

Shaping the Future of Agriculture

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Bernstein 6th Annual Agriculture Conference, London

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Cautionary Statements Regarding Forward-Looking Information

This presentation contains forward-looking statements. A forward-looking statement is any statement that does not relate to historical facts and events, but rather reflects Bayer's current beliefs, expectations and assumptions regarding the future. This applies, in particular, to statements in this presentation on revenue growth, including product introductions and peak sales potential, synergies, especially in relation to the acquisition and integration of Monsanto Company, portfolio adjustments, cost reduction, financial targets and earnings, cash flow generation, deleveraging and other similar statements relating to future performance, including with respect to the markets in which Bayer is active.

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We are a Global Leader in Health & Nutrition

Well-Positioned Across Our Businesses



~€45bn 2018 Pro-forma Sales¹

Crop Science

~€19bn / ~43% of Group #1 Position

Growing ahead of competition over last five years on average Best-in-class profitability through the cycle

- // Leading portfolio of seed & traits, crop protection and digital farming
- # World-class R&D platform with best talent and technology in the industry
- // Positioned to shape the future of agriculture: development of tailored solutions to address farmers' individual needs and challenges

Pharmaceuticals

~€17bn / ~38% of Group #2 Position in Cardiovascular

One of the fastest growing Pharma businesses over the past five years

Xarelto and Eylea among the world's leading Pharma brands

- // Innovative medicines in areas of high unmet medical need
- // Therapeutic focus areas: Cardiology, Oncology, Gynecology, Hematology and Ophthalmology
- // Strong position in emerging markets
- // Leading in Radiology and Women's Health

Consumer Health

~€5bn / ~12% of Group #2 Position

Leading Positions in 7 of the Top 10 OTC Markets

- // Focus categories:
 - Allergy & Cold, Cough, Sinus and Flu; Nutritionals; Dermatology; Pain and Cardio; Digestive Health
- Concentrated portfolio of 16 megabrands with annual sales of >€100m

¹ The unaudited Pro-forma data are presented as if both the acquisition of Monsanto and the associated divestments had taken place as of January 1, 2018. Sales of Monsanto are presented in periods as per the Bayer fiscal year. One-time effects of business operations, the accounting for discontinued operations and the recognition and measurement of sales from certain business transactions have been adjusted in line with our accounting. Due to this simplified procedure, they explicitly do not reflect sales according to IFRS or IDW RH HFA 1.004, meaning they have not been audited.

Glyphosate is a Vital and Effective Tool

Every Year, as much as 40% of World's Potential Harvests are Lost to Pests, Including Weeds

Glyphosate is the most widely used, non-selective herbicide in the world, accounting for roughly half of the global volume of herbicides used annually.

Critical for Global Food Security

Without glyphosate, global crop production would decrease by a combined 19M MT¹– enough to feed 46M people annually, about the population of Kenya



Environmentally Beneficial

// Use of glyphosate-based herbicides today leaves soil intact, supporting soil health and reducing greenhouse gas emissions by the equivalent of ~11.8M¹ additional cars on the road annually



History of Safe Use

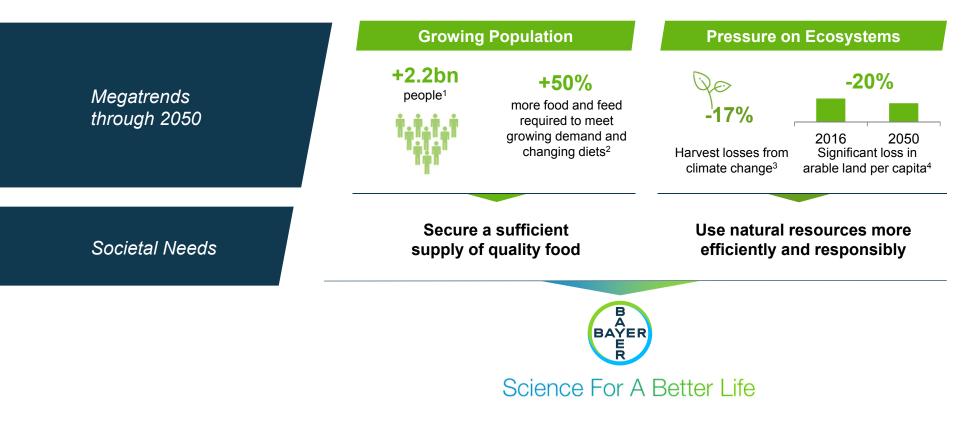
- 800+ rigorous studies, submitted to the EPA and other regulators in connection with the registration process, confirm that glyphosate-based products are safe when used as directed.
- # EPA's 2018 risk assessment examined more than 100 studies and concluded glyphosate is not likely to be carcinogenic to humans.

