Your Farm.
Your Credits.

Carbon Farming Foundation

Carbon Farming Unpacked

Farming Secrets

Weds 11th May 2022

1. The basics
2. The do-it-yourself model
3. Q & A

Why we exist

Our motivation:

- Heroes of net-zero
- Credit where credit is due
- Carbon flowing = productivity

The challenge:

- Confusing
- Difficult
- Expensive
- Farmer are fence sitting

We do things a little differently...

We make it drastically **simpler and cheaper** for farmers to integrate a profitable carbon crop into their operations.

- Healthier soils, crops, and paddocks.
- More money in the farmer's pocket

Part 1: The Basics

What is carbon farming?

New Activity + Proof = Credits Issued >> Maintain

Methodology = the rule book

The rule books

Accreditors

Australian Government
Clean Energy Regulator

VCS VERIFIED CARBON STANDARD

REGEN NETWORK

puro.earth

Gold Standard
Climate Security & Sustainable Development

Methodologies

- Different activities
- Heaps of methods
- What applies to you?

What is a carbon credit?

- 1 Credit = Ton of CO_2 equivalent
- A financial product (like a share)
- Held in your account with the Accreditor (like a share registry)

Retire

- Carbon Neutrality

Hold

- Balance sheet value
- Future security

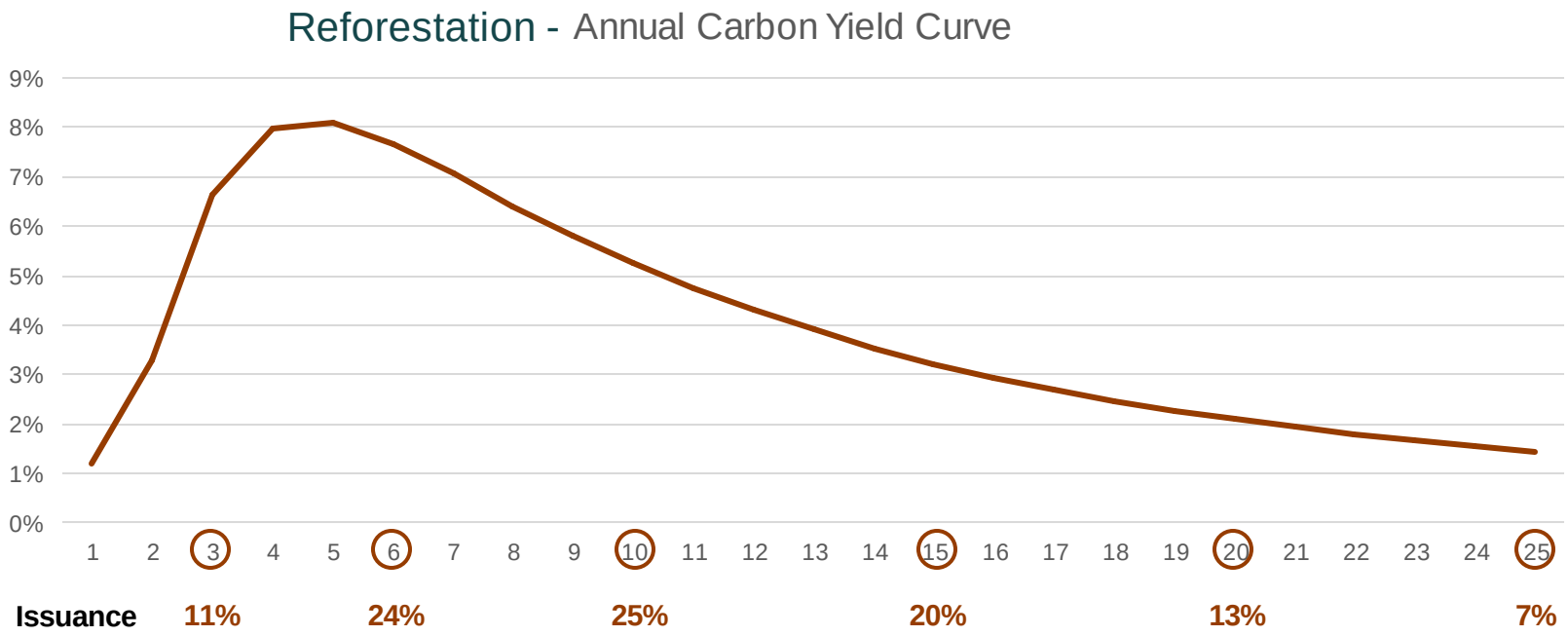
Trade

- Forward contract
- Spot sales

Credit issuance

Credit issuance

- Yield Curve
- 5-year max gap
- Costs per issuance



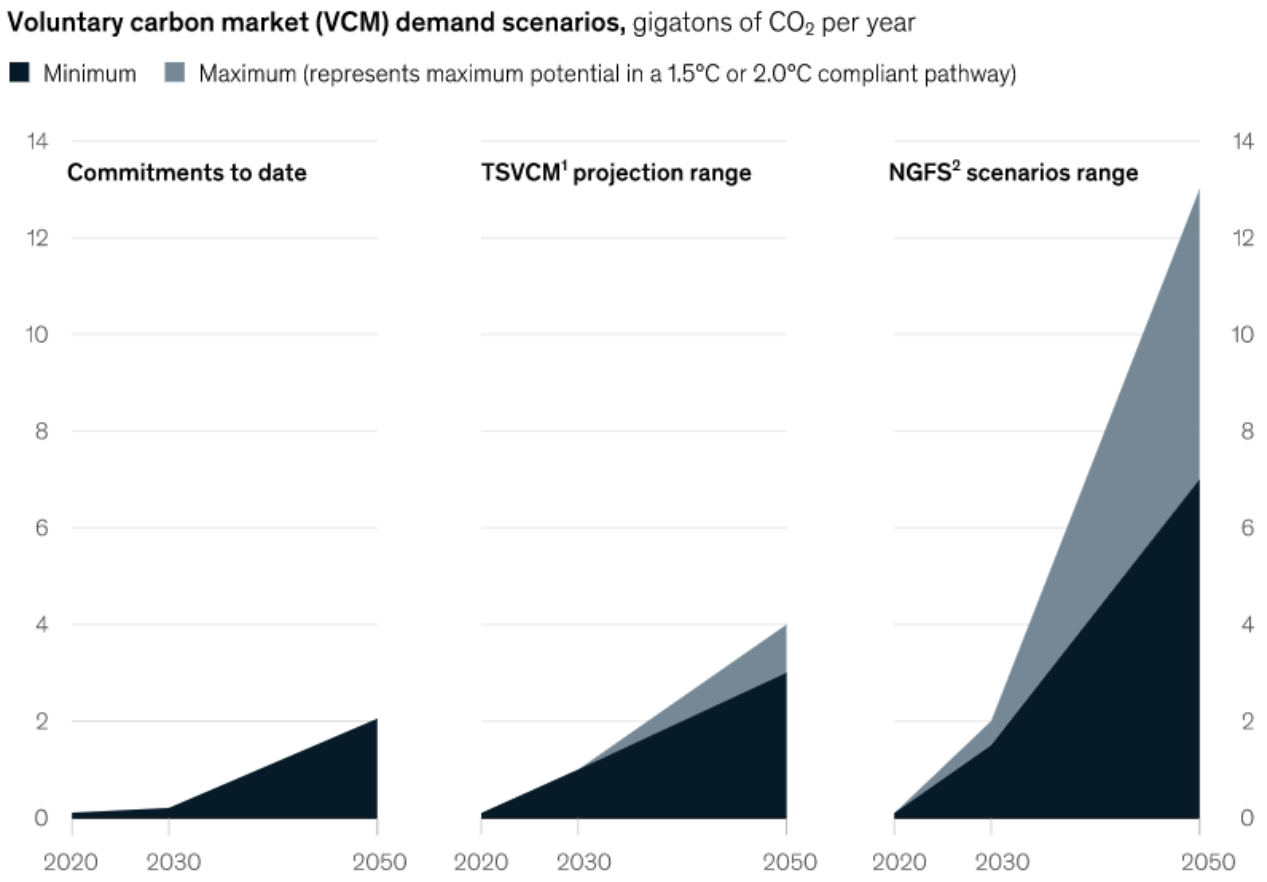
The carbon market explained

Buyers (Getting to net zero)

- Government
- Compliance
- Voluntary

Selling

- Government Auctions
- Spot Market
- Forward Contracts
- Private Sale – Storytelling
- Quantity and quality



https://www.mckinsey.com/business-functions/sustainability/our-insights/putting-carbon-markets-to-work-on-the-path-to-net-zero

$50B industry by 2050 (McKinsey)

Permanence & buffers – what does this mean?

