

Capitalizing on the New Sustainability Commodity Marketplace

Ryan Heiniger – Conservation Technology Information Center **Scott Herndon – Field To Market** 



















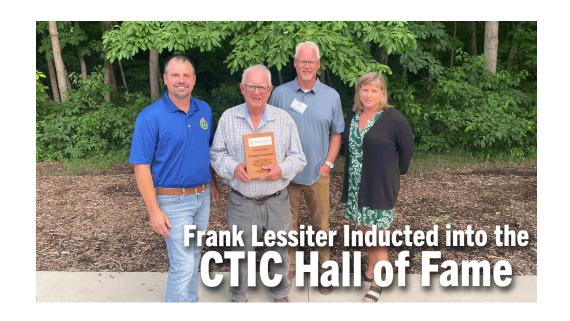






## **Conservation Technology Information Center**

Since 1982, our mission to champion, promote and provide information on technology and sustainable agricultural systems that conserve and enhance soil, water, air and wildlife resources and are productive and profitable.





























**Vision:** To harness the collective action of the value chain to support resilient ecosystems and enhance farmer livelihoods.

Mission: To meet the agricultural challenge of the 21st century by providing collaborative leadership that is:

- Transparent
- Grounded in science
- Focused on outcomes
- Open to the full range of technology choices
- Committed to creating productive and profitable opportunities across the agricultural value chain for continuous improvements in environmental outcomes



























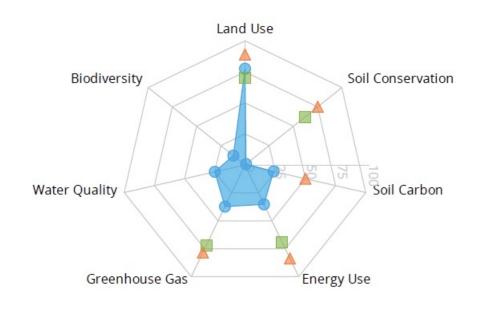






# The Fieldprint Platform

- Measure impact through Field to Market's Fieldprint Platform.
- Provides a field-level assessment of how a farmer's management practices affect our 8 metrics.































# Today's Agenda

- **Trends**
- 2. Data
- 3. Opportunities





























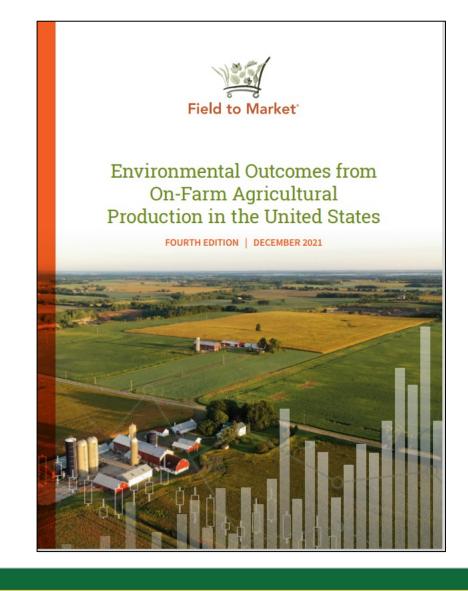


# Corn & Soy

For major commodity crops, soil erosion was significantly reduced from around 1990 through  $2005^{1}$ 

Since the early 2000s soil erosion has largely held steady. This reflects a flat trend for adoption of no-till and reduced-till practices recently and a relatively modest adoption of cover crops to date

<sup>1</sup>Source: Field to Market: The Alliance for Sustainable Agriculture, 2021. Environmental Outcomes from On-Farm Agricultural Production in the United States (Fourth Edition). ISBN: 978-0-578-33372-4





























