





Green Plains

Climate Report

2025





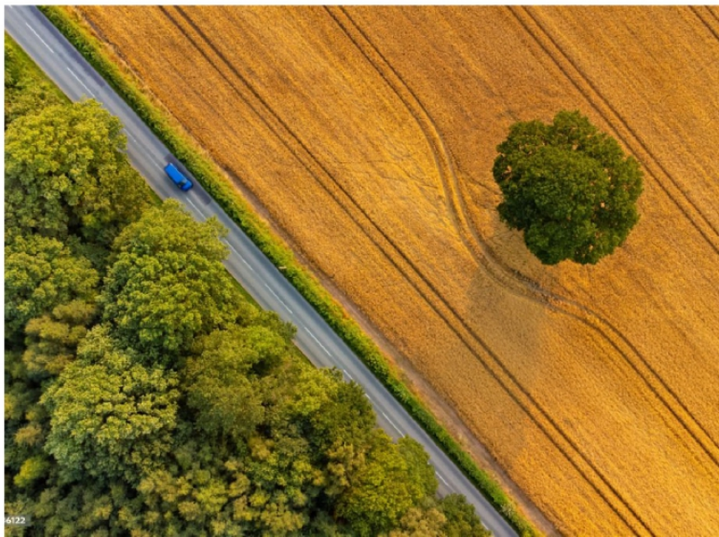


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About This Report

This Climate Report is a public accounting of our ongoing pursuit and realization of decarbonization solutions and our commitment to corporate responsibility. In the following pages, we share breakthroughs and progress made to date and preview paths forward for 2026 and beyond.

The environmental data presented in this report, with the exception of the GHG emissions inventory, are limited to our production operations and operating facilities. The boundary for our GHG emissions inventory is operational control. The boundary coverage for the GHG emissions inventory contains all GHG emissions from all relevant sources and subsidiaries, specifically 99.69% boundary coverage for Scopes 1 and 2 emissions and 100% boundary coverage for Scope 3 emissions. Boundary coverage represents what is evaluated and screened for consideration in reporting. From there, materiality decisions are made to determine what to ultimately measure and report. Select data in this report have also received external assurance by a third party, Apex Companies, LLC. Please see **page 42** for a copies of the assurance letters and a complete listing of the metrics that received external assurance.

Inquiries related to this report and its contents should be directed to our sustainability team at **sustainability@gpreinc.com**. More information can also be found at **gpreinc.com/sustainability**.

This report has been prepared in accordance with California SB 261 and aligned with IFRS Climate-Related Disclosures (IFRS S2), which has subsumed the recommendations of the former Task Force on Climate-related Financial Disclosures (TCFD). See **page 29** for our IFRS S2 Index.

Governance and Risk Management

Green Plains' approach to governance and risk management reflects our commitment to embedding climate accountability at every level of the organization — from our Board of Directors to our cross-functional Carbon Workgroup.



Governance and Risk Management

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4 Management Oversight

Board Oversight

The Green Plains Board of Directors monitors our compliance with regulatory requirements and oversees sustainability topics, including climate change risks and opportunities, goals (or targets) and metrics like GHG emissions. The Nominating and Governance Committee of the Board has primary oversight of our sustainability initiatives, including climate, with the goal of integrating sustainability strategy into our overall business strategy. Other Board committees provide support to the entire Senior Leadership Team by overseeing certain key topics.

Nominating and Governance Committee

Pursuant to its **charter**, the Nominating and Governance Committee oversees sustainability topics, including the development, approval, and updating of the Company's sustainability and responsible business purpose, mission statements, strategies, policies, and goals. This committee is responsible for monitoring the progress of our strategy and goals and reviewing climate-related topics quarterly. The committee is committed to transparency and is responsible for overseeing our sustainability initiatives, including this Climate Report. The committee chair, Kimberly Wagner, has received formal training on sustainability and climate-related topics. She is a graduate of the October 2023 cohort of the Competent Boards Climate & Biodiversity Designation Program.

Compensation Committee

The **Compensation Committee** determines remuneration policies in collaboration with third-party compensation consultants. The committee holds Green Plains executives accountable for the Company's sustainability priorities (including climate) by integrating performance measures that align with our sustainability goals. From 2021-2024, for four years in a row, our executive remuneration policy included sustainability performance criteria in the short-term incentive plan. The sustainability performance criteria consisted of an Institutional Shareholder Services (ISS) ESG Quality Score target and performance against that target. The target ISS ESG Quality Score range for 2024 was 3 to 2.33 on a scale of 10 to 1, with 10 being the worst possible score and 1 being the best possible score. The ISS ESG Quality Score environmental criteria includes climate-related matters and was weighted as 2.5% of the overall remuneration performance criteria.

Green Plains determines whether its Board members and senior leadership have the appropriate climate-related skills and competencies through several ongoing mechanisms. Board member competencies are assessed annually through the director skills and experience matrix disclosed in the Company's proxy statement. Sustainability is one of the competency categories evaluated, and eight of nine current Board members have sustainability listed among their areas of expertise — reflecting the Board's collective capacity to provide informed oversight of climate-related risks and opportunities, including those associated with Green Plains' transition toward a lower-carbon economy.

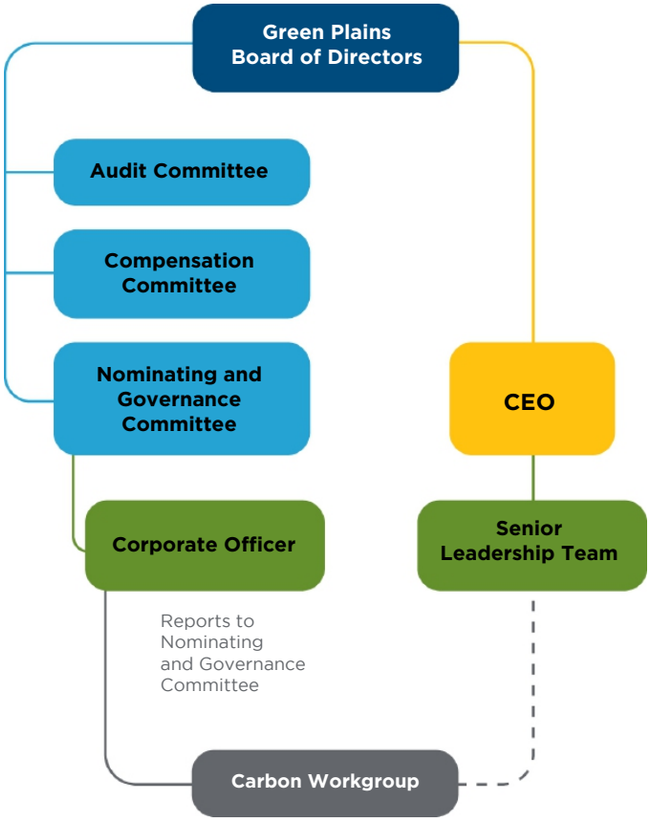
Risk Committee

The **Risk Committee** assists the Board in overseeing risk management policies, strategies, and risk exposure related to Green Plains' operations, including environmental, regulatory, financial, and market risks associated with the ethanol industry. Pursuant to its charter, the Committee is responsible for identifying and assessing key risks facing the Company — including sustainability risks such as carbon and LCFS compliance, emissions control, and community relations. The Committee also ensures that risk assessment processes align with corporate strategy and sustainability goals, and that risk reporting mechanisms provide accurate and timely data to the Board.

The Risk Committee's scope encompasses oversight of the Company's enterprise risk management (ERM) framework, including risks related to regulatory compliance with environmental laws, biofuel mandates, and carbon credit policies. By integrating sustainability considerations into its broader risk governance responsibilities, the Committee supports Green Plains' efforts to identify, monitor, and mitigate climate-related risks across our operations. The Committee meets at least quarterly and reports key risks and mitigation actions to the full Board following each meeting.

Management Oversight

Our President and Chief Executive Officer is the most senior member of the Senior Leadership Team responsible for overall Green Plains strategy and performance, including oversight of sustainability topics such as climate-related risks and opportunities. The Senior Leadership Team is composed of the President and Chief Executive Officer, the Chief Financial Officer, the Chief Administrative Officer, the Senior Vice President, Head of Trading & Commercial Operations, the Senior Vice President of Operations, and the General Counsel & Corporate Secretary. The President and Chief Executive Officer is also a member of the Board of Directors and regularly reports to the Board.



Recognizing the importance of integrating climate as part of our broader sustainability strategy across the organization, our Senior Leadership Team is actively engaged with:

- Developing governance practices responsive to climate-related issues.
- Setting/updating and regularly reviewing the Company's performance against goals in areas such as GHG emissions, energy use, and customer relationships.
- Developing, setting, and reviewing the Company's performance against carbon sequestration goals and targets, in order to maximize permanently stored CO_2.
- Incorporating risk assessment and climate strategy into financial and operational plans.
- Making recommendations to our Compensation Committee to update or change how we link executive compensation to sustainability (including climate) performance.
- Overseeing development of our voluntary carbon offset project, which we are pursuing under the **Gold Standard** methodology.
- Implementing technical and operational changes that improve climate-related performance, including reduction of GHG emissions intensity/footprint.
- Engaging with investors on climate-related issues.
- Participating in the Company's climate-related disclosure practices.

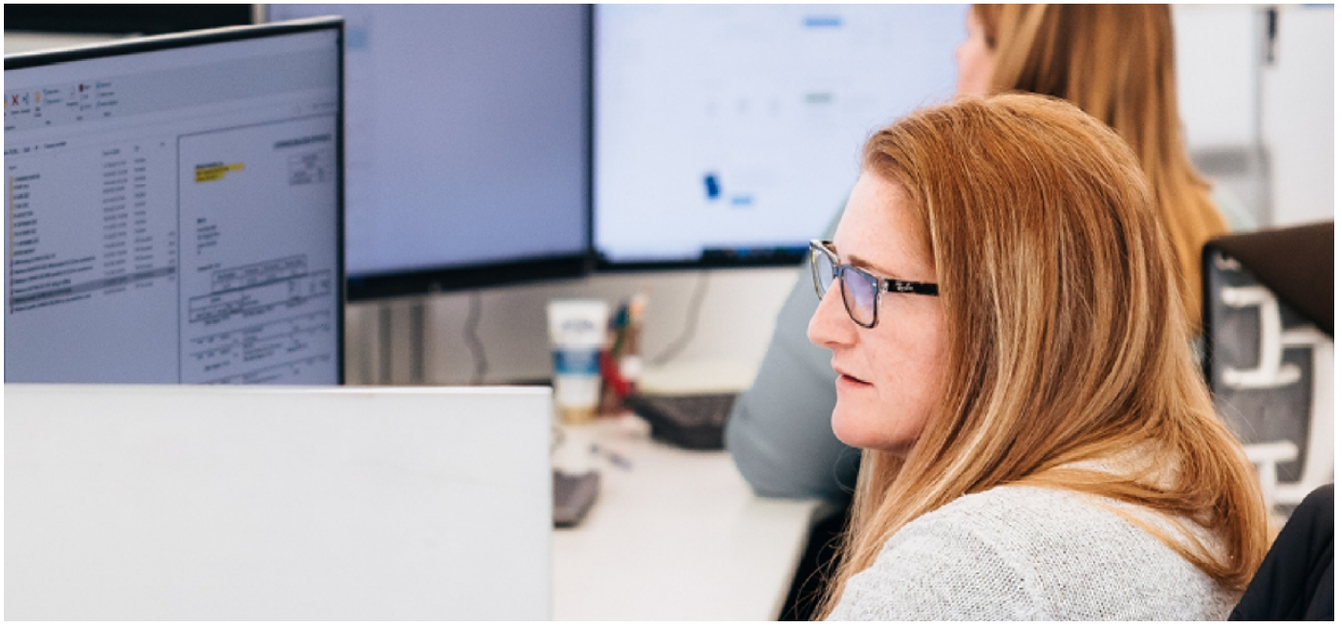
Ensuring Integration

The Senior Leadership Team is the highest management level responsible for climate-related issues. The Carbon Workgroup is responsible for the day-to-day identification and management of all of our key climate-related impacts, risks, and opportunities. This workgroup consists of cross-functional subject-matter experts at the associate, management, and executive levels and is led by the Director of Corporate Sustainability & Government Affairs, who coordinates with the Chief Financial Officer. Assessment, prioritization, and monitoring of climate-related risks and opportunities and targets and metrics are well integrated into Green Plains' overall risk management process. The Carbon Workgroup includes members of the overall risk management team and reports up through the Senior Leadership Team, which is ultimately responsible for overall risk management. The Senior Leadership Team and the Carbon Workgroup review and approve all policies and approaches developed by subject-matter experts and track metrics relative to sustainability goals, including those focused on climate, to the fullest extent possible.

> The Senior Leadership Team oversees climate-related strategy, risks, opportunities, and performance. Day-to-day management is coordinated through the Carbon Workgroup, a cross-functional team representing key areas of the business.

By including representatives from all key areas and levels of the Company, the Carbon Workgroup ensures a coordinated, enterprise-wide approach.

The importance of climate performance is well integrated across Operations, Legal, Trade, Finance, Accounting, Product Sales, Technology, Environmental, Health, Safety and Security, Investor Relations, and Human Resources. The Carbon Workgroup facilitates outreach between certain stakeholders and the Board, using various means to consult with stakeholders and subsequently reporting back through the Chief Financial Officer to the Nominating and Governance Committee. Members of the Carbon Workgroup meet with the Senior Leadership Team regularly to report on the Company's environmental (including climate) performance and the status of initiatives and to discuss sustainability-related strategy. The Carbon Workgroup, through the Director of Corporate Sustainability & Government Affairs, meets quarterly with the Nominating and Governance Committee to provide updates on sustainability matters, including climate-related risks and opportunities. These meetings are used to educate Directors on evolving climate-related regulations, market developments, and strategic considerations, enhance the Committee's understanding of climate-related topics, and support informed oversight of the Company's transition and sustainability strategy.



Political Advocacy Disclosure

Green Plains regularly engages on public policy issues that impact us, our customers, our farmer partners, and our industry. Any organizations, trade and other memberships of which we are a part, along with our public policy and other political engagement, align with our stated climate and broader sustainability goals and priorities.

During the reporting period, Green Plains actively advocated on issues related to agriculture, energy, climate, water, land use, international trade, tax, and transportation policy, among other topics. We identify emerging policy risks and opportunities to help support our business units. We also regularly engage with policymakers to educate them about issues impacting Green Plains and the broader agricultural and energy industries.

We engage employees, farmer customers, and other stakeholders in policy conversations. Green Plains is a member of several industry organizations such as Fuels America, Low Carbon Fuels Coalition, and National Grain and Feed Association, among others.

Our political action committee, the **Green Plains Inc. Political Action Committee**, is funded through voluntary employee and Board member donations. Our political action committee provides employees a way to voluntarily support candidates who are aligned with the Company's policy priorities. Green Plains Inc.'s federal lobbying reports are available at **lobbyingdisclosure.house.gov/** and **www.disclosure.senate.gov**.

Tracking Performance

Our committee charters and corporate governance policies can be found on our **website**. We continuously track our sustainability performance based on analysis from ESG rating agencies (including Sustainalytics, MSCI, ISS, Refinitiv, CDP, and the S&P Corporate Sustainability Assessment) as well as through stakeholder engagement processes, Q&As during quarterly earnings calls, annual shareholder meetings, feedback from our 24/7 ethics hotline, and direct engagement with investors. We also track the **metrics and targets discussed on pages 15-26**.

In 2025, we made financial and in-kind political corporate contributions of $10,000 and political action committee contributions of $1,000.



