

## Frequently asked questions on forestry and CDM

Version 1.2

### A. Introduction to forestry under the CDM

After the definition of the Kyoto target of 5.2 % emission reduction for the industrialised countries in 1997, it remained to be decided how to incorporate forests to the CDM in the first commitment period (2008-2012). On the operational side, issues of special concern have been methodological aspects and the topic of permanence – the potential threat that carbon effects accumulated over time are reversed e.g. by fire. On the political side, negotiators were worried that “easy to earn” carbon credits forests would flood the markets and outcompete other project categories.

These hurdles have been overcome with the clarification that only afforestation and reforestation projects (AR-CDM) are going to be eligible for the first commitment period, the definition of key methodological aspects such as baseline elaboration and monitoring (through PDD documents, approved methodologies, etc) and the introduction of temporary and long-term carbon credits (tCER and ICER). In 2006 the procedures for AR-CDM projects have become fully operational.

The first AR-CDM project registered by UNFCCC worldwide (10 Nov 2006) was the Guangxi Watershed Management project in the Pearl River Basin, China. The comprised reforestation of about 4000 ha with mostly native species is supported by the Worldbank’s BioCarbon Fund. TÜV SÜD carried out corresponding validation tasks. By mid 2010, 15 AR-CDM projects have been registered.

As currently the negotiations start to focus on post-2012 agreements and targets, further options to incorporate forests start to return to the political agenda. Subsumed under the title **Reducing Emissions from Deforestation and Degradation** or in short avoided deforestation, several proposals how to include projects and/or national approaches for the forestry sector in the developing world are being discussed. Among others, avoided deforestation activities could include forest conservation or sustainable forest management projects.

In advance to the official climate change negotiation process on the inclusion of other forestry measures and with a focus on a parallel non-Kyoto market, the demand for independent certification of carbon effects generated by corresponding project categories is increasing. Corresponding projects may be validated according to the standards for Verified Emission Reductions (VER).

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## B. Frequently asked questions on forestry under the CDM

### 1. Which type of forest activities of forestry projects are eligible for the CDM?

**Only afforestation and reforestation** projects qualify as CDM activity (**AR-CDM**) in the first commitment period (2008-2012). REDD projects (Reduced Emissions for Deforestation and Degradation) are not eligible under CDM

### 2. What is the difference between an afforestation and a reforestation?

The term afforestation describes a newly created forest on land that has been free of forest cover for more than 50 years. A reforestation is a newly created forest on land that has been **free of forest cover on 31 Dec. 1989**. Most project developers opt to prove compliance with the prerequisites of a reforestation.

### 3. What is considered a forest in the CDM context?

Forests in the CDM context are land areas covered with wooden species that **surpass the forest threshold**: min. 10-30% crown cover, minimum height 2-5 m, minimum area 0,05 ha-1,00 ha. Within these margins, national governments have to opt for a specific CDM forest definition. Corresponding information is accessible at <http://cdm.unfccc.int/DNA> or national CDM offices (DNA). Thus, an afforestation or a reforestation implies the conversion of forest-free land to forests.

### 4. Which land areas qualify for an AR-CDM project? Does agro-forestry qualify? Do enrichment plantings in existing forests or forest conservation qualify?

For an AR-CDM project all those land areas qualify on which wooden vegetation has **not surpassed the forest threshold** for more than 50 years (afforestation) or on the end of 1989 (reforestation), and furthermore would not surpass this threshold in future, e.g. stable grass- or shrubland.

Considering the previously indicated, agroforestry only qualifies if project measures convert long term non-forest land to forests. Enrichment plantings or forest conservation measures do not qualify under the current CDM setting as these activities focus on areas already covered with forests.

### 5. What is the role of TÜV SÜD as Designated Operational Entity (DOE)? Does TÜV SÜD elaborate a Project Design Document (PDD) for the project proponent?

Key task for a DOE accredited by UNFCCC is to provide independent audit services. These services focus on the **validation** of the project design and the estimated carbon effects prior to project start, as well as the **verification** of the project operation and the accumulated carbon effects over time as the project is implemented. For large scale projects the DOE that carries out validation has to differ from the one that is in charge of verification. For small scale projects the same DOE may carry out

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both tasks. Furthermore a DOE channels communication between the project participants and the UNFCCC secretariat.

6. What are the **key contents of a PDD** for an AR-CDM project?

The most up to date version of the official AR-PDD can be accessed at: [http://cdm.unfccc.int/Reference/PDDs\\_Forms/Reference/PDDs\\_Forms/PDDs](http://cdm.unfccc.int/Reference/PDDs_Forms/Reference/PDDs_Forms/PDDs).

