

# Future Proofing the Voluntary Carbon Markets: Double Counting

Guideline for the Double Counting Risk Assessment Tool

Version 1

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## 1 Introduction

With a cumulative transacted value of about \$4.6bn and 329 million tonnes of carbon dioxide equivalents (tCO<sub>2</sub>e)<sup>1</sup> avoided over the period 2005-2016, the voluntary carbon market has played a significant role in delivering climate action at scale. Despite its proven track record, the Voluntary Carbon Market (VCM) faces a challenge to adapt to the new paradigm posed by the Paris Agreement.

Post-2020, a significant share of VCM projects will be hosted in countries that have pledged targets and actions to mitigate climate change under the Paris Agreement. This presents the possibility that the impact of emission reductions from such projects may be 'double counted' – accounted in national pledges to mitigate climate change and counted in purchases made by individuals or corporates to 'offset' their greenhouse gas emissions. As such, it will become increasingly difficult to source double-counting 'risk-free' credits to fulfil voluntary carbon neutrality commitments<sup>2</sup>.

To help solve this challenge, this guideline and accompanying risk assessment tool allows VCM projects to assess the double counting risk against host country's Nationally Determined Contributions (NDCs).

To develop the guideline, an expert working group was convened to help formulate a high-level definition of double counting and an approach to assess whether double counting may occur and review the risk assessment tool to assess the exposure to double counting risk in post 2020 scenario. It is likely that over time as knowledge increases, NDCs are expanded upon and solutions are developed that the tool and its use are further developed. This version of the tool and guideline are not therefore a Requirement under Gold Standard but rather an optional review that can be conducted with results being put towards future developments.

A corresponding report has also been issued by Gold Standard that presents findings to date and next steps with regards to developing solutions.

Comments and queries should be directed to [help@goldstandard.org](mailto:help@goldstandard.org)

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<sup>1</sup> State of the Voluntary Carbon Markets 2016. Ecosystem Marketplace. Available from: [http://www.forest-trends.org/documents/files/doc\\_5242.pdf](http://www.forest-trends.org/documents/files/doc_5242.pdf)

<sup>2</sup> Hermville Kreibich, 2016, Identity Crisis? Voluntary Carbon Crediting and the Paris Agreement

## 2 Scope & Applicability

This guideline and associated tool are intended for use by Project Developers to assess if and where under an NDC double counting could potentially occur. It is not a Requirement of Gold Standard to apply this tool though future iterations may become part of the Standard in due course, as solutions are developed.

Project Developers applying the tool are encouraged to share their results with Gold Standard to further build the picture of the issues at hand and to inform solutions. These will only be shared publically if agreed by both parties and can be anonymised as needed.

## 3 Definition of Double Counting

Double counting is often used as an 'umbrella' term for a number of related issues. There are various definitions of double counting (and similar issues) relevant to the world of carbon offsetting and not all definitions agree; indeed different sub-types of double counting have been identified, as follows.<sup>3</sup>

- **Double issuance** - occurs when more than one unit is issued for the same emissions or emission reductions.
- **Double use** - occurs when one issued unit is used for mitigation pledge attainment more than once, either by the same Party or by different Parties, thereby leading to double counting of the emissions reductions represented by that unit. For example, because certificates are indistinguishable due to lack of unique serial numbers.
- **Double purpose** - occurs when the mitigation outcome is counted towards a (purchasing) country's mitigation commitment and at the same time the financial flow associated with the project is counted towards the investing country's financial commitment.
- **Double selling** - In this situation, a single emission reduction or removal is sold to multiple buyers. For example, a greenhouse gas (GHG) credit might be sold twice, or a singular GHG emission reduction might be certified under two GHG programs and sold under each.
- **Double claiming** - occurs when the host country and the purchasing country both claim the emission reductions and count them towards achieving their mitigation goal.

Not all sub-types of double counting are relevant for assessing risk of double counting

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<sup>3</sup> Schneider, Kollmuss, & Lazarus, 2015; Addressing the risk of double counting emission reductions under the UNFCCC, Stockholm Environment Institute

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against NDC mitigation pledges, so, a specific definition of double counting was approved by the Expert Working Group for the purposes of the risk assessment tool. This definition necessarily assumes that all other forms of double counting risk (double issuance use, purpose, selling) are otherwise avoided.

