



Science For A Better Life



Investor Handout – Crop Science

Bernstein 4th Annual Agriculture Conference

May 19, 2017

Cautionary Statements Regarding Forward-Looking Information



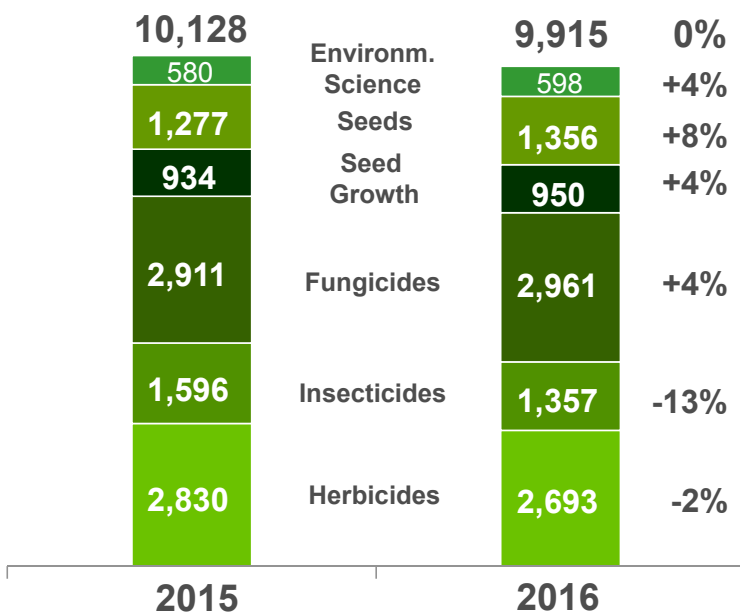
Certain statements contained in this communication may constitute “forward-looking statements.” Actual results could differ materially from those projected or forecast in the forward-looking statements. The factors that could cause actual results to differ materially include the following: uncertainties as to the timing of the transaction; the possibility that the parties may be unable to achieve expected synergies and operating efficiencies in the merger within the expected time-frames or at all and to successfully integrate Monsanto’s operations into those of Bayer; such integration may be more difficult, time-consuming or costly than expected; revenues following the transaction may be lower than expected; operating costs, customer loss and business disruption (including, without limitation, difficulties in maintaining relationships with employees, customers, clients or suppliers) may be greater than expected following the announcement of the transaction; the retention of certain key employees at Monsanto; risks associated with the disruption of management’s attention from ongoing business operations due to the transaction; the conditions to the completion of the transaction may not be satisfied, or the regulatory approvals required for the transaction may not be obtained on the terms expected or on the anticipated schedule; the parties’ ability to meet expectations regarding the timing, completion and accounting and tax treatments of the merger; the impact of the refinancing of the loans taken out for the transaction, the impact of indebtedness incurred by Bayer in connection with the transaction and the potential impact on the rating of indebtedness of Bayer; the effects of the business combination of Bayer and Monsanto, including the combined company’s future financial condition, operating results, strategy and plans; other factors detailed in Monsanto’s Annual Report on Form 10-K filed with the SEC for the fiscal year ended August 31, 2016 and Monsanto’s other filings with the SEC, which are available at <http://www.sec.gov> and on Monsanto’s website at www.monsanto.com; and other factors discussed in Bayer’s public reports which are available on the Bayer website at www.bayer.com. Bayer and Monsanto assume no obligation to update the information in this communication, except as otherwise required by law. Readers are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date.

FY 2016 – Crop Science Successful in a Difficult Market Environment



Sales

in € million; Δ% yoy, Fx & portfolio adj.



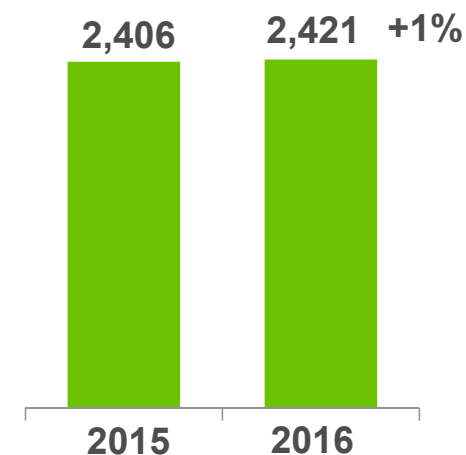
Regions

Sales in € million, Δ% yoy, Fx adj.

Europe / Middle East / Africa	3,290	+2%
North America	2,616	+4%
Asia / Pacific	1,548	+3%
Latin America	2,461	-7%

EBITDA

before special items, in € million; Δ% yoy

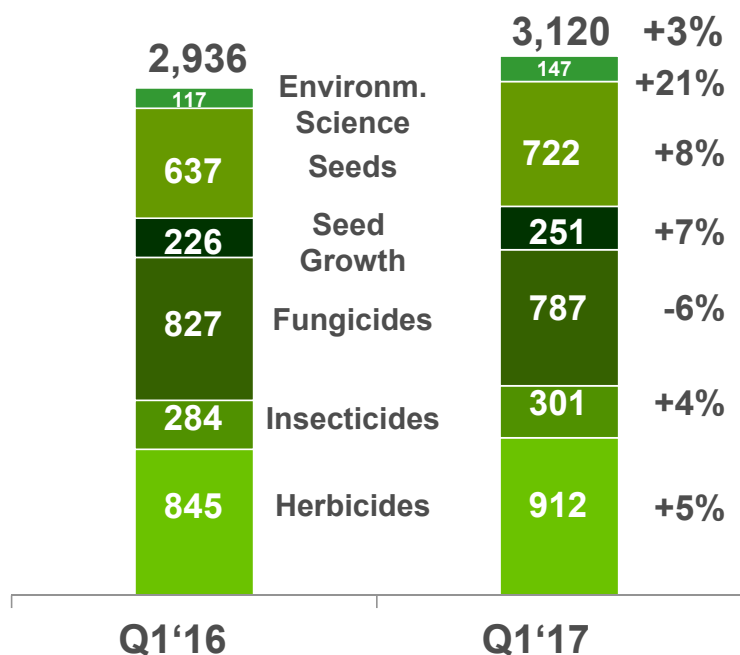




Q1 2017 - Performance on Track

Sales

in € million; Δ% yoy, Fx & portfolio adj.



