

////////// *Health for all, Hunger for none*



BAYER **CROP SCIENCE**

Scaling Regenerative Agriculture

*Barclays Digital & Disruptive
Technologies Conference
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Cautionary statements regarding forward-looking information

This presentation may contain forward-looking statements based on current assumptions and forecasts made by Bayer management.

Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports which are available on the Bayer website at

<http://www.bayer.com/>



The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.



The 2030 Challenge: Producing More with Less in a Changing Climate

Food Security

+ 2.2
billion people

+ 50%
food and feed
required



Climate Change

- 17%
harvest loss due to
climate change

- 20%
loss in arable land



Our Vision Aspires to Address Global Challenges at Scale

Produce **50% More.**



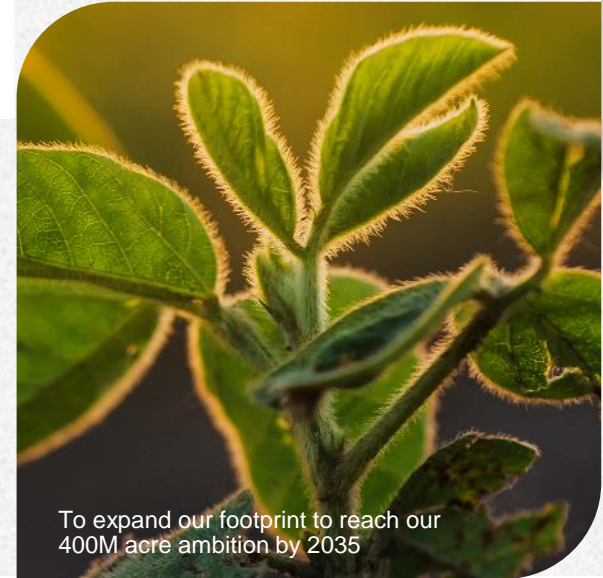
Required increase by 2050
to feed the world (FAO data)

Restore Nature.



To meet our 2030 sustainability commitments

Scale Regenerative Ag.



To expand our footprint to reach our
400M acre ambition by 2035



Sustainability Commitments¹

30%

Reduction in GHG
emissions per kg of
crops produced

30%

Reduction in
crop protection
impact on the
environment

25%

Improvement of
water use per kg
of rice produced

100m

Empower 100m
smallholder farmers

FAO= Food and Agriculture Organization; GHG= Greenhouse Gas; ¹ For detailed commitments see our Sustainability Report



Ag Input Market Growing Over Two Percent to Meet Demand

Potential to Double our Accessible Market Through Investments in Innovation in Adjacent Spaces

>100bn¹ EUR
2023 Global Ag Input Market

>200bn¹ EUR
2030 Global Ag Input Market & Related Adjacencies

Crop
Protection

Seed and
Traits



>2%

expected annual growth rate in crop
protection and seed & traits market

>2x
opportunity

ADJACENT SPACES

- Biofuels
- Digital Platforms
- Carbon
- Crop Fertility
- Digital Marketplaces
- Precision Application

