



Bayer 2022: Delivering Value Creation



**UniCredit // Kepler Cheuvreux
German Corporate Conference
January 21st & 22nd, 2019**





Disclaimer

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.

Although the forward-looking statements contained in this presentation are based upon what Bayer's management believes are reasonable assumptions, they necessarily involve known and unknown risks and uncertainties that could cause actual results and future events to differ materially from those anticipated in such statements. Forward-looking statements are not guarantees of future performance and undue reliance should not be placed on them. Bayer undertakes no obligation to update forward-looking statements if circumstances or management's estimates or opinions should change except as required by applicable securities laws.

For more information on factors that could cause actual results and future events to differ from those anticipated in forward looking statements, please refer to the factors discussed in Bayer's public reports which are available on the Bayer website at <https://www.investor.bayer.com/en/reports/annual-reports/overview/>, including in the Annual Report 2017 under the caption "Report on Future Perspectives and on Opportunities and Risks".



2018: Progress Across all Divisions

Delivering on Guidance Despite Headwinds

Group ✓		
<ul style="list-style-type: none"> // 2018 on track // Status of Glyphosate litigation // Value crystallization of Covestro stake // Net financial debt at ~€36bn by end of 2018, ~€3bn ahead of plan 		
Crop Science ✓	Pharmaceuticals ✓	Consumer Health ✓
<ul style="list-style-type: none"> // Growth ahead of competition and best-in-class profitability¹ // Full recovery in Brazil // Successful start of integration 	<ul style="list-style-type: none"> // Growth at rate of competition² // cGMP remediation in Leverkusen fully on track // Xarelto approvals/launch in CAD/PAD in EU/US // Progress with Larotrectinib and Darolutamide 	<ul style="list-style-type: none"> // Growth acceleration plan with strengthened management underway // Return to growth in H2 2018 // Portfolio further focused through divestiture of Rx dermatology

¹ Reported data peer group; ² IQVIA; cGMP: current Good Manufacturing Practices; CAD: Coronary Artery Disease, PAD: Peripheral Artery Disease



We Will Create Significant Value Through 2022 and Beyond

Focus on Execution and Driving Sustained Profitable Growth...

1

We have completed Bayer's portfolio transformation into a global leader in Health & Nutrition

2

The next phase is focused on driving value creation through (i) growth ahead of competition enabled by innovation and portfolio measures (ii) profitability enhancement through Bayer 2022 synergy and efficiency programs and (iii) strong cash generation

3

We target Sales, Core EPS and FCF CAGR* until 2022 of 4%, 10% and 18%, respectively




4

Strong FCF along with proceeds from divestments enable (i) growing dividends, (ii) quick deleveraging of our balance sheet and (iii) selective bolt-ons and in-licensing transactions

2018e PF used for Sales and Core EPS; 2018e used for FCF

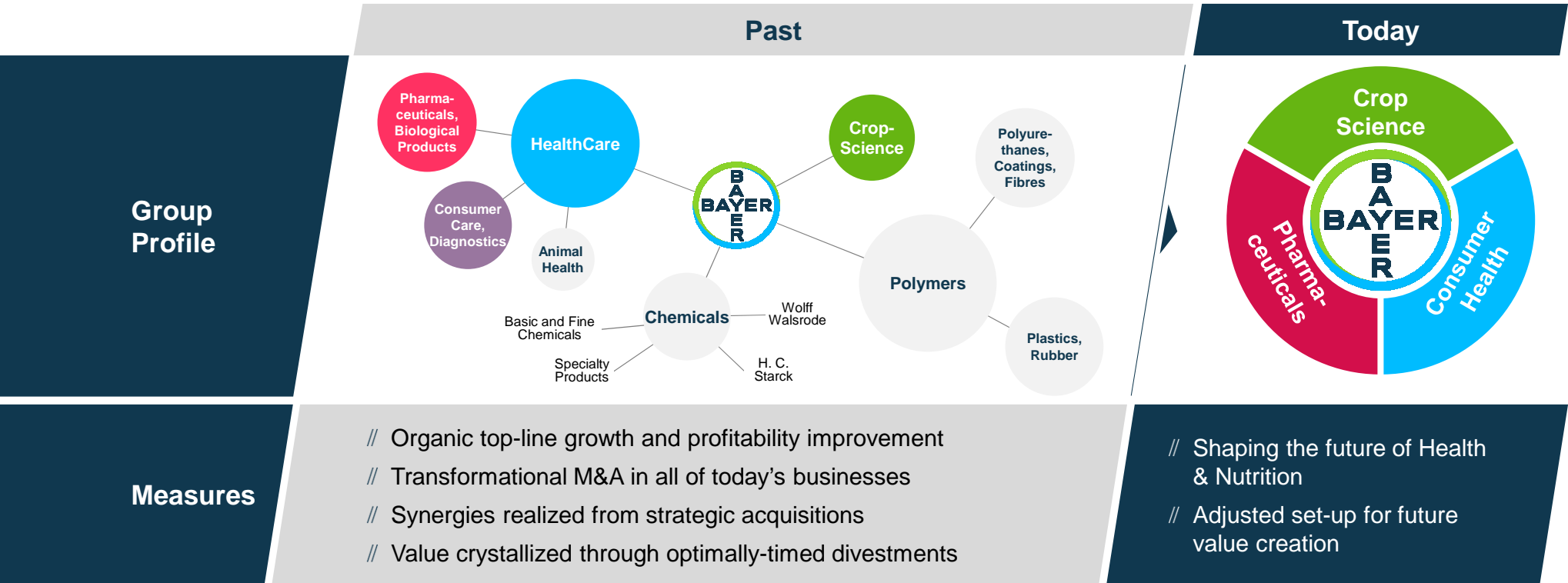


We Will Make Further Portfolio Adjustments: Crystallizing Value of Non-core Assets

Portfolio assets	Rationale	Financials (2018e)	
		Sales	EBITDA <small>before special items</small>
 <p>// Explore strategic exit options for Animal Health</p>	<p>// Inorganic investments required to build a leading position will be shifted to other investment priorities</p>	~€1.5bn	~€0.35bn
 <p>// Explore strategic options for share in Currenta</p>	<p>// Non-core business; mismatch between Bayer's ownership share (60%) and demand of services (20%)</p>	~€1.2bn	~€0.2bn
 <p>// Explore strategic options for Suncare & Footcare</p>	<p>// Crystallize value of consumer care brands to focus capital allocation on core OTC brands</p>	~€0.4bn	N/A
Total:		~€3.1bn	>€0.6bn