" If we are going to feed 10 billion people by 2050, we are going to need all the tools at our disposal, which includes the use of glyphosate. USDA applauds EPA's proposed registration decision as it is science-based and consistent with the findings of other regulatory authorities that glyphosate does not pose a carcinogenic hazard to humans." - U.S. Secretary of Agriculture Sonny Perdue, April 30, 2019

¹ The contribution of glyphosate to agriculture and potential impact of restrictions on use at the global level. : <u>https://www.tandfonline.com/doi/full/10.1080/21645698.2017.1390637</u>

Need for Innovation Driven by Megatrends

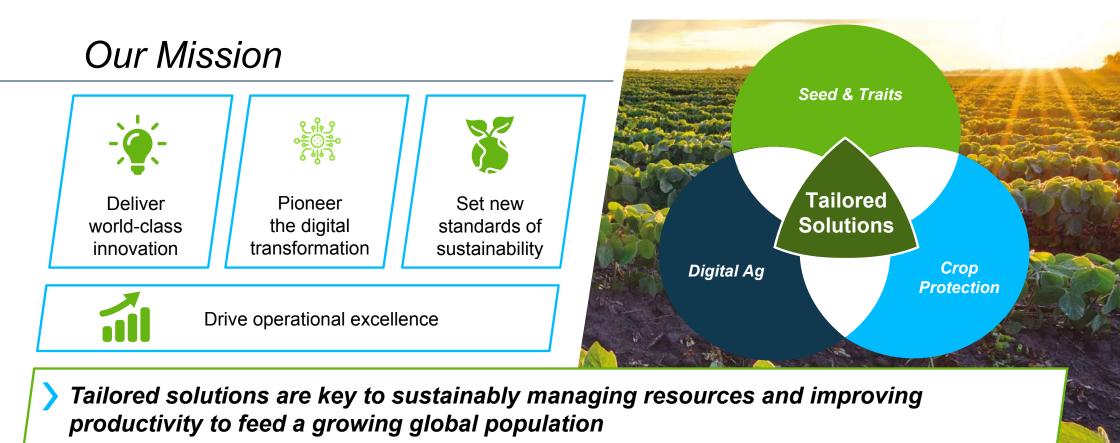
Producing More with Less: A Fundamental Driver for our Crop Science Business



¹ UNDESA 2017 (United Nations Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision); ² FAO 2017 (FAO Global Perspective Studies) ³ Nelson et. all. (2104); (2) FAO 2016 "Climate change and food security"; ⁴ FAOSTAT (accessed Oct 30, 2018) for 1961-2016 data on land, FAO 2012 for 2030 and 2050 data on land, and UNDEDA 2017: World Population Prospects for world population data.

Shaping Agriculture to Benefit Farmers, Consumers and Our Planet

As the Industry Leader Uniquely Positioned to Create Value and Pioneer Tailored Solutions



