Accounting for land use change emissions from agricultural supply chains: Pilot Questions and Guidance

This document is part of CDP's targeted engagement of the project 'Accounting for land use change emissions from agricultural supply chains.' You will find pilot questions and amendments of current questions proposed for CDP's Agricultural Climate Change and Forests Questionnaires.

Please read the questions proposed in this document before providing your feedback. Feedback is requested through the online feedback form that accompanies this document. To access the feedback form, either click in the link or copy and paste the following URL into a new window in your browser: https://www.surveygizmo.com/s3/4625269/Land-use-change-targeted-engagement

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Introduction

CDP, in collaboration with the sustainability consulting group Quantis, is looking at how to best assist companies to account for, and report on, greenhouse gas (GHG) emissions from land use change (LUC). Quantis have reviewed CDP's Climate Change and Forests questionnaire and proposed new questions or amendments to existing questions and guidance. In particular, the questions aim to capture the full scope of LUC emissions (i.e. emissions from the supply chain as well as direct operations). This document includes:

- 4 new pilot questions proposed for the Agricultural Climate Change questionnaire;
- 1 new pilot question proposed for the Forests questionnaire;
- 2 amendments to the current Climate Change questionnaire, and 1 amendment to the Forests questionnaire. Please refer to the current questionnaires when reviewing these suggested amendments;
- A glossary of key terms as defined by Quantis.

***Please note** the question numbers for the new pilot questions do not represent actual CDP Questionnaire numbers but provide a logical order to review the questions. Amendments to current questions, however, will use the same numbering.*

New pilot questions

Agricultural Climate Change Questionnaire

(1) Do you calculate greenhouse gas emissions related to land use change in your direct operations and/or in other parts of your value chain?

Rationale

This question asks whether your business quantifies the total GHG emissions from land use change in its direct operations and the rest of the value chain. Land use change (e.g. deforestation) leads to significant GHG emissions on a global level and can have a considerable impact with regards to an organization's footprint. Previously, this information was excluded from reporting practices due to lack of a consistent methodology. New methodological developments in the accounting space provide a more consistent approach (e.g. LUC Guidance). This question not only allows companies to disclose on GHG emissions from LUC but also allows investors and other data-users to more easily access this information from a risk perspective. Organizations benefit from disclosing this information by informing their stakeholders about their status with regards to LUC and consequently identify the magnitude of the potential risks and opportunities related to land use change.

Response options

Select one of the following options:

- Yes
- Partially
- No

(1a) Break down your land use change emissions for your direct operations and for your value chain.

Question dependencies

This question only appears if you select "Yes" or "Partially" in response to 1.

Response options

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table:

Value chain stage	Emissions (metric tons CO2e)	Methodology	Change from last reporting year	Please explain
Select from: • Direct operations • Supply chain • Other parts of the value chain	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places]	Select all that apply: • Default emissions factors • Region-specific emissions factors • Empirical models • Process-based models • Field measurements • Other, please specify	Select from: • Increased • Decreased • Remained the same overall • This is our first year of reporting gross global land use change emissions, so we cannot compare to last year	Text field [maximum 2,400 characters]

[Add Row]

Additional information

Relevant methodologies for the calculation of emissions:

- Blonk consultants
- LUC Guidance methodology
- PAS 2050
- Regional standard
- The Greenhouse Gas Protocol Agricultural Guidance: Interpreting the Corporate Accounting and Reporting Standard for the Agricultural Sector
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

(1b) Identify the reasons for any change in your total land use change emissions and explain how the land use change emissions from your direct operations and/or other parts of your value chain compare to the previous year.

Question dependencies

This question only appears if you select "Increased" or "Decreased" or "Remained the same overall" in response to column 4 (Change from last reporting year) of question 1a.

Rationale

This question gathers information on how LUC emissions evolved since the last reporting period. This is a new question related specifically to LUC emissions encompassing both emissions happening in direct operations **and** in the value chain. It allows investors to transparently understand progress towards LUC emission targets and it allows organizations to assess progress with regards to reducing LUC emissions. Note that this question is about actual emission reductions and not avoided emissions.

