Sustainable market mechanisms: Carbon offsets in South Africa

Minerals Council South Africa | 2026

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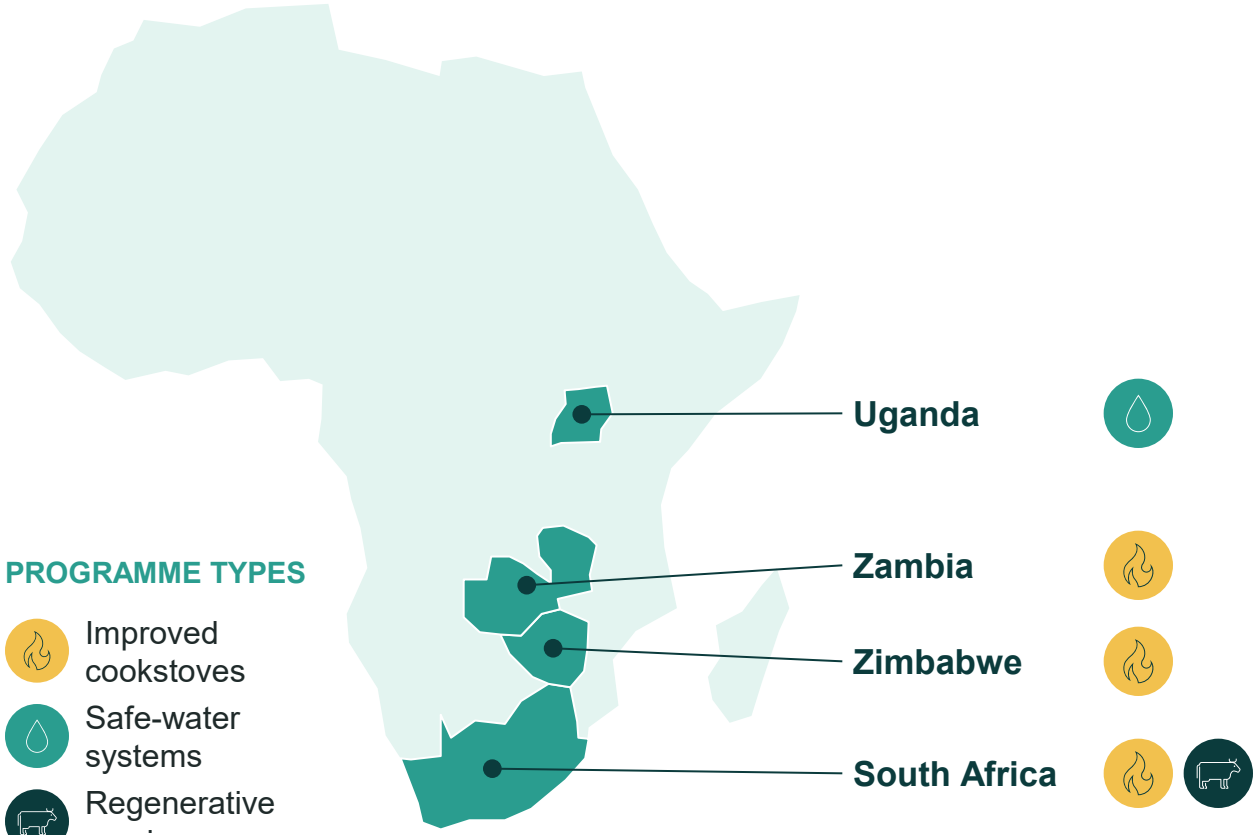
A LEADING GLOBAL CARBON PROJECT DEVELOPER

