

CDP Technical Note: Special conditions for reporting Scope 1 emissions

CDP Climate Change Questionnaire



Contents

CDP Technical Note: Special conditions for reporting Scope 1 emissions	. 1
Version	.3
For companies that capture & store and transfer CO ₂	.4
Transfer in - transfer out	.5
Enhanced Oil Recovery (EOR)	.6

Version

Version	Revision date	Revision summary
1.0	September 25, 2014	First published version.
2.0	June 1, 2018	Updates for companies with emissions from biologically sequestered carbon (from combustion of biomass/biofuels).
3.0	March 3, 2019	Revision to clarify the reporting of emissions from biologically sequestered carbon (from combustion of biomass/biofuels).
3.1	April 7, 2020	Minor revision to "For companies with emissions from biogenic carbon" section.
4.0	January 25, 2023	Section on reporting emissions from biogenic carbon has been removed, as this information is covered in the reporting guidance for relevant questions instead.

For companies that capture & store and transfer CO₂

If a company generated CO_2 within its consolidation boundary and captures the gas, it should report the generated gas within its Scope 1 figure. If the CO_2 is transferred outside the reporting boundary, the organization may document the quantities of CO_2 that have been transferred and the relevant organization and/or facility to which the gas was transferred within the "Comment" column in C6.1 (this will not be scored).

If desired, this portion of transferred CO_2 can be subtracted from the company's direct (Scope 1) emissions, although it should be reported elsewhere: under Scope 3 depending upon whether the CO_2 is eventually emitted and the nature of the emission. Some of the potential uses of transferred CO_2 are: carbonated beverages; dry ice; fire extinguishing agent; refrigerant; laboratory gas; grain infestation treatment; solvents; as a constituent of a by-product fuel that is exported (also known as inherent CO_2); as a feedback to other chemical or industrial processes; and Enhanced Oil Recovery (see below).

Companies should document the quantities of CO₂ transferred outside of its organizational boundaries. Oil & gas sector companies are asked to report on transfers and Enhanced Oil Recovery in question C-OG9.8b of the oil & gas questionnaire and could direct data-users to that information using the "Comment" column, rather than reproduce information there.

It should be noted that oil & gas companies with business activities additional to their oil & gas sector work should report on any transfers related to those activities within the main questionnaire.

Transfer in - transfer out

There may be cases in which an organization transfers in CO_2 (or more generally GHG), incorporates that CO_2 into a product and then transfers the product out of its organization. Examples of this include some carbonated beverages and fire extinguisher products, for which the transferred-in CO_2 may have been purchased from a third party. Neither the transfer in nor the transfer out of the CO_2 should be included within the Scope 1 figure of the reporting organization. However, if the process of introducing CO_2 into the product results in some of the transferred-in CO_2 being lost to the atmosphere (i.e. as fugitive emissions) then that CO_2 lost to the atmosphere from within the boundary of the reporting organization should be included within the Scope 1 figure.

Oil & gas sector companies are asked to report transfers in question C-OG9.8a of the oil & gas questionnaire. For other companies, the transfers in and out of CO_2 across the boundary of the reporting organization should be documented in the "Comment" column in question C6.1. It should be noted that the transfer in – transfer out process is different to the situation where companies generate and transfer out, in which CO_2 is generated within the boundary of the reporting organization and subsequently transferred out.

Enhanced Oil Recovery (EOR)

An organization that has captured CO_2 from the combustion of fossil fuels may subsequently transmit that CO_2 in a process of geological sequestration. The transmission of the CO_2 may be within the boundary of the organization or outside the boundary of the organization. Geological sequestration is often associated with Enhanced Oil Recovery (EOR), in which gas is injected into an emptying oil well in order to recover residual oil reserves and CO_2 is either captured underground in the empty or emptying oil well, which is capped, or flushed out of the well as it may be dissolved in the recovered oilwater mixture.

There are various uncertainties associated with geological sequestration and these are to varying degrees the subject of ongoing research initiatives and investigations. Firstly, there are uncertainties about how much of the CO_2 may actually be sequestered and what level of permanence may be attached to the carbon capture. Secondly there are life cycle issues in terms of how much CO_2 is emitted in surface facilities and transportation processes, energy use through the EOR process, losses from the storage system, leakage through abandoned wells and diffusion mechanisms through nearby active wells.

Given the uncertainties, CO_2 transferred and geologically sequestered through EOR processes either within or across the organizational boundary should be included within the gross Scope 1 figure. The gross Scope 1 figure should not be reduced to give a net figure.

If a company uses CO₂ for enhanced oil recovery (EOR) in oil wells within its consolidation boundary, then the emissions that occur from this process should be logged under Scope 1. Oil & gas sector companies are asked to specifically report on EOR in question C-OG9.8b.

A company may consider that some of the CO₂ remains sequestered within the oil well. However, due to the uncertainty over the permanence of this sequestration, the mass of gas should still be logged under Scope 1.

A company that transfers CO_2 outside its consolidation boundary for use in EOR can report the emissions that occur under Scope 3, if (some other) organization participating in the EOR activity reports it as a direct emission under Scope 1. It may consider that some CO_2 may remain sequestered within the oil well. However, due to uncertainty over the permanence of the sequestration, the mass of gas should still be logged under Scope 3.