

AgriCarbon[™]
Rebuild. Improve. Reward.

Anthesis 

Demystifying carbon credits: A game-changer or just hot air?

Pieter van Niekerk

Principal Sales Manager – AgriCarbon (Anthesis South Africa)

Contents

Section 1

Introduction

Section 2

The Agri Opportunity

Section 3

Carbon Credits

Section 4

The AgriCarbon Programme

Section 5

Conclusion

A decorative graphic on the left side of the slide, featuring a vertical bracket and a cluster of circles of varying sizes, some solid and some hollow, arranged in a pattern that suggests movement or a list.

Section 1

Introduction

1 Our mission

We help organisations from A to Zero CO₂ to realise a '**Net Zero carbon economy**' in 2050 according to the Paris Agreement.

2 About us

Climate Neutral Group was founded in 2002 by Triodos Bank and the DOEN Foundation. In 2022, we merged with the Anthesis Group. This allows us to offer our services in more than 23 countries with about 800 Sustainability experts.

3 Impact

Worldwide, we have supported more than **3,000 organisations**, mitigated over **12 million tons of CO₂**, and improved the quality of life of many thousands of people by contributing to various Sustainable Development Goals.

4 Recognitions - Partnerships



Anthesis: Local knowledge & Global reach



Anthesis Clients

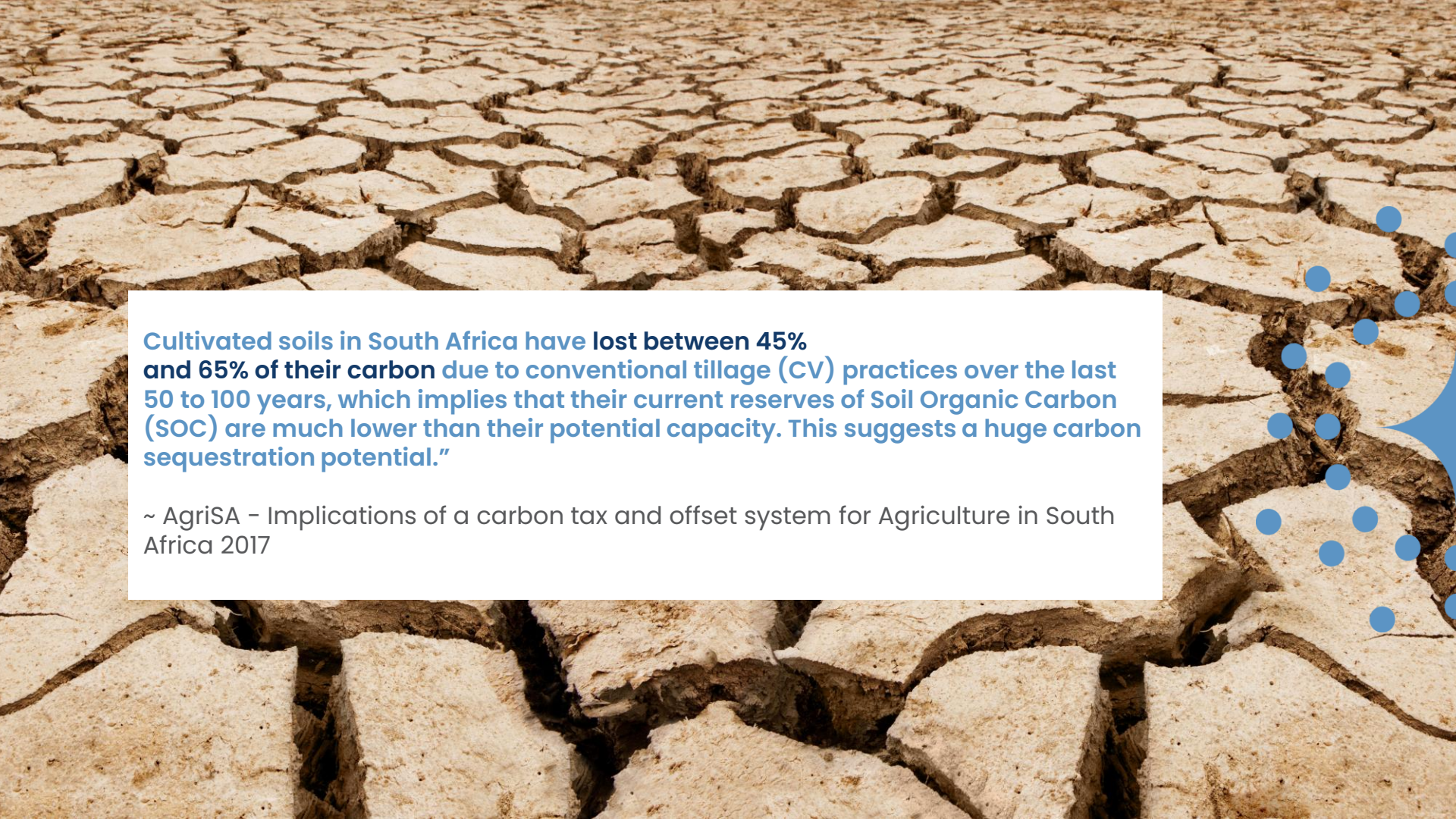




Section 2

The Agri Opportunity





Cultivated soils in South Africa have lost between 45% and 65% of their carbon due to conventional tillage (CV) practices over the last 50 to 100 years, which implies that their current reserves of Soil Organic Carbon (SOC) are much lower than their potential capacity. This suggests a huge carbon sequestration potential.”

