



Green Plains

**ROTH London Conference
Investor Presentation**

June 2020

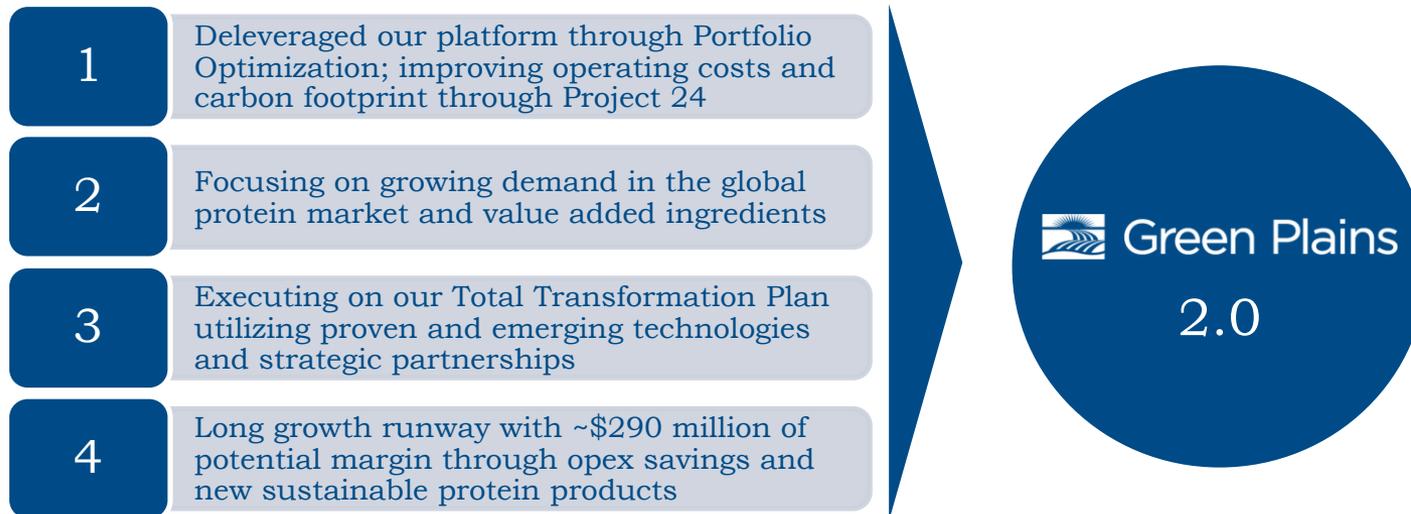
Forward-Looking Statements

This presentation 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 Securities and Exchange Commission. Green Plains is not obligated nor intends to update its forward-looking statements at any time unless it is required by applicable securities laws. Unpredictable or unknown factors not discussed in this presentation could also have material adverse effects on forward-looking statements.

Reinventing Green Plains

Refining our Platform – Building for Growth



2007 – 2017

Expansion

- Expanded from 4 to 17 plants
- Vertical integration up and down the value chain
- Expanded into Cattle and Vinegar

2018 – 2019

Optimization

- Deleveraged B/S by ~\$1B
- Monetized three plants, Fleischmann's Vinegar, 50% of Cattle and JGP Terminal

2020 & Beyond

Transformation

- Leveraging technology and strategic partnerships to reduce expenses, lower carbon footprint and meet rising demand for global proteins and alcohol

Why Green Plains?

Strong Asset Base	<ul style="list-style-type: none">• Tremendous base platform of assets built up over the past 13 years from which to build Green Plains 2.0 from
Proven Track Record	<ul style="list-style-type: none">• Seasoned management team with strong proven track record of managing risk and allocating capital in various cycles
Financial Flexibility	<ul style="list-style-type: none">• Strong balance sheet with ample liquidity and levers available in order to execute on our strategy
Low Cost	<ul style="list-style-type: none">• Executing on Project 24 – to be at or below \$0.24 per gallon of operating costs while reducing our carbon footprint with total savings of ~\$80 million annualized impact upon completion
Value Added Opportunities	<ul style="list-style-type: none">• Executing on protein strategy – where we are unlocking significant margin potential by producing new efficacious feeds for pet and aquaculture ~ growing toward \$150 - \$210 million annualized impact upon completion
Strategic Partnerships	<ul style="list-style-type: none">• Developing strategic partnerships to drive additional value across our platform – driving out costs, reducing carbon footprint and developing better products
Innovation	<ul style="list-style-type: none">• Strong R&D mindset to further diversify products into more stable and more valuable margin streams to be deployed at our biorefineries in the coming years – York Research Facility and Shenandoah Aquaculture Center