¹ Company estimates



The Established Leader in Crop Science

Expect 2024 to be our 4th Consecutive Year of Growth in Core Business

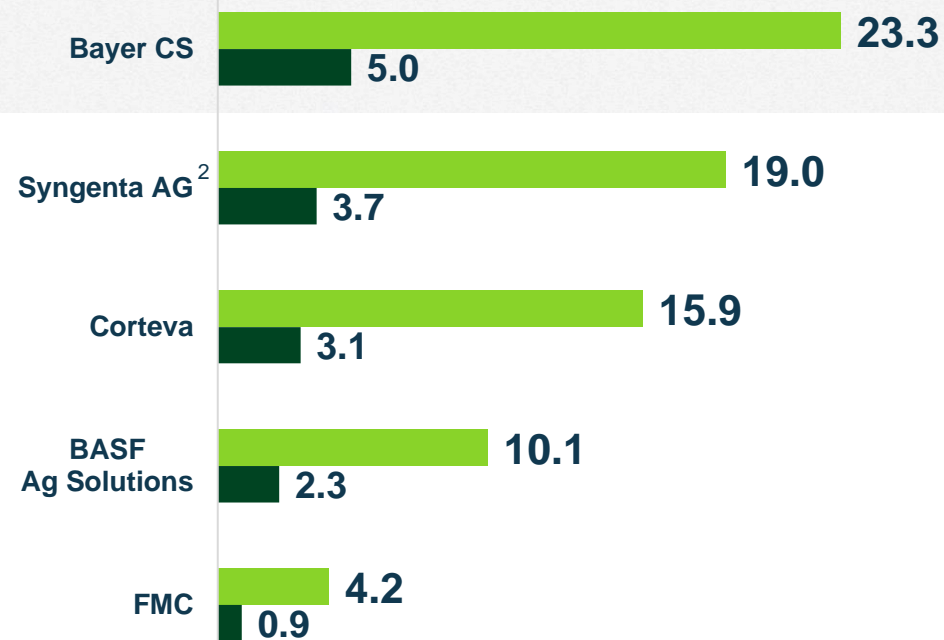
Market Position



- #1** Corn Seed & Traits
- #1** Herbicides
- #1** Soybean Seed & Traits
- #1** Cotton
- #2** Fungicides
- #2** Vegetable Seed
- #3** Insecticides

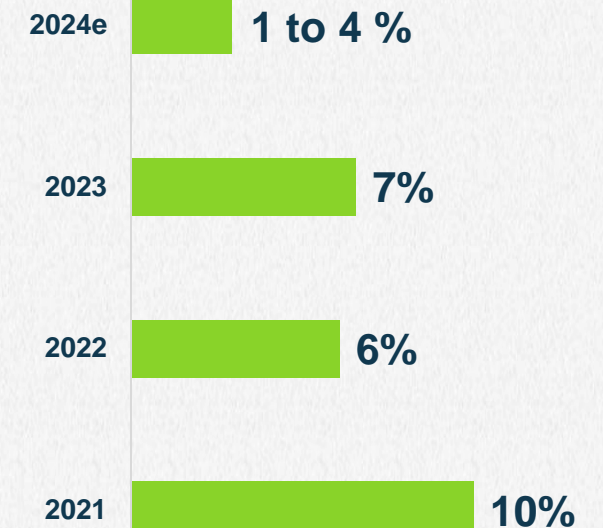
GLOBAL LEADER IN AG INPUTS

Sales / cEBITDA¹ (€bn) / FY 2023



Growth in Bayer Crop Science Core Business

Sales / currency & portfolio adj growth%



¹ Company information; exchange rate: FY 2023: ~1.08 USD/EUR;

² Syngenta AG as of FY'22, ~1.05 USD/EUR;

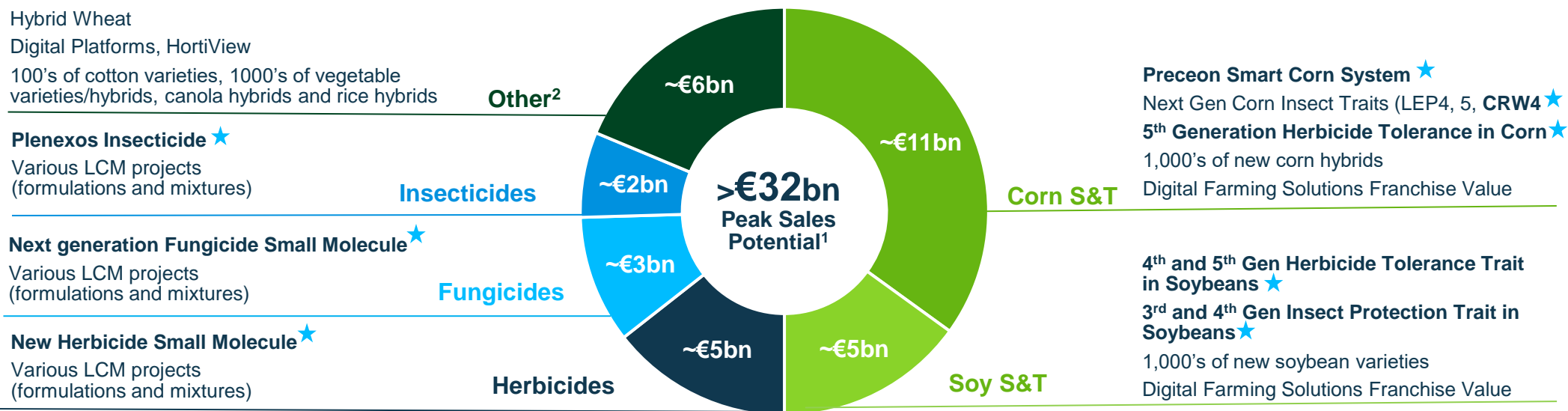
Core = Crop Science business excl. glyphosate-based herbicides