TASC has issued ~12.4M carbon credits to date

Our mission: financing and developing high-impact climate mitigation projects



PROGRAMME TYPES

- Improved cookstoves
- Safe-water systems
- Regenerative grazing

PUBLISHED PORTFOLIO

1.22M
household devices distributed

~12.4M
carbon credits issued

Over 700
local jobs across projects

LAND PORTFOLIO

>1.2 mil ha
currently reported under GRASS

~700,000 ha
COMMUNAL

~500,000 ha
PRIVATE

5
countries

2019
established

6 yrs
in project development

South Africa • Zambia • Zimbabwe • Uganda • Australia

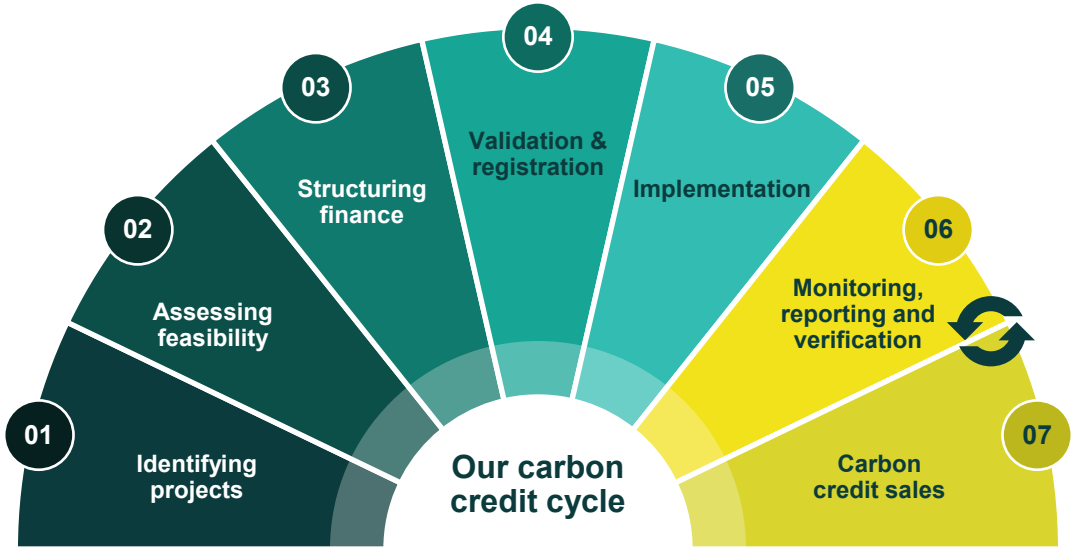
Market mechanisms: separating the green benefit from the activity, and earning the right to sell it

One activity, two products

THE ACTIVITY	WHAT IT PRODUCES	WHO USES THE CLAIM
Solar farm	**Electricity** — Flows into the grid, mixes with coal power	*Stays with the activity*
Solar farm	**Certificate (REC)** — One for every unit of clean power	→ **Factory** — Matches its power use
Cookstoves	**Cleaner cooking** — Less smoke and wood for families	*Stays with the activity*
Cookstoves	**Carbon credit** — One for every tonne of CO_2 avoided	→ **Mine** — Balances diesel emissions

The good thing happens in one place. The credit travels to wherever it's needed.

Our carbon credit cycle



Stages 06 and 07 repeat
Each monitoring and verification round issues new credits for sale

Once we put a value on the good, more of it gets done

Credits can typically be sold into three markets

Voluntary market
Companies buy by choice

Companies buy and retire credits to back their own net-zero and climate claims.

TASC project
cuts emissions

Standard
issues credits

Company
retires credits

Price
Agreed between buyer and seller, not set by regulation

WHO BUYS

Corporates, retailers and traders

RULES SET BY

Standards (Gold Standard, Verra)

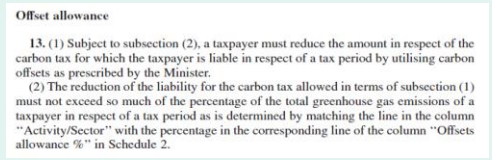
Compliance market
South Africa: companies buy by law

Carbon taxpayers can retire eligible offsets to reduce their carbon tax bill.

Government Gazette
REPUBLIC OF SOUTH AFRICA
Vol. 647 Cape Town Kaapstad 23 May 2019 No. 42483
THE PRESIDENCY
DIE PRESIDENSIE

Carbon Tax Act
Act No. 15 of 2019

Section 13 offset allowance
Offsets can cover 10% of process & fugitive emissions and 15% of combustion emissions


Offset allowance

13. (1) Subject to subsection (2), a taxpayer must reduce the amount in respect of the carbon tax for which the taxpayer is liable in respect of a tax period by utilising carbon offsets as prescribed by the Minister.
(2) The reduction of the liability for the carbon tax allowed in terms of subsection (1) must not exceed so much of the percentage of the total greenhouse gas emissions of a taxpayer in respect of a tax period as is determined by matching the line in the column "Activity/Sector" with the percentage in the corresponding line of the column "Offsets allowance %" in Schedule 2.