Green Plains Today

13 Sustainable biorefineries

\$2.4 Billion revenue in 2019

11 Millions tons of corn processed annually

1.1 Billion gallons biofuel production capacity

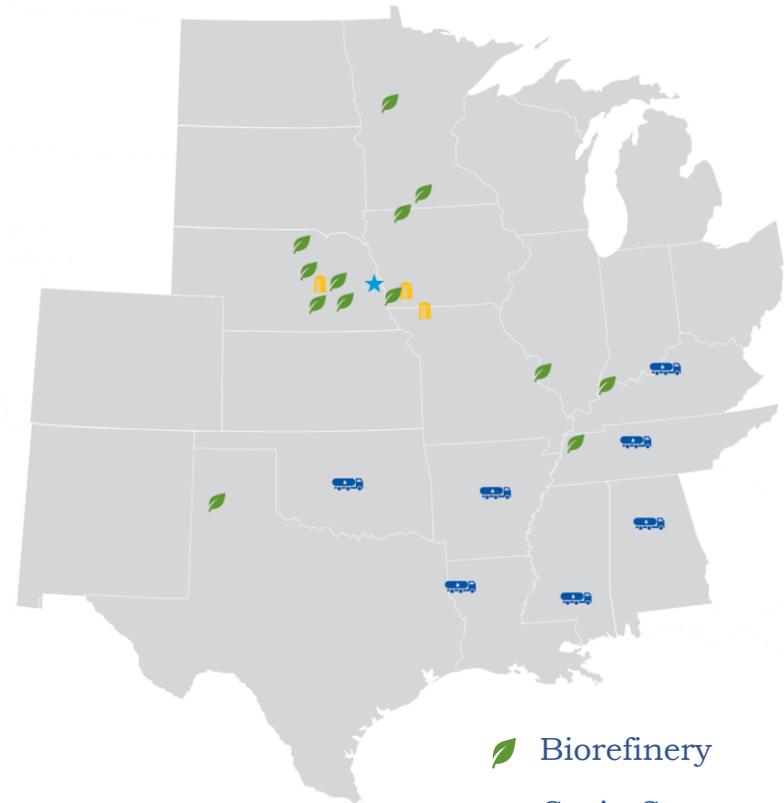
2.9 Million tons of distillers grains

300 Million pounds of corn oil

Transform Toward high value, high protein feed ingredients

1,079 Dedicated employees inclusive of Cattle JV

Strategically Located Assets



-  Biorefinery
-  Grain Storage
-  Fuel Terminal
-  Corporate Headquarters

Transforming Green Plains

- **Concluded Portfolio Optimization & Strengthened our Balance Sheet**
 - Realized ~ \$780 million in proceeds from asset sales over previous six quarters
 - Debt reduced or deconsolidated by nearly \$1 billion
 - Continue to have strong liquidity position with over \$205 million in cash
- **Investing in our Future – Total Transformation Plan**
 - Reducing our operating costs and carbon footprint through Project 24
 - Project 24 on a path to be complete by end of Q3 2020
 - Investing in sustainable high protein and novel feed ingredients
 - Shenandoah shipped first product in April
 - Engineering underway at Wood River
 - Creating sustainable efficacious co-products to drive higher and more resilient margins
 - Aligning protein production and feed strategy through Novozymes partnership, Optimal Aquafeed, and key strategic players