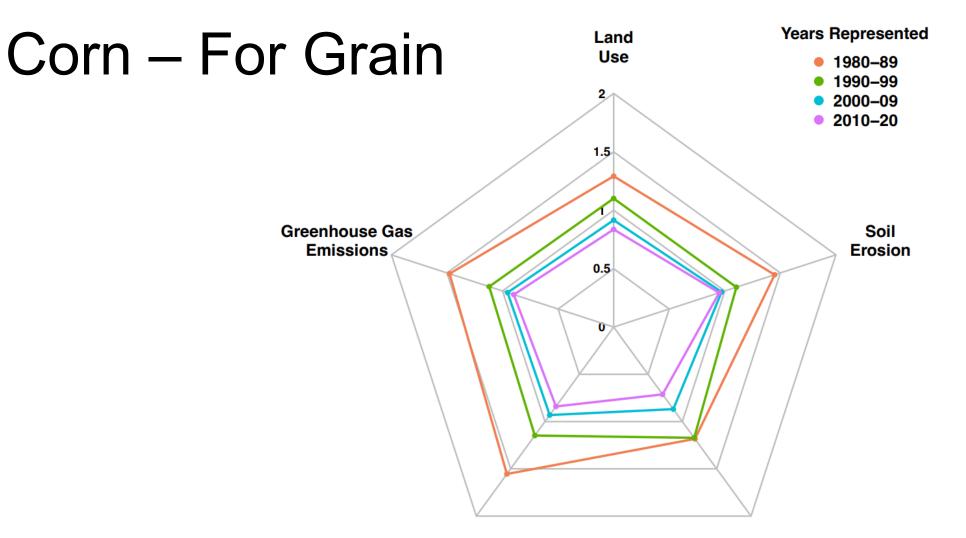


















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# Summary of Indicators – Corn for Grain

Year	Land Use	Irrigation Water Use	Energy Use	<b>Greenhouse Gas Emissions</b>	Soil Erosion
	Planted Acres Per Bushel	Acre Inches Per Bushel	BTU Per Bushel	Pounds of CO₂e Per Bushel	Tons of Soil Loss Per Acre
1980	0.0104	0.3497	83,276	20.6	7.8
1990	0.009	0.2865	64,551	16.3	6.1
2000	0.0075	0.2638	48,094	12.6	4.8
2010	0.0066	0.1998	42,873	11.9	4.6
2020	0.0058	0.1533	37,791	10.7	4.7