WHO BUYS

Companies liable for South African carbon tax

RULES SET BY

Standards and National Treasury, under the Carbon Tax Act 2019

Article 6 market
Countries trade under the Paris Agreement

Countries transfer emission reductions to meet their Paris Agreement targets (NDCs).

Host country
sells reductions, adjusts its own tally

ITMOs

Buying country
counts them towards its NDC

Article 6.2
Direct deals between countries

Article 6.4
UN-supervised Paris Agreement Crediting Mechanism

WHO BUYS

Typically, governments meeting their NDC targets

RULES SET BY

Standards, UNFCCC (under Article 6 of the Paris Agreement) and National Carbon Market Regulations

Sources: Carbon Tax Act 15 of 2019, s13 and Schedule 2 (Government Gazette No. 42483, 23 May 2019); UNFCCC, Paris Agreement, Article 6. ITMO = internationally transferred mitigation outcome.

COMPLIANCE MARKET · SOUTH AFRICA

Using the offset allowance to reduce carbon tax liability

Illustrative example: a mining company with 100,000 t of greenhouse gas emissions a year

1. How much can be offset?

Combustion emissions
Burning fuel · 40,000 t × 15% — **6,000 t**

Process & fugitive
Processes & leaks · 60,000 t × 10% — **6,000 t**

Offset allowance — **12,000 t / yr**

For these 12,000 t: pay the full tax to SARS, or buy offsets for less.

2. The saving if offsets cost 10% less than the tax

	2026	2027	2028	2029	2030	Total
Tax rate (R/t)	R308	R347	R385	R424	R462	
Pay full tax	R3.70m	R4.16m	R4.62m	R5.09m	R5.54m	**R23.11m**
Buy offsets	R3.33m	R3.75m	R4.16m	R4.58m	R4.99m	**R20.80m**
Saving	**R370k**	**R416k**	**R462k**	**R509k**	**R554k**	**R2.31m**

Assumes 12,000 t of offsets bought each year at 10% below the headline carbon tax rate. Illustrative only.

~R2.3 million cumulative saving, 2026–2030

Use it or lose it: an unused allowance doesn't roll over; the company simply pays the full tax for those emissions.

ARTICLE 6 MARKET · PARIS AGREEMENT

Article 6 creates two routes for trading credits

Under the Paris Agreement, traded reductions can count towards the buyer's nationally determined contribution (NDC)

Article 6.2
Country-to-country deals

Two governments agree a bilateral deal. The host country authorises a project's reductions for transfer to the buyer.

RULES SET BY

The two countries, reporting to the UNFCCC

UNITS TRADED

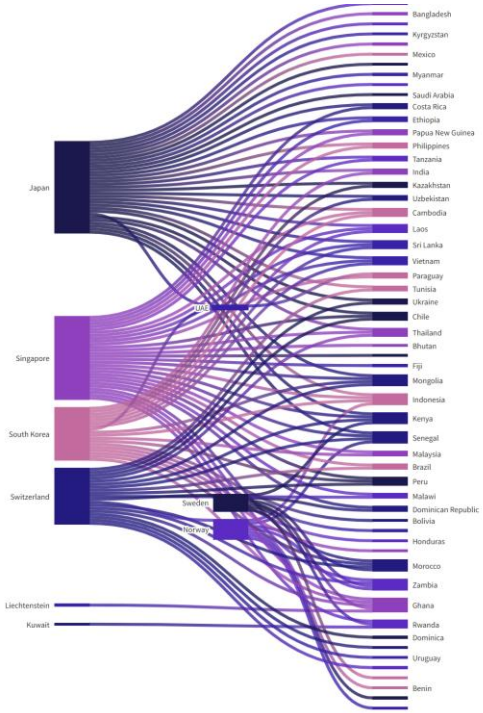
ITMOs (internationally transferred mitigation outcomes)

MOST ACTIVE BUYERS

Japan, Singapore, South Korea and Switzerland

Buyers sit on the left, hosts on the right; each line is one deal. Scan for the live IETA tracker.