~ AgriSA - Implications of a carbon tax and offset system for Agriculture in South Africa 2017



David R. Montgomery

"A story which we cannot afford to ignore. . . . Well and eloquently told."—*Financial Times*



With a New Preface

dirt

The Erosion of Civilizations



'Replete with powerful evidence ... He does a superb job of equipping us with the hard facts' Mark Cocker, *New Statesman*

PHILIP LYMBERY

SIXTY


HARVESTS



LEFT

HOW TO REACH A
NATURE-FRIENDLY FUTURE

BLOOMSBURY



Farmers should be encouraged to take-up sustainable land management practices to sequester carbon. This will require a comprehensive dedicated approach based on scientific practice, a sound legal framework, facilitating mechanisms to educate and promote land-use change and a range of financial and market-based economic incentives to initiate and then reward actions that realise or have the potential to realise improvements.”

~ AgriSA - Implications of a carbon tax and offset system for Agriculture in South Africa 2017

How to scale Regenerative Agriculture in South Africa?

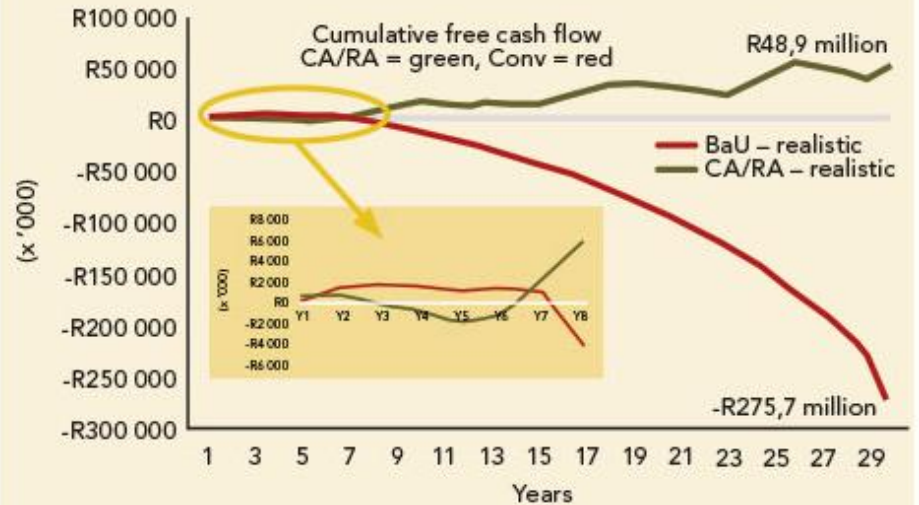




Balancing Act

Recognizing the profound potential of agriculture and food systems to drive powerful and innovative responses to climate change and to unlock shared prosperity ...

**GRAPH 3: CHANGE IN SOIL PRODUCTIVITY
INPUT INFLATION > OUTPUT INFLATION**



CA/RA: Conventional agriculture / Regenerative agriculture
Conv: Conventional agriculture
BaU: Business as usual

SA Climate Policy Landscape

South Africa's GHG Emissions

South Africa is the 16th largest emitter of GHGs in the world:

- In 2020, SA emitted 447.36 million tCO₂e
- Due to abundant coal reserves and relative isolation in its recent history it has one of the most carbon intensive energy systems in the world (1,56tCO₂e/million \$GDP)

South Africa's GHG Mitigation Policy Landscape

South Africa deploys a wide range of policy instruments to mitigate GHGs emissions:

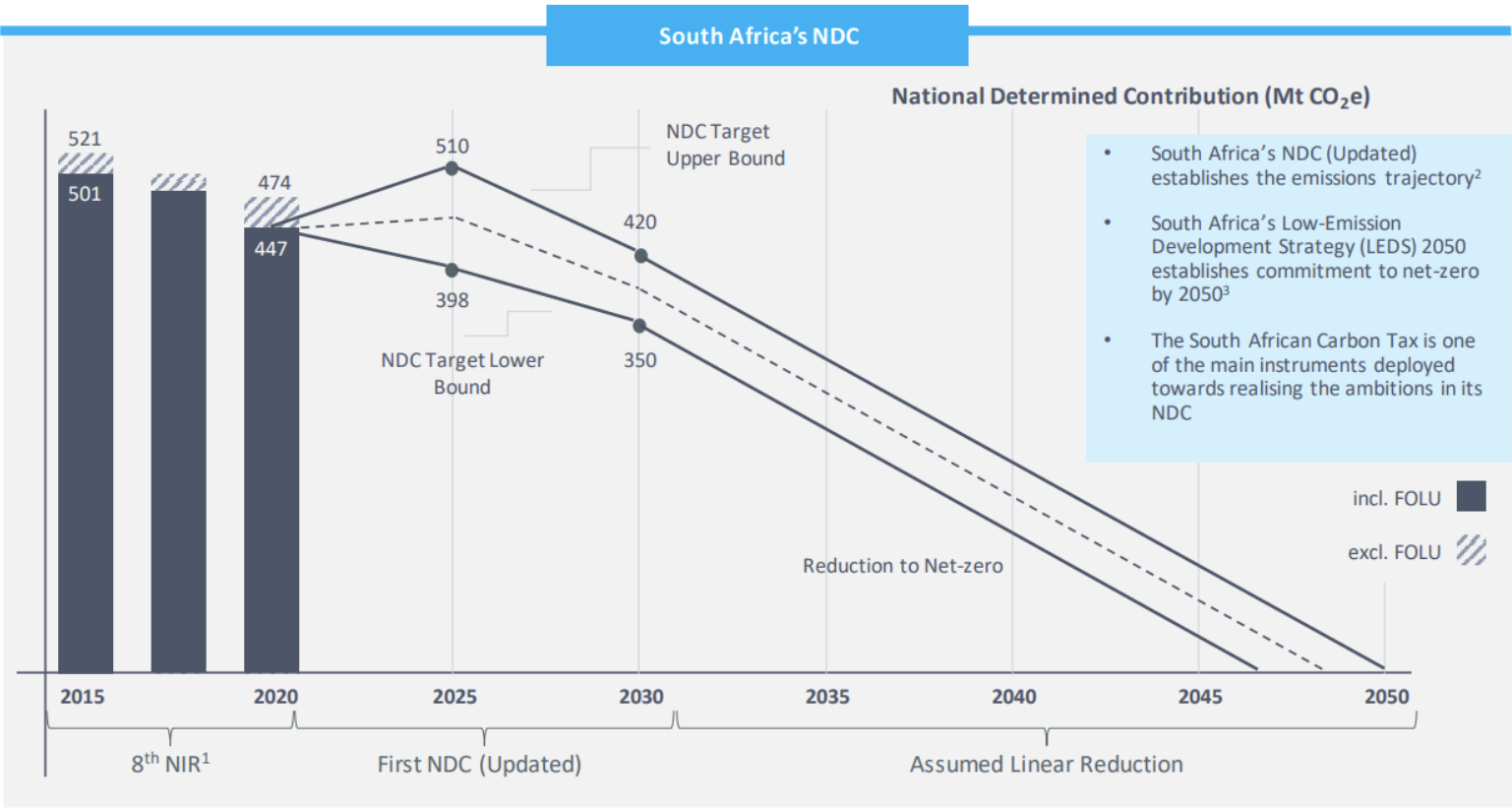
- SA is an active participant in the COP process and has ratified the Kyoto Protocol and Paris Agreement
- SA has introduced cost instruments (**Carbon Tax, Carbon Budgets**), incentive structures (REIPPP, 12 L EE) and recent CC Bill