2016 figures restated

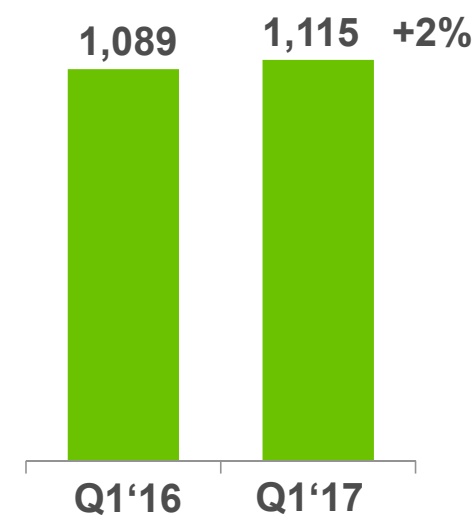
Regions

Sales in € million, Δ% yoy, Fx adj.

Europe / Middle East / Africa	1,462	+2%
North America	1,042	+9%
Asia / Pacific	366	+3%
Latin America	250	-10%

EBITDA

before special items, in € million; Δ% yoy



FY 2017 Crop Science Guidance

As presented on
April 27, 2017



Sales Δ Fx & portfolio adjusted

	2016	2017
Sales	€9.9bn	Low-single-digit % increase to > €10bn
EBITDA before special items	€2.4bn	At prior-year level

Assuming end 2016 Fx rates (USD 1.05); Outlook depends on specific planning assumptions as detailed in the Annual Report

Mid-Term Aspirations

As presented on
Sept. 20, 2016



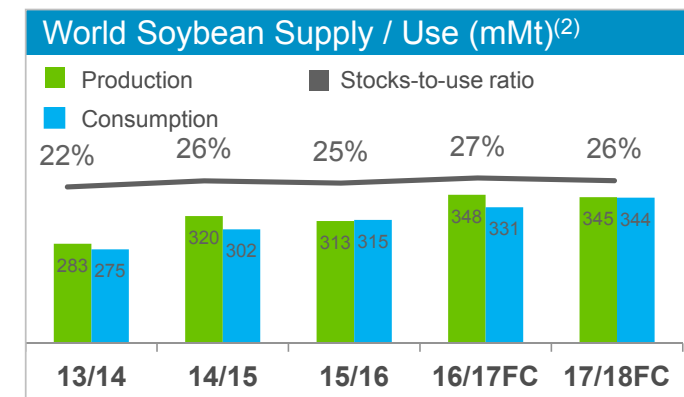
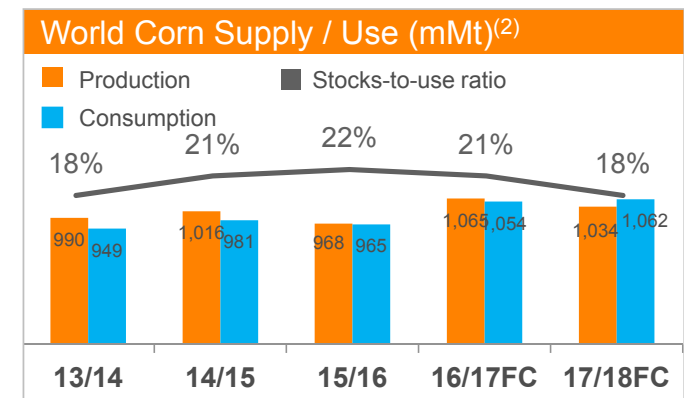
	2015	Aspiration (incl. Monsanto) ⁽¹⁾
Sales	+1.7% to €10.1bn	Above market growth
Adj. EBITDA margin	23.8%	> 30% after year 3 post closing

Sales Δ Fx & portf. adjusted, EBITDA before special items; 2015 figures restated
Outlook depends on specific planning assumptions outlined in the Interim Report Q2 2016
(1) Not including any potential divestments

Current Ag Market Downturn Driven by Supply – Demand Steadily Growing



- Demand is steadily growing as long-term drivers are intact
- Several strong harvests in a row hiked global stocks of key commodities
- Stocks-to-use ratios for soy and wheat expected to stabilize; corn ratio expected to decrease
- CBOT⁽¹⁾ futures for corn and wheat trending upwards; soybean impacted by further acreage increase
- ➔ Early indicators suggest that bottom of the ag cycle has been reached
- ➔ Ag market recovery expected to start in late 2017, depending on quality of harvests over the year



(1) CBOT: Chicago Board of Trade, as of May 12, 2017
Corn futures chain; c1 Soybean front month continuation; c1 Wheat front month continuation
(2) Source: USDA WASDE, as of May 10, 2017

