AGRICULTURAL INNOVATION AUSTRALIA®

ENVIRONMENTAL ACCOUNTING PLATFORM

AIA ENVIRONMENTAL ACCOUNTING PLATFORM

Final Report prepared for AMPC
September 2024

OUR GOAL

To provide Australian agriculture, fisheries and forestry with an accessible and standardised approach to carbon calculation

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ENVIRONMENTAL ACCOUNTING PLATFORM

WHAT IS THE AIA EAP?

A **definitive** cross-sectoral carbon calculation engine for Australian agriculture, fisheries and forestry

It provides producers and their supply chains with a **common**, **consistent** and **standardised** way to calculate a carbon footprint at a commodity, enterprise and whole of business level

Pre-competitive solution that does not compete, but enables the market, leveraging channels producers already use and trust

AIA ENVIRONMENTAL ACCOUNTING PLATFORM

WHAT WE KNOW

Environmental accounting is complex - but can be effectively addressed using a cross-sectoral, collaborative approach

The AIA Environmental Accounting Platform (AIA EAP) leverages RDC funding and expertise to create a more efficient and effective whole-of-industry solution.

Growers can't improve what they don't know

The AIA EAP has been designed to enable farmers, fishers and foresters to know their carbon footprint and help to inform decision-making to reduce emissions, by providing a common, consistent and standardised approach to calculate carbon emissions.

The AIA EAP is designed to be Australia's single source of truth

The AIA EAP is a definitive accounting engine for Australia's agriculture, fisheries and forestry, which uses a common, consistent and standard calculation for GHG emissions. This level of cross-sectoral standardisation ensures confidence in carbon emissions and supports a united narrative of Australian agriculture's collective progress toward net zero targets.

The AIA EAP is designed to move with the changes of Australia's rural industries, including the ability to evolve the model to accommodate new factors, mitigations, functionality and the addition of emerging accounting frameworks, such as biodiversity and natural capital.

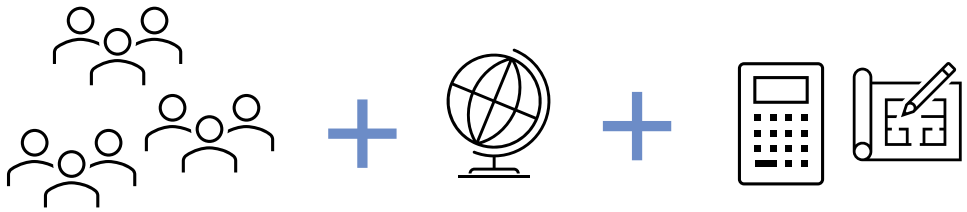
EAP STAGE 1 INVESTING RDCS

EAP STAGE 1 JOURNEY

Foundational work

Common Approach to GHG Accounting Framework and Terminology

User/market validation & discovery

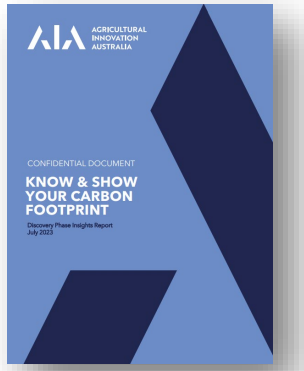


140+ interviews

international market analysis

analysis of tools, models + frameworks

Evidence to support design



Discovery Report

Early- late 22
Collaborative workshops

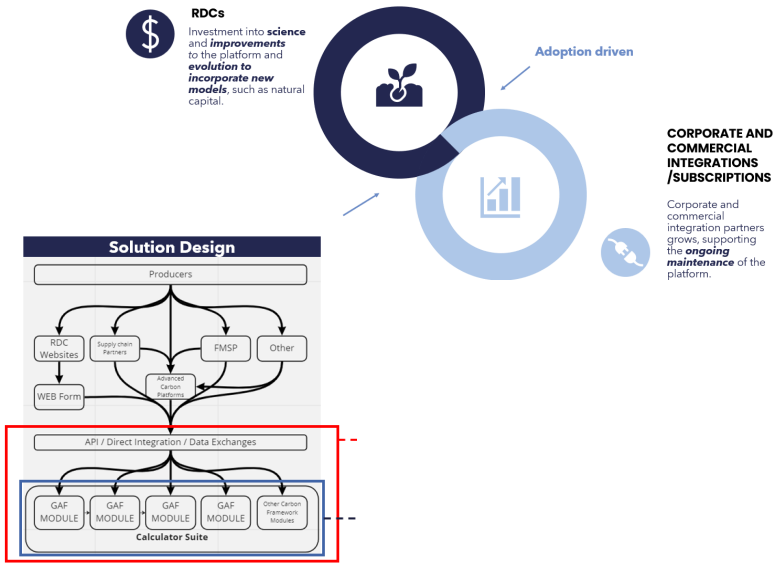
May 23
Common Framework + Terminology published