Transformation Completed





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

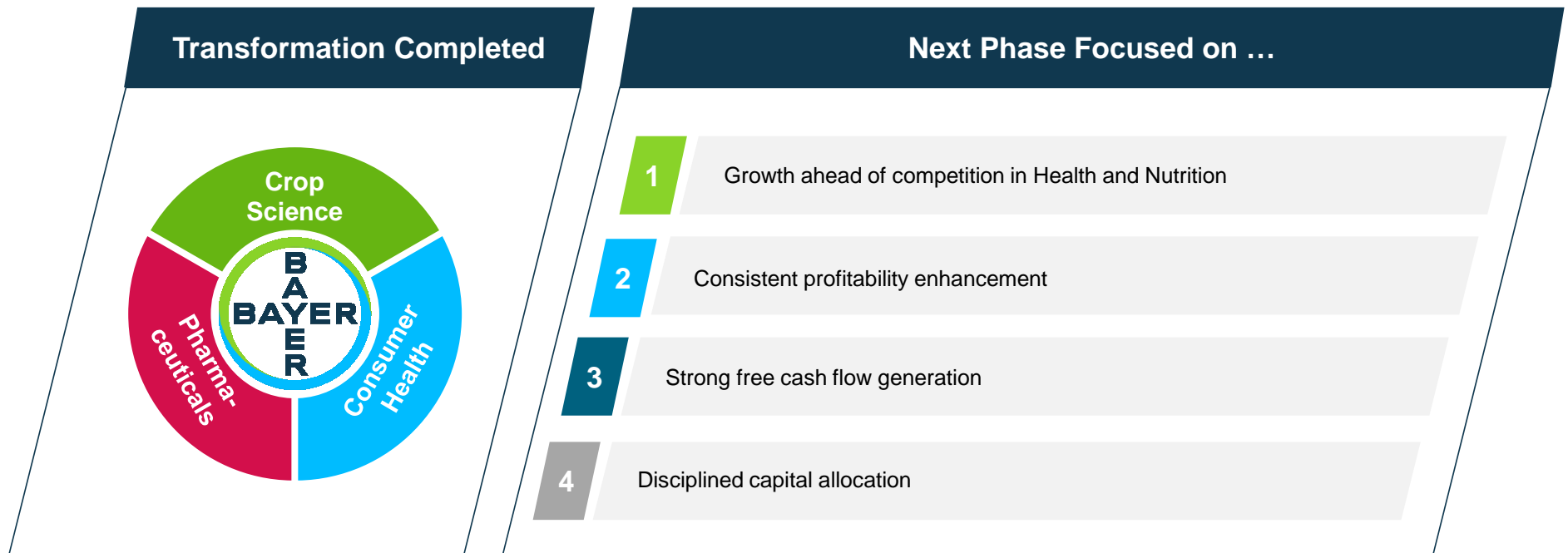
Leading Positions in 7 of the Top 10 OTC Markets

- // Focus categories: Allergy & Cold, Cough, Sinus and Flu; Nutritionals; Dermatology; Pain and Cardio; Digestive Health
- // Concentrated portfolio of 16 mega-brands 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.



Next Phase to Deliver Value Creation





Global Megatrends in Health & Nutrition

Attractive Macro Drivers of Our Businesses

Megatrends through 2050

Societal Needs

Our Mission

Aging Population



People 60+ more than doubling¹

>20% of total population¹

Preserve and restore health

Growing Population

+2.2bn people¹



+50%

more food and feed required to meet growing demand²

Secure sufficient supply of quality food

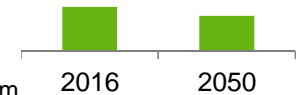
Pressure on Ecosystems



-17%

Harvest losses from climate change³

-20%



Significant loss in arable land per capita⁴

Use natural resources more efficiently and responsibly

We leverage science to address these societal needs – with the ultimate goal to improve people’s lives



Science For A Better Life

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. al, (2014); 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



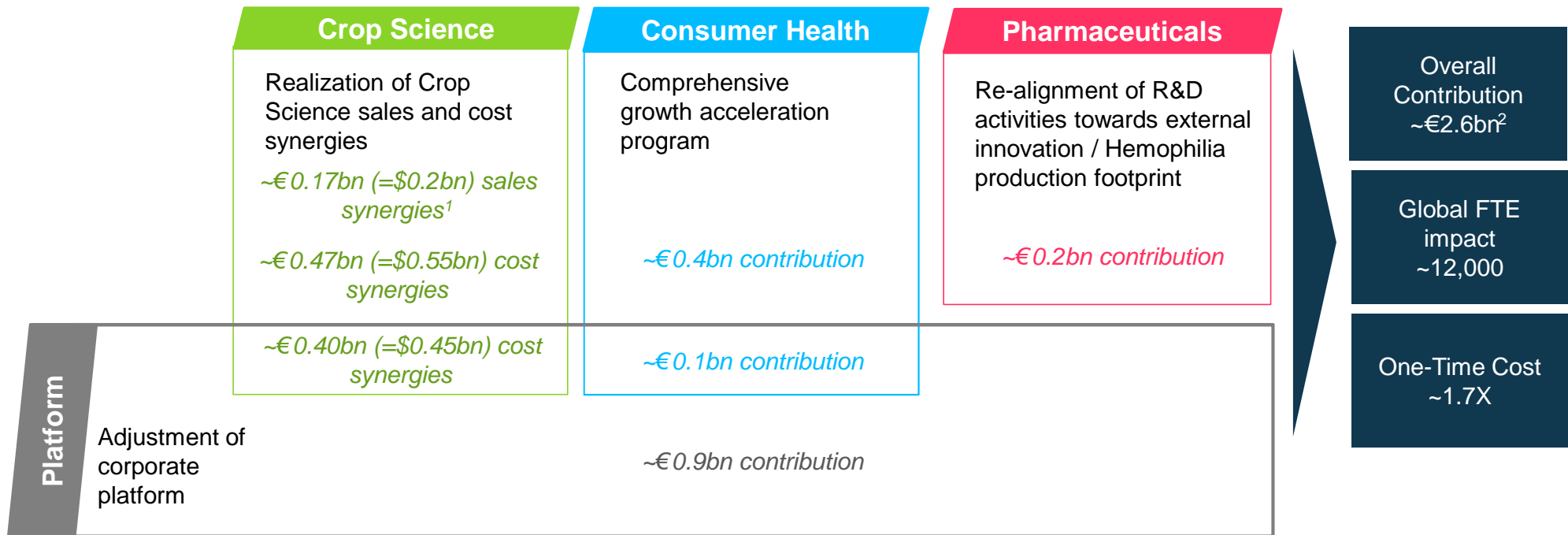
We Focus on Growth in Attractive Markets

Bayer Group	Market		Bayer's growth levers
	Size 2017	CAGR 2018-2022	
Crop Science	 ~€90bn ¹	 ~3% ²	<ul style="list-style-type: none"> // Using our leading positions in Agriculture, Pharmaceuticals and Self-care to address societal needs and benefit from global megatrends // Drive innovation
Pharmaceuticals	 ~€870bn ³	 4-5%	<ul style="list-style-type: none"> // 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
Consumer Health	 ~€140bn ⁴	 3-4%	<ul style="list-style-type: none"> // Innovative medicines in areas of high unmet medical need // Therapeutic focus areas: Cardiology, Oncology, Gynecology, Hematology and Ophthalmology // Leverage external innovation and partnering as well as pipeline and potential of current products
			<ul style="list-style-type: none"> // Branded self-care solutions that help transform people's daily health // Focus on five core categories

¹ Pro-forma calculations Bayer, Bayer CS market model; ² excluding potential cyclical recovery of the Crop Science market; ³ IQVIA ; ⁴ Market model in-market sales OTC medicines, data from IQVIA, Nicholas Hall



