

# The chemical industry – case BASF Roadmap 2020

Roadmap Flanders, May 27, 2010



**Wouter De Geest**  
Managing Director BASF Antwerpen



## BASF in a nutshell BASF – The Chemical Company



- The world's leading chemical company

	BASF Group	BASF Antwerpen
■ Sales 2009:	€ 50.7 billion	€ 4,402 million
■ EBIT 2009:	€ 3.7 billion	€ 392 million
■ Employees 2009:	104,779	3,552



**Chemicals**  
18%



**Plastics\***  
15%



**Performance Products**  
13%



**Functional Solutions**  
15%



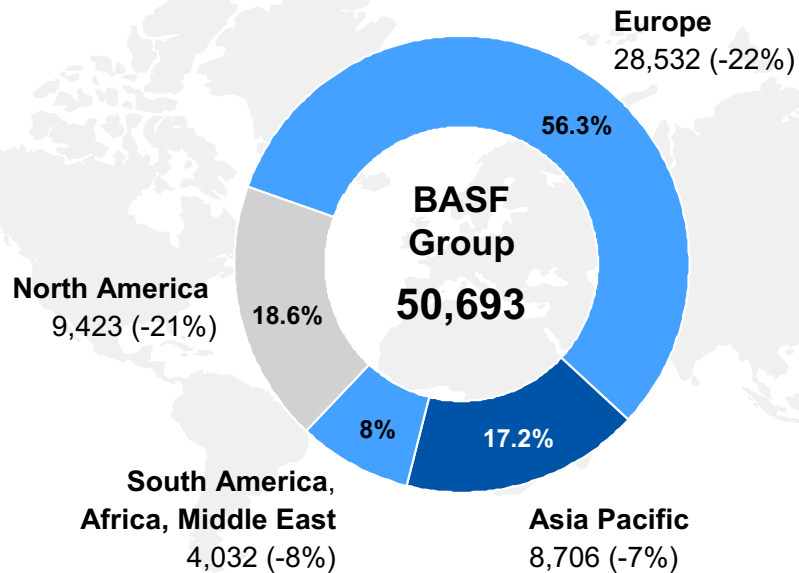
**Agricultural Solutions**  
5%



**Oil & Gas**  
23%

## BASF in a nutshell Sales 2009 by region [by customer location]

Million € (Change compared with previous year)