Strategy

As a leading biorefining company, Green Plains is adapting our business strategy to build climate resilience. Through our integrated, performance-driven platform, we maximize yield and lower carbon intensity (CI) across our core operations. Every investment reinforces our leadership in low-carbon biofuels and advances renewable processes across our high-value ingredients portfolio — addressing climate risks while driving long-term, responsible performance.

Strategy

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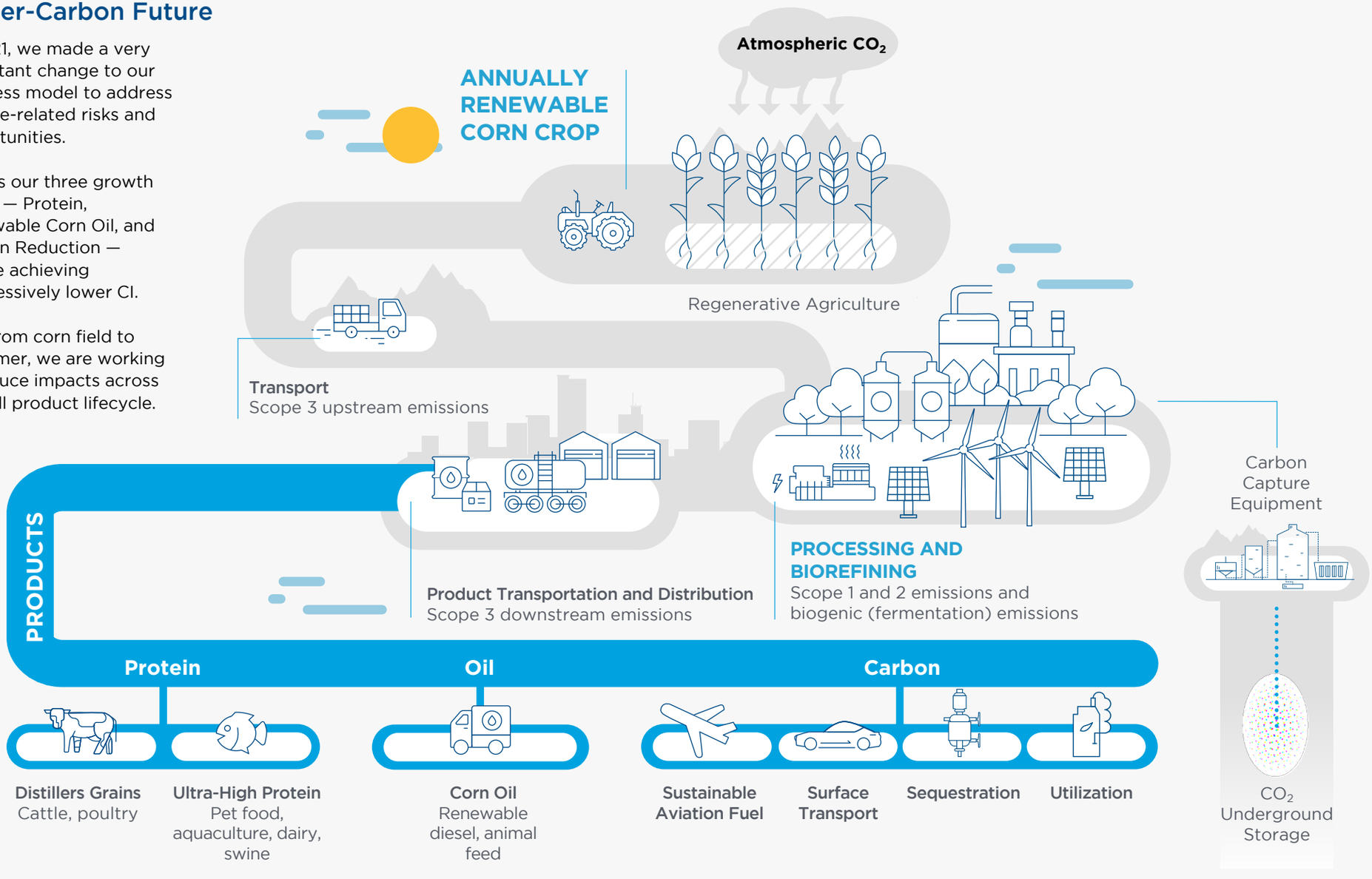
Adjusting Our Business Model

Progress Toward a Lower-Carbon Future

In 2021, we made a very important change to our business model to address climate-related risks and opportunities.

Across our three growth pillars — Protein, Renewable Corn Oil, and Carbon Reduction — we are achieving progressively lower CI.

And from corn field to customer, we are working to reduce impacts across our full product lifecycle.



Climate Scenario Analysis

Green Plains recognizes that our business is not immune to physical or transitional risks related to climate change. These include negative effects on the health and wellness of our employees, how our facilities operate, the sourcing of our raw materials, and customer use of our products. We also are adjusting our business strategy to take advantage of climate opportunities.

The Carbon Workgroup continues to meet regularly in one-on-one strategy meetings, group discussions, and plenary sessions to further enhance our existing identification and assessment of climate-related risks and opportunities. In addition, we regularly engage with stakeholders, policymakers, regulators, and our industry partners about climate change issues and how they might affect our business. Climate-related risk and opportunity assessments, including scenario analysis findings and proposed actions, objectives, and targets, are reviewed with the Nominating and Governance Committee on a quarterly basis, enabling the Board to provide oversight and strategic guidance on the management of climate-related risks and opportunities.

Through our analysis, we consider:

- The potential size and scope of identified risks.
- Whether the identified risks and opportunities fall under short-, medium-, or long-term time horizons.
- Whether the identified risks and opportunities could have a material financial impact on the organization.

In 2025, we engaged an external third party to conduct a climate risk assessment. Following completion of the assessment, Green Plains convened internal subject matter experts from across the business to review the findings, discuss potential impacts, and evaluate relevant risks and opportunities. The assessment focused on identifying five types of climate risks:

Climate Risk Category	Major Characteristics	Metrics Considered
Policy Risk	Risk of policy action to encourage low-carbon transition in direct operations or upstream supply chain	Carbon pricing risk exposure (USD millions) Increase in expenditures (%) Carbon-adjusted operating profit margin (%) Earnings risk (%) Average carbon pricing risk (USD)
Market Risk	Increased costs for suppliers	Median EBITDA at risk for key supplier sectors due to carbon pricing EBITDA at risk for key suppliers due to carbon pricing
Reputation Risk	Increased scrutiny from customers about a company's commitment to the transition to a low-carbon economy could lead to shifts in consumer preferences	Carbon performance relative to industry peers Carbon budget alignment across multiple IEA scenarios Carbon disclosures (GHG and climate risks) Financial impact (adjusted revenue in USD)
Technology Risk	Possible early retirement of existing products or technologies to mitigate climate impacts	Exposure to revenues from candidate sectors for low-carbon transition taxonomy (EU) Evidence of low-carbon goods/services Evidence of low-carbon capital expenditures (CapEx)/R&D
Physical Risk	Increasing frequency and severity of climate hazards generating financial impacts on company assets	Relative risk (%) Absolute risk (USD millions)

Risks

We consider short-term to be one to five years, medium-term six to 10 years, and long-term greater than 10 years. Our short-term timeframe carries more focus. We also consider how the identified risks and opportunities could affect our business strategy and financial planning and how resilient our strategy is given different climate-related scenarios. This regular cadence of meetings allows us to adjust or adapt our strategy and business model as we consider the need for changes or improvement.

We chose several scenarios under which to consider our climate-related risks and opportunities. The third party with whom we conducted our analysis used climate scenario and information from the Intergovernmental Panel on Climate Change (IPCC), the International Energy Agency (IEA), the U.S. National Aeronautics and Space Administration (NASA), and the U.S. National Oceanic and Atmospheric Administration (NOAA).

Physical Risks Scenarios

- SSP1-2.6 Low Emissions: This 2°C scenario aligns with the IPCC Representative Concentration Pathway, or IPCC RCP, 2.6. It assumes aggressive mitigation in which total global GHG emissions are reduced to net zero by 2050 and global average temperatures rise by 1.3-2.4°C by 2100, consistent with the goals of the Paris Agreement. Businesses are primarily impacted by transition risks under this scenario, and the physical impacts are constrained but not completely avoided.
- SSP5-8.5: This business-as-usual scenario aligns with IPCC RCP 8.5 and assumes low mitigation in which total global GHG emissions triple by 2075 and global average temperatures rise by 3.3-5.7°C by 2100. Business are impacted more by physical risks than transition risks. More heat waves and changes in rainfall patterns and monsoon systems occur, Arctic summer sea ice almost disappears, and sea levels rise by one half to one meter. Additional key drivers and signposts that would occur include more unusually hot and fewer unusually cold days almost everywhere, increased ocean warming, dry areas becoming drier, wet areas becoming wetter, and a decrease in glacier volumes.

Transition Risks Scenarios

- IEA Net Zero Emissions Scenario (1.5°C): This high carbon pricing/required policies scenario shows what is needed across the main sectors by various actors, and by when, for the world to achieve net zero energy-related and industrial process GHG emissions by 2050.
- IEA APS Scenario (1.7°C): This moderate carbon pricing/committed policies scenario assumes that governments will meet, in full and on time, all of the climate-related commitments that they have announced, including longer-term net zero emissions targets and pledges in Nationally Determined Contributions (NDCs).
- IEA STEPS Scenario (2.0°C): This low carbon pricing/current policies scenario reflects a detailed review of the policies and measures that are actually in place or that have been scheduled to start. In this scenario, many separate efforts to reduce GHG emissions from the energy sector occur between now and 2040, including stronger deployment of technologies that are currently available at commercial scale today, the building of significant additional nuclear capacity, and rapid deployment of carbon capture and storage. Additional key drivers and signposts include strong efficiency-related policy action, increased renewable energy generation, implementation of carbon pricing mechanisms, rapid deployment of electric vehicles charged with renewable electricity, and increased use of bioenergy, with biofuels making up 17% of worldwide transportation fuel demand.

Identified Risks

This discussion of our identified climate risks incorporates risks disclosed in the Risk Factors section of Green Plains Inc.'s Form 10-K SEC filing.

We have identified inherent climate-related risks with the potential to substantively affect our financials or broader business. The extreme weather we have identified as medium- to long-term physical risks include:

- Droughts
- Flooding
- Hurricanes
- Rising mean temperatures and longer, more frequent summer heat waves
- Thunderstorms
- Tornadoes
- Unpredictable or later-than-usual last freeze/frost
- Winter storms



Climate Risks and Possible Financial Impacts

	Short Term (1-5 Years)	Medium Term (6-10 Years)	Long Term (10+ Years)
Physical Climate Risks	Flooding Extreme weather Fluctuations in seasonal temperatures	Flooding Extreme weather Fluctuations in seasonal temperatures	Flooding Most frequent and intense extreme weather Most volatile fluctuations in seasonal temperatures
Transition Climate Risks	CA SB 253, SB 261, and AB 1305 EU Corporate Sustainability Reporting Directive (CSRD) and Carbon Border Adjustment Mechanism (CBAM) Governing state regulations on biorefineries Changes to the California Low Carbon Fuel Standard (LCFS)	Governing state regulations on biorefineries Costs to transition to lower-emissions process technology related to our decarbonization strategy Increased cost of raw materials, such as corn, enzymes, and yeast Increased concern related to the perceived impact biofuels have on climate change or food prices	More state, national and international climate-related regulations Increased cost of raw materials, such as corn, enzymes, and yeast Increased concern related to the perceived impact biofuels have on climate change or food prices
Possible Negative Financial Impacts	Carbon pricing impacts (mainly from suppliers in food products; oil, gas, and consumable fuels; and ground transportation with Scope 3 upstream GHG emissions) Revenue exposure to EU Green Taxonomy Risk from lack of public disclosures regarding low-carbon transition goods/services and green R&D and CapEx Enhanced emissions-reporting obligations and mandates on and regulation of existing products and services could result in increased operating costs, higher compliance costs, increased insurance premiums, and abrupt and unexpected shifts in energy costs, especially large and unexpected spikes in natural gas prices. Fluctuating input prices Increased concern related to the perceived impact biofuels have on climate change or food prices, or delayed air permitting for expansion projects or new construction. It could result in a reduction in capital availability. Banks, lenders, and other providers of capital may be more hesitant to invest in our business.	Carbon pricing impacts (mainly from suppliers in food products; oil, gas, and consumable fuels; and ground transportation sectors on operating expenditures Revenue exposure to EU Green Taxonomy Risk from lack of public disclosures regarding low-carbon transition goods/services and green R&D and CapEx Increased R&D expenditures related to new and alternative technologies in addition to capital investments in technology development. Possible unsuccessful investment in new technologies poses further risk.	High risk premiums in some geographies in which Green Plains operates Average annual loss on assets from climate hazards, mainly due to extreme heat, water stress, and wildfire Crop damage and negative impacts on yields, in turn affecting availability, quality, and price of annually renewable agricultural commodities we rely on to supply our biorefineries as well as our operations and operating results Slow development in drought-tolerant seeds might not keep pace with rapid climate changes. Increased commodity prices due to increased frequency of flood events hurting corn crop yields Remapped floodplains, putting assets in newly created flood zones and resulting in increased insurance premiums Challenges to maintaining the temperature of our refining process, resulting in the need to run supplementary summertime chillers for longer periods or to upgrade their capacities, adding to operating costs and increasing emissions
Possible Positive Financial Impacts	Updated guidance on the 45Z Clean Fuel Production Credit (CFPC) and 45ZCF GHG, Regulated Emissions, and Energy Use in Transportation (GREET) model		Rising mean temperatures possibly increasing domestic double-cropping, as is currently common in Brazil, thus increasing the supply of crop feedstocks and putting downward pressure on corn prices

Opportunities

Producing Low-Carbon Fuels and Carbon Removals

Green Plains operates at the active intersection of agriculture, renewable fuels, and carbon management. Through strategic deployment of CCS, advanced processing technologies, and continuous operational efficiency, we are converting our biorefineries into active platforms that produce low-carbon fuels alongside durable CDR. CCS is the cornerstone of this strategy. By permanently storing biogenic carbon dioxide generated during ethanol production, we directly lower the lifecycle CI of our ethanol while generating high-quality CDR credits through bioenergy with carbon capture and storage (BECCS).

Low-Carbon Ethanol

Reducing the CI of ethanol enhances participation in low-carbon fuel markets and supports growing demand for lower-emission transportation fuels. By combining operational efficiencies with active CCS, and further investments in technologies to further reduce CI, we continuously improve the carbon profile of our biofuels, solidifying our position across domestic and international clean fuel markets.