South Africa's Carbon Market

South Africa has a voluntary and compliance carbon market:

- Voluntary: local or international carbon credits used by local companies for marketing or net zero purposes
- Compliance: companies liable for carbon tax can use certain local carbon offsets to pay less tax

South Africa's NDC



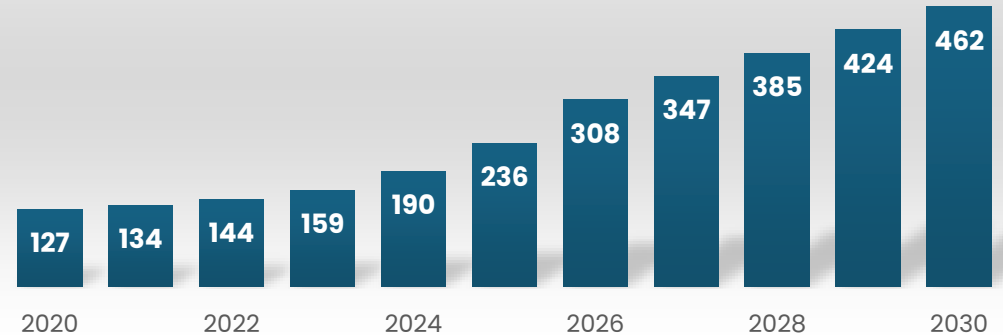
Notes/sources:

1. Source: Department of Forestry, Fisheries and the Environment, 2022: National GHG Inventory Report South Africa 2000 – 2020. Pretoria. (NIR8)
2. Source: Republic of South Africa, 2021: South Africa First Nationally Determined Contribution Under The Paris Agreement (Updated). (Updated SA NDC)
3. Source: Republic of South Africa, 2020: South Africa's Low-Emission Development Strategy 2050. (LEDS)

Carbon TAX Rates South Africa 2020 – 2030

- Carbon (tax) offsets transact at around 80-90% of the carbon tax rate.

Approved Rand CO2 tax rate per ton



Taxation Laws Amendment Act 20 of 2022

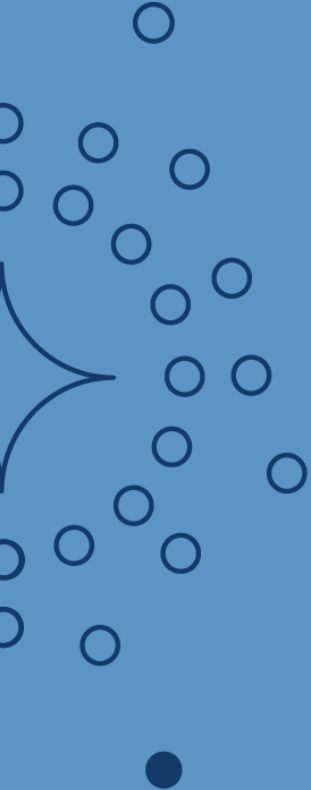
- Carbon tax rate in 2026: US\$20 equivalent
- Carbon tax rate in 2030: US\$30 equivalent