Jan 23
AIA EAP Discovery Phase

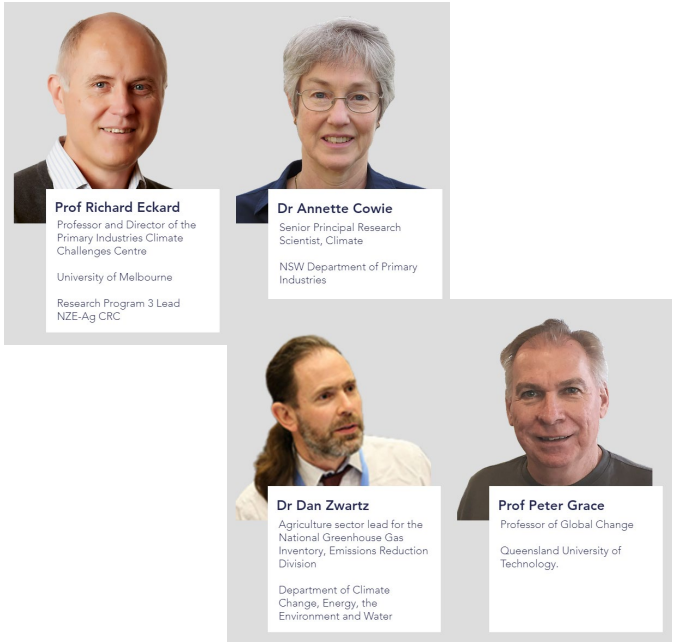
Jul 23
AIA EAP Discovery Report

EAP STAGE 1 JOURNEY

Solution & business model design

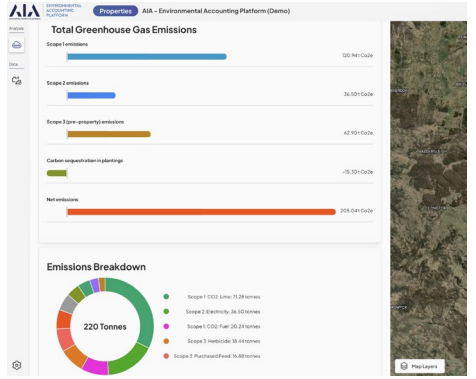


Governance established



AIA EAP Launched

AIA AGRICULTURAL INNOVATION AUSTRALIA® | ENVIRONMENTAL ACCOUNTING PLATFORM



Mid 23
Solution and business model design

Mid - Late 23
Business model tested with supply chain

Oct 23
AIA EAP Technical Advisory Panel established

Feb 24
AIA EAP Beta Launch

May 24
AIA EAP Launched

DISCOVERY PHASE

140+ interviews

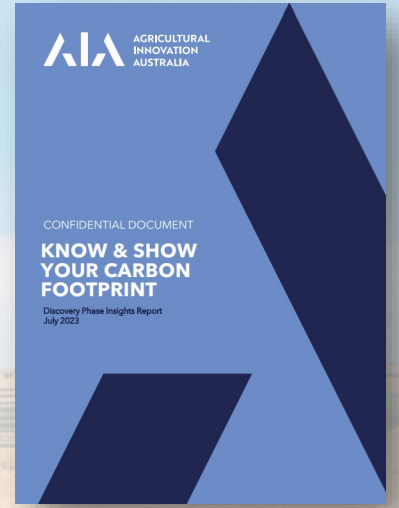
With producers across all commodities, supply chain, software and service providers, financial institutions

International market analysis

With a focus on North America and New Zealand

Analysis of available tools, models + frameworks

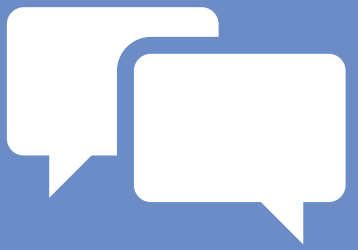
Including inputs required for commonly used GHG calculators, licensing terms of available calculators, current commercial providers



DISCOVERY PHASE:

KEY CHALLENGES SOLUTION NEEDED TO ADDRESS

- Carbon accounting is **confusing** + **cumbersome,** particularly for mixed enterprises
- Producers want to continue to engage with **channels they already use and trust**
- Calculators require **constant maintenance/updating** to align with latest research, standards + protocols
- Lack of a **consistent, standardised approach** leads to fragmentation and a proliferation of proprietary calculators



"It is bewildering for producers – there are so many different calculations.

There needs to be standardisation.

It's so confusing!

No wonder people give up."