Response options

Please complete the following table. You are able to add rows by using the “Add Row” button at the bottom of the table:

Value chain stage	Reasons	Change in emissions (metric tons CO2e)	Direction of change	Emission value (%)	Please explain
Select from: • List created from your response to question 1a	Select from: • Other emissions reduction activities • Change in output • Change in methodology • Change in boundary • Change in physical operating conditions • Unidentified • Other, please specify	Numerical field [enter a number from 0-99,999,999,999 using a maximum of 2 decimal places]	Select from: • Increased • Decreased • No change	Numerical field [enter a number from 0-999 using a maximum of 2 decimal places and no commas]	Text field [maximum 2,400 characters]

[Add Row]

(1c) Why do you not calculate greenhouse gas emissions for land use change in your direct operations and/or in other parts of your value chain?

Question dependencies

This question only appears if you select "No" in response to 1.

Response options

Please complete the following table:

Primary reason	Please explain
Select from: • Outside the scope of my organization • Analysis in progress • Evaluated but judged to be unimportant • Not evaluated due to insufficient data on operations • Not evaluated due to lack of internal resources • No instruction from management • Other, please specify	Text field [maximum 4,000 characters]

(1) Do you measure the impact of your forests-related commitment(s)?

Rationale

Although forests-related commitments are well documented, it is difficult to establish measurable outcomes such as emission reductions. These questions gather more specific details on the environmental impact of your forests-related commitment(s).

Response options

Please complete the following table:

Do you measure the impact?	Commitment	Type of monitoring system	Metric used to quantify	Please explain
Select from: • Yes • No	• No conversion of natural habitats • Zero gross deforestation and forest degradation • Zero net deforestation and forest degradation • No new development on peatland • Forest landscape restoration • Avoidance of negative impacts on threatened and protected species and habitats • No land clearance by burning or clearcutting • No conversion of High Conservation Value areas • No conversion of High Carbon Stock forests • Other, please specify	Select all that apply: • Geographic Information System (GIS) • Ground-based monitoring system • Aerial monitoring system • Other, please specify	Select from: • Reduced GHG emissions • Avoided GHGs emissions • Increased carbon sequestration • Increased biodiversity • Improved soil quality • Financial benefits • Improved water supply • Increased water quality • Water flow regulation • Other, please specify	Text field [maximum 2,400 characters]

Amendments to questions

Climate Change Questionnaire

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Current response options

Please complete the following table. The table is displayed over several rows for readability. You can add rows by using the “Add Row” button at the bottom of the table.

Target	KPI – Metric numerator	KPI – Metric denominator (intensity targets only)	Base year	Start year	Target year
Select from: • Energy productivity • Renewable energy consumption • Renewable energy production • Renewable fuel • Waste • Zero/low-carbon vehicle • Energy usage • Land use • **Land use change*** • Methane reduction target • Engagement with suppliers • R&D investments • Other, please specify	Text field [maximum 200 characters]	Text field [maximum 200 characters]	Numerical field [enter a number between 1900-2018]	Numerical field [enter a number between 1900-2018]	Numerical field [enter a whole number between 2000- 2100]

KPI in baseline year	KPI in target year	% achieved in reporting year	Target Status	Please explain	Part of emissions target	Is this target part of an overarching initiative?
Numerical field [enter a number from 0 to 999,999,999,999 using up to 5 decimal places and no commas	Numerical field [enter a number from 0 to 999,999,999,999 using up to 5 decimal places and no commas	Percentage field [enter a percentage from 0-100 using a maximum of 2 decimal places]	Select from: • Underway • Retired • Expired • New • Replaced	Text field [maximum 2,400 characters]	Text field [maximum 2,400 characters] [emissions reduction target ID]	Select from: • RE100 • EP100 • EV100 • Below50 – sustainable fuels • Science-based targets initiative • Reduce short-lived climate pollutants • Remove deforestation • Low-Carbon Technology Partnerships initiative • No, it's not part of an overarching initiative • Other, please specify

[Add Row]

*Suggested amendment: Add “Land use change” to the “Target” dropdown (column 1)

Rationale for amendment: This allows investors and other data-users to gain visibility and transparency on how organizations address and integrate actions related to LUC emissions into their climate targets. Organizations benefit from disclosing this information as it allows them to credibly share their strategies to reduce LUC emissions as well as track progress towards targets

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(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Current response options

Please complete the following table. The table is displayed over several rows for readability. You can add rows by using the “Add Row” button at the bottom of the table.