Tailored Solutions Enable Optimal Grower Productivity

Optimizing Decisions for Growers to Produce More with Less

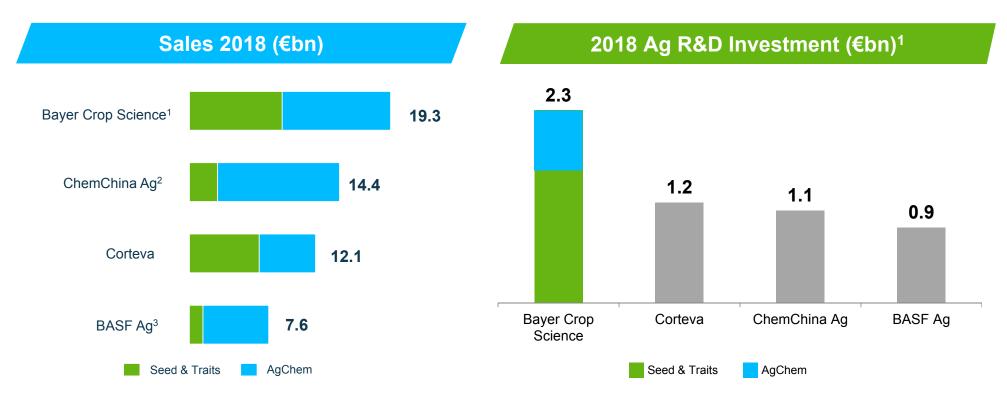
Superior products and use of digital tools like Climate FieldView across the Brazil soybean season



Tailor-made customer solutions holistically enhance yield and sustainability, ensuring safe, healthy, and affordable food

The Established Leader in Crop Science

Industry Leading Sales and Unmatched Investment in R&D



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² Excludes non-agro business sales of ADAMA (nutritional supplements, aromatic products, industrial products)

³ Includes BASF Ag Sales 2018 as reported plus €1.4bn (€2.027m sales FY 2018 excluding €586m sales from Jan '18 until cut-off in Aug '18) reported sales in 2018 from Bayer businesses sold to BASF. Split between Seed and CP businesses based on internal estimates. ⁴ Exchange rate: FY 2018: ~1.18 USD/EUR

⁵ Competitor Pro forma R&D cost split not available

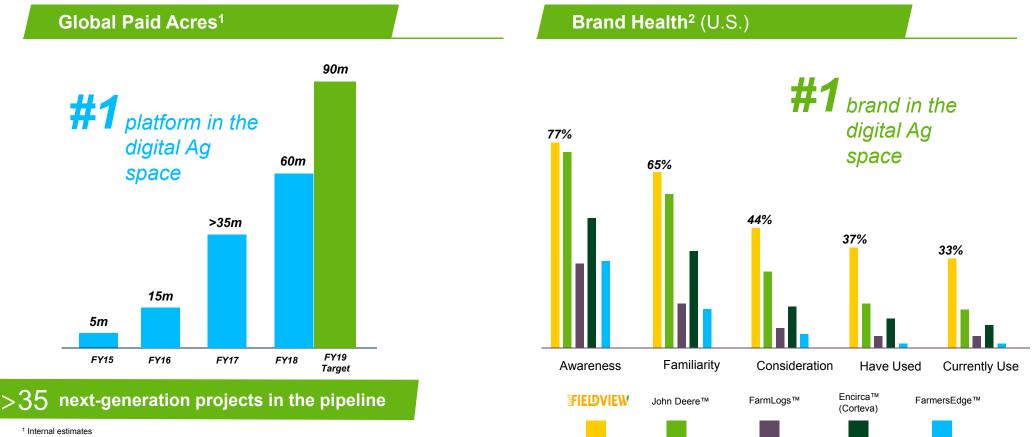
Expect €17bn in Peak Sales from Recent and Near-Term Launches

