



Crop Science Field
Technology Showcase

Fields of Opportunity



August 11, 2022

Bayer Investor Relations





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Guidance at constant currencies, not including portfolio divestitures if not mentioned differently.



Event Agenda

Le Meridien Hotel, St. Louis/Clayton and Jerseyville Agronomy Center

August 11th, 2022

6:30 am/ 7:00 am	<i>Breakfast</i> <i>Welcome at Le Meridien</i>	Oliver Maier/Laura Meyer	Hotel - Le Meridien Ballroom
7:05 am	Opening Comments, Executive Leadership Panel Q&A	Rodrigo Santos, Bob Reiter, Jeremy Williams, Frank Terhorst, Kelly Gast	
7:45 am	<i>Break</i>		
8:00 am	<i>Travel to Jerseyville - Discovery Engines Videos</i>		Buses waiting outside hotel
9:15 am (2 hrs 40 min)	Rotating Field Stops – Sustainable Full System Solutions <ul style="list-style-type: none"> Transforming Corn Production, featuring the Smart Corn System Leading in LATAM Soybean Production Solutions Next-Generation Technology for NA Soybean Growers Enhancing Sustainability and Productivity in Cotton and Advancing Wheat through Genetics and Disease Mgmt. 	John Chambers, Tom Eickhoff, Kelly Gillespie, Luis Offa, Marcio Santos, Santiago Schiappacasse Jennifer Ralston, Rachel Rama, Ty Vaughn Scott Bollman, Jessica Christiansen Frank Goehlich, JD Rossouw	Jerseyville Agronomy Center
12:00 pm	LATAM Customer Experience	Cristian Dalben, Jose Perilla	
12:45 pm	Closing Comments	Rodrigo Santos	
1:00 pm	<i>Lunch</i>		
1:30 pm	<i>End of Day</i>		Buses depart for STL Airport/Hotel – Le Meridien



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Crop Science Executive Leadership Panel





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President,
Crop Science Division



Robert Reiter, Ph.D.

Head of R&D,
Crop Science Division



Jeremy Williams, Ph.D.

Head of Climate LLC and
Digital Farming Solutions



Frank Terhorst

Head of Strategy,
Crop Science Division



Kelly Gast

CFO,
Crop Science Division



Vision / Health For All, Hunger For None



> Win by being more grower centric

Purpose: Shaping agriculture for the benefit of farmers, consumers and the planet

Pillars:

- // Operational Excellence
- // World Class Innovation
- // Digital Transformation
- // New Standards in Sustainability

Strategic Ambition

Perform:

Grow above market and deliver strong returns

Transform:

Achieve 100% digitally enabled sales by 2030

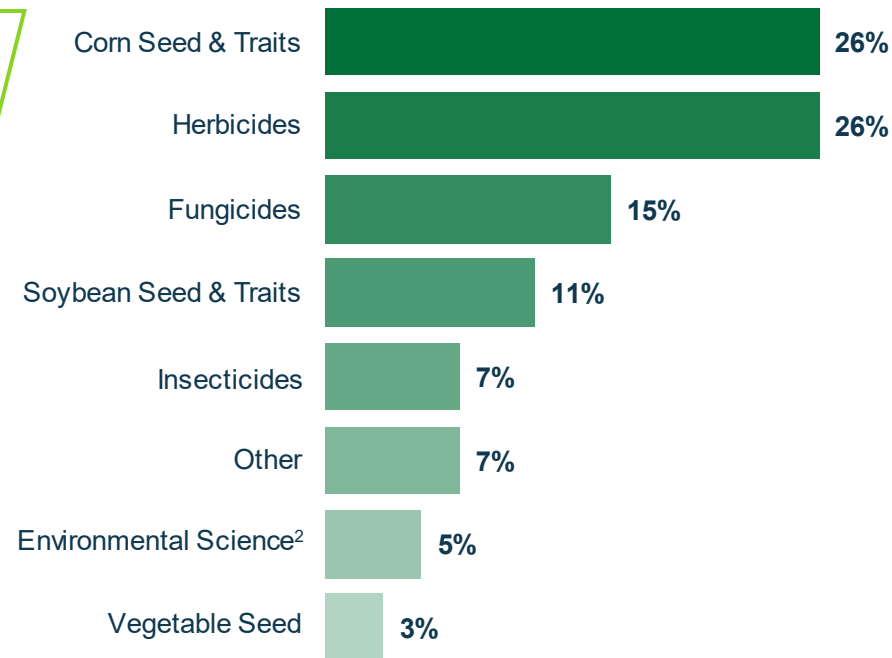


Growers Worldwide Recognize the Value We Deliver

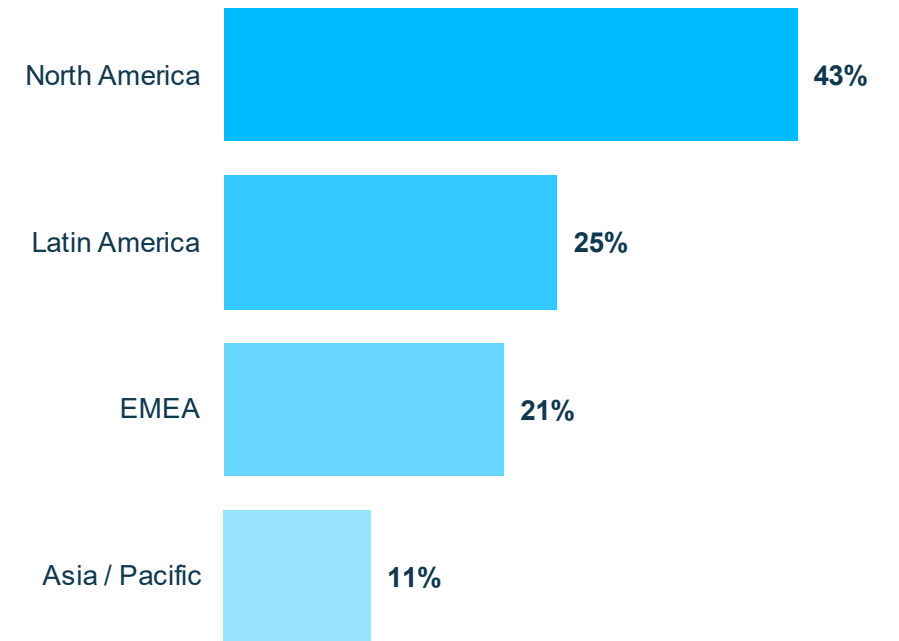
#1 in Seed & Traits Sales with Leading Crop Protection Portfolio in €100bn Global Ag Input Market

Bayer Crop Science 2021 Sales (€20.2bn)