Extending Our Leadership Position Through Our Pipeline

>€32bn Peak Sales Potential; Ten Blockbusters Expected to Launch in Next Decade

Bayer Crop Science R&D Pipeline



> Assuming success, pipeline peak sales values translates to above market sales CAGR

Annual Crop Protection Life Cycle Management and Seed Germplasm Refresh Generates

>50% PSP

★ Blockbuster Products with >€0.5bn expected PSP

¹ Represents non-risk adjusted estimated peak sales for the combined breeding, biotech, crop protection and environmental science pipelines, as well as new business models and new value areas. On average, ~50% of the PSP is incremental and 50% is replacement value. Note that products are excluded from the pipeline PSP typically the year following launch. Projects listed are only a subset of the pipeline. Direct-seeded rice, carbon farming, corn biotech traits in Asia and Africa and ~1.5bn EUR sales ambition in biologicals are upside potential to the €32bn PSP.

² Other² category includes seeds and traits, such as cotton, canola, wheat, OSR, rice, vegetable seeds and sugarbeets, plus digital platforms and SeedGrowth



Annual Portfolio Refresh Provides Foundation for Growth

Pricing and Sales Mix Opportunity Across Our Leading Global Footprint Enhanced by Digital Assets

ANNUAL SEED GERMPLASM REFRESH

~400-500

new seed **hybrids & varieties**
deployed **annually**

>400

hybrids and varieties
launched in **2023**

6

row crops and

>20

fruit and vegetable crops
in our **breeding programs**

CROP PROTECTION LIFE-CYCLE MANAGEMENT

~90-100

new **formulations** to
launch in the next decade

>190

crop protection
registrations in 2023

6

formulation
launches in 2023

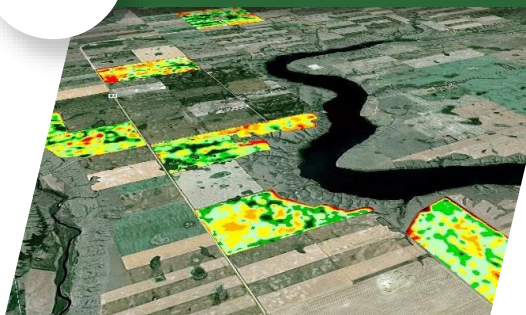




Accelerating Genetic Gain with Precision Breeding

ACCELERATING OUR ABILITY to bring innovative solutions to our customers around the world

Data & analytics driving decisions & AI connected pipeline - enabling a dynamic breeding pipeline



Fieldview Field Health Imagery
Data Collection



Customer Insights

Customer Driven
quantitative
economic indices



Seed Chipping Technology
for Accelerated Discovery



Advanced Genomic Capabilities

Genomic Insights
& AI driving new
breeding starts



Marana, AZ Protected Culture
Design Center



Accelerated Breeding Methods

Genomic Insights
& AI driving new
breeding starts



Cassette Planter delivers
large scale field testing



Digital Field- Testing Twin

Mix of simulated and
actual field testing

**Doubling
Genetic
Gain by
2030**

**Accelerating
Breeding
Cycle from
5-6 years to
~4 months**



Preceon Smart Corn System to Transform Corn Production

High-Value Biotech Approach Advanced to Phase IV; Breeding Targeted U.S. Launch in 2024