The current AR-PDD includes the following chapters:

- A. General description** of the proposed A/R CDM project activity
- B. Duration** of project activity / crediting period
- C. Application** of an approved baseline and monitoring **methodology**
- D. Estimation** of ex ante net anthropogenic **GHG removals** by sinks and estimated amount of **net anthropogenic GHG removals** by sinks over the chosen crediting period
- E. Monitoring plan**
- F. Environmental impacts** of the proposed A/R CDM project activity
- G. Socio-economic impacts** of the proposed A/R CDM project activity
- H. Stakeholders' comments**

The requested annexes are: 1. Contact information on participants, 2. Information regarding public funding, 3. Baseline information, 4. Monitoring plan

7. What are the **key contents of a methodology**? How can the most adequate methodology be identified?

An approved methodology defines the general framework based on which the project baseline as well as the monitoring for the project activity needs to be developed. Hence, the choice of methodology largely impacts the calculation of the net anthropogenic removals to be accredited to the project. Methodologies, especially for large scale projects, are technically complex and require a consistent and well equipped project regime in order to be implemented successfully.

Key contents of the methodology are:

- i) the **applicability criteria**, which describe the conditions (e.g. in regard to current land use), under which the corresponding methodology can be utilised, including an enumeration of the different carbon pools to be considered (below ground biomass, above ground biomass, litter, dead wood, soil organic carbon).
- ii) the **baseline methodology** that estimates the most plausible “without-project-scenario” and provides ex ante indications on the GHG removals that would have occurred in the absence of the project within the defined project boundaries and its strata.
- iii) the **monitoring methodology** which focuses on the sampling design and stratification in order to estimate the project’s ex post net GHG removal by sinks. The latter considers potential leakage, e.g. provoked by emissions from the shift of activities from the inside to the outside

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of the project area. According to the monitoring guidelines defined by the methodology a project specific Monitoring Plan is developed.

Ten methodologies for large scale projects have been approved (see <http://cdm.unfccc.int/methodologies/ARmethodologies>) and six small scale methodologies are available (see <http://cdm.unfccc.int/methodologies/SSCmethodologies/SSCAR/approved.html>).

In order to identify the most adequate methodology, it has to be analyzed if the applicability criteria match the project conditions. If that is the case, it remains to be decided whether the implications on baseline and monitoring are feasible for the specific project context.

#### 8. What is the **frequency for verification** and when are **carbon credits issued**?

After validation and project registration with UNFCCC, initial project verification may be carried out at a time selected by the project participants. Subsequently verification needs to be carried out every 5 years (see <http://cdm.unfccc.int/Reference/COPMOP/08a01.pdf#page=61>; page 69, no 32). Carbon credits are issued ex post to verification by the UNFCCC's Executive Board.

#### 9. What is the **crediting period** for an AR-CDM project?

For AR-CDM projects it can be opted for up to a **20 years crediting period that may be renewed two times** for 20 years (totalling to max. 60 years), or a **one-time crediting period for up to 30 years**. The renewal of the crediting period implies that the chosen baseline will be re-assessed ahead of the second / third crediting period.

#### 10. How is it proven that the **project is additional** and not business-as-usual?

Under the CDM it can not be accounted for activities that would have been carried out anyhow - even without becoming a CDM project. In order to prove that the activity at stake is additional, guidance is provided by the **Additionality Tool for AR-CDM projects** (latest version included to EB 21 Report, Annex 16; <http://cdm.unfccc.int/EB>).

The document provides a step-wise approach to demonstrate additionality, based on i) identification of **alternatives** to the project activity, ii) **investment analysis** to determine that the activity is not the most economically or financially attractive, or iii) **barriers analysis**, and iv) **common practice analysis** (comparison to regional setting). In the field of forestry, project developers mostly prefer to use the barrier analysis rather than the investment analysis.

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11. Can a reforestation project that has already started still qualify for the CDM? Is **early crediting** for AR-CDM projects possible?

The Kyoto Protocol defined that CDM projects may start as early as the **year 2000**. Unlikely to conventional CDM projects, the option for **retroactive crediting** is still functional for AR-CDM projects. Nonetheless, within the process of validation, clear proof has to be provided that the project was started as a CDM measure from the start on.

(See [http://cdm.unfccc.int/EB/021/EB21\\_para64\\_Def\\_of\\_reg\\_per\\_for\\_ARProj\\_after\\_Jan2000.pdf](http://cdm.unfccc.int/EB/021/EB21_para64_Def_of_reg_per_for_ARProj_after_Jan2000.pdf))

12. What are the characteristics of **Small Scale AR-CDM** projects?

Small scale AR-CDM projects are currently limited to those activities that do not result in carbon effects larger than 16.000 t CO<sub>2</sub>-e / year implemented by poor individuals or communities. The design of the small scale PDD document is simpler ([http://cdm.unfccc.int/Reference/PDDs\\_Forms/Reference/PDDs\\_Forms/PDDs](http://cdm.unfccc.int/Reference/PDDs_Forms/Reference/PDDs_Forms/PDDs)), and the approved small scale methodology for baseline elaboration and monitoring is less sophisticated. (<http://cdm.unfccc.int/methodologies/SSCmethodologies/SSCAR/approved.html>)

An example in regard to project area: Considering e.g. an average annual net GHG removal of 10 t CO<sub>2</sub>-e / ha / year, the corresponding project area would be limited to 1600 ha.