Fuels	Country/Region*	Heating value	Total MWh consumed by the organization	MWh consumed for self-generation of electricity
Select from: Fuels found here.	Select from a drop-down list of countries and regions. Please see the Technical Note “Country Regions” for details around the available regions and their constituent countries.	Select from: • LHV • HHV	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]

MWh consumed for self-generation of heat	MWh consumed for self-generation of steam	MWh consumed for self-generation of cooling	MWh consumed self-cogeneration or self-trigeneration
Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]	Numerical field [enter a number from 0 to 9,999,999,999 using up to 2 decimal places and no commas]

[Add Row]

*Suggested amendment: If select any of the following fuels (new fuels suggested in bold): “Animal Fat; Animal/Bone Meal, **Algaculture**, Bagasse; Bamboo, Biodiesel; Biodiesel Tallow; Biodiesel Waste Cooking Oil; Bioethanol; Biogas; Biogasoline; Biomass Municipal Waste; Biomethane, Liquid Biofuel, Primary Solid Biomass, **Palm oil (vegetable oil), Soya oil (vegetable oil), Rapeseed oil (vegetable oil), Other vegetable oil – please specify**, Waste Paper and Card, Wood; Wood Chips; Wood Logs; Wood Pellets; Wood Waste.”, a new column asking for the “Country/Region” where the disclosed fuels originate will be shown.

Rationale for amendment: This question asks details on your business exposure to climate risks with regards to own energy generation using forest-based or other agricultural-based products as fuel (for own operations and the rest of the value chain). This information provides investors and other data users with greater transparency on possible forest risk-exposure to companies due to their own energy production. This inclusion allows companies increased awareness of their potential forests-related risks.

(F2.1b) Which of the following issues are considered in your organization's forests-related risk assessment(s)?

Current response options

Please complete the following table:

Issue	Relevance & inclusion	Please explain
Availability of forest risk commodities	Select from: • Relevant, always included • Relevant, sometimes included • Relevant, not included • Not relevant, included • Not relevant, explanation provided • Not considered	Text field [maximum 2,400 characters]
Quality of forest risk commodities		
Impact of activity on the status of ecosystems and habitats		
Direct land use change*		
Indirect land use change*		
Regulation		
Climate change		
Tariffs or price increases		
Loss of markets		
Brand damage related to forest risk commodities		
Corruption		
Social impacts		
Other, please specify		

*Suggested amendment: Add “Direct land use change” & “Indirect land use change” to the drop-down list to the ‘Issue’ column.

Rationale for amendment: This information helps investors and other data-users to assess the robustness of the risk assessment made by companies.

Glossary

Land use (LU) “The total of arrangements, activities and inputs that people undertake in a certain land cover type” (IPCC, 2006).

Land use change (LUC): A change from one land use category to another as a result of human activity. Land transformation is another term for land use change. (Quanits, 2018)

Direct land use change (dLUC): land use change directly related to the history of the plot of land under consideration and refers to its conversion from one land category to another one e.g. forest to cropland or grassland to cropland. Direct land use change is a company’s “direct impact” on land. (Quantis, 2018)

Indirect land use change (iLUC): land use change that occurs elsewhere (national or international piece of land) due to indirect market pressures from the land under consideration. For example, a specific crop is expanding in terms of the land required for its production on a global level. Sourcing more of this crop can lead not only to direct land use change impacts, the impacts that can be observed on the piece of land growing this crop, but it also creates increased global pressure on any kind of land globally that is required to grow this crop. This second force of land use change is due to the company creating increased market demand for the crop and can impact land that might not be directly related to the company’s supply chain. A company can reduce its indirect land use change impacts by increasing the yield of the specific crop on land used to grow the crop in the own supply chain. As such, indirect land use change is defined as a company’s “market impacts” on land. (Quantis, 2018)

LUC Guidance: the Quantis LUC Guidance assembles, aligns, and completes the methodological accounting approach for greenhouse gas emissions from land use and land use change (LULUC) in corporate supply chains. This allows to ensure greater consistency when calculating and accounting for these emissions in the companies’ value chains. The guidance is built up on 14 recommendations which are divided in three groups. The first five recommendations are about the applicability, scope and principles of a LULUC GHG accounting assessment. The next five recommendations are on how to allocate and calculate GHG emissions from LULUC. Finally, the last four recommendations are on how to distribute these emissions across time and across products. While not intended as a standard but to serve as a Guide until an official standard can be published, the Guide helps organizations take tangible and voluntary steps towards developing future-proof standards and tools.