ZAR rates in the graph as per USD/ZAR ex rate in 2022

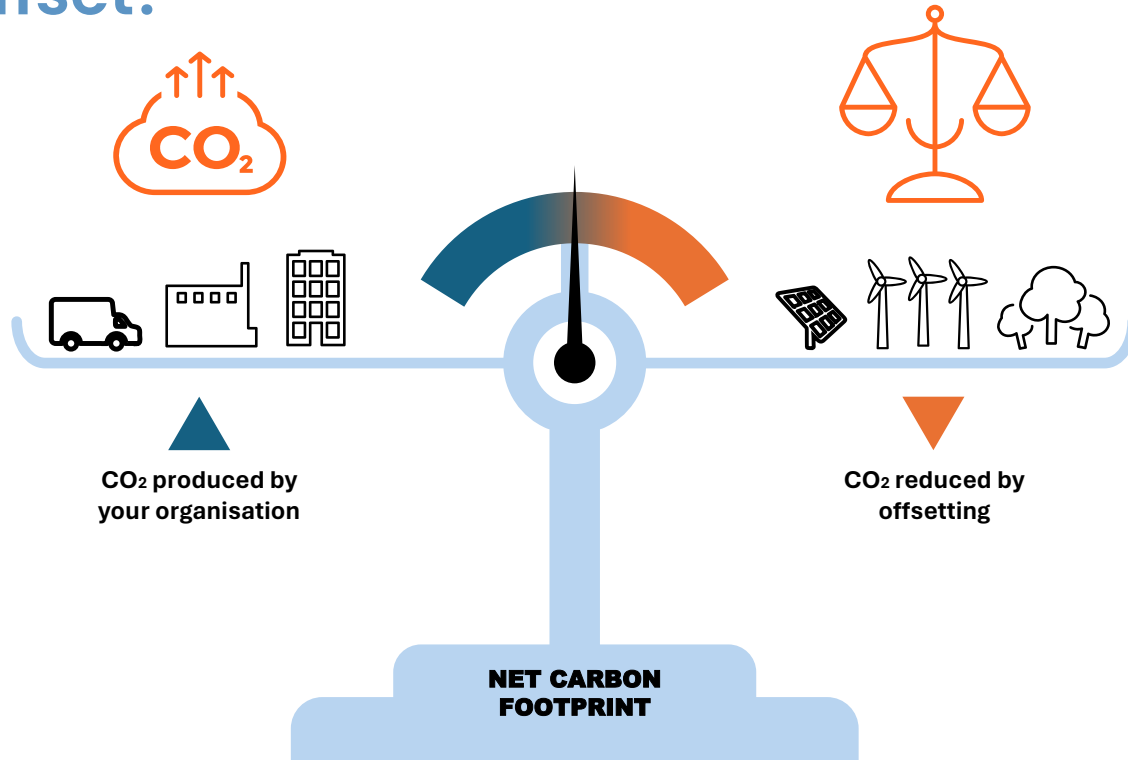


Section 3

Carbon Credits

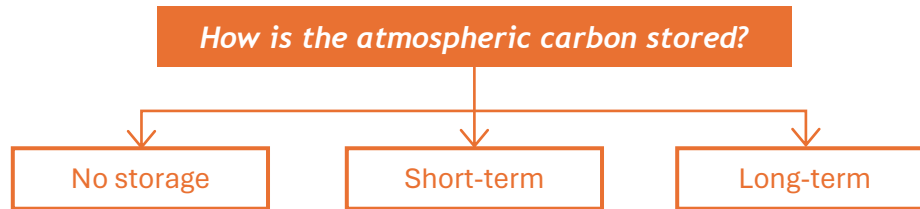
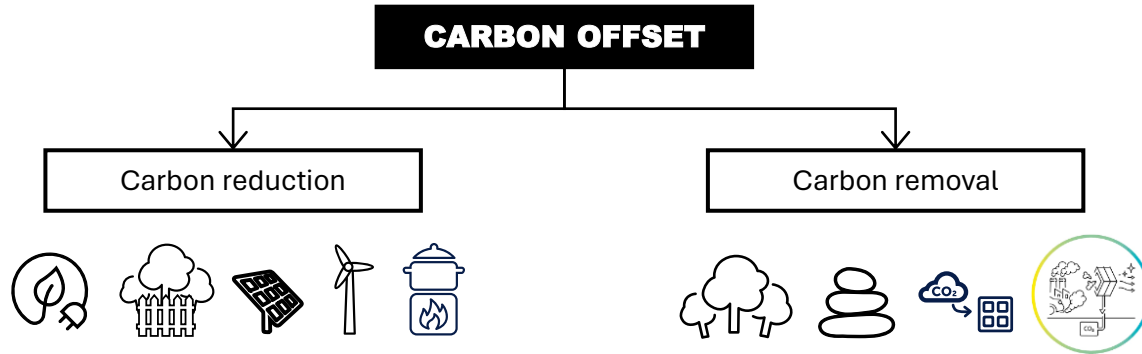


What is a carbon offset?



TAXONOMY OF OFFSETS

OXFORD PRINCIPLES



HOW CARBON OFFSETTING WORKS

Carbon offsets allow you to offset your climate impact by reducing the emissions you generate elsewhere

CO₂ emissions are caused by air travel, accommodation, transport, dining and other travel activities.



You buy carbon credits that are equal to the amount of CO₂ you produce.



These projects reduce CO₂ and other greenhouse gases by removing existing CO₂ from the atmosphere or preventing new emissions.



One project may build a wind farm that reduces dependence on fossil fuels.

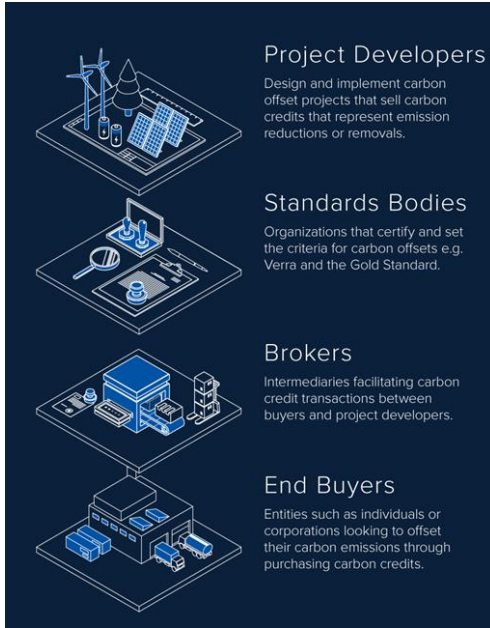
Another may preserve forests or create new ones.