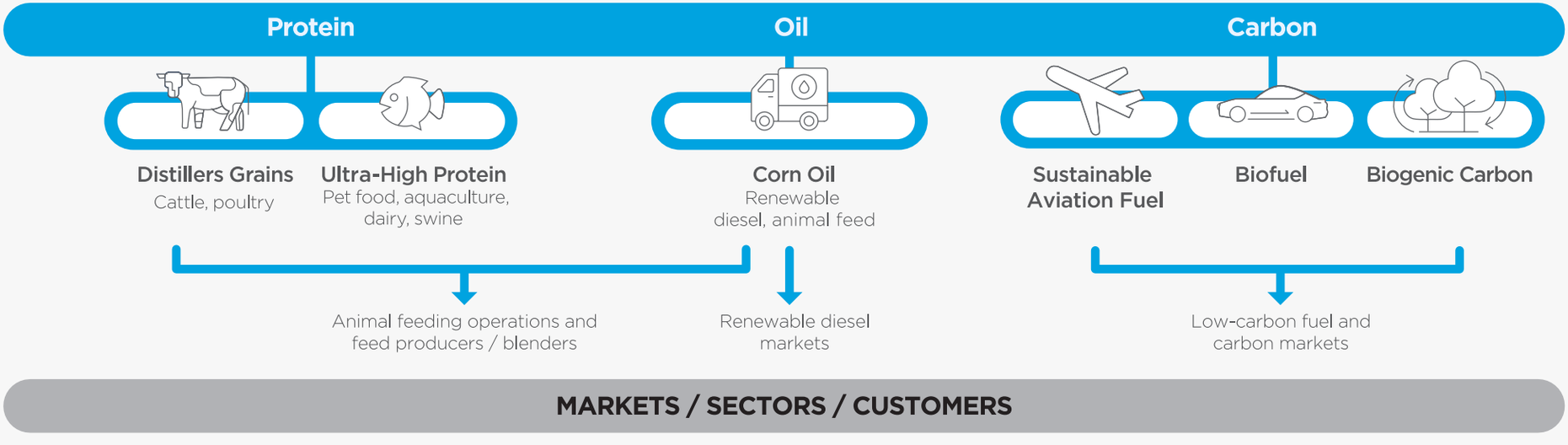
Our low-CI oils and biofuel products are helping customers meet the following U.S. and international clean-energy standards and laws:

- U.S. Renewable Fuel Standard
- California LCFS
- Oregon Clean Fuels Program
- Washington Clean Fuel Standard
- British Columbia LCFS
- Canadian Clean Fuel Regulation
- International Sustainability and Carbon Certification (ISCC) EU/ISCC PLUS/UN's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

Carbon Dioxide Removal

Beyond standard emissions reductions, pairing permanent CCS with renewable biogenic feedstocks permanently removes carbon dioxide from the atmosphere. Through BECCS, Green Plains generates verified CDR credits for voluntary carbon markets, driving tangible progress toward broader climate mitigation goals.

By utilizing annually renewable agricultural feedstocks and permanent geologic sequestration, Green Plains actively decarbonizes transportation fuels while driving real supply in the growing market for engineered carbon removals.





Carbon Capture and Sequestration

CCS represents Green Plains' most significant climate-related opportunity and is a foundational element of our long-term decarbonization strategy.

By capturing and permanently storing biogenic carbon dioxide generated during ethanol production, Green Plains can substantially reduce the lifecycle CI of its products while creating opportunities to generate durable CDR.

Six Green Plains biorefineries have been committed to carbon sequestration infrastructure projects that are expected to collectively capture approximately 1.3 million metric tons of carbon dioxide annually. The captured carbon is permanently stored in deep geologic formations and is not used for enhanced oil recovery.

In 2025, Green Plains reached an important milestone with the completion and startup of carbon capture operations at its Central City, Nebraska; Wood River, Nebraska; and York, Nebraska biorefineries. These projects demonstrate the successful transition from project development to commercial operation and establish the foundation for future carbon management initiatives across our platform.

Lower Carbon Intensity Fuels

Carbon capture is expected to reduce lifecycle CI scores by approximately 30 points, allowing Green Plains to produce significantly low-carbon ethanol and enhance participation in existing and emerging clean fuel programs.

Low-carbon fuels are increasingly important to state, federal, and international regulatory programs as well as customers seeking to reduce transportation-related emissions throughout their supply chains.

Bioenergy With Carbon Capture and Storage (BECCS)

Because the carbon dioxide captured from fermentation originates from annually renewable biological feedstocks, permanent sequestration can result in net atmospheric carbon removal.

These removals may qualify under emerging carbon accounting frameworks and voluntary carbon market methodologies, creating the potential for additional revenue streams through the issuance and sale of CDR credits.

Our CCS Platform

6
biorefineries committed

3
biorefineries operating

Expected to capture
1.3 million
metric tons of CO_2

Currently capturing
0.7 million
metric tons of CO_2

In late 2025, Green Plains began carbon capture operations at:

- Central City, Nebraska
- Wood River, Nebraska
- York, Nebraska

This marked the first operational phase of Green Plains' CCS strategy and established the foundation for future deployment across additional committed facilities.

Building Value from a Decarbonized Platform

CCS is significantly reducing the CI of our ethanol production platform while creating opportunities to generate durable CDR. These investments also strengthen the value proposition of the low-carbon products produced across our biorefineries.

As low-carbon fuel policies, customer sustainability commitments, and carbon accounting requirements continue to evolve, Green Plains is positioned to create additional value from a portfolio of products derived from renewable agricultural feedstocks.

By combining carbon capture, process innovation, and advanced separation technologies, we are increasing the value generated from every bushel of corn while supporting the transition to lower-carbon fuel and agricultural supply chains.

Renewable Corn Oil

Renewable corn oil remains one of Green Plains' most important low-carbon product opportunities.

Produced as a co-product of ethanol production, renewable corn oil serves as a feedstock for renewable diesel and other lower-carbon fuel applications. Increasing renewable corn oil recovery improves resource efficiency and allows additional low-carbon fuel production without requiring additional cropland or agricultural inputs.

Our MSC™ technology continues to increase renewable corn oil yields while simultaneously supporting enhanced protein production and improved overall utilization of each corn kernel processed.

Higher-Protein Feed Ingredients

Green Plains continues to expand production of higher-value feed ingredients with a comparatively low lifecycle carbon footprint.

Five MSC installations currently operating across our production network provide approximately 330,000 tons of annual protein production capacity. These systems enable production of feed ingredients containing approximately 50% protein while also supporting higher-concentration specialty products for customers with specific nutritional requirements.

Independent lifecycle assessments have demonstrated that Green Plains' Ultra-High Protein products compare favorably to many commonly used protein ingredients. These products help support lower-emission livestock, aquaculture, poultry, dairy, and pet food value chains while creating additional value from existing agricultural production.

Future Opportunity: Sustainable Aviation and Marine Fuel

The aviation and marine sector is expected to require significant volumes of low-carbon fuels to support long-term decarbonization goals. We continue to monitor developments in alcohol-to-jet technologies and evaluate the potential role low-carbon ethanol may play as a future feedstock for marine fuel applications.

While not currently a commercial product offering, sustainable aviation and marine fuel remains a longer-term strategic opportunity as fuel conversion technologies, carbon markets, and policy frameworks continue to mature.

GLOBAL PROTEINS: CLIMATE IMPACT COMPARISONS

Global Feed LCA Institute (GFLI) 2.0 DATABASE SAMPLE
(Cradle-to-Gate, Economic Allocation in USD)

Lifecycle Impact Assessment

Product Name	**Climate Change Impact** (KG CO_2e/Ton Product)
Corn distillers dried grain with solubles at U.S. ethanol plant	**655**
Ultra-High Protein at Green Plains plant	**691**
Corn gluten meal at U.S. wet mill	**799**
Fishmeal at Norwegian fishmeal and oil production plant	**1,041**
Corn gluten meal at global wet mill plant	**1,126**
Pea protein concentrate at German plant	**2,560**
Soybean meal at Brazilian crushing plant	**4,258**
Soybean protein concentrate at Brazilian crushing plant	**7,271**



Metrics and Targets

Our carbon reduction strategy is at the core of our climate transition planning. We continue to adapt our strategic road map as the viability and feasibility of a range of technologies across our platform progresses.

Metrics and Targets

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We report on several targets (or goals) and metrics associated with our climate-related risks and opportunities, including:

- Absolute GHG emissions, including the procedures and methods to collect data critical for calculating these emissions, as our primary metric in this area.
- Additional metrics associated with our climate change strategy, including operational GHG emissions intensity at the organizational level as measured in metric tons of CO_2e per metric ton of raw material feedstock, as well as the CI of our biofuel as measured in kilograms of CO_2e per MMBtu.

Targets

Our Carbon Workgroup evaluates, establishes, and monitors (on an annual basis) targets by working with goal owners who develop specific plans, budgets, and timelines to achieve individual goals. These are then reviewed and approved by our Senior Leadership Team with oversight from our Board's Nominating and Governance Committee. Other than our medium-term GHG emissions target validated by Science Based Targets initiative (SBTi), no other third party validates our sustainability targets. However, the underlying data for each target is included in our annual external assurance process through APEX Companies LLC.

We've set ambitious GHG reduction goals, with a path to carbon-neutral operations by 2050.

We monitor our progress with key performance indicators that have short-, medium-, and long-term targets. There have been no revisions to sustainability targets from the previous reporting period. Additionally, we do not use a sectoral decarbonization approach in our GHG emissions targets.

	Goals	Progress	Status
Short-Term Target: Performance Tied to Our Sustainability-Linked Credit Facility	**2026 GOAL:** 16.5% reduction in operational GHG emissions intensity (vs. 2020).	**2025 PROGRESS:** Operational GHG emissions intensity reduced by 11% (vs. 2020).	In progress
Medium-Term Targets: Validated by the SBTi	**2030 GOAL:** Green Plains commits to reducing absolute Scope 1 and Scope 2 GHG emissions 37.8% from a 2021 base year by 2030.[1]	**2025 VS. 2021 PROGRESS:** 10.5% decrease in Scopes 1 and 2 GHG emissions since 2021.	In progress
	Green Plains also commits to reducing absolute Scope 3 GHG emissions 22.5% within the same timeframe.[1]	20% decrease in Scope 3 GHG emissions since 2021.	In progress
Long-Term Target: Carbon-Neutral Operations	**2050 GOAL:** 100% reduction in operational GHG emissions (Scope 1, Scope 2, and biogenic) (vs. 2018).[2]	**2025 PROGRESS:** Reduced operational GHG emissions by 42.1% since 2018.[3]	In progress

In progress **Complete**

1. The target boundary includes land-related emissions and removals from bioenergy feedstocks.
2. Not validated by the SBTi.
3. Reductions are a result of energy-efficiency projects and asset divestments.

Investing to Decarbonize

Our decarbonization strategy is based on the particular operational circumstances and technical specifications of each of our biorefineries.

Each one has unique characteristics that will require a varying combination of low-carbon technologies. For example, while one facility may be suitable for wind turbines and photovoltaic solar due to land availability and wind speeds, another may lack Federal Aviation Administration clearance due to a nearby airport, and the available land may not be suitable due to wetlands or other protected habitats. We have already begun engineering and/or construction on several projects that are expected to result in emission reductions (as shown in the chart on the **following page**). Though site-dependent, these practices are expected to have a significant impact on our CI score, with a path to making our biofuel carbon-neutral or even carbon-negative.

To further reduce the CI of our biofuels and other products/ingredients, however, we will need to invest in additional technology. We continue to evaluate and monitor the economic viability of technologies such as combined heat and power cogeneration systems, biomass-based systems to produce biogas and renewable natural gas, renewable energy systems, and other cogeneration technologies such as steam-letdown turbines. Additionally, the viability of biogas and renewable natural gas production via anaerobic digestion and gasification will depend on sourcing feedstock of sufficient quality and regularity as well as qualification under tax credit programs such as the U.S. Department of the Treasury's 45Z Clean Fuel Production Credit.

Green Plains continues to invest significant capital in projects that support its long-term decarbonization strategy. As of 2026, the Company had approximately $125.3 million of carbon capture and sequestration (CCS) infrastructure financing associated with its Central City, Wood River, and York, Nebraska CCS projects. The Company also expects to incur an additional $20 million to $25 million of capital expenditures during 2026 for efficiency and operational improvement projects, some of which are expected to reduce energy consumption, lower greenhouse gas emissions, and further improve the carbon intensity of its products. Together, these investments support Green Plains' strategy to reduce emissions, enhance facility-level carbon performance, and position its biorefineries to participate in low-carbon fuel markets and climate-related incentive programs such as Sections 45Z and 45Q.

Updated guidance on the 45Z Credit was issued in 2026 and includes the new 45ZCF-GREET model. This model gives us clarity on how our biorefineries' ethanol CI will be assessed and what practices will be allowed for CI reduction, giving us added confidence in our ongoing decarbonization investments.

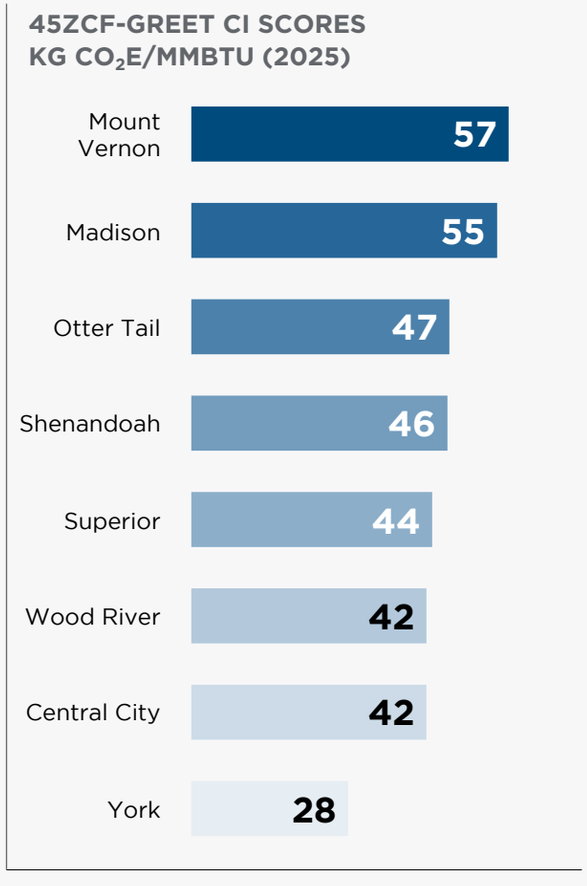
Examples of how different technologies impact the CI of our biofuel under the 45ZCF-GREET model are shown on the following page. Each location's strategy will be different, with the end goal remaining the same: carbon-neutral or carbon-negative liquid biofuels. Whether converted into sustainability aviation fuel or used in legacy internal-combustion surface-transportation vehicles, there is a bright future ahead for the planet by using biofuels that can achieve carbon neutrality.

The majority of our operating emissions are released by the ethanol fermentation process and are classified as biogenic emissions. Most of the remaining emissions are from natural gas combustion (Scope 1) for steam generation and drying of distillers grains as well as indirect (Scope 2) emissions associated with electricity consumption. A very small amount of GHG emissions from gasoline, diesel, and liquified petroleum gas fuel combustion occurs on-site related to our mobile equipment and generators and is included in our Scope 1 emissions.

Green Plains has set ambitious GHG reduction goals, with a path to carbon-neutral operations by 2050. As shown in the following charts and tables, we are monitoring our progress related to short-, medium-, and long-term targets. We maintain independent third-party validation of our medium-term 2030 targets from the SBTi, with Scopes 1 and 2 goals in alignment with a 1.5°C trajectory. This voluntary independent review demonstrates our commitment to credibility and accountability in climate change impact reporting.

The current 45ZCF-GREET CI scores of our facilities (shown below) align with the most up-to-date studies analyzing the CI of corn ethanol. Our carbon reduction strategy, notably our Advantage Nebraska CCS project, has resulted in a ~30 point reduction in CI score and allows us to monetize a key aspect of our climate change management strategy.

