BAYER ECOSYSTEM SERVICES

YOUR PARTNER IN CARBON SOLUTIONS

BACKED BY BAYER

A MISSION ORGINATING FROM HISTORY

We're working together with a growing number of farmers and partners to make that future a reality – a future where farming produces more and restores more at the same time.

We are a global leader in health and agriculture and innovate to help farmers bring high quality, abundant and diverse food to the table for millions of people every day.

FROM 1863

TO TODAY

WE HAVE BEEN INNOVATORS IN LIFE SCIENCES FOR MORE THAN 160 YEARS

Ecosystem Services

BACKED BY BAYER

SCIENCE

Bayer is a leader in life sciences and agriculture research and product development.

$2 billion invested in R&D in 2024.

CLIMATE TARGETS

Science-based target to decarbonize and a net zero target, including our Scope 3 supply chain, by 2050.

Reduction of 30% GHG emissions per kg of crops produced by 2030.

REACH

We work every day with farmers globally who produce the staples that feed, clothe and fuel a growing world.

Bayer products touch 55% of all corn acres globally.

Bayer Crop Science

FOR MORE INFORMATION:

www.bayer.com/en/sustainability/targets

www.bayer.com/en/agriculture-overview

BACKED BY BAYER

1000s of PhDs
in weather, soil, plant, water, climate, insects, chemistry, biology and other life sciences.

Research farms in dozens
of regions led by local agronomists with more than $2 billion in R&D.

CLIMATE FIELD VIEW™

With over 220M acres
in 23 countries, Climate FieldView™ is an on-farm engine behind our end-to-end sustainability services.

BAYER Crop Science

Trusted by millions
of farmers around the world as a provider of seeds, crop protection, and technology.

VERRA Gold Standard CLIMATE ACTION RESERVE

Collaborate with the world's
leading carbon protocols to establish uniform guidelines.

ValueChange IETA INTERNATIONAL EMISSIONS TRADING ASSOCIATION Natural Climate Solutions Alliance

Active in numerous climate
working groups, including the GHGP Land Sector and Removals Guidance, IETA and NCSA.

EXPERTISE INCLUDING

- SCOPE 3 (INSET) PROGRAM DESIGN
- CARBON MODELING
- VERIFICATION & VALIDATION
- REGENERATIVE AGRONOMY
- FARMER PROGRAMS & RECRUITMENT
- CARBON CREDIT PURCHASES
- CLAIMS DEVELOPMENT & LABELING
- DIGITAL FARMING TECHNOLOGY
- DATA COLLECTION & REPORTING

Industries Served with Carbon Solutions

- Food & Beverage
- Pet Food
- Animal Feed
- Data Centers
- CPG Brands
- Certified B Corps

YOUR GOALS, OUR SERVICES

DIRECT VALUE CHAIN IMPACT

BEYOND VALUE CHAIN IMPACT

NET ZERO

DATA-DRIVEN INSIGHTS

Leverage our global farmer footprint and know-how to help hit your carbon reduction targets.

CO-BENEFIT REPORTING

View the full benefits that your program is generating, including carbon sequestration, water quality, soil health, biodiversity, and socioeconomic impacts.

VERIFIED CARBON INSETS

Transform your supply chain and products into drivers of positive climate outcomes to meet market and compliance needs.

CARBON OFFSET CREDITS

Help neutralize your GHG emissions with verified carbon credits while supporting the regeneration of vital ecosystems

