

Citrus Sustainability Forum of Southern Africa

09 May 2025

09:00-10:30

DRAFT MINUTES

Welcome and Apologies

This CSF was focussed on carbon credits and life cycle assessments with two guest speakers specialising in these fields, and a food safety update was presented at the end.

Christo Theron, Wilma du Plooy, MC Pretorius, Trienie Kellerman, Nico Smith extended their apologies.

A total of 65-68 participants were online during the course of the forum.

Finalisation of the agenda

No new points were added.

The minutes of the previous CSF (28 February 2025) were approved.

Demystifying Carbon Credits: A Game Changer or Just Hot Air? – Pieter van Niekerk (Anthesis South Africa)

Introduction to Anthesis

A global sustainability company with the belief that sustainability initiatives should lead to profitability. Anthesis has been active in carbon trading project development and consultation for about 20 years. They currently have three regenerative carbon projects across the globe (Brazil, Chili, Paraguay & Argentina area, and South Africa). The head office is based in Cape Town, with consultants spread widely across the globe. They were Africa's first Carbon/Regenerative Farming Project to receive Verra Registration and Carbon Credit Issuance. This means, they can offer a reputable revenue stream rewarding e.g. farmers for their regenerative agricultural practices.

South Africa

South Africa is a big carbon emitter, largely due to Eskom operations. One mechanism to reduce one's carbon footprint, is to by cost instruments (carbon tax or budgets). Carbon credits is one of the approved mechanisms for companies to reduce their emissions. South Africa has a set target of net-zero footprint by 2025 and there are a number of opportunities in this space (the agriculture industry is currently not being taxed).

Carbon tax rates in South Africa is expected to increase over time (e.g. from R127 per tonne of CO₂ to R462 per tonne in 2030). There are limited carbon credits in SA compared to the global market, making the local market a lot more stable.

For carbon credits to be eligible for the local carbon tax, the Verra or VCS standard can be implemented. It is positive to see that the Verra-listed projects in South Africa are increasing.

Why agri-culture?

Agriculture is the one sector that can contribute to reducing greenhouse gasses. According to research, cultivated soils in South Africa have lost 45-65% of their carbon due to conventional tillage practices. This implies that the current soil organic carbon reserves are much lower than the potential capacity, suggesting that there is a huge carbon sequestration potential.

Regenerative agriculture practices need to be increased in South Africa. However, there is always a risk of short term reduction in yields and income once growers start to implement these changes. The Carbon Credit Farming Project is aimed at navigating the potential short term losses. A carbon credit or off-set is a reputable way of measuring one tonne of CO₂ equivalent and traded in a reputable way. Not all carbon credits are equal, e.g. credits based on emission reduction vs credits based on removing carbon from the atmosphere (here agriculture can play a key role). It is important to note that carbon credits are based on additional intervention on-top of standard practices. For example, farming already removes carbon from the atmosphere, but there needs to be additional intervention that was not part of 20% 'business as usual' to be eligible as an additional practice.

What are the practices a citrus grower can consider to reduce GHG-emissions and sequester carbon?

Reduce synthetic fertilizer application, improved water management, improved grazing practices, reduce soil tillage, and diversifying crops or crop rotation. A grower goes through eligibility criteria and Anthesis will then gather all the required data (e.g. soil samples) to evaluate the baseline.

Things to consider when joining carbon farming programme

- Understand carbon farming practices – understand which practices in your specific climatic condition and soil type can be implemented.
- Economic Viability – new practices should not lower yields to the extent that it does not make financial sense.
- Technical support and training – support on the ground is important, Anthesis work with such service providers that can assist in this regards.
- Soil and land sustainability
- Program requirements and commitments – understand what is expected (e.g. monitoring, reporting and verification process).
- Environmental and Social benefit - producers can include this in their ESG reporting.
- Long-term sustainability
- Policy and market conditions

The entire process is about 2 years. Both the carbon footprint and sequestration components are modelled and measured on a per-field basis. It is advisable to start measuring your carbon footprint sooner than later, to be eligible for the future (e.g., 3 years of baseline measurement is required in this process). This is a long-term project (up to 40 years) and some variables do plateau over time, like the ability of the soil to store carbon. However, there are different means to take on the journey so that it makes financial sense over time.

Any new farm that joins Anthesis (given that they are eligible), would go through a number of steps over 16 – 20 months before carbon credits realise.

Final remarks

Emission sources are categorised in 3 different scopes.