U.S. ethanol has a 46% lower GHG profile on average than petroleum-based gasoline.[4]

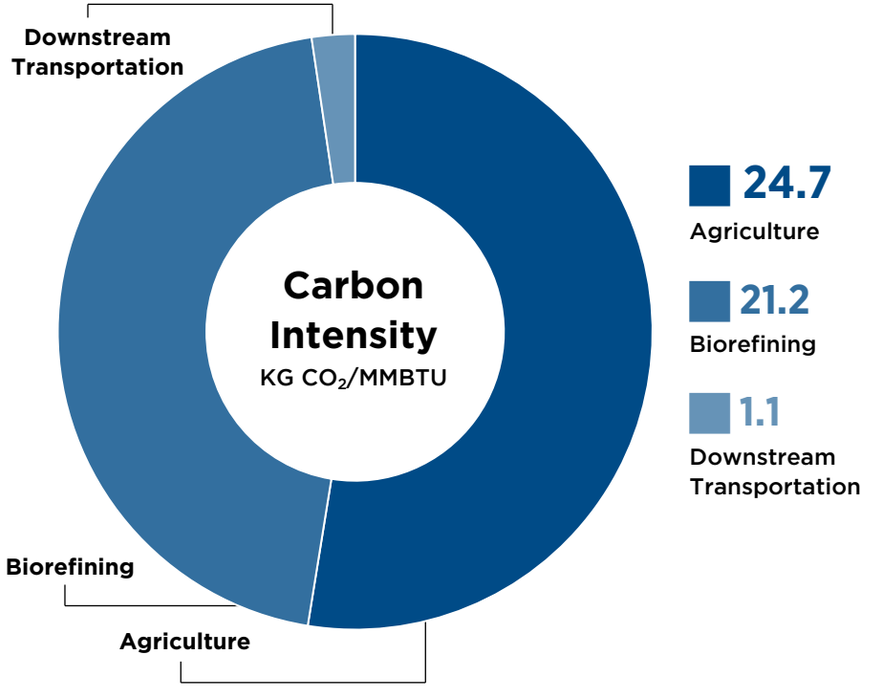


4. https://iopscience.iop.org/article/10.1088/1748-9326/abde08/pdf

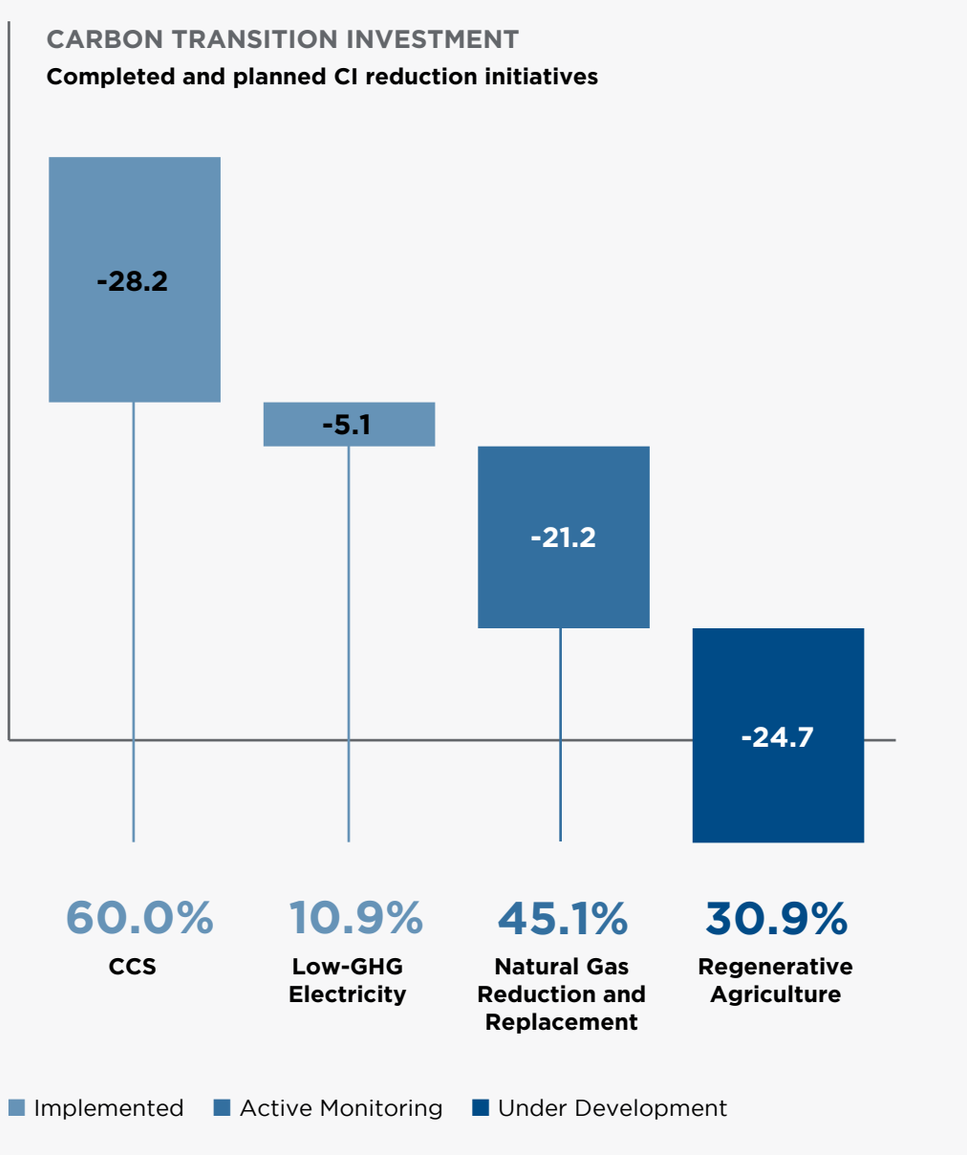
Pathway to Net-Zero

Our decarbonization strategy — anchored by CCS, low-GHG electricity, natural gas reduction, and regenerative agriculture — targets meaningful reductions across each of these categories. Through these investments, Green Plains is on a path to producing carbon-neutral or even carbon-negative liquid biofuels, without relying on carbon credits or offsets to meet our targets.

Expected emission reductions from our investments are shown below, with a goal of achieving not only low-carbon ethanol but potentially net-zero ethanol. It is important to note that we do not plan to use carbon credits or offsets to achieve net GHG emissions targets.



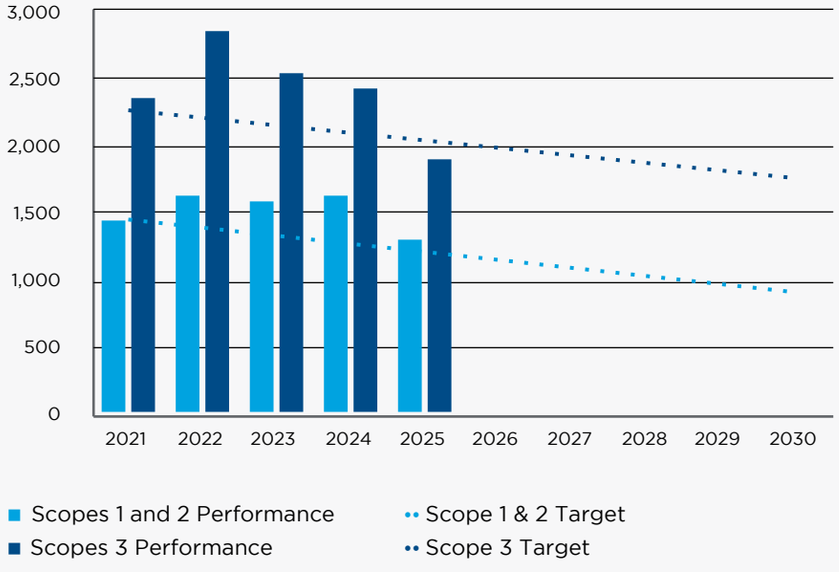




Medium-Term Target Progress

(Scope 1, Scope 2, and Biogenic)

THOUSAND METRIC TONS CO_2e



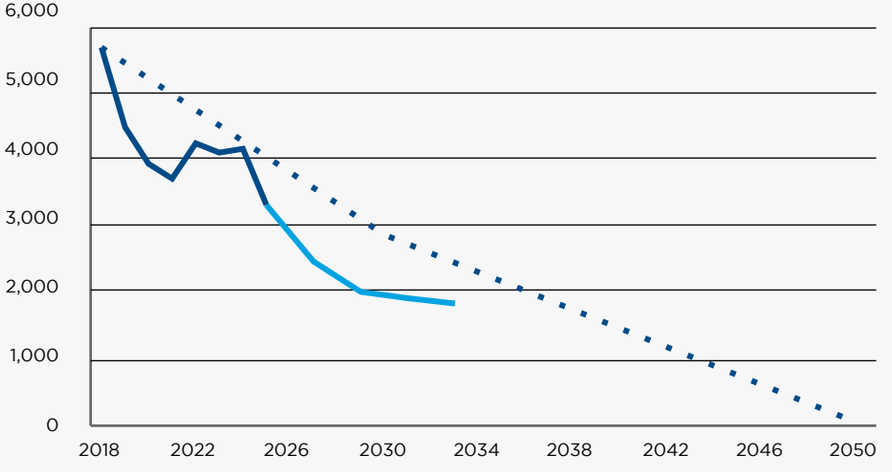
2025 VS. 2024 PROGRESS: ON THE RIGHT TRACK

While still behind our Scope 1 & 2 target, we made significant progress in 2025 by achieving a 20% reduction in Scope 1 & 2 and a 22% reduction in Scope 3 GHG emissions over 2024.

Path to Carbon-Neutral Operations by 2050

(Scope 1, Scope 2, and Biogenic)

THOUSAND METRIC TONS CO_2e



5. 2022–2032 project-based expectations. Estimates based on various carbon- and energy-efficiency-related projects and initiatives.



Progress to Date

In 2025, we continued to evaluate a variety of additional energy-efficiency and clean-energy-generation technologies that aim to reduce our natural gas usage and generate additional efficiencies in power consumption. These technologies include:

- Combined heat and power systems
- Renewable natural gas / biogas via anaerobic digestion
- Wind turbines and photovoltaic solar
- Low-energy distillation systems
- Energy reclamation projects
- Evaporation system upgrades
- Steam-letdown turbines
- Boiler economizers
- Variable frequency drives
- Heat exchanger projects

We continue to monitor the economic viability of such technologies and their ability to contribute to our energy transition plan. The economic viability of these projects depends on many factors, including the cost of power, the value of environmental attributes, efficiency gains, and, importantly, tax incentives such as the 45Z Clean Fuel Production Credit.

For example, the regulations surrounding 45Z contain several restrictions concerning the eligibility of biogas or renewable natural gas for use directly in our operations. These considerations, among others, are consistently monitored and our energy transition plan adjusts and adapts as needed.

Green Plains calculates its Scope 1, 2, and 3 GHG emissions in accordance with the GHG Protocol Corporate Accounting and Reporting Standard. For full details on our methodology, visit **ghgprotocol.org**.



FIVE-YEAR ENERGY PERFORMANCE

Green Plains Performance Data	Unit of Measurement	2025	2024	2023	2022	2021
Electricity Use	Thousand Megawatt Hours	694.89	779.28	759.41	725.65	649.59
Electricity from Renewable Sources	Percent	48.73 %	31.89%	32.73%		
Electricity from Non-Renewable Sources	Percent	51.27 %	68.11%	67.27%		
Electricity Intensity	Kilowatt Hours/Raw Material MT	105.800	105.988	103.352	94.635	98.438
Natural Gas	Metric Million British Thermal Unit	20,901,708	23,601,284	22,636,322	23,517,446	20,622,819
Natural Gas Intensity	MMBtu/Raw Material MT	2.843	3.212	2.952	3.564	2.949
Mobile Fuel (Diesel, Gasoline, Propane)	Gallons	195,524	248,320	232,388		
Total Energy Use	Gigajoules	24,581,522	27,741,050	26,649,316		
Total Energy Use from Renewable Sources	Percent	5%	3%	3%		
Total Energy Use from Non-Renewable Sources	Percent	95%	97%	97%		



Scope 1 and Scope 2 Emissions

In 2025, we accelerated implementation of strategies to lower our Scope 1 and Scope 2 emissions.

To convert our feedstock into biofuels, feed, and ingredients, we require purchased electricity and the combustion of natural gas fuel. We are managing how and where we source this energy and how efficiently we manage it. In 2025, we sourced 49% of our electricity from renewable sources via purchases of Renewable Energy Credits with plans to increase that in 2026. Our electrical energy is used to power our pump motors, centrifuges, fans, separation equipment, lights, and other process machinery. Our natural gas supply serves two primary purposes: production of steam in our boilers and combustion in our feed ingredient dryers. Approximately two-thirds of our natural gas usage is for steam production, with the remaining one-third for drying. We use various steam generation technologies, each with their own efficiency advantages.

Some of our biorefineries use traditional boilers for steam production and more efficient stand-alone regenerative thermal oxidizer pollution control technology on the dryer exhaust. Others use less efficient thermal oxidizer pollution control technology on the dryer exhaust but also integrate a heat recovery steam generator or waste heat boiler technology for steam production into the thermal oxidizer system.

We evaluate, select, allocate, and fund our energy-transition investments through our capital planning process. If an energy project is selected and allocated funds through the capital planning process, it still must secure final approval to move forward through the capital improvement request process.

Over the past several years, we have completed the installation of numerous projects that directly impact our energy transition plan. These projects include:

- Distillation system upgrades at several of our biorefineries from 2019 through 2021, resulting in significant electricity and natural gas savings.
- A new boiler with a ConDex Condensing Economizer System at our Central City, Neb., location in 2023.
- Multiple boiler economizers installed at our Madison, Ill., and Mount Vernon, Ind., locations in 2023 and 2024.



Scope 3 Emissions

Our Scope 3 emissions reduction strategies are focused on Purchased Goods and Services (GHG Protocol Category 1), Upstream (Category 4) and Downstream (Category 9) Transportation and Distribution, and Use of Sold Products (Category 11).

Purchased Goods and Services

We maintain relationships with a dedicated group of suppliers, primarily based in North America, that consistently meet the needs of our growing business. Green Plains does not outsource any significant part of our activities.

Green Plains' responsible sourcing is focused on three primary objectives:

- Bind our suppliers and vendors to legal compliance with environmental, human rights, and employee health and safety laws via our **Terms and Conditions**.
- Communicate our responsible sourcing expectations via our **Code of Vendor Conduct, Human and Labor Rights Policy, Environmental Policy** and **Occupational Health & Safety Policy**.
- Screen our vendors and suppliers for serious violations of laws, regulations, and our policies via our vendor screening practices.

Each of our biorefineries requires on average approximately 31 million bushels of corn annually, depending on production capacity. More than 90% of our corn purchases are from local corn suppliers, many of which are family farms. Corn is an annually renewable crop that captures CO_2 from the air as it grows and also sequesters CO_2 in the soil and in corn kernels.

Yields have risen since the Renewable Fuel Standard was expanded and have been accompanied by reductions in chemical, fertilizer, and water inputs, including a 50% reduction in the amount of nitrogen fertilizer application (in pounds per bushel of corn) since the 1970s.[6]

The biofuels produced from corn support environmental sustainability, reduce GHG emissions, and combat price inflation for transportation fuel.

Regenerative Agriculture

Given our interdependent relationship with local farmers and their crops, land stewardship and the conservation of natural resources are top priorities for Green Plains.

In 2025, we continued to develop our regenerative agriculture program to drive sustainable farming practices and outcomes. We intend to work with our farmer customers to:

- Help reduce the CI of the feedstock they produce and we process.
- Keep carbon in the soil.
- Reduce water use.
- Minimize erosion of valuable topsoil.

Our farmers are continually innovating, using the latest production practices, available technologies, and the latest science to produce more crop on the same acreage. Leaps forward in seed technology have dramatically increased yields and enhanced drought tolerance and weed resistance. When coupled with regenerative production practices such as cover crops, reduced tillage, and split application of crop nutrients, these new seed technologies enable farmers to produce more while using fewer inputs, conserving water and making fewer trips across the field.

