



environment, forestry & fisheries

Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

(under the C Tax Act) are replanted and “responsibly” managed, most on the 3rd party timber sources supplied to manufacturing facilities may still not be certified.

- Participation in COC or a certification scheme does not guarantee permanence of accounted removals because certification may not be renewed following subsequent audits.

Despite the above-mentioned difficulties, it is acknowledged that COC and certification could be used in cases where the risk of non-permanent accounting of removals is low, such as in the case of 3rd party forest emissions and removals and inflows into HWP storage (see Accounting Rules in Chapter B). However, 3rd parties can only be included if proof of certification is provided and that the burden of reporting and accounting is put on the company accounting for “S” under the C tax scheme.

A.5. Defining the Variable “S” and system boundaries

The previous “Technical guidance for the reporting of GHG emissions from plantation forests, biogenic fuels and harvested wood products within the South African plantation forest and forest products sector” (Knowles and Christie, 2018) defines the net sequestration by forest and forest products (“S”), as:

$$S = S_B + S_{HWP} - \Delta C - S_{fire} - S_{fert} \quad \text{Equation A.2}$$

Where:

- S_B = CO₂ component of biogenic fuel emissions from the combustion of biogenic fuels sourced from South African plantations (e.g. wood, bark, black liquor) expressed in t CO₂eq. Note that this excludes non-CO₂ emissions but these are reported and accounted under ‘E’;
- S_{HWP} = CO₂ emissions or removals by harvested wood products (expressed in t CO₂eq).
- ΔC = Annual change in plantation carbon stocks (expressed in t CO₂eq);
- S_{fire} = Emissions from controlled burning and wildfires (N₂O and CH₄ expressed in t CO₂ eq);
- S_{fert} = The fraction of emissions from applied fertiliser (N₂O expressed in t CO₂eq).

Subsequent to the compilation of the Knowles and Christie guideline document, the amendments to the C Tax Act define biogenic fuels as a net zero CO₂ emission assuming that sources are renewable. In addition, through the implementation of a mass balance methodology of S_{HWP} , biogenic fuel use and CO₂ emissions are included in this calculation. Since the conventions for net removals of CO₂eq under the UNFCCC that emissions are denoted as a positive value and sequestration as a negative value, both S_{HWP} and ΔC should have negative values in equation A.3, to denote net removals of CO₂eq. Equation A.2, therefore, becomes:

$$S = -S_{HWP} - \Delta C - S_{fire} - S_{fert} \quad \text{Equation A.3}$$