	Recent Launches	2019-2020 ¹	2021-2022 ¹
Corn	 Annual germplasm upgrades BioRise 2 microbial seed treatment Trecepta insect control trait Delaro fungicide, U.S.A. 	 // Annual germplasm upgrades // Nemastrike Technology nematicide // Vayego insecticide 	 Annual germplasm upgrades SmartStax PRO corn 3rd gen weed control management system
Soybean	 Annual germplasm upgrades Roundup Ready 2 Xtend soybean XtendiMax Herbicide with VaporGrip Technology 	 Annual germplasm upgrades XtendFlex soybean Soybean Cyst Nematode resistance trait NemaStrike Technology nematicide Fox Xpro fungicide, Brazil 	 // Annual germplasm upgrades // Intacta 2 Xtend trait // Indiflin fungicide
Horticulture	// Annual germplasm upgrades (vegetables)	 // Annual germplasm upgrades(vegetables) // Tiviant fungicide // Vayego insecticide 	 // Annual germplasm upgrades (vegetables) // Highly concentrated biological fungicide
Cereal and Others	 Annual germplasm upgrades Bollgard II XtendFlex cotton Bollgard 3 XtendFlex cotton XtendiMax Herbicide with VaporGrip Technology 	 Annual germplasm upgrades Vayego insecticide (rice, other crops) TruFlex canola weed management Nemastrike Technology nematicide 	// Annual germplasm upgrades// Lygus & Thrips control cotton
Digital Ag	 // Advanced Seed Scripting - corn // Manual Seed Scripting - corn // Nitrogen Management // Manual Fertility Scripting for P,K, N,Lime 	//Corn Seed Advisor//FieldView Machine Compatibility//Expanded FieldView - EACompatibility//FieldView - AR, PY, UY//Irrigation mgmt EA//Advanced Seed Scripting - BR//FarmRise features//Crop Protection Risk Tool//FieldView - Retail//Crop Protection Outcome-Based Models//Fertility Risk Tool	 Øutcome-based Models in Seed and Fertility Crop Disease Diagnosis FieldView – Fruits & Vegetables Soybean Seed Advisor

¹ Subject to regulatory approvals. Represents a subset of the pipeline; not representative of the entire €30bn peak sales opportunity

FieldView: The Leading Brand and Platform for Growers

Our Value Creation is Supported by our Performance Trends; Paid Acres >7x Closest Competitor



FieldView Platform Uniquely Enables Innovative Business Models

Data Science Drives More Informed Decisions for Growers and Enables Outcome-Based Offerings

Example: Fungicide Opportunity

- # ~8 bu/acre¹ more yield when DEKALB[®] hybrids used with a fungicide¹
- // **15-20%** of U.S.A. corn growers use a fungicide²
- 75% of U.S.A. farmers more likely to purchase a product with outcome-based pricing
- SOLUTION: Offer outcome-based pricing at defined bu/ac threshold using Climate FieldView to measure; rebate fungicide and application if yield gain is not achieved

Fungicide Pilot Offer

- // Offered outcome-based price for fungicide at a defined bu/ac threshold using FieldView as tool to assess in field performance
- // If yield gain is not achieved, a rebate paid to grower for fungicide and application cost

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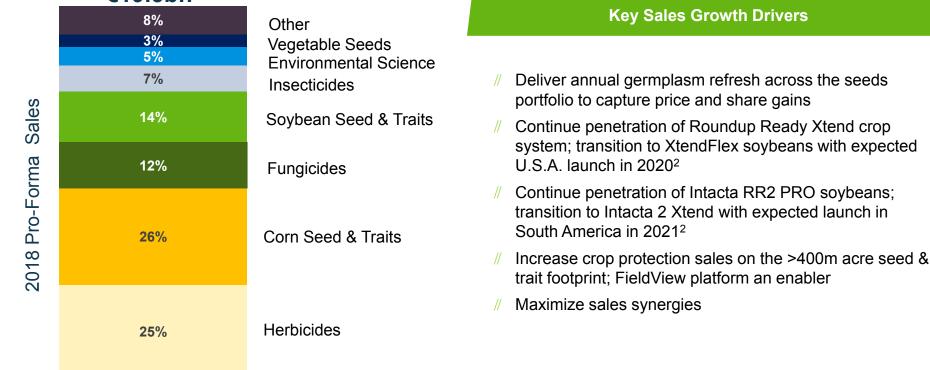
FieldView Maps of 2018 Fungicide Trial



Blue box on right yield map depicts lower yields on portion of field not treated with a fungicide, as depicted in spray map on the left