Your contribution funds certified projects that conserve and restore forests, generate clean and renewable energy or increase energy efficiency.



FOUR KEY PARTICIPANTS



A decorative graphic on the left side of the slide, featuring a series of white circles of varying sizes and a white line that curves around them, resembling a stylized wave or a cluster of particles.

Section 4

Farm for Impact

With SA's leading carbon farming programme

Anthesis Regenerative Agriculture Carbon Projects



SARA Regenerative Agriculture
South America (Chile, Paraguay &
Argentina)

Since 2019

**Brazil Regenerative
Agriculture**
Coming soon

**AgriCarbon Regenerative
Agriculture**
South Africa

Since 2018

What is the AgriCarbon programme?



South Africa's first verified carbon programme paying farmers for the carbon credits they generate from their sustainable land management practices.

- Applies **VM0042** – Methodology for **Improved Agricultural Land Management (IALM)** **Verra – Verified Carbon Standard (VCS)**
- Through our AgriCarbon Programme, **increased soil organic carbon** and **reduced greenhouse gas emissions** from sustainable farming practices generate high-quality carbon credits. These credits are purchased by companies in South Africa and abroad looking to offset their carbon footprint.

Enrolled farmers implementing **improved land management practices** that sequester carbon are eligible for **Carbon Credits**.

1.Reduction in Fertiliser Application: Implementing more efficient fertiliser use to minimize nitrogen emissions.

2.Reduced Tillage: Decreasing the frequency and intensity of soil tillage to maintain soil structure and carbon content.

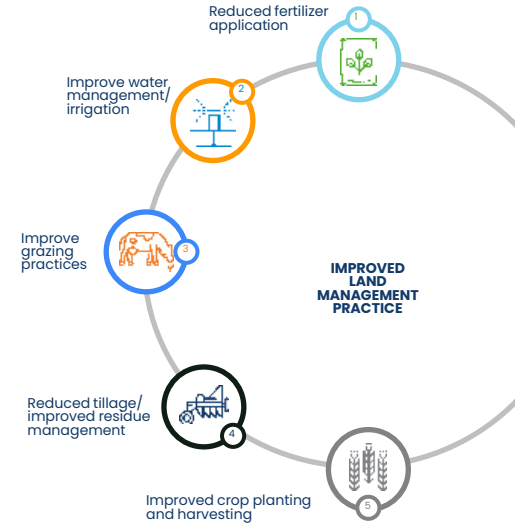
3.Water Management: Improving irrigation practices to enhance water use efficiency and reduce emissions from waterlogged soils.

4.Residue Management: Managing crop residues effectively to enhance soil organic matter and reduce emissions from decomposition.

5.Cover Cropping: Planting cover crops during off-seasons to protect soil, enhance soil organic carbon, and reduce erosion.

6.Diversified crop rotations: Optimizing planting and harvesting techniques to improve soil health and carbon sequestration.

7.Grazing Practices: Implementing sustainable grazing practices to improve pasture health and increase soil health.



AgriCarbon™

Rebuild. Improve. Reward.



**TRACE
& SAVE**

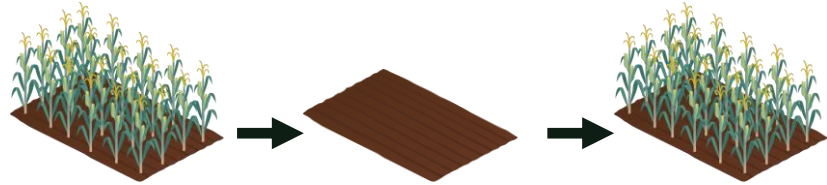
 **Intelact®**
lifting productivity - driving profitability