PREC/EON
SMART CORN SYSTEM™

>€1.5bn

Global PSP Opportunity¹

>220m

Global Acre Potential¹

Phase IV

Advancement of Biotech Trait
in collaboration with BASF



365

growers (>30k acres)
in Europe & US in Groundbreaker
trials in 2023



>80%

growers in trials
would plant Preceon
Smart Corn again



Next Gen Soybean Traits Driving >€3bn Peak Sales Potential

Key Anchoring Technologies in Next Gen Soybean Solutions Advanced in 2023



HT4

Advanced to

Phase

4

4th
Gen

Soybean Herbicide Tolerance

- Provides **industry leading weed control** and flexibility with 2 additional herbicide tolerances: HPPD (Mesotrione) + 2,4-D
- **Broadest class of high-performing** varieties across all maturities
- **Potential to regain significant U.S. market share**

IP3

Advanced to

Phase

3

3rd
Gen

Soybean Insect Protection

- Includes **two new proteins** for enhanced and durable protection from broad spectrum of lepidopteran pests
- Builds on **leading insect protection platform and >80% Brazil market share**

>€3bn PSP

Including Next Generation: HT5 and IP4 to be introduced early next decade



New Production Systems for the World's Largest Crops

Potential to Shape Transformation of Wheat and Rice Production by End of the Decade

Resilient Hybrid Wheat System

- Hybrid wheat expected to provide **higher yield** and **yield stability**, with potential fit on a significant portion of the **~555m acres of wheat** grown globally and **~€700m PSP**
- Envision a **more sustainable and resilient system** with better nitrogen use efficiency, disease, drought and heat tolerance
- Advancements in **genomic tools** and the **cytoplasmic male sterility system** are enabling the development of hybrid wheat at competitive cost
- 'Blue ocean' market potential to drive value of market for Wheat seed and technologies, which has already happened in crops like corn



Our Vision:

A digitally enabled sustainable hybrid wheat system offering



Hybrid Wheat Nursery
Filer, Idaho | June 2022

Sustainable & Profitable Direct Seeded Rice Crop System

- *Elite Designed Hybrid Rice* // // // //
- *Integrated & Effective Weed Mgmt System* // // // //
- *Digital Insights & Agronomic Support* // // // //

- Farmer economics show 16% lower costs with direct seeded rice¹
- Reduced water usage by up to 40%²
- Manual labor reduced by up to 50% or 150 labor hrs per 1 Ha DSR³
- Up to 45% reduction in CO2 emissions⁴
- Methane reduction up to 85%⁵

