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Australian STANDARD

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

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Australian Energy Council
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Geoscience Australia
Petroleum Exploration Society of Australia (Victorian Branch)
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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.*

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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.

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 CO_2 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 CO_2 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 CO_2 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).