Figure 1 - Definition of Double Counting:

Double counting of emission reductions or removals occurs when a single greenhouse gas (GHG) emission reduction or removal is used more than once to achieve climate change mitigation efforts.

Specifically this definition implies:

- That double counting is an accounting issue as it refers to the unitised Emission Reduction (ER) being applied multiple times.
- That use by the Host Country requires that the GHG emission reduction or removal be expressed as a clearly defined and quantified target (whether expressly in the form of a GHG or not) and that progress towards achieving the target is quantifiable.
- That specifically this includes the risk of double counting between a voluntary action and a formal commitment under the Paris Agreement
- It specifically relates to performance efforts such as NDC targets and also to voluntary situations but does not assume these are formal 'compliance' mechanisms (as the Paris Agreement is non-binding)
- It also assumes that all other forms of double counting above (double issuance use, purpose, selling) are addressed.

## 4 Risk Assessment Tool Guidelines

### 4.1 Rationale of the Tool

Host Country NDC (or iNDC) submissions are not required to follow a shared template or indeed share a common language (as any of the 6 UN languages, in theory, may be used), though basic guiding principles such as “ a manner that facilitates the clarity, transparency and understanding” are given. NDCs span a wide range of economies and so cover different levels of ambition, ranging from non-quantified activities that are conditional upon accessing external funding through to economy-wide greenhouse gas emission targets tracked in national GHG inventories. The clarity and quality of information is also similarly variable, which makes drawing consistent conclusions hard to achieve.

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The risk assessment tool has therefore been developed to apply a reasonably generic approach to help the user navigate the wide differences in NDC types. Recalling from the definition in the previous section, that if a Host Country's NDC expresses a GHG emission reduction as a clearly defined and quantified target (whether expressly in the form of a GHG or not) a double counting risk is, in principle, present for any voluntary carbon market projects generating emission reductions within its borders. The tool has therefore been designed to identify such targets, and crucially, confirm if there are any exclusions that mean that risk is mitigated against such a target. The screening process follows a simple approach that determines if the IPCC sectors and/or subsectors that a project falls under are either specifically excluded from the NDC or are otherwise excluded (for example because a quantifiable target is not given). Where all parts of a project activity are excluded from an NDC in its entirety (i.e. at sector, sub sector and project level), only then can the risk of double counting be perceived as non-existent. IPCC sectors and subsectors were chosen because the categories within each are mutually exclusive and IPCC language is commonly used across many NDCs and in National GHG inventories (which have relevance for GHG target NDCs).

NDCs will be renewed every 5 years, in line with the principle of the Paris Agreement that signatory commitments shall increase in ambition. Therefore the scope and coverage of NDCs may change in the future and this tool cannot today make any conclusions about risk presented by future NDCs, only those for which exist. In all cases, where risk is identified in the tool, it will be because there is, as yet, no clarity on how accounting mitigations or "corresponding adjustments" to avoid double counting of emission reduction transfers between nations will be made within the context of the Paris Agreement. Solutions to double counting require market dialogue and will be developed further in due course.

The Tool has been developed to be as user friendly and intuitive as possible, with a number of guidance points that are included as comments in the XL file. It is not expected to be necessary for someone with a technical background in carbon offset projects to read this guideline to be understand how to use the Tool. The main purpose of this guideline is to provide hints and tips for the user and to explain the rationale behind the tool where it may not be clear.

## 4.2 Background Information Sheet

This sheet is used to gather the project information that will be required to conduct an assessment against an NDC. The key bits of project data used in the assessment are as follows:

- The Host Country location (to find out which NDC (s) should be reviewed),

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- The GS project type (in case information relevant to the project type is in the NDC),
- The start and end dates of the project crediting period (double counting may exist where these overlap with the start and end dates of a relevant NDC quantifiable target)
- How the baseline emissions of the project are defined (identifying these allows all possible risks of double counting to be assessed, discussed in more detail below)

There is also a single high level question for the situation in which a host country does not have an NDC (for example Nicaragua), as the tool cannot be used to assess risk in this case. Note that at this early stage of collecting information, if the host country NDC has an economy wide quantifiable target it is likely that a double counting risk will exist, so there may be little value in carrying out a detailed analysis using the tool, other than reviewing the start and end date of the target and comparing it with the project crediting period.