25 Yr Crediting Period

25 Yr Permanence

- **Keep 75% of the credits from the Crediting Period**

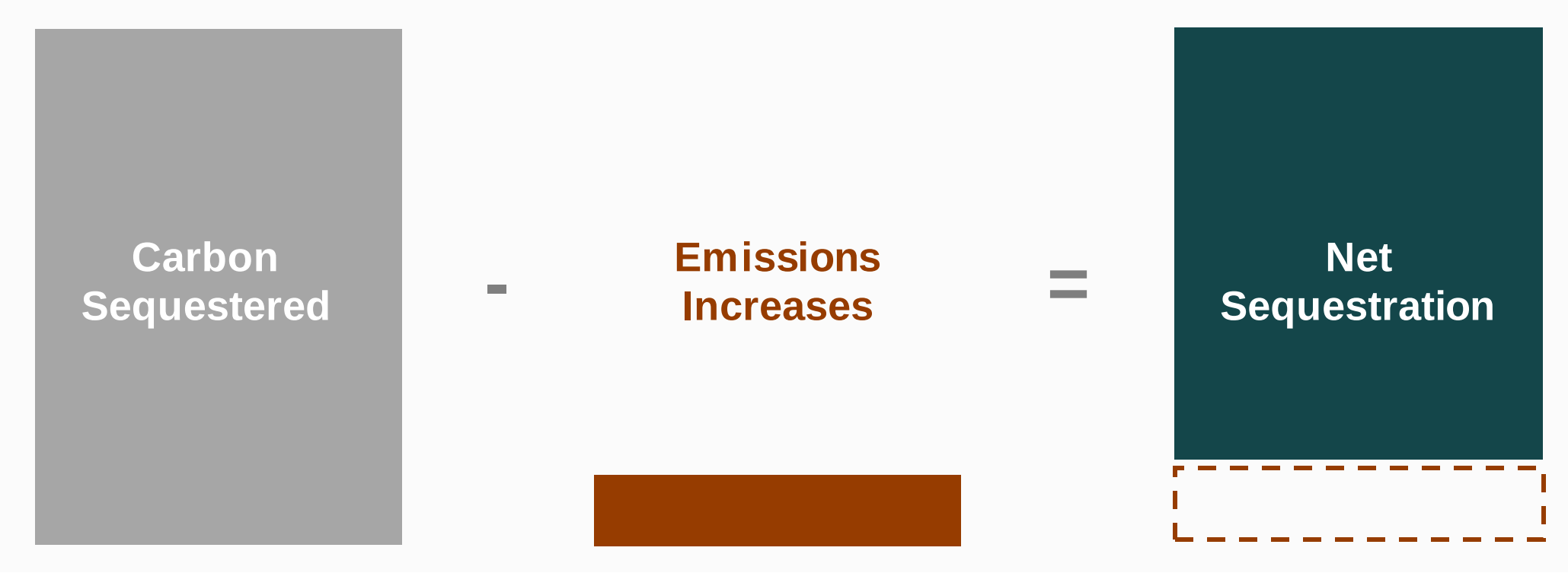
Varies for some methods (e.g. plantation forestry)

100 Yr Permanence

- **Keep 95% of credits from the Crediting Period**

Project emissions

Operational GHG emission increases are usually deducted.



Project costs

Implementing the activity

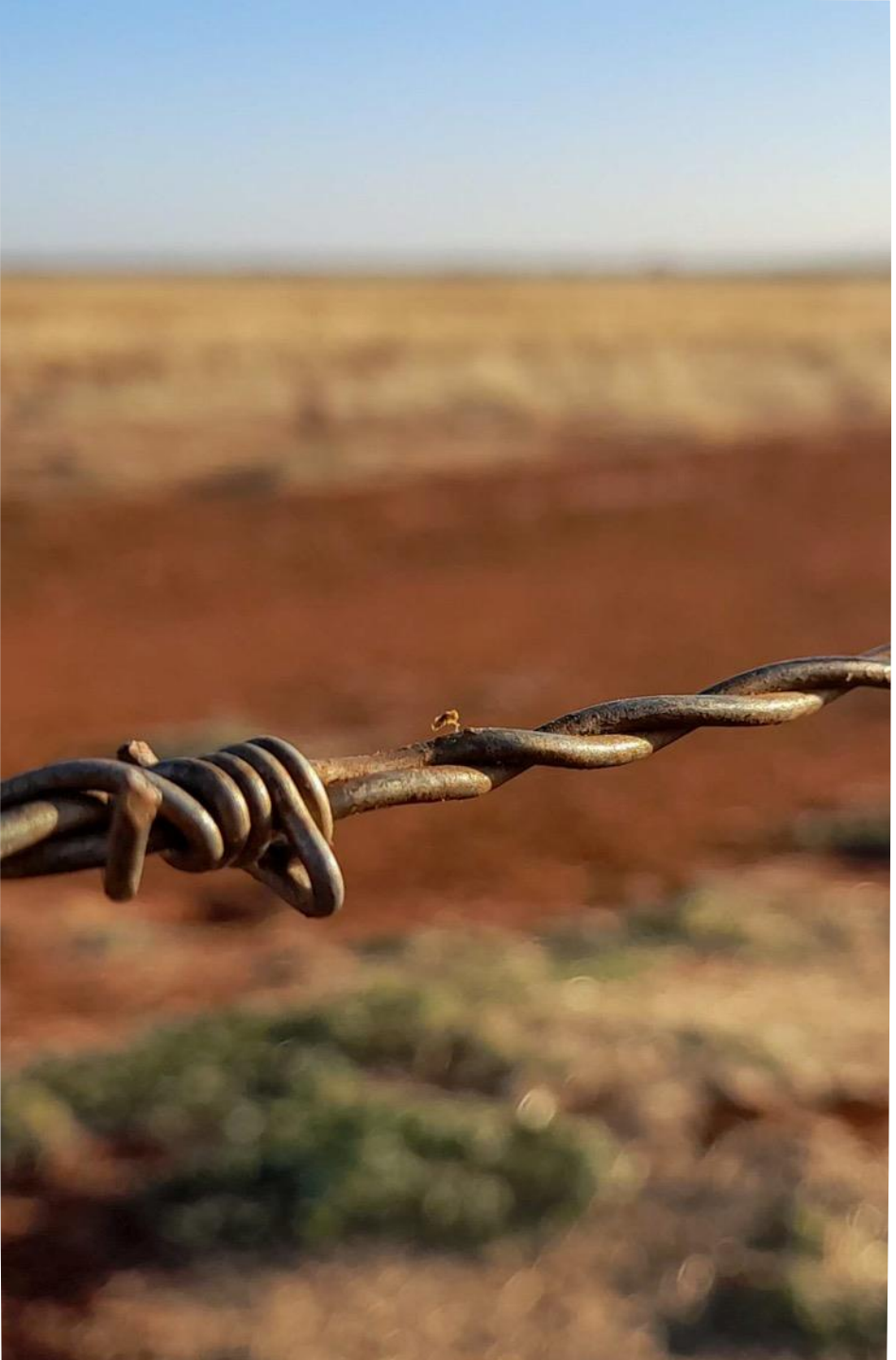
- Planting trees
- Soil sampling
- Fencing, inputs, machinery works & labour
- Agronomy
- Etc.