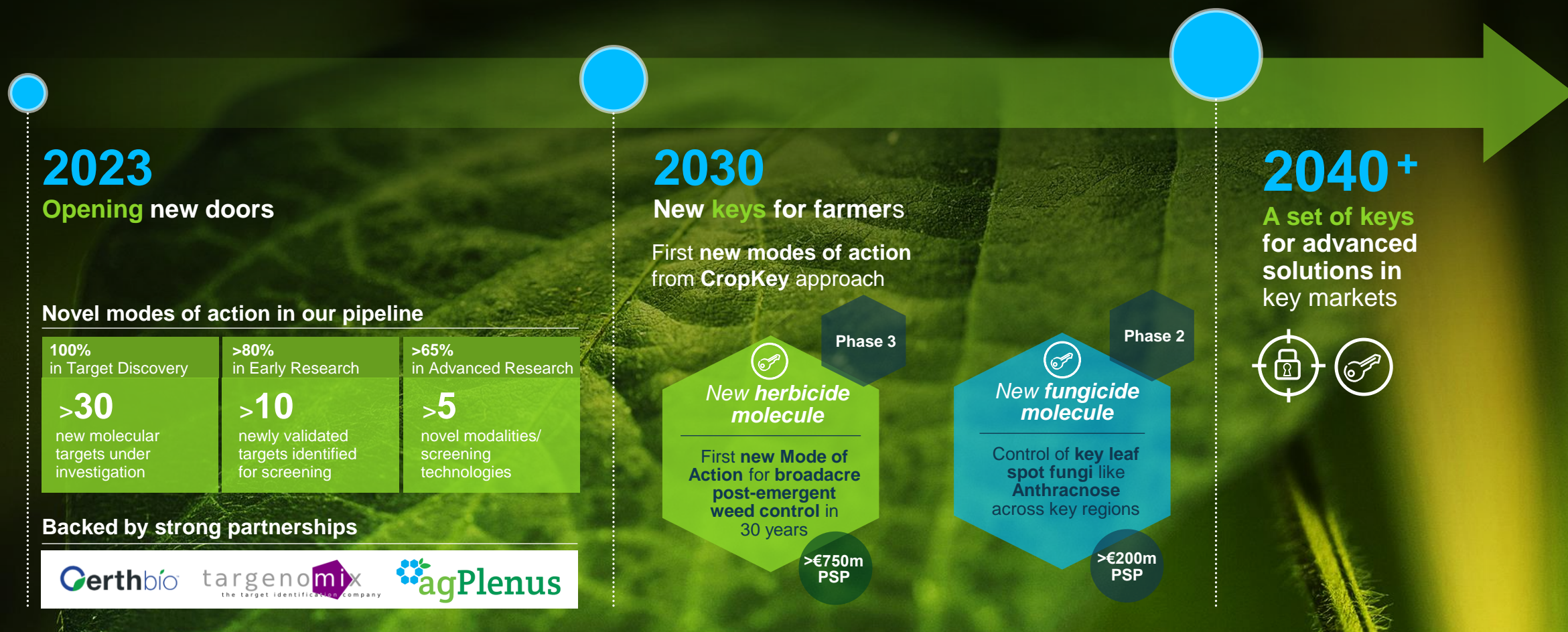
HYBRID RICE TRIALS





CropKey Approach to Open Uncharted MoA & Chemical Spaces

Pioneering Today to **Unlock** the Crop Protection Solutions of Tomorrow

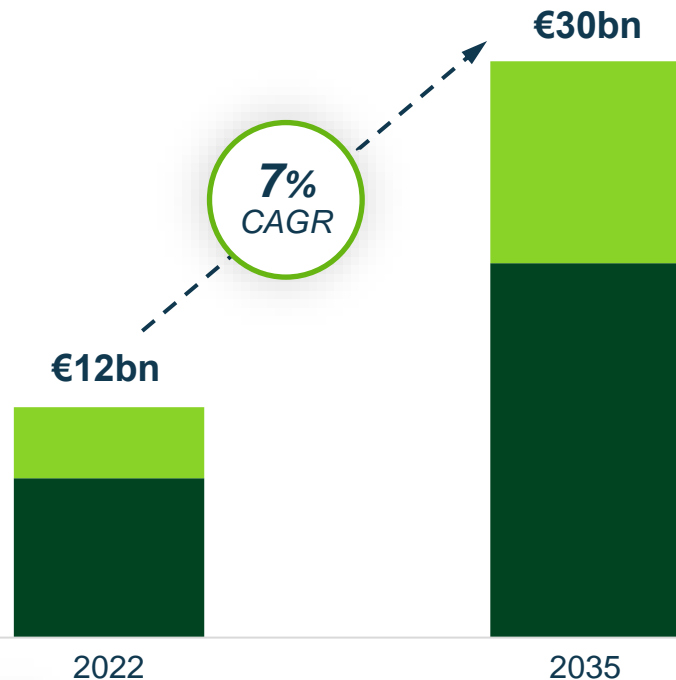




Biologicals Market Expected to More than Double to €30bn by 2035

We aim to Outgrow the Market with a 17% CAGR

Global Biologicals Market



○ CAGR ■ Biocontrol ■ Biostimulants

Bayer Biologicals Opportunity

€**200**_m Sales 2022

17% CAGR

> €**1.5**_{bn} Sales 2035e



In-licensing or distribution;
expanding current portfolio



Pipeline
advancements



Strategic research
partnerships



Increasingly stringent regulatory approvals processes, consumers' demand for low- and no-residue food products and retailer food sourcing standards drive growers to look for new innovations in crop protection

Source: Global Agricultural Biologicals Market, Forecast to 2030, Frost & Sullivan, 2022 and internal estimates



Data and Digital are Anchors for the Pathway to Regenerative Ag

CLIMATE

FIELDVIEW

impacting **+250M acres** in **23 countries** through our digital farming solutions and carbon programs

