



Eastern Africa Alliance  
On Carbon Markets And  
Climate Finance

# CARBON MARKET

PROFILE  SUDAN







## Key assumptions

- Data referring to the CDM (projects and programmes) has been taken from the UNEP DTU CDM project and PoA pipelines as of November 2020. In order to remain conservative, we only include registered activities. We did not assess data quality with regard to whether a project is still active, as UNEP is the commonly recognized database drawing directly on UNFCCC Secretariat data. While there is a high degree of uncertainty with regard to the issuance and upscaling potential of individual activities, these are difficult to assess and will be affected by future political decisions. Only PoAs which have an included component project activity (CPA) in the profiled country have been counted.
- While it is clear that in particular the 2030 potential is subject to political decisions and therefore theoretical, it is included as the numbers are based on current CDM activity documents. Whilst all emission reductions may be highly unlikely to be achieved under the CDM, the emission reduction volume may still be relevant e.g. for own NDC contributions by host countries. Moreover, PoAs may experience significant upscaling if carbon market demand increases, which would add further mitigation potential, since we only included emission reductions from actually included CPAs.
- Any future mitigation potential is expressed in kilotons of carbon dioxide equivalent ( $\text{ktCO}_2\text{e} = 1000 \text{ tCO}_2\text{e}$ ) in order not to prejudge the type of certification that post-2020 mitigation outcomes may be using.
- Voluntary carbon standard data has been taken from the official databases of the respective standard. Verified Carbon Standard data is as of December 2020. Data on Gold Standard (GS) activities have been obtained from the GS registry and complemented by information provided directly from the GS in December 2020. Plan Vivo data was obtained directly from the standard in October 2020.
- Assumptions on CDM transition are based on the current status of the COP25 draft decision documents. While these may change, the delay of COP26 to November 2021 rules out that a final decision can be taken before. Therefore, we give a brief indication of what the proposed cut-off dates for CDM transition may mean on a country level. A recent short study on CDM transition and its relevance for Africa explains key issues in detail.
- Due to the lack of a definition or common understanding of what an Article 6 pilot is, we also include initiatives that aim at implementing carbon market activities beyond the CDM. This includes readiness activities and others aiming at emission reduction transactions.

## Introduction

# EXECUTIVE SUMMARY

Sudan submitted its NDC in 2017 outlining its intention to contribute to mitigation efforts within the energy (electricity), forestry and waste sectors (Khartoum state only). This is in-line with its national circumstances, development priorities and goals as stated in documents such as the Second National Communication (SNC, 2013), National Adaptation Plan (NAP, 2014) and Strategic Plan 2007-2033.

For Climate Action by 2030, for example, Sudan intends to integrate renewable energy in its power system by up to 20% (2610MW) (including Solar rural electrification through installation of 1.1 million Solar Home Systems), attain 25% forest coverage from the total area of Sudan (over 790,000 hectares to be planted annually) and overhaul the waste sector (collection, sanitary landfills and moving towards to zero waste).

The country estimates that close to USD 12 billion in the form of finance, technology and capacity building will be required to support its mitigation climate actions. In addition, "Sudan does not exclude using market-based-mechanisms in implementing its contributions if access to market mechanism is granted".

In total over 230,000 carbon credits have been issued in Sudan from the Gold Standard (GS)

Sudan hosts 3 registered and included CDM activities being in wind power, biogas and landfill composting, with the potential to generate an accumulated 2.6 million Certified Emission Reductions (CERs) by 2030.

There are 3 Gold Standard (GS) activities focused on improved cookstoves (67%) and solid waste composting (33%) with over 230,00 Verified Emission Reductions (VERs) issued to date.