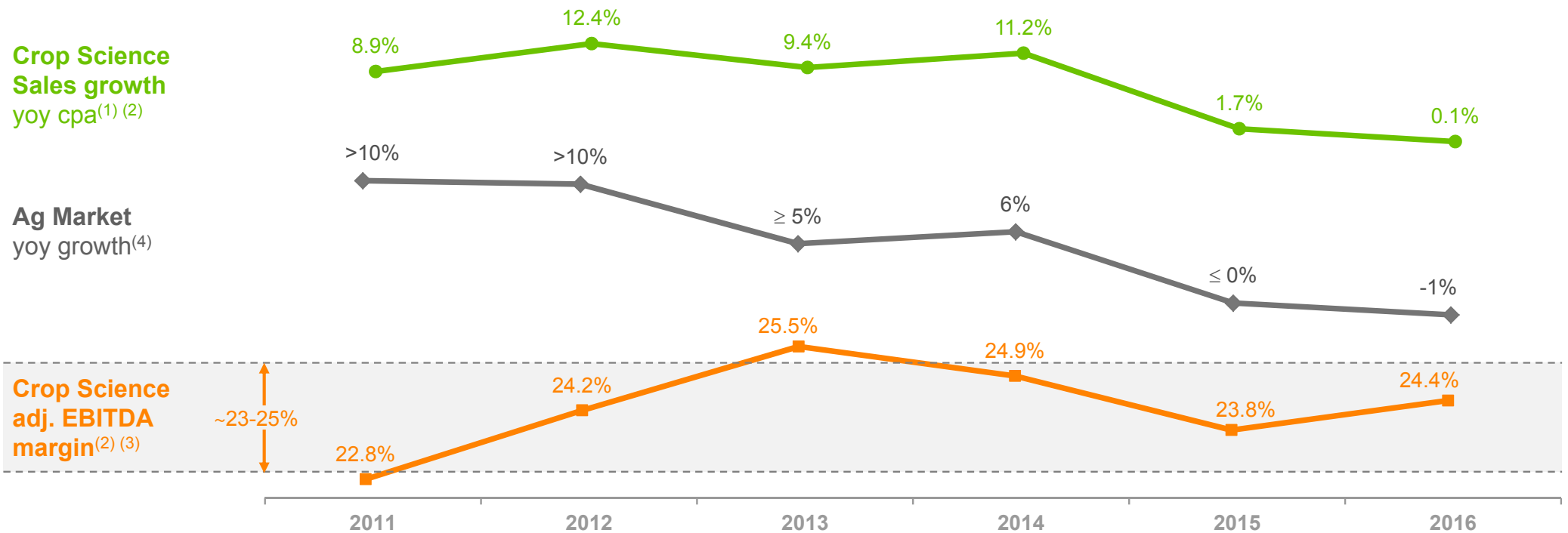


Ag Market Expected to Stabilize Over 2017

- 2017 Seed and crop protection market growth projection: +1%
 - Market environment expected to remain volatile
 - Recovery in Latin America foreseen to a certain extent (farmer economics are favorable, larger planting acres anticipated for corn and soybean)
 - Continued soybean demand from China
 - Further growth from Eastern Europe and the Asia/Pacific region
 - North America still challenged by tight grower economics; also in Western Europe the pace of growth will presumably lag behind global development
- Growth in Seeds business reported in Q1 by major ag companies
- Investments in SeedGrowth seen as additional early indicator for improvement in farmer sentiment

Slow return to growth anticipated to start end of this year, depending on quality of 2017 harvests

Crop Science Delivers Growth and Robust Margins Over the Ag Cycle



(1) currency and portfolio adjusted (2) 2015 data restated (3) before special items

(4) Seeds, traits and crop protection market; source 2011: internal estimation, source 2012-2016: Bayer Annual Reports

Highly Attractive Agriculture Industry Benefiting from Macro Trends



~10bn

United Nations 2015

People on the planet by 2050

-17%

Nelson⁽¹⁾ / FAO⁽²⁾

Biophysical effect of climate change shocks on yields by 2050

-17%

From 0.218 ha/capita in 2015 to 0.181 ha/capita in 2050⁽²⁾

Declining hectares of farmland per capita by 2050

+50%

FAO⁽³⁾

Productivity increase required to feed the planet by 2050

€120bn

from ~€86bn in 2016⁽⁴⁾

Estimated agriculture inputs market size by 2025

(1) Nelson et. al. (2014) (2) FAO 2016 "Climate change and food security" (3) FAO 2017 "The Future of Food and Agriculture - Trends and Challenges" (4) Seeds, traits and crop protection market

Delivering Enhanced Solutions for Next Generation of Farming



Increase Efficiency

- Overcome increasing gap of demand and availability of skilled labor

Optimize Yield

- Raise yield given the environmental conditions by taking right decisions on genetics, agronomic practices and input factors

Ensure Sustainability

- Optimize input factors to protect natural resources

Manage Volatility

- Manage agronomic volatility and better mitigate risks, e.g. weather and commodity prices

Integrated Solutions

- Smart combination and optimized usage of products
- Based on agronomic advice and digital farming solutions



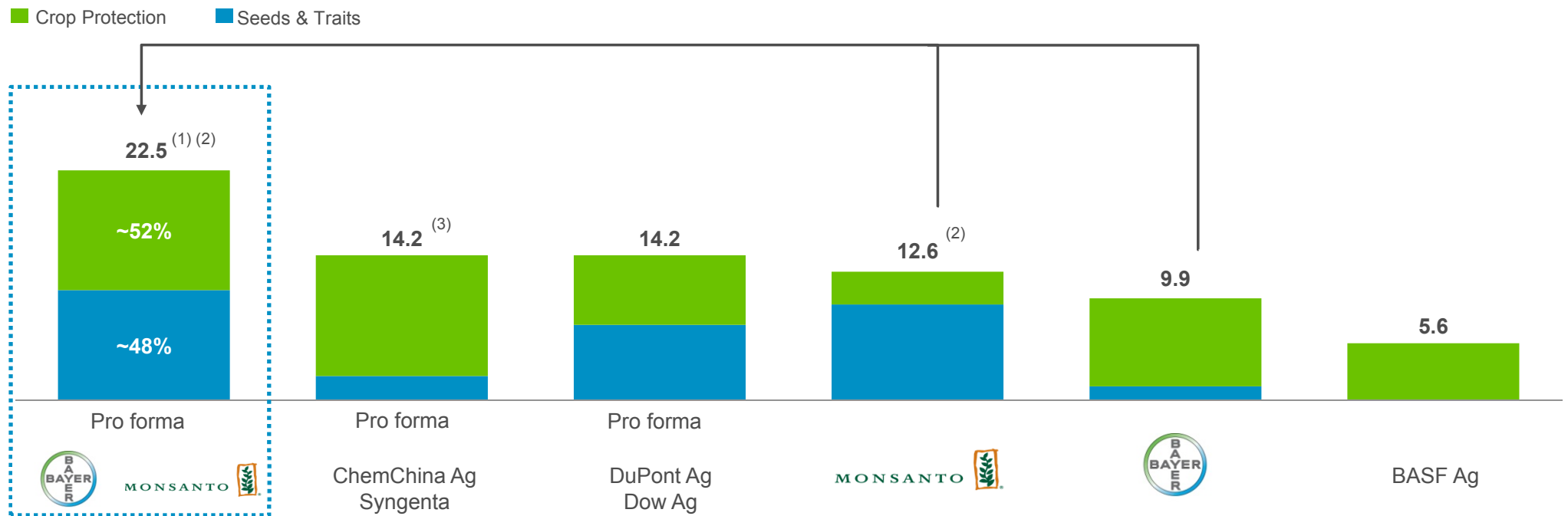
Valuable New Technologies

- Excellence in chemistry and biology
- High-tech breeding capabilities
- Targeted genome optimization
- Computational Life Science