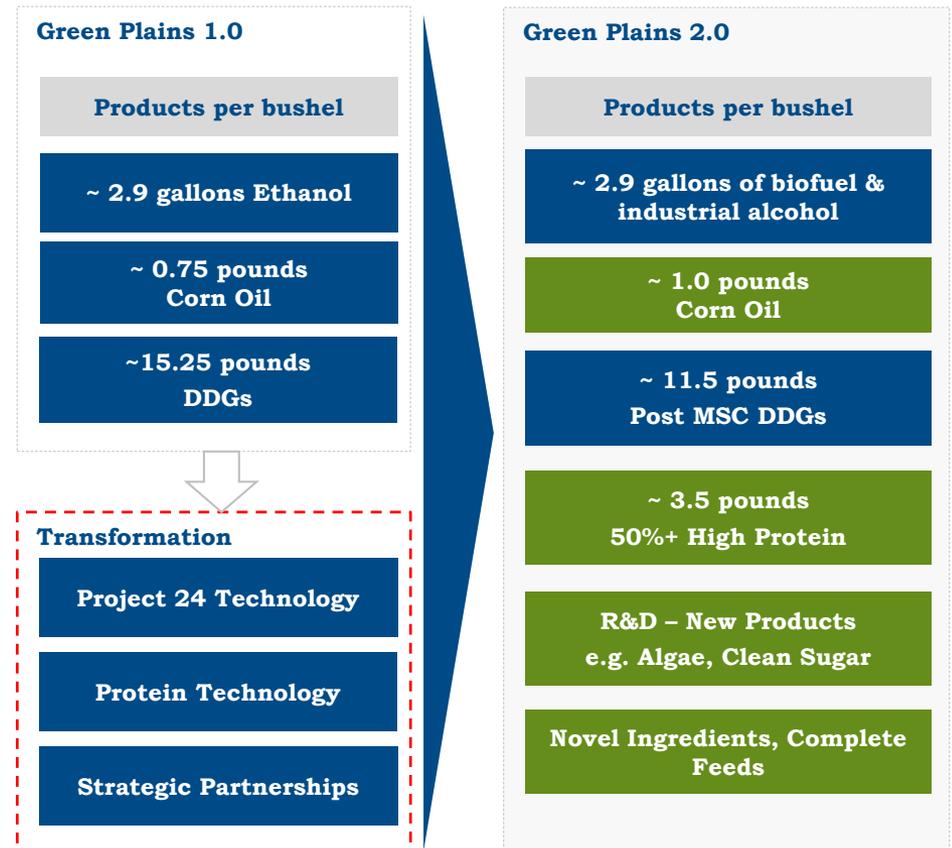
Total Transformation Plan

- **Our processing plants as biorefineries**

- Use mechanical and enzymatic processes to “crack” a commodity into its most valuable components
- Aligned with key technology players through exclusive collaborative partnerships to drive transformation

- **Extracting more value**

- Focus on driving higher values from what we process every day:
 - Lower operating costs
 - Reduced carbon footprint
 - Production of higher protein
 - Better corn oil yields
 - Improved distillers grains
 - Optimizing valued components



Total Transformation - Project 24

- Project 24 captures our goal to be at or below \$0.24 per gallon of operating expenses across the platform
- Developed an exclusive partnership with ICM for technology that will drive operational costs savings, and reduce energy consumption at our non-ICM plants
- Provides a distinct advantage in operational costs and transform Green Plains into a low cost, low carbon, closed loop sustainable biofuels producer
- Anticipate being a top 15% or 20% low cost producer upon completion
- Project 24 will be over 50% complete with the upcoming completion of the Fairmont, MN location
- Capital cost of ~ \$0.09 per gallon with a payback of ~ one year

Wood River OPEX per Gallon
(Illustrative Example)



Sustainability in What We Do

Transforming capabilities and expanding impact



Help meet global renewable transportation fuel needs



Provide less expensive, renewable biofuel alternatives to regular gasoline for consumers¹



Meet the world's growing food and dietary protein demands with high-protein, plant-based feeds



Reduce the need to feed animals to animals and overfish our oceans



Improve the food system to be more secure with healthier livestock and aquacultures



Reduce need to further deforest land for agricultural purposes by using corn sustainably farmed and sourced locally

World class provider of sustainable, high protein and novel feed ingredients, and low carbon, closed loop and sustainable biofuels

