



Bayer 2022: Delivering Value Creation



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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

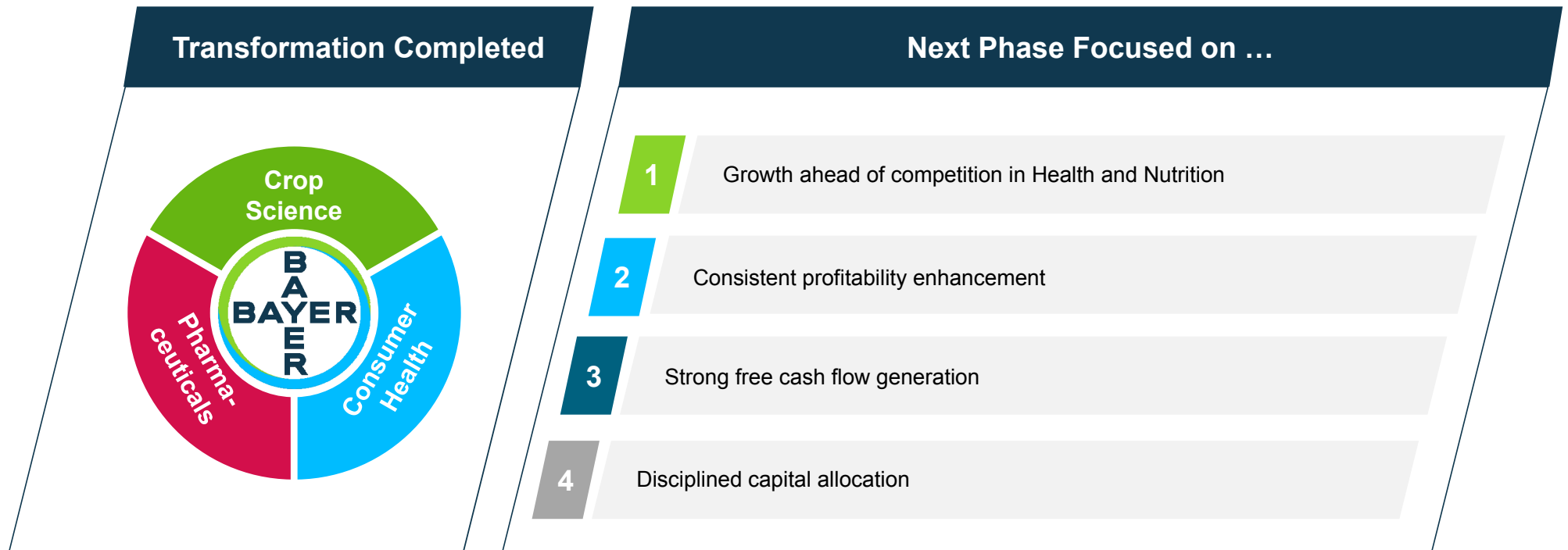
Leading Positions in 7 of the Top 10 OTC Markets

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

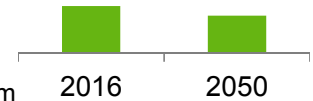
Pressure on Ecosystems



-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



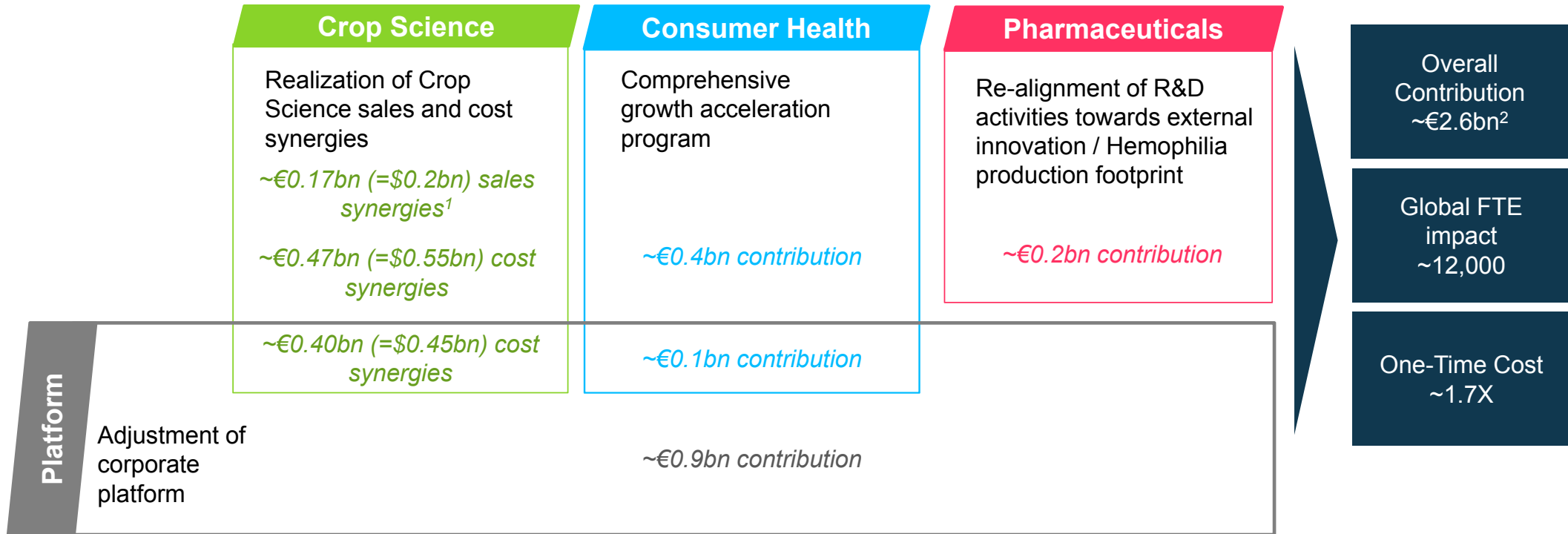
We Focus on Growth in Attractive Markets

	Market		Bayer's growth levers
	Size 2017	CAGR 2018-2022	
Bayer Group			<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
Crop Science	 ~€90bn ¹	 ~3% ²	<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
Pharmaceuticals	 ~€870bn ³	 4-5%	<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
Consumer Health	 ~€140bn ⁴	 3-4%	<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



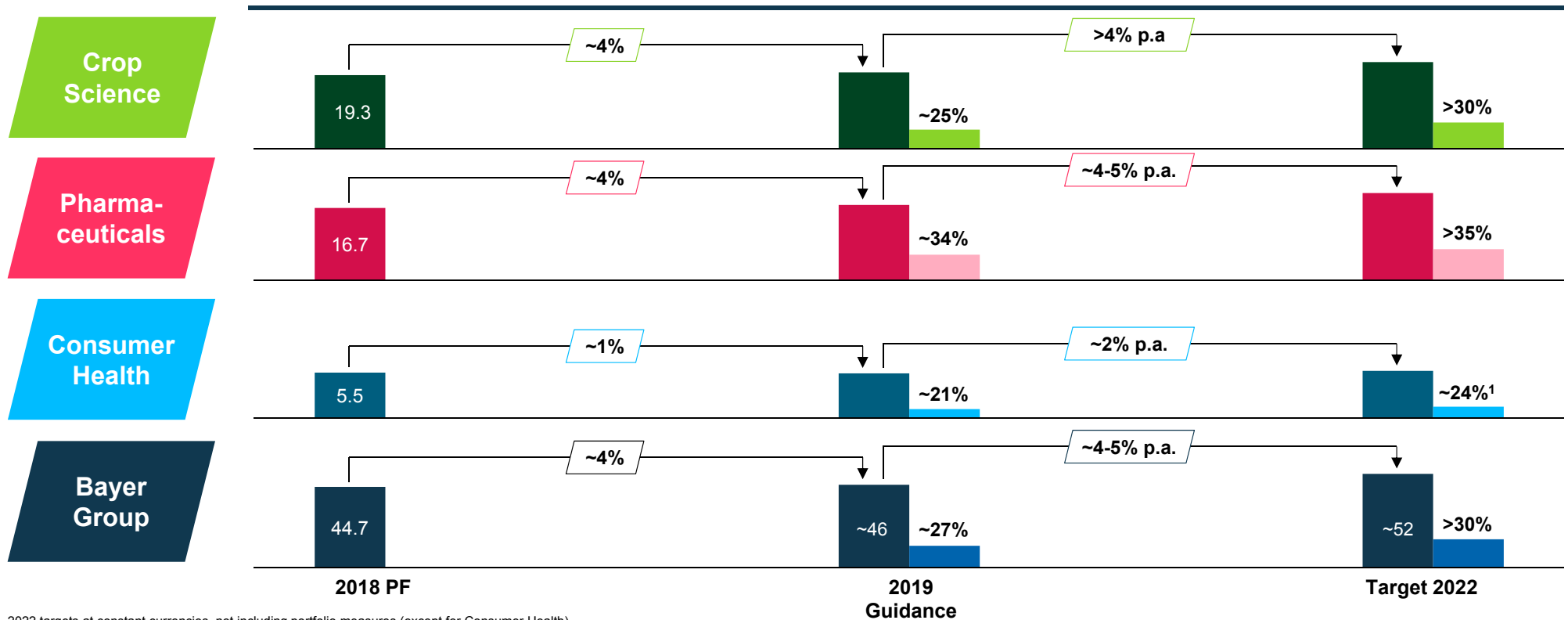
¹ EBITDA before special items impact from sales synergies

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, %)

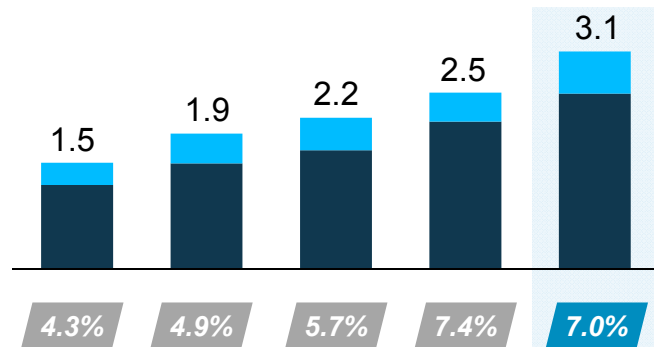




Cash Flow Improvement Focusing on Capex and Working Capital Optimization



Capex spend
in €bn



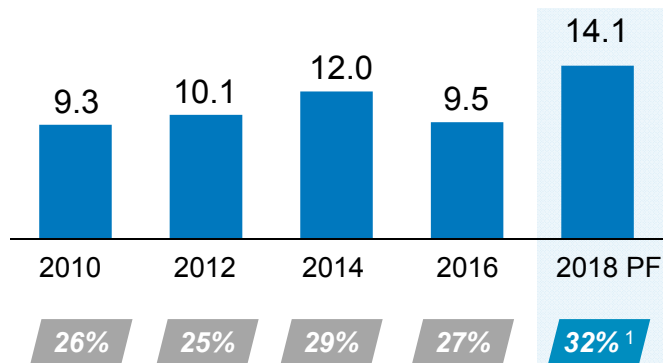
- // Annual contribution of ~0.5bn EUR by 2022
- // Past and current levels impacted by single large-scale investments in fixed assets
- // Licensing will continue to be an element to drive growth

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

Working capital optimization → ~ 32%

¹ Crop Science 48%, Pharmaceuticals 24%, Consumer Health 24%



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	
	Core EPS (€)		~6.8	~10	~10%
	FCF	~4.7 ³	~3-4	~8	~18%
	Net financial debt	~35.7 ³	~36 ⁵	~26-28	

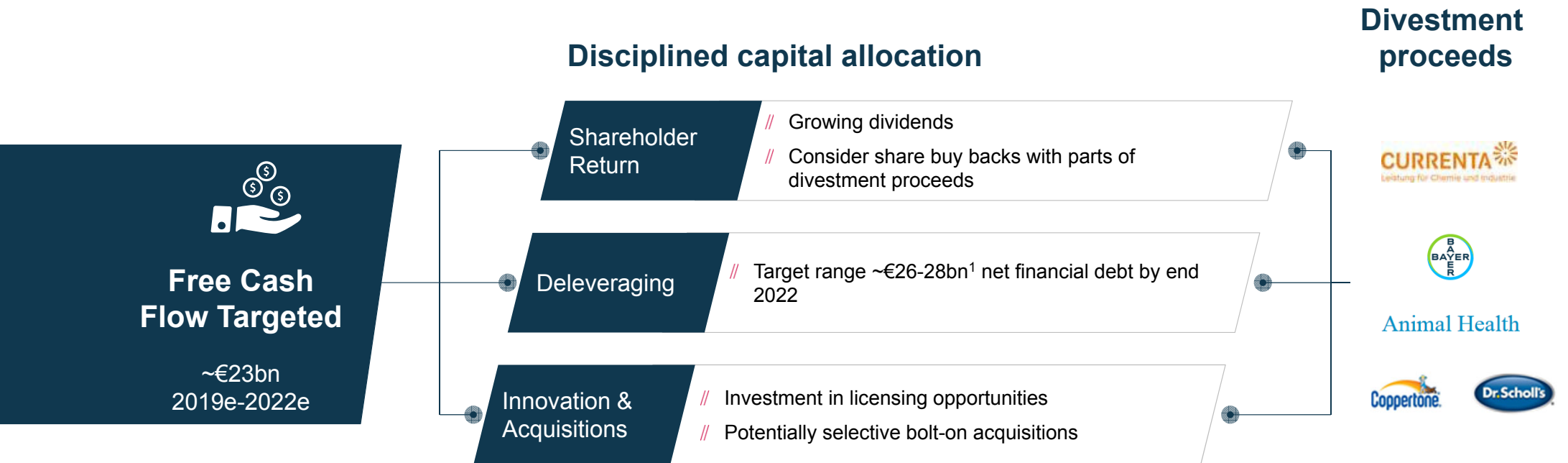
2022 targets at constant currencies, not including portfolio measures (except for Consumer Health)

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



FY 2018 & Outlook 2019





FY 2018 – Group Targets Achieved

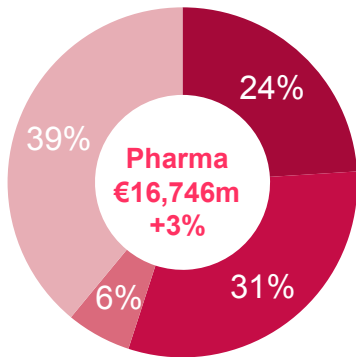
	2017	Group Forecast 2018 (as updated on 5 September 2018) ²	2018	
Sales	€35.0bn	// >€39.0bn	€39.6bn	✓
EBITDA (before special items)	€9.3bn	// Low-to-mid-single-digit % increase	€9.5bn	✓
Core EPS	€6.64 ¹	// €5.70 - €5.90	€5.94	✓

¹ Adjusted for the bonus element in the context of the discounted rights issue in June 2018

² Closing rates on June 30, 2018

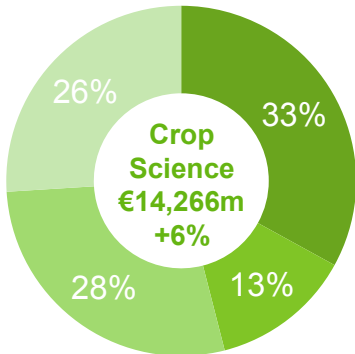
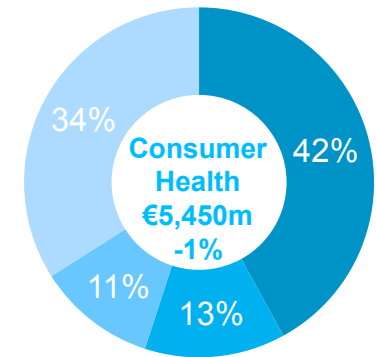


FY 2018 – Sales Breakdown by Region



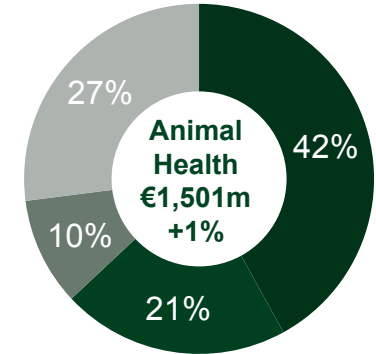
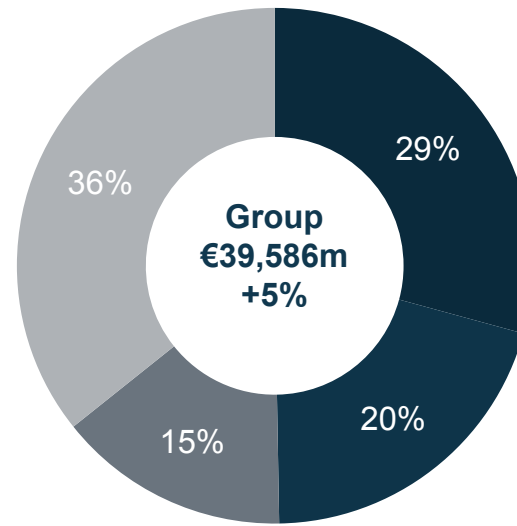
Europe / Middle East / Africa

North America



Latin America

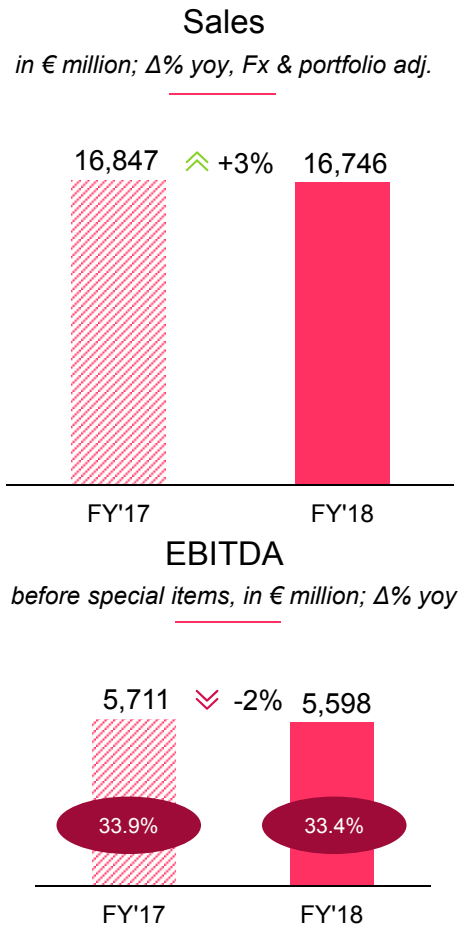
Asia / Pacific



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



FY 2018 – Pharmaceuticals Driven by Xarelto & Eylea



// Volume	+6%	// Currency	-4%
// Price	-2%	// Portfolio	-0%

// Key growth products grew by 14%, top 15 products by 6%*

// Xarelto (+13%) & Eylea (+20%) with continued strong growth*

// New launches / indications for Xarelto (CAD/PAD), Vitrakvi (US), Jivi, Kovaltry (China) and Eylea (China DME & wAMD)

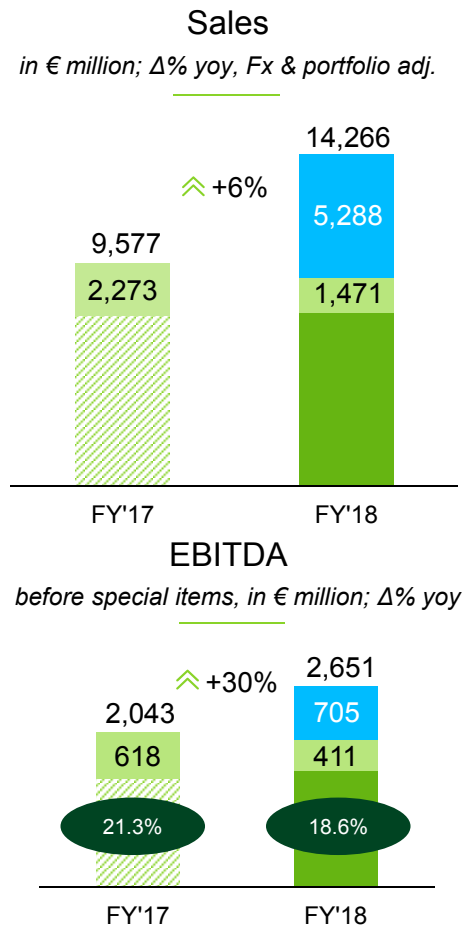
// Darolutamide with strong efficacy and safety data

// EBITDA heavily impacted by negative Fx effects of €256m

● EBITDA Margin *Δ% yoy, Fx & portfolio adj.



FY 2018 – Crop Science Global #1 in Agriculture



// Volume	+6%	// Currency	-4%
// Price	+0%	// Portfolio	+47%

// Positive sales development in Latin America (+17%), North America (+8%) and Asia/Pacific (+10%)*

// Herbicides, fungicides and insecticides sales grew after the normalization of inventories in Brazil

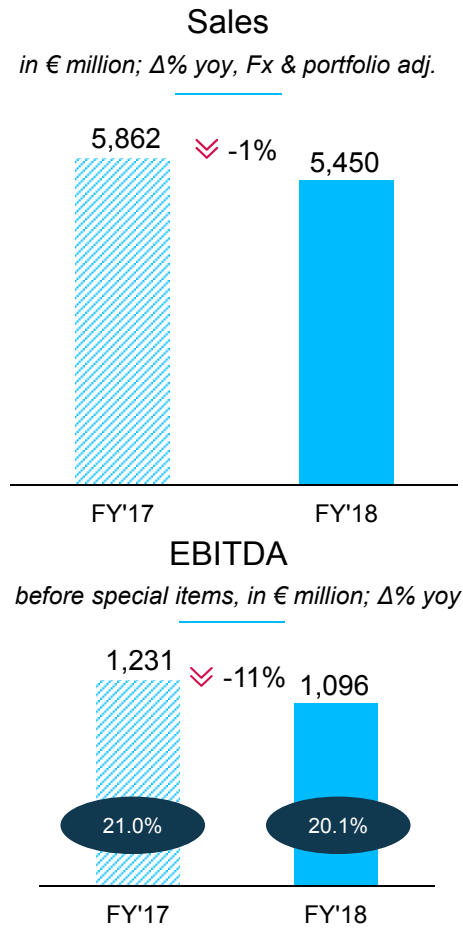
// Sales benefited from service agreements with BASF

// EBITDA benefits from acquisition, Fx with negative impact of €101m

● EBITDA Margin ■ Monsanto contribution since June 7 ■ BASF divestment *Δ% yoy, Fx & portfolio adj.



FY 2018 – Consumer Health Returned to Growth in H2



// Volume	-2%	// Currency	-6%
// Price	+1%	// Portfolio	-1%

- // Business with sales swing in H2 (+1%)*
- // Asia / Pacific (+4%) and Latin America (+4%) with growth*

// EBITDA decline driven by negative portfolio and Fx-effects of €82m as well as lower volumes

// Selling processes for Dr. Scholl's and Coppertone have started

● EBITDA Margin *Δ% yoy, Fx & portfolio adj.



FY 2019 Guidance in Line with Prior Indication

Going concern, i.e. announced portfolio measures not included

	2018 ¹	Group Forecast 2019 (at constant currencies)	Δ 2019 – 2018
Sales	€39.6bn	~€46bn	+~16% (thereof +~12% portfolio)
EBITDA (before special items)	€9.5bn	~€12.2bn	+~28%
Core EPS	€5.94	~€6.80	+~14%

¹ Monsanto included since June 7 and assets divested to BASF included until August 2018



Focus Areas for 2019

Enhance Operating Performance and Drive Value Creation

1

Deliver on operational targets

2

Integrate Crop Science and further advance #1 industry platform

3

Execute efficiency improvement program and realize synergies

4

Continue vigorous defense in glyphosate litigation

5

Further strengthening of internal Pharma pipeline and intensify external sourcing of innovative technologies and assets

6

Drive performance improvement of Consumer Health



Appendix





FY 2019 – Guidance by Segment

Going concern, i.e. announced portfolio measures not included

	Sales 2018	EBITDA-margin 2018 (before special items)	Sales Growth 2019 (cpa ²)		EBITDA-margin 2019 (before special items)	
			(at constant currencies)	(at constant currencies)	(at constant currencies)	(at constant currencies)
Pharma	// €16.7bn	// 33.4%	// ~4%		// ~34%	
Consumer Health	// €5.5bn	// 20.1%	// ~1%		// ~21%	
Crop Science	// €14.3bn ¹	// 18.6%	// ~4%		// ~25%	
Animal Health	// €1.5bn	// 23.9%	// ~4%		// ~24%	

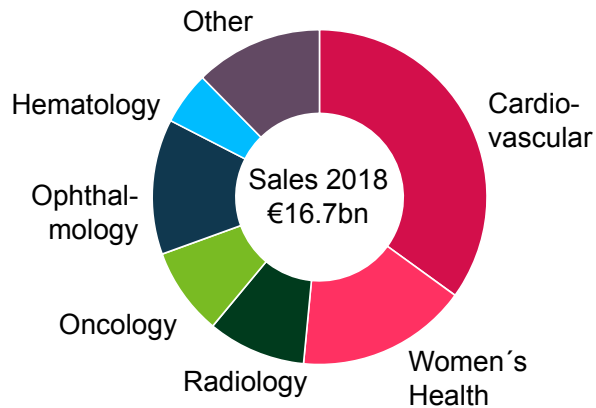
¹ Monsanto included since June 7 and assets divested to BASF included until August 2018; ² currency and portfolio adjusted



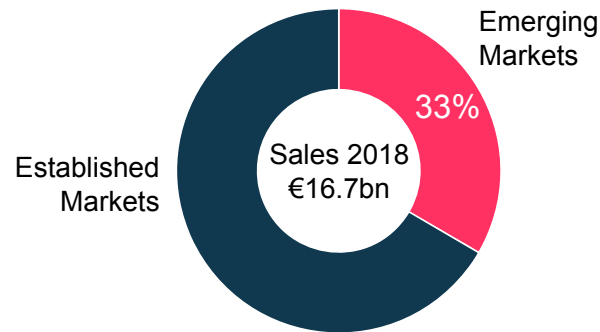
Pharma

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

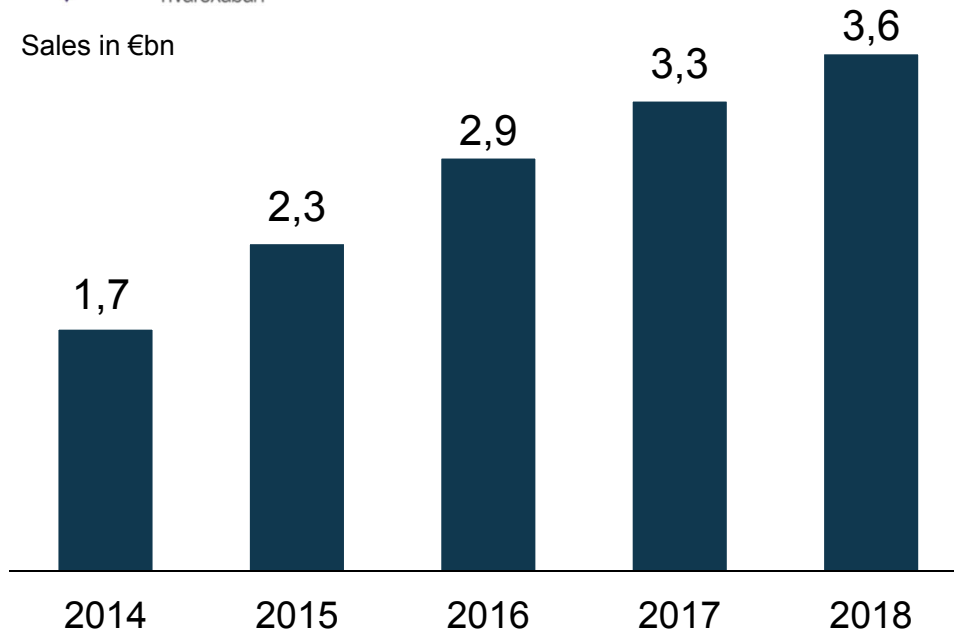


Pharma

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 €5.2bn in 2018 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
¹ Ex-US sales plus royalty from J&J as reported by Bayer

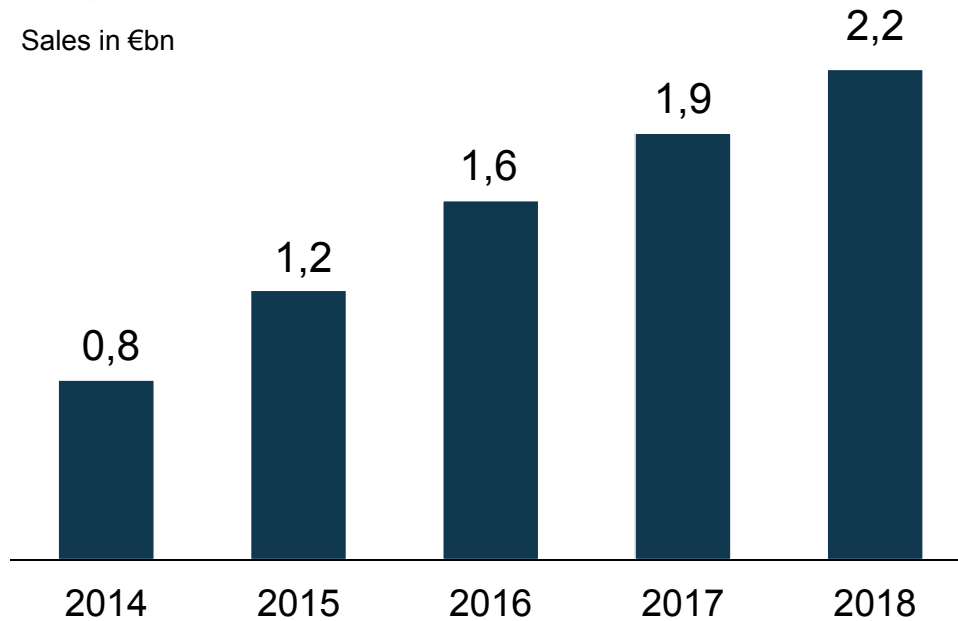


Pharma

Eylea – A Leader in Retinal Diseases



Sales in €bn



- // A leader in retinal diseases with global brand sales of €5.6bn in 2018 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

Late-stage Pipeline with Progress in Oncology

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







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

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)



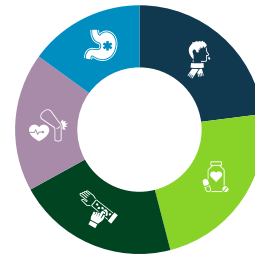
Consumer Health

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

First actions

People & Organization



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

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

Q4 2018
Q1 2019

Winning Portfolio



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

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

H2 2018
2019

Accelerate growth-focused Innovation



- // Rebuild innovation pipeline

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

2020

Modernized Marketing & Sales



- // Rebuild brand fundamentals
- // Accelerate digital

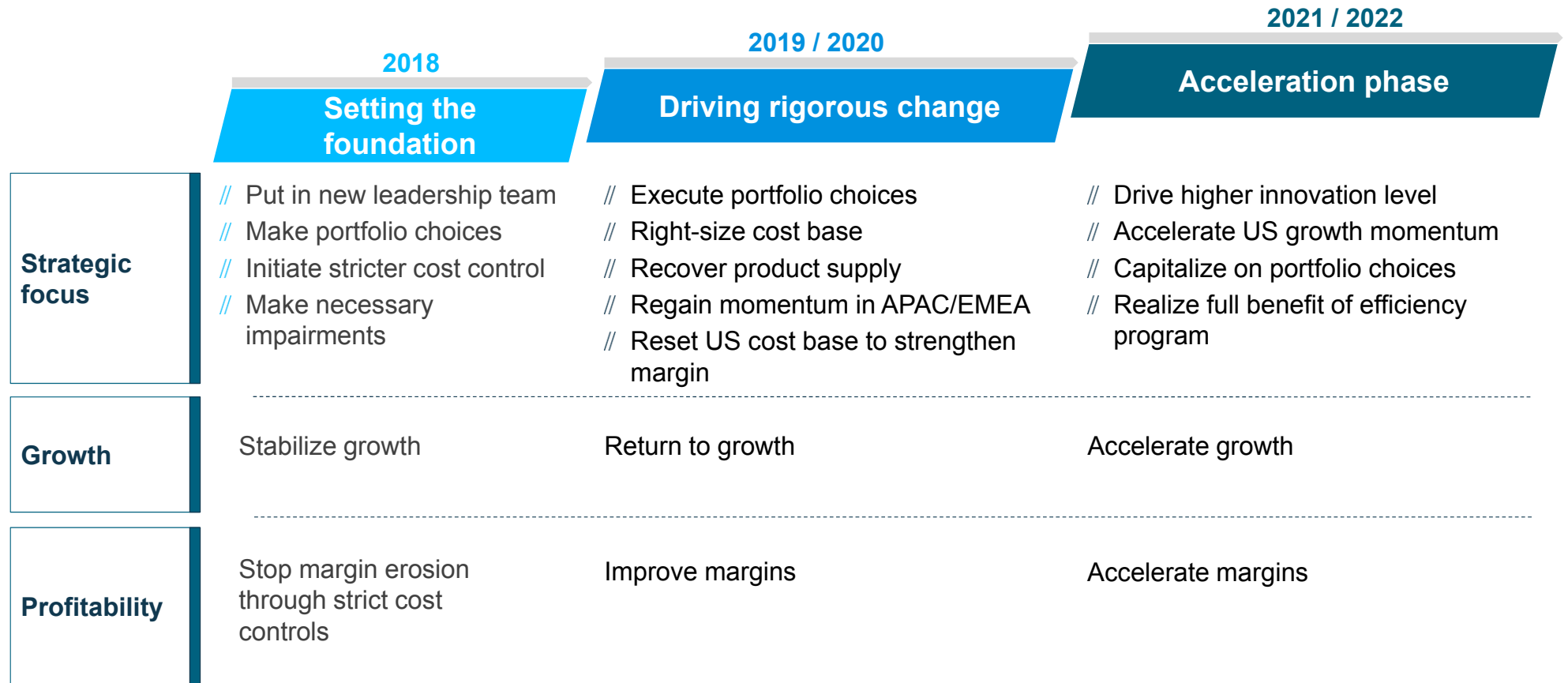
- // Step up e-commerce
 - Amazon 2018e sales +60%
 - Online (8.3%) to offline (8.7%) share

2018



Consumer Health

Our Strategic and Operational Roadmap



Crop Science

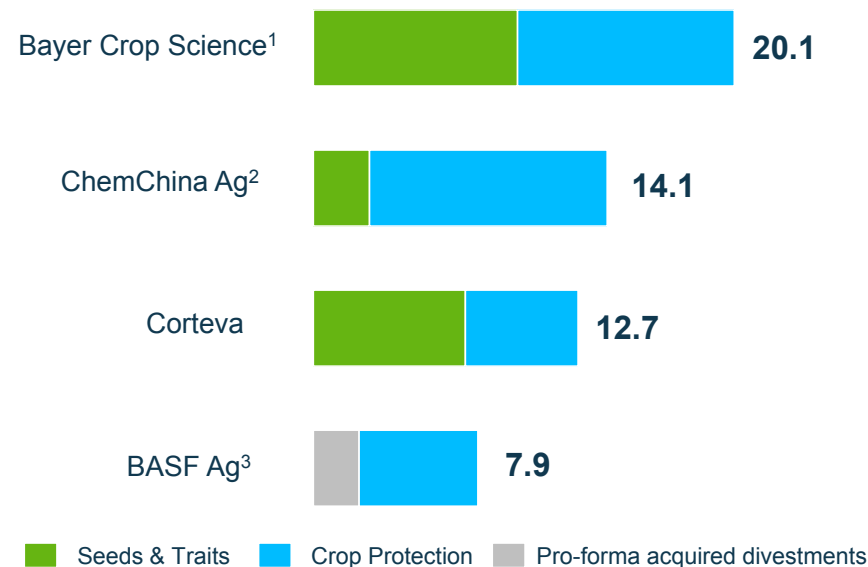
The Established Leader in Crop Science

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 €2.2bn Pro-forma sales in 2017 from Bayer businesses sold to BASF

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

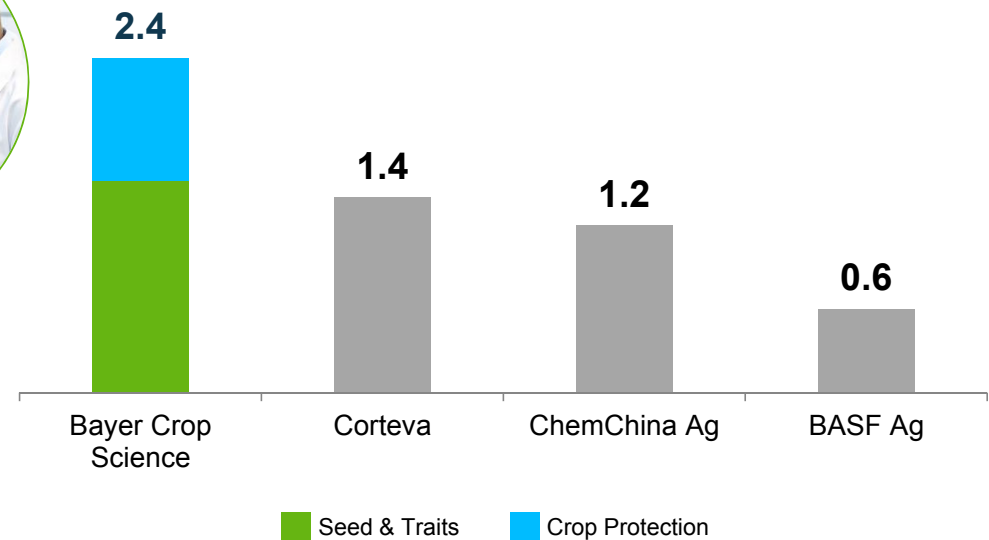
// >175 breeding locations delivering innovation

// Partner of choice

// Technology provider to the industry



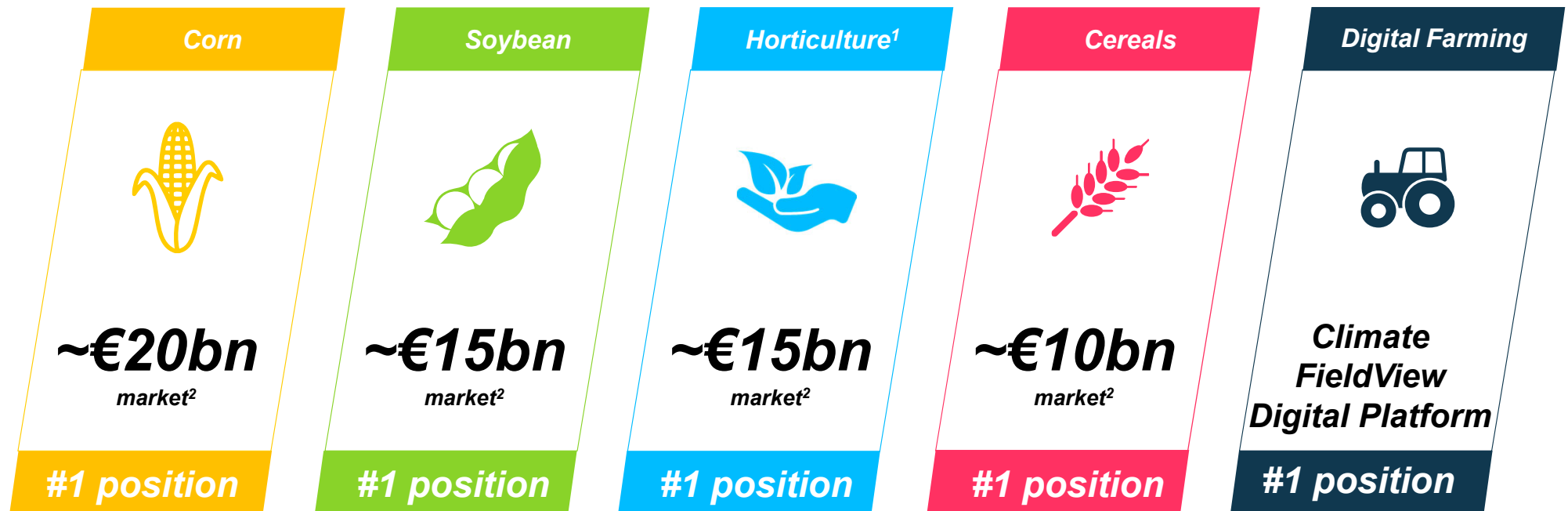
2017 Ag R&D Investment (€bn)¹



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 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

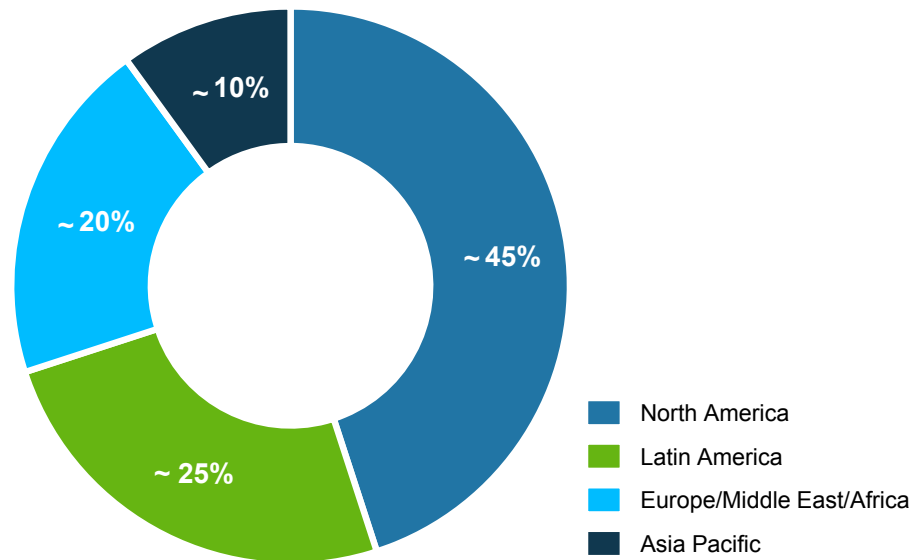


Crop Science

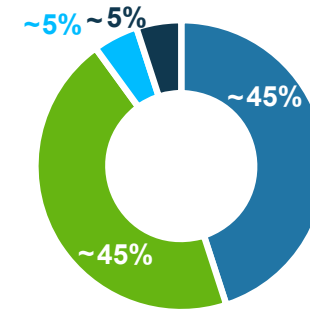
World's Broadest Commercial Footprint in Agriculture

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

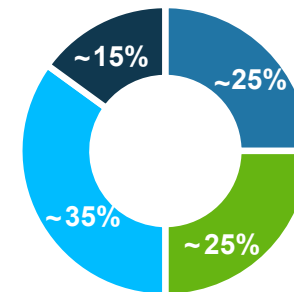
Sales 2017¹: €20.1bn



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



Crop Protection Sales 2017¹: ~€9.5bn



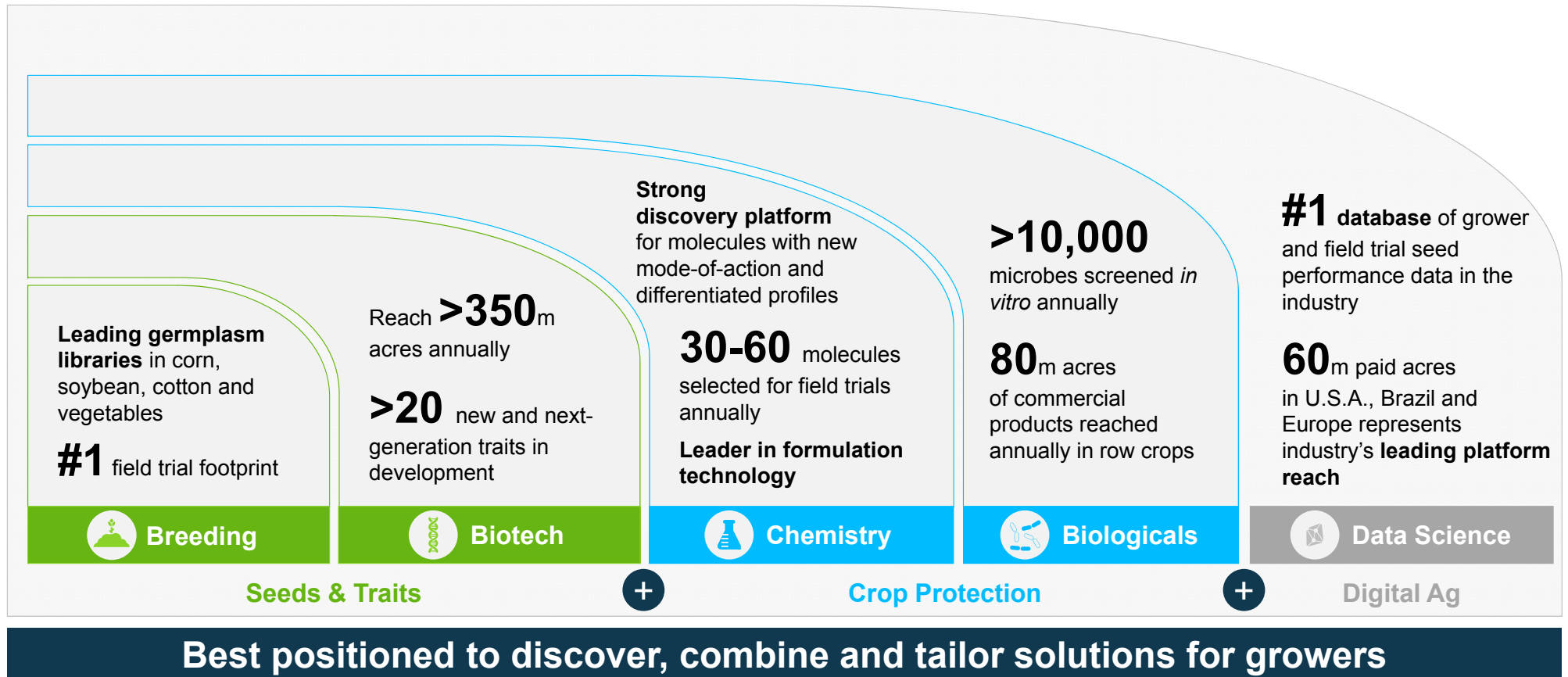
¹ The unaudited Pro-forma data are presented as if both the acquisition of Monsanto and the associated divestments had taken place as of January 1, 2017. Sales of Monsanto are presented in periods as per the Bayer fiscal year. One-time effects of business operations, the accounting for discontinued operations 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

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



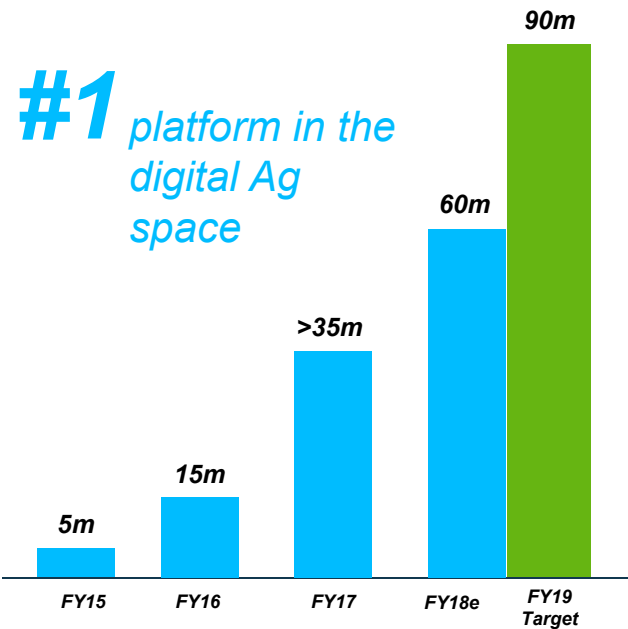


Crop Science

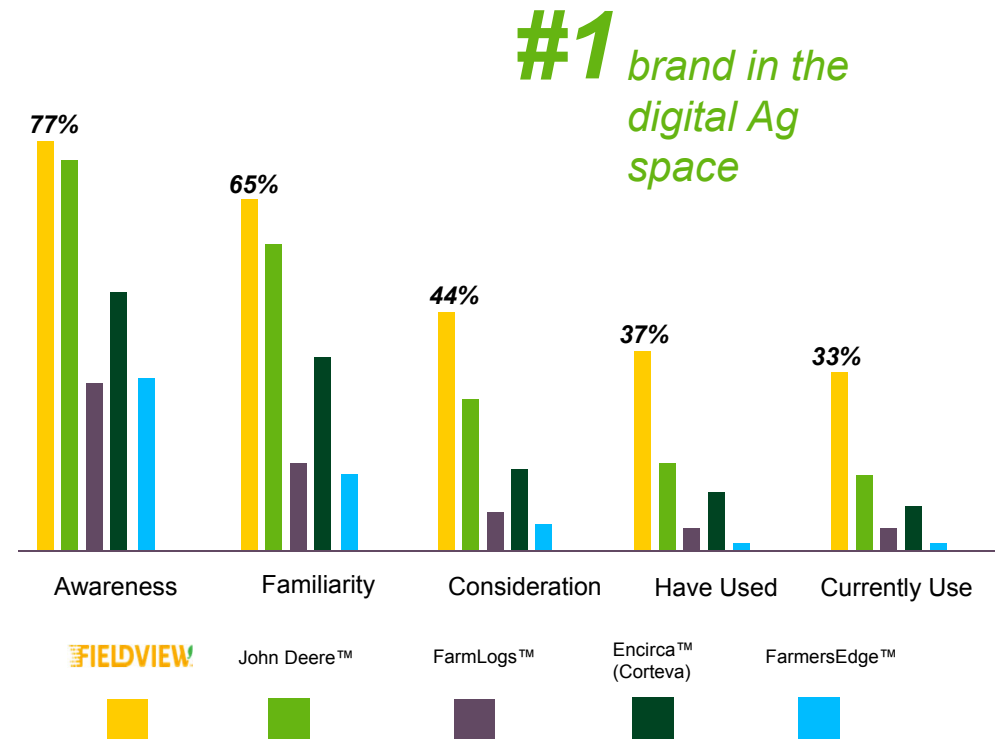
FieldView: The Leading Brand and Platform for Growers

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



Bayer 2022: Delivering Value Creation



**Bankhaus Lampe
German Conference
April 4th, 2019**

**Oliver Luckenbach & Simone Mörchen
Bayer AG**