BUILT ON THE PROPERIETARY ENHANCED S3 SOLUTIONS SUITE

Ecosystem Services

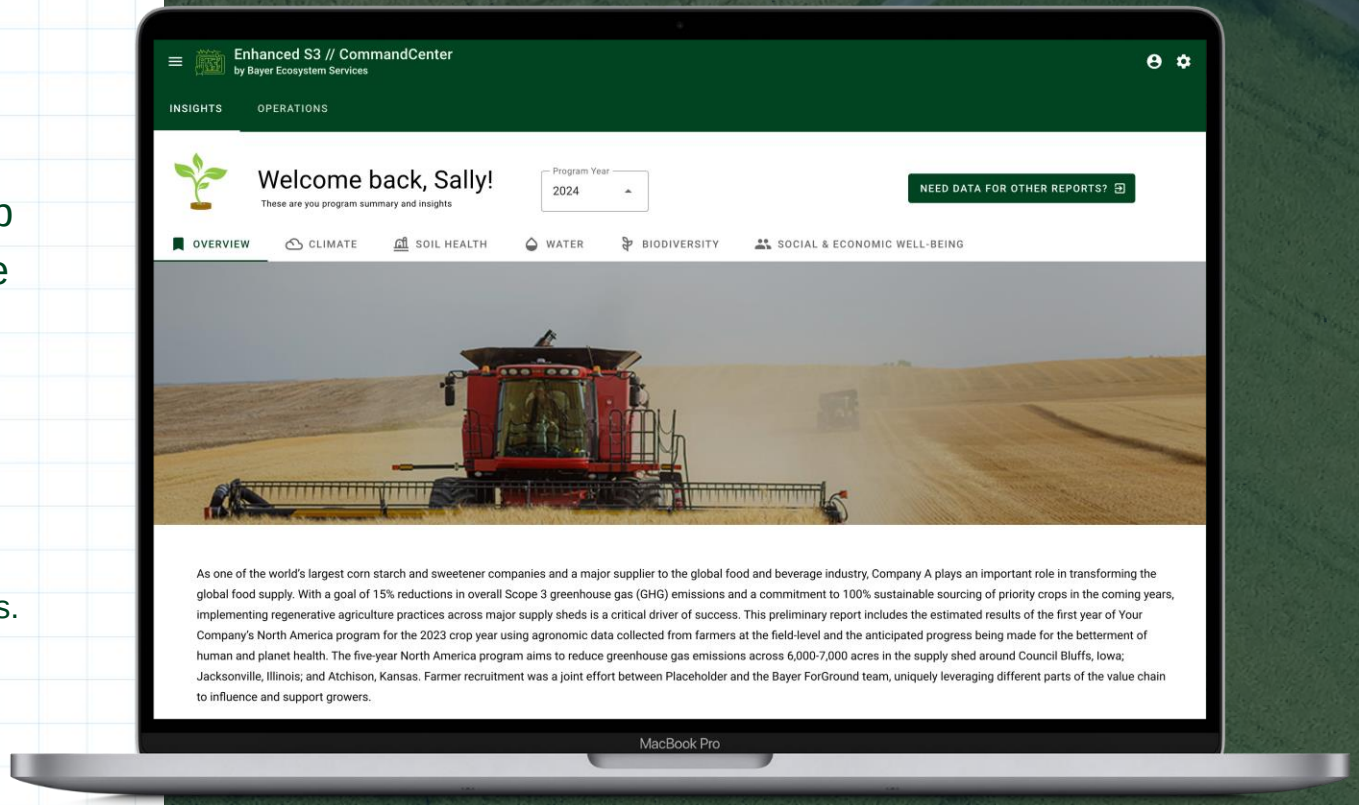
ENHANCED S3 OVERVIEW

Our new Enhanced S3 Solutions Suite provides more value by using the same grower data collection from standard carbon programs to map the current state of other regenerative agriculture outcomes, along with an ability to go deeper into additional insights and interventions.

CORE OFFERINGS

Greater understanding of the co-benefits for your ESG targets.

- Climate
- Water Quality
- Soil Health
- Biodiversity
- Socioeconomic Impact



Ecosystem Services

REACH & IMPACT TODAY

GLOBAL ECOSYSTEM SERVICES

- 6 Countries
- 22 Programs / Projects & 17 Companies
- +21K Growers
- 3.6M paid acres
- 10M acres in the pipeline

SOME OF OUR GLOBAL CUSTOMERS:

Algar Telecom, ADM, COPLACANA, Natter, freshpet, VITERRA, PERDUE, Cboe

1. Paid acres = acres where Bayer is compensating farmers for regenerative farming practices and converting the sustainability benefits into new company revenue.
2. Acres in the pipeline = cropland acres enrolled in the most basic programs and not yet qualified to a revenue generating program, thus not converted yet to paid acres
3. # Program/Projects incl one internal project

Figures from Sep 2024

Argentina, Brazil, France, India, Poland & U.S.

Collaborating with farmers and the ag value chain globally to reduce greenhouse gas emissions.