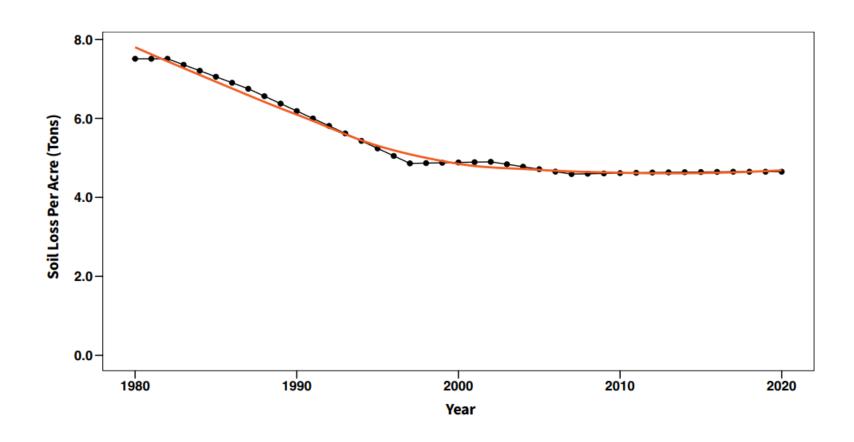








## Soil Erosion in Corn 1980 - 2020



























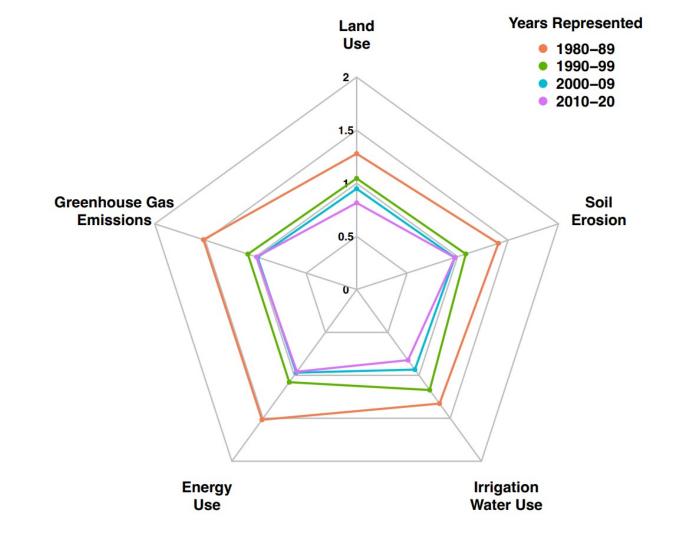






# Soybeans











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# Summary of Indicators – Soybeans

Year	Land Use	Irrigation Water Use	<b>Energy Use</b>	<b>Greenhouse Gas Emissions</b>	Soil Erosion
	Planted Acres Per Bushel	Acre Inches Per Bushel	BTU Per Bushel	Pounds of CO₂e Per Bushel	Tons of Soil Loss Per Acre
1980	0.0371	1.0839	72,726	13.6	7.4
1990	0.0303	0.8921	54,184	10.1	5.8
2000	0.0264	0.7436	42,333	8	4.7
2010	0.0236	0.6822	41,464	7.9	4.6
2020	0.0197	0.4194	40,035	7.9	4.8





