Creating a Global Leader in Agriculture

2016 Pro Forma Sales (in € billion)



Based on company information and internal calculations (at avg. 2016 Fx rate USD/EUR=1.11)

(1) Pro forma figures without impact of potential divestments (2) Monsanto calendarized to Nov 2016

(3) Excludes non-consolidated Chinese Ag business of ChemChina

Targeting Above-Market Growth and Industry Leading Profitability



**Broad
Product Portfolio**

**Truly Global
Footprint**

**Integrated
Solutions**

**Innovation
Engine**

Substantial Synergy Potential

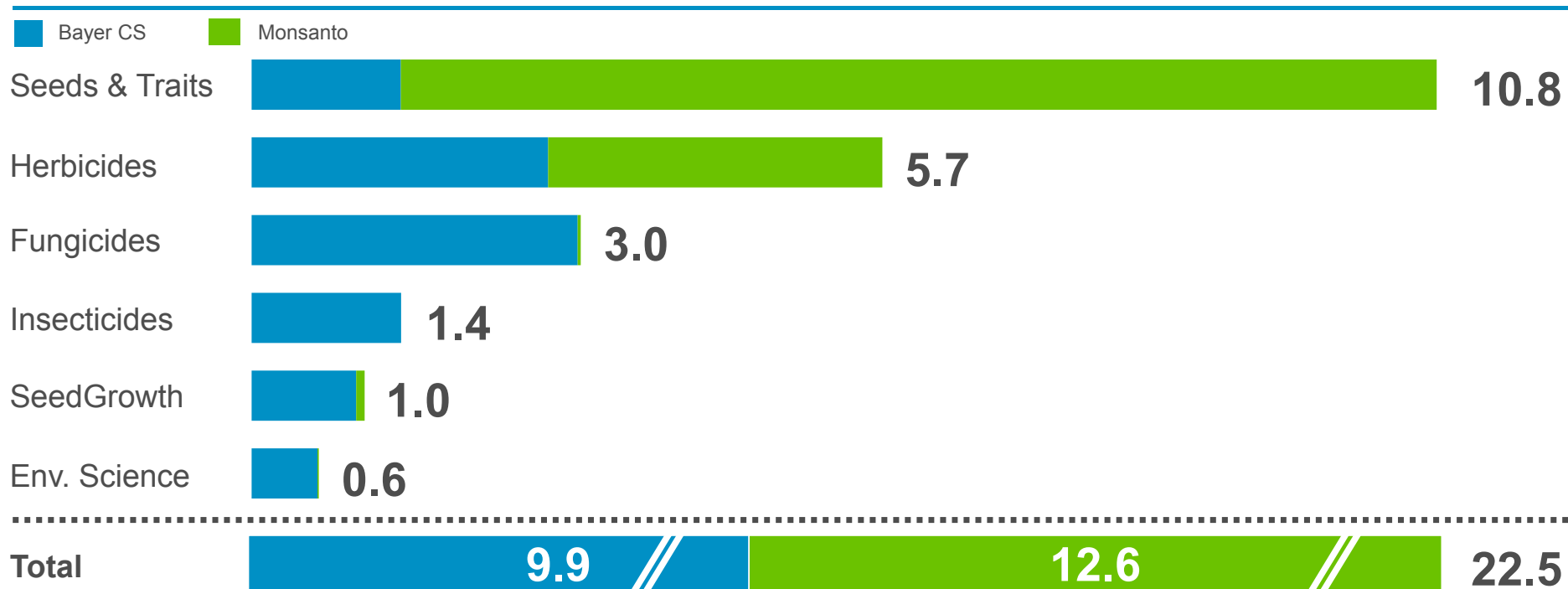
Combined company expected to deliver above market growth and underlying EBITDA margin of > 30% after year 3 post closing⁽¹⁾