Consultant costs

- Technical support
- Coordination
- Reporting

Other

- Audits / accreditation
- Sharing your carbon credits
- Finance
- Brokers
- Software



Risks

- Land use opportunity cost – long term
- Price fluctuation
- Reversal – carbon decline
- Property sale – what if incoming buyer doesn’t want the project?

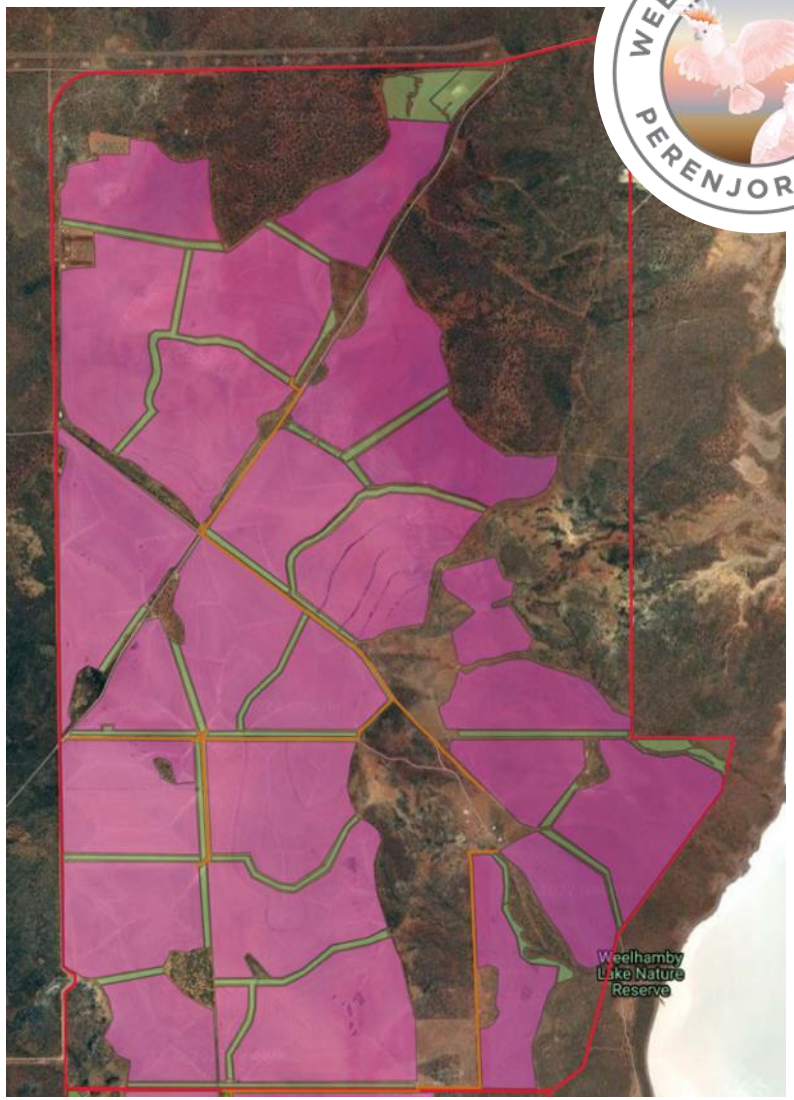
Risk mitigation

It’s just a new crop

- Farm productivity comes first
- Tactical integration
- Diversify your carbon crops

Long-game

- Scope and Plan
- Control your credits
- No lock-in contracts
- Hold v’s trade



WEELHAMBY FARM
PERENJORI W.A.

Soil carbon & reforestation

Part 2: Do-it-yourself carbon farming

The problem

- Confusing
- Difficult

- 30-50% credits to third party
- Locked in

The solution

Carbon should be grown, managed and sold like any other crop

- Choose level of support
- Slash delivery costs
- Keep 95-100% of the credits
- No lock-in or exclusivity
- Shared risk

What we bring to the table

1. DIY Toolkit

- Project management software
- Templates, guidebooks, industry knowledge & training resources
- Network of contractors, trading & funding opportunities

2. Setup services

- Registration & documentation
- Workplan, process support & critical path
- Cost optimisation, design compliance, CEA advice & mapping
- Stratification & sample plan design (soil)
- Coordination and technical support

3. Ongoing services

- Offset reporting & credit issuance
- Compliance, coordination and technical support

Transparent fees

Success fee (risk shared)

- 100 Credits per annum
- 2.5% of credits

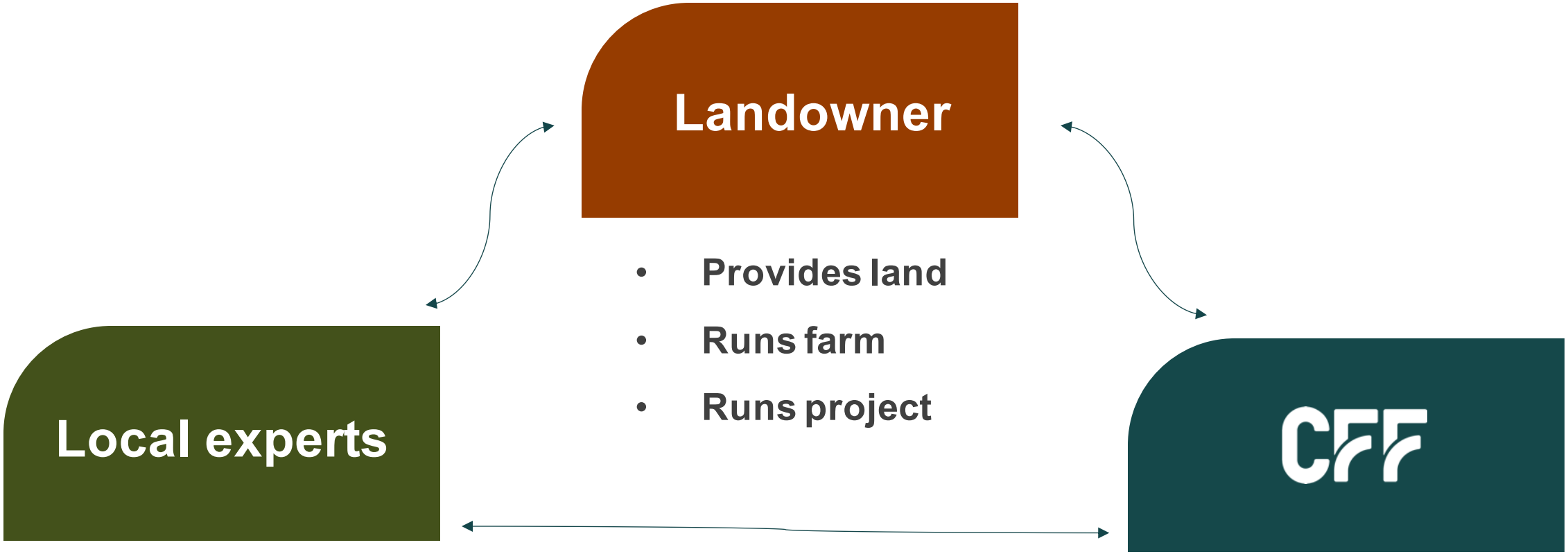
Choose your level of service

- *E.g. $15K – $35K*

Choose what your level of service

- *E.g. $10K - $20K per credit round*
- *$1K – $4K per annum budget*

A partnership approach



DIY toolkits available - what will work for you?