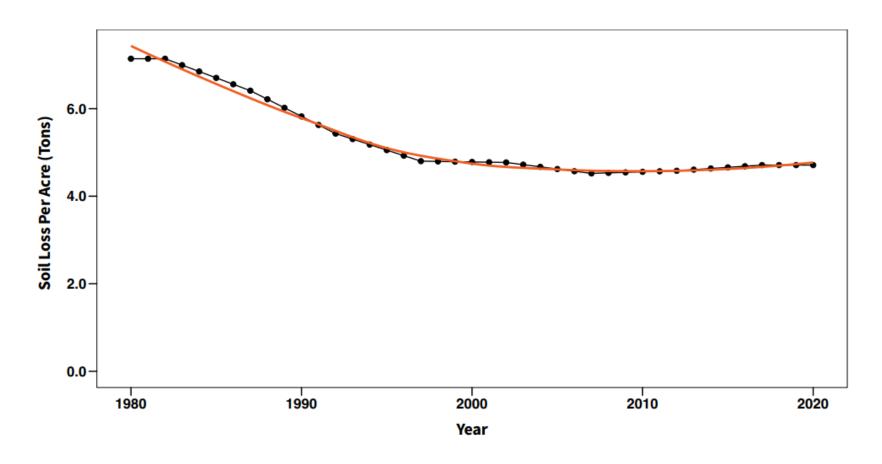








# Soil Erosion in Soybeans 1980 - 2020





















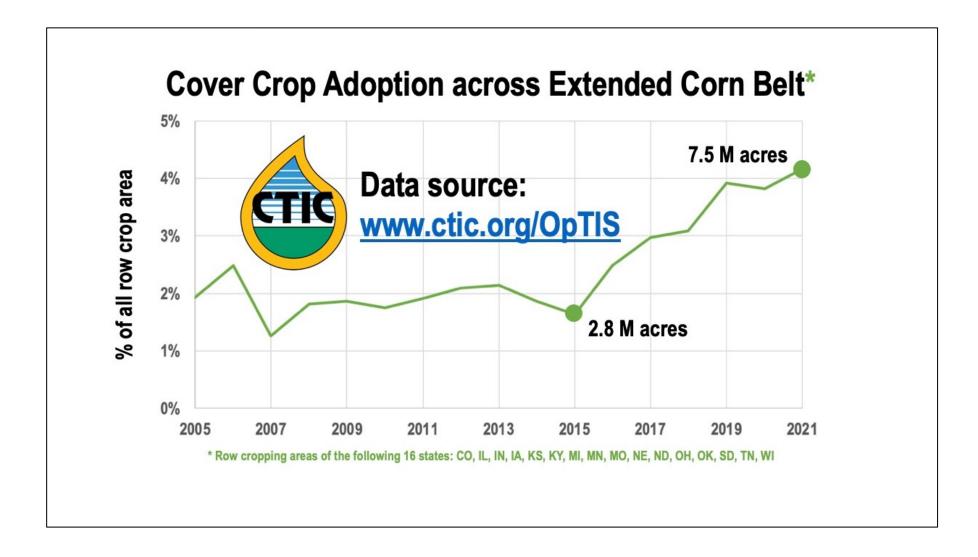


































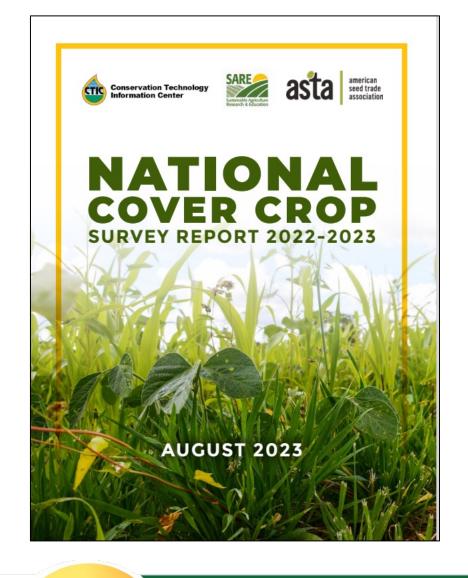






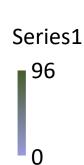


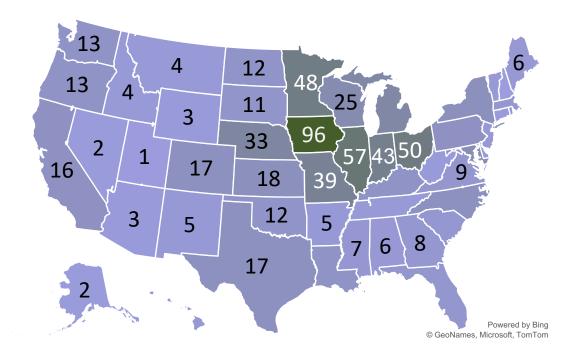




## 795 Farms across 49 States

## Farm Location

























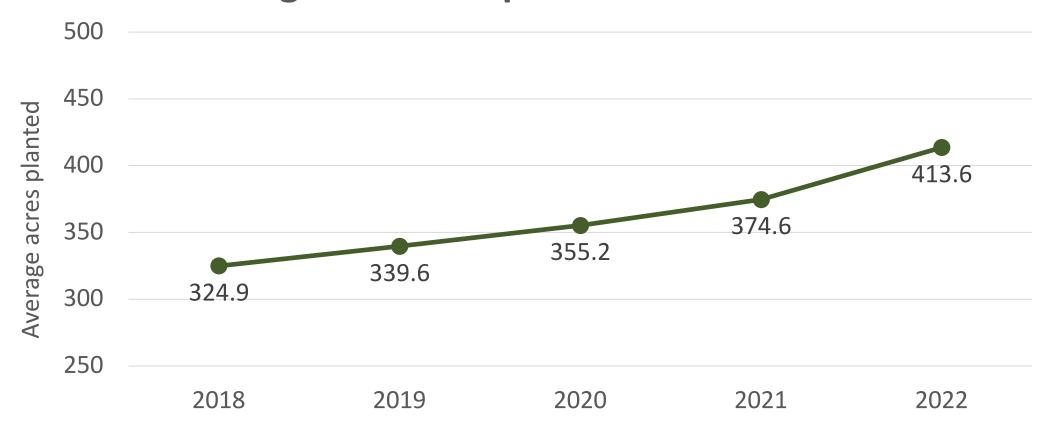