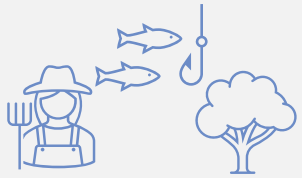
Red meat

SOLUTION

KEY PRINCIPLES APPLIED TO SOLUTION DESIGN

- ✓ reducing the reliance on one provider
- ✓ ensuring IP developed would be owned by AIA on behalf of industry
- ✓ creating pathways to meeting the market where it is currently at, whilst maintaining scalability for future enhancements
- ✓ focusing on the pre-competitive space, enabling the leveraging of existing pathways to reduce barriers to adoption
- ✓ focusing on a 'whole of agriculture, fisheries and forestry' solution
- ✓ working directly with the GAF experts
- ✓ enabling partnerships with commercial agribusiness and supply chain partners

SOLUTION



Cross sectoral

A **collaborative** and **cross-sectoral** approach to effectively and efficiently support carbon accounting across multiple commodities

Backed by industry

Built with investment from nine of Australia's rural Research and Development Corporations

Science based

Australia's leading experts ensure alignment with the latest science and consistency with relevant Australian standards and protocols

Australian conditions

100% consistent with the most widely-used and de-facto standard that reflects Australian conditions and NGGI

Pre-competitive

Enables the market by leveraging channels producers already use and trust

Whole-of-industry

Provides a reliable and consistent reference point to support the entire supply chain with understanding agricultural carbon emissions

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ENVIRONMENTAL ACCOUNTING PLATFORM

Based on robust, peer-reviewed scientific research and data

Consistent with relevant Australian standards and protocols

Backed by panel of Australian experts in GHG accounting, emissions reduction, soil carbon management, lifecycle assessment and climate science

Technical Advisory Panel

Prof Richard Eckard

Dr Annette Cowie

Prof Peter Grace

Dr Dan Zwartz

Grains

Red meat
(beef, sheep, feedlot, goat)