Project Type	Soil Carbon	Native Planting	Plantation Forestry
Method	Soil Carbon 2021	Enviro Plantings FullCAM Method	Plantation Forestry 2021
Activity	Store **additional** carbon in the soil through new and eligible activities • Eg: no-till, cover cropping, soil amelioration, rotational grazing.	Plant new native trees to grow a permanent forest. • Used as shelterbelts, windbreaks, wildlife corridors • Must reach 2m high & 20% crown cover	There are 4 options: • **Establish** new plantation • **Convert** existing plantation from short to long rotation • **Avoid** conversion of forest to non-forested land • **Transition** to permanent forest
Land type	Pasture, crop or fallow.	Can support a forest.	Cleared land, or existing plantation
	No forest cover in last five years		

Coming soon

VCU – mixed farming method, Small scale tree planting & Other ERF methods

How we help you zero in on your carbon opportunity

High level opportunity assessment

- Free software tools
- Reforestation Yield Heatmap $150 + 5c per Ha

Feasibility Report

- Tailored costs, full financial assessment, cashflow model and low-med-high scenarios.
- Project suitability, risks and success factors
- $1,500

Custom advice

- Hourly rate to help with whatever you need

No obligation or exclusivity

The Process

1. Feasibility

2. Sign-off

Project kick-off

3. Design & planning
3-12 months

4. Setup
3-6 months

5. Management
25 - 100 years

6. Credit Sales
25 years

DIY Carbon

Select Project

Stannich

- Dashboard
- 1. Feasibility
  - 1.1 Project Details
  - 1.2 Yield Estimator
  - 1.3 Calculator
  - 1.4 Report
  - 1.5 Self Assessment
- 2. Sign Off
- 3. Design & Planning
- 4. Establishment
- 5. MRV
- 6. Sales

Powered by CFF

Dashboard

WELCOME TO DIY CARBON DASHBOARD

My Projects

+ ADD DEMONSTRATION PROJECT + ADD PROJECT

TITLE	STATE	HA	METHODOLOGY	STAGE
Back paddock farm	WA	200	REFOREST	1. FEASO
Top paddock farm	NSW	1000	SOIL	3. DESIGN
Gumboot farm	TAS	300	FORESTRY	5. MRV
Jumbuck farm	VIC	800	SOIL	5. MRV


Yield Estimator
Guide
Help
Next
Boundaries
Add
FullCAM Yield
Add
Heatmap
Add
Plots
Add
Search
Pingrup
181
146
129
112
94
77
tCO2e/ha 100y permanence
3 km
mapbox
© Mapbox © OpenStreetMap Improve this map © Maxar

DIY Carbon

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Stannich

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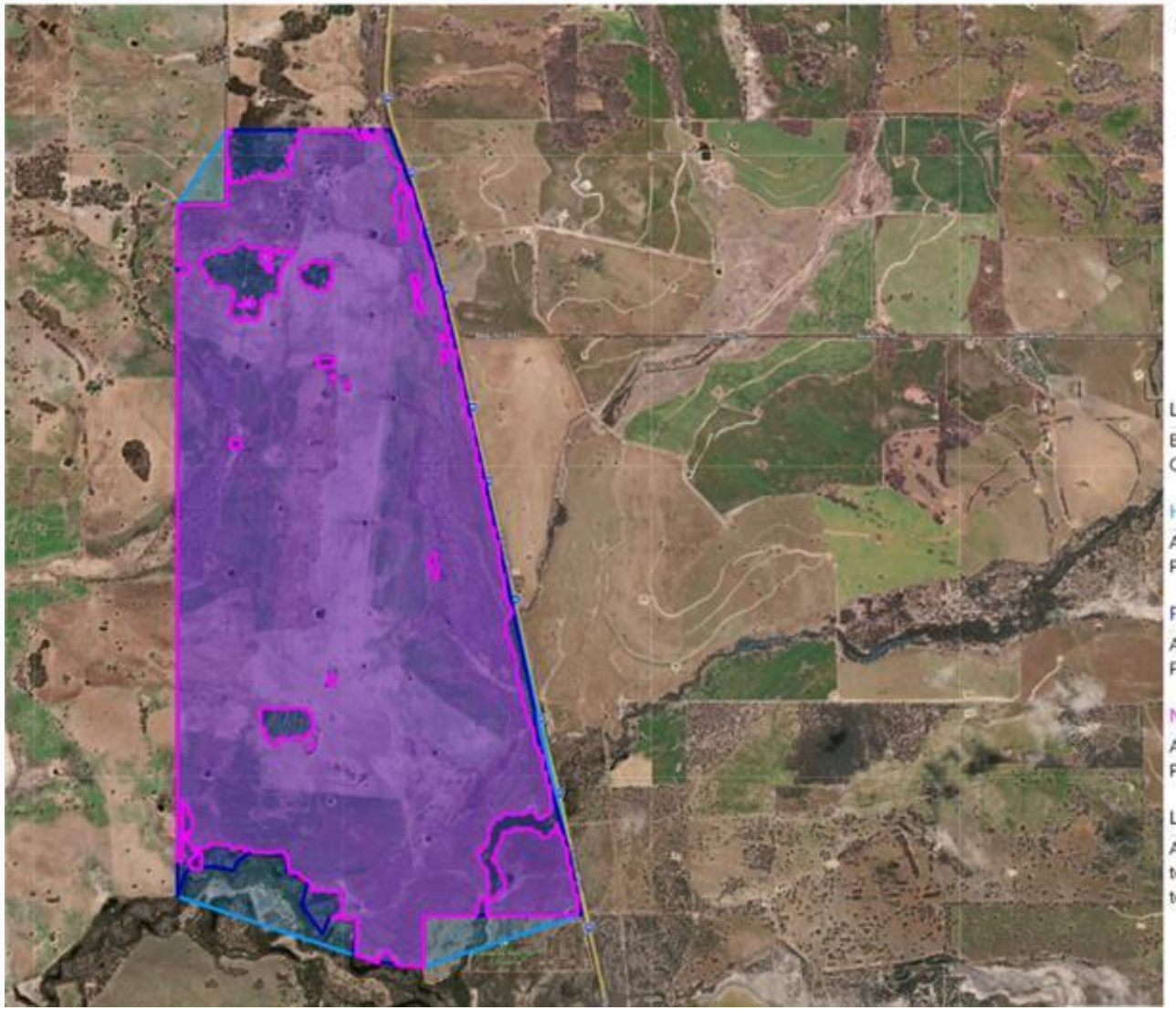
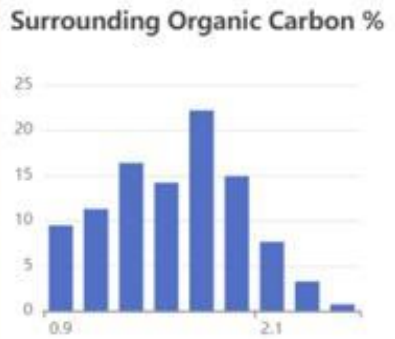
Powered by CFF