## **Average Cover Crops Planted Over Time**























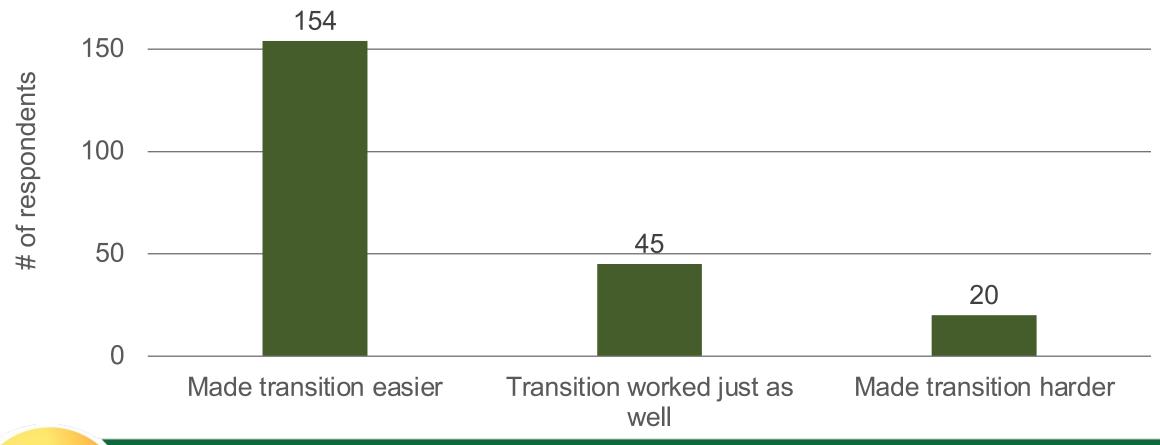








## Cover Crop Impacts on the Transition to No-Till



















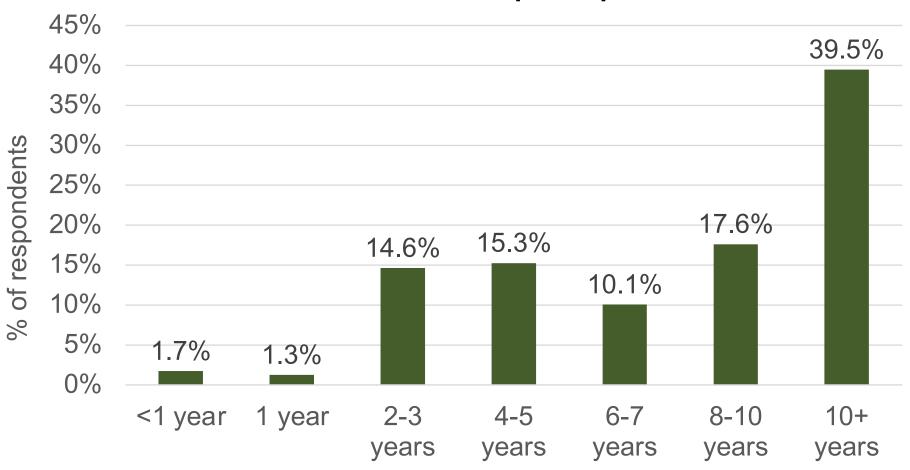








## Years of Cover Crop Experience

















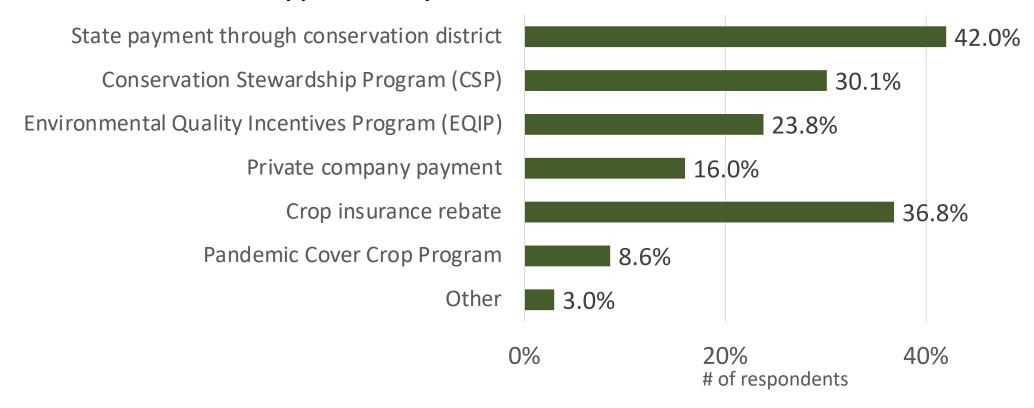








## Type of Payment Received in 2022









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## Who is at the table?