Cotton

Horticulture

Poultry and Eggs

Pork

Sugar

Fisheries

Aquaculture

Wine

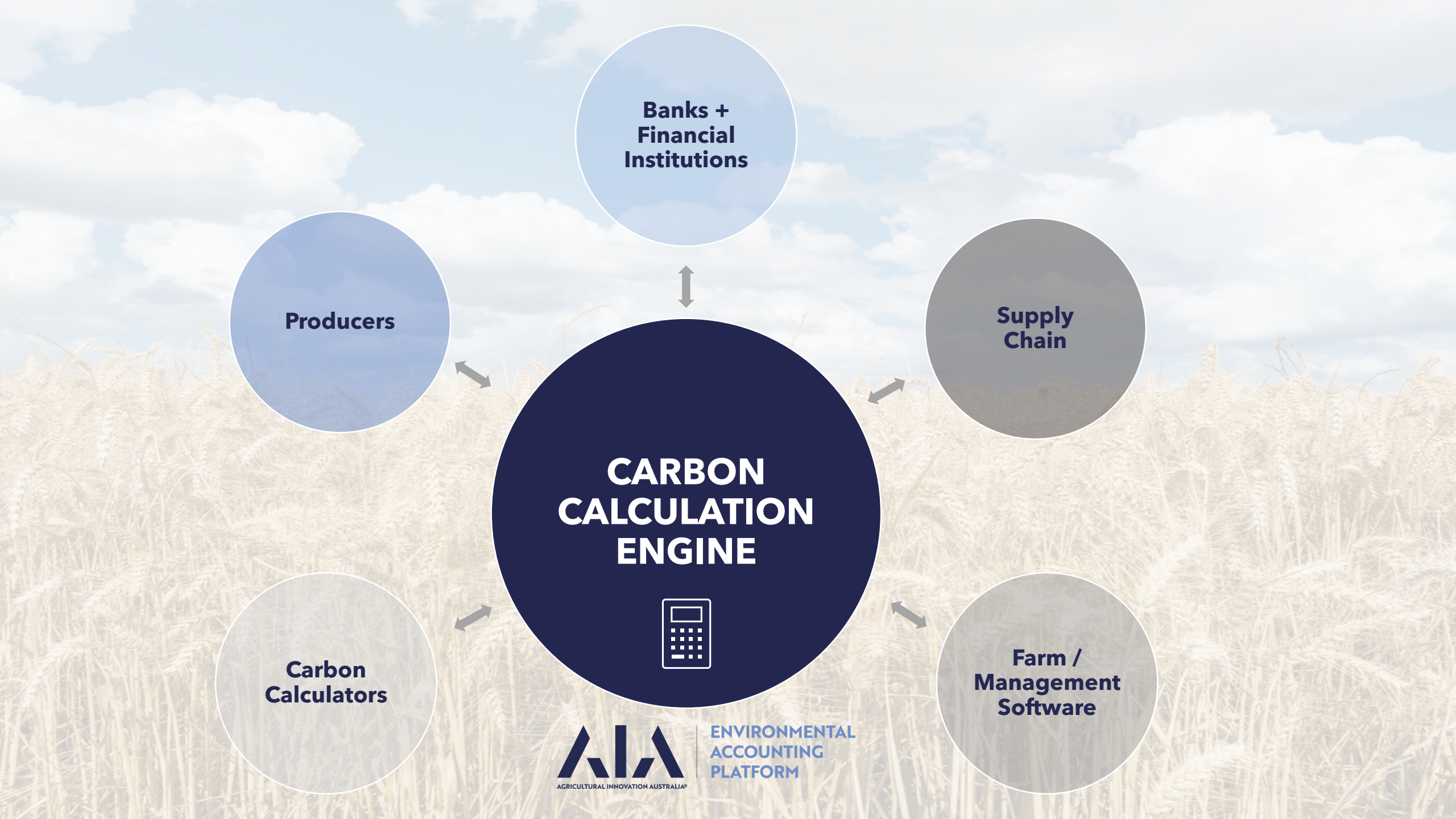
Dairy

Rice

Buffalo

Deer

Forestry


Banks + Financial Institutions
Producers
Supply Chain