SGS

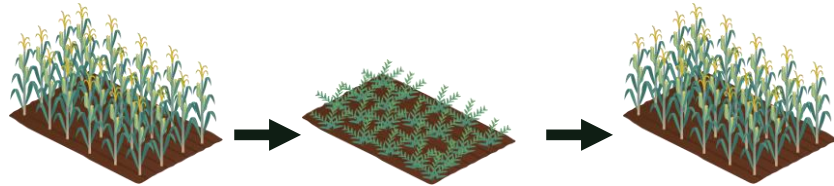
SOC Modelling Overview



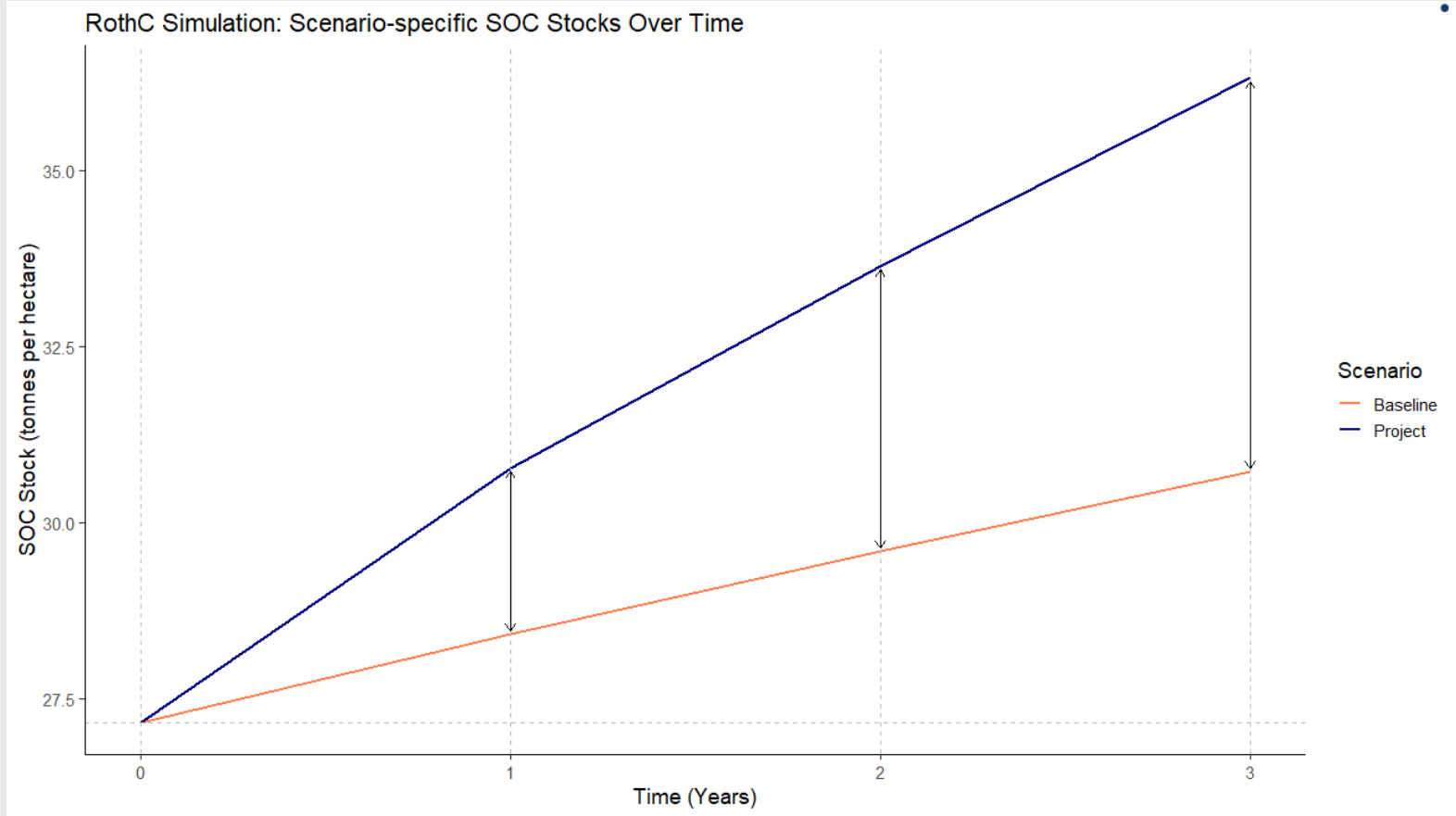
Traditional Agriculture (Baseline scenario)



Conservation Agriculture (Project Scenario)