## Carbon market portfolio

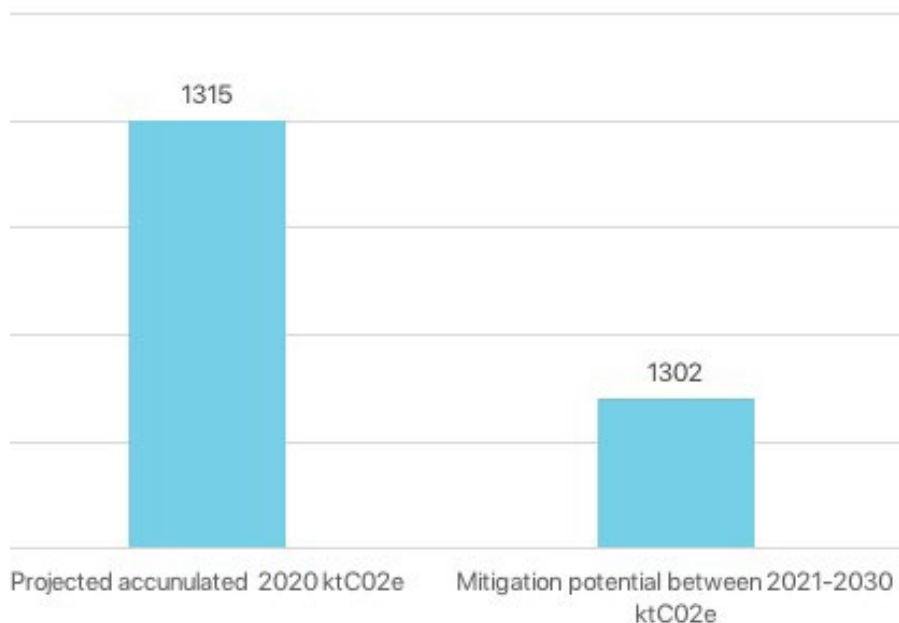
There are 3 registered CDM activities: 2 projects and 1 component project activity (CPA) within 1 single country Programme of Activity (PoA) all of which were registered after 2014.

Sector wise the CDM activities focus on wind power (100MW grid connected power plant), biogas (households level treatment of animal manure and avoidance of fuel wood) and landfill composting (new composting plant next to an existing waste disposal site).

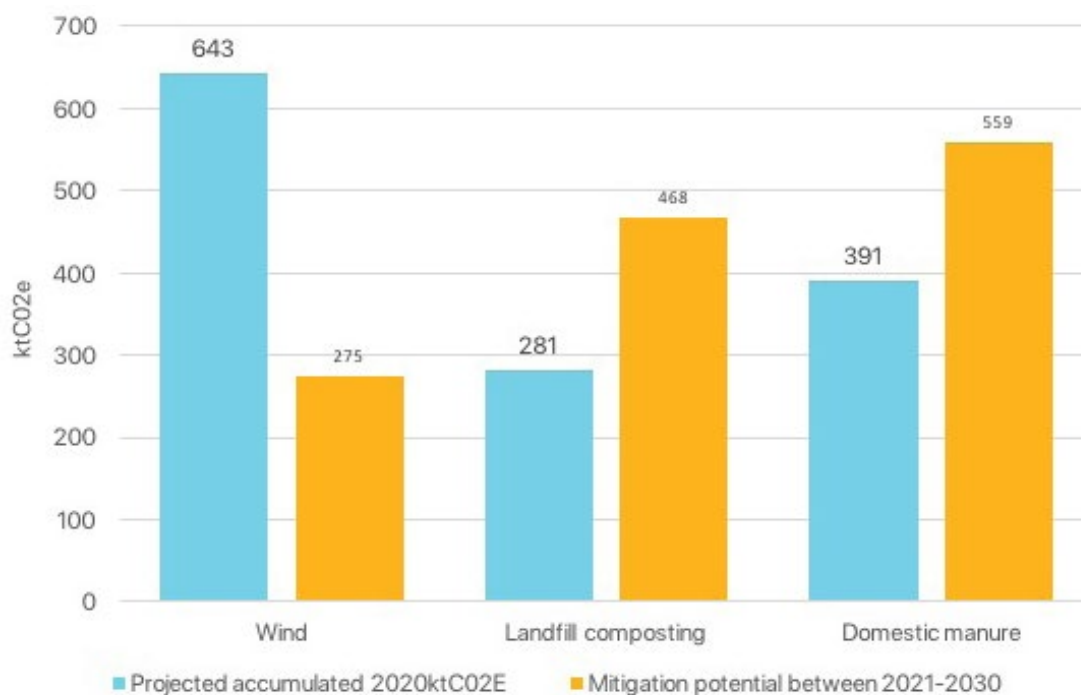
Sudan has yet to issue any CERs.