6. **USDA Economic Research Service — Fertilizer Use and Price**

The net positive soil carbon sequestration over extended periods, alongside reduced land use for corn production, reflects ecosystem protection and sustainable land management practices. Finally, the impact of GHG emissions associated with land use change is often overstated. A recent study found that a much longer period than five to 10 years must be considered to accurately assess the impact of land use change on soil carbon, and that overall soil carbon sequestration of more than 35 years (even on land that fluctuates between fallow / Conservation Reserve Program and cash crop rotations) yields a net positive soil carbon value.[7] Advances in agricultural practices, including reduced land usage, improved seed genetics, and reduced chemical inputs, are examples of replacing intensive resource use with sustainable practices.

Our practice of buying locally from U.S. farmers not only keeps family farms in business and supports local communities, but also helps mitigate deforestation around the globe. It is important to note the amount of corn we processed in 2025 can be grown on 329,000 fewer acres than was the case in 2007 due to crop yield improvements,[8] and none of our feedstock comes from land converted to cropland from forests, grasslands, or wetlands, in alignment with the Renewable Fuel Standard regulations for renewable biomass to which we are subject.

A related common misconception of our business model is the amount of U.S. farmland used to grow crops for fuel rather than for human consumption, otherwise known as the food versus fuel debate. It is often overlooked that biofuels and the food system are not separate entities. The corn kernels processed in biorefineries do not entirely leave the food system. Rather, nearly a third of each kernel processed in our facilities becomes feed for poultry, cattle, fish, and other animals consumed in human diets. Less than 10% of corn grown in the U.S. is processed directly into products for human consumption.[9] There exist greater threats to habitat conversion than biofuels production, such as urban development, which claims 2 million acres of farmland per year in the U.S.[10] Over the long term, our business helps ensure sustainable land use by keeping existing land in agricultural production, which in turn fosters soil regeneration and resilient ecosystems.

Diversifying Our Supply Chain

Many of our facilities are capable of processing primary feedstocks beyond corn, including sorghum/milo; two of them have already maintain regulatory-approved pathways to process sorghum/milo into ethanol. We also have plans to secure regulatory approval to process sorghum/milo into ethanol at additional facilities where there is adequate local sourcing available. Our ability to process multiple feedstocks enhances operational flexibility and serves as one of several strategies we use to manage risk across the business.



7. Copenhaver, K.; Mueller, S. "Considering Historical Land Use When Estimating Soil Carbon Stock Changes of Transitional Croplands." **Sustainability 2024, 16, 734**.
8. (258,568,000 bushels of corn processed in 2025/average U.S. corn yield in 2007 of 150.7 bushels per acre) minus (258,568,000 bushels of corn processed in 2025/average U.S. corn yield in 2025 of 186.5 bushels per acre) equals 329,356
9. Adapted from **https://ncga.com/world-of-corn/dashboard/u-s-corn-usage-by-segment-1**
10. Boone, D. (October 23, 2023). "Farmland losing to urban sprawl." **Farm Progress.com**

Upstream and Downstream Transportation

By sourcing 100% of corn feedstock from farmers, grain elevators, and cooperatives in the U.S., with more than 90% sourced within a 30-mile trucking distance from each of our biorefineries, we lower the GHG emissions associated with our supply chain. We do not import corn from foreign countries or other long-distance locations.

Green Plains benefits from the bulk product transport used in our industry and its comparatively small carbon footprint. We also actively work to create further efficiencies in our supplemental forms of transport.

We move the majority of our output by rail or barge. According to the Association of American Railroads, moving freight by rail rather than truck reduces GHG emissions by up to 75%.[11] We met our 2024 goal of maintaining at least 50% in bulk transport to keep our CI scores low, achieving 74%.

For the balance of our freight moved by truck, we actively work to optimize efficiencies in local trucking services. While not all truck deliveries are supported by backhauls, some carriers voluntarily incorporate backhaul shipments originating from our facilities and terminals to reduce deadheading. Decreasing deadheading — the practice of returning empty trailers — minimizes GHG emissions intensity and contributes to overall efficiency. However, due to information-sharing constraints, we are unable to quantify the full impact of these efforts at this time. We remain committed to collaborating with our logistics partners to unlock additional efficiencies in transportation and distribution. Studies show that decreasing deadheading can reduce Scope 3 emissions by 3% to 20%.[12]

Our transportation footprint is further managed through our strategically located biofuel storage facility, which supports our operational assets. This facility is equipped with fuel storage tanks and supported by one major rail line. Ethanol is sourced via rail and loaded into tanker trucks for distribution, reducing the need for long-distance trucking and enhancing overall efficiency and sustainability in our supply chain.

We oversee a leased railcar fleet with an aggregate capacity of 57.7 million gallons dedicated to transporting end products. This fleet plays a vital role in extending the reach of our renewable fuels to a majority of the U.S., ensuring reliable and efficient delivery of our products while maintaining a low CI score.

As opportunities to advance sustainable agriculture expand every year, we seek to partner with farmers to lower their CI even further.

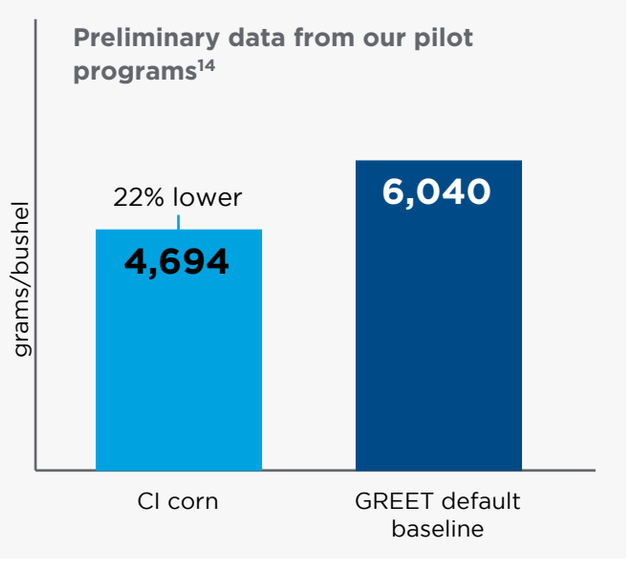
A number of farmers in our supply chain already employ sustainable farming techniques, such as precision agriculture and the split application of nutrients, to increase yields while lowering the levels of traditional inputs needed (such as land, water, fertilizer, herbicides, and insecticides).[13] Many of these farmers also use cover crops and conservation tillage practices to reduce the risk of land degradation and often enroll marginal ground in federal conservation programs.

2030 GOAL:
Source 100% of primary feedstock sustainably.

2025 PROGRESS:

- Continued development of our regenerative agriculture strategy.
- Initiated multiple pilot programs to better understand the true carbon impact of our corn feedstock and incentivize sustainable farming practices.

In progress



11. https://www.aar.org/wp-content/uploads/2020/06/AAR-Sustainability-Fact-Sheet.pdf
12. Lin, Dung Ying and Ng, Kuok Hou. (December 2021). "The impact of collaborative backhaul routing on carbon reduction in the freight industry." Transportation Research Part D: Transport and Environment, Volume 17, Issue 8, pp. 626-628.
13. See https://sustainableamerica.org/blog/what-is-precision-agriculture/ and https://nutrientstewardship.org/implementation/split-fertilizer-application-helps-optimize-nutrient-management/.
14. When comparing CI data of a portion of our growers to the GREET default value, as calculated using the Feedstock Carbon Intensity Calculator.

Use of Sold Products

Use of our products helps Green Plains' customers comply with the Renewable Fuel Standard, a law enacted by the U.S. Congress in 2005 and expanded in 2007, with goals to reduce surface transportation GHG emissions, expand the nation's renewable fuels sector, decrease our reliance on imported fossil fuels, and encourage ethanol production for use as a gasoline oxygenate to replace methyl tertiary butyl ether, which has been banned in multiple states.[15]

> The renewable biofuels we produced from 2007 through 2025 have reduced GHG emissions by more than 58.3 million metric tons, or MMT, of CO_2e — the equivalent of taking 13.6 million passenger vehicles off the road for one year.[16]

As an additional environmental benefit, ethanol, the most cost-effective octane enhancer available, also displaces some of the toxic elements of gasoline — aromatics such as xylene, toluene, and benzene — thereby reducing particulate matter that negatively impacts air quality in addition to reducing GHG emissions.

We are also producing cellulosic ethanol at multiple facilities. This fuel has a significantly lower CI than starch-based ethanol, which helps us better serve our customers' low-CI needs and competes in low-carbon fuel markets. By extracting additional yield from fiber, we create more value with the same kernel of corn.

Adaptation and Resilience

In partnership with our property insurer, we focus on physical climate risks and actively work to identify and respond to high-exposure areas. Our property insurer offers premium credit to its insurance customers for their efforts to address these risks through projects aimed at improving climate resilience. During each policy period, engineers from our property insurer conduct field visits and provide recommendations in site-specific risk reports. Actionable physical climate risk resilience recommendations are often included. We then work to close these recommendations on a priority basis. Recommendations can include things such as structural improvements to increase snow-load capacity and wind resistance.

Our Emergency Response Plans for all of our operational sites detail the procedures for emergency scenarios, including adverse weather events.



15. https://www.epa.gov/renewable-fuel-standard-program
16. https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

FIVE-YEAR GHG PERFORMANCE[17]

Green Plains Performance Data	Unit of Measurement	2025	2024	2023	2022	2021
Direct GHG Emissions (Scope 1)	Thousand MT CO_2e	1,112	1,256	1,205	1,252	1,098
Carbon Dioxide (CO_2)	Thousand MT	1,111	1,255	1,203	1,251	1,096
Methane (CH_4)	Thousand MT CO_2e	0.594	0.665	0.570	0.596	0.519
Nitrous Oxide (N_2O)	Thousand MT CO_2e	0.591	0.670	0.722	0.779	0.631
Indirect GHG Emissions (Scope 2 - Location Based)	Thousand MT CO_2e	302	353	366	357	338
CO_2	Thousand MT	301	350	364	355	336
CH_4	Thousand MT CO_2e	0.840	1.018	0.949	0.928	0.893
N_2O	Thousand MT CO_2e	1.140	1.405	1.616	1.608	1.536
Indirect GHG Emissions (Scope 2 - Market Based)	Thousand MT CO_2e	173				
Total Biogenic GHG Emissions	Thousand MT CO_2	1,868	2,361	2,344	2,441	2,101
Biogenic GHG Emissions (CO_2 from Fermentation)	Thousand MT CO_2	1,915	2,361	2,344	2,441	2,101
Biogenic GHG Emissions (Carbon Capture)	Thousand MT CO_2	-47				
Total Operational GHG Emissions (Scope 1, Scope 2, and Biogenic)	Thousand MT CO_2e	3,153	3,970	3,915	4,050	3,537
Operational Emissions Intensity	MT of CO_2e/Raw Material MT	0.480	0.540	0.533	0.528	0.536
Indirect GHG Emissions (Scope 3)	Thousand MT CO_2e	1,885	2,408	2,533	2,849	2,342
Category 1 (Purchased Goods and Services)	Thousand MT CO_2e	1,490	1,951	1,954	2,128	1,751
Category 2 (Capital Goods)	Thousand MT CO_2e	7.8	21.2	29.9	47.6	45.4
Category 3 (Fuel- and Energy-Related Activities Not Included in Scopes 1 or 2)	Thousand MT CO_2e	209	228	344	463	345
Category 4 (Upstream Transportation and Distribution)	Thousand MT CO_2e	50	50	50	52	45
Category 7 (Employee Commuting)	Thousand MT CO_2e	1.9	2.4	2.2	2.3	2.4
Category 9 (Downstream Transportation and Distribution)	Thousand MT CO_2e	58	80	78	78	87
Category 11 (Use of Sold Products)	Thousand MT CO_2e	67.82	75.02	74.54	77.32	66.50

17. Our Scopes 1, 2, 3, and biogenic emissions are calculated using a GHG Inventory Management Plan based on GHG Protocol standards and rules. We primarily use consumption data along with commonly accepted and publicly available emission factors to calculate our relevant emissions. We use a grid/location-based method of converting purchased electricity into GHG emissions. For Scope 3 emissions: Category 1 consists primarily of the corn we purchase; Category 2 is our capital goods purchases such as plant equipment; Category 3 is the upstream emissions from Scopes 1 and 2 energy-related activities; Category 4 is the upstream transportation and distribution associated with the corn we process; Category 7 is emissions from our employee commuting; Category 9 is all of the downstream transportation and distribution associated with all of our products produced from corn; and Category 11 is use of sold products, such as the combustion of the non-biogenic portion of denatured ethanol blended in gasoline in internal combustion engines.

Additional Information

A glossary of terms, as well as additional context for the sustainability disclosure contained in this report, is provided on the following pages.

Additional Information

28 Acronyms and Abbreviations

29 IFRS S2 Climate-Related Disclosures Index

42 Apex Letters

49 Forward-Looking Statements



Acronyms and Abbreviations

APS	Announced Pledges Scenario
BECCS	Bioenergy with Carbon Capture and Storage
CapEx	Capital Expenditures
CCS	Carbon Capture and Storage
CDR	Carbon Dioxide Removal
CFPC	Clean Fuel Production Credit
CI	Carbon Intensity
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
EPA	Environmental Protection Agency
ESG	Environmental, Social, and Governance
EU	European Union
GHG	Greenhouse Gas
GREET	Greenhouse Gases, Regulated Emissions and Energy Use in Transportation
IEA	International Energy Agency
IFRS	International Financial Reporting Standards
IPCC	Intergovernmental Panel on Climate Change
ISCC	International Sustainability and Carbon Certification
ISS	Institutional Shareholder Services
LCFS	Low Carbon Fuel Standard
MMBtu	Metric Million British Thermal Unit
MSC™	Maximized Stillage Co-Products™
MSCI	Morgan Stanley Capital International
MT	Metric Tons
PAC	Political Action Committee
Q&A	Question and Answer
R&D	Research and Development
RCP	Representative Concentration Pathway
S&P	Standard and Poor's
SBTi	Science Based Targets initiative
SEC	Securities and Exchange Commission
STEPS	Stated Policies Scenario
TCFD	Task Force on Climate-related Financial Disclosures
UN	United Nations



IFRS S2 Climate-Related Disclosures Index

This index is based on the International Financial Reporting Standards (IFRS) S2 Climate-Related Disclosures issued in June 2023.

Disclosure Number	Sub-topic	Location or Response
IFRS S2-6	**To achieve this objective, an entity shall disclose information about:**	
	(a) The governance body(s) (which can include a Board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities. Specifically, the entity shall identify that body(s) or individual(s) and disclose information about:	Governance and Risk Management — Board Oversight and Management Oversight, **pages 4-6** *2026 Proxy Statement*: Corporate Governance — Board Oversight — Sustainability Oversight, **page 32**
	(i) How responsibilities for climate-related risks and opportunities are reflected in the terms of reference, mandates, role descriptions and other related policies applicable to that body(s) or individual(s)	Governance and Risk Management — Board Oversight and Management Oversight, **pages 4-6**
	(ii) How the body(s) or individual(s) determines whether appropriate skills and competencies are available or will be developed to oversee strategies designed to respond to climate-related risks and opportunities	Governance and Risk Management — Board Oversight and Management Oversight, **pages 4-6**
	(iii) How and how often the body(s) or individual(s) is informed about climate-related risks and opportunities	Governance and Risk Management — Board Oversight and Management Oversight, **pages 4-6**
	(iv) How the body(s) or individual(s) takes into account climate-related risks and opportunities when overseeing the entity's strategy, its decisions on major transactions and its risk management processes and related policies, including whether the body(s) or individual(s) has considered trade-offs associated with those risks and opportunities	Governance and Risk Management — Board Oversight and Management Oversight, **pages 4-6**; Strategy — Adjusting Our Business Model, **page 8**
	(v) How the body(s) or individual(s) oversees the setting of targets related to climate-related risks and opportunities, and monitors progress towards those targets (see paragraphs 33–36), including whether and how related performance metrics are included in remuneration policies (see paragraph 29(g))	Governance and Risk Management — Board Oversight, Compensation Committee, **page 4**
	(b) Management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities, including information about:	Governance and Risk Management — Management Oversight, **pages 4-6**
	(i) Whether the role is delegated to a specific management-level position or management-level committee and how oversight is exercised over that position or committee	Governance and Risk Management — Management Oversight, **pages 4-6**
	(ii) Whether management uses controls and procedures to support the oversight of climate-related risks and opportunities and, if so, how these controls and procedures are integrated with other internal functions	Governance and Risk Management — Management Oversight, **pages 4-6**

Strategy

The objective of climate-related financial disclosures on strategy is to enable users of general purpose financial reports to understand an entity's strategy for managing climate-related risks and opportunities.