# 2023 Sustainable Agriculture Summit

- **925** Registrants
- 450+ Companies and **Organizations Present**
- **125+** Main Stage and Breakout Session Speakers
- 48 States and 11 Countries Represented



























### Advancing regenerative food systems at scale

6.8%

of key ingredients sourced through regenerative agriculture methods in 2022\*

20%

of our key ingredients will be sourced through regenerative agriculture methods by 2025

**50%** 

of our key ingredients will be sourced through regenerative agriculture methods by 2030 (an estimated 14 million tonnes)

\*In 2022, only the following sources are included in regenerative agriculture volumes: fresh milk, Ecuadorian cocoa, green coffee and Libby's vegetables sourced through direct procurement/Farmer Connect or for Nespresso, Nestlé Nutrition cereals and vegetables that are traceable back to a farm/cooperative level and raw materials that are covered by the Living Soils initiative with Earthworm Foundation for Nestlé France. The denominator includes all raw materials in scope





























# PepsiCo+



#### PR Newswire

https://www.prnewswire.com > news-releases > pepsic...

### PepsiCo Announces \$216 Million Investment in Long-term ...

Mar 21, 2023 — "We are excited to expand our partnership with **PepsiCo** and **farmers** in its supply chain to support the adoption of regenerative agriculture ...

Spreading the adoption of regenerative farming practices across 7 million acres – approximately equal to 100% of the land used around the world to grow key crops and ingredients for our products. These efforts are estimated to lead to a net-reduction of at least 3 million tons of greenhouse gas (GHG) emissions by 2030.





























## FBN + EDF Regenerative Agriculture Financing Program

"The information necessary to calculate N balance includes crop type and field area, N fertilizer inputs, and N removed (calculated through yield and stover removal). Additional data collected includes N fertilizer management practices, tillage type and timing, planting date, pest management, field history and climatic and geographic identifiers."



























### Field to Market Enters Agreement with USDA to Begin Work on Partnerships for Climate-Smart **Commodities Grant**

December 18, 2023

**WASHINGTON, DC** — Today, Field to Market: The Alliance for Sustainable Agriculture® announced that it has entered into an agreement with the U.S. Department of Agriculture (USDA) to begin work on Field to Market's Climate-Smart Agriculture Innovative Finance Initiative (The Initiative), effective December 9, 2023.

The Initiative, which is part of USDA's Partnerships for Climate-Smart Commodities Grant Program, will use innovative finance mechanisms to accelerate climate-smart practice uptake by farmers, leveraging private sector demand to strengthen markets for climate-smart commodities.

































## Climate-Smart Agriculture Innovative Finance Initiative

Using innovative finance mechanisms to accelerate climate-smart practice uptake by farmers, including Tribal and Black farmers, leveraging private sector demand to strengthen markets for climatesmart commodities.

























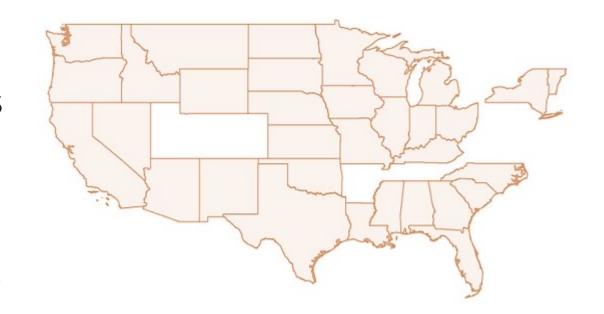






## Five Year Project Benchmarks

- 10.6 M acres enrolled
- Covers 34 States/Territories
- 2.79M metric tons of GHG reductions
- \$66M in match funding
- \$40M in leveraged funding
- \$35.7M in federal funds to producers
- \$81M in total funds to producers































## Farmers for Soil Health

We aim to improve soil health by encouraging farmers to expand their adoption of cover crops, to reach 30 million U.S. acres by 2030.