CARBON CALCULATION ENGINE
Carbon Calculators
Farm / Management Software
AIA
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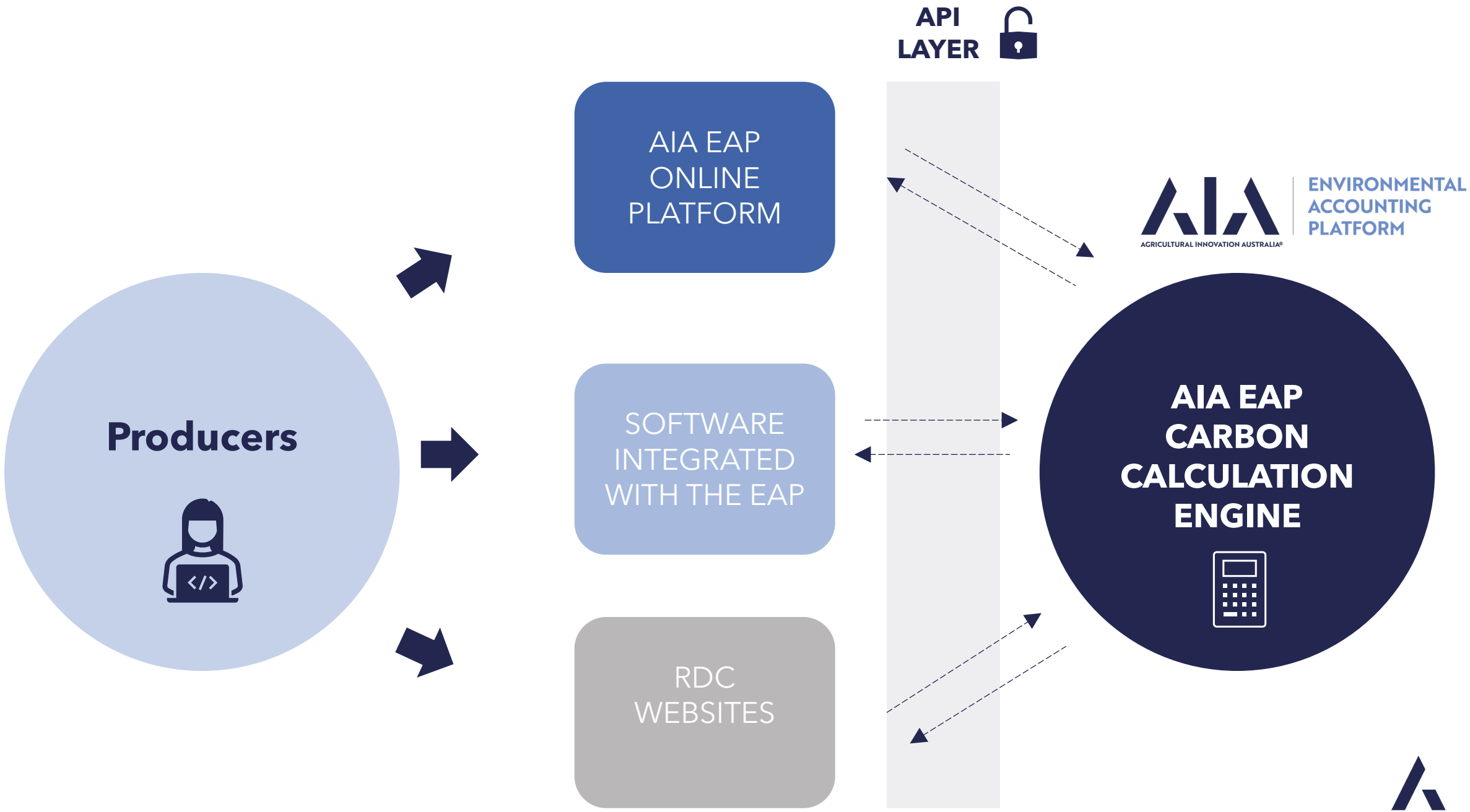
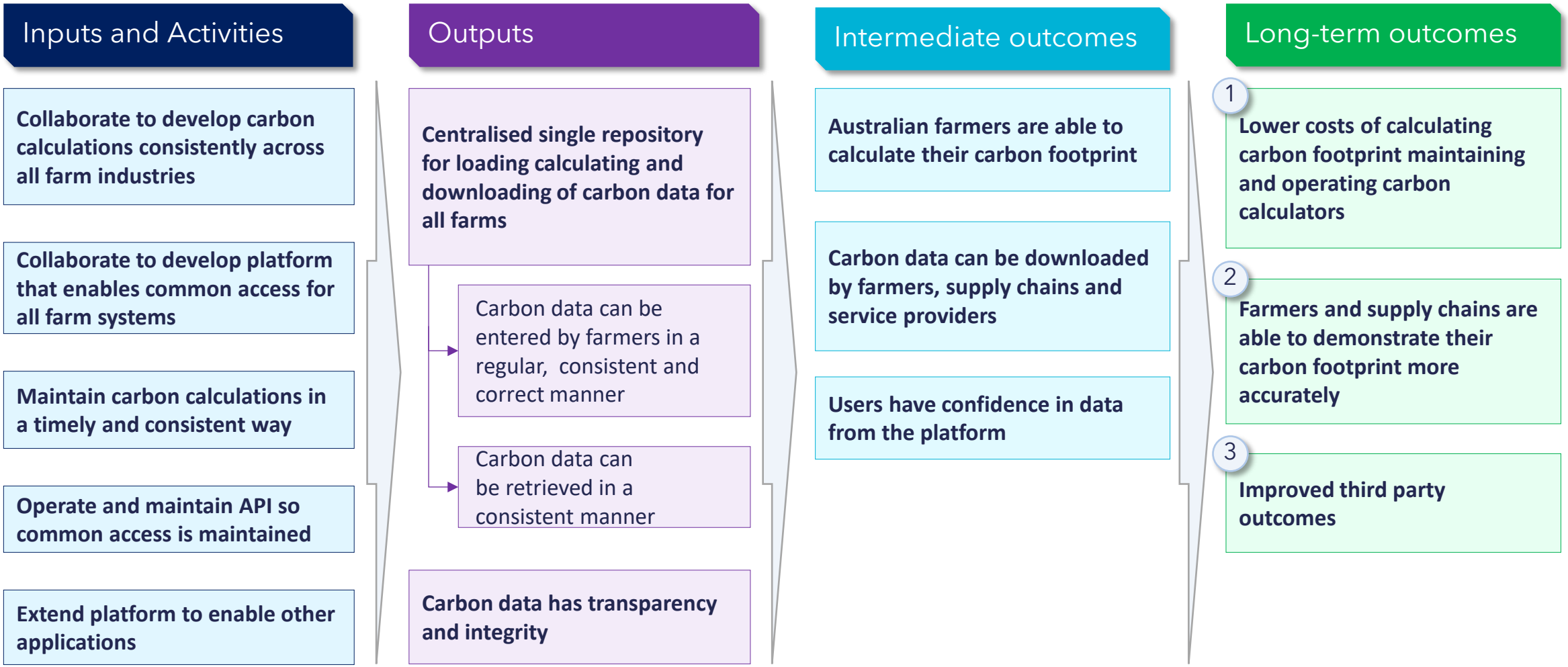