Bayer 2022 Synergy & Efficiency Programs



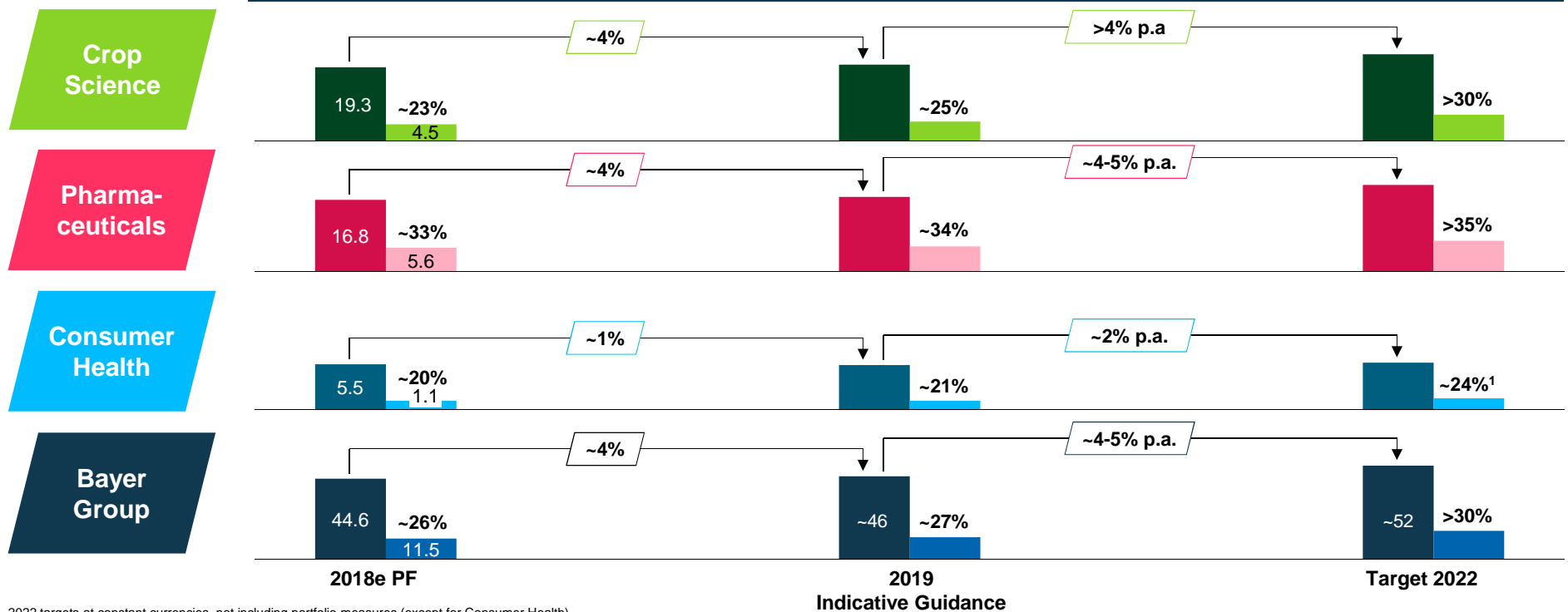
¹ EBITDA before special items impact from sales synergies

² Indicative Phasing: ~30% effective in 2020, ~70% in 2021 and 100% in 2022



Targeting Significant Profitability Improvements Across All Divisions

Sales and EBITDA before special items (margin) development (in €bn, %)



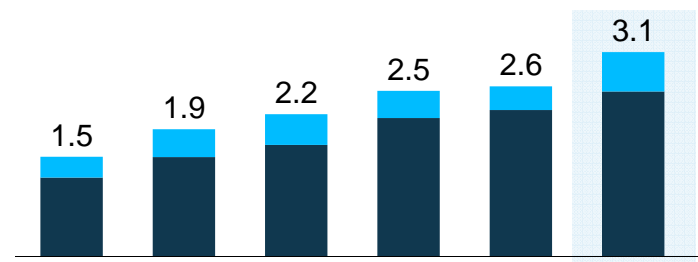
2022 targets at constant currencies, not including portfolio measures (except for Consumer Health)

¹ Includes portfolio measures



Cash Flow Improvement Focusing on Capex and Working Capital Optimization

Capex spend
in € bn



- // Annual contribution of ~0.5bn EUR by 2022
- // Past and current levels impacted by single large-scale investments in fixed assets
- // Licensing will continue to be an element to drive growth

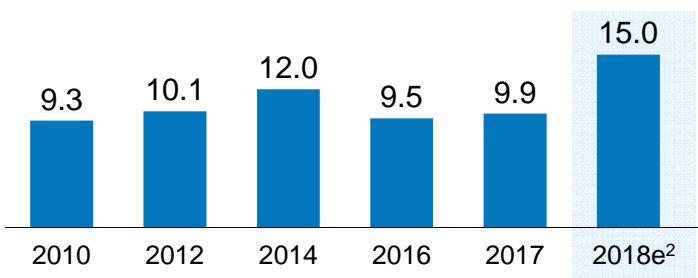
in % of sales



Focused CapEx below current levels → ~ 5-6%

■ Intangibles ■ Fixed assets

Working Capital
in € bn



- // Annual contribution of ~0.5bn EUR by 2022
- // Focus on optimization of inventory levels and receivables management

in % of sales



Working capital optimization → ~ 32%

¹ Crop Science 48%, Pharmaceuticals 24%, Consumer Health 24%; ² Working Capital estimated at year-end



Group Targets - Value Creation from Strengthened Base

Triple Leverage

€bn		2018e PF	Indicative Guidance 2019	Target 2022	CAGR 2018-22 ²
Sales ¹	Total Group	44.6	~46 (~4%)	~52	~4%
	Crop Science	19.3	~4%		>4%
	Pharmaceuticals	16.8	~4%		~4-5%
	Consumer Health	5.5	~1%		~2%
EBITDA before special items (%)	Total Group	11.5 (~26%)	~12.2 (~27%)	~16 (>30%)	~9%
	Crop Science	4.5 (~23%)	~25%	>30%	
	Pharmaceuticals	5.6 (~33%)	~34%	>35%	
	Consumer Health	1.1 (~20%)	~21%	~24% ⁴	
Core EPS (€)		~6.7	~6.8	~10	~10%
FCF		~4.1 ³	~3-4	~8	~18%
Net financial debt		~36 ³	~36 ⁵	~26-28	

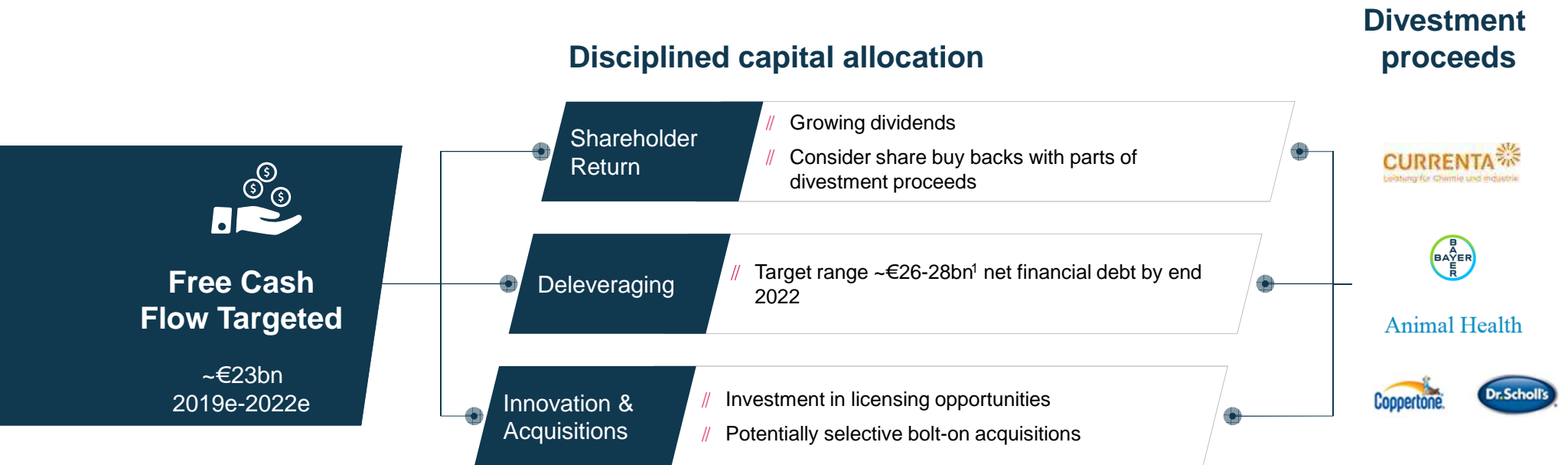
2022 targets at constant currencies, not including portfolio measures (except for Consumer Health)

