



We create chemistry

Adding Balance to Agrochemicals: Innovations for Sustainable Farming

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BASF, President Bioscience Research

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BASF at a glance: Key figures 2019

~118,000

Employees
worldwide

~\$69.7 bn

Sales

\$5.3 bn

EBIT before
special items

\$2.6 bn

R&D budget

~11,000

Employees
worldwide in R&D

\$9.1 bn

Agricultural Solutions
Sales

\$1.2 bn

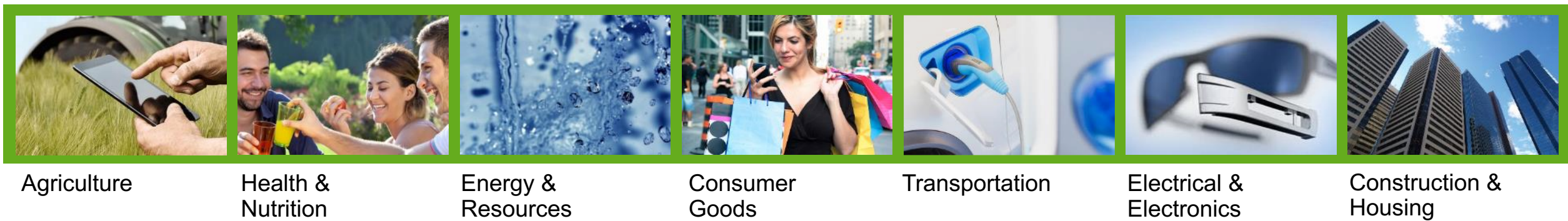
Ag. Sol. EBIT
before special items

>\$1.0 bn

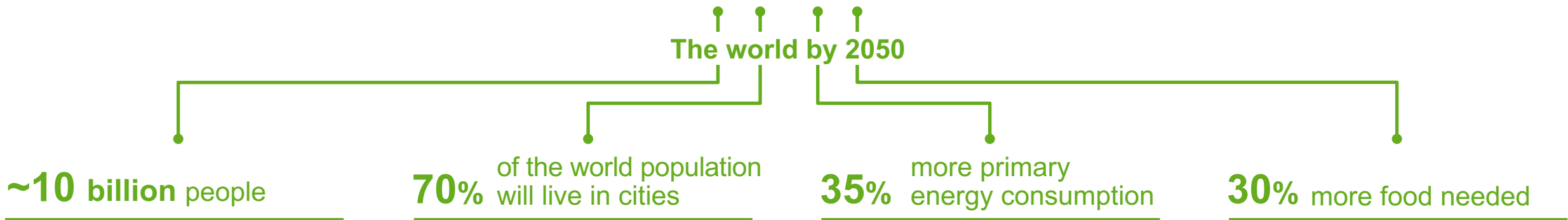
Ag. Sol.
R&D budget

We are the world's largest chemical company

Chemistry as enabler for sustainable development



Chemistry as enabler to meet current and future needs





Our purpose:

