

CLIMATE CHANGE, CARBON TAX AND GREENHOUSE GAS EMISSIONS (Ch.11)

SOUTH AFRICAN GREENHOUSE GAS REPORTING SYSTEM (SAGERS) (p111)

The South African Agriculture, Forestry and Other Landuses Sector accounts for 10% of the country's green house gas (GHG) emissions, although it should be stressed the bulk of this is from cattle production. Indeed, forested land in South Africa is responsible for 90% of the country's carbon sequestration - where atmospheric carbon is captured by trees and stored in the above and below ground biomass - wood, leaves, roots and organic matter. Forests, and therefore forestry, plays an important role in offsetting GHG emissions and therefore climate change.

GHG Reporting: Legislative Requirements

COP15 PARIS AGREEMENT

As a signatory, South Africa is required to report GHG emissions to the UN Framework Convention on Climate Change.

NEM: AIR QUALITY ACT

NO.39 OF 2004

NATIONAL GREENHOUSE GAS EMISSION REPORTING REGULATIONS

Department of Forestry, Fisheries and the Environment (DFFE) conduct an annual inventory of GHG emissions.

FORESTRY LAND HOLDERS

DFFE requires landowners with over 100ha of plantations to register GHG emissions.

National Green House Gas Inventory System

Tracks emission levels in relation to international pledges, commitments and other reporting obligations, including South Africa's GHG emission reduction targets.

The DFFE: Measuring, Reporting & Verification (MRV) Tool

The MRV tool sets out the methodology, formulae and conversion factors to be used for calculating GHG emissions and carbon stocks.

Calculating GHG emissions and carbon stock

While the forestry industry is currently exempt from the Carbon Tax Act, all downstream processing plants are required to pay tax on annual GHG emissions. The carbon sequestered and stored in trees and harvested wood products can be offset against GHG emissions, reducing the tax burden on the processing plants. While timber growers will not directly benefit from reporting, it is a legal requirement and may in the future dictate access to timber markets.

Annual carbon balance = carbon stock less GHG emissions

GHG emissions

- Fuel use
- Emissions from fertiliser use
- Harvest residue burning
- Decomposition of timber residues

Carbon stock

- **Carbon stock** the carbon in the trees, leaf litter and soil
- **Loss of carbon stock** is a result of harvested wood products and loss due to conversion to another form of landuse or fire

Annual comparisons of your carbon balance will indicate whether the plantation is **gaining carbon**, **losing carbon** or is **carbon neutral**. It should be noted that change in carbon stocks is calculated as the difference between the starting stock and ending stock and not the actual carbon stocks (the amount physically being stored in the trees, leaf litter and soil).

Validating and verifying GHG emissions and carbon stocks

DFFE published technical guidelines in August 2020 that require timber growers to complete a series of forms. Before these forms can be submitted, they need independent verification by a certified body.

INDUSTRY INFORMATION - FROM PAMSA

Sustainable African Forest Assurance Scheme, SAFAS, in association with PAMSA and the DFFE have developed a draft protocol to assist growers to register on the SAGERS platform and annually calculate and report their carbon balance (carbon stock and GHG emissions) as per legislation. To find out more visit the SAFAS website: www.safas.org.za