¹ Sales: cpa growth; ² CAGR from 2018 base year; ³ FCF 2018e (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



¹ Before M&A / Portfolio



We Will Create Significant Value Through 2022 and Beyond

Focus on Execution and Driving Sustained Profitable Growth...

1

We have completed Bayer's portfolio transformation into a global leader in Health & Nutrition

2

The next phase is focused on driving value creation through (i) growth ahead of competition enabled by innovation and portfolio measures (ii) profitability enhancement through Bayer 2022 synergy and efficiency programs and (iii) strong cash generation

3

We target Sales, Core EPS and FCF CAGR* until 2022 of 4%, 10% and 18%, respectively

4

Strong FCF along with proceeds from divestments enable (i) growing dividends, (ii) quick deleveraging of our balance sheet and (iii) selective bolt-ons and in-licensing transactions

2018e PF used for Sales and Core EPS; 2018e used for FCF



Appendix

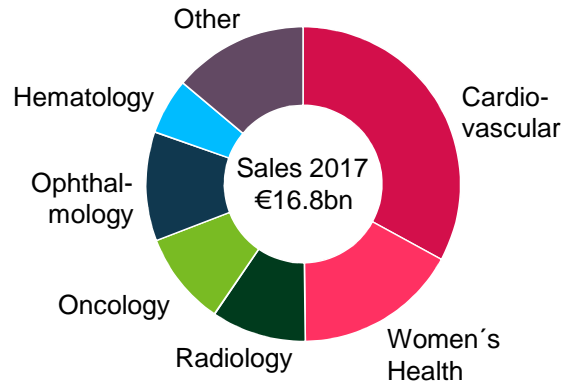




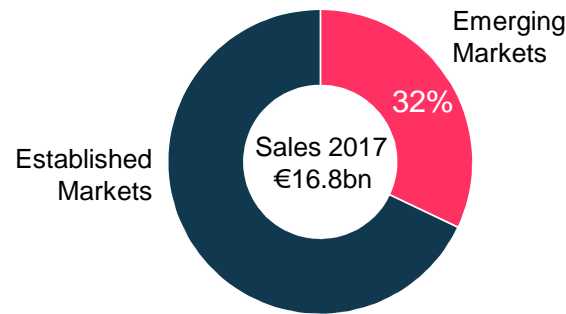
Pharma

Innovative Medicines in Areas of High Unmet Medical Need

Therapeutic area focus



Emerging markets exposure



Global leadership in important therapeutic areas

- // **No. 1** in Retinal Diseases
- // **No. 1** in Women's Health
- // **No. 1** in Radiology
- // **No. 2** in Cardiovascular
- // **No. 2** in Hematology

Leading Brands



Emerging markets include Latin America, Asia (w/o Japan, Australia, New Zealand), Africa and Middle East incl. Turkey, Eastern Europe

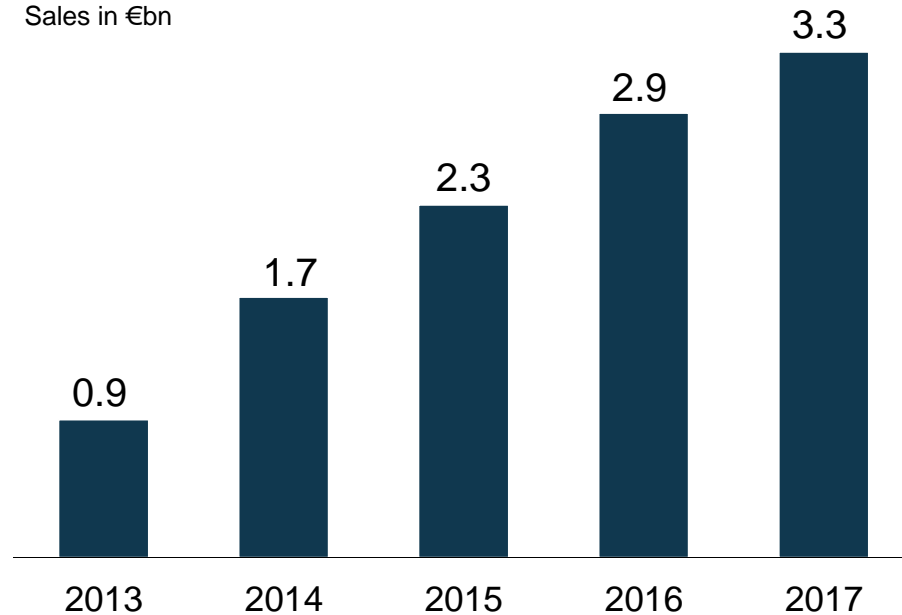


Pharma

Xarelto – Continued Growth of a Leading Anticoagulant



Sales in €bn



- // Most broadly indicated anticoagulant for use in venous and arterial thromboembolic conditions
- // A leading pharma brand with global sales of €5.0bn in 2017 incl. sales at Johnson & Johnson
- // New CAD/PAD indication launching in EU and the US
- // Peak sales potential: >€5.0bn¹
- // Further growth driven by:
 - // Under-served patient populations
 - // Demographics
 - // Shift from warfarin
 - // New indications targeting patients currently not treated with anticoagulants

CAD: Coronary artery disease; PAD: Peripheral artery disease

¹Ex-US sales plus royalty from J&J as reported by Bayer

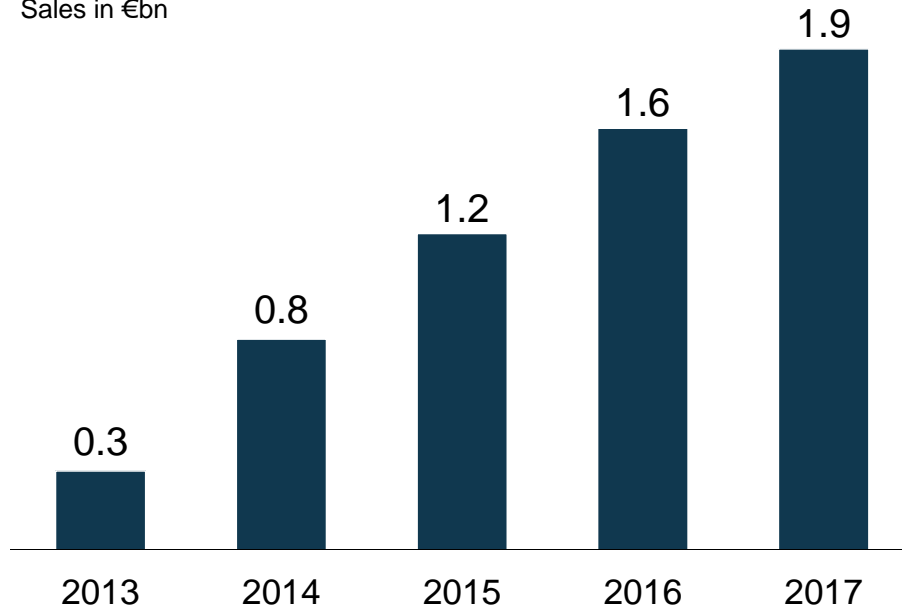


Pharma

Eylea – A Leader in Retinal Diseases



Sales in €bn



// A leader in retinal diseases with global brand sales of €5.2bn in 2017 incl. sales at Regeneron¹