Soil Carbon Yield Calculator

FARMLAB

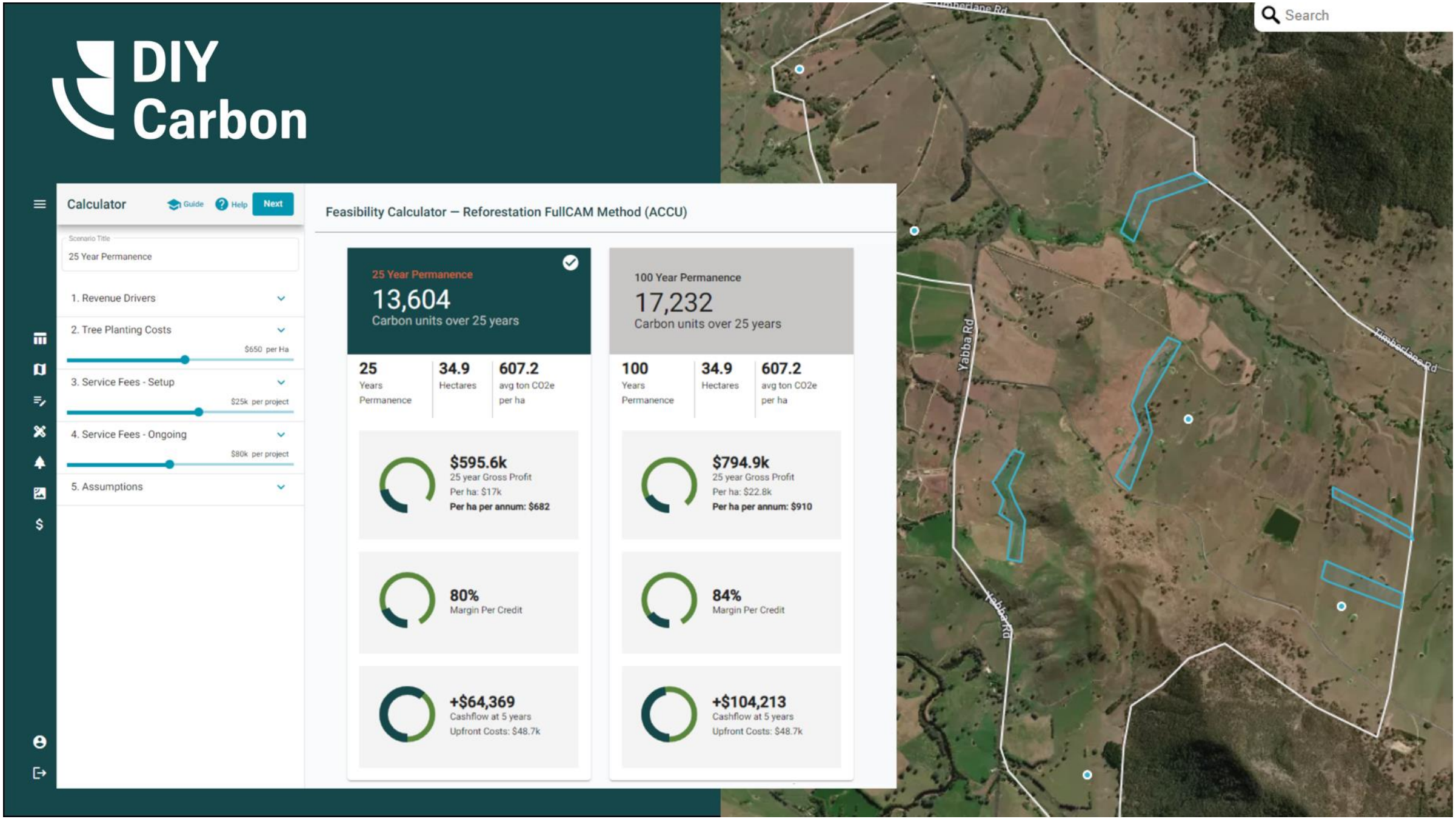




LOOC-C Values	
Bulk Desity Average	1.4921955360385948
OC Average %	1.3
Hull	
Area	1101.5136240535005
Percent	1
Paddocks	
Area	1037.4410214409256
Percent	0.9418322195809147
No Tree Cover	
Area	957.8365952269536
Percent	0.8695640020340151

LOOC-C SOC Values	
Abatement CO2 Ha/Yr	1.3131440092782533
total CO2	31444.434672243824
total CO2 per year	1257.777386889753

DIY Carbon


Search
Calculator
Guide
Help
Next
Scenario Title
25 Year Permanence
1. Revenue Drivers
2. Tree Planting Costs
$650 per Ha
3. Service Fees - Setup
$25k per project
4. Service Fees - Ongoing
$80k per project
5. Assumptions
Feasibility Calculator — Reforestation FullCAM Method (ACCU)
25 Year Permanence
13,604
Carbon units over 25 years
25
Years
Permanence
34.9
Hectares
607.2
avg ton CO2e
per ha
$595.6k
25 year Gross Profit
Per ha: $17k
Per ha per annum: $682
80%
Margin Per Credit
+$64,369
Cashflow at 5 years
Upfront Costs: $48.7k
100 Year Permanence
17,232
Carbon units over 25 years
100
Years
Permanence
34.9
Hectares
607.2
avg ton CO2e
per ha
$794.9k
25 year Gross Profit
Per ha: $22.8k
Per ha per annum: $910
84%
Margin Per Credit
+$104,213
Cashflow at 5 years
Upfront Costs: $48.7k
Yabba Rd
Timberlane Rd

Wide Open Agriculture

Cobram Estate®

Every olive matters.

ProTen

BARLOO

heartwood plantations

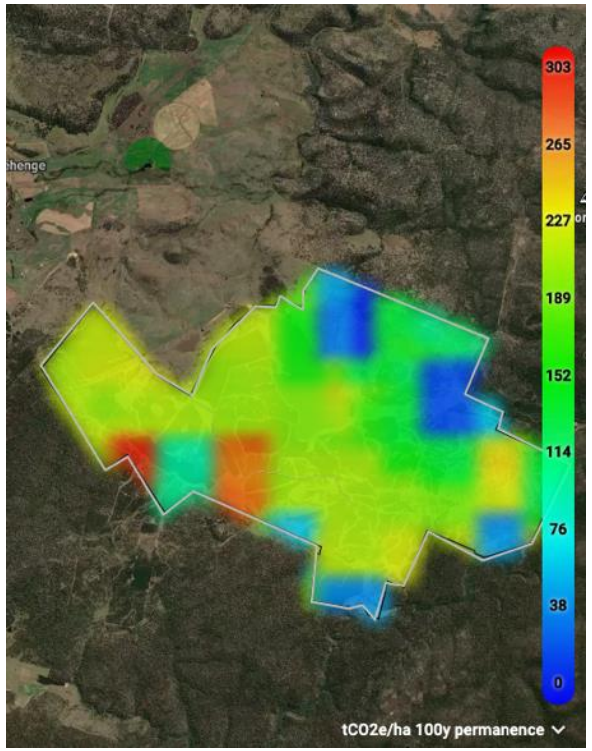
Show me the numbers!