API
LAYER
AIA EAP
ONLINE
PLATFORM
SOFTWARE
INTEGRATED
WITH THE EAP
RDC
WEBSITES
Producers
AGRICULTURAL INNOVATION AUSTRALIA®
ENVIRONMENTAL
ACCOUNTING
PLATFORM
AIA EAP
CARBON
CALCULATION
ENGINE

IMPACT AND BENEFITS

HIGH LEVEL PROGRAM LOGIC



Source: Independent Review of AIA carbon calculator project by Marsden Jacob Associates

BENEFITS PROVIDED BY THE EAP

PRODUCERS

- ✓ calculate a whole of enterprise carbon footprint
- ✓ baseline their enterprise
- ✓ scenario plan to inform decision-making around reducing emissions
- ✓ share outputs with consultants, advisors, supply chain

INDUSTRY

- ✓ common, consistent and standardised approach to carbon accounting
- ✓ integrated whole of sector + supply chain solution
- ✓ supports a united Australian narrative around emissions
- ✓ can evolve to support new calculators and frameworks

LONG TERM OUTCOMES

1

Lower costs of calculating carbon footprint maintaining and operating carbon calculators

- Lower cost to farmers to input data to one system – avoided duplication
- Lower cost of maintain data systems in central location

2

Farmers and supply chains are able to demonstrate their carbon footprint more accurately

- Data has more integrity to third parties through common language regular maintenance and improved accuracy
- Farmers and supply chains can shape value of products and services by demonstrating carbon footprint
- Maintain access to markets and maintain consumer trust both at national and commodity level

3

Improved third party outcomes

- Farmers and processors modify their production systems to reduce their carbon footprint
- Carbon calculators integrity avoids loss of confidence or need to demonstrating integrity in other ways
- 3rd parties share cost of system maintenance through leverage of benefits

Source: Independent Review of AIA carbon calculator project by Marsden Jacob Associates

BENEFITS

✓	Creates a single point of calculation and retrieval for carbon footprint of mixed farms
✓	Single platform creates efficiencies instead of maintaining individual calculators (refer to ROI slide 22)
✓	A centrally managed platform ensures data integrity and timely maintenance and update of calculators
✓	A public not for profit ensures independence and integrity of data
✓	A centralised independent platform can leverage 3rd party cost sharing more effectively
✓	Standardisation of language and calculations improve trust and use of the data
✓	Addresses missing and replaces outdated calculators (wine, fish, aquaculture)
ongoing	Improved expertise and specialisation in carbon methodologies increases future innovation

Source: Independent Review of AIA carbon calculator project by Marsden Jacob Associates

RETURN ON INVESTMENT

17:1

Benefit : Cost ratio

of research, development and maintenance of a single, common platform

$84m

Approx net benefits

of research, development and maintenance of a single, common platform

11x

More cost effective

than an individual commodity specific calculator approach

$52m

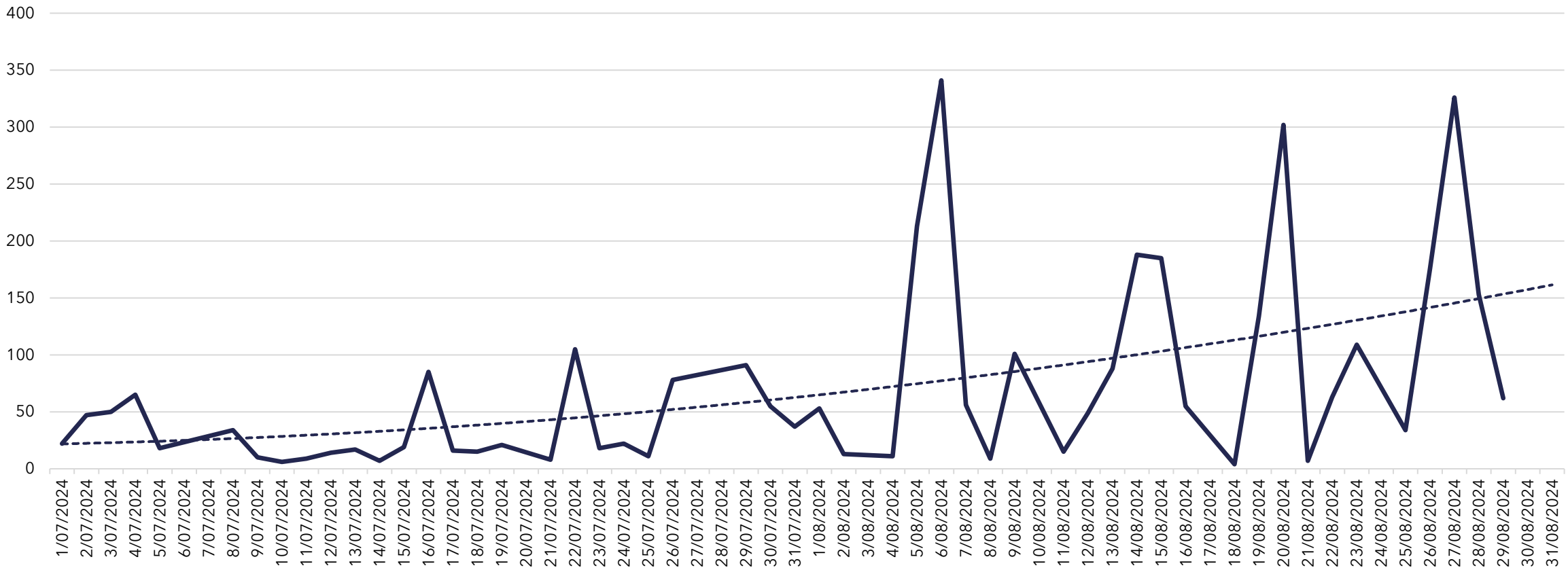
Approx saving

of investment in a single, common platform vs individual commodity calculator approach