Several small scale projects may be combined in a bundle (e.g. sharing the same baseline and monitoring plan). However, bundling is not allowed if the combined small scale projects qualify as a de-bundled large scale project. In order to be acceptable as a bundle, small scale projects may not:

- be carried out by the same project participants, and
- belong to the same project category and technology/measure (e.g. AR-CDM); and
- have been registered within the previous 2 years; and
- have project boundaries within 1 km to each other (at the closest point)

(see <http://cdm.unfccc.int/EB/007/eb7ra07.pdf>)

13. What is the **difference between tCER and ICER**?

In order to provide an operational response to the fact that the carbon effects achieved by an AR-CDM project are potentially reversible and non-permanent, two special types of CDM credits (Certified Emission Reductions, CER) with limited validity were introduced.

**tCERs:** Temporary CER expire at the end of the **commitment period** subsequent to the one in which they were issued. The country with reduction targets that uses these credits for compliance must fully replace them at expiration (e.g. by tCERs or other credits).

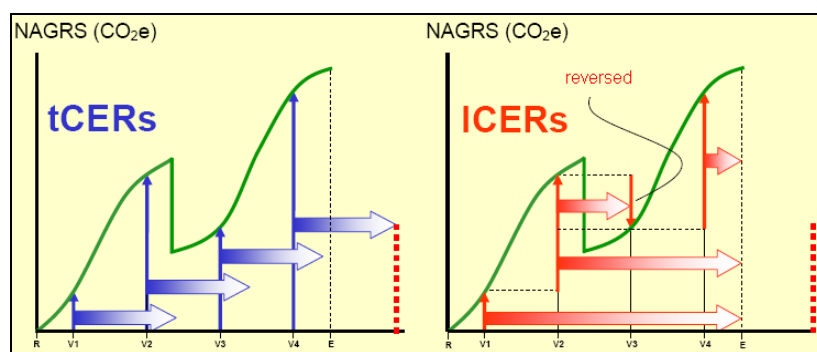
Furthermore, tCERs can be used only for that commitment period in which they were issued and they can not be banked to subsequent periods.

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The project implementer can request **issuance of tCER** for those carbon removals that have been **accumulated over last 5 years** once a renewed and positive verification report is provided (every 5 years). Issued tCERs are valid independent to the fact, if the project continues to generate net carbon removals or not.

**ICERs** – Long-term CER **expire at the end of the registered crediting period (max. 20 or 30 years)**. After verification (every 5 years), ICERs are issued for those carbon removals that have been obtained since the previous verification.

Expired credits must be replaced (e.g. again by ICERs or other credits). If a verification report by a DOE indicates that an issued ICER has been reversed (e.g. by fire), then it must be replaced.



Pedroni, L., 2005. Carbon accounting for sinks in the CDM after CoP-9. Climate Policy. 5:407-418.

**14. What is the price for tCERs and ICERs?**

Currently there is no clear indication on prices for tCERs and ICERs available as market streams are still limited and mostly non-public. However, the prices for tCERs and ICERs will represent **only a fraction of the prices for regular CERs** from other project categories due to the fact that tCERs and ICERs must be replaced by permanent credits at some point in the future.

Bird *et al* indicate that the price of tCERs or ICERs plus the net present value of the replacement cost should be less (*respectively equal*) than the current price of CERs. The same authors estimate the **tCER price with approximately 10%** of the current market value for CERs. For **ICERs** it is estimated that they are expected to fetch **up to 60%** of the current market price for CERs (for early ICERs, valid 30 years)<sup>1</sup>.

Hence, it will remain to the market to constitute reliable price indications for tCER and ICER from afforestation and reforestation projects under the CDM.

In regard to financial flows and purchasing agreements, several contractual options exist that can result in an upfront payment to the project developer. Frequently, lower prices per credit unit are provided in trade off for early payment.

<sup>1</sup> D.N. Bird, M. Dutschke, L.Pedroni, B. Schlamadinger, A.Vallejo, 2005: Should one trade tCER or ICER? See [http://www.joanneum.at/encofor/publication/Should\\_one\\_trade\\_tCERs\\_or\\_ICERs-ENCOFOR\\_policy\\_brief.pdf](http://www.joanneum.at/encofor/publication/Should_one_trade_tCERs_or_ICERs-ENCOFOR_policy_brief.pdf)

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Up to now tCERs and ICERs can not be used under the EU Emissions Trading Scheme, as they are not incorporated to the corresponding Linkage Directive.

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