	Forestry	Reforestation	Soil Carbon
@ $30 carbon price - Includes all CFF fees - Excludes land cost, finance or farm costs* - 25-year permanence period	558 Hectares, Gippsland Vic	200 Hectares, New England NSW	2000 Hectares, Great Southern WA
25-year carbon yields	178 Tonnes CO2e per Hectare	369 Tonnes CO2e per Hectare	Avg 0.29% increase in SOC to 1m depth
Your carbon units over 25 years	56,497	46,070	400,740
Upfront carbon project costs	$21k *	$383k	$159k *
Additional lifetime costs	$237k	$160k	$780k
Gross profit at 25 years	$1.4M	$950k	$11M
Cost to produce each carbon credit	$4.60	$8.90	$2.28
Gross profit per hectare per annum	**$114**	**$190**	**$222**
	+ Sawlogs	**+ Shelterbelts**	**+ Productivity**

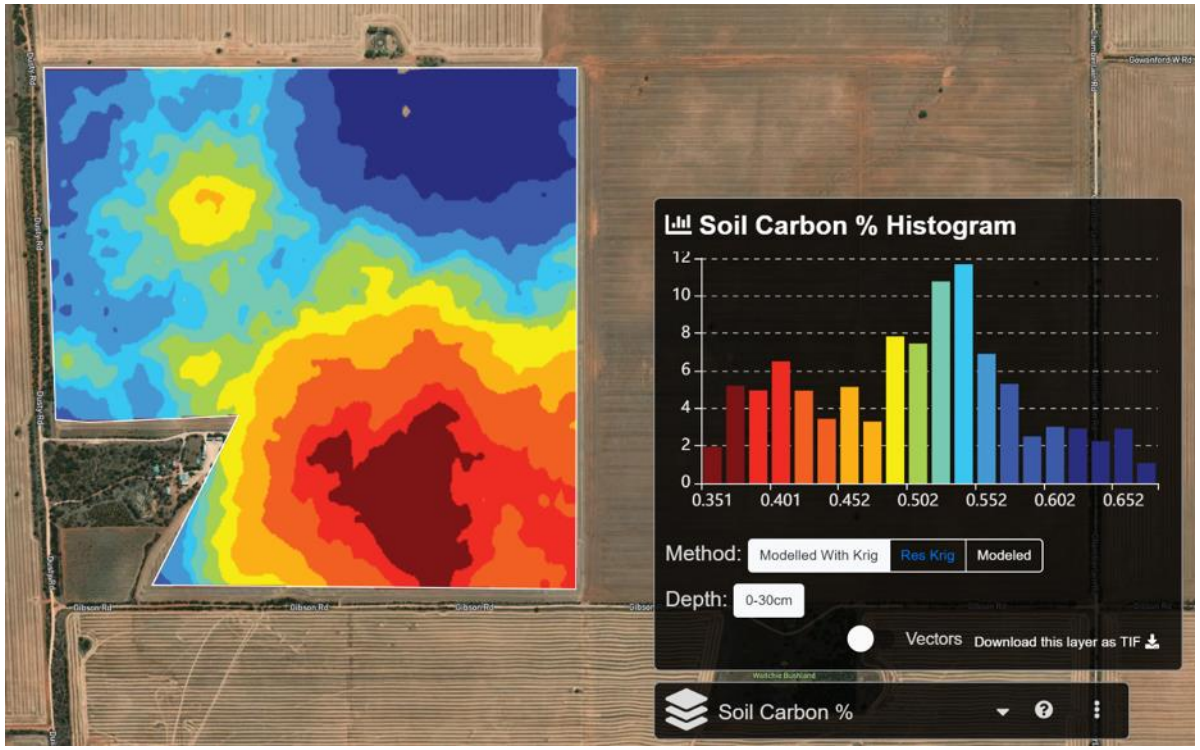
What can affect your yields?

Modelled / measured

- Climate
- Soil
- Topography
- Management!



Beta.diycarbon.com.au

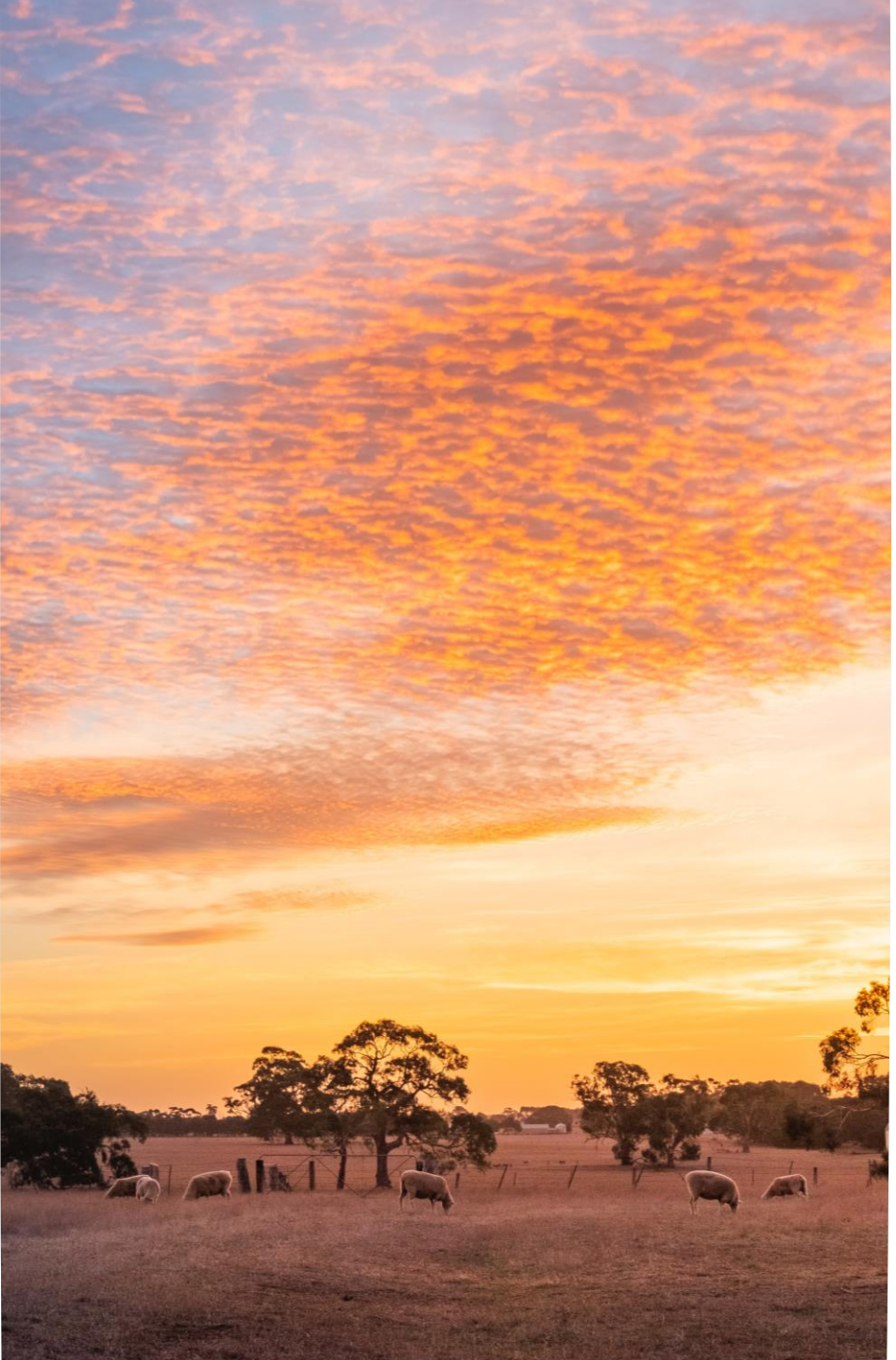


Farmlab.com.au

Take aways

It’s just like any other crop

- Focus on new activities that can boost resilience and productivity.
- Get carbon flowing in your system.
- We can help you decide which rulebooks fit these activities.
- It isn’t that hard, with a bit of guidance.
- DIY your project and control your credits!



CFF Fortnightly Webinar

We are kicking off fortnightly Q&A webinars where you can ask all your burning questions about carbon farming!