8.4 billion gallons of low-carbon fuel produced

33.6 MMT of reduced CO₂ emission

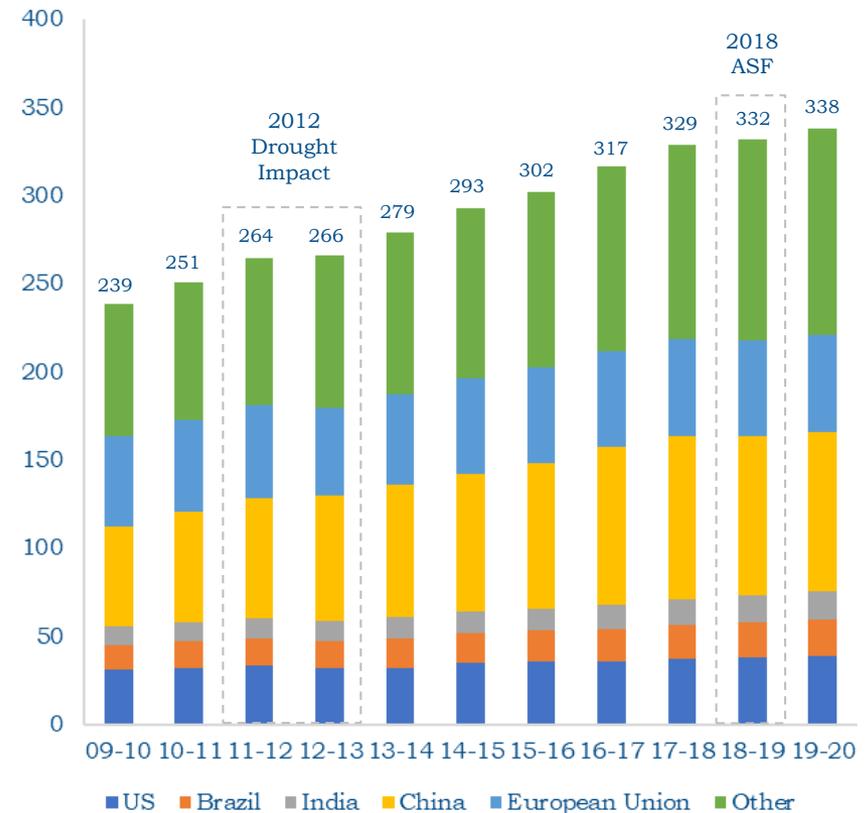
43% lower GHG profile than regular gasoline

50% projected GHG reduction vs. gasoline

Thesis – World Protein Demand is Growing

- World demand in protein is growing across every major sector driven by population growth, economics and availability
- Increase protein production without acreage expansion
- Installed Fluid-Quip Process Technology, Maximized Stillage Co-Products™ System, a bolt-on technology, at our Shenandoah, IA plant
- Produces 50+% protein animal feed ingredients from at least 20% of distillers grains produced today
- At capacity, Green Plains entire platform will produce ~ 0.7 MMT of High Protein

Geographic World Protein Consumption (MMT)