We create
chemistry for a
sustainable future



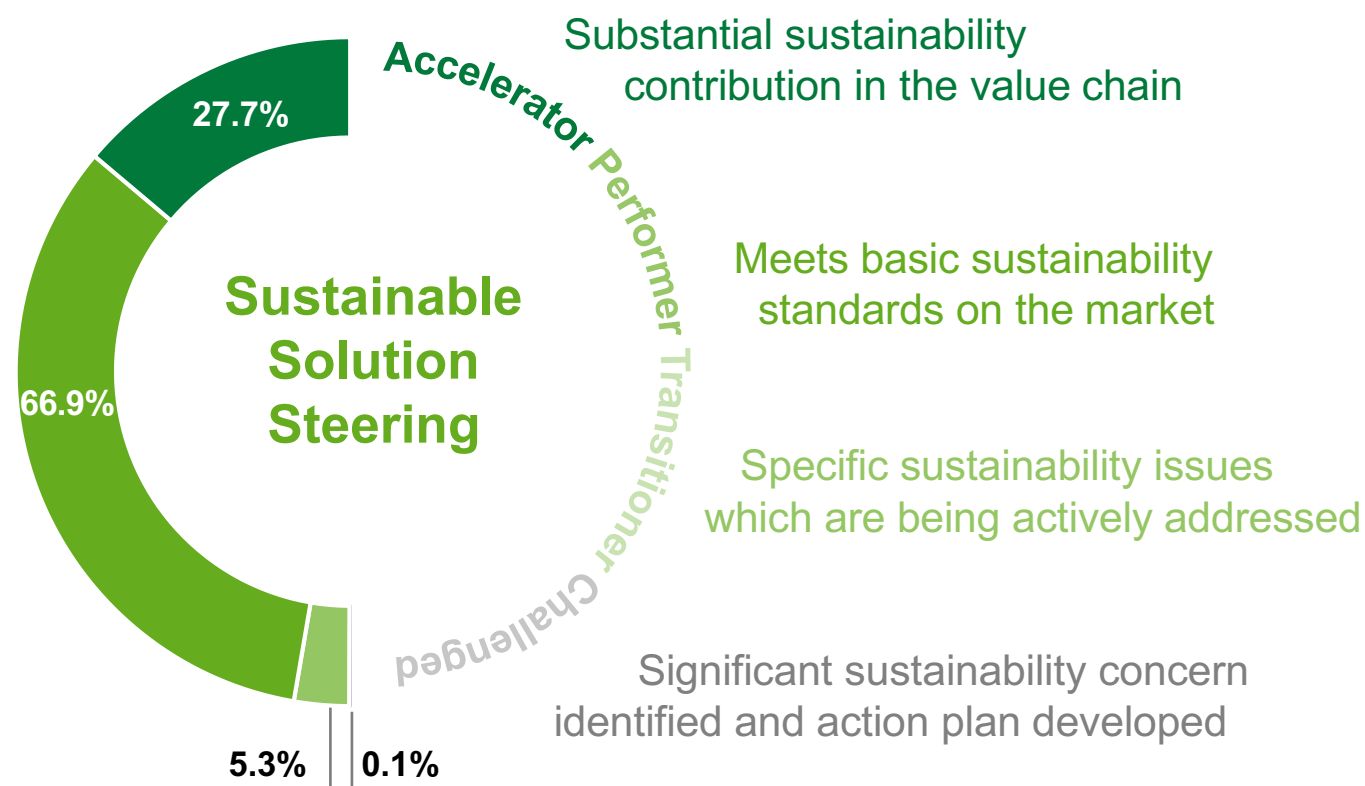
We create chemistry for a sustainable future

■ • BASF
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Farming. The biggest job on earth.

We strive for a sustainable product portfolio

Percentage of sales 2018

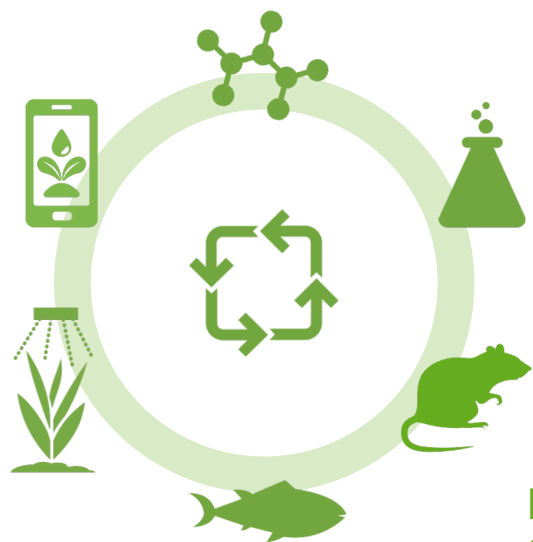


- We target to further increase our sales from Accelerator products by 2025
- We will stop selling all Challenged products within maximum five years after classification
- To achieve this goal, we integrate Sustainable Solution Steering in the **R&D pipeline**

Sustainable steering of R&D disrupted linear research programs

Optimize regulatory requirements and performance in parallel

Develop in-vitro tox predictors, identify potential off targets, rule out unwanted modes of action early