Sales by Product Line



Sales by Region



#1 Market Position

Corn Seed & Traits
Herbicides
Soybean Seed & Traits

#2 Market Position

Fungicides
Vegetable Seed

#3 Market Position

Insecticides

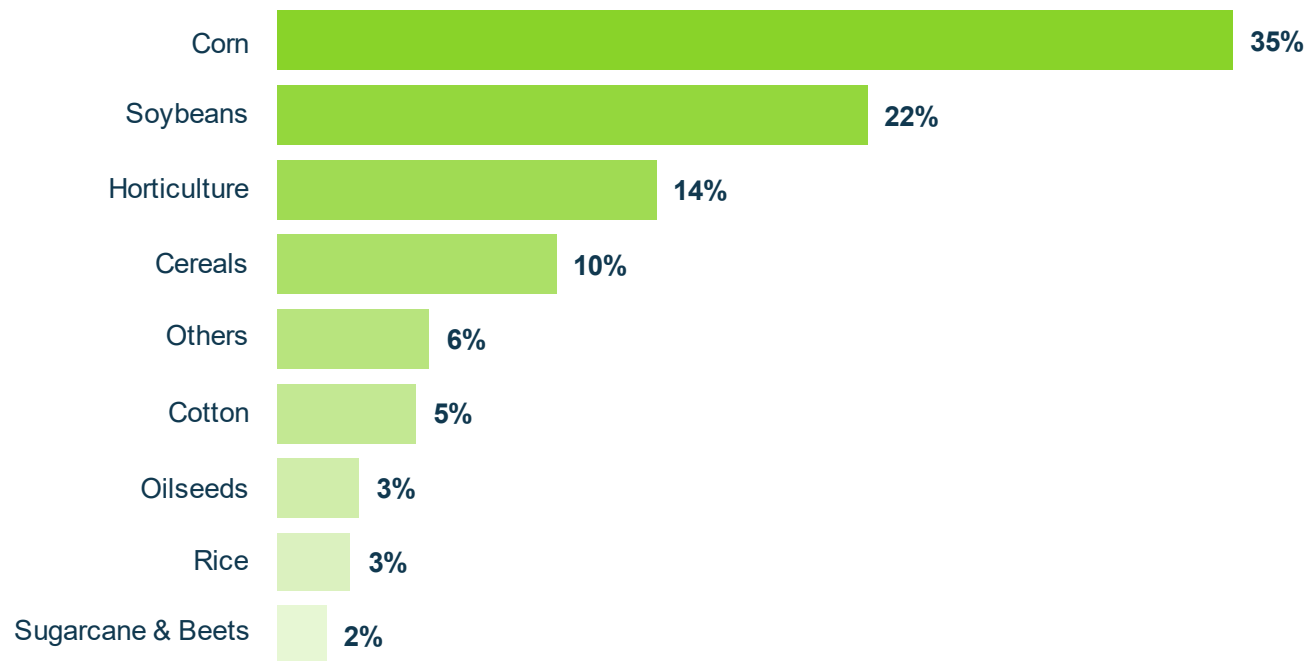
¹ Source: Company estimates. Market positions based on 2021 data; ² announced definitive agreement to sell Environmental Science Professional business in March, 2022



Supporting Growers Globally in High Value, Broad Acre Crops

Bayer Crop Science 2021 Sales¹

Sales by Crop Served



¹ Source: Company estimates. Based on 2021 data, excluding Environmental Science sales. Crop protection sales allocated to crops where they are applied. "Others" includes digital farming solutions, non-commercial crops, and non-identified crops.





Corn, Soybean & Cotton Seed Share Unmatched

Broad Licensing of Germplasm and Biotech Traits Expands Reach to ~330m Acres Annually; Underpins >€2bn Annual Licensing Revenue in Crop Science

United States #1 Market Position



Corn

Market (acres)

~93m

Seed Share

>55%



Soybean

~87m

~40%



Cotton

~11m

~65%

Mexico #1 Market Position



Corn

Market (acres)

~5m

Seed Share

>65%²

South Africa #1 Market Position



Corn

Market (acres)

~6m

Seed Share

~70%

Europe #2 Market Position



Corn

Market (acres)

~60m

Seed Share

~20%

Brazil #1 Market Position



Corn

Market (acres)

~50m

Seed Share

~30%

Argentina #1 Market Position



Corn

Market (acres)