(1) Not including any potential divestments

Attractive Offering Across All Relevant Product Segments



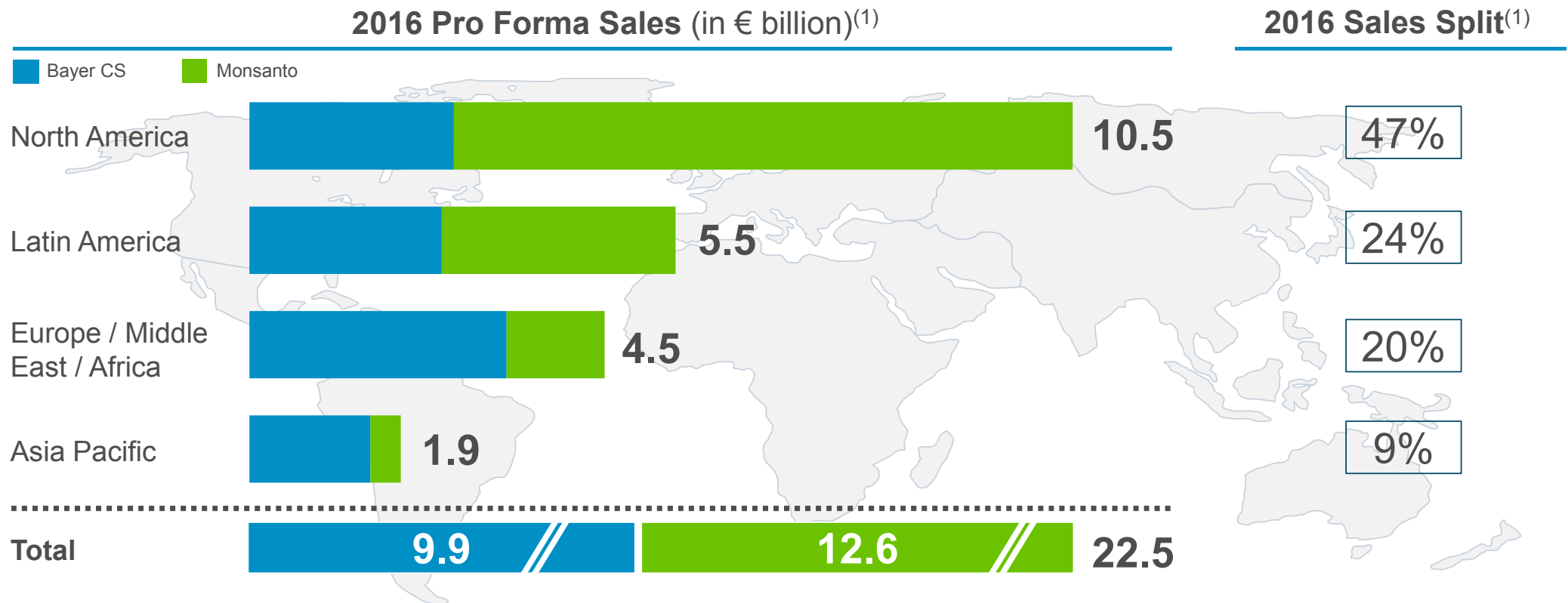
2016 Pro Forma Sales (in € billion)⁽¹⁾



(1) Based on company information and internal calculations (at avg. 2016 Fx rate USD/EUR=1.11)
Pro forma figures without impact of potential divestments; Monsanto calendarized to Nov 2016

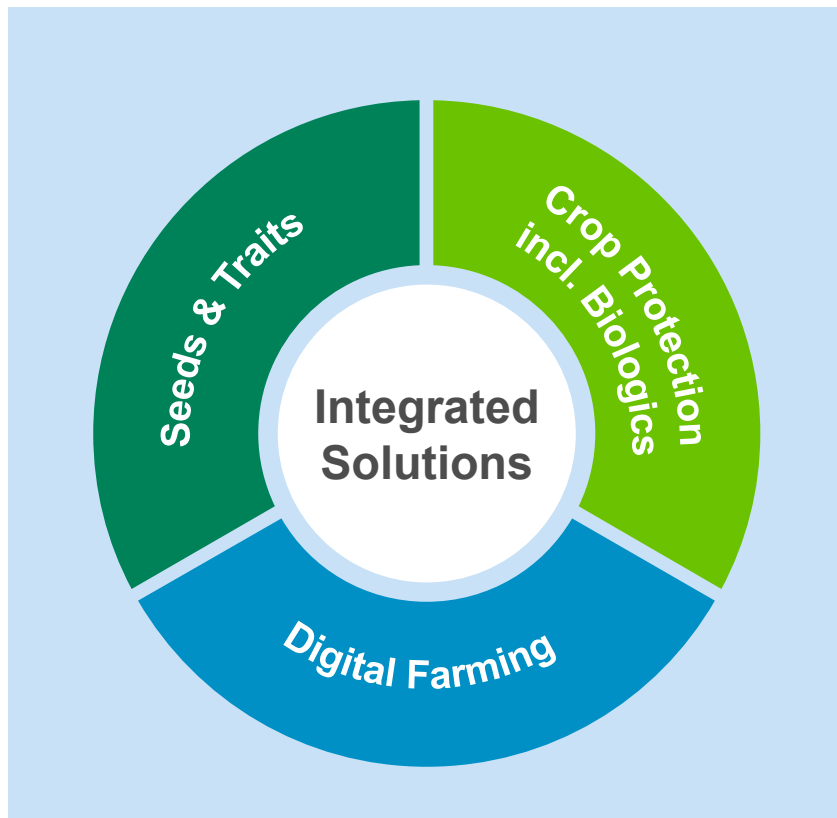


A Truly Global Footprint of the Combined Business



(1) Based on company information and internal calculations (at avg. 2016 Fx rate USD/EUR=1.11)
Pro forma figures without impact of potential divestments; Monsanto calendarized to Nov 2016

Successful Integrated Solutions Need Best-in-Class Technology



Seeds & Traits

- Superior germplasm
- Strong genetics and breeding capabilities

Crop Protection incl. Biologics

- Innovative chemistry for weed, pest and disease control
- Strong Biologics portfolio

Digital Farming

- Extensive data collection and computation
- Predictive analytics

Advancing from Combined Offering to Integrated Solutions



From short-term to long-term

Combined Offering

- Ability to **offer a broad variety** of seed and chemical products
- Combining sales forces and infrastructure across geographies

Integrated Solutions

- **Smart combination** and optimized usage of products
- Based on agronomic advice and **Digital Farming**
- **Innovation of differentiated systems** based on technologies optimally designed to work together