## BASF in a nutshell Our strategic guidelines, key to success of BASF



We earn a premium on the cost of capital

We help our customers to be more successful

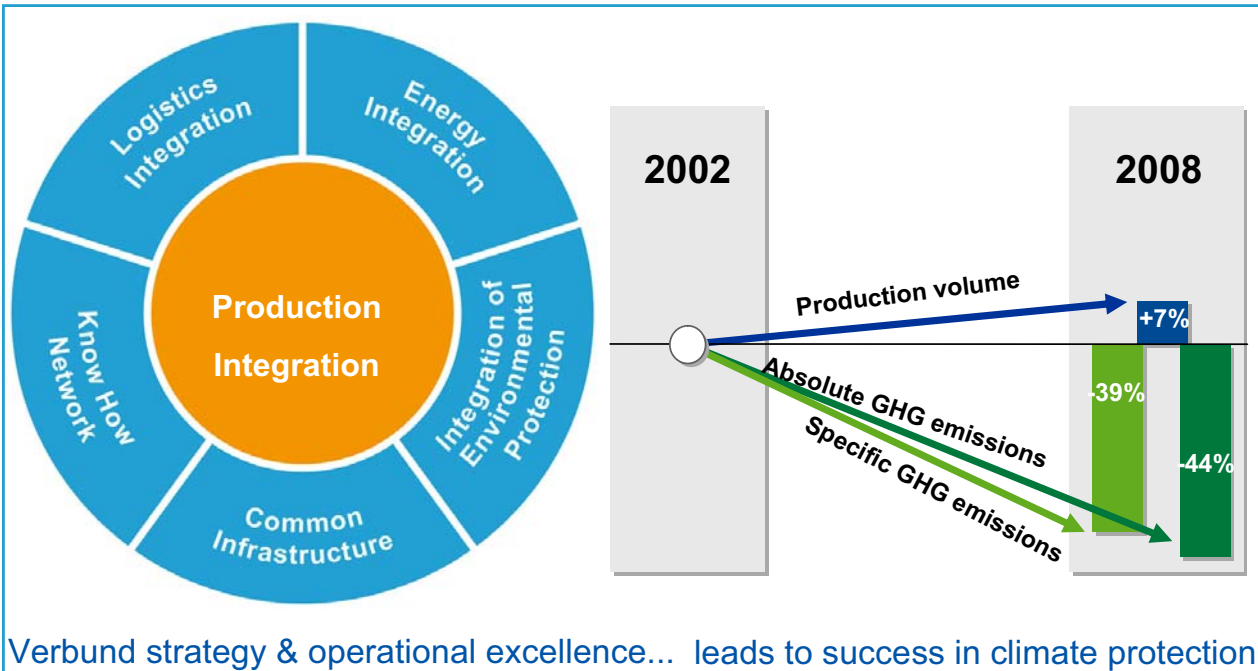


We form the best team in industry





We ensure sustainable development



# BASF in a nutshell Verbund, key to success of BASF Antwerpen



# Chemical industry trends Global megatrends leading to market needs

<p><b>Health &amp; Nutrition</b></p> 	<p><b>9 billion people will live on earth by 2050!</b></p> <ul style="list-style-type: none"> <li>How can we guarantee food and water supply for everyone?</li> <li>What are possible benefits and contributions of plant science?</li> </ul>	<p><b>Construction &amp; Housing</b></p> 	<p><b>67% of the world population will live in cities by 2025!</b></p> <ul style="list-style-type: none"> <li>What does future architecture look like?</li> <li>Which materials are needed to make energy consumption more efficient?</li> </ul>
<p><b>Energy &amp; Resources</b></p> 	<p><b>50% more primary energy needed in 2030!</b></p> <ul style="list-style-type: none"> <li>What is the ideal energy mix of the future?</li> <li>How big is the stake of renewable energy?</li> </ul>	<p><b>Mobility &amp; Communication</b></p> 	<p><b>1.2 billion cars will drive on earth by 2020!</b></p> <ul style="list-style-type: none"> <li>How can we reduce emissions and fuel consumption?</li> <li>What will future cars be made of?</li> </ul>

## Chemical industry trends Sustainability as top priority

- Sustainable economy ≠ green hype
- Sustainable economy goes beyond public opinions & subjective goals
- Innovation as a chance, not as a threat (learning curves)
- What we need:
  - Transparent experiments & measurements
  - Critical evaluations & attitude

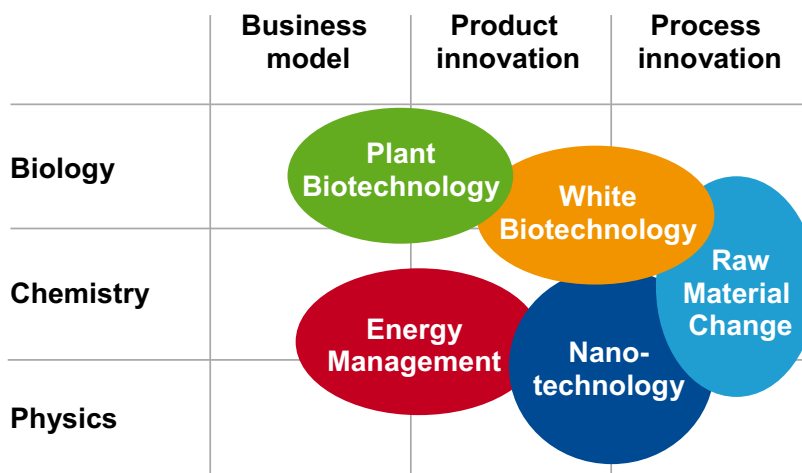


Eco-efficiency & social analysis → decisions on:

- strategy
- marketing, customers
- research & development
- stakeholder dialogue