Ecosystem Services

THE US BAYER CARBON PROGRAM

2025 US CROPLANDS PROJECT

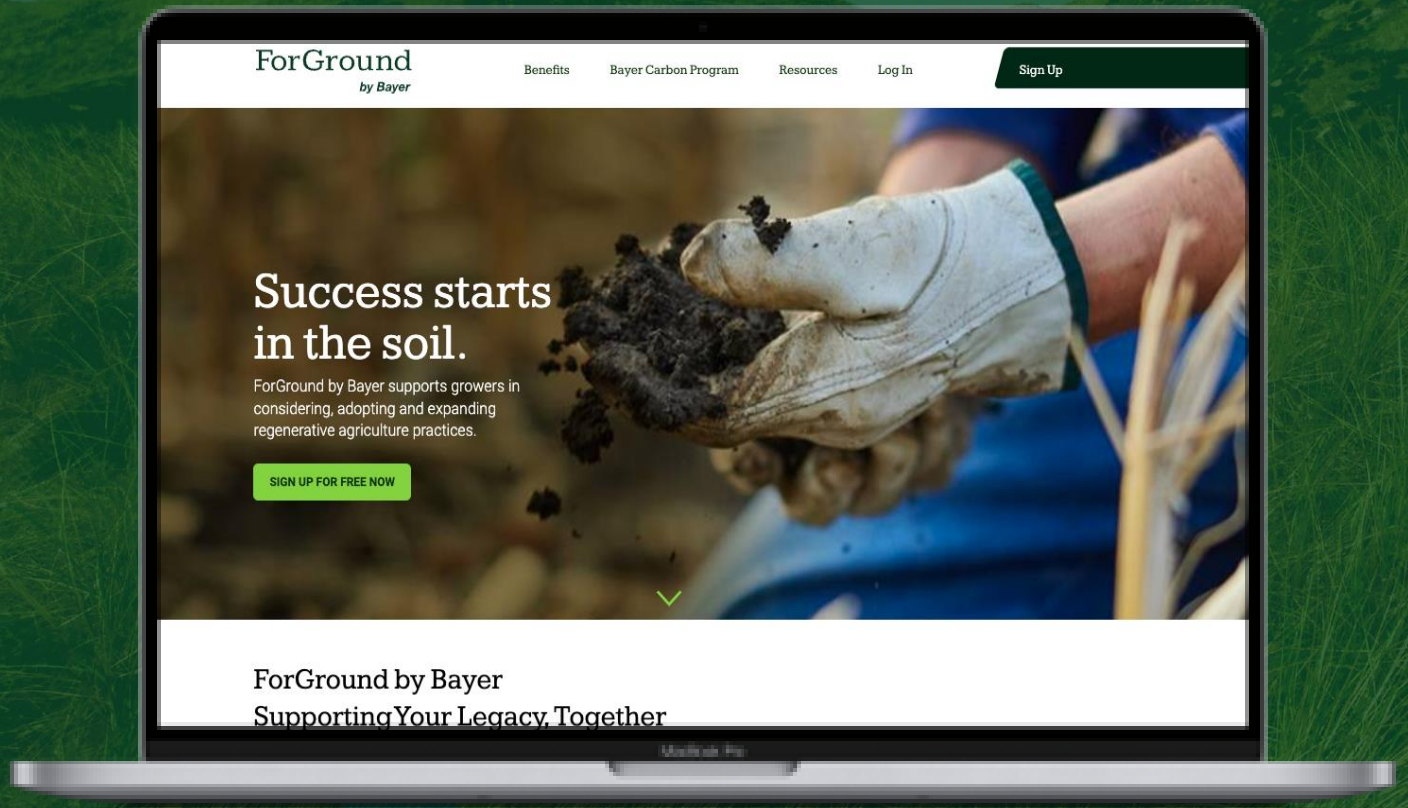
- 28 Eligible States
- 12+ Cash Crops Covered
- Thousands of Family-Owned Farms

ELIGIBLE CASH CROPS

Corn, Soybeans, Wheat, Barley, Sorghum, Chickpeas, Dry beans, Oats, Lentils, Millet, Peas, Rye, and more.

Ecosystem Services

FORGROUND
BY BAYER PLATFORM



ForGround
by Bayer

Proprietary service to support farmers in adopting and expanding regenerative ag practices.