Benefit to the Farmer

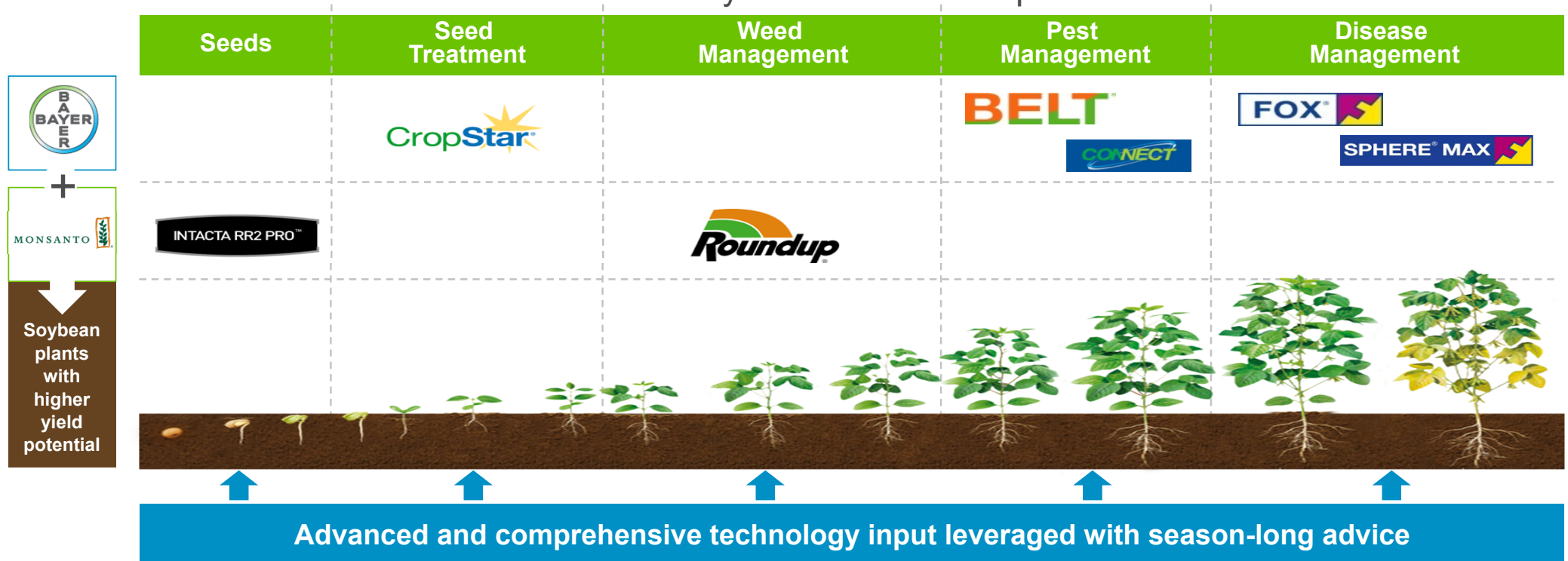
- More convenience
- Improved sourcing

- Improved yield
- Optimized inputs
- Sustainable farming



Combined Offering to Fully Address Farmers' Needs

The Soybean Brazil Example⁽¹⁾



(1) Pro forma combined portfolio

Combined Technologies Enable Customized Solutions



















Corn and Soy Example



Market

- Broad-acre crops corn and soy account for ~40% of global ag market value⁽¹⁾
- Key growing regions are North/Latin America (~40% of corn and ~80% of soy global planted acres)⁽²⁾, thereof > 85% of corn and soy acres is biotech seed⁽³⁾

Combined Portfolio⁽⁴⁾

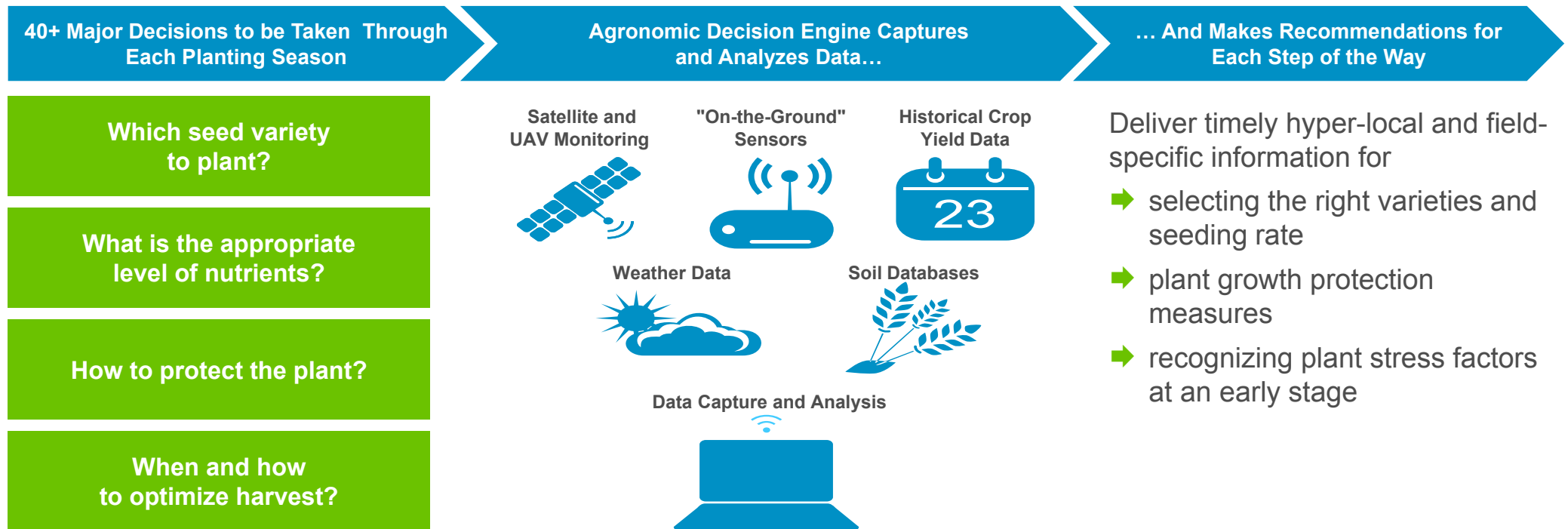
	SEEDS	BIOTECH TRAITS			CROP PROTECTION ⁽⁵⁾				DIGITAL FARMING
		Yield & Stress	Pest Control	Weed Control	Yield & Stress	Pest Control	Weed Control	Disease Control	
Corn									
Soybean									

Combined company with strong positions across all technologies offers high value capturing opportunity in corn and soy in key growing regions

(1) Seeds, traits and crop protection, Bayer internal estimates (2) Source: IHS Global, May 2016

(3) Source: Phillips McDougall Jul 2016 (4) Pro forma (5) Chemical and biological

Digital Farming Provides Data-Based Insights to Optimize Field Specific Decision-Making



Digital Farming helps to improve on-farm decision-making and execution along the entire planting cycle, helping to maximize yields and improve sustainability



Digital Farming Potential of Combined Portfolio

Combining Advanced Digital Farming Capabilities



Bayer

- Leading pest, weed, disease modelling and analytics – **increasing resource efficiency**
- Hyper-localized decision support tools – **optimizing use of Crop Protection products**

MONSANTO



- Seeds & Planting scripts creator – **improving operations**
- Nitrogen Advisor – **optimized N-fertilizer use**
- Field-level weather information and notification – **managing weather risks**
- **>100 million acres enrolled already today**



Integrated solutions of Seeds & Traits and Crop Protection inputs based on **optimized field-level prescriptions** to improve **on-site decision making and execution**

Long-term Vision:

Outcome-driven value proposition (e.g., “yield guarantee”, “disease-free acre”)

Strong Innovators are Needed to Step-up the Pace in Agriculture R&D



- The Pharma industry spends ~\$150bn⁽¹⁾ per year on R&D to enhance health, whilst the Agricultural industry spends only ~\$8bn⁽²⁾ per year on R&D to enhance food security, which is the basis for good health
 - United Nations FAO⁽³⁾ sees need for more sustainable food and agricultural production and calls for innovative systems that protect and enhance the natural resource base, while increasing productivity:
 - More efficient use of land, water and other inputs
 - Climate-smart agriculture: adapting and building resilience to climate change, while capturing potential mitigation co-benefits
 - Greater conservation of biodiversity
 - Achieve a greater quality and quantity of production with shift from "ready-to-use" to "custom-made" production systems
- ➔ "Adoption and adaptation of sustainable farming systems and practices require technological innovation and investment in R&D"