Disclosure Number	Sub-topic	Location or Response
Climate-related risks and opportunities		
IFRS S2-10	**An entity shall disclose information that enables users of general purpose financial reports to understand the climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects. Specifically, the entity shall:**	
	(a) Describe climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**; and Opportunities, **pages 12-13** *2025 Form 10-K:* Item 1A. Risk Factors — Risks Related to our Business and Industry, **pages 15-26**
	(b) Explain, for each climate-related risk the entity has identified, whether the entity considers the risk to be a climate-related physical risk or climate-related transition risk	Strategy — Risks, **pages 10-11**
	(c) Specify, for each climate-related risk and opportunity the entity has identified, over which time horizons — short, medium or long term — the effects of each climate-related risk and opportunity could reasonably be expected to occur	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**; and Opportunities, **pages 12-13**
	(d) Explain how the entity defines 'short term', 'medium term' and 'long term' and how these definitions are linked to the planning horizons used by the entity for strategic decision-making	Strategy — Climate Scenario Analysis, **page 9**
Business model and value chain		
IFRS S2-13	**An entity shall disclose information that enables users of general purpose financial reports to understand the current and anticipated effects of climate-related risks and opportunities on the entity's business model and value chain. Specifically, the entity shall disclose:**	
	(a) A description of the current and anticipated effects of those climate-related risks and opportunities on the entity's business model and value chain	Strategy — Adjusting Our Business Model, **page 8**; Risks, **pages 10-11**; and Opportunities, **pages 12-13** *2025 Form 10-K:* Item 1A. Risk Factors — Risks Related to our Business and Industry, **pages 15-26**
	(b) A description of where in the entity's business model and value chain climate-related risks and opportunities are concentrated (for example, geographical areas, facilities and types of assets)	Strategy — Adjusting Our Business Model, **page 8**; Climate Risks and Possible Financial Impacts, **page 11**

Strategy and decision-making		
IFRS S2-14	**An entity shall disclose information that enables users of general purpose financial reports to understand the effects of climate-related risks and opportunities on its strategy and decision-making. Specifically, the entity shall disclose:**	
	(a) Information about how the entity has responded to, and plans to respond to, climate-related risks and opportunities in its strategy and decision-making, including how the entity plans to achieve any climate-related targets it has set and any targets it is required to meet by law or regulation. Specifically, the entity shall disclose information about:	Strategy — Adjusting Our Business Model, **page 8**; Metrics and Targets, **pages 15-26**
	(i) Current and anticipated changes to the entity's business model, including its resource allocation, to address climate-related risks and opportunities (for example, these changes could include plans to manage or decommission carbon-, energy- or water-intensive operations; resource allocations resulting from demand or supply-chain changes; resource allocations arising from business development through capital expenditure or additional expenditure on research and development; and acquisitions or divestments)	Strategy — Adjusting Our Business Model, **page 8**; Metrics and Targets, **pages 15-26**
	(ii) Current and anticipated direct mitigation and adaptation efforts (for example, through changes in production processes or equipment, relocation of facilities, workforce adjustments, and changes in product specifications)	Strategy — Adjusting Our Business Model, **page 8**; Metrics and Targets, **pages 15-26**
	(iii) Current and anticipated indirect mitigation and adaptation efforts (for example, through working with customers and supply chains)	Strategy — Adjusting Our Business Model, **page 8**; Metrics and Targets, **pages 15-26**
	(iv) Any climate-related transition plan the entity has, including information about key assumptions used in developing its transition plan, and dependencies on which the entity's transition plan relies	Green Plains has not yet published a climate transition plan.
	(v) How the entity plans to achieve any climate-related targets, including any GHG emissions targets, described in accordance with paragraphs 33–36	Strategy — Adjusting Our Business Model, **page 8**; Metrics and Targets, **pages 15-26**
	(b) Information about how the entity is resourcing, and plans to resource, the activities disclosed in accordance with paragraph 14(a)	Metrics and Targets — Investing to Decarbonize, **page 17**
	(c) Quantitative and qualitative information about the progress of plans disclosed in previous reporting periods in accordance with paragraph 14(a)	Metrics and Targets, **pages 15-26**

Financial position, financial performance and cash flows		
IFRS S2-15	**An entity shall disclose information that enables users of general purpose financial reports to understand:**	
	(a) The effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period (current financial effects)	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(b) The anticipated effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows over the short, medium and long term, taking into consideration how climate-related risks and opportunities are included in the entity's financial planning (anticipated financial effects)	Strategy — Adjusting Our Business Model, **page 8**; Climate Risks and Possible Financial Impacts, **page 11** *2025 Form 10-K:* Item 1A. Risk Factors — Risks Related to our Business and Industry, **pages 15-26**
IFRS S2-16	**Specifically, an entity shall disclose quantitative and qualitative information about:**	
	(a) How climate-related risks and opportunities have affected its financial position, financial performance and cash flows for the reporting period	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(b) The climate-related risks and opportunities identified in paragraph 16(a) for which there is a significant risk of a material adjustment within the next annual reporting period to the carrying amounts of assets and liabilities reported in the related financial statements	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(c) How the entity expects its financial position to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities, taking into consideration:	Strategy — Adjusting Our Business Model, **page 8**; Climate Risks and Possible Financial Impacts, **page 11** *2025 Form 10-K:* Item 1A. Risk Factors — Risks Related to our Business and Industry, **pages 15-26**
	(i) Its investment and disposal plans (for example, plans for capital expenditure, major acquisitions and divestments, joint ventures, business transformation, innovation, new business areas, and asset retirements), including plans the entity is not contractually committed to	Strategy — Adjusting Our Business Model, **page 8**; Climate Risks and Possible Financial Impacts, **page 11** *2025 Form 10-K:* Item 1A. Risk Factors — Risks Related to our Business and Industry, **pages 15-26**
	(ii) Its planned sources of funding to implement its strategy	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(d) How the entity expects its financial performance and cash flows to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities (for example, increased revenue from products and services aligned with a lower-carbon economy; costs arising from physical damage to assets from climate events; and expenses associated with climate adaptation or mitigation)	Strategy — Adjusting Our Business Model, **page 8**; Climate Risks and Possible Financial Impacts, **page 11** *2025 Form 10-K:* Item 1A. Risk Factors — Risks Related to our Business and Industry, **pages 15-26**

IFRS S2-21	**If an entity determines that it need not provide quantitative information about the current or anticipated financial effects of a climate-related risk or opportunity applying the criteria set out in paragraphs 19–20, the entity shall:**	
	(a) Explain why it has not provided quantitative information	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(b) Provide qualitative information about those financial effects, including identifying line items, totals and subtotals within the related financial statements that are likely to be affected, or have been affected, by that climate-related risk or opportunity	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(c) Provide quantitative information about the combined financial effects of that climate-related risk or opportunity with other climate-related risks or opportunities and other factors unless the entity determines that quantitative information about the combined financial effects would not be useful	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
Climate resilience		
IFRS S2-22	**An entity shall disclose information that enables users of general purpose financial reports to understand the resilience of the entity's strategy and business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities. The entity shall use climate-related scenario analysis to assess its climate resilience using an approach that is commensurate with the entity's circumstances (see paragraphs B1–B18). In providing quantitative information, the entity may disclose a single amount or a range. Specifically, the entity shall disclose:**	
	(a) The entity's assessment of its climate resilience as at the reporting date, which shall enable users of general purpose financial reports to understand:	Strategy, **pages 7-14**
	(i) The implications, if any, of the entity's assessment for its strategy and business model, including how the entity would need to respond to the effects identified in the climate-related scenario analysis	Strategy, **pages 7-14**
	(ii) The significant areas of uncertainty considered in the entity's assessment of its climate resilience	Strategy, **pages 7-14**
	(iii) The entity's capacity to adjust or adapt its strategy and business model to climate change over the short, medium and long term, including:	Strategy, **pages 7-14**
	(1) The availability of, and flexibility in, the entity's existing financial resources to respond to the effects identified in the climate-related scenario analysis, including to address climate-related risks and to take advantage of climate-related opportunities	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(2) The entity's ability to redeploy, repurpose, upgrade or decommission existing assets	Strategy, **pages 7-14**
	(3) The effect of the entity's current and planned investments in climate-related mitigation, adaptation and opportunities for climate resilience	Strategy — Adjusting Our Business Model, **page 8**; Metrics and Targets, **pages 15-26**

IFRS S2-22	**An entity shall disclose information that enables users of general purpose financial reports to understand the resilience of the entity's strategy and business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities. The entity shall use climate-related scenario analysis to assess its climate resilience using an approach that is commensurate with the entity's circumstances (see paragraphs B1–B18). In providing quantitative information, the entity may disclose a single amount or a range. Specifically, the entity shall disclose:**	
	(b) How and when the climate-related scenario analysis was carried out, including:	Strategy — Climate Scenario Analysis, **page 9**
	(i) Information about the inputs the entity used, including:	
	(1) Which climate-related scenarios the entity used for the analysis and the sources of those scenarios	Strategy — Climate Scenario Analysis, **page 9**
	(2) Whether the analysis included a diverse range of climate-related scenarios	Strategy — Climate Scenario Analysis, **page 9**
	(3) Whether the climate-related scenarios used for the analysis are associated with climate-related transition risks or climate-related physical risks	Strategy — Climate Scenario Analysis, **page 9**
	(4) Whether the entity used, among its scenarios, a climate-related scenario aligned with the latest international agreement on climate change	Strategy — Climate Scenario Analysis, **page 9**
	(5) Why the entity decided that its chosen climate-related scenarios are relevant to assessing its resilience to climate-related changes, developments or uncertainties	Strategy — Climate Scenario Analysis, **page 9**
	(6) The time horizons the entity used in the analysis	Strategy — Climate Scenario Analysis, **page 9**
	(7) What scope of operations the entity used in the analysis (for example, the operating locations and business units used in the analysis)	About This Report, **page 2**; Strategy — Climate Scenario Analysis, **page 9**

IFRS S2-22	**An entity shall disclose information that enables users of general purpose financial reports to understand the resilience of the entity's strategy and business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities. The entity shall use climate-related scenario analysis to assess its climate resilience using an approach that is commensurate with the entity's circumstances (see paragraphs B1–B18). In providing quantitative information, the entity may disclose a single amount or a range. Specifically, the entity shall disclose:**	
	(ii) The key assumptions the entity made in the analysis, including assumptions about:	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**; and Opportunities, **pages 12-13**
	(1) Climate-related policies in the jurisdictions in which the entity operates	Strategy — Climate Scenario Analysis, **page 9**
	(2) Macroeconomic trends	Strategy — Climate Scenario Analysis, **page 9**
	(3) National- or regional-level variables (for example, local weather patterns, demographics, land use, infrastructure and availability of natural resources)	Strategy — Climate Scenario Analysis, **page 9**
	(4) Energy usage and mix	Strategy — Climate Scenario Analysis, **page 9**
	(5) Developments in technology	Strategy — Climate Scenario Analysis, **page 9**
	(iii) The reporting period in which the climate-related scenario analysis was carried out (see paragraph B18)	April 2025

Risk Management

The objective of climate-related financial disclosures on risk management is to enable users of general purpose financial reports to understand an entity's processes to identify, assess, prioritize, and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process.

Disclosure Number	Sub-topic	Location or Response
IFRS S2-25	**To achieve this objective, an entity shall disclose information about:**	
	(a) The processes and related policies the entity uses to identify, assess, prioritise and monitor climate-related risks, including information about:	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**
	(i) The inputs and parameters the entity uses (for example, information about data sources and the scope of operations covered in the processes)	About This Report, **page 2**; Strategy — Climate Scenario Analysis, **page 9**
	(ii) Whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related risks	Strategy — Climate Scenario Analysis, **page 9**
	(iii) How the entity assesses the nature, likelihood and magnitude of the effects of those risks (for example, whether the entity considers qualitative factors, quantitative thresholds or other criteria)	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**
	(iv) Whether and how the entity prioritises climate-related risks relative to other types of risk	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**
	(v) How the entity monitors climate-related risks	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**
	(vi) Whether and how the entity has changed the processes it uses compared with the previous reporting period	No changes have occurred compared to the previous reporting period.
	(b) The processes the entity uses to identify, assess, prioritise and monitor climate-related opportunities, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**; and Opportunities, **pages 12-13**
	(c) The extent to which, and how, the processes for identifying, assessing, prioritising and monitoring climate-related risks and opportunities are integrated into and inform the entity's overall risk management process	Strategy — Climate Scenario Analysis, **page 9**; Risks, **pages 10-11**; and Opportunities, **pages 12-13**

Metrics and Targets

The objective of climate-related financial disclosures on metrics and targets is to enable users of general purpose financial reports to understand an entity's performance in relation to its climate-related risks and opportunities, including progress toward any climate-related targets it has set, and any targets it is required to meet by law or regulation.