Data Collection



Understand what farmers are doing

Data Analysis



Obtain deeper insights into each acre

Data-based Recommendation



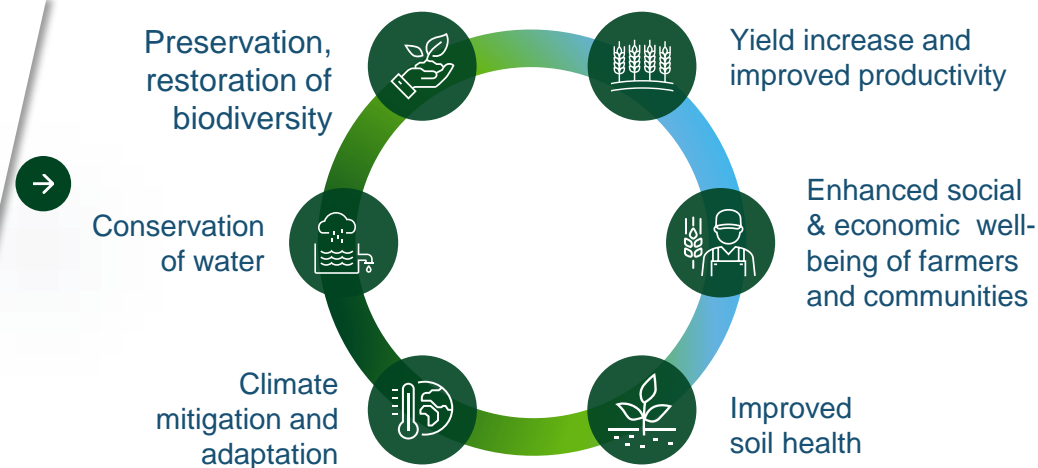
Support farmer decision-making

Creation of New Value Streams



Quantify outcomes & co-benefits

Validation of Regen Ag outcomes



Powered by an **open ecosystem** driving **continuous innovation** towards more **sustainable food systems**



Broadening our Reach To Shape Regenerative Ag on >400m Acres

- // Today our seed & trait technologies reach **~340m** acres globally, anchoring our vision for regenerative system solutions
- // By the middle of the next decade, we envision broadening our reach to **>400m acres**
- // Hybrid wheat, direct seeded rice, corn traits in Africa & Asia and carbon farming enable potential in new crops and markets
- // Preceon Smart Corn System and next-gen herbicide tolerance in soybeans build out our base





Appendix



Crop Science: Seed & Traits and Digital R&D Pipeline

(Annual Update March 2024)

~€21bn
PSP

	Phase I	Phase II	Phase III	Phase IV	PSP
CORN SEED & TRAIT	Corn Disease Shield - NA	Corn LEP5 2nd Generation Seed Density Digital Tool - NA	Corn HT5 2nd Gen Seed Density Digital Tool – EMEA 2nd Gen Seed Density Digital Tool – LATAM	PRECEON Smart Corn - Breeding PRECEON Smart Corn – Biotech Trait ² Corn LEP4 CRW4	~€11bn
	Annual Germplasm Upgrades	Annual Germplasm Upgrades	Annual Germplasm Upgrades	Annual Germplasm Upgrades	
SOYBEAN SEED & TRAIT		Soy IP4 Digital Disease Mgmt. - NA Seed Placement Digital Tool – LATAM	2nd Generation Soy Cyst Nematode resistance Soy HT5 (6 Tolerances – Adds PPO) Seed Placement Digital Tool – NA	Soy IP3 Soy HT4 (5 Tolerances – Adds 2, 4-D and HPPD) Vistive Gold Xtend	~€5bn
	Annual Germplasm Upgrades Soybean Native Resistance	Annual Germplasm Upgrades Soybean Native Resistance	Annual Germplasm Upgrades Soybean Native Resistance	Annual Germplasm Upgrades Soybean Native Resistance	
VEGETABLES and OTHER ³ Including Carbon Model	Canola/OSR Digital Disease Mgmt. - NA	Wheat Digital Disease Mgmt. - EMEA Canola HT4	Sugarbeets 2nd Generation Herbicide Tolerance ¹ Cotton HT4 (5 tolerances – Adds 2, HPPD and PPO) Cotton IP4		~€5bn ³
	Wheat Annual Germplasm Upgrades	Wheat Annual Germplasm Upgrades	Wheat Annual Germplasm Upgrades	Wheat Annual Germplasm Upgrades	
	Wheat Disease Package Upgrades	Wheat Disease Package Upgrades	Wheat Disease Package Upgrades	Wheat Disease Package Upgrades	
	Cotton Annual Germplasm Upgrades	Cotton Annual Germplasm Upgrades	Cotton Annual Germplasm Upgrades	Cotton Annual Germplasm Upgrades	
	Canola/OSR Annual Germplasm Upgrades	Canola/OSR Annual Germplasm Upgrades	Canola/OSR Annual Germplasm Upgrades	Canola/OSR Annual Germplasm Upgrades	
	Veg- Annual Germplasm Upgrades	Veg- Annual Germplasm Upgrades	Veg- Annual Germplasm Upgrades	Veg- Annual Germplasm Upgrades	
	Rice Annual Germplasm Upgrades	Rice Annual Germplasm Upgrades	Rice Annual Germplasm Upgrades	Rice Annual Germplasm Upgrades	

Breeding
 Trait
 Digital Model

■ advanced to next phase

HT = Herbicide Tolerance
CRW = Corn Rootworm
LEP = Lepidoptera
IP = other Insect Protection

Projects listed here and included in the peak sales potential by segment do not include projects funded by our Leaps by Bayer investments; includes all advancements made in FY'23, updated Mar'24

PSP = Peak Sales Potential, 50% incremental; Expected to reach 30% of PSP by 2032, 80% of PSP by 2038 and remainder in 2039+; **Note that products are excluded from the pipeline PSP typically the year following launch**

¹ In collaboration with KWS; ² In collaboration with BASF; ³ "Other" category includes seeds and traits, such as cotton, canola, wheat, OSR, rice, vegetable seeds and sugarbeets, plus carbon and digital Models.



Crop Science: Crop Protection R&D Pipeline

(Annual Update March 2024)

~€11bn
PSP

	Phase I	Phase II	Phase III	Phase IV	Life Cycle Management ¹	PSP
HERBICIDES	New AI Development New Herbicide ✓✓✓	New Herbicide ✓	New Herbicide ✓✓✓ New Herbicide ✓ New Herbicide ³ ✓		Non-Selective Glyphosate LCM ✓ Selective Merlin Flexx / Adengo LCM ✓ Council Family ✓ Balance Flexx LCM ✓ Ronstar One ✓ Convintro ✓ Mesosulfuron LCM ✓ New over-the-top herbicide ✓	~€5bn
FUNGIC.		New Fungicide ✓ New Fungicide ✓	New Fungicide ³ ✓✓✓		Nativo Plus ✓✓ Delaro Forte ✓	~€3bn
INSECT.	New Insecticide ✓✓	New Insecticide ✓ New Insecticide ✓		Plenexos ✓✓✓	Vayego Duo ✓ Fluopyram ✓	~€2bn
SEED GROWTH ²			New Seed Treatment ✓	Ibisio ✓	INS FUN ready mixture ✓ Ladoran ✓✓✓ Next gen. Potato Fungicide ✓	

✓ Corn ✓ Soybeans ✓ Fruits and vegetables ✓ Cereals, oilseed rape, sugarbeets, cotton and rice Biological Small Molecule

¹ Shown here is a subset of Bayer's total life cycle management activities; focused on new formulation developments which have the potential to bring significant innovation to customers compared to currently marketed product; Products shown may not yet be fully registered in all jurisdictions; includes all advancements made in FY'23, updated Mar'24; ² SeedGrowth is currently reported within other SBEs; ³ 3rd party collaboration

PSP = Peak Sales Potential, 50% incremental; Expected to reach 30% of PSP by 2032, 80% of PSP by 2038 and remainder in 2039+; **Note that products are excluded from the pipeline PSP typically the year following launch.**

advanced to next phase Selection of projects listed here and included in the peak sales potential by segment do not include projects in early research or discovery



► Sustainability
Report



► Innovation Summit
June 2023

