



BASF
We create chemistry

Verbund advantages reduce the environmental impact

Geismar



Antwerp



Ludwigshafen



Nanjing



Freeport



Kuantan



BASF
“Verbund”
avoided
3.9 million t
of CO₂ emissions
in 2017

Efficiency drivers: heat integration, process control and process integration

Energy and climate protection

Greenhouse gas emissions

per metric ton of sales product
by 2020 (baseline 2002)*

-40%

Status
2017:
-35.5 %



Energy efficiency

Coverage of our primary energy demand
through certified energy management
systems (ISO 50001) at all relevant sites

90%

Status
2017:
54.3 %

* Excluding oil and gas production

BASF's segments*



Chemicals

Petrochemicals

Monomers

Intermediates



Performance Products

Dispersions & Pigments

Care Chemicals

Nutrition & Health

Performance Chemicals



Functional Materials & Solutions

Catalysts

Construction Chemicals

Coatings

Performance Materials



Agricultural Solutions

Agricultural Solutions**

*As of October 1, 2018 **Until August 2018: Crop Protection

Chemicals – a growth industry

Global annual growth rate of ~3.4%*



Agriculture



Health & nutrition



Energy & resources



Construction & housing



Consumer goods



Transportation



Electrical & electronics

..... Chemistry as enabler to meet current and future needs



~10bn
... people by 2050



70%
... of the world population
will live in cities by 2050



50%
... more primary energy
consumption by 2050



30%
... more food needed
by 2050

* Average annual real change 2018-2020; BASF Report 2017 p.121

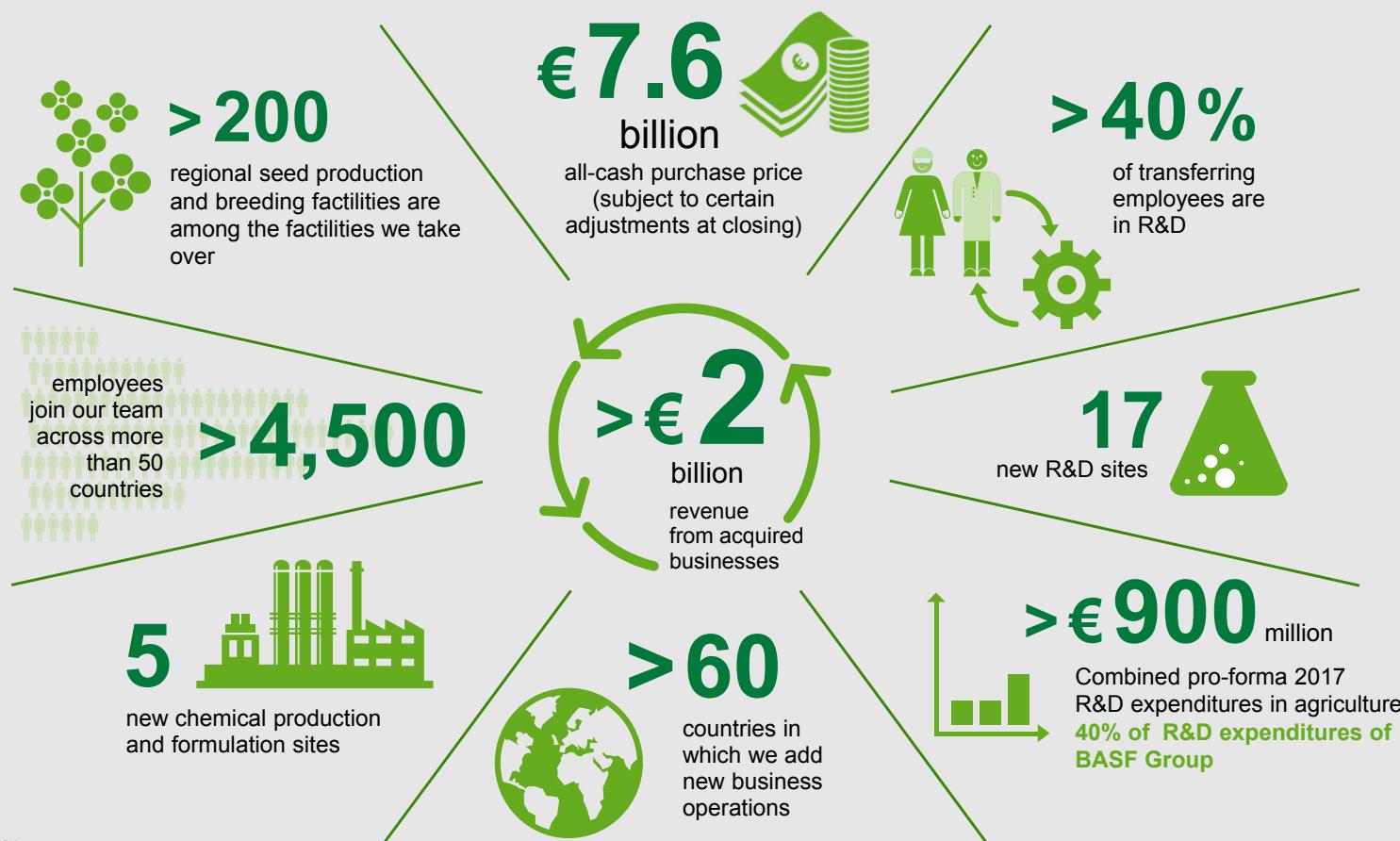
At a glance

The acquisition of businesses
and assets from Bayer – Focus EMEA

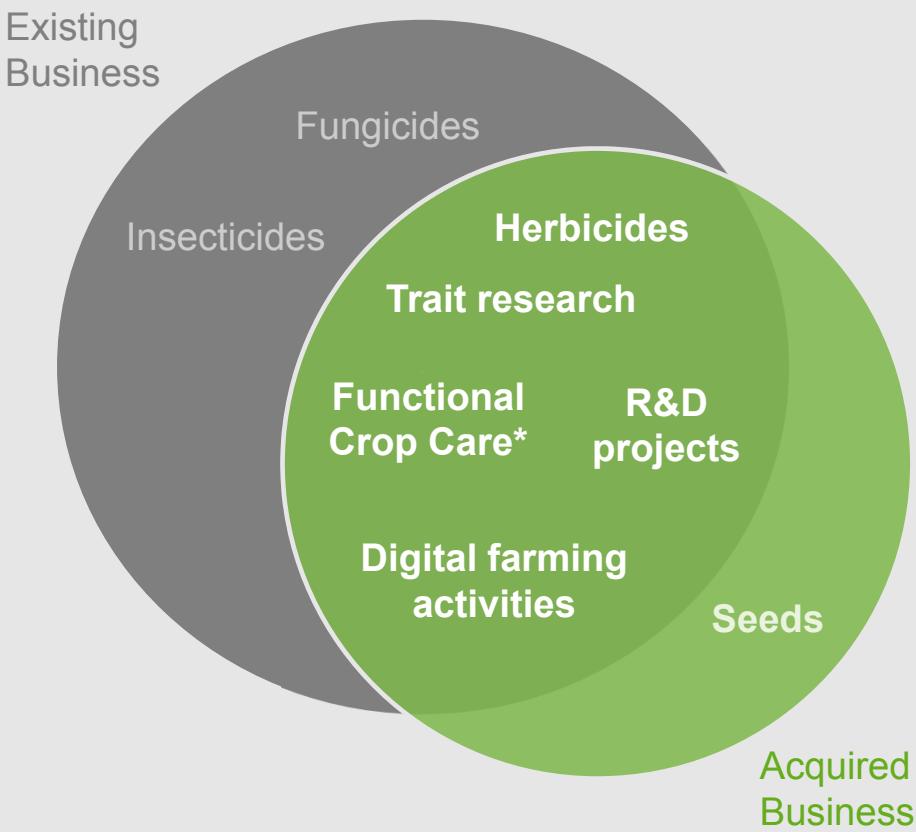