// Approved for the treatment of 5 retinal diseases: wAMD, DME, BRVO, CRVO, mCNV

// Treat and extend dosing regimen with injection intervals of up to 12 weeks or more for wAMD

// Peak sales potential: >€2.5bn²

// Further growth driven by:

// Continued generation of real-life experience in wAMD across key markets and treatment-naïve patient share gains

// Market expansion in DME

¹ Marketed by Bayer ex-US only; ² As reported by Bayer

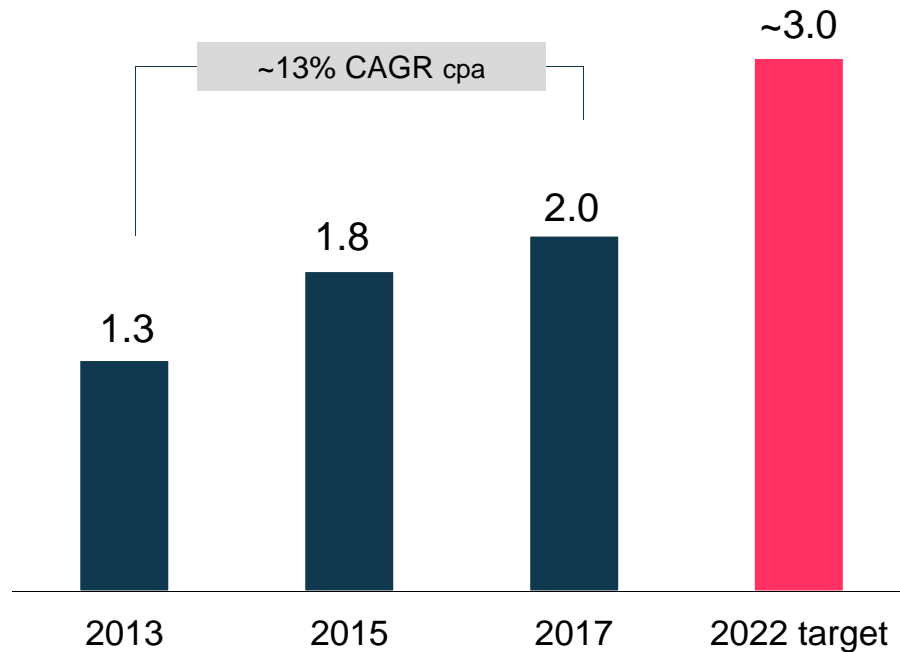
wAMD: Wet age related macular degeneration; DME: Diabetic macular edema; BRVO: Branch retinal vein occlusion; CRVO: Central retinal vein occlusion, mCNV: Myopic choroidal neovascularization



Pharma

China is a Growth Engine for Pharma

Sales in PR China in €bn



- // Ranked among the top 5 multi-national pharma companies in China
- // Targeting sales of ~€3bn in PR China by 2022
- // Portfolio of established and innovative drugs matches China's needs
- // Strong growth of key products
- // Xarelto and Nexavar entered the National Reimbursement Drug List in 2017
- // Glucobay, Adalat, Nimotop, Bayaspirin and Ciprobay listed on China's Essential Drug List

cpa: Currency and portfolio adjusted



Pharma

Late-stage Pipeline with Progress in Oncology

Darolutamide met Primary Endpoint in Phase III-trial and FDA-approval of Larotrectinib







	Larotrectinib	Darolutamide	Copanlisib	Finerenone	Vericiguat
Indication	// TRK-fusion Cancer	// Prostate Cancer	// Lymphoma	// Diabetic Kidney Disease	// Chronic Heart Failure
Status	// FDA approved / in registration	// Phase III (nmCRPC) // Phase III (mHSPC)	// Launched in the US // Phase III	// Phase III	// Phase III (HFrEF) // Phase II (HFpEF)
Commercial Potential	// PSP >€750m	// PSP ≥€1bn	// PSP ≥€0.5bn	// PSP ≥€1bn	// PSP ~€0.5bn
Clinical Completion	// Clinical program ongoing	// Completed (ARAMIS, nmCRPC) // Aug 2022e (ARASENS, mHSPC)	// May 2020e (CHRONOS-3) // Sep 2021e (CHRONOS-4)	// May 2020e (FIDELIO-DKD) // Jul 2021e (FIGARO-DKD)	// Jan 2020e (VICTORIA, HFrEF) // Oct 2019e (VITALY, HFpEF)

NTRK: Neurotrophic receptor tyrosine kinase; nmCRPC: Non-metastatic castration resistant prostate cancer; mHSPC: Metastatic hormone sensitive prostate cancer; HFrEF: Heart failure with reduced ejection fraction; HFpEF: Heart failure with preserved ejection fraction; PSP: Peak sales potential



Consumer Health

Strong Consumer Brands Built up Over Decades

Brand	Category	Age	Sales 2017	CAGR 2013-2017	# of studies ²
 ASPIRIN	Pain, Cardio, Cough & Cold	119	€1,043m ³	2.6%	88
 Claritin	Allergy	25 ¹	€585m	2.2%	82
 Bepanthen	Dermatology	74	€379m	9.7%	116
 ALEVE	Pain	42 ¹	€375m	1.3%	42
 Alka-Seltzer	Digestive Health, Cough & Cold	87	€244m	4.4%	7
 elevit	Nutritionals	34	€189m	17.1%	6

¹ Rx launch; ² Past 20 years of clinical data; ³ Combined sales (Consumer Health and Pharmaceuticals)



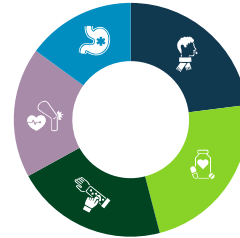
Consumer Health

We Will Focus on our Core OTC Categories To Leverage our Science and Marketing Capabilities

Categories to accelerate

- Allergy + Cough + Cold
- Nutritional
- Dermatology
- Pain + Cardio
- Digestive Health

Sales Split 2017¹



Global Position²

- #5
- #2
- #2
- #4
- #2

Main Brands

-
-
-
-
-

Categories to exit

- // Divestment of Rx Dermatology - US business closed; closing ex-US expected in H2 2019³
- // Explore exit options for Sun- and Footcare in 2019

-
-
-

¹ Excluding Derma Rx, Suncare, Footcare
² PARS database December 2017
³ Subject to the fulfillment of customary closing conditions



Consumer Health US Turnaround Plan

Levers and key focus areas

**People &
Organization**



- // Increase category and brand building experience
- // Drive leaner more agile organization