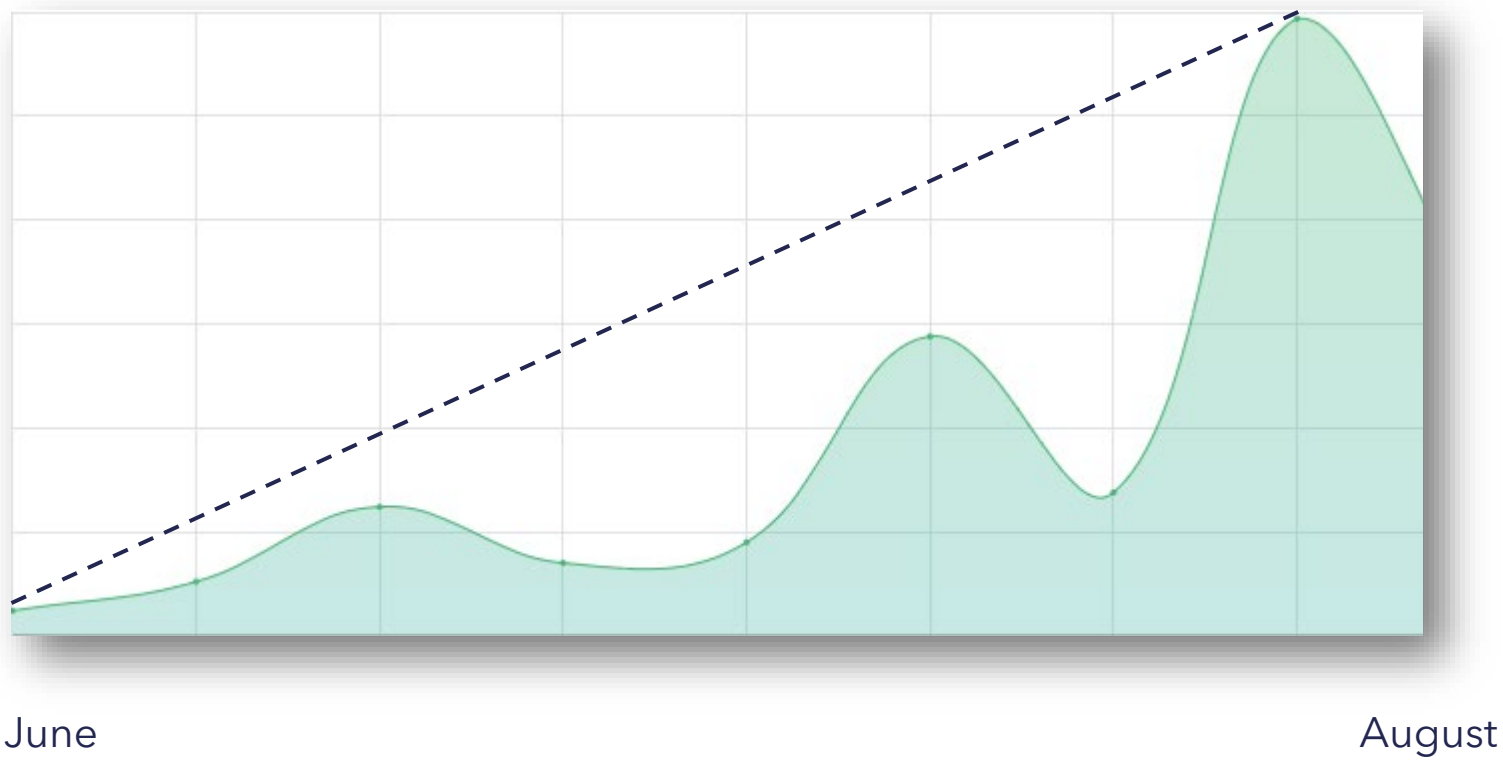
Independent review by Marsden Jacob Associates

