BASF – We create chemistry

Our chemistry is used in almost all industries

We combine economic success, social responsibility and environmental protection

Sales 2016: €57,550 million

EBIT 2016: €6,275 million

Employees: 113,830 (as of December 31, 2016)

6 Verbund sites and 352 other production sites
Continuous Commitment to R&D

Success Stories of Innovation

152 years of spending in R&D and competency build-up
Research & Development is a major growth driver for BASF

Champion in the chemical industry

High R&D expenditures

€10 billion annual sales with innovations

Around 3,000 running research projects,
10,000 employees worldwide in R&D

Global Know-How Verbund with external partners
Global R&D presence in key markets

BASF R&D sites with proximity to customers and markets

Around 70 BASF R&D sites globally
150 Years of Academic Partnerships

**1897**
- **Indigo**
  - Bayer, Heumann (university)
  - Heinrich Caro (BASF)

**1913**
- **Ammonia**
  - Fritz Haber (university)
  - Carl Bosch (BASF)

**1930**
- **Polystyrene**
  - Hermann Staudinger (university)
  - Carl Wolff (BASF)

**1963**
- **Vitamin A**
  - Georg Wittig (university)
  - Horst Pommer (BASF)

**1996**
- **Strobilurins**
  - Timm Anke, Wolfgang Steglich (university)
  - Hubert Sauter (BASF)

**2015**
- **Slentite**
  - I.S.I.S. Strasbourg (university)
  - PM (BASF)
Research collaboration with universities and research institutions

Our global network of around 600 universities, research institutes and companies forms an important part of our Know-How Verbund.

- **CARA** - California Research Alliance
- **NORA** - North American Center for Research on Advanced Materials
- **JONAS** - Joint Research Network on Advanced Materials and Systems
- **NAO** - Network for Asian Open Research

4 Postdoc Centers
Collaborations with several research groups on a regional level

**UNIQUE** – The BASF Academic Partnership Program connects 15 leading universities worldwide
Current UNIQUE Universities

- University of California, Berkeley
  - C Schildknecht, at site
- Harvard University
  - Cambridge, MA
  - M Schroeder, at site
- Massachusetts Institute of Technology
  - Cambridge, MA
  - M Schroeder
- U of Massachusetts, Amherst
  - M Schroeder/
  - W Kaufmann
- Texas A&M U
  - College Station, TX
  - R Thiele
- Stanford U
  - C Schildknecht
- Kyoto U
  - H Yamashita
- UNICAT Berlin
  - F Rosowski, at site
- U Heidelberg
  - T Schaub, at site
- Imperial College
  - London
  - V André
- KIT-Karlsruhe Institute of Technology
  - B Sachweh
- ETH Zurich
  - A Hafner
- Inst. of Chemistry
  - CAS, Beijing
  - S Garnier
- Fudan University
  - Shanghai
  - S Garnier
The Australia and New Zealand business is arranged around broad industry groups

- Access to overall BASF portfolio of products, technologies and solutions
- Innovation as the foundation of our joint success
- Strong account management, reliable supply chain, excellent technical and customer service
BASF ANZ at a glance
Our local key customer industries are agriculture, coatings, construction, manufacturing solutions and mining

- 4 wholly-owned subsidiaries
- 13 production sites*
- 493 employees
- Sales** of approx. €417 million

Data as of December 31, 2016.
* All companies and sites (Including admixture sites and Chemetall sites acquired in December 2016).
** By location of customer.
Natural beta-carotene manufacturing

**Location:** Production sites at Hutt Lagoon, WA and Whyalla, SA, processing plant at Cheltenham, VIC

**Employees:** 17

**Production scope:**
- World’s only producer of algal beta-carotene.
- In operation for 35 years.
- Lakes take on the pink colour from presence of algae trapped in the salt granules from which we harvest natural beta-carotene.
- Recent approval for $1 million upgrade to Whyalla site to expand production and ensure long term viability.
- 95% of product exported to Asia for use as a dietary supplement, food and beverage additive.
Biological crop protection manufacturing

**Located:** Somersby, NSW

**Employees:** 12

**Production scope:**

- Manufacture of beneficial biological crop protection products which are, or are derived from, living organisms or natural extracts.

- Beneficial bacteria cultivated from peat sourced from WA and applied as a seed treatment.

- $1 million upgrade underway to expand production to biological pesticides for the protected cropping industry.
Local R&D to support global innovations

**Business Unit:** Agriculture  
**Facility:** Research farm  
**Location:** Tamworth, NSW  
**Employees:** 2  
**R&D Program:**
- Field trials across Australia’s major crops.  
- Training for agronomists.  
- Collaborative research with Department of Primary Industries NSW and University of New England.  
- In-field and in-class training for University of New England students.
Local R&D to support global innovations

**Business Unit:** Mining Technology

**Facility:** R&D laboratory

**Location:** Perth, WA

**Employees:** 10

**R&D Program:**

- Study of mineral processing innovation needs such as advanced rheology modifiers for the improvement of the thickening process for valuable material and tailings.
- Contributing to operational, environmental and economic benefits for the mining industry.
- Focus on key ores mined with highest demand for innovation and newly mined ores such as lithium.
- Additional focus on improving solid-liquid separation products to improve handleability and floatation products for sulphides and non-sulphides.
- Sponsorship of PHD students from Curtin and Monash Universities and collaboration with CSIRO and mining operators.
Community Engagement – Focus on education and biodiversity protection

**BASF Kids’ Lab**
BASF runs an annual Kids’ Lab program to encourage an interest in science and chemistry from an early age by conducting fun, hands-on chemistry-related experiments. The program is conducted in partnership with Curtin University, Monash University, University of New South Wales and Auckland University.

**The Smith Family**
BASF sponsors the tertiary education of disadvantaged children through independent, national children’s charity, The Smith Family, investing over A$500,000 since 2007.

**The Scholarship for German-Australian Student Exchange**
To foster the exchange between Australia and Germany, BASF supports the Scholarship for German-Australian Student Exchange. Each year, the society awards scholarships to Australian students to travel to Germany during their summer holidays.

**Wasp Wipeout**
BASF sponsors the Wasp Wipeout program in the Nelson-Tasman region of New Zealand. The program is a community-led conservation project that aims to significantly reduce European wasp populations in the region. The control method adopted by the project uses BASF’s insecticide fipronil.