**Winning
Portfolio**



- // Focus our resources on categories where we can win

**Accelerate growth-
focused Innovation**



- // Rebuild innovation pipeline

**Modernized
Marketing & Sales**



- // Rebuild brand fundamentals
- // Accelerate digital

First actions

- // Right-size the organization
- // New leadership team in place

**Q4 2018
Q1 2019**

- // Divested Rx Dermatology
- // Explore exit options:
Suncare / Footcare

**H2 2018
2019**

- // Strengthen innovation for core brands
- // Establish Rx-to-OTC switch pipeline

2020

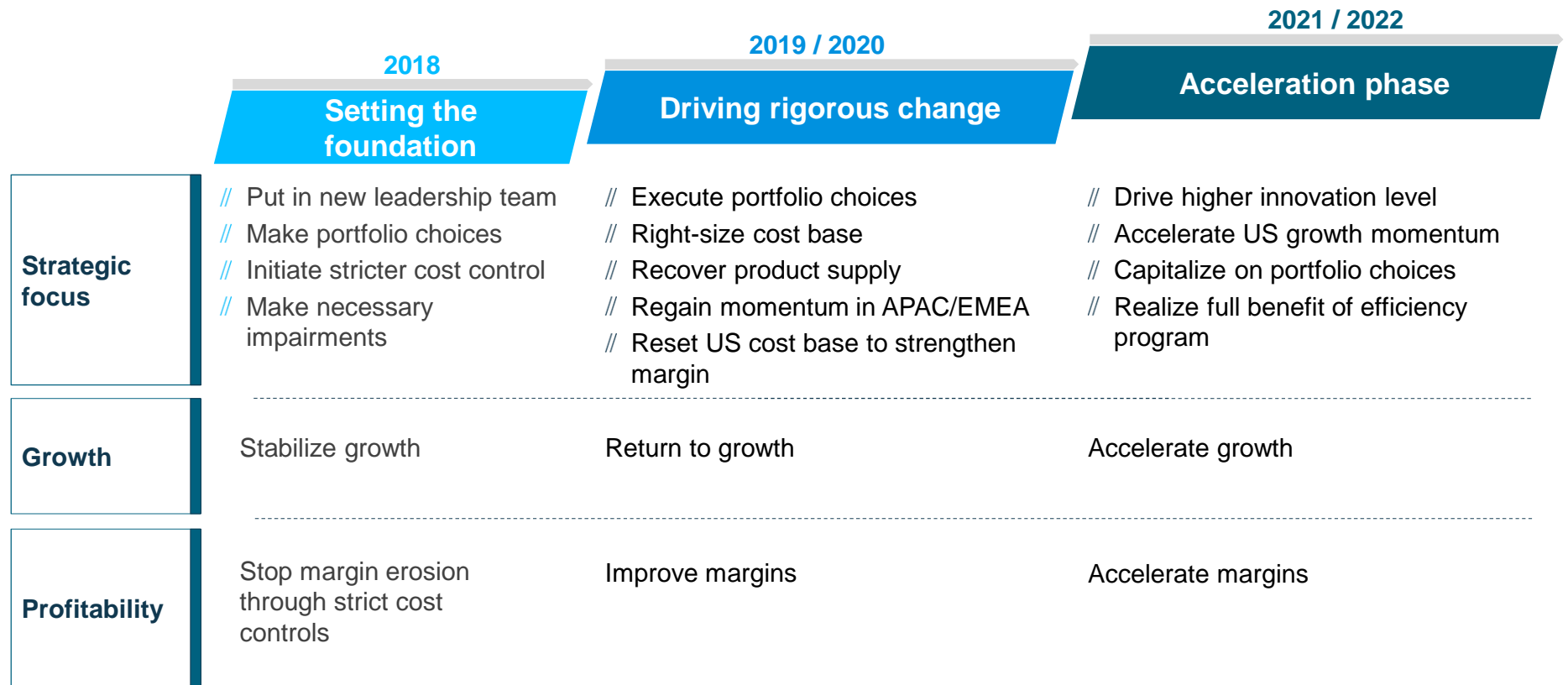
- // Step up e-commerce
 - Amazon 2018e sales +60%
 - Online (8.3%) to offline (8.7%) share

2018



Consumer Health

Our Strategic and Operational Roadmap





Crop Science

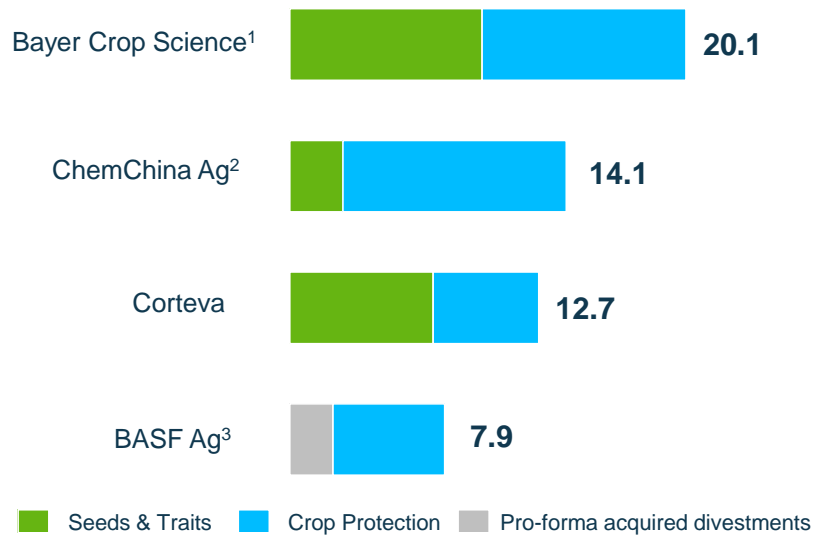
The Established Leader in Crop Science

Grower Endorsement of Excellent Product Portfolio Evidenced by Industry Leading Sales

Broadest Crop Science Product Portfolio



Sales 2017 (€bn)



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, 2017. 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.

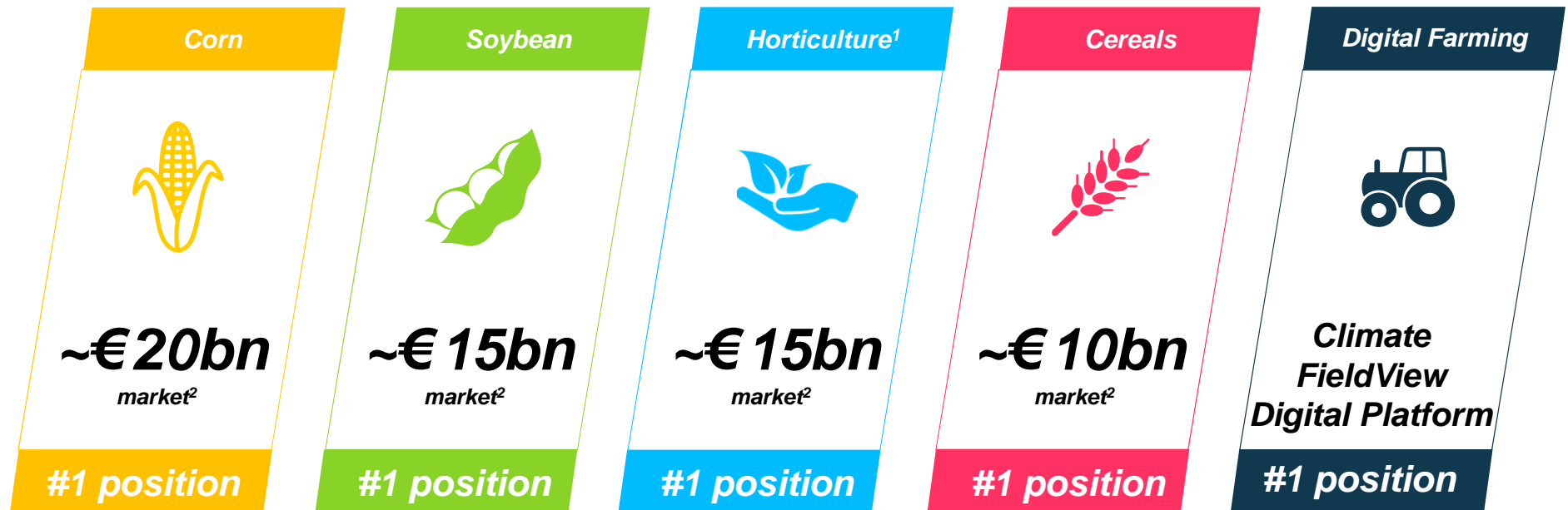
² Excludes non-agro business sales of ADAMA (nutritional supplements, aromatic products, industrial products)