Source – USDA World Protein Report
MMT is defined as million metric tons

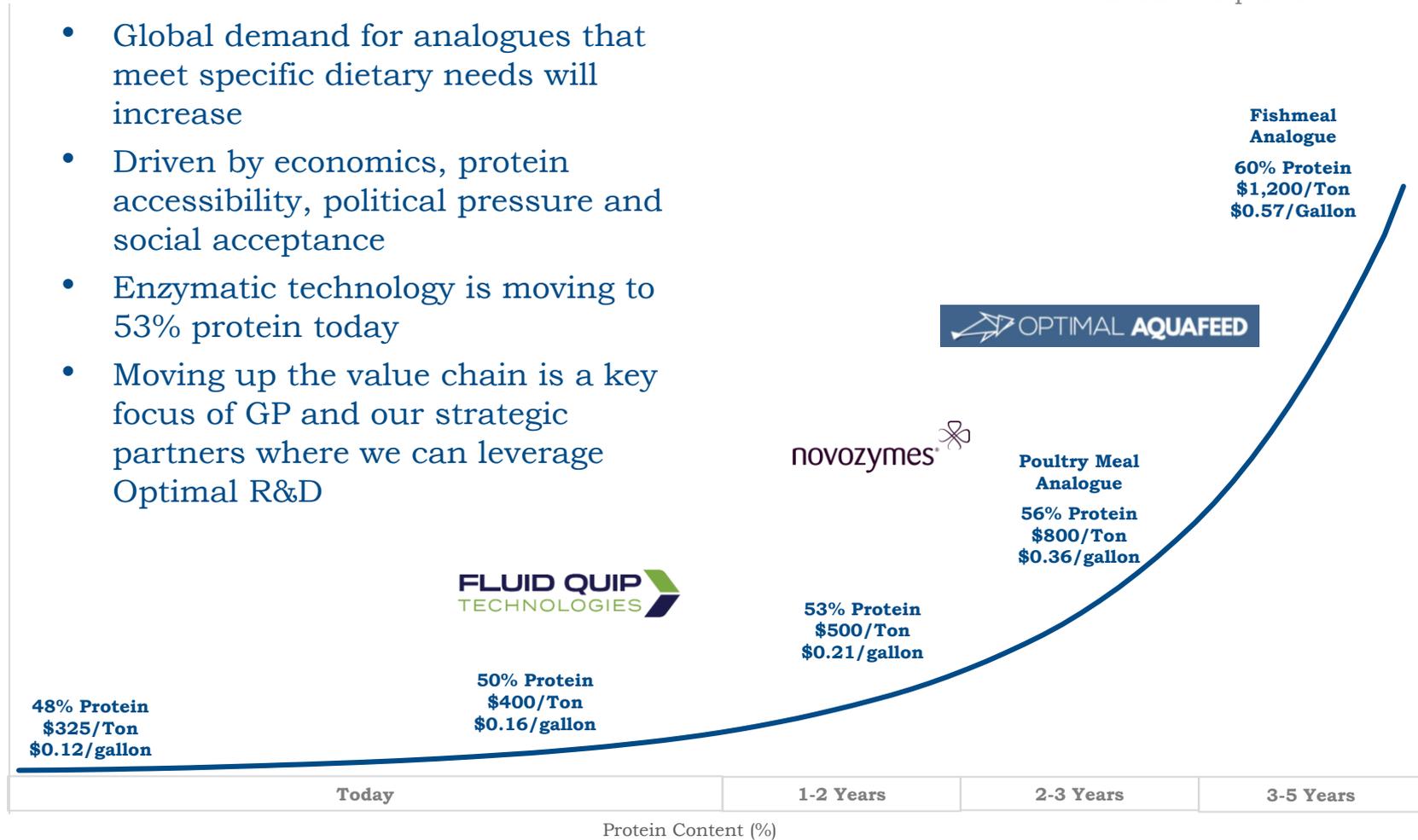
Potential for Higher Margins Enhance Opportunity

J-Curve of Protein Opportunity

Gen II Developments

- Global demand for analogues that meet specific dietary needs will increase
- Driven by economics, protein accessibility, political pressure and social acceptance
- Enzymatic technology is moving to 53% protein today
- Moving up the value chain is a key focus of GP and our strategic partners where we can leverage Optimal R&D

Feed Price (\$ / Ton)



Partnerships that Further Enhance Values



- Exclusive partnership with Novozymes
 - Provides expertise through enzyme and yeast technology
 - Further enhances value by producing feeds that exceed 50% protein content



- Syngenta's Enogen® corn technology improves efficiency of our biorefineries and reduces carbon emissions



- Exclusive partnership with ICM to improve plant operations and efficiencies through Project 24



- Installed Fluid Quip Technologies patented Maximized Stillage Co-Products (MSC™) system for high protein feed production at our Shenandoah location

