

## **CCAFS OFFSETTING NOTE**

*This CCAFS Offsetting Note is based on the website of, and personal communication with, Carbon Offset Research and Education (CORE), an initiative of the Stockholm Environment Institute (SEI) and the Greenhouse Gas Management Institute (GHGMI). Besides the information provided on the CORE website, staff scientist, Carrie Lee, from SEI has recommended relevant literature published by well-respected organizations within the field of carbon offsetting including the World Resource Institute, Center for Climate and Energy Solutions, Offset Quality Initiative, and the Carbon Trust. The CCAFS Offsetting Note does not express CCAFS' own views but is merely a summary of the knowledge and views of the above mentioned institutions.*

### **1. INTRODUCTION TO CARBON OFFSETTING**

Carbon offsets have long been promoted as an important element in the global effort to reduce greenhouse gas (GHG) emissions. The idea behind carbon offset markets is to give companies a financial incentive to control emissions and the flexibility to determine how and when emissions will be reduced, thus minimizing the overall program cost (CORE 2011, C2ES 2011).

The types of carbon markets are many but essentially can be divided into two main categories, compliance and voluntary. Compliance markets are created and regulated by mandatory national, regional, or international carbon reduction regimes, such as the one created by the Kyoto Protocol, whereas voluntary markets function outside compliance markets. They enable NGOs, businesses and individuals to offset their emissions by purchasing offsets independently of mandatory systems (CORE 2011).

### **2. THE ROLE OF OFFSETTING IN CLIMATE MITIGATION**

Besides providing companies with a financial incentive to reduce their GHG emissions, carbon offsets have the potential to deliver sustainable environmental, social and economic co-benefits; are an important driver of new, innovative technologies; and can promote knowledge transfer between developed and developing countries. The voluntary markets, in particular, can serve as a testing field for new procedures and technologies, allowing for experimentation and innovation due to fewer transaction costs compared with compliance market projects. Further, voluntary markets serve a niche for projects too small to warrant the administrative burden of projects under compliance schemes (OQI 2008, CORE 2011, C2ES 2011).

Yet, carbon offsetting is not without its critics; both compliance and voluntary markets have been criticized for having poor quality offset projects. The voluntary market in particular has been criticized for its lack of transparency, quality assurance and third-party standards (CORE 2011).

However, the carbon markets are already a substantial economic force and are, according to SEI and GHGMI, likely to grow in the coming years. Thus, the discussion should focus on how to ensure the quality of carbon offsets that aim to contribute to climate change mitigation through real, additional, permanent, and verifiable GHG reductions, while limiting unintended negative consequences. Especially for the voluntary carbon market, where no rules or regulations are established, it is important to have a guideline that can help in the assessment of good quality offsets (CORE 2011).

### **3. ENSURING OFFSET QUALITY**

To address the above mentioned quality concerns, several voluntary offset standards have been developed. Although the standards have different rules, procedures and certification methods, most literature on carbon offsets refers to a core set of criteria summarized below (Carbon Trust 2006, Broekhoff and Zyla 2008):

#### **Verification**

*Carbon offsets should result from projects whose performance and effects can be readily monitored and verified. The verification should be conducted and accredited by a third party according to a standard or protocol. Verification ensures that offset reductions are “real” and not overestimated.*

#### **Additionality**

*Activities that would occur regardless of an offset market (business as usual) should not be counted. This ensures that reductions are additional to what would have happened in the absence of the project.*

#### **Leakages (real)**

*Carbon credits must represent an actual net GHG reduction, i.e. taking into account negative impacts beyond the project boundary.*

#### **Impermanency**

*This criterion ensures that the reductions achieved are maintained over time. Permanence is usually only an issue for GHG sequestration or storage projects, as their effects can be reversed over time; e.g. disturbances can release carbon stored in forests or soils. In these cases, mechanisms are required for addressing reversible reductions; methods comprises discounting, expiring credits, or buffer systems.*

#### **Double counting**

*Companies should avoid using or counting offsets more than once. To avoid double counting clear definitions of ownership are essential.*

#### **4. SHOULD COMPANIES VOLUNTARILY PURCHASE OFFSETS TO ACCOUNT FOR EMISSIONS?**

Taking all of this into account, the question arises concerning whether companies should voluntarily purchase carbon offsets to account for their GHG emissions. The overall general advice given by SEI and GHGMI is that businesses should evaluate their current emissions and take all possible steps to reduce emissions from their own operations before considering options for offsetting their emissions, as carbon offsets alone cannot achieve the GHG emission reductions required to stabilize the climate. The same view is expressed by various other institutes (Broekhoff and Zyla 2008, WRI 2010, C2ES 2011). However, when internal mitigation opportunities have been maximized, offset credits provide an option for businesses to reduce their carbon footprints and support emission reduction projects (WRI 2010).

#### **5. CCAFS OFFSETTING – AND CARBON REDUCTION PLAN**

To contribute to the global effort to reduce GHG emissions, the CCAFS Coordinating Unit (CCAFS CU) has voluntarily developed a Carbon Reduction Plan. The plan is part of the CCAFS Carbon Footprint Initiative, which analyzed and calculated CCAFS CU's annual CO<sub>2</sub>e emissions<sup>1</sup>. Based on this analysis, CCAFS CU has identified possible steps to reduce emissions.

The emissions which cannot be avoided, due to the structure and operation of CCAFS CU, will be offset through the Emti Nibwo Bulora project in Tanzania. The selection of this particular project is a result of a management decision based on in-depth analysis of different options. Some of the criteria for choosing Emti Nibwo Bulora are that the project is located closely to a CCAFS working site; and involves small scale farmers in tree planting activities, with the objective of building adaptive capacity of the farmers to cope with the impacts of climate change (Plan Vivo 2013).

Furthermore, the Emti Nibwo Bulora project is undertaken by Vi Agroforestry and certified by the Plan Vivo Standard which, according to the Carbon Trust (2006), complies with the previously mentioned criteria in relation to verification, additionality, leakage, impermanence, and double-counting. Further, the Plan Vivo Standard is, according to SEI and GHGMI one of the most important offset standards (CORE 2011).

The Plan Vivo system was originally developed by the Edinburgh Centre for Carbon Management (ECCM), in partnership with El Colegio de la Frontera Sur (ECOSUR), the University of Edinburgh, and other local organizations, with funding from the UK Department for International Development (DFID) (CORE 2011). Click here to read more about the [Plan Vivo Standard](#).

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<sup>1</sup> CCAFS CU calculation methods have been analyzed and verified by Grontmij A/S

## REFERENCES

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