A key principle of the tool is to separate out the baseline emissions sources (or the way the emission reductions occur) within the project and conduct a review to see if a GHG or a quantifiable non-GHG target exists in the NDC for the identified baseline source. The separation is done because baseline emissions may occur across 2 or more IPCC sectors or sub sectors. For example, a Landfill Gas Waste to Energy Project that generates renewable energy from captured methane reduces emissions in both the Waste and Energy Sector.

As it is easier to define where an emission source exists within a Sub Sector than a Sector (because Sectors are broader), the tool asks the user to identify the IPCC Sub Sector first and then maps the relevant Sector to it automatically. This allows both to be considered separately in the screening process; the reason this is important it because a Sector may be included within an NDC target, and a specific sub sector excluded from it.

As GHG methodologies and Host Countries may consider baseline emissions to occur in different sectors/sub sectors<sup>4</sup>, the screen is done first from the methodology perspective and where a baseline emission source is specifically mentioned in the NDC as being considered within a different sectors/sub sector, this is also screened to capture all potential areas of risk. Once all Sectors and Subsectors are defined for the methodology and Host Country perspective, the tool will guide the user to check if a GHG or a quantifiable non-GHG target exists for each identified baseline source.

**Tips on using the tool:** many GHG methodologies specify the GHGs included within the

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<sup>4</sup> For example cookstoves are considered in biomass combustion in most GHG methodologies but may be considered in Forestry/AFOLU by a Host Country

project boundary and their sources. This information will also be repeated in the project design document.

Using the 'find' or search document for specific words in NDCs is a useful way of screening if named Sectors, Sub Sectors or Project Types are mentioned in the NDC. The same applies for any other relevant search term, for example 'Target', or 'Date'.

## 4.3 Assessment Grid Sheet

Once the Background Information has been filled in, it will be transferred across to the Assessment Grid. The grid is structured such that it asks the same questions for each baseline emissions source starting at the IPCC sector and moving down to the Sub Sector. Main questions (column C) should be answered first and where the answer is yes, then the user should move to the right and answer all relevant qualifying questions (for instance, a target start date should not be given if a project type or location is excluded from a target and likewise GHGs do not need to be excluded/included if a target is somehow excluded). A key is provided in the Tool to show the question type and if a dropdown is provided for use when answering.

NDC declared quantifiable targets may come in the form of a GHG target, or a non GHG target (or an Action<sup>5</sup>). Reflecting the diversity of NDCs themselves, various different sub-target types exist in NDCs GHG targets<sup>6</sup>, however they are not universally declared, or in many cases even obvious. This tool therefore requires the user only to define if a quantifiable target exists and if so, if it is for GHGs - and thereby assumes all other quantifiable targets fall into the non-GHG section (no differentiation on GHG sub-target types is required). As specific GHGs may be excluded from either an NDC or from a project, the screening process occurs separately at these two levels, which captures the possibility that a specific GHG may not be counted by both a Host Country NDC and a Project. An example being China's NDC which refers only to carbon dioxide as a target greenhouse gas; projects generating emission reductions solely from methane avoidance, for example, may not present any double counting risk here). Note that only carbon dioxide, methane and nitrogen dioxide are the only GHGs credited in the Gold Standard and therefore considered of relevance to double counting risk in this tool.

For each quantifiable target identified, the tool asks if there are any specific location or project based exclusions from it given in the NDC. Examples of this include Sudan's NDC

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<sup>5</sup> Actions may be quantifiable in nature, for instance Myanmar has a Policy to distribute 260,000 cook- stoves between 2016 and 2031.

<sup>6</sup> Base year, Fixed level, Baseline scenario, Intensity and Trajectory are known sub-target types

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that excludes all states except from Khartoum from its target in the Waste Sector, another example is Kenya's NDC that specifically excludes from its target emissions of carbon dioxide from the combustion of biomass (relevant to cookstove projects amongst others). Whilst this is not strictly a GS project or location based exclusion, the tool provides guidance to the user to use the exclusion question with discretion, capturing any similar exclusions from identified targets and recording the interpretation.

The preliminary results column provides the user with a first analysis of where double counting risks may lie in their project for each question answered. If no text appears, the assumption is that no risk is present for the numbered question. This preliminary conclusion is then summarised and subject to further analysis on the Results sheet.

**Tips on using the tool:** Using the 'find' or search document for specific words in NDCs is a useful way of screening if named GHGs (e.g. carbon dioxide, or CO<sub>2</sub>) are mentioned in the NDC.