³ Includes BASF Ag Sales 2017 as reported (€ 5.7bn) plus €22bn Pro-forma sales in 2017 from Bayer businesses sold to BASF



Crop Science Leading Position in All Major Categories

Crop Science Market² Currently Valued at ~€90bn // ~3% Long-term CAGR Expected



¹ Includes fruits, vegetables, flowers and nuts

² Includes seeds, traits, crop protection chemistries and environmental science; does not include fertilizer

Note: Reflecting BCS' portfolio after divestments. Market sizes rounded to nearest \$5bn. Source: Pro-forma calculations Bayer; Bayer CS market model

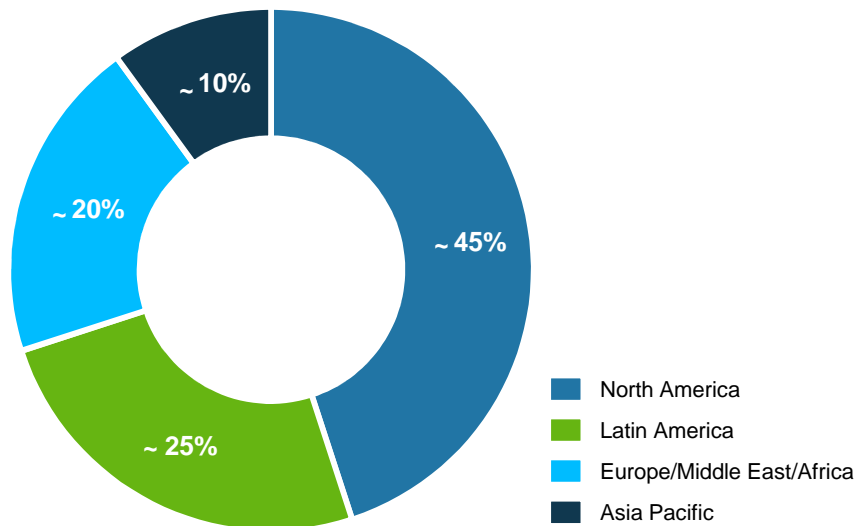


Crop Science

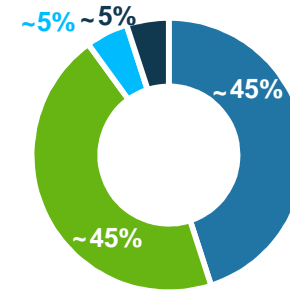
World's Broadest Commercial Footprint in Agriculture

~7,800 Customer-facing Employees with Significant Opportunity to Optimize Portfolio Across Key Regions

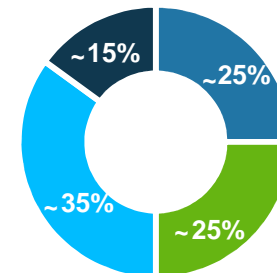
Sales 2017¹: €20.1bn



Seed & Trait Technology Acres 2017/2018²: >400m acres (160m ha)



Crop Protection Sales 2017¹: ~€9.5bn



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, 2017. 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. Rounded to the nearest 5%.
² Internal estimates; represents acres containing at least one Bayer seed or biotech trait technologies



Crop Science

Unmatched Investment in R&D

Shaping the Future of Agriculture with Most Productive Innovation Platform in the Industry

#1 R&D Platform in Crop Science

// ~7,300 R&D employees

// >35 R&D sites

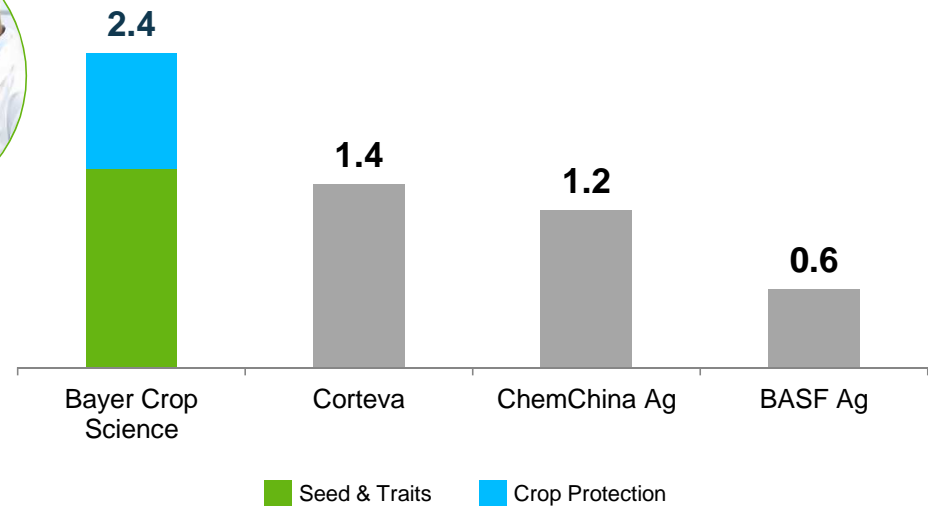
// >175 breeding locations delivering innovation