## Chemical industry trends New products by market driven innovation

- BASF Group's Growth clusters: Innovative solutions for the future



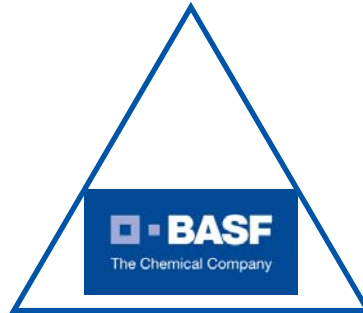
Expenditures growth clusters 2009-2011: € 1 billion  
Targeted annual sales from growth clusters 2015: € 2-4 billion

# Chemical industry trends Chemicals, solutions for global challenges

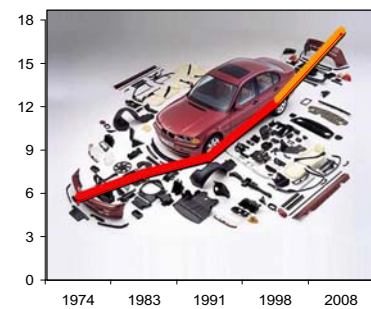
## Performance products



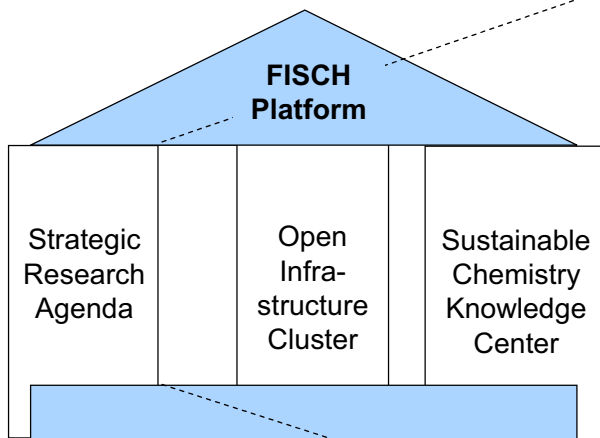
## Insulation materials



## Light materials



# Chemical industry trends Open innovation on sustainability



### 1. Alternatives for fossils

1. Biomass conversion
2. Micro-algae
3. Valorization of side and waste streams

### 2. Process Intensification

4. Separation technology
5. Green solvents
6. Micro-technology
7. Catalysis and alternative energy input

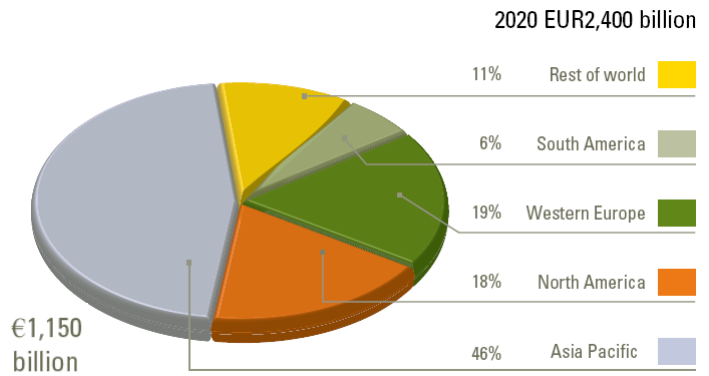
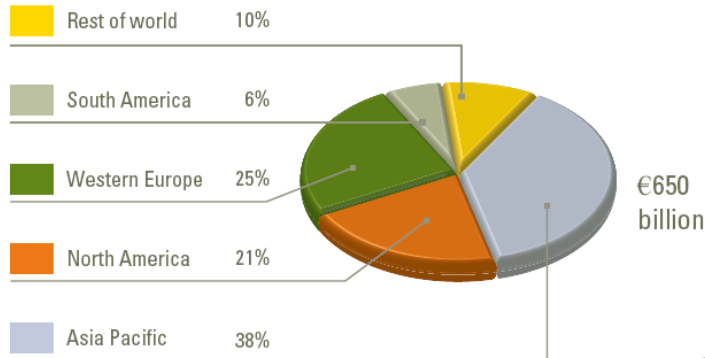
### 3. Sustainable Chemical Products