Ecosystem Services

VETTING PROCESS

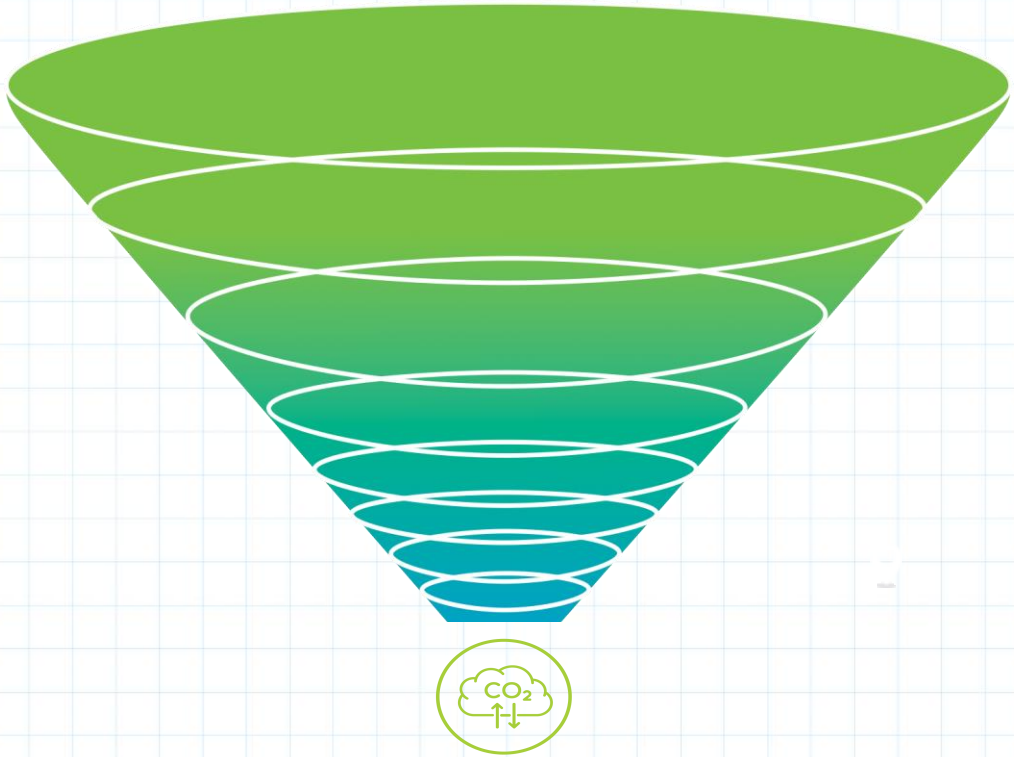
OUR GROWERS ADHERE TO A MULTI-STEP VETTING PROCESS

We have 1000s of PhDs in weather, soil, plant, water, climate, insects, chemistry, biology and other life sciences working together to ensure our projects are of the highest quality.

- Observation & implementation of regenerative farming practices
- Data collection and baseline setting
- Soil sampling and net-carbon removal quantification
- Measurement of changes in trace gases such as N2O, CH4, AND CO2
- Co-benefits evaluation measures & impact outside of carbon sequestration
- Project re-verification every 3 years

FARMERS

NETWORK OF INDIVIDUAL FARMERS



REGENERATIVE AGRICULTURE ASSETS

BAYER ECOSYSTEM SERVICES

WE ARE PIONEERS

1.

We measure the emissions of the entire production cycle

2.

We integrate regenerative farming into your supply chain

COMPANY

GROWER

4.

You reap the rewards of a more sustainable supply chain

3.

We quantify the emissions reductions and removals

Gold Standard for the Global Goals

Bayer's protocol design is the first to receive certification in agriculture from Gold Standard, the leading standardization registry on value chain interventions to reduce Scope 3 inventories in alignment with the GHG-Protocol.