~20m

Seed Share

~60%²

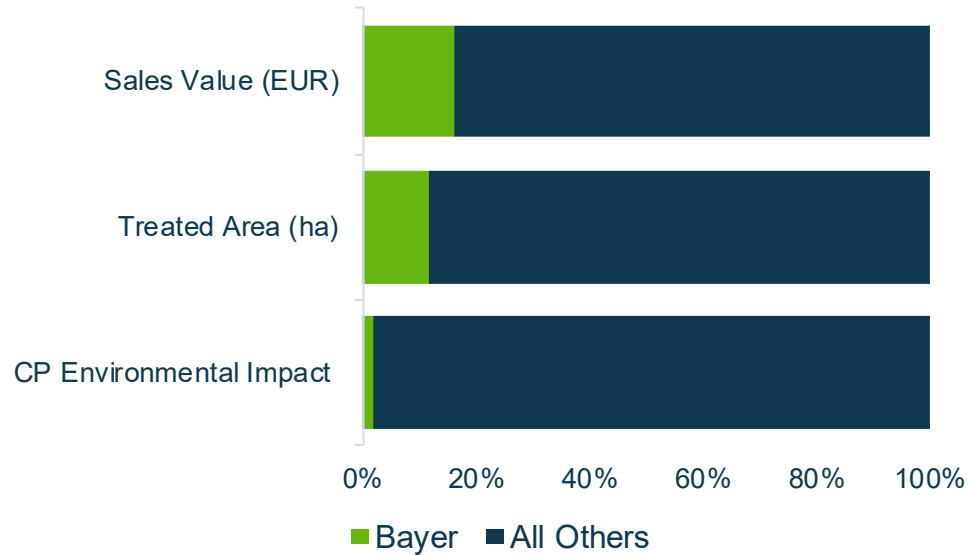
Note: Size of market, market position and seed (germplasm) share measured as of 2021. Market size relates to hybrid corn acres.

¹ Eu27 + UK, Russia and Ukraine; ² In hybrid corn market only



Driving Higher Value with Lowest Estimated Environmental Impact Crop Protection Portfolio Relative to Sales and Treated Value

2020 Crop Protection Industry's Environmental Impact



*Bayer Crop Protection accounts for nearly **12%** of the global treated area, yet less than **2%** of the environmental impact*



Key Crop Protection Products



Preliminary impact assessment has been conducted by Technical University of Denmark (DTU) based on the PestLCI/USEtox® models. PestLCI secondary distributions currently out of scope. Impact assessment limited to current scientific consensus of USEtox®: aquatic organisms and the substances which can be characterized in USEtox®. Terrestrial and pollinator impact assessment is currently not included in USEtox®. CP application data mostly from third parties such as Kynetec/Kleffmann. In some countries based on Bayer estimates.

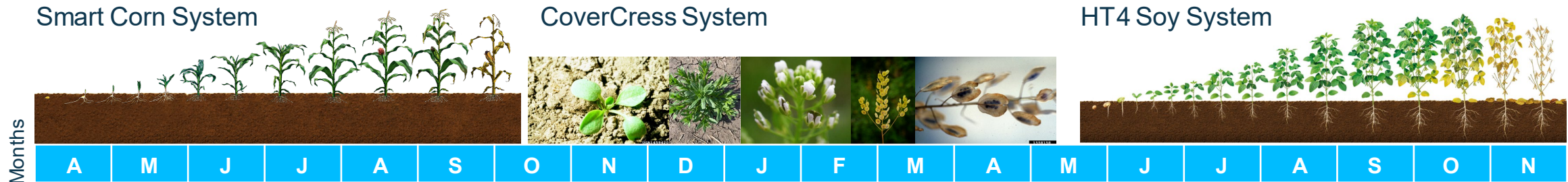


CoverCress : New Cash Cover Crop to Serve as Low-Carbon Renewable Feedstock for Growing Biodiesel Market

Bayer Acquires Majority Share (65%) in Sustainable Low-Carbon Oilseed Producer CoverCress Inc. (CCI)

Example: CoverCress seed fit in Bayer rotational corn/soy crop system

Unique Rotational Contract Offer & Agronomic System
Lowers Carbon with Higher Oil for Renewable Diesel and Creates Carbon Value for Farmer – 3 Crops in 2 Seasons



CoverCress:

- Low input rotational cash crop with ecosystem benefits of a cover crop and attractive economics of an oilseed crop
- Carbon sequestration and ecosystem services potential
- Developed through gene editing and advanced breeding tools; improved the oil profile, protein content and yield of field pennycress
- Niche market in U.S. Midwest initially; within draw area in proximity to crushing and refining facilities
- Expect to launch crush-ready CoverCress product mid-2020's

The Need:

- Majority of aviation and industrial transportation sector emissions reductions to come from sustainable low carbon intensity biofuels, due to lack of electrification options
- Expect demand for 6bn gallons of Renewable Diesel/Sustainable Aviation Fuel by 2030

The Business Model:

- Closed Loop Production Contract: Farmers paid a premium to contract produce CoverCress; Bunge delivers premium valued oil to Chevron to convert to Renewable Diesel/Sustainable Aviation Fuel
- CoverCress receives payment from crusher (e.g. Bunge) for the crop delivered; owners share profits: *Bayer 65%; Chevron and Bunge 35%*



Climate FieldView Digital Tools Reach >200m Subscribed Acres in 23 Countries; Fueled by Grower and Field Trial Performance Data

Climate Fieldview

>200m subscribed acres

#1 brand in digital ag¹

Operates in 23 countries



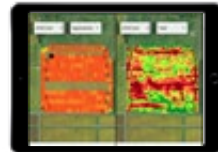
Largest database of grower and field trial seed performance data in industry

>70 partners on platform

In-cab visualization



Performance Visualization



Performance Evaluation



Field Health Images



Prescription Delivery



¹ according to Kynetec December 2021 FieldView Brand Tracker



Digital Farming Solutions Underpin and Enhance Our Ability to Bring Transformational Solutions to Agriculture

Our Vision for Digital Agriculture

Increase **yield** and improve **profitability**

Glean insights from data to help **manage risk** and address **variability**

Manage fields down to the square meter, to farm more efficiently and sustainably

Seamlessly collect, visualize and analyze data to enable **more informed decisions**

Three Core Value Drivers



Franchise Value



Downstream Value

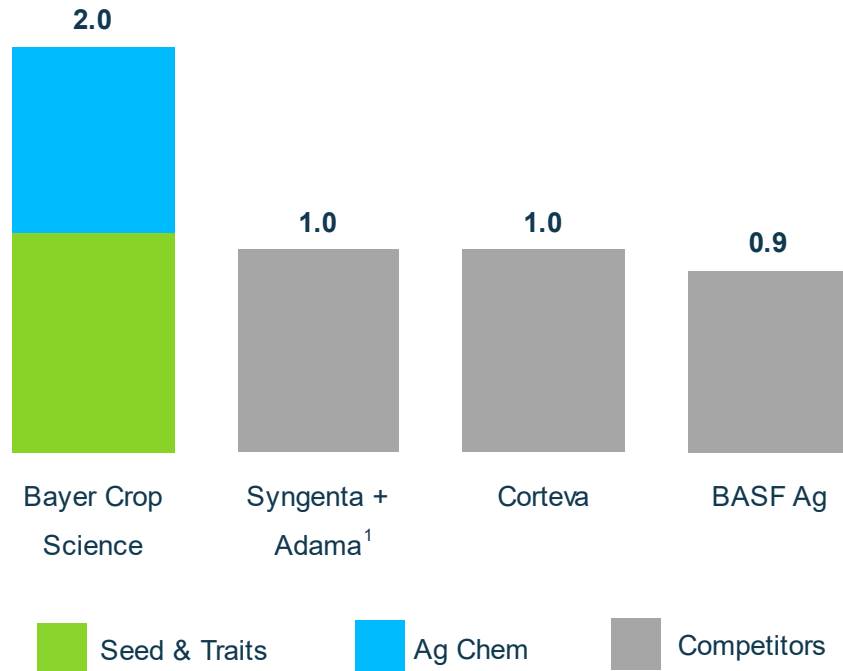


Platform Value



Industry Leading R&D Investment Powers Pipeline Potential

2021 Ag R&D Investment (€bn)



Top Talent:

>7,100
R&D employees²

>100
Key Collaborations

Generating Next Generation Solutions:

>500
Hybrids & Varieties Deployed³

15
New Biotech Traits in Development

>300
New Crop Protection Registrations³

30-60
New Molecules in Field Trials Annually

2021 reported results, exchange rate: FY 2021: ~1.18 USD/EUR

¹ Represents the legacy Syngenta results plus Adama

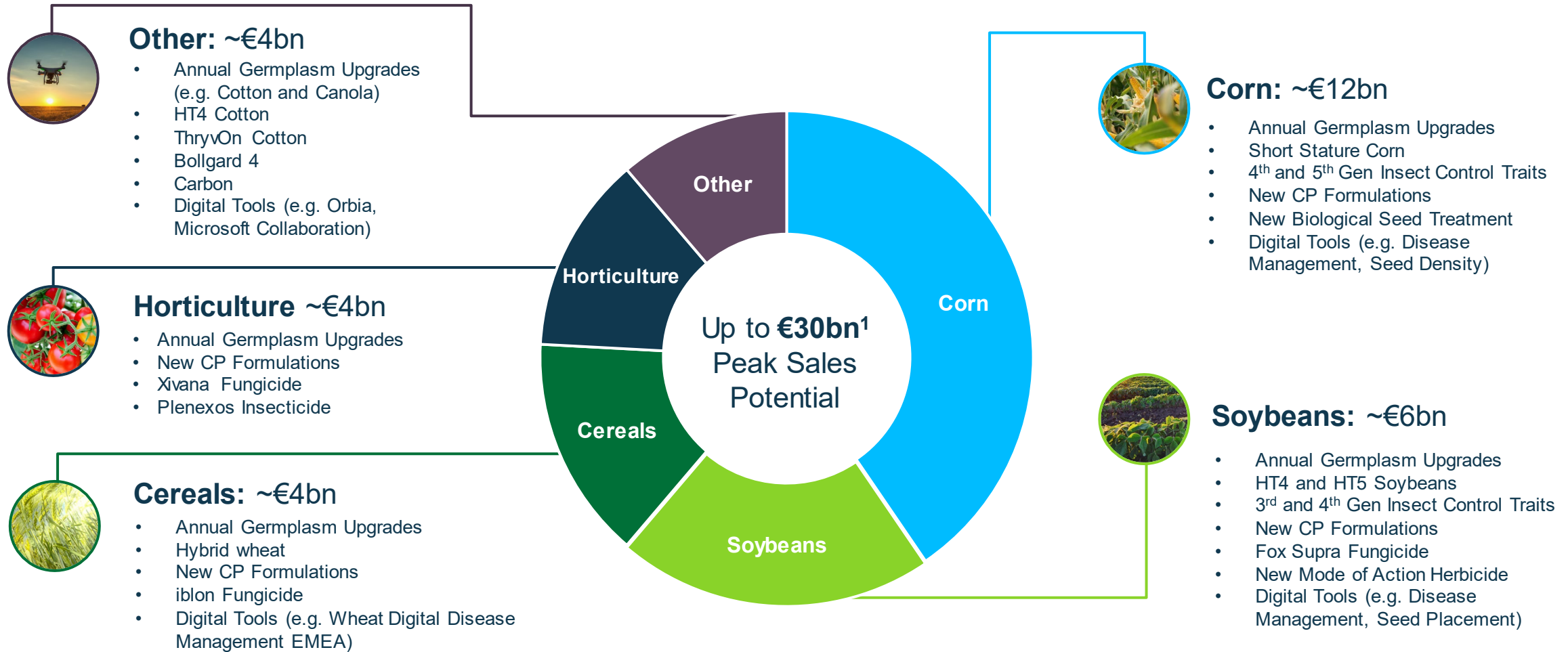
² Includes permanent and temporary employees

³ 2021



Crop Science Pipeline Potential Balanced Across Key Global Crops

Seed, Trait, Crop Protection and Digital Solutions Peak Sales Potential by Crop Served



¹ Represents non-risk adjusted estimated peak sales for the combined breeding, biotech, crop protection and environmental science pipelines, as well as new business models and new value areas. ~50% incremental sales value. Estimated to reach ~40% of peak sales potential by 2031, ~40% by 2032-2035 and ~20% by 2036+, Note: Projects listed per crop are subset of the pipeline; selected top contributors to peak sale potential