8. Multifactorial performance increase methodologies
9. Sustainable chemical products

## Chemical industry trends A growing and shifting market

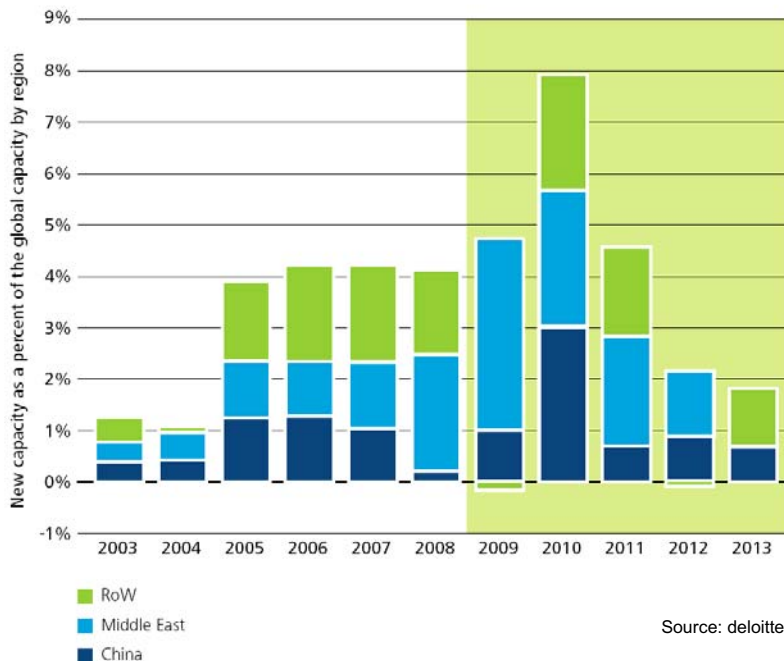
### Chemical demand (excluding pharma)

2008 EUR1,700 billion



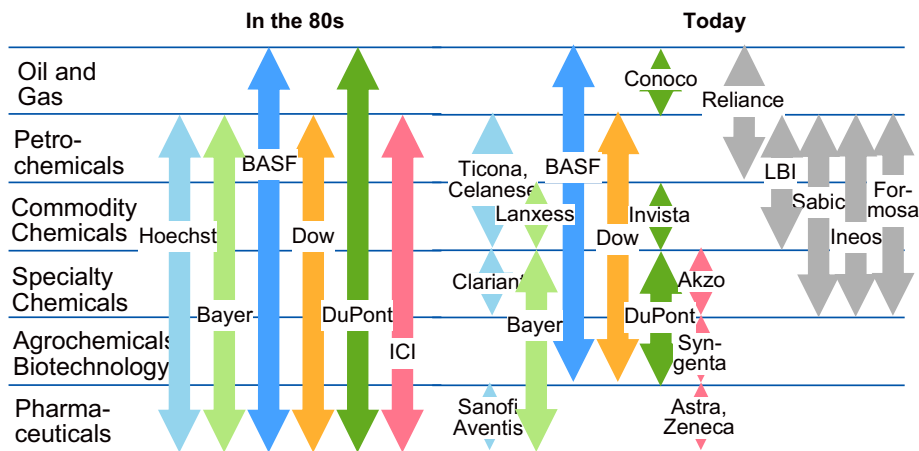
## Chemical industry trends A growing and shifting sector

### Planned ethylene capacity investments by region



Source: deloitte, dec 2009

# Chemical industry trends Dynamics within the competitive landscape



- **Portfolio management** reshaped the chemical industry landscape
- **Top 10 chemical companies** are besides ‘traditional’ EU & US companies:
  - Private equity companies
  - Asia and middle east companies

# Chemical industry trends Clustering dynamics in Europe



Source: European Chemical Site Promotion Platform, 2009

- **Consolidation:** M&A, JVs, ...
- **Clustering:**
  - **Cost competitiveness** from integration along value chains
  - **Synergy benefits:** utilities, services, logistics and infrastructure

## Chemical industry trends How we shape the future as BASF

### Leading positions in growth industries and emerging markets

- Translate megatrends into business growth
- Continue expansion in Asia

### Ongoing portfolio optimization

- Continue with active portfolio management
- Drive portfolio closer to customers