Leadership and Innovation Drive Above Market Sales Growth Target

Target >4% Sales CAGR from 2018 to 2022

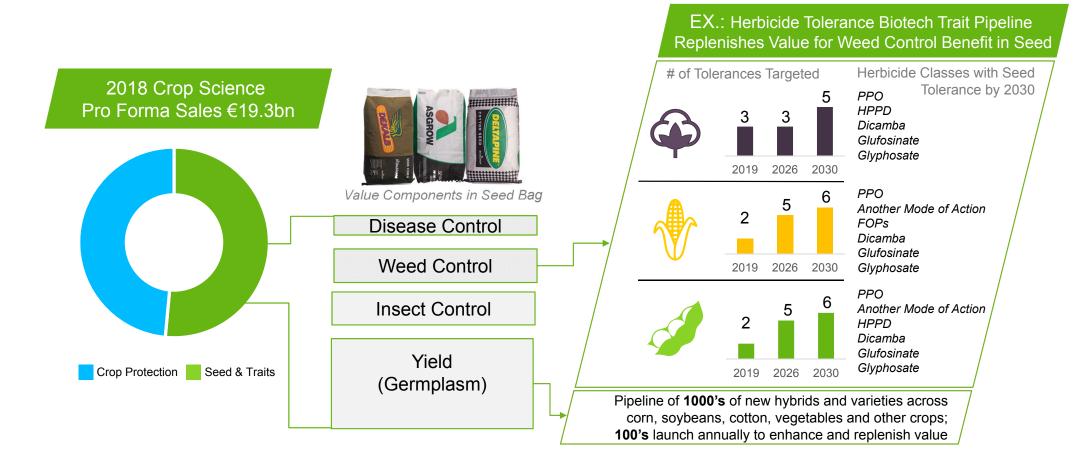


€19.3bn¹

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Seed Sales Reflect Value of Germplasm, Traits and Treatments

Preserve and Create New Value with Pipeline of Options to Create Tailored Solutions for Each Farm



Corn Seed & Trait: Leading Share Position Enhanced by Innovation

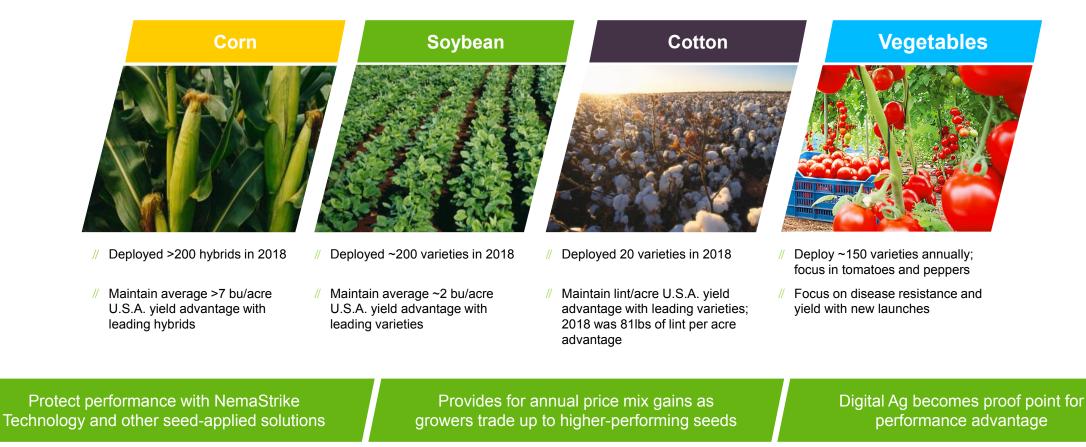
Annual Germplasm Upgrade, New Technology Launches and Digital Ag Key to Growth

Germplasm Position and Share ¹		n and Share ¹	Sales Growth Opportunity Areas to 2022		
U.S.A.	#1	>50%	INSECT CONTROL: SmartStax Pro		
Brazil	#1	~45%	WEED CONTROL: New herbicide tolerance traits		
Argentina	#1	~75%	DIGITAL AG: Climate FieldView Platform		
E.U.	#2	~20%	SEED GROWTH: BioRise 2 corn offering and NemaStrike Technology		
2018 global 110 m		~110 m	SEED: Annual launch of ~200 new higher-performing hybrids globally		
trait acres ¹			NEAR TERM 2022		