Disclosure Number	Sub-topic	Location or Response
IFRS S2-28	**To achieve this objective, an entity shall disclose:**	
	(a) Information relevant to the cross-industry metric categories (see paragraphs 29–31)	Governance and Risk Management — Political Advocacy Disclosure, **page 6** *2023 Sustainability Report:* Planet — Water Management, Natural Capital and Land Stewardship, **pages 36-42**; Frameworks — Biofuels Standard from SASB, **page 78-79**
	(b) Industry-based metrics that are associated with particular business models, activities or other common features that characterise participation in an industry (see paragraph 32)	Governance and Risk Management — Political Advocacy Disclosure, **page 6** *2023 Sustainability Report:* Planet — Water Management, Natural Capital and Land Stewardship, **pages 36-42**; Frameworks — Biofuels Standard from SASB, **page 78-79**
	(c) Targets set by the entity, and any targets it is required to meet by law or regulation, to mitigate or adapt to climate-related risks or take advantage of climate-related opportunities, including metrics used by the governance body or management to measure progress towards these targets (see paragraphs 33–37)	Metrics and Targets, **pages 15-26**
Climate resilience		
IFRS S2-29	**An entity shall disclose information relevant to the cross-industry metric categories of:**	
	(a) Greenhouse gases — the entity shall:	
	(i) Disclose its absolute gross GHG emissions generated during the reporting period, expressed as metric tonnes of CO_2 equivalent (see paragraphs B19–B22), classified as:	Metrics and Targets — GHG Performance Data, **page 26**
	(1) Scope 1 GHG emissions	Metrics and Targets — GHG Performance Data, **page 26**
	(2) Scope 2 GHG emissions	Metrics and Targets — GHG Performance Data, **page 26**
	(3) Scope 3 GHG emissions	Metrics and Targets — GHG Performance Data, **page 26**
	(ii) Measure its GHG emissions in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) unless required by a jurisdictional authority or an exchange on which the entity is listed to use a different method for measuring its GHG emissions (see paragraphs B23–B25)	Additional Information — Apex Letter, **page 42-48**

IFRS S2-29	An entity shall disclose information relevant to the cross-industry metric categories of:	
	(iii) Disclose the approach it uses to measure its GHG emissions (see paragraphs B26–B29) including:	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**
	(1) The measurement approach, inputs and assumptions the entity uses to measure its GHG emissions	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**
	(2) The reason why the entity has chosen the measurement approach, inputs and assumptions it uses to measure its GHG emissions	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**
	(3) Any changes the entity made to the measurement approach, inputs and assumptions during the reporting period and the reasons for those changes	No changes were made to the measurement approach and inputs during the reporting period.
	(iv) For Scope 1 and Scope 2 GHG emissions disclosed in accordance with paragraph 29(a)(i)(1)–(2), disaggregate emissions between:	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**
	(1) The consolidated accounting group (for example, for an entity applying IFRS Accounting Standards, this group would comprise the parent and its consolidated subsidiaries)	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**
	(2) Other investees excluded from paragraph 29(a)(iv)(1) (for example, for an entity applying IFRS Accounting Standards, these investees would include associates, joint ventures and unconsolidated subsidiaries)	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**
	(v) For Scope 2 GHG emissions disclosed in accordance with paragraph 29(a)(i)(2), disclose its location-based Scope 2 GHG emissions, and provide information about any contractual instruments that is necessary to inform users' understanding of the entity's Scope 2 GHG emissions (see paragraphs B30–B31)	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**
	(vi) For Scope 3 GHG emissions disclosed in accordance with paragraph 29(a)(i)(3), and with reference to paragraphs B32–B57, disclose:	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**
	(1) The categories included within the entity's measure of Scope 3 GHG emissions, in accordance with the Scope 3 categories described in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)	Metrics and Targets — GHG Performance Data, **page 26**; Additional Information — Apex Letter, **page 42-48**

IFRS S2-29	**An entity shall disclose information relevant to the cross-industry metric categories of:**	
	(2) Additional information about the entity's Category 15 GHG emissions or those associated with its investments (financed emissions), if the entity's activities include asset management, commercial banking or insurance (see paragraphs B58–B63)	Not applicable
	(b) Climate-related transition risks — the amount and percentage of assets or business activities vulnerable to climate-related transition risks	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(c) Climate-related physical risks — the amount and percentage of assets or business activities vulnerable to climate-related physical risks	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(d) Climate-related opportunities — the amount and percentage of assets or business activities aligned with climate-related opportunities	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(e) Capital deployment — the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities	Green Plains does not disclose this information. To the extent that such disclosures become legally required, we intend to comply.
	(f) Internal carbon prices — the entity shall disclose:	
	(i) An explanation of whether and how the entity is applying a carbon price in decision-making (for example, investment decisions, transfer pricing and scenario analysis)	Green Plains does not use internal carbon prices.
	(ii) The price for each metric tonne of GHG emissions the entity uses to assess the costs of its GHG emissions	Green Plains does not use internal carbon prices.
	(g) Remuneration — the entity shall disclose:	
	(i) A description of whether and how climate-related considerations are factored into executive remuneration (see also paragraph 6(a)(v))	Governance and Risk Management — Board Oversight, Compensation Committee, **page 4**
	(ii) The percentage of executive management remuneration recognised in the current period that is linked to climate-related considerations	Governance and Risk Management — Board Oversight, Compensation Committee, **page 4**
IFRS S2-32	**An entity shall disclose industry-based metrics that are associated with one or more particular business models, activities or other common features that characterise participation in an industry. In determining the industry-based metrics that the entity discloses, the entity shall refer to and consider the applicability of the industry-based metrics associated with disclosure topics described in the *Industry-based Guidance on Implementing IFRS S2.***	Governance and Risk Management — Political Advocacy Disclosure, **page 6** *2023 Sustainability Report:* Planet — Water Management, Natural Capital and Land Stewardship, **pages 36-42**; Frameworks — Biofuels Standard from SASB, **page 78-79**

Climate-related targets		
IFRS S2-33	**An entity shall disclose the quantitative and qualitative climate-related targets it has set to monitor progress towards achieving its strategic goals, and any targets it is required to meet by law or regulation, including any GHG emissions targets. For each target, the entity shall disclose:**	
	(a) The metric used to set the target (see paragraphs B66–B67)	Metrics and Targets, **pages 15-26**
	(b) The objective of the target (for example, mitigation, adaptation or conformance with science-based initiatives)	Metrics and Targets, **pages 15-26**
	(c) The part of the entity to which the target applies (for example, whether the target applies to the entity in its entirety or only a part of the entity, such as a specific business unit or specific geographical region)	Metrics and Targets — Targets, **pages 16-17**
	(d) The period over which the target applies	Metrics and Targets — Targets, **pages 16-17**
	(e) The base period from which progress is measured	Metrics and Targets — Targets, **pages 16-17**
	(f) Any milestones and interim targets	Metrics and Targets — Targets, **pages 16-17**
	(g) If the target is quantitative, whether it is an absolute target or an intensity target	Metrics and Targets — Targets, **pages 16-17**
	(h) How the latest international agreement on climate change, including jurisdictional commitments that arise from that agreement, has informed the target	Metrics and Targets — Targets, **pages 16-17**
IFRS S2-34	**An entity shall disclose information about its approach to setting and reviewing each target, and how it monitors progress against each target, including:**	
	(a) Whether the target and the methodology for setting the target has been validated by a third party	Metrics and Targets — Targets, **pages 16-17**
	(b) The entity's processes for reviewing the target	Governance and Risk Management — Board Oversight and Management Oversight, **pages 4-5**
	(c) The metrics used to monitor progress towards reaching the target	Metrics and Targets — Pathway to Net-Zero, Progress to Date and GHG Performance Data, **pages 20-26**
	(d) Any revisions to the target and an explanation for those revisions	Metrics and Targets — Targets, **pages 16-17**
IFRS S2-35	**An entity shall disclose information about its performance against each climate-related target and an analysis of trends or changes in the entity's performance.**	Metrics and Targets — Pathway to Net-Zero, Progress to Date and GHG Performance Data, **pages 20-26**

IFRS S2-36	**For each GHG emissions target disclosed in accordance with paragraphs 33–35, an entity shall disclose:**	
	(a) Which GHG are covered by the target	Metrics and Targets — Targets, **pages 16-17**
	(b) Whether Scope 1, Scope 2 or Scope 3 GHG emissions are covered by the target	Metrics and Targets — Targets, **pages 16-17**
	(c) Whether the target is a gross GHG emissions target or net GHG emissions target. If the entity discloses a net GHG emissions target, the entity is also required to separately disclose its associated gross GHG emissions target (see paragraphs B68–B69)	Metrics and Targets — Targets, **pages 16-17**
	(d) Whether the target was derived using a sectoral decarbonisation approach	Metrics and Targets — Targets, **pages 16-17**
	(e) The entity's planned use of carbon credits to offset GHG emissions to achieve any net GHG emissions target. In explaining its planned use of carbon credits the entity shall disclose information including, and with reference to paragraphs B70–B71:	Metrics and Targets — Pathway to Net-Zero, **page 18-19**
	(i) The extent to which, and how, achieving any net GHG emissions target relies on the use of carbon credits	Metrics and Targets — Pathway to Net-Zero, **page 18-19**
IFRS S2-36	**For each GHG emissions target disclosed in accordance with paragraphs 33–35, an entity shall disclose:**	
	(ii) Which third-party scheme(s) will verify or certify the carbon credits	Not applicable
	(iii) The type of carbon credit, including whether the underlying offset will be nature-based or based on technological carbon removals, and whether the underlying offset is achieved through carbon reduction or removal	Not applicable
	(iv) Any other factors necessary for users of general purpose financial reports to understand the credibility and integrity of the carbon credits the entity plans to use (for example, assumptions regarding the permanence of the carbon offset)	Not applicable

Apex Letters

INDEPENDENT LIMITED ASSURANCE STATEMENT

To: The Stakeholders of Green Plains Inc.

Introduction and Objectives of Work

Apex Companies, LLC (Apex) has been engaged by Green Plains Inc. to provide limited assurance of its Health and Safety, Production, Energy, Air Pollutants, Water Withdrawal, Water Discharge, Waste, and Social data for 2024 ("Subject Matter"). This assurance statement applies to the Subject Matter included within the scope of work described below.

This information and its presentation are the sole responsibility of the management of Green Plains Inc. Our sole responsibility was to provide independent assurance on the accuracy of the Subject Matter.

Scope of Work
The scope of our work was limited to assurance of the metrics listed above for the period January 1, 2024, to December 31, 2024. The metrics assured by Apex are included in the attached table.

Data and information supporting Health and Safety, Production, Energy, Air Pollutants, Water Withdrawals, Water Discharge, Waste, and Social data were primarily historical in nature.

Reporting Boundaries
The following are the boundaries used by Green Plains Inc. for reporting sustainability data:

- Operational Control
- United States
- Bioethanol production sites

Reporting Criteria
Reporting criteria include the following:

- 2021 GRI Sustainability Reporting Standards
- OSHA definitions and requirements for injuries and reporting
- Company-specific criteria for reporting of Production and Production Systems

Limitations and Exclusions
Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period;
- Material outside the scope of work.

This limited assurance engagement relies on a risk-based selected sample of sustainability data and the associated limitations that this entails. The reliability of the reported data is dependent on the accuracy of metering and other production measurement arrangements employed at site level, not addressed as part of this assurance. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

Responsibilities
The preparation and presentation of the Subject Matter are the sole responsibility of the management of Green Plains Inc.

Apex was not involved in the development of the Subject Matter or of the Reporting Criteria. Our responsibilities were to:

- obtain limited assurance about whether the Subject Matter has been prepared in accordance with the Reporting Criteria;
- form an independent conclusion based on the assurance procedures performed and evidence obtained; and
- report our conclusions to the Stakeholders of Green Plains Inc.

Assessment Standards
We performed our work in accordance with Apex's standard procedures and guidelines for external Assurance of Sustainability Reports and International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board. A materiality threshold of ±5 percent was set for the assurance process.

Summary of Work Performed
As part of our independent assurance, our work included:

1. Assessing the appropriateness of the Reporting Criteria for the Subject Matter;
2. Querying information and data related to the Subject Matter from relevant personnel;
3. Reviewing the data collection and consolidation processes used to compile Subject Matter, including assessing assumptions made, and the data scope and reporting boundaries;
4. Reviewing documentary evidence provided by relevant personnel; and,
5. Agreeing a selection of the Subject Matter to the corresponding source documentation.

Conclusion
On the basis of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the Subject Matter is not fairly stated in all material respects; and,
- It is our opinion that Green Plains Inc. has established appropriate systems for the collection, aggregation and analysis of quantitative data.

Statement of Independence, Integrity and Competence
Apex is an independent professional services company that specializes in Health, Safety, Social and Environmental management services including assurance with over 30 years history in providing these services.

Apex has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

No member of the assurance team has a business relationship with Green Plains Inc., its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, and has over 20 years combined experience in this field and an excellent understanding of Apex's standard methodology for the assurance of sustainability data.

Mary E. Armstrong-Friberg, Lead Assuror
ESG Senior Program Manager
Cleveland, Ohio

Scott Johnston, Technical Reviewer
ESG Principal Consultant
Doral, Florida

August 26, 2025

This assurance statement, including the opinion expressed herein, is provided to Green Plains Inc. and is solely for the benefit of Green Plains Inc. in accordance with the terms of our agreement. We consent to the release of this statement to the public or other organizations but without accepting or assuming any responsibility or liability on our part to any other party who may have access to this declaration.

APEX

Data Subject to Assurance (Calendar Year 2024)

Green Plains Inc.	Units	Value[1]
Production		
Corn Bushels Consumed	Metric Tons	7,352,520
Corn Oil Yield	Lbs per bushel	1.00
Production Systems		
Number of Maximized Stillage Co-products (MSCTM) systems in operation at production facilities	Count	6
Air Emissions		
Sulfur Dioxide	Thousand Metric Tons	0.076
Nitrogen Oxides	Thousand Metric Tons	0.462
Volatile Organic Compounds	Thousand Metric Tons	0.594
Carbon Monoxide	Thousand Metric Tons	0.355
Particulate Matter	Thousand Metric Tons	0.368
Electricity Usage[2]		
Electricity Usage	Thousand MWh	779.28
Electricity Use Intensity	kWh/metric tons of raw material	105.988
Natural Gas Usage[2]		
Natural Gas Usage	MMBTU	23,601,284
Natural Gas Use Intensity	MMBTU/metric tons of raw material	3.201
Water Usage		
Groundwater Withdrawals	Thousand m^3	8,664
Municipal Water Withdrawals	Thousand m^3	1,911
Reclaimed Water Withdrawals	Thousand m^3	310
Saltwater Withdrawals	Thousand m^3	0
Surface Water Withdrawals	Thousand m^3	0
Total Water Withdrawals	Thousand m^3	10,885
Total Water Discharged	Thousand m^3	3,923
Total Water Usage	Thousand m^3	6,962
Total Water Use Intensity	m^3/metric tons of raw material	0.947
Environmental Compliance		
Number of Sites	Count	10
Number of Federally Reportable Spills	Count	0
Volume of Federally Reportable Spills	Liters	0
Number of Environmental Fines	Count	2
Amount of Environmental Fines	USD	$27,929
Employee Retention		
Full-Time (Male)	Count	720
Part-Time (Male)	Count	9
Total (Male)	Count	729
Full-Time (Female)	Count	170
Part-Time (Female)	Count	4
Total (Female)	Count	174

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APEX

Employee Turnover		
All	%	24
Male	%	76
Female	%	24
Under 30	%	31
30-50	%	47
Over 50	%	22
Employee Compensation		
Ratio of average new employee wage to the federal minimum wage	Ratio	4.37
Diversity[2]		
Male	Total Number (%)	729 (80.7)
Female	Total Number (%)	174 (19.3)
Under 30	Total Number (%)	206 (22.8)
30-50	Total Number (%)	443 (49.1)
Over 50	Total Number (%)	254 (28.1)
Caucasian/White	Total Number (%)	806 (89.3)
Hispanic/Latin American	Total Number (%)	38 (4.2)
American Indian/Alaskan Native	Total Number (%)	5 (0.6)
Asian	Total Number (%)	12 (1.3)
Native Hawaiian or Other Pacific Islander	Total Number (%)	0 (0)
Black or African American	Total Number (%)	27 (3.0)
Two or More Races	Total Number (%)	15 (1.7)
Unspecified	Total Number (%)	0 (0)
Training and Education		
Production	Average hours/employee	52
Production - Male	Average hours/employee	52
Production - Female	Average hours/employee	53
Corporate	Average hours/employee	8
Corporate - Male	Average hours/employee	8
Corporate - Female	Average hours/employee	8
Health and Safety		
Fatalities	Total Number	0
Lost Time Incidents	Total Number	3
Lost Time Incident Rate	Incidents per 200,000 hours worked	0.32
Recordable Incidents	Total Number	11
Recordable Incident Rate	Incidents per 200,000 hours worked	1.18
Hours Worked	Total Number	1,859,108
Waste		
Hazardous Waste Disposal	Thousand Metric Tons	0.050
Non-Hazardous Waste Diverted from Disposal – Reuse Total	Thousand Metric Tons	2.366
Non-Hazardous Waste Diverted from Disposal – Recycle Total	Thousand Metric Tons	0.248

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Non-Hazardous Waste Disposal – Incineration Total	Thousand Metric Tons	0.000
Non-Hazardous Waste Disposal – Landfill Total	Thousand Metric Tons	6.167
Total Waste Generated	Thousand Metric Tons	8.831

[1]Values are for period CY 2024 unless otherwise specified

[2]These values may be impacted by rounding

[3]tCO_2e is an abbreviation of metric tons of carbon dioxide equivalent

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INDEPENDENT LIMITED ASSURANCE STATEMENT

To: The Stakeholders of Green Plains Inc.

