Committee EE-002:

- Australian Energy Council
- Australian National Low Emissions Coal R&D
- CSIRO
- Department of Mines, Industry Regulation and Safety (WA)
- Department of Premier and Cabinet (SA)
- Engineers Australia
- Geoscience Australia
- Petroleum Exploration Society of Australia (Victorian Branch)
- University of Melbourne

This Standard was issued in draft form for comment as DR AS ISO 27917:2018

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

www.standards.org.au

ISBN 978 1 76072 376 7



**Carbon dioxide capture, transportation
and geological storage—Vocabulary—
Cross cutting terms**

First published as AS ISO 27917:2019.

COPYRIGHT

© ISO 2019 — All rights reserved
© Standards Australia Limited 2019

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

Preface

This Standard was prepared by the Standards Australia Committee EE-002, Carbon dioxide capture, transportation, and geological storage.

The objective of this Standard is to define a list of cross-cutting terms commonly used in the field of carbon dioxide capture, transportation and geological sub-surface storage including through storage in association with enhanced oil recovery (EOR) operations.

The terms are classified as follows:

- (a) general terms and definitions relating to carbon dioxide;
- (b) general terms and definitions relating to carbon dioxide capture, transportation and storage;
- (c) general terms and definitions relating to monitoring and measuring performance in carbon dioxide capture, transportation and geological storage;
- (d) general terms and definitions relating to risk;
- (e) general terms and definitions relating to relationships with stakeholders.

This Standard is identical with, and has been reproduced from, ISO 27917:2017, *carbon dioxide capture, transportation and geological storage – Vocabulary – Cross cutting terms*.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

Contents

Preface	ii
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 General terms and definitions relating to carbon dioxide capture, transportatio. and storage	1
3.2 General terms and definitions relating to CO ₂	3
3.3 General terms and definitions relating to monitoring and measuring performance in CCS	6
3.4 General terms and definitions relating to risk	7
3.5 General terms and definitions relating to relationship with stakeholders	9
Annex A (informative) List of acronyms	10
Annex B (informative) CCS project life cycle	11
Bibliography	12
Alphabetical index	13

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 265, *Carbon dioxide capture, transportation and geological storage*.

Introduction

The objectives of the document are the following:

- to provide a comprehensive list of terms and their definitions for carbon dioxide capture, transportation and geological storage including through EOR operation in order to facilitate communication among:
 - experts involved in the development of ISO standards on carbon dioxide capture, transportation and geological storage;
 - other carbon dioxide capture, transportation and geological storage stakeholders;
- to provide the basis for common understanding for all future ISO standards for carbon dioxide capture, transportation and geological storage.

Currently in preview, click buy full version

Australian Standard®

Carbon dioxide capture, transportation and geological storage— Vocabulary—Cross cutting terms

1 Scope

This document defines a list of cross-cutting terms commonly used in the field of carbon dioxide capture, transportation and geological sub-surface storage including through storage in association with enhanced oil recovery (EOR) operations.

This document only deals with CO₂ geological sub-surface storage.

The terms are classified as follows:

- general terms and definitions relating to carbon dioxide;
- general terms and definitions relating to carbon dioxide capture, transportation and storage;
- general terms and definitions relating to monitoring and measuring performance in carbon dioxide capture, transportation and geological storage;
- general terms and definitions relating to risk;
- general terms and definitions relating to relationships with stakeholders;

A list of the main acronyms used is given in [Annex A](#).

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1 General terms and definitions relating to carbon dioxide capture, transportation and storage

3.1.1 carbon dioxide capture and storage

CCS
process consisting of the separation of CO₂ from industrial and energy-related sources, transportation and injection into a geological formation, resulting in long term isolation from the atmosphere

Note 1 to entry: CCS is often referred to as Carbon Capture and Storage. This terminology is not encouraged because it is inaccurate: the objective is the capture of carbon dioxide and not the capture of carbon. Tree plantation is another form of carbon capture that does not describe precisely the physical process of removing CO₂ from industrial emission sources.

Note 2 to entry: The term "sequestration" is also used alternatively to "storage". The term "storage" is preferred since "sequestration" is more generic and can also refer to biological processes (absorption of carbon by living organisms).