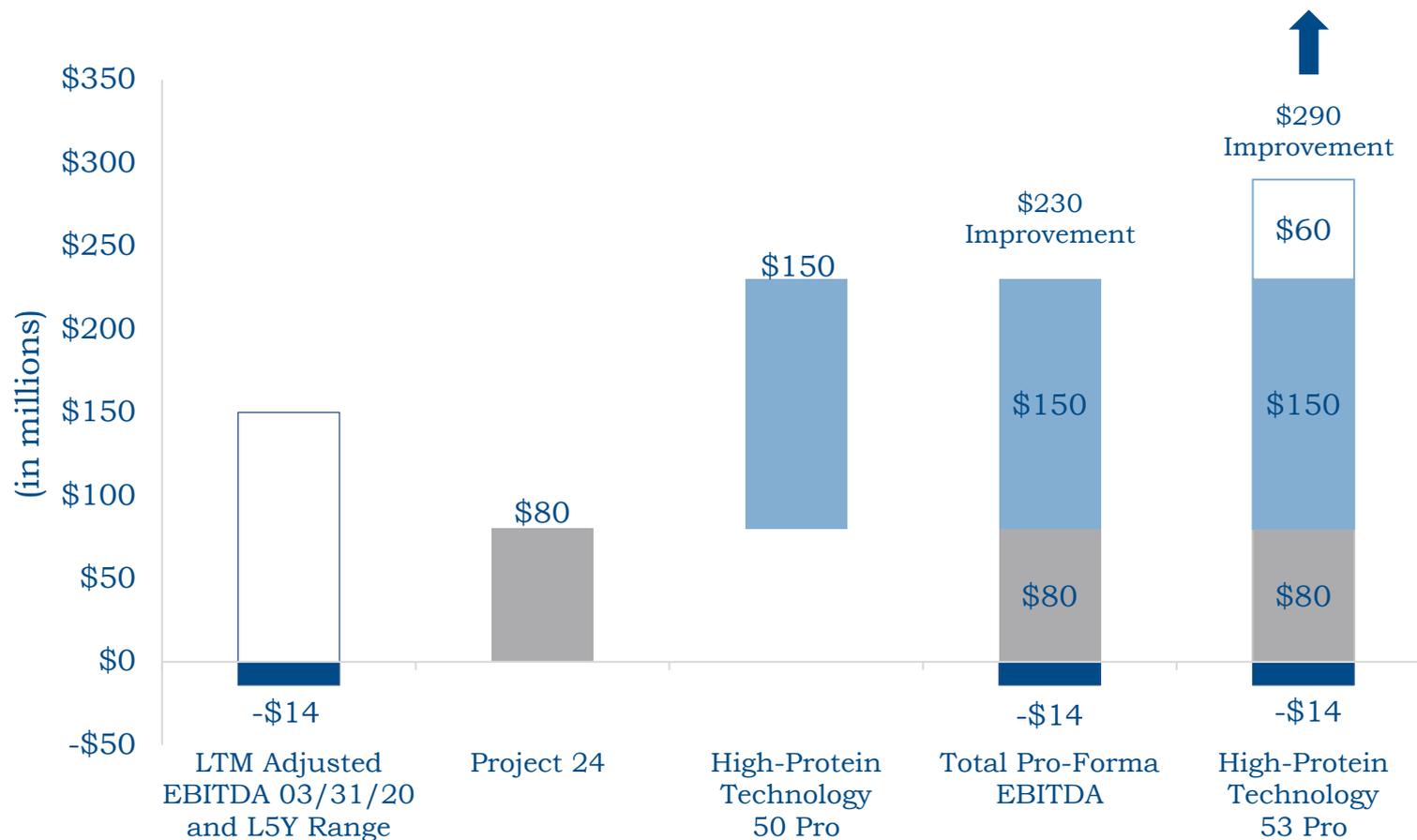


- Optimal Aquafeed
 - Focused on specialty feed ingredients for the aquaculture market - one of the most sustainable and efficient sources of animal protein for human consumption
 - Leveraging world-class aqualab in Shenandoah to prove value of our product while establishing valuable customer/producer relationships

**PREMIER SUPPLIER to
PET FOOD INDUSTRY**

- Partnership with premier raw material supplier to the pet food industry for nearly all of Shenandoah's high protein production

Significant Margin Potential Exists From Project 24 and High-Protein Technology



Assumptions:

- Assets produce at 90% of capacity on 1.123 billion gallons
- Project 24 with operating expense of \$0.24/gallon across the platform
- Crush margin lift of \$0.15/gallon for high-protein technology at base 50 Pro; \$0.21/gallon at 53 Pro
- Project 24 ~ \$60 million & High-Protein ~ \$350 - \$450 million of capital investment based on 13 ethanol plants