(1) 2015, source: EvaluatePharma, Aug 2016 (2) Estimation based on Phillips McDougall AgriService data; 2015 R&D expenditure of leading companies in conventional crop protection and agricultural biotechnology

(3) Source: FAO. 2016. The future of food and agriculture – Trends and challenges. Rome

Accelerating Innovation Through Joint R&D Forces in Combined Entity



- Innovation in agrochemicals, seeds & traits has become more costly and takes longer⁽¹⁾ due to higher regulatory demands
 - New unmet needs and challenges (e.g. climate change, resistances) require break-through innovation based on synergistic technology application
 - Emerging technologies allow to generate new customized solutions
- ➔ Increasing need for interdisciplinary approaches to accelerate R&D productivity

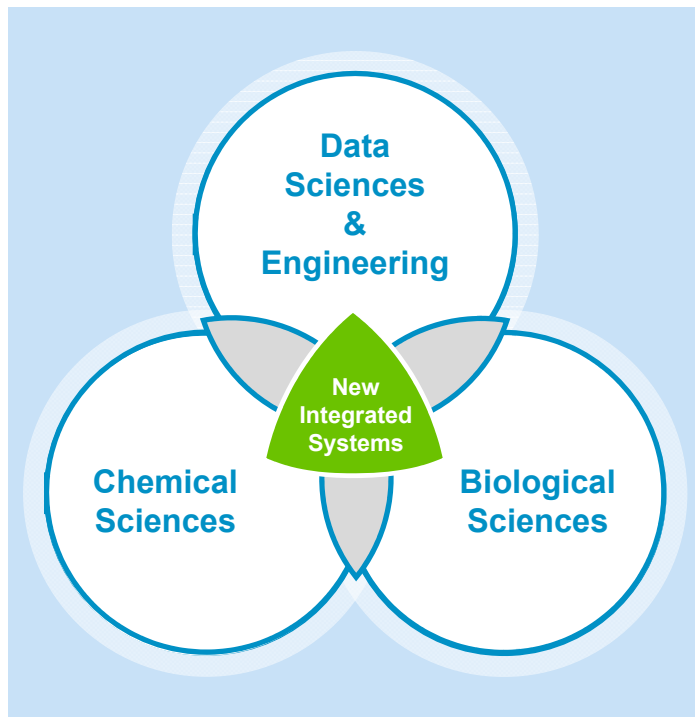
Bayer & Monsanto's Joined R&D Forces⁽²⁾

- Strong R&D technology platforms with cross-technology capabilities
 - Superior access to innovation resources (including emerging technologies like genome-editing) through alliances and ventures
- ➔ Strong commitment to innovation with 2016 pro forma R&D investment of €2.5bn

(1) Based on: Phillips McDougall, AgriFutura Apr 2016 and AgriService Nov 2016

(2) 2016 Bayer + Monsanto pro forma; Fx rate USD/EUR=1.11; Monsanto R&D investment calendarized to Nov 2016

Building Integrated Systems Based on Synergistic Technology Application



New types of products

- Resistance-breaking herbicide systems based on innovative traits and chemistry
- Novel macromolecules selectively targeting pests (e.g., sprayable RNAi)

Data-based decision support

- Advisory tools for on-farm decisions (e.g., choice of germplasm/seeds)
- Crop Protection applications at ultra-high precision (e.g., down to single-plant level)

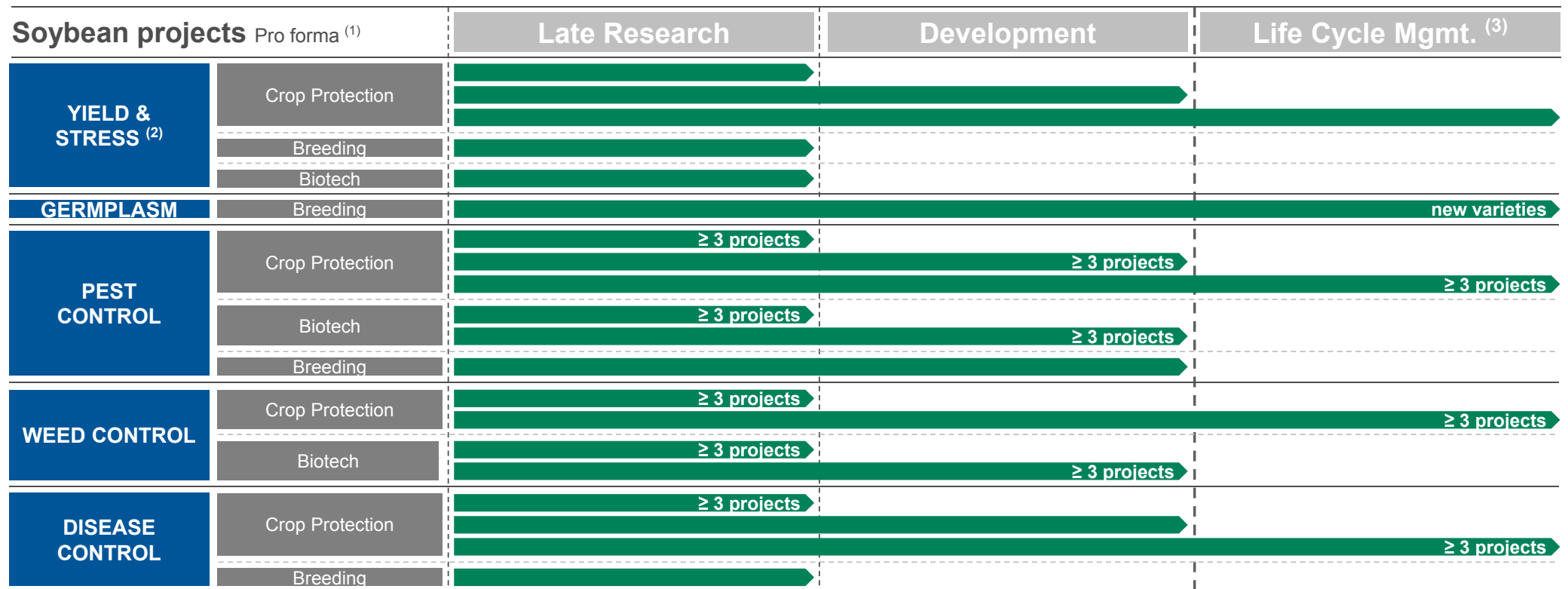
Better / safer products

- Beneficials-friendly products based on in-depth understanding of physiology

Potential for faster and more efficient development of customized solutions for farmers