Introduction and Objectives of Work

Apex Companies, LLC (Apex) has been engaged by Green Plains Inc. to provide limited assurance of its Greenhouse Gas (GHG) emissions (Scope 1, Scope 2 [location-based], Scope 3 [Purchased Goods and Services, Capital Goods, Fuel and Energy-Related Activities, Upstream Transportation and Distribution, Employee Commuting, Downstream Transportation and Distribution, Use of Sold Products], and Biogenic emissions for 2024 ("Subject Matter"). This assurance statement applies to the Subject Matter included within the scope of work described below.

This information and its presentation are the sole responsibility of the management of Green Plains Inc. Our sole responsibility was to provide independent assurance on the accuracy of the Subject Matter.

Scope of Work

The scope of our work was limited to assurance of the metrics listed above for the period January 1, 2024, to December 31, 2024. The metrics assured by Apex are included in the attached table.

Data and information supporting GHG emissions (Scope 1, Scope 2 [location-based], Scope 3, Biogenic) were primarily historical in nature.

Reporting Boundaries

The following are the boundaries used by Green Plains Inc. for reporting sustainability data:

- Operational Control
- United States
- Bioethanol production sites

Reporting Criteria

Reporting criteria include the following:

- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard (Scope 1 and 2)
- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol GHG Protocol Corporate Value Chain Accounting and Reporting Standard (Scope 3)

Limitations and Exclusions

Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period;
- Material outside the scope of work;
- Fugitive GHG emissions from refrigerants (de minimis); and,
- Optimal Fish Food, Bio-Process Algae, Fuel Stations (8), and Green Plains' Omaha, Nebraska Headquarters facility.

This limited assurance engagement relies on a risk-based selected sample of sustainability data and the associated limitations that this entails. The reliability of the reported data is dependent on the accuracy of metering and other production measurement arrangements employed at site level, not addressed as part of this assurance. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

Responsibilities
The preparation and presentation of the Subject Matter are the sole responsibility of the management of Green Plains Inc.

Apex was not involved in the development of the Subject Matter or of the Reporting Criteria. Our responsibilities were to:

- obtain limited assurance about whether the Subject Matter has been prepared in accordance with the Reporting Criteria;
- form an independent conclusion based on the assurance procedures performed and evidence obtained; and
- report our conclusions to the Stakeholders of Green Plains Inc.

Assessment Standards
We performed our work in accordance with Apex's standard procedures and guidelines for external Assurance of Sustainability Reports and International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board. GHG emissions were verified in accordance with ISO 14064-3: Second edition 2019-04: *Greenhouse gases -- Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements*. A materiality threshold of ±5 percent was set for the assurance process.

Summary of Work Performed
As part of our independent assurance, our work included:

1. Assessing the appropriateness of the Reporting Criteria for the Subject Matter;
2. Querying information and data related to the Subject Matter from relevant personnel;
3. Reviewing the data collection and consolidation processes used to compile Subject Matter, including assessing assumptions made, and the data scope and reporting boundaries;
4. Reviewing documentary evidence provided by relevant personnel; and,
5. Agreeing a selection of the Subject Matter to the corresponding source documentation.

Conclusion
On the basis of our methodology and the activities described above:

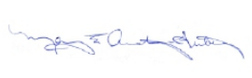
- Nothing has come to our attention to indicate that the Subject Matter is not fairly stated in all material respects; and,
- It is our opinion that Green Plains Inc. has established appropriate systems for the collection, aggregation and analysis of quantitative data.

Statement of Independence, Integrity and Competence
Apex is an independent professional services company that specializes in Health, Safety, Social and Environmental management services including assurance with over 30 years history in providing these services.

Apex has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

No member of the assurance team has a business relationship with Green Plains Inc., its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, and has over 20 years combined experience in this field and an excellent understanding of Apex's standard methodology for the assurance of sustainability data.





Mary E. Armstrong-Friberg, Lead Assuror
ESG - Senior Program Manager
Cleveland, Ohio

Scott Johnston, Technical Reviewer
ESG Principal Consultant
Doral, Florida

August 19, 2025

This assurance statement, including the opinion expressed herein, is provided to Green Plains Inc. and is solely for the benefit of Green Plains Inc. in accordance with the terms of our agreement. We consent to the release of this statement to the public or other organizations but without accepting or assuming any responsibility or liability on our part to any other party who may have access to this declaration.

Data Subject to Assurance

Green Plains Inc.	Units	Value[1]
GHG Emissions[2]		
Scope 1	Thousand tCO_2e[3]	1,256
CO_2	Thousand tCO_2	1,255
CH4	Thousand tCO_2e	0.665
N2O	Thousand tCO_2e	0.670
Scope 2 (Location-Based)	Thousand tCO_2e	353
CO_2	Thousand tCO_2	350
CH4	Thousand tCO_2e	1.018
N2O	Thousand tCO_2e	1.405
Biogenic	Thousand tCO_2e	2,361
Total Operating GHG Emissions (Scopes 1, 2, and Biogenic)	Thousand tCO_2e	3,970
Total Operating GHG Emissions Intensity	tCO_2e/ton of raw material	0.540
Scope 3: Purchased Goods and Services[4]	Thousand tCO_2e	1,951
Scope 3: Capital Goods	Thousand tCO_2e	21
Scope 3: Fuel and Energy-Related Activities	Thousand tCO_2e	228
Scope 3: Upstream Transportation and Distribution	Thousand tCO_2e	50
Scope 3: Employee Commuting	Thousand tCO_2e	2
Scope 3: Downstream Transportation and Distribution	Thousand tCO_2e	80
Scope 3: Use of Sold Products	Thousand tCO_2e	75

[1]Values are for period CY 2024 unless otherwise specified

[2]These values may be impacted by rounding

[3]tCO_2e is an abbreviation of metric tons of carbon dioxide equivalent

[4]Scope 3 – Purchased Goods and Services includes only purchased corn, estimated at 75-80% of total company spend

INDEPENDENT ASSURANCE STATEMENT

To: The Stakeholders of Green Plains Inc.

Introduction and Objectives of Work

Apex Companies, LLC (Apex) has been engaged by Green Plains Inc. to provide reasonable assurance of its Greenhouse Gas (GHG) emissions (Scope 1 and Scope 2 [location-based and market-based] and limited assurance of its Scope 3 [Purchased Goods and Services, Capital Goods, Fuel and Energy-Related Activities, Upstream Transportation and Distribution, Employee Commuting, Downstream Transportation and Distribution, Use of Sold Products] and Biogenic GHG emissions for 2025 ("Subject Matter"). This assurance statement applies to the Subject Matter included within the scope of work described below.

This information and its presentation are the sole responsibility of the management of Green Plains Inc. Our sole responsibility was to provide independent assurance on the accuracy of the Subject Matter.

Scope of Work
The scope of our work was limited to assurance of the metrics listed above for the period January 1, 2025, to December 31, 2025. The metrics assured by Apex are included in the attached table.

Data and information supporting GHG emissions (Scope 1, Scope 2 [location-based and market-based], Scope 3, Biogenic) were primarily historical in nature.

Reporting Boundaries
The following are the boundaries used by Green Plains Inc. for reporting sustainability data:

- Operational Control
- United States
- Bioethanol production sites

Reporting Criteria
Reporting criteria include the following:

- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard (Scopes 1 and 2)
- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol GHG Protocol Corporate Value Chain Accounting and Reporting Standard (Scope 3)

Limitations and Exclusions
Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period;
- Material outside the scope of work;
- Fugitive GHG emissions from refrigerants (de minimis); and,
- Fuel Stations (1), and Green Plains' Omaha, Nebraska Headquarters facility.

This reasonable/limited assurance engagement relies on a risk-based selected sample of sustainability data and the associated limitations that this entails. The reliability of the reported data is dependent on the accuracy of metering and other production measurement arrangements employed at site level, not addressed as part of this assurance. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

Responsibilities
The preparation and presentation of the Subject Matter are the sole responsibility of the management of Green Plains Inc.

Apex was not involved in the development of the Subject Matter or of the Reporting Criteria. Our responsibilities were to:

- obtain limited assurance about whether the Subject Matter has been prepared in accordance with the Reporting Criteria;
- form an independent conclusion based on the assurance procedures performed and evidence obtained; and
- report our conclusions to the Stakeholders of Green Plains Inc.

Assessment Standards
We performed our work in accordance with Apex's standard procedures and guidelines for external Assurance of Sustainability Reports and International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board. GHG emissions were verified in accordance with ISO 14064-3: Second edition 2019-04: *Greenhouse gases -- Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements.* A materiality threshold of ±5 percent was set for the assurance process.

Summary of Work Performed
As part of our independent assurance, our work included:

1. Assessing the appropriateness of the Reporting Criteria for the Subject Matter;
2. Querying information and data related to the Subject Matter from relevant personnel;
3. Reviewing the data collection and consolidation processes used to compile Subject Matter, including assessing assumptions made, and the data scope and reporting boundaries;
4. Reviewing documentary evidence provided by relevant personnel; and,
5. Agreeing a selection of the Subject Matter to the corresponding source documentation.

Conclusion
On the basis of our methodology and the activities described above:

- Green Plains' statement that the Subject Matter related to Scopes 1 and 2 is presented in accordance with the Reporting Criteria and is, in all material respects, fairly stated;
- Nothing has come to our attention to indicate that the Subject Matter related to Scope 3 and Biogenic emissions is not fairly stated in all material respects; and,
- It is our opinion that Green Plains Inc. has established appropriate systems for the collection, aggregation and analysis of quantitative data.

Statement of Independence, Integrity and Competence
Apex is an independent professional services company that specializes in Health, Safety, Social and Environmental management services including assurance with over 30 years history in providing these services.

Apex has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

No member of the assurance team has a business relationship with Green Plains Inc., its Directors or Managers beyond that required of this assignment. We have conducted this verification independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, and has over 20 years combined experience in this field and an excellent understanding of Apex's standard methodology for the assurance of sustainability data.

Mary E. Armstrong-Friberg, Lead Assuror
ESG - Senior Program Manager
Cleveland, Ohio

Scott Johnston, Technical Reviewer
ESG Principal Consultant
Doral, Florida

November 9, 2026

This assurance statement, including the opinion expressed herein, is provided to Green Plains Inc. and is solely for the benefit of Green Plains Inc. in accordance with the terms of our agreement. We consent to the release of this statement to the public or other organizations but without accepting or assuming any responsibility or liability on our part to any other party who may have access to this statement.

APEX

Data Subject to Assurance

Green Plains Inc.	Units	Value[1]
GHG Emissions[2]		
Scope 1	Thousand tCO_2e[3]	1,112
CO_2	Thousand tCO_2	1,111
CH4	Thousand tCO_2e	0.594
N2O	Thousand tCO_2e	0.591
Scope 2 (Location-Based)	Thousand tCO_2e	302
CO_2	Thousand tCO_2	301
CH4	Thousand tCO_2e	0.840
N2O	Thousand tCO_2e	1.14
Scope 2 (Market-Based)	Thousand tCO_2e	173
Total Biogenic GHG Emissions	Thousand tCO_2	1,868
Biogenic GHG Emissions (CO2 from Fermentation)	Thousand tCO_2	1,915
Biogenic GHG Emissions (Carbon Capture)	Thousand tCO_2	-47
Total Operating GHG Emissions (Scopes 1, 2, and Biogenic)	Thousand tCO_2e	3,153
Total Operating GHG Emissions Intensity	tCO_2e/ton of raw material	0.480
Scope 3: Purchased Goods and Services[4]	Thousand tCO_2e	1,490
Scope 3: Capital Goods	Thousand tCO_2e	7.8
Scope 3: Fuel and Energy-Related Activities[5]	Thousand tCO_2e	209
Scope 3: Upstream Transportation and Distribution	Thousand tCO_2e	50
Scope 3: Employee Commuting	Thousand tCO_2e	1.9
Scope 3: Downstream Transportation and Distribution	Thousand tCO_2e	58
Scope 3: Use of Sold Products	Thousand tCO_2e	67.82

[1]Values are for period CY 2025 unless otherwise specified

[2]These values may be impacted by rounding

[3]tCO_2e is an abbreviation of metric tons of carbon dioxide equivalent

[4]Scope 3 – Purchased Goods and Services includes only purchased corn, estimated at 75-80% of total company spend

[5]Scope 3 – Fuel and Energy-Related Activities includes only electricity and natural gas

Forward-Looking Statements

This Climate Report includes forward-looking statements that reflect management's current views of Company performance, industry conditions, and future economic environment. These statements are based on assumptions and various factors that are subject to risks and uncertainties. Green Plains has provided additional information about such risks and uncertainties that could cause actual results to differ materially from those expressed or implied in its reports filed with the SEC. Forward-looking statements are made in accordance with safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on current expectations, which involve a number of risks and uncertainties and do not relate strictly to historical or current facts but rather to plans and objectives for future operations. These statements include words such as "anticipate," "believe," "continue," "estimate," "expect," "intend," "outlook," "plan," "predict," "may," "could," "should," "will," and similar words and phrases as well as statements regarding future operating or financial performance or guidance, business strategy, environment, key trends, and benefits of actual or planned acquisitions. Factors that could cause actual results to differ from those expressed or implied are discussed in our 10-K report under "Risk Factors" or incorporated by reference. Specifically, we may experience fluctuations in future operating results due to a number of economic conditions, including competition in the ethanol industry and other industries in which we operate; commodity market risks, including those that may result from weather conditions; financial market risks; counterparty risks; risks associated with changes to government policy or regulation, including changes to tax laws; risks related to acquisitions and disposition activities and achieving anticipated results; risks associated with merchant trading; risks related to our equity method investees; disruption caused by health epidemics, such as the COVID-19 outbreak; and other factors detailed in reports filed with the SEC. We believe our expectations regarding future events are based on reasonable assumptions; however, these assumptions may not be accurate or account for all risks and uncertainties. Consequently, forward-looking statements are not guaranteed. Actual results may vary materially from those expressed or implied in our forward-looking statements. In addition, we are not obligated and do not intend to update our forward-looking statements as a result of new information unless it is required by applicable securities laws. We caution investors not to place undue reliance on forward-looking statements, which represent management's views as of the date of this report or documents incorporated by reference. This Climate Report also includes estimated projections of future operating results. This information is not fact and should not be relied on as being necessarily indicative of future results; the projections were prepared in good faith by management and are based on numerous assumptions that may prove to be wrong. Important factors that may affect actual results and cause the projections to not be achieved include, but are not limited to, risks and uncertainties relating to the Company and other factors described in the "Risk Factors" section of the Company's Annual Report on Form 10-K. Actual results may differ materially from those contained in the estimates. Accordingly, there can be no assurance that the estimates will be realized. Neither the SEC nor any other regulatory body has assessed the accuracy or adequacy of this Climate Report. Any representation to the contrary is a criminal offense. Except as otherwise indicated, this Climate Report speaks as of the date hereof. The delivery of this Climate Report shall not, under any circumstances, create any implication that there has been no change in the affairs of the Company after the date hereof. Certain information contained herein may be derived from information provided by industry sources. While the Company believes such information is accurate and that the sources from which it was obtained are reliable, it has not independently verified data from these third-party sources.



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