USAGE

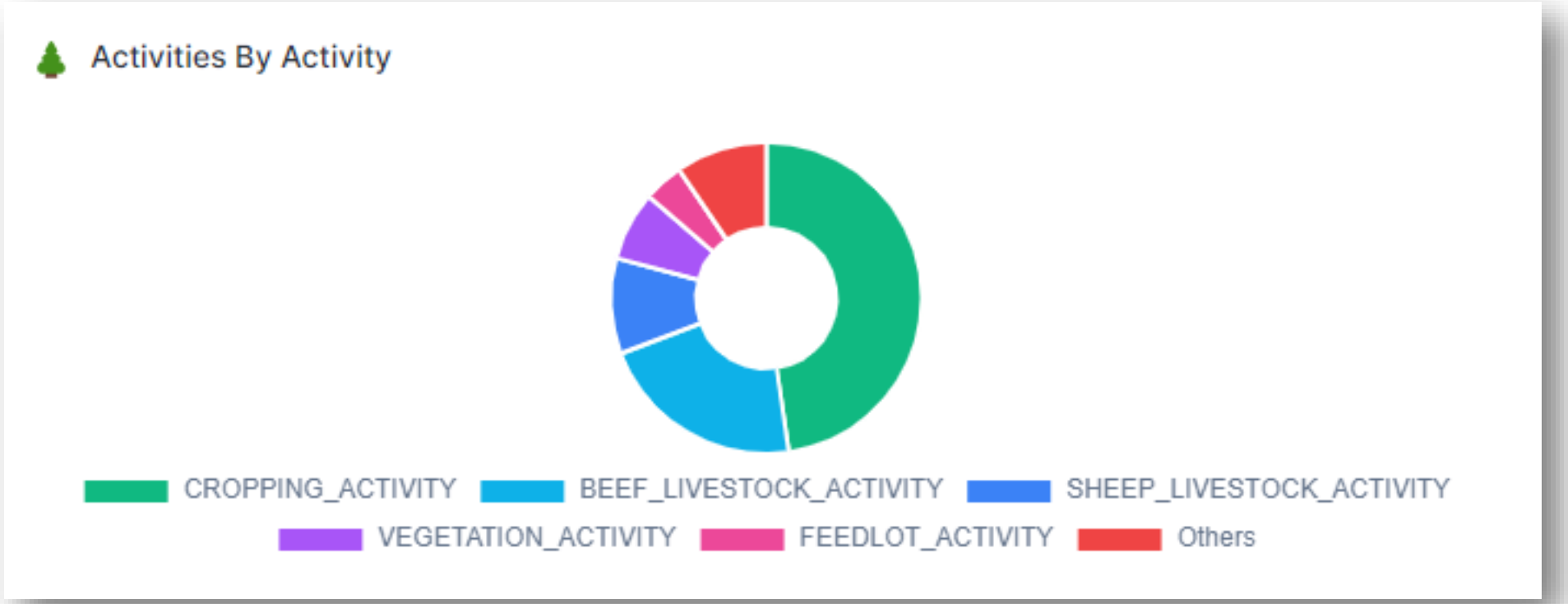
API CALLS PER DAY (VIA INTEGRATIONS)



EMISSIONS CALCULATION USAGE PER WEEK (VIA DIRECT WEB ACCESS)



USAGE – BY ACTIVITY



www.aiaeap.com

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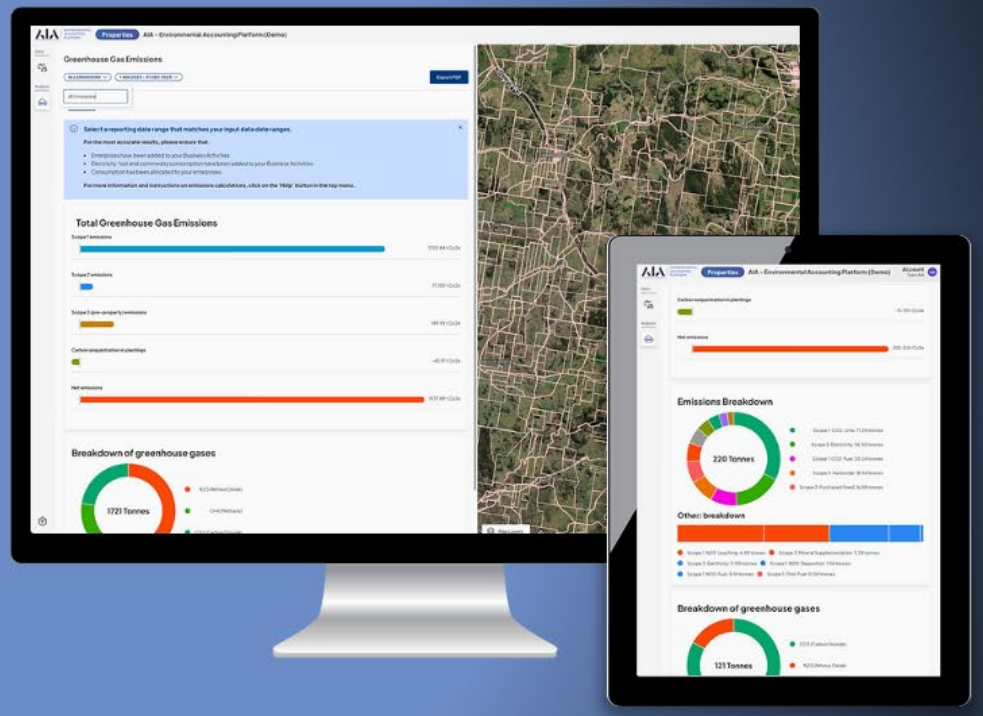
FAQs Governance Partner Contact Help T&Cs Login

A definitive carbon calculation engine

for Australian agriculture, fisheries and forestry

Read FAQs



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