Tailwinds in Washington Regulatory Policy

2020 Renewable Volume Obligations

- 15 billion gallons = 15 billion gallons
- Continue to watch EPA after 10th Circuit Court ruling

Higher Blends

- \$100s of millions in USDA funding for higher blends
- E15 available year round
- Potential for EPA to allow E15 through E10 infrastructure
- Working with the EPA to improve the labeling for E15

Trade

- Expect 1.1 – 1.5 billion gallons of exports in 2020
- Phase I Trade Agreement could lead to higher exports to China

EPA Delivers On President Trump's Promise To Allow Year-Round Sale Of E15 Gasoline And Improve Transparency In Renewable Fuel Markets

(WASHINGTON May 31, 2019)

EPA Fulfills Another Trump Administration Promise: Finalizes RFS Volumes for 2020 and Biomass Based Diesel Volumes for 2021

(WASHINGTON, Dec 19, 2019)

Court forces U.S. EPA to reconsider three refinery biofuel waivers

(Reuters - Jan 24, 2020)

USDA Announces \$100 Million for American Biofuels Infrastructure

(Washington, D.C., May 4, 2020)

Tailwinds Driving Demand Through Higher Blends

- E15 sold in 30 states at 2,180 retail stations as of May, 2020¹
- Expect 2,350 sites by the end of 2020¹
- \$100s of millions of USDA infrastructure funding to accelerate rollout
- EPA reviewing E15 through E10 infrastructure and labeling
- Automakers approve the use of E15 in more than 90% of 2020 models²

US Retail Stations Selling E15⁽¹⁾



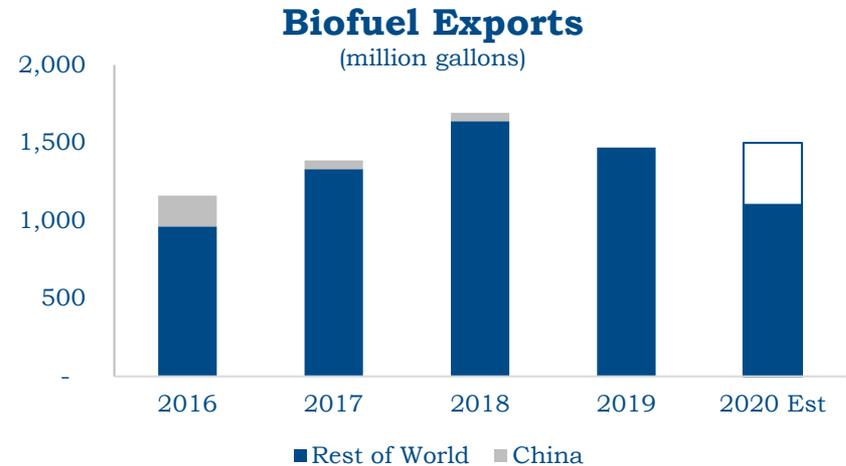
1) Source: Growth Energy as of May, 2020

2) Source: Based on analysis by RFA

Tailwinds Expanding Export Markets

Biofuel Exports

- Cleaner air, higher octane
- Anticipate 1.1 - 1.5 billion gallons of exports in 2020 without China demand
- Brazil and Canada accounted for ~45% of exports
- China could take gallons in 2020



Distillers Exports

- 10.8 million metric tons of DDGs exported in 2019, or ~25% of production
- Mexico, Vietnam, South Korea and Thailand accounted for ~41% of exports
- Anticipate exports to be similar in 2020 as China comes back into the market



Source: USDA Foreign Agriculture Service and Company estimates

In Closing

- 1 Tremendous base platform to build upon for creating Green Plains 2.0
- 2 Seasoned management with proven track record to manage risk and allocate capital
- 3 Strong balance sheet with ample liquidity and numerous levers to manage volatility
- 4 Executing on Project 24 to reduce operating expenses and carbon footprint
- 5 Executing on protein strategy, unlocking significant margin potential
- 6 Aligned with strategic partners to create additional value across our platform
- 7 Strong R&D capabilities for developing new value-added products with upside potential



Green Plains

2.0



Green Plains

Green Plains Inc. | NASDAQ: GPRE | www.gpreinc.com

Green Plains Partners LP | NASDAQ: GPP | www.greenplainspartners.com