Article 6.2 deals by country pair



Article 6.4
PACM, run by the UN

The Paris Agreement Crediting Mechanism: a UN Supervisory Body approves projects and issues credits centrally.

UNITS TRADED

A6.4ERs

LEVIES

5% of credits to the Adaptation Fund; 2% cancelled

A corresponding adjustment is required when transferred for NDC use (to avoid double counting)

Sources: IETA, Article 6.2 Bilateral Agreements Tracker (Sankey diagram); UNFCCC, Paris Agreement, Article 6. ITMO = internationally transferred mitigation outcome.

GRASS · VERRA VCS + CCB · PROJECT 2931

In partnership with

GRASS is already restoring >1.2 mil ha of grassland

Grassland Restoration and Stewardship in South Africa, run with communal and commercial livestock farmers

Project at a glance

How GRASS generates and verifies credits

MECHANISM

Soil carbon sequestration, plus lower livestock methane and wildfire emissions

QUANTIFICATION

Measure and model

STANDARDS

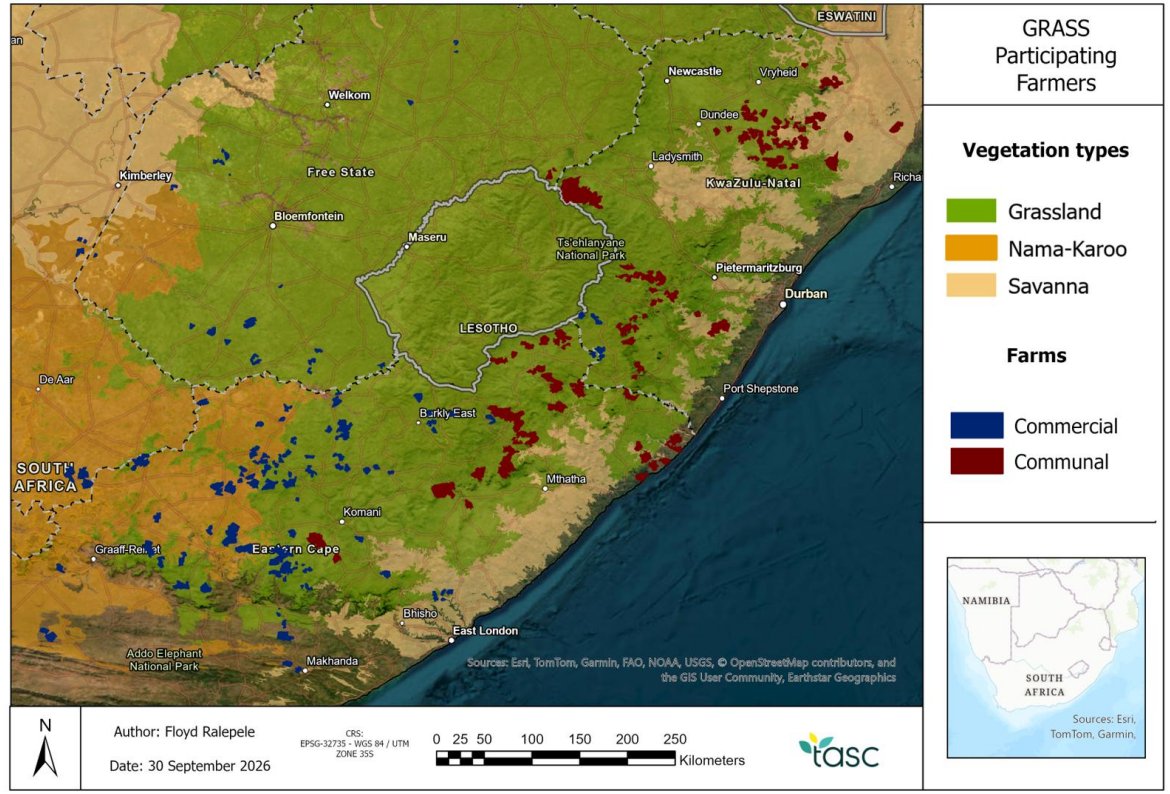
Dual Verra VCS and CCB (climate, community and biodiversity)

SUPPLY HORIZON

30-year crediting period, 17.76M tCO_2e projected

SCALE

Growing towards 2M ha



178 communal grazing associations and 145 commercial farms are currently taking part

Source: TASC GRASS project data; Verra VCS project 2931. Map: GRASS participating farms by vegetation type, TASC, September 2026.