¹ Internal estimates of branded and licensed germplasm share positions

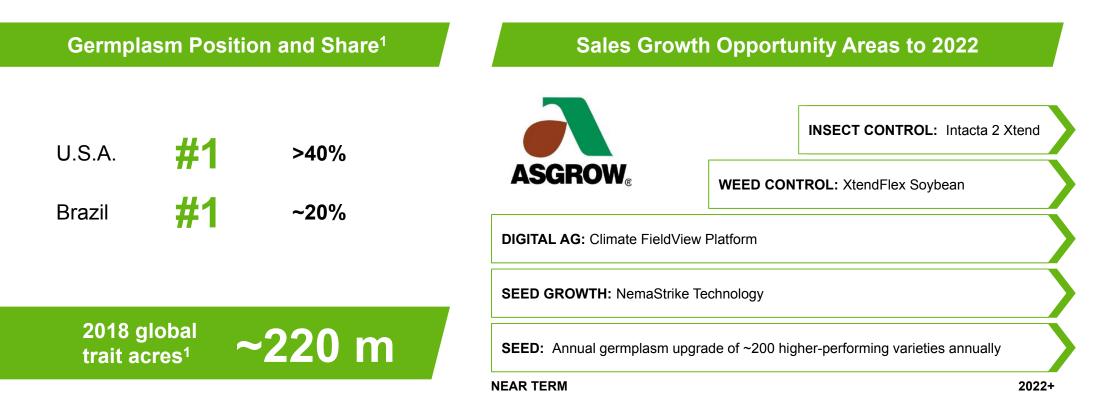
Annual Germplasm Upgrades Serve as Foundational Growth Driver

Leading Global Germplasm Libraries and Advanced Breeding Tools Deliver High-performing Products



Soybean Seed & Trait: Key Trait Upgrades Expected to Fuel Growth

New Solutions in Insect and Weed Control Provide More Options for Farmers in the Americas



¹ Internal estimates of branded and licensed share positions

Continued Penetration of Roundup Ready 2 Xtend and Intacta RR2 Pro Soybean Trait Techologies

Providing More Weed and Insect Control Options for Farmers in the Americas



// >40m acres in 2018; expect the Roundup Ready Xtend Crop System for soybean and cotton to grow to 60m acres in 2019

BAYER

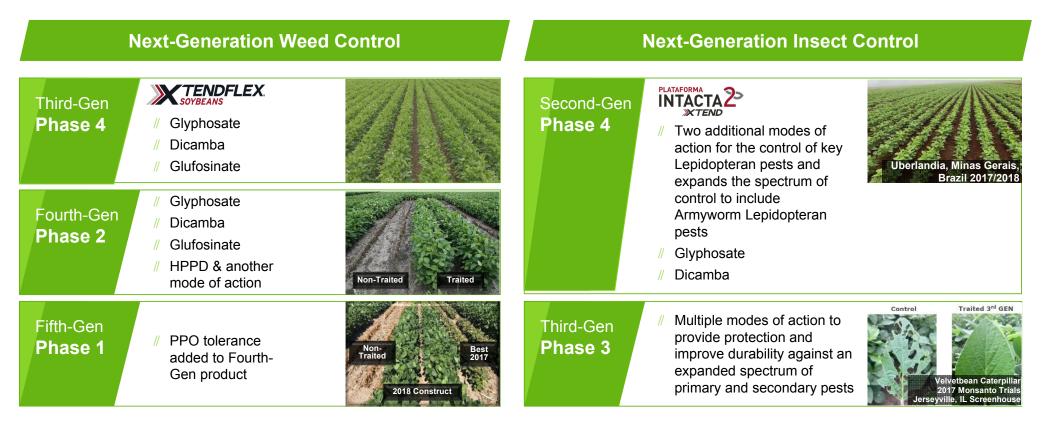
- # EPA continues registration of XtendiMax with VaporGrip technology, a low-volatility dicamba formulation for in-crop use
- // Potential fit on all soybean acres in North America; broadly licensed to U.S.A. seed companies who account for >90% share



- # Exceptional performance, penetrating 65m acres in South America in six years
- Consistently provides yield advantage and reduces insecticide applications for the primary insect pest in tropical soybean
- // Insect-protected soybean technologies have a fit on ~100m acres in South America