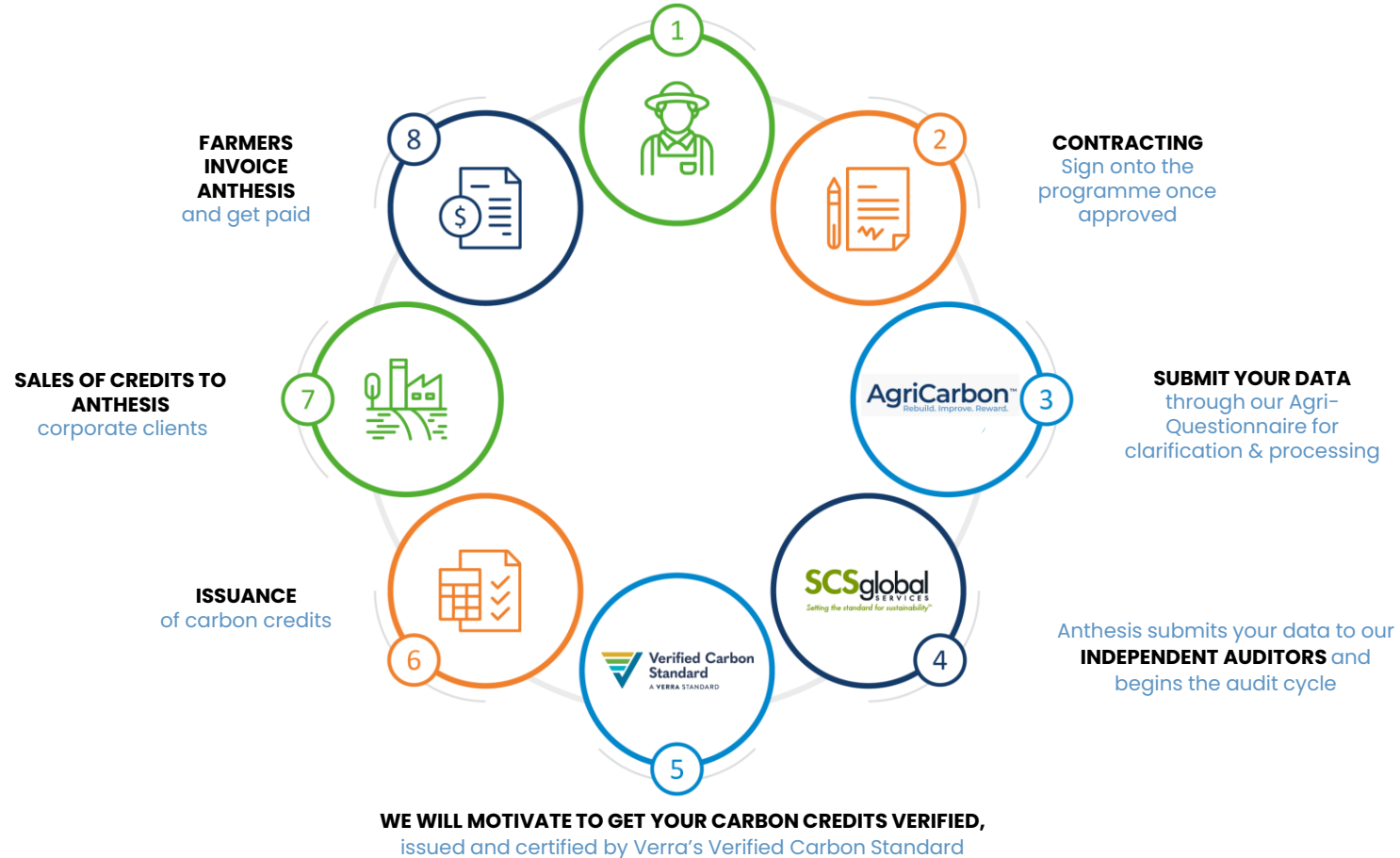
SOC Modelling Overview

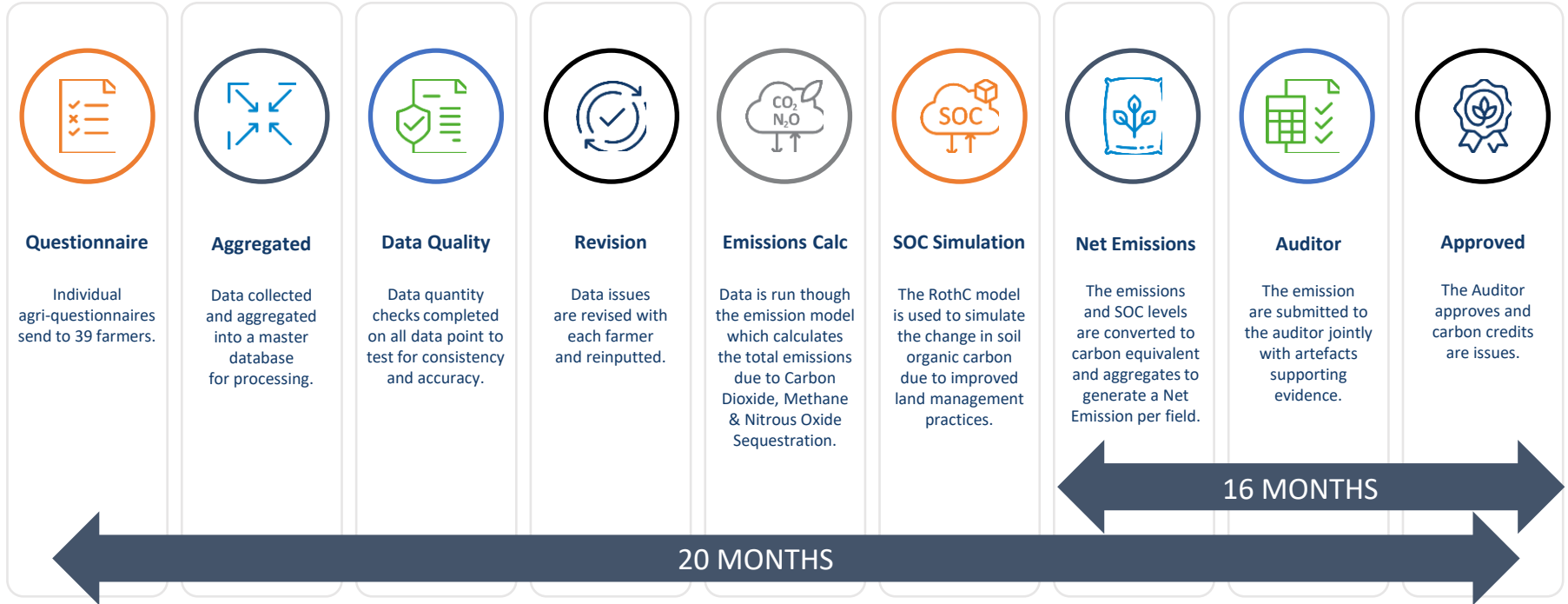




TELL US ABOUT YOUR FARM

Provide background on your farming practices so we can assess eligibility through our Expression of Interest page on our website