November 2018



The acquisition in numbers



Complementary additions and new opportunities



New parts of the portfolio

- Significant seeds businesses for canola/oilseed rape, soybean, cotton
- Global vegetable seeds business

Complementary additions to the portfolio

- Non-selective herbicides with strong market presence, ideal extension of BASF's herbicide portfolio
- Attractive seed treatment business
- Promising seed and trait research, e.g. hybrid wheat and further R&D projects
- Highly innovative digital farming activities

xarvio™ digital farming solutions

- Digital solutions for crop optimization including assets, IP, pipeline developments, sites and 80+ digital experts
- Two main products:
 - xarvio™ SCOUTING: detects in-field problems by picture recognition
 - xarvio™ FIELD MANAGER: status report, spray timer, field-specific zone spray recommendations
 - Available in 100+ countries and 30+ languages
- xarvio™ HEALTHY FIELDS in concept phase





BASF

We create chemistry

14

The advertisement features a green rectangular background with a white border. On the left side, there is a large red kidney bean hanging from a thin brown string. To the right of the bean is the BASF logo, which consists of a square with a horizontal dash followed by the word "BASF". Below the logo is the tagline "We create chemistry". In the center of the green area, the word "Seeds" is written in a large, bold, green sans-serif font. At the bottom of the green area, the date "November 2018" is printed in a smaller, gray sans-serif font. The background of the entire advertisement is white and contains several small, scattered seeds and seed pods in various colors like yellow, green, and brown.