Scope 1: direct emissions from sources owned or controlled by the company.

Scope 2: indirect emissions from purchased electricity, steam, or heating and cooling.

Scope 3: Divided into 15 categories up- or downstream from company's activities.

Q: can a group of growers/packhouses pursue a collective project? A: it is permissible, but not advisable, because the overhead cost becomes too big.

Carbon and beyond: looking at the bigger picture – Alistair Galloway (BrightWolves)

Introduction to Bright Wolves

Bright Wolves is a Belgium Management-Consulting firm based out of Brussels and have offices in Cape Town and Johannesburg.

Areas of expertise in the sustain portfolio

Sustainability strategy & implementation: costed decarbonisation pathways, supplier engagement, and circular business models.

Impact assessment: carbon footprint, lifecycle assessment, double materiality assessment, ESG Due Diligence.

Reporting: CSRD, SFDR & EU Tax, Green claims, digital product passport.

Carbon credits – voluntary carbon market

Credits are developed by project developers through projects that evidently reduce emissions, while following accredited standards and methodologies before being validated and verified by independent third parties. After successfully completing the third party review process, the Standard Bodies (Verra, Gold Standard, Puro Earth) also review the projects before publishing them on a public registry (interesting parties can view Verra's website).

Carbon credits fit into the bigger picture. The Science Based Targets Initiative (SBTi) is an international framework that companies can use to progress towards reaching net-zero, ideally by 2050. The idea is that companies reduce their own carbon emissions up to a point where they can't reduce them any further, then carbon credits may be used to further reduce one's footprint.

Example

If a farmer is already planning on planting cover crops between citrus orchard rows, carbon credits will most likely not be relevant. However, if the farmer does not intend to plant cover crops because of the expense (seeds or new machinery required), but may do so if he/she gets funding, then carbon credits become relevant. Carbon credits are only applicable when the environmental benefit happens due to carbon credit project funding (a principle referred to as "additionality" or above and beyond usual practices). How is it assessed? Depending on the methodology (e.g. VM0042), different tiers are assessed, e.g. the project activities should not be required by existing legislative requirements and the activity should not be common practice (it's not being practices above 20% of the standing practices).

Verra methodology opportunities and challenges

Example given: any quantitative adjustment must exceed 5% of the pre-existing value. For instance, decrease in synthetic fertilizer application. The methodology will not be applicable to an area that has been cleared of native ecosystems within 10-years prior to starting the project, or if the project is suspected to cause a sustained reduction in productivity/yield of 5% or more. Biochar application is also not applicable to the project and project activities may not occur on wetlands.

Rand/cents value?

A project developer would be able to give accurate figures, but an estimation was shared. R120 per tonne CO₂ equivalent for agricultural projects, with the mean annual mitigation potentials per ha being: 0.39 tCO₂ in agronomy, 0.33 tCO₂ in nutrient management, 0.35 tCO₂ in soil management, and 1.14 t CO₂ in water management. Many factors can influence carbon credit pricing, including quality, type, size and geographical location.

Product Carbon Footprint in a Broader Sense – Carbon Border Adjustment Mechanism (CBAM)

CBAM is a policy tool introduced by the EU to prevent carbon leakage, or for companies to transfer production to other countries with weaker carbon regulations. It imposes a carbon price on certain imported goods based on their carbon footprint, aligning the cost of imports to the EU's internal carbon pricing system. Current sectors that are taxed: iron, cement, steel, fertilizers, electricity and hydrogen. Agriculture is not included yet, but there is intention to expand the scope to include agricultural products imported into the EU. Other countries are also contemplating establishing a carbon tax, including Canada, UK and Australia.

Life Cycle Assessments of products

The LCA encompasses the stages of introduction, growth, maturity, and decline that a product goes through from raw material extraction to end of life. This may include products, services, systems and entire urban areas. The University of Pretoria recently published a LCA study about an avocado that was grown in South Africa and exported to Europe – at the end of the day, it's your carbon product footprint that will be taken into account in policies such as CBAM.

The World Economic Forum highlights the immediate and medium-term global risks. The medium-term risks (next 10 years) are becoming more environmentally focussed (e.g. extreme weather events). There is high pressure from the NGOs in the media about climate change and this triggers policies coming from the EU and retailer requirements.

Why perform LCAs?

To identify key environmental impacts of your product, service, or processes. These results can be used in eco-labelling or certification programs. It assists with decision making about design & use of products and it fosters transparency and accountability. LCAs takes GHG-emissions, water usage, land use, eutrophication, and acidification into account amongst others.