Time: Thursday 19th May at 2pm AEST/ 12pm AWST

Register for the webinar here.

Join the CFF herd and sign up to our newsletter & news bulletins here.

DIY Carbon

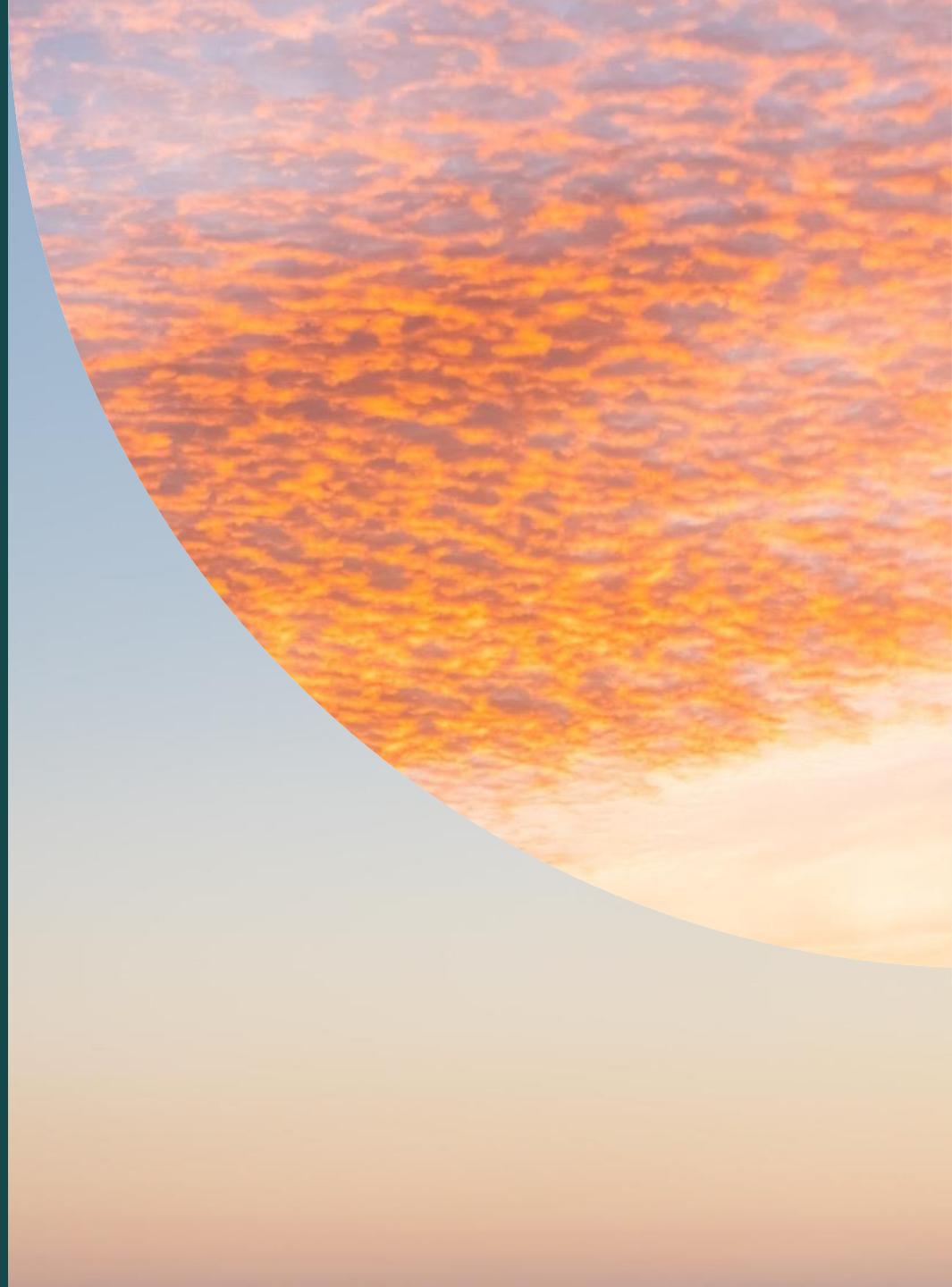
https://beta.diycarbon.com.au

CFF News

https://news.carbonfarming.org.au/

CFF Academy

Coming soon!