BASF

We create chemistry

Seeds

November 2018

InVigor[®]



BASF
We create chemistry



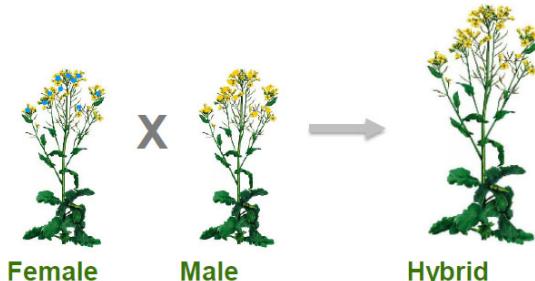
Vigorous

Kraftfull
Energisk
Spänstig

BASF
We create chemistry

Förädling – en stor prioritet

- BASF 2018 övertagit förädlingsprogram av BCS
 - ▶ Höstraps
 - ▶ Vårraps
- 3 förädlingsstationer
 - ▶ Belgien, Ghent (2 lokaliteter)
 - ▶ Polen, söder om Poznan
 - ▶ Sørup, i närheten av Flensborg



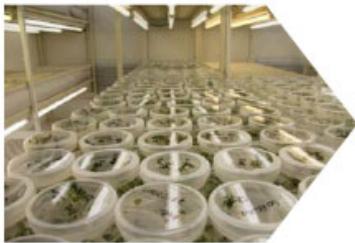
Astene

Soerup

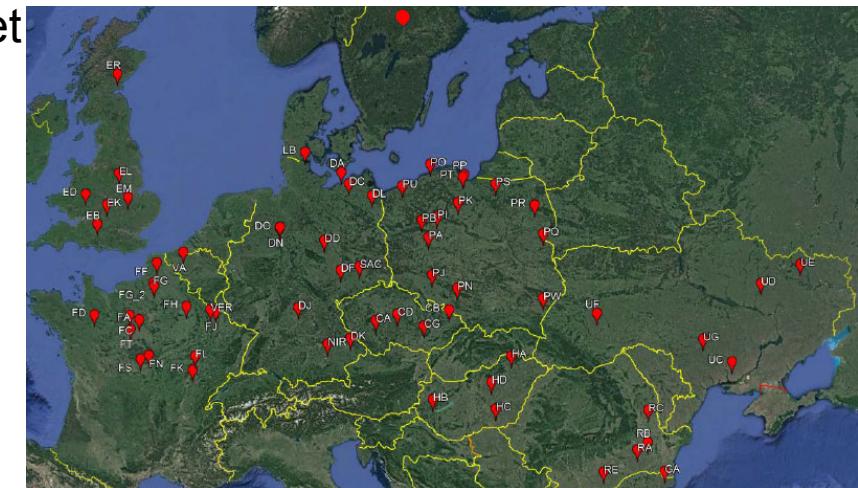
Grabianowo

BASF
We create chemistry

Förädling på lokal nivå



- Förädling hybridraps
- Fokus på skörd, oljehalt och stabilitet
- Prövning under många olika förhållanden, detta stärker urvalet av sorter.
 - ▶ Vinterfasthet fx Polen/Sverige
 - ▶ LLS fx England
 - ▶ Phoma fx Frankrig
- Stort forsöksnätverk
- Sortnamnen känns igen på namn som börjar på INV kendes på navne begyndende med **Inv**