// Partner of choice

// Technology provider to the industry



2017 Ag R&D Investment (€bn)¹



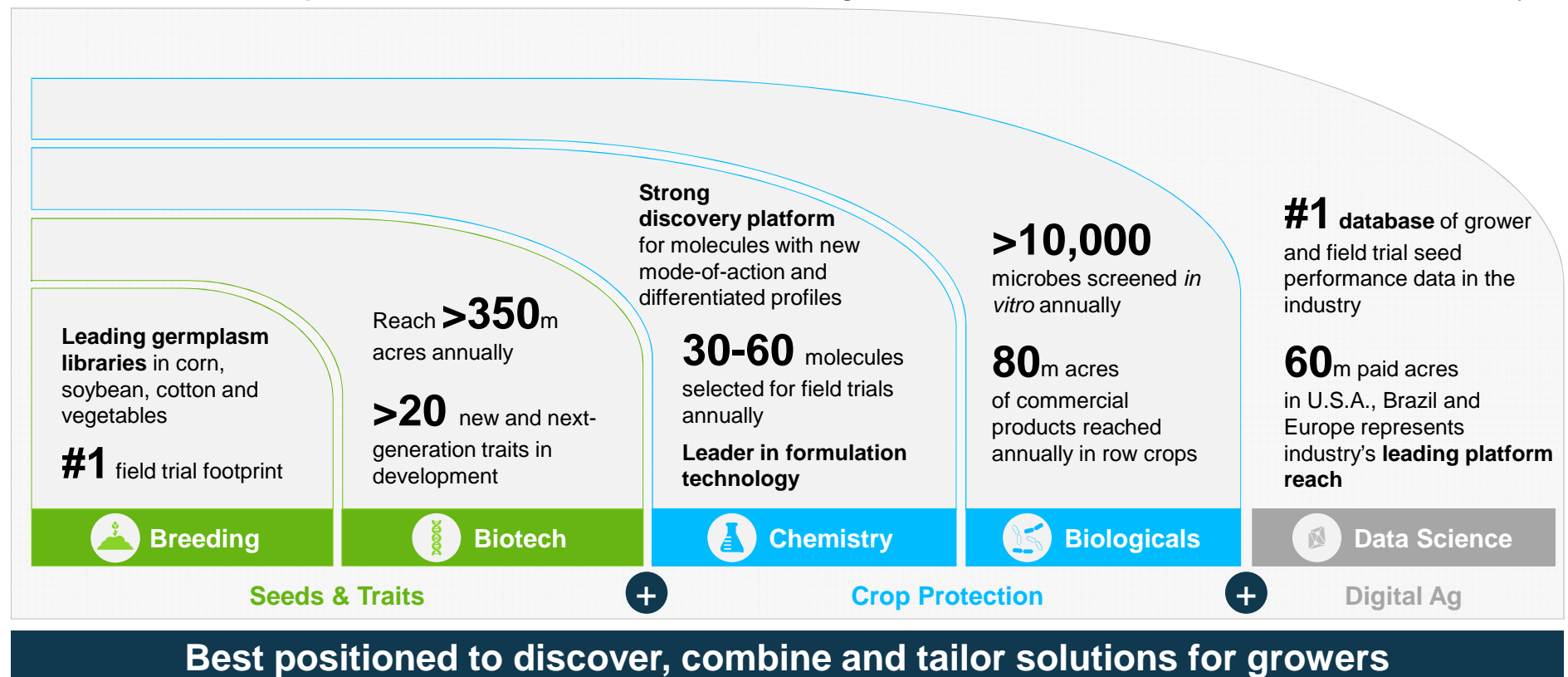
¹ Pro-forma estimates based on company information and internal calculations. | Bayer Pro-forma figures consider Monsanto acquisition and related divestments | Monsanto calendarized to twelve-month-period end ended November 30, 2017



Crop Science

Next Growth Opportunity: Convergence of Leading R&D Platforms

Extensive Germplasm and Biotech Foundation, Combined with Leadership in Chemistry and Biologicals and Data Science Optimization, Serves As Innovation Engine To Accelerate Benefits Across The Industry





Crop Science

Driving the Largest and Most Valuable R&D Pipeline in Ag

Highly Effective in Converting Investment into Meaningful Products for Farmers

Newly Combined Pipeline

Scale

Unmatched in the Industry

- // **>75** projects in seed & traits, crop protection and digital ag pipelines
- // **100's** of new hybrids and varieties commercialized annually

Advancements

Outpacing Competitors

- // **>70** advancements in 2016 and 2017
- // **>50** advancements in 2018

Value

Up to **€30bn** Peak Sales¹

- // Potential to accelerate with combined pipelines
- // Climate tools serve as an enabler to reach peak opportunity

Peak Sales Opportunity by Crop

Corn
~ €11-14bn



Soybean
~ €6-7bn



Cereals & Other
~ €4-5bn



Horticulture
~ €3-4bn



¹ Represents non-risk adjusted estimated peak sales for the combined breeding, biotech, crop protection and environmental science pipelines. Applied FX rate of USD/EUR of 1.15

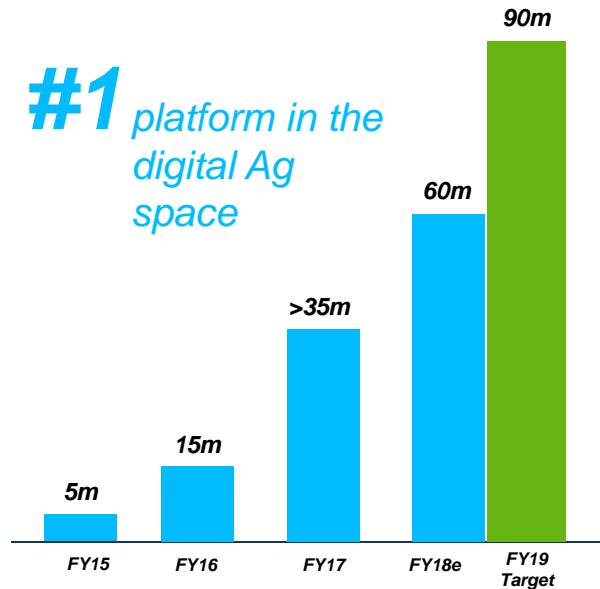


Crop Science

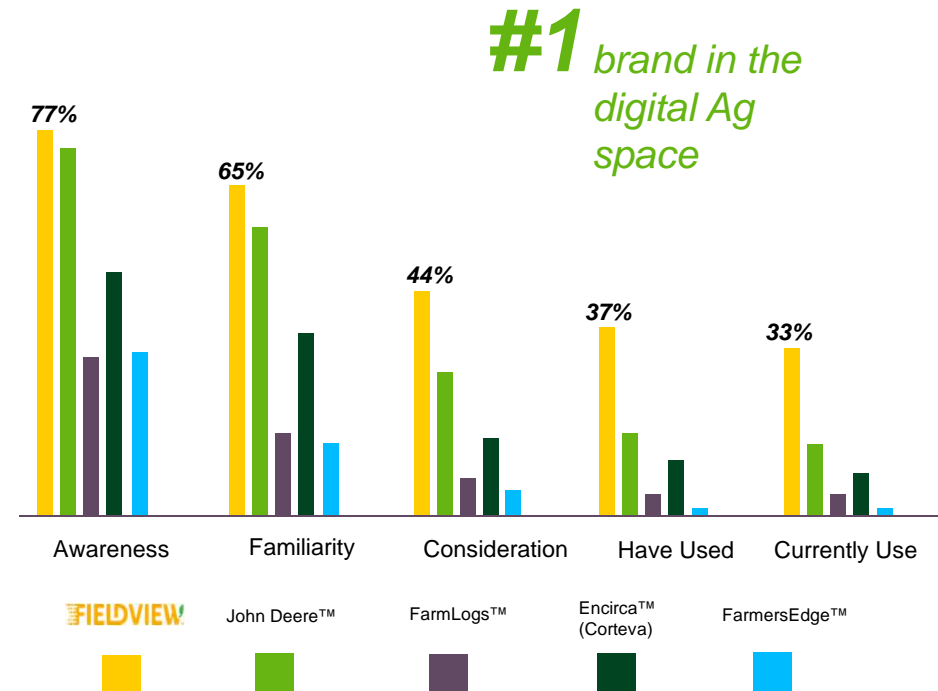
FieldView: The Leading Brand and Platform for Growers

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

Global Paid Acres¹



Brand Health² (U.S.)



>35 next-generation projects in the pipeline

¹ Internal estimates
² 2018 Brand Health Monitor