Final remarks

Bright Wolves offers online or in-person LCA workshops, they offer consulting service to conduct LCAs on your behalf and they offer a software platform where these LCAs are hosted on.

Albert: FruitSA is contemplating to calculate LCA values from certain points on behalf on the fruit industry to get a better idea of how the industry is performing.

EU Legislative Updates

Corporate Sustainability Due Diligence Directive Review (CSRD)

The implementation was delayed to July 2028 (postponed with a year from the original date). The content of the legislation is still under review.

Corporate Sustainability Reporting Directive

The content of the legislation is still under review and the implementation date is also delayed.

EU Deforestation Regulation

Postponed until 30 December 2025 (excludes pallets, cardboard used to support, protect or carry products).

Food Safety (MRL) update

- The latest CGA/CRI Recommended Usage Restrictions of Plant Protection Products for Export Citrus from Southern Africa is No. 58 of April 2025. The key changes highlighted: the timeline of the EU Carbendazim (Benomyl) and Mancozeb MRLs, Switzerland's Carbendazim and Spirodiclofen MRL, the amended usage restrictions for bromopropylate to avoid MRL exceedances and clarified wording around the use of 2,4-D on citrus destined for South Korea. Please visit the Summary Table of Changes in the RUR for all the changes effective from this edition.
- The EU MRL for fenpropathrin and cypermethrin are expected to be lowered in Q2 of 2026 at the earliest. The fenpropathrin MRL is expected to be lowered to 0.01 ppm on all citrus types and the residue definition for cypermethrin is expected to change to accommodate a separate MRL for alpha-cypermethrin (which will likely be lowered to the limit of detection or quantification on all citrus types). CGA will have more clarity on the proposed MRLs and accompanied timelines after the June SCoPAFF meeting.
- Stakeholders were reminded about the low 2,4-D MRL for mandarins and oranges in China of 0.1 ppm. Packhouse managers should pay special attention not to exceed this MRL. There are two different analytical methods to test for 2,4-D residues, where the free acids method only accounts for a portion of the 2,4-D residues. The total 2,4-D residues can be 2-8 times higher and account for free acids, esters, salts and conjugates. Stakeholders are urged to speak to their analytical service provider about the different methods, especially when testing fruit that is destined for sensitive markets (i.e. mandarins or oranges destined for China).
- The Taiwan FDA officially published a carnauba wax MRL on all citrus fruit of 200 mg/kg which came into effect on 10 May 2025. CGA will publish a cutting edge on the use and recommended post-harvest declaration of carnauba wax on citrus destined for Taiwan soon.
- The GSO countries notified their intention to adopt the Codex MRL for fenpyroximate on citrus. That would mean that the MRL will change from 0.6 ppm on all citrus types to 0.5 ppm on grapefruit, 1.0 ppm on lemons and NONE on mandarins and oranges (meaning it should not be detected). It is unclear when this MRL will apply, the commenting period is open until June 2025.

Act 36 of 1947

- The active substances of concern (1A/1B CMRs) are being phased out under Act 36, unless there is data to support a reclassification of the molecule or in the case of a successful derogation outcome (subject to public consultation phase and the Registrar's final decision making).
- CGA has been tracking this process closely and expressed support for the reclassification of key active ingredients, as well as the derogations to try and retain the use of key active ingredients on citrus.
- We expect that certain registrations with active substances of concern will fall away at the end of May 2025.

Pest Control Operator Regulations

- Cutting Edge No. 410 & 414 summarise the PCO regulations and which products registered for use on citrus trees or in citrus orchards are classified as restricted agricultural remedies.
- In the latest Cutting Edge (No 414), it was mentioned that there was a request sent to the Registrar's Office to consider a phase-in period of the regulation. It became apparent that a phase-in period is

highly unlikely to occur and that growers will have to gain a PCO licence to comply if they are using restricted agricultural remedies (the requirement will soon form part of SIZA and GLOBALG.A.P. audits). Users of restricted agricultural remedies are encouraged to apply for a PCO licence as soon as possible, because an influx of applications at the Act 36 Offices are expected.

- Citrus Academy is busy developing a credit-bearing PCO short course tailored for the citrus industry. This online course will provisionally be available from July 2025.

Other matters

Stakeholders were pointed to the Crop Life SA website to register for a series of free webinars during 2025.

Close

The next CSF is scheduled for 27 June 2025.