FARMER-LED COLLABORATION







With special support from American Soybean Association, National Fish and Wildlife Foundation, The Sustainability Consortium, National Association of Conservation Districts, University of Missouri's Center for Regenerative Agriculture, National Center for Appropriate Technology's Appropriate Technology Transfer for Rural America (NCAT-ATTRA), Walton Family Foundation, DTN, Soil Health Institute and USDA-NRCS.

































### Are you interested in regenerative ag?

ADM re:generations is offering programs built to support farm legacies and consumer demand. If you are growing cover crops, adopting no-till, or working to lower your emissions on the farm, reach out to your local ADM representative today to find out how you can get paid for your efforts.

ADM offers choices in its programs, and we do our best to make them easy for you to participate. Our range of programs encompass:































### 7/21/22

"ADM is leading in the decarbonization of our industry, meeting demand for food, beverages and consumer products that are produced sustainably from seed to store shelf. Last year, we committed to reducing our Scope 3 emissions 25% by 2035. Just last May, we committed \$20 million in incentives for farmers who use cover crops to improve soil health, prevent runoff and reduce carbon emissions."

Greg Morris, president of ADM's Ag Services and Oilseeds business

### **Indiana Programs**

## **Climate Smart Commodities Payment**

PRACTICE	COMPENSATION	REQUIREMENTS
Cover Crop - New in 2023	\$25/acre	Must provide FSA documents and FSA subsidiary print and will be shared with NRCS/USDA. Cannot be paid for cover crop on the same acres by federally funded programs like EQIP/CSP/RCPP. Has to be new practice or expanded practice. Must have wheat, corn, or soybeans in rotation.
Cover Crop - New in 2018 to 2022	\$15/acre	Must provide FSA documents and FSA subsidiary print and will be shared with NRCS/USDA. Cannot be paid for cover crop on the same acres by federally funded programs like EQIP/CSP/RCPP. Acres could not have cover crop prior to 2018. Must have wheat, corn, or soybeans in rotation.

#### **Standard Practice Payment**

PRACTICE	COMPENSATION

Plant a cover crop in 2023 \$10/acre

**ISCC** Emissions Scoring

\$0.05/bu-.07/bu delivered

#### REQUIREMENTS

Plant a cover crop no later than NRCS accepted date. Previous cover crop practice allowed on field. Can be in other federally funded program. Must have wheat, corn, or soybeans in rotation.

Score acres for smaller payment and beat local benchmark for greenhouse gas emissions for higher payment on field level basis for soybeans. Sign a self-declaration document. Must have High Oleic Soybeans in rotation. Premium paid bi-annually on Soybeans delivered to: Beech Grove, Frankfort, Fickle, Fowler,

































### International Sustainability & Carbon Certification (ISCC)

### **ISCC Soybean Export Program**

### Soybeans

Qualifications: Delivery to ADM location September 1, 2023 through August 31, 2024 at these locations: (IL) Creve Coeur, Havana, Hennepin, Lacon, Morris, Mound City, Ottawa, Quincy, Sauget, Spring Valley (IA) Burlington, Clinton (MO) Charleston, New Madrid, St. Louis (IN) Evansville, Mount Vernon, Newburgh, Rockport (KY) Henderson; Field boundaries, GHG scores, ISCC survey filled

out by producer

PRACTICE	COMPENSATION	REQUIREMENTS
ISCC survey and FBN data collection	5c/bushel for participation on all bushels delivered to qualifying ADM location(s)	ISCC survey - 5 min FBN data collection - 45 min Deliver to ADM location(s)
Carbon Intensity Score below benchmark	Additional 2c/bushel on all bushels delivered to qualifying ADM location(s)	Score below established benchmark
End of year verification interview	\$1,000/producer	Small subset of producers chosen at random for on-site interview verifying information - 2 hrs







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# Producer Perspective Aaron Krueger – Owensville, Indiana