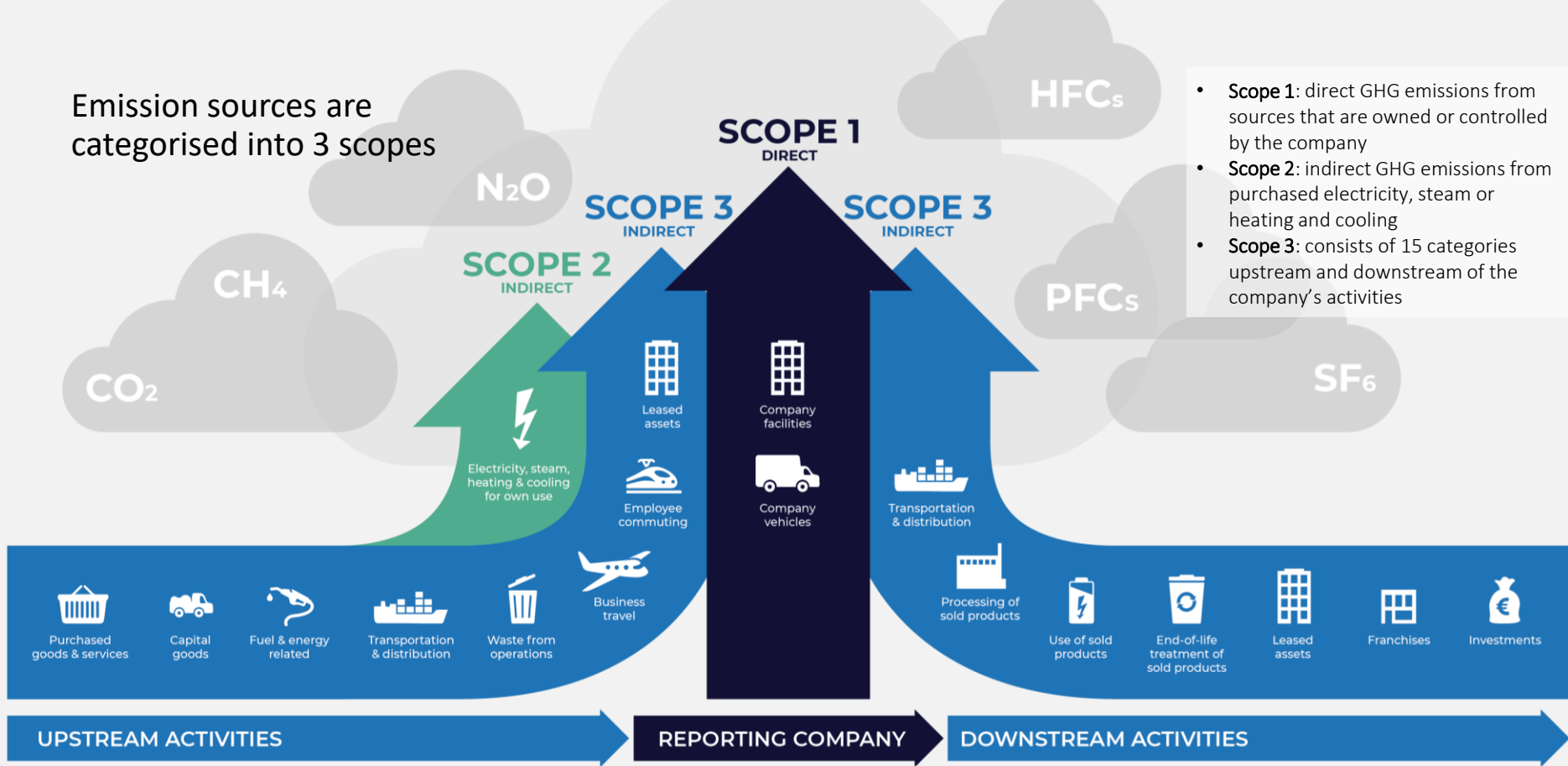
A decorative graphic on the left side of the slide, featuring a cluster of white circles of varying sizes and two solid dark blue circles, arranged in a pattern that suggests movement or a flow.

What to consider when joining a carbon farming programme



- 1. Understanding Carbon Farming Practices:** Farmers need to familiarize themselves with the specific practices involved, such as cover cropping, reduced tillage, reduced fertilizer use, and rotational grazing. Understanding these practices helps in assessing their feasibility and benefits.
- 2. Economic Viability:** Evaluate the financial aspects, including potential costs and benefits. This includes initial investments, potential income from carbon credits, and long-term savings from improved soil health and productivity.
- 3. Technical Support and Training:** Check if the program offers adequate technical support and training. This is crucial for successfully implementing and maintaining sustainable practices.
- 4. Soil and Land Suitability:** Assess the suitability of their land for carbon farming practices. Soil type, climate, and existing land use can influence the effectiveness of carbon sequestration methods.
- 5. Program Requirements and Commitments:** Understand the specific requirements and commitments of the program, such as monitoring, reporting, and verification processes. Ensure they are manageable and align with the farmer's capacity.
- 6. Environmental and Social Benefits:** Consider the broader environmental and social benefits, such as improved biodiversity, water retention, and community resilience. These can add significant value beyond financial gains.
- 7. Long-term Sustainability:** Evaluate the long-term sustainability of the practices and the program itself. Sustainable practices should enhance soil health and productivity over time, ensuring ongoing benefits.
- 8. Policy and Market Conditions:** Stay informed about relevant policies and market conditions that can impact the viability and profitability of carbon farming. This includes government incentives, carbon market trends, and regulatory requirements.

Emission sources are categorised into 3 scopes



- **Scope 1:** direct GHG emissions from sources that are owned or controlled by the company
- **Scope 2:** indirect GHG emissions from purchased electricity, steam or heating and cooling
- **Scope 3:** consists of 15 categories upstream and downstream of the company's activities

Soil Carbon: A scalable high-impact solution for global net-zero



About Anthesis:

Anthesis is the sustainability activator. We seek to make a significant contribution to a world which is more resilient and productive. We do this by working with cities, companies, and other organisations to drive sustainable performance. We develop financially driven sustainability strategies, underpinned by technical expertise and delivered by innovative collaborative teams across the world.

The company combines the reach of big professional services groups with the deep expertise of boutiques. Anthesis brings together 1250+ experts with 45 offices located in 23 countries including Andorra, Australia, Brazil, Canada, China, Colombia, Finland, France, Germany, Ireland, Italy, the Middle East, Belgium, the Netherlands, the Philippines, South Africa, Spain, Sweden, the UK, and the US.

In South Africa, our mission is to focus, almost entirely, on carbon offset project development and the sale of carbon credits. We aim to harness the carbon markets for Africa by increasing the development of carbon credit projects across various sectors with a focus on nature-based solutions,.

Our core offering includes:

- Carbon Project Development
- South African Carbon Tax and Carbon Advisory
- Carbon Offsetting



Workshop17, 32 Kloof Street
Gardens, Cape Town, 8005



T: +27 21 300 6770
E: agricarbon@anthesisgroup.com
W: www.agricarbon.co.za