Inevitably, a user may have to use their best efforts to interpret an NDC where it is not clear or the wording exactly matching those given in the Tool, for this reason, a section is given so that the NDC text and the rationale behind any interpretation can be clearly recorded (including the above point on exceptions in Kenya and Sudan).

## 4.4 Results Sheet

The Results page summarises the identified quantifiable targets for each baseline type by Sector and Sub Sector and if any specific exclusions from the target have been identified. It also ports across the preliminary results for the identified quantifiable targets in the Assessment Grid. The preliminary results include guidance on the specific double counting risk for each identified target, for example, for highlighted GHGs only in a period where project crediting and target dates overlap. The crediting period of the project is shown so that any Target start and end dates can be quickly compared with the start and end dates of Crediting Periods.

In the example below, the identified GHG target has a start date (01/01/2011) after the crediting period start date (01/01/2010). Double counting risk is present in this project for this target however, there is a time-based *part* exclusion for the period before the target start date. Where such a time-based exclusion occurs to an identified risk, the start date of the identified Target appears in a green font, as shown below. Notice that in the example the project crediting extends past the NDC target, but owing to the fact that NDCs will be renewed on a 5 year basis, it cannot be concluded that a time-based exclusion of risk is present for periods in the future.

Figure 2 - Example Results showing crediting start date before a target date

GS Project Type	Biodigesters	Crediting Period	Start Date	End Date						
			01/01/2010	31/12/2031						
Baseline A	IPCC Sector/ Sub Sector	Excluded ?	Quantifiable Target	Start Date	End Date	CO2	CH4	N2O	Preliminary Results	Conclusion
	Energy	No	GHG	01/01/2011	31/12/2030	DC		DC	DC risk on highlighted GHGs where Target and Crediting periods overlap	Preliminary Results Apply
		?	non-GHG or Action							
Methodology	> Biomass Combustion	?	GHG							
		?	non-GHG or Action							

An additional function of the results page is to refine the preliminary results with a final Conclusion. Where sub sector, or other exclusions (for example location based) do not apply (which will be in most cases), the Conclusion from the preliminary results will apply (see above). However, in that case that a specific exclusion at Sub Sector level renders a preliminary result incorrect, a pop up in the Conclusion appears to this effect. In the example shown, a GHG target for biomass combustion is specifically excluded from the Sector, which overrides the GHG target at Sector level. Note care must be taken when different target types are present within Sectors, for example if a GHG target is excluded at Sub Sector level, but a non GHG target is included at Sector level for the same baseline. The exclusion of the GHG target may not mean that the Sector level risk for the non GHG targets is fully removed. This type of situation is not expected, but it is worth bearing in mind.

Figure 3 - Example results showing a subsector exclusion overriding preliminary results

GS Project Type	Biodigesters	Crediting Period	Start Date	End Date						
			01/01/2010	31/12/2031						
Baseline A	IPCC Sector/ Sub Sector	Excluded ?	Quantifiable Target	Start Date	End Date	CO2	CH4	N2O	Preliminary Results	Conclusion
	Energy	No	GHG	01/01/2011	31/12/2030	DC		DC	DC risk on highlighted GHGs where Target and Crediting periods overlap	Sector Specific DC Risk removed by a Sub Sector exclusion from NDC
		?	non-GHG or Action							
Methodology	> Biomass Combustion	Yes	GHG	01/01/2010	31/12/2030					
		?	non-GHG or Action							

When interpreting results, the Assessment Grid works on the principle that if a double counting risk is not identified in the Preliminary Results or the Conclusion resolves an identified risk, then a project presents no identifiable double counting risk. Where risk is identified, it may have a time based exclusion, as discussed above.

Double Counting risk may be identified at Sector and Sub Sector level for one or more baseline types and this risk may exist from both methodology and Host Country perspectives. Host Countries may state that project activities displace or reduce emissions

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in different sectors and subsectors than in the applied methodology. Where this is the case, the Host Country statement on where emissions occur is the most important from the perspective of double counting risk.

If a Sector is specifically excluded in the Assessment Grid, but a target for a Sub Sector exists within the same baseline type, then the Conclusion is that Sub Sector target overrides the Sector exclusion. Where a double counting risk is highlighted across both a Sector or Sub Sector for a baseline type then the most accurate identification of double counting risk (and therefore the simplest accounting solution) is the smallest level identified (the sub sector).