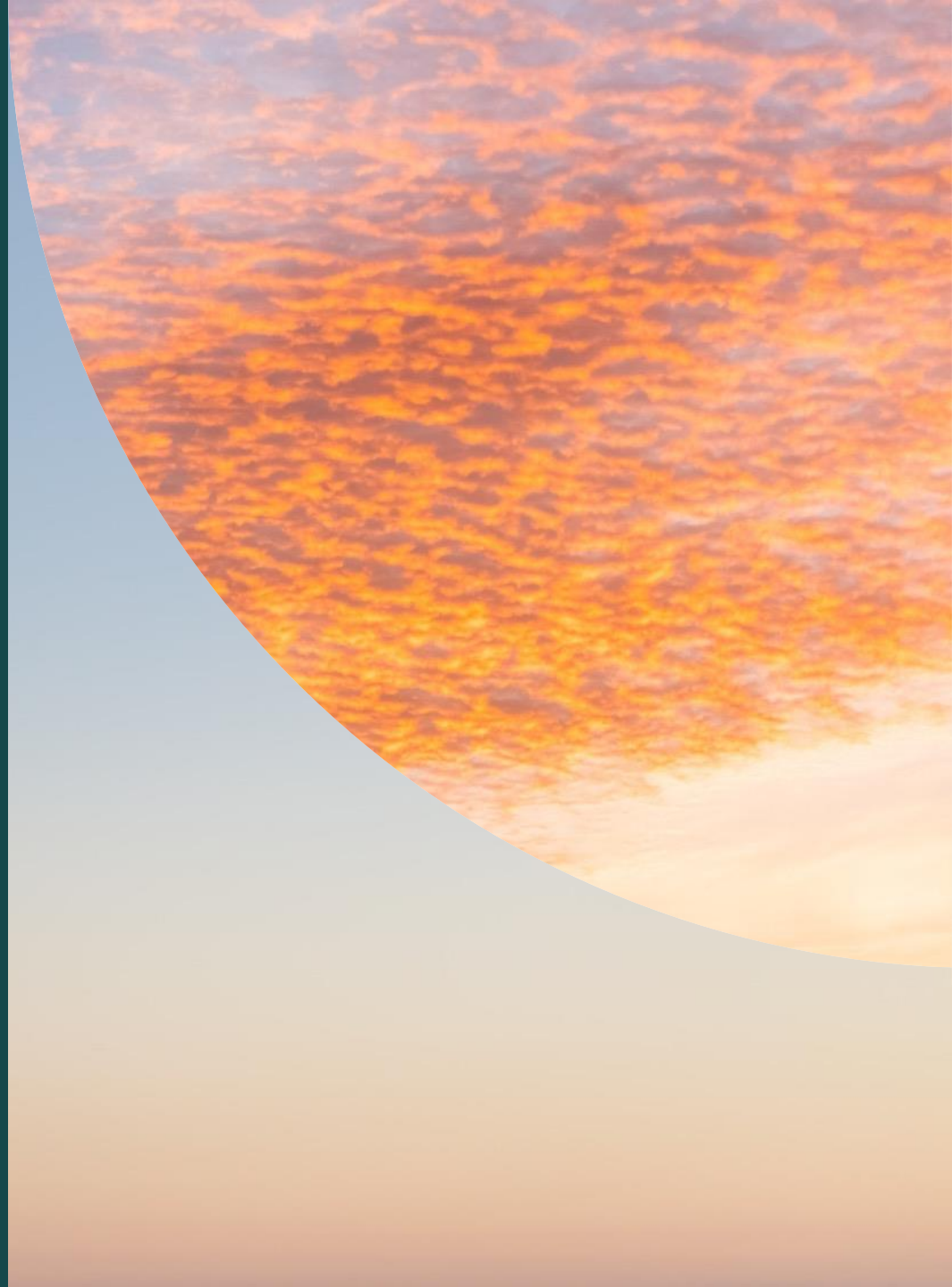
Thank you

Carbonfarming.org.au

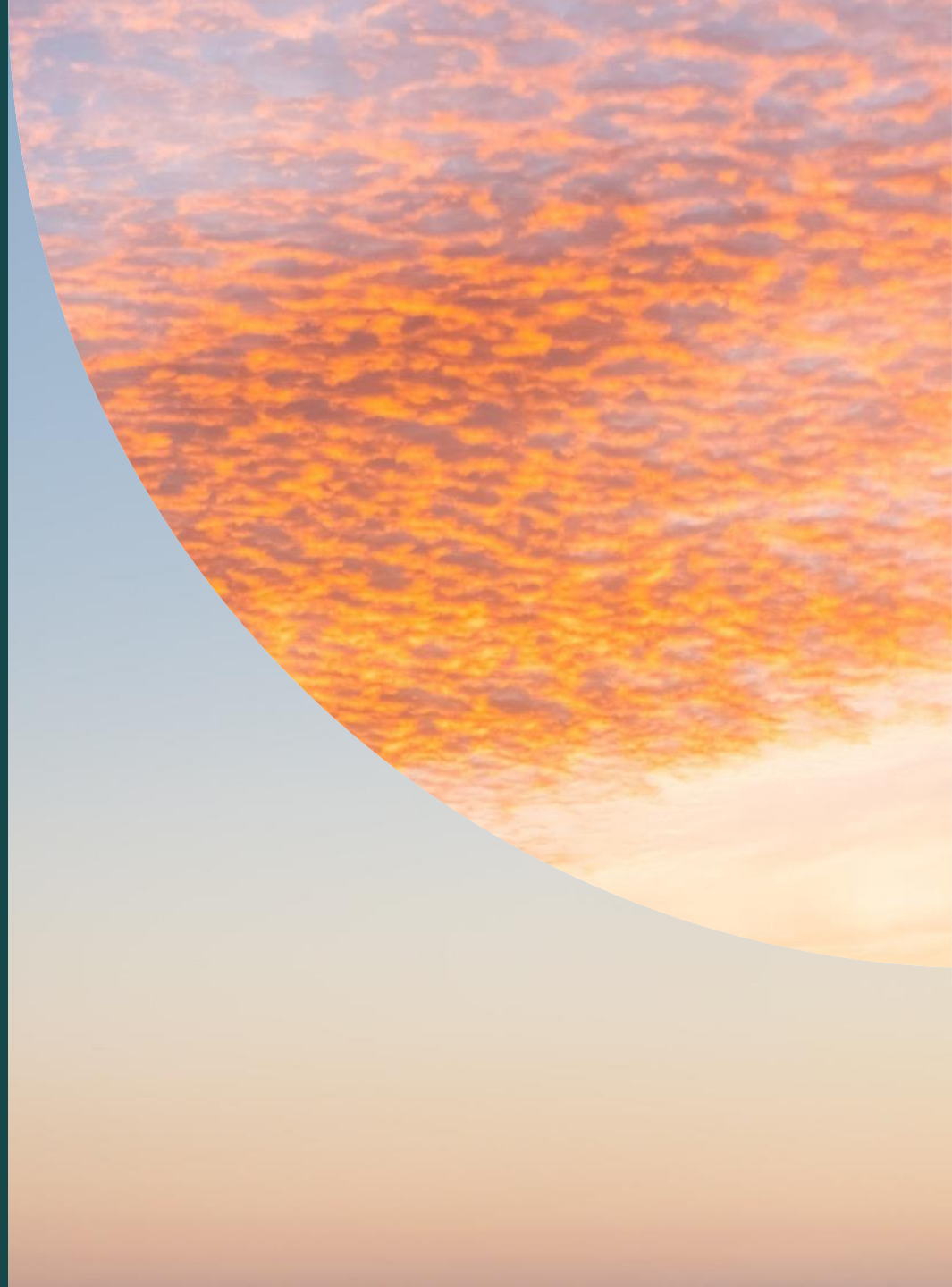
hello@carbonfarming.org.au

Carbon Farming Foundation

Any Questions?



Some Handy Resources



Carbon farming projects in action

558 Hectare Plantation Forestry Project in Gippsland, Vic

Modelled and verified FullCAM method

Property size	620 Ha.
Project size	558 Ha.
Project goal	Drawdown 178 tonnes of carbon per Ha across project lifetime (FullCAM modelled yield).
Project strategy	Establish a new 30-year (long-rotation) plantation of native trees. Plantation activities to be maintained for 25 years or more.
DIY opportunity	To reduce costs, landowner will coordinate the project directly.

Landowner carbon units over 25 years*	56,497
Upfront cost	$21k
Additional lifetime costs	$237k
Cost to produce each carbon credit	$4.60

Average carbon price over 25 years**	**$30**	**$50**
Gross profit at 25 years	$1.4M	$2.5M
Gross profit per hectare per annum, over 25 years	$114	$204

* Factors in 100 credits per year + 2.5% of credits to CFF

** See www.accus.com.au to make your own price assumptions.

Carbon farming projects in action

200 Hectare Reforestation Project in New England, NSW

Modelled and verified FullCAM method

Property size	3,000 Ha.
Project size	200 Ha.
Project goal	Drawdown 369 tonnes of carbon per Ha across project lifetime (FullCAM modelled yield).
Project strategy	Plant shelter-belts and wildlife corridors. Trees in the ground for 25 years or more.
DIY opportunity	To reduce costs, landowner will do site-prep and are taking on project coordination.

Landowner carbon units over 25 years*	46,070
Upfront cost	$383k
Additional lifetime costs	$160k
Cost to produce each carbon credit	$8.90

Average carbon price over 25 years**	**$30**	**$50**
Gross profit at 25 years	$950k	$1.9M
Gross profit per hectare per annum, over 25 years	$190	$384

* Factors in 10% tree failure rate, and 100 credits per year + 2.5% of credits to CFF

** See www.accus.com.au to make your own price assumptions.

Carbon farming projects in action

2000 Hectare Soil Carbon Project in Great Southern Region, WA

Modelled and measured method

Property size	9,700 Ha.
Project size	2000 Ha.
Project goal	Increase soil organic carbon by 0.29% across project lifetime, drawing down 82.5 tonnes of carbon per Ha.
Project strategy	Planned stubble retention, no till practices, multi-species perennials, rotational grazing and the application of nutrients across 25 years.
DIY opportunity	To reduce costs, landowner will write their own Land Management Strategy using CFF template, coordinate project and keep detailed project records to limit consultant site visits.

Landowner carbon units over 25 years*	400,740	
Upfront cost	$159k	
Additional lifetime costs	$780k	
Cost to produce each carbon credit	$2.28	
Average carbon price over 25 years**	**$30**	**$50**
Gross profit at 25 years	$11M	$19M
Gross profit per hectare per annum, over 25 years	$222	$382

* Factors in 100 credits per year + 2.5% of credits to CFF

** See www.accus.com.au to make your own price assumptions.

Some helpful reading

Permanence & Buffers

A guide to crediting, reporting, delivery and permanence periods

Risks

A guide to reducing the risk of fire and preserving sequestered carbon in Emissions Reduction Fund vegetation projects