Advancing our Soybean Pipeline with New Trait Technologies for Next-Generation Weed and Insect Control Systems

Building on record-growth of Roundup Ready 2 Xtend and Intacta RR2 PRO



¹ Pending regulatory approvals ² XtendiMax with VaporGrip Technology is a restricted use pesticide

Integration and Synergies On Track in Largest-Ever Ag Combination

Leadership in Place, Engagement High and Progressing Toward €1bn Synergy Target as of 2022

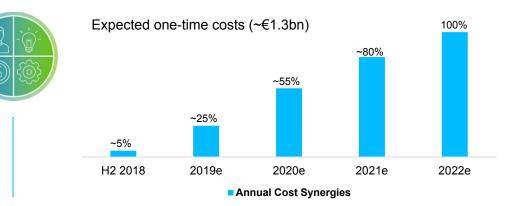
Integration Achievements

- Customer: Leadership teams actively engaging customers around the world and incorporating feedback
- // Leadership: First three organizational levels (~500 positions) in place; expect rest of organization to be in place by end of 2019.
- // Cultural integration: Employee engagement scores consistently above 75% across all major countries. Relocated numerous leadership positions to accelerate integration.

// Synergies:

- // Communicated significant consolidation of site landscape in US, Canada, Brazil and Mexico and 20+ smaller markets
- # Substantial early cost synergies delivered by consolidating procurement activities
- // Personnel synergies from selection process

Cost Synergies ^{1,2}: ~€870m (~\$1bn) as of 2022



Sales Synergies¹: ~€170m (~\$200m) as of 2022

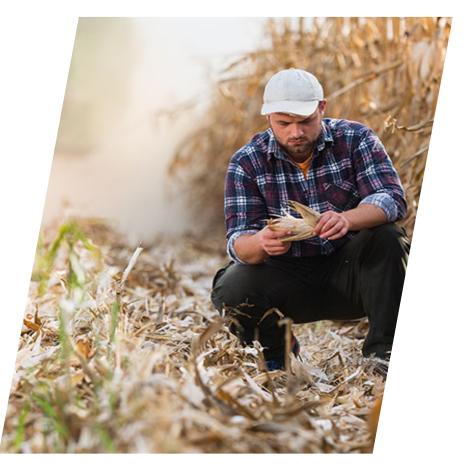
- Four countries to generate >60% of the sales synergies
 - // U.S.A., Brazil, Argentina and Mexico
- Increase crop protection chemistry sales in Americas on the >400m acre seed & trait footprint; digital ag to serve as an enabler

¹ Net EBITDA impact before special items, net of estimated dissynergies such as termination of selected distribution agreements as well as sales disruptions ² Majority of one time costs to achieve synergies expected to be recorded as special items Applied FX rate of USD/EUR of 1.15

Base Case Targets at Least 30% EBITDA Margin by 2022

Upside Potential in Case of Commodity Cycle Recovery

	Guidance 2019	Target 2022 ¹
Sales growth ³	~4%	CAGR >4%
EBITDA margin ²	~25%	>30%



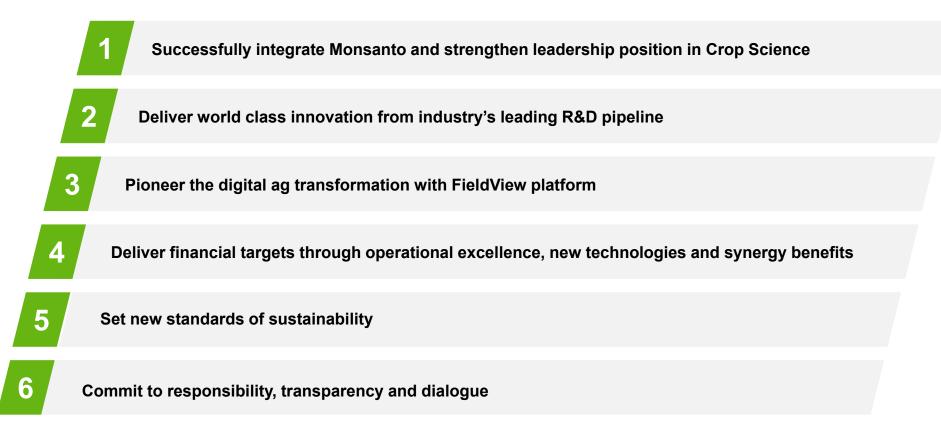
¹ 2022 targets at constant currencies, not including portfolio measures.