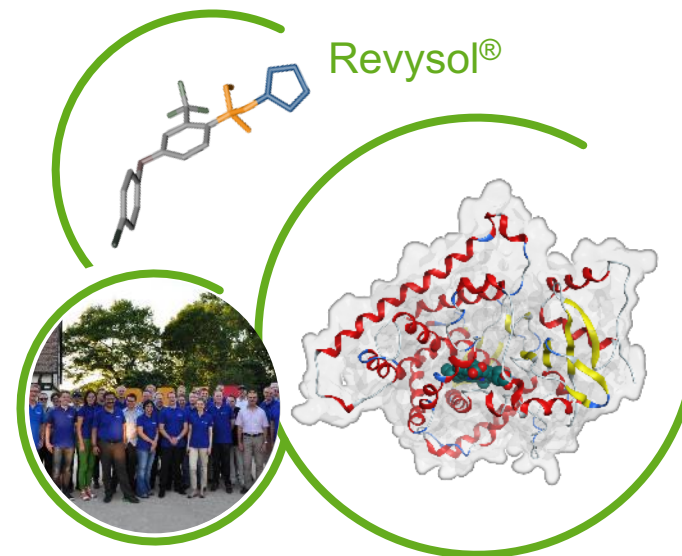


New Biological Mode of Action with favorable environmental profiles
Inscal^{is}® controls resistant pests for more efficient farming, low acute toxicity for mammals, fish, birds and beneficial insects



Digitalization supports sustainable product development

Dual target design, coupling molecular modeling & alternative toxicological testing makes Revysol[®] an extraordinarily safe triazole fungicide

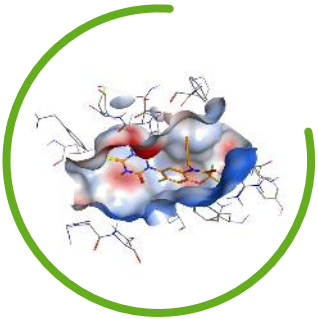


Integrated solutions for sustainable farming



Interplay of Chemistry & Traits

- Mode of action research facilitates development of traits
- Allows the use of the modern PPO-herbicides



Sophisticated design

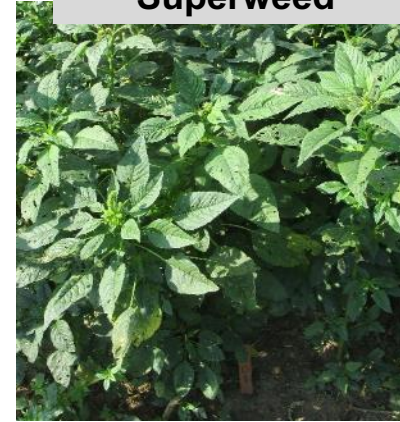
- Controls broadly herbicide resistant superweeds
- Designed for optimal binding and potency on the plant PPO enzyme, lower use rates



Sustainability

- Increasing productivity (land use)
- Environmental benefits (no-till fields)

Palmer Amaranth
"Superweed"



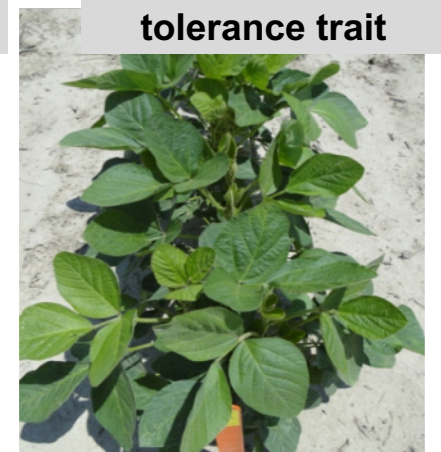
BASF PPO
weed control



non-transgenic



BASF PPO
tolerance trait



Tirexor™ + Kixor® herbicide

Smart stewardship to make sustainability work on the farm



xarvio™
Digital Farming
Solutions

powered by BASF

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