I Svenska sortförsöken 2018/2019

InVigor®



- InV 1030
 - InV 1044
 - InV 1055
-
- InV 1077
 - InV 1165



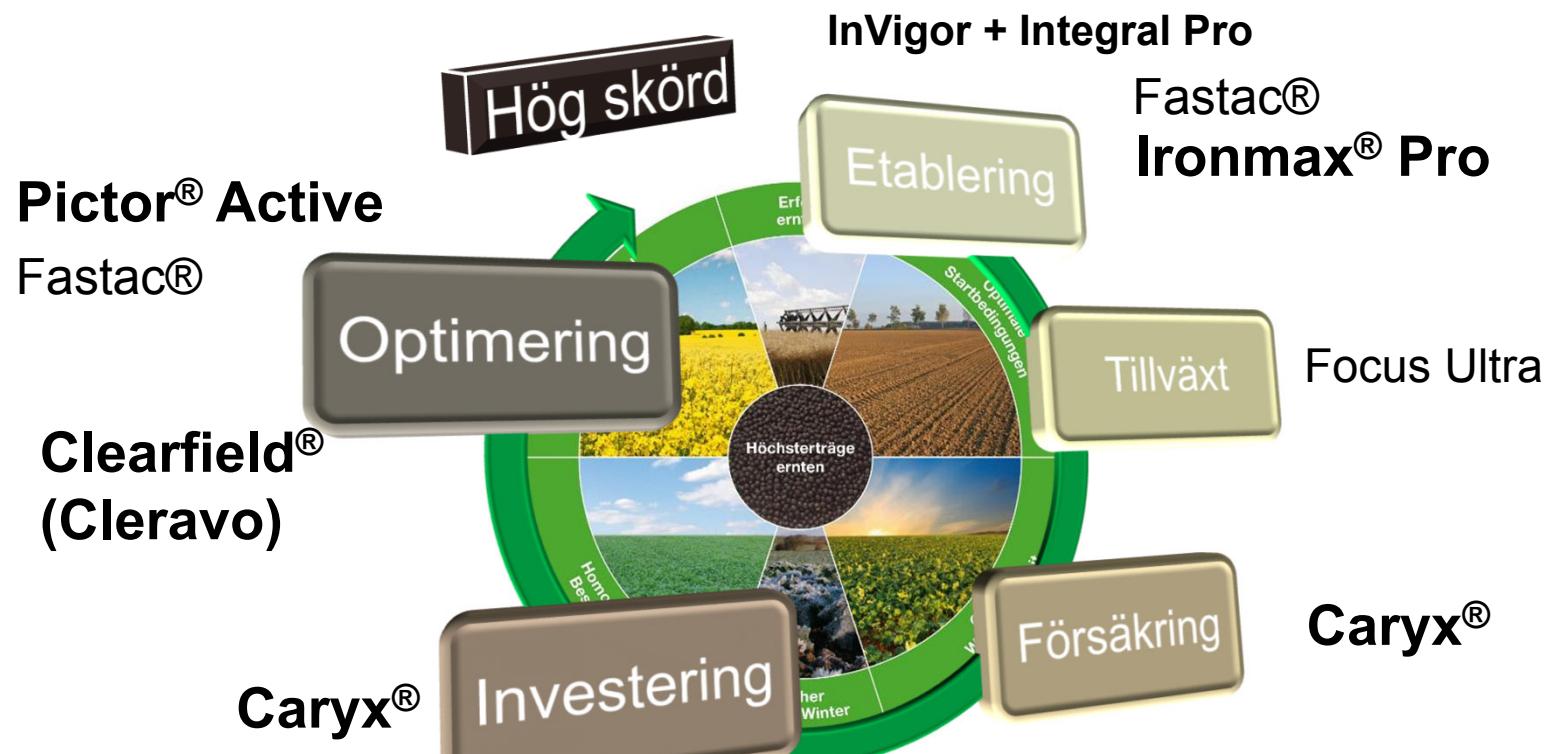


We create chemistry

- Caryx Nyhet!
- Librax Nyhet!
- Pictor Active Nyhet!
- Ironmax Pro Nyhet!
- Priaxor Nyhet!
- Biathlon 4D Nyhet!
- Comet Pro
- Forbel
- Flexity
- Medax Max
- Terpal
- Cycocel Plus
- Fastac 50
- Basagran SG
- Cleravo
- Cantus
- Focus Ultra

- Acrobat
- Signum
- Candit
- Delan
- Kumulus
- Scala
- Regalis Plus
- Cabrio Duo
- RAK 3+4
- Vizura
- Limus
- Nodulator

Oljeväxter



Stråsäd

Ogräs

Biathlon 4D

(Basagran SG i insådder)

Skadedjur

Fastac 50

Tillväxtreglering

Medax Max

CCC

Terpal

Svamp

Priaxor

Librax

Comet

Forbel

Flexity

 **BASF**

We create chemistry

Fluxapyroxad (Xemium) - SDHI

- Introducerades 2012- (Adexar, Librax, Ceriax och Priaxor)
- Mycket **snabbt upptag** i växten
- Unik **rörlighet** (mobilitet) i plantvävnaden
- Unik förmåga att bilda **väderbeständiga depåer i vaxskiktet**- från vilka aktiv substans frigörs kontinuerligt



Priaxor®



A photograph showing a man in a white polo shirt and dark trousers standing next to a large green agricultural tractor. The tractor has a red wheel and a white license plate that reads "40". The background is a field of harvested grain. A semi-transparent white rectangular box covers the lower-left portion of the image, containing the text "Stark SDHI och stark strobilurin".

Stark SDHI och stark strobilurin



BASF
We create chemistry



BASF
We create chemistry

Librax®

Stark SDHI och stark triazol





We create chemistry

Nyhet

Revysol

Triazol

Mefentrifluconazol

Control of *Septoria* in winter wheat



Flakkebjerg (AAU) 2017. Trial ID: 17329-1. Variety: Cleveland. Yield in untreated: 78,0 dt/ha. Two applications: GS 32-33 (9/5) and GS 51-55 (29/5). Photo 30/6.