Larry Bortz Farm

Dekalb Asgrow Dealer

Post High-Wind Storm on
July 5, 2022



Rudd, Iowa

July 6, 2022

Conventional Height Corn

Conventional
Height Corn



Short-Stature Corn





Innovative, Sustainable Solutions to Address Global Challenges

Global Challenges

Our Goals

Our Priorities

Our Solutions

In the Field Today



Growing Population
Increasing Protein Demand

30%
Reduction in Crop Protection impact on the environment

Producing & Protecting Higher-Yielding Seeds

- High-yielding, disease-resistant seeds
- Next-generation biotech traits and crop protection to protect yield



Water Quality
Soil Health

30%
Reduction in Crop Protection impact on the environment

Using Fewer Natural Resources

- Novel small molecules and biological solutions with reduced environmental impact
- Short stature corn provides the opportunity to unlock additional yield potential by optimizing crop inputs



Climate Change
Sustainable Energy Sources

30%
Reduction of field greenhouse gas emitted per kg of crops produced

Advancing a Carbon Smart Future For Ag

- Digital tools for carbon sequestration measurement, precise input application
- Next-generation herbicide-tolerant traits to support no-till/ conservation tillage systems

Solutions must serve growers large and small; Empowering 100m smallholders by 2030



The Next Frontier: Evolution to Digitally Enhanced System Solutions

Illustration: NA Smart Corn System Featuring Short Stature Corn



Win by being more grower centric

Discrete Solutions

Tailored Solutions

Crop System Solutions

SEEDS & TRAITS	CROP PROTECTION	DIGITAL
	 	 Performance Transparency Yield Analysis

SEEDS & TRAITS	OR	CROP PROTECTION	OR	DIGITAL
				Field Level Hybrid Seed Placement & Density
				Field and Zone Level Crop Protection Recommendations
				Field Level Fertility Prescriptions
				Targeted Application Recommendations

SEEDS & TRAITS	+	CROP PROTECTION	+	DIGITAL
				Field Level Hybrid Seed Placement & Density
				Field and Zone Level Crop Protection Recommendations
				Field Level Fertility Prescriptions
				Targeted Application Recommendations
Cover crops		Biological Solutions		



¹ Biotech approach in collaboration with BASF; ² VT4PRO™ with RNAi Technology corn products are expected to be commercially available for the 2024 growing season



Crop Science Executive Leadership Panel Q&A



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President,
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CFO,
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Fields of Opportunity

Jerseyville Agronomy Center

August 2022

North America
Soybeans

Cotton

Wheat

LATAM
Soybeans

North America
Corn





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Convergence of Technologies on Farm Optimizes Performance

LATAM Customer Experience: Cristian Dalben



Cristian Dalben
Sorriso, Brazil

> Win by being more grower centric

- // **Total area (ha) - 2021:** 2,100 soy / 2,000 corn
- // **Intacta RR2 Pro:** 80%
- // **Bayer Corn seeds:** 100%
- // **Bayer Crop Protection:** 55%

2015-16 **FieldView Adopter**

2019-20 **Loyal Bayer Customer (IMPULSO & ORBIA)**

2019-20 **Outcome-Based Pricing Pilot Participant**

2020-21 **Carbon Ambassador**

After using FieldView and participating in Outcome-Based pricing trials, Cristian increased his share of Bayer products on farm significantly:

33% Bayer Corn seeds to 100%
16% Bayer Crop Protection to 55%



Leading Grower Perspectives – U.S.

Crop Science Field Technology Showcase

// **Bowen Flowers – Clarksdale, MS**

// ~10,000 acres of cotton, ~5,000 acres of soybeans and 1,000 acres of corn

// **Scott Rahn – Bingham Lake, MN**

// ~4,000 acres of corn and 3,000 acres of soybeans

// Bayer contract soybean seed producer

// **Kassi Tom-Rowland – Tom Farms – Leesburg, IN**

// 18,000 acres of corn, soybeans

// Bayer contract corn seed producer