The total 2020 mitigation potential for registered CDM activities is 1.3million CERs and an additional 1.3 million between 2021-2030. The registered projects have a greater mitigation potential with over 900,000CERs (70%) up to 2020 and an accumulated 1.6 million (63%) by 2030.

### CDM Pipeline-Mitigation Potential



### Mitigation potential by sector



### Volume of CER issuance and potential of currently registered CDM activities by sector

Activity Type / Sub-sector	No. of PA	No. of PoA	No. of CPA	Total issued kCERs	Projected accumulated 2020 ktCO2e	Mitigation potential between 2021-2030 ktCO2e
Wind	1			0	643	275
Landfill composting	1			0	281	468
Domestic manure	0	1	1			559
Total	2	1	1	0	1315	1302

## Voluntary carbon standards

### Key statistics/facts

- There are 2 Gold Standard (GS) certified activities - one Voluntary Project Activity (VPA), and one standalone project., both improved cookstoves projects.
- One GS activity has issued 231,507 VERs, with 168,310 retired

## Showcase Activity



### Darfur Efficient Cookstove Project in El Fasher, Sudan, Source: Practical Action Website

Darfur Efficient Cookstove Project (GS ref no. 500) is utilising carbon finance to assist vulnerable communities replace traditional wood and charcoal stoves with Liquefied Petroleum Gas (LPG) cookstoves in El Fasher, Sudan. This activity was the first carbon credit program to be registered in Sudan and has delivered over 10,000 cookstoves. The project has so far generated over 230,000 Gold Standard VERs from 11 issuance rounds, that have since been retired (Gold Standard, 2019, Practical Action, 2019 and UNFCCC, 2017), The project is implemented by Practical Action with EcoAct (previously Carbon Clear) being the carbon project manager. The project was the recipient of the UNFCCC Momentum for Change award in 2013 for its contribution to delivering climate friendly finance.

## CDM transition

### What is at stake?

Of the 2 registered projects – 1 will expire in 2022, and the other in 2024. The current renewal period of the PoA is until August 2021.

All 3 CDM activities were registered between 2013 and 2016.

## New market mechanisms and Article 6

The country is exploring ways to strengthen its access to Green Climate Fund (GCF) resources in order to enhance its low carbon development path in the long-run. UNDP and Sudan through its National Designated Authority have developed a GCF Readiness and Preparatory Support Proposal with the objective of effectively utilising climate finance through the GCF via direct access to funds and private sector engagement (UNDP, 2017).

## References

Gold Standard (2019) Low Smoke Stoves in Dafur, <https://www.goldstandard.org/projects/darfur-low-smoke-stoves-project> (Accessed December 2020)

Gold Standard (2020) Impact Registry, all projects, <https://registry.goldstandard.org/projects?q=&page=1> (Accessed December 2020)

Practical Action (2019) Sudan cookstove projects wins best Carbon Offsetting project Award, <https://practicalaction.org/news-media/2019/09/16/sudan-cookstove-project-wins-best-carbon-offsetting-project-award/> (Accessed August 2020)

UNDP (2017) Readiness Proposal, <https://www.greenclimate.fund/sites/default/files/document/readiness-proposals-sudan-undp-nda-strengthening-and-country-programming.pdf> (Accessed August 2020)

UNEP DTU (2020a) CDM pipeline overview, downloaded from <http://www.cdmpipeline.org/> (Accessed November 2020)

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