Combined Company Has a Broad Pipeline

Soybean Example



(1) Pro forma core soybean pipeline only, not exhaustive; Monsanto projects as published in R&D Update Jan 5, 2017 (2) Crop Efficiency

(3) Bayer: Top LCM products only; Crop Protection: chemical and biological; Breeding: incl. selective native traits; Biotech: GM traits

Combined Entity Expected to Deliver Synergies of Approx. \$1.5bn After Year Three



Synergy Breakdown (Net EBITDA Impact ⁽¹⁾)

Total Cost Synergies ~\$1.2bn

Total Sales Synergies ~\$0.3bn

Total Synergies ~\$1.5bn

Synergies are above and beyond Monsanto's announced restructuring program

Cost Synergies Breakdown

- **~70% stemming from SG&A savings**
 - Integration of country platforms / IT land-scape
 - Public company expenses
 - Overlapping marketing & sales functions while maintaining exceptional global footprint for future growth
- **R&D synergies**, e.g. in trait research
- **COGS synergies**, e.g. from overlap in supply function & procurement spend

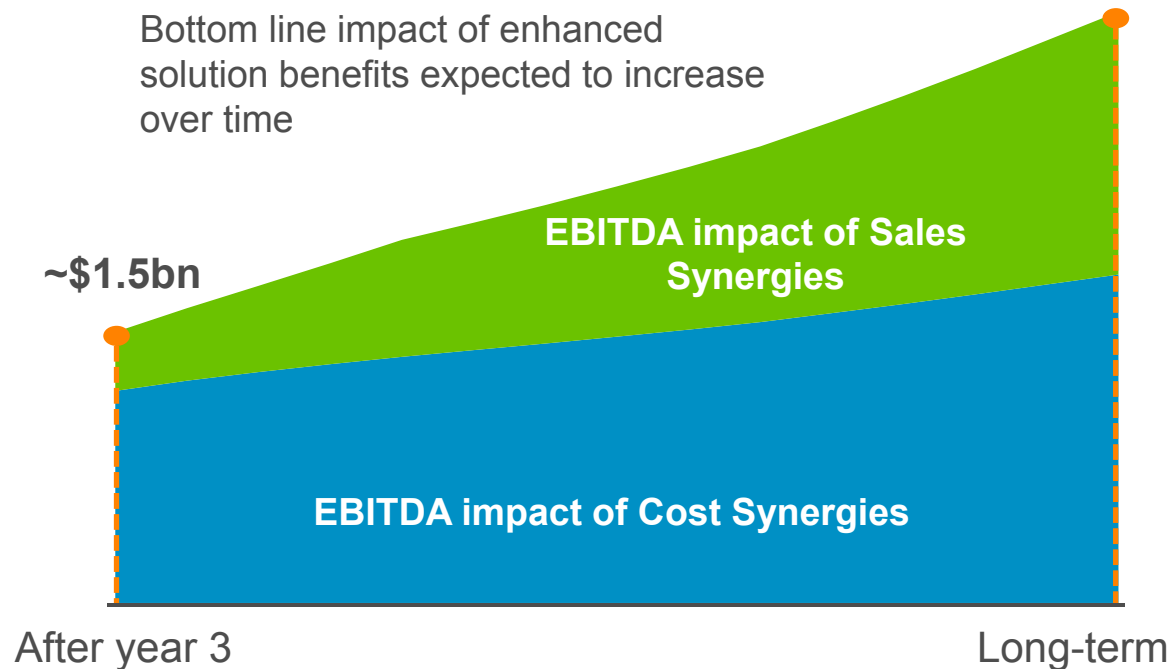
**~\$1.5bn total annual synergies after year three confirmed in due diligence,
plus additional synergies from integrated solutions in future years**

(1) Net of estimated dissynergies such as termination of selected distribution agreements as well as sales disruptions; based on detailed bottom-up analysis by Bayer; Fx rate: USD/EUR=1.11

Substantial Longer-Term Synergies from Integrated Solutions Anticipated



Net EBITDA Impact of Synergies



Fx rate: USD/EUR=1.11

From Combined Offering to Integrated Solutions

- Creates an enhanced agricultural offering to address broad range of farmer needs
- Initial sales synergies expected mainly from broader product variety materializing already **near-term** (~\$0.3bn net EBITDA impact)
- Sales synergies **expected to expand** in the mid to long-term from integrated solutions
 - **Smart combinations**
 - **Innovation of differentiated systems**



Agreed Monsanto Acquisition – Achievements



Combined Crop Science Company Well Positioned to Deliver Excellent Performance



A Global Leader in Agriculture

Global Leader in Agriculture with broad product portfolio and an integrated agricultural offering

Integrated Solutions

Fully leverage smart combinations and optimized usage of products based on agronomic advice and digital farming

Innovation Engine

Deploy joint innovation capabilities to deliver enhanced solutions for the next generation of farming

Deliver Value Proposition

Deliver above market growth and underlying EBITDA margin of > 30% after year 3 post closing⁽¹⁾
Expect to earn cost of capital after year 4 post closing

(1) Not including any potential divestments



Reporting Events

Date	Event	Publication
Thursday, July 27, 2017	Investor Conference Call	Q2 2017 Interim Report
Thursday, October 26, 2017	Investor Conference Call	Q3 2017 Interim Report
Wednesday, February 28, 2018	Investor Conference Call	2017 Annual Report
Thursday, May 03, 2018	Investor Conference Call	Q1 2018 Interim Report
Friday, May 25, 2018	Annual Stockholders' Meeting	

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