GRASS monitors 18 indicators to earn the CCB label

The CCB label needs evidence of benefits to people and nature, not only carbon

Climate
3 indicators

- Soil organic carbon (SOC) sequestration
- CH_4 emission reductions from enteric fermentation
- CH_4 and N_2O emission reductions from fewer wildfires

Community
4 indicators

- Farmer market access and income
- Training and skills transfer
- Youth and women capacity development, and job creation
- Traditional medicine availability

Biodiversity
11 indicators

- Grass species
- Species richness, abundance, evenness
- Tuft diameter
- Tuft distance
- Bare soil
- Erosion
- Mineral cycle
- Energy cycle
- Community dynamics
- Ecosystem function
- Wildfires

Local field teams collect the data behind these indicators across >1.2 mil ha

CCB = Climate, Community & Biodiversity Standards (Verra). Source: TASC GRASS project data.

Ecorangers collect the data, technology scales it

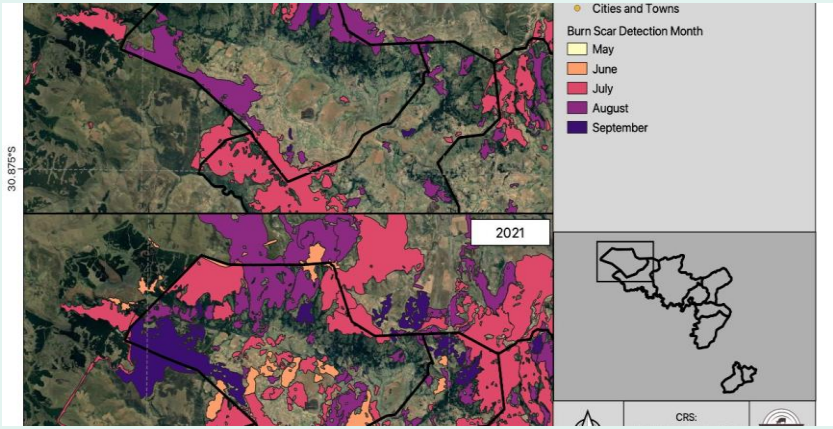
786 ecorangers trained and employed; remote sensing cannot yet measure many CCB indicators

Boots on the ground
Primary data source

- **Ecorangers** collect field samples and survey data
- **Training** and skills transfer are core project activities, not a co-benefit
- **Local teams** build community trust and ground-truth the data

…layered with technology
Scales and checks the field data

- **Mobile app** for field capture, plus drone and satellite data
- **Central database** and the FarmSolve farm-management platform
- **Remote sensing** maps wildfire burn scars



Local teams plus fit-for-purpose tech keep MRV rigorous and affordable at scale

MRV = monitoring, reporting and verification. Source: TASC GRASS project data.

GRASS has issued 266,255 tCO_2e in credits to date

Climate, community and land results

266,255*

tCO_2e in carbon credits issued

95,000*

People whose wellbeing the project supports

>1.2 mil

Hectares under restoration and stewardship

786

Ecorangers trained and employed

R5.64 mil*

Farmer revenue unlocked through market access

R2.7 mil*

Revenue share paid directly into community sub-accounts

178

Communal grazing associations

145

Commercial farms

Healthier grasslands, stronger livelihoods and real climate impact

* Verified data from the first issuance, covering 2021–2023; all other figures are to date. Source: TASC GRASS project data; credits issued under Verra VCS & CCB project 2931.

Closing thoughts

How to get started in South Africa's carbon market

01 **Explore your own projects, with the right partners**

They are more complex than they look. Work with specialist developers and community organisations people trust.

02 **But start with your carbon tax offset allowance**

South Africa's carbon tax lets you fund high-impact projects while cutting your tax bill. Use the full allowance.

03 **Act now, before supply tightens**

The Article 6 framework is imminent, and export demand may compete for domestic credits.

04 **Secure supply with multi-year offtakes**

Forward agreements lock in volume and price, and give developers the certainty to build projects.

Thank you

Get in touch

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