² EBITDA margin based on EBITDA before special items

³ Currency and portfolio adjusted rate

Key Priorities

Shaping agriculture to benefit farmers, consumers and our planet





Shaping the Future of Agriculture

Appendix



Group Targets - Value Creation from Strengthened Base

Triple Leverage

€bn		2018 PF	Guidance 2019	Target 2022	CAGR 2018-22 ²
Sales ¹	Total Group	44.7	~46 (~4%)	~52	~4%
	Crop Science	19.3	~4%		>4%
	Pharmaceuticals	16.7	~4%		~4-5%
	Consumer Health	5.5	~1%		~2%
EBITDA before special items (%)	Total Group		~12.2 (~27%)	~16 (>30%)	~9%
	Crop Science		~25%	>30%	
	Pharmaceuticals		~34%	>35%	
	Consumer Health		~21%	~24%4	
C	ore EPS (€)		~6.8	~10	~10%
FCF		~4.7 ³	~3-4	~8	~18%
Net financial debt		~35.7 ³	~365	~26-28	

2022 targets at constant currencies, not including portfolio measures (except for Consumer Health)

¹ Sales: cpa growth; ² CAGR from 2018 base year; ³ as reported; ⁴ includes portfolio measures; ⁵ including around ~€1bn lease liability due to IFRS 16

We Have Clear Priorities for Capital Allocation

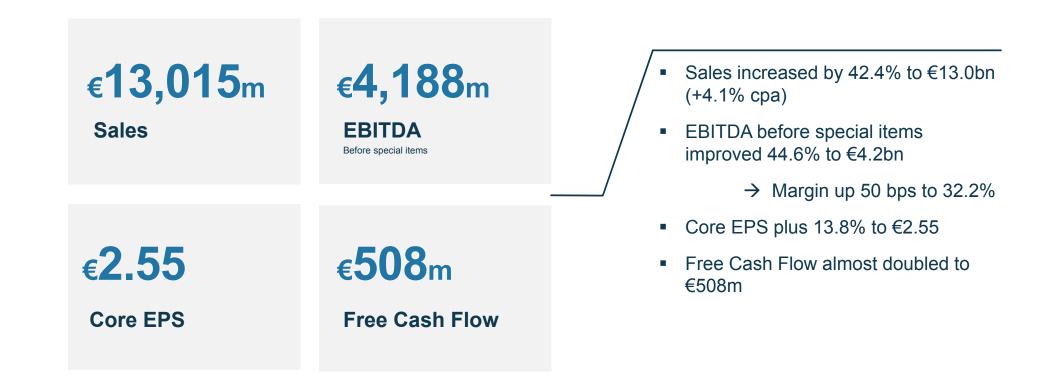
Focus on Shareholder Return, Innovation and Deleveraging



Divestment

¹ Before M&A / Portfolio

Strong Start into the Year and on Track to Meet FY Guidance



Progress in All Focus Areas



Target Delivery

Guidance for 2019 confirmed



Crop Science

- Integration well underway
- Strong earnings performance

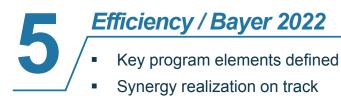


Pharmaceuticals

- FDA inspection conducted in March
- Profitable growth continued

Consumer Health

- "Fit to win" initiative starting to deliver
- FY guidance confirmed





Portfolio Measures

Disposal process of all announced divestments on track

Crop Science with Strong Start into 2019



- 6% cpa sales growth driven by Latin and North America
- Good growth across herbicides, insecticides and cotton seeds & traits
- On track with Xtend technology and Climate FieldView in 2019
- EBITDA before special items more than doubled to €2.3bn
- On track to deliver on synergy targets for 2019