MARKET DEMAND FOR SUSTAINABILITY

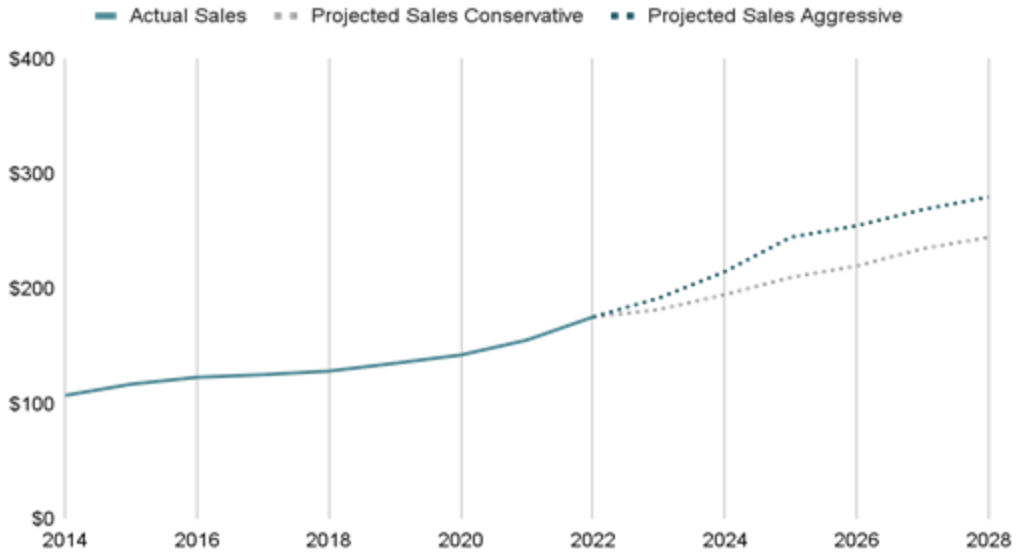
CONSUMER DEMAND IS RAPIDLY INCREASING

Industries are getting involved in new and innovative ways.

- Sustainability searches grew nearly 250% between 2019 and 2022 across the U.S.
- Roughly 70% of potential customers said that they would be likely or very likely to switch brands if it meant they could offset their carbon emissions.
- Nearly 50% of consumers across all generations are willing to spend >20% more for sustainable options.
- 1 in 2 global consumers have purchased a sustainable product or service.

SUSTAINABLE PRODUCT SALES IN US

($ IN BILLIONS)



SUSTAINABLE OFFERINGS MATERIALIZING ACROSS INDUSTRIES

BENEFITS FOR REGEN AG FARMS

PRACTICES LEAD TO SEVERAL CO-BENEFITS

97%

of farmers report improved crop resilience [1]

86%

Improvement in farm net incomes [1]

5%+

Average increase in crop yields [1]

40K Gal.

of added water retention per hectare [2]

1 https://soilhealthinstitute.org/our-work/initiatives/economics-of-soil-health-systems/
2 https://www.canr.msu.edu/hrt/uploads/535/78622/Organic-Matters-figure-6pgs.pdf

YOUR REGEN AG CARBON CREDITS HELP TO:

- Restore vital agriculture soils
- Protect biodiversity and improve water quality
- Improve the livelihoods of family farms (97% of US farms are family owned)
- Encourage greater adoption of regen ag practices

BAYER

Ecosystem Services

BAYER CARBON
PROGRAM OFFSETS

HOW OUR CARBON CREDITS ARE CREATED

1. We work with farmers around the world to implement regenerative farming practices.

2. Our team works in unison with our verification partners to quantify the carbon impact.

3. Carbon credits are issued for each tonne of CO2e that is avoided/removed.

HOW OUR CARBON CREDITS CAN BE UTILIZED

1. Neutralizing your residual emissions.
Take the next step in your journey to net-zero by using our verified carbon credits to offset your residual Scope 1, 2, or 3 emissions.

2. Climate-positive goods and services.
Utilize carbon credits to offset the emissions associated with your products or services, helping weave the story of sustainability into your brand narrative.

US CROPLANDS PROJECT

OVERVIEW

Nature-based carbon removal credits support regenerative agriculture and deliver climate benefits through soil restoration and carbon sequestration.

For Bayer, regenerative agriculture focuses on outcomes, enhancing soil health, reducing greenhouse gas emissions, conserving water, and improving the well-being of farmers and communities.

Most farmers in the Bayer Carbon Program are in the Midwest, rotating crops like corn, soybeans, and wheat while using practices like no-till and cover crops. They receive financial rewards for carbon-storing methods and often see improved soil quality.

PROJECT STATS

- 730k+ tCO2e removed to date
- 420k acres of land supported
- 300+ farmers supported to date
- Co-benefits include erosion resistance, soil biodiversity, nutrient-dense food production, air & water quality

UN SDG GOALS

- Goal 2: Zero hunger
- Goal 9: Industry, innovation and infrastructure
- Goal 12: Responsible consumption and production
- Goal 13: Climate action
- Goal 15: Life on land

BAYER

Ecosystem Services

US CROPLANDS PROJECT

NORI CROPLANDS METHODOLOGY

- Vintages available: 2019 - 2022
- Volume available: 350,000 tonnes
- Carbon storage: 10+ yrs
- Third party verified: NSF
- Location: USA

VERRA VM 0042

- Vintages available: 2020 - 2023
- Volume available: ~100,000 tonnes
- Carbon storage: 30+ yrs
- Third party verified: Aster Global
- Location: USA

Ecosystem Services

INDIA RICE PROJECT

OVERVIEW

Rice cultivation poses significant challenges, contributing 11% of global food system emissions in 2020 and threatening food security. In India, where rice is a staple, production reached 196.25 million tons in 2022. Methane emissions from rice, with a Global Warming Potential of 28, account for 10% of non-CO2 emissions, with India ranking second in these emissions.

Irrigated rice also exacerbates global water scarcity, using over 30% of the world's freshwater and affecting 2.2 billion people without safe drinking water. With the global population expected to reach 10 billion by 2050, a 25% increase in rice production is necessary to meet demand and stabilize prices.

The Good Rice Alliance (GRA) is a transformative initiative across 11 Indian states, empowering farmers to adopt climate-smart practices like Alternate Wetting and Drying (AWD) and Direct Seeded Rice (DSR).

PILOT

- Vintages available: 2021+
- Volume available: 100,000 tonnes (Pilot) 3,000,000+ tonnes (Future)
- Third party verified: TÜV SÜD
- Location: India

Ecosystem Services

INDIA RICE PROJECT

PROJECT STATS

- 45k hectares | 1M+ hectares
- 17K+ farmers
- 180k+tCO2e/year | ~3.5M tCO2e/year
- Co-benefits include reduced water usage, improved soil health, reduced farming costs, faster planting and improved yield, increased climate resilience and improved smallholder livelihoods.

UN SDG GOALS

- Goal 1: No poverty
- Goal 2: Zero hunger
- Goal 5: Genter equality
- Goal 6: Clean water and sanitation
- Goal 8: Decent work and economic growth
- Goal 12: Responsible consumption and production
- Goal 13: Climate action
- Goal 17: Partnerships for the goals

FUTURE

- Vintages available: 2021+
- Volume available: 100,000 tonnes (Pilot) 3,000,000+ tonnes (Future)
- Third party verified: TÜV SÜD
- Location: India

Ecosystem Services

UPDATE COMING

VITERRA PROJECT

OVERVIEW

2-3 paragraphs of information on the project.
Background, purpose, impact.

KEY STATS

Include important metrics and stats to showcase reach and success

Ecosystem Services

PERDUE AGRIBUSINESS & VALUE CHAIN

CASE STUDY

Using Bayer's ForGround platform, Perdue launched an initiative that incentivizes sustainability practices among corn and soybean growers in their commodity sourcing network.

The collaboration between Perdue and Bayer has the potential to remove over one million metric tons of CO2e annually from the atmosphere, showcasing Perdue's sustainability leadership.

PERDUE AgriBusiness

Value Drivers	Benefits	
	Edible soybean oil	Chicken breast
Better emission data (Change in carbon intensity)	**63%** decrease	**53%** decrease
Removal data (Lb of CO_2e removed per million lbs of product)	485,000 lb	617,000 lb

~1.4M TCO2e reduced

GET IN TOUCH

George Mazzella
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APPENDIX

MARS PETFOOD
& SUPPLY CHAIN

CASE STUDY

Using Bayer's ForGround platform, Perdue launched an initiative that incentivizes sustainability practices among corn and soybean growers in their commodity sourcing network.

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FPO

MARS

Value Drivers	Benefits	
	Soybean oil	Chicken breast
Better emission data (Change in carbon intensity)	[illegible] decrease	[illegible]% decrease
Removal data (Lb of CO_2e removed per million lbs of product)	485,000 lb	617,000 lb

FPO

~1.4M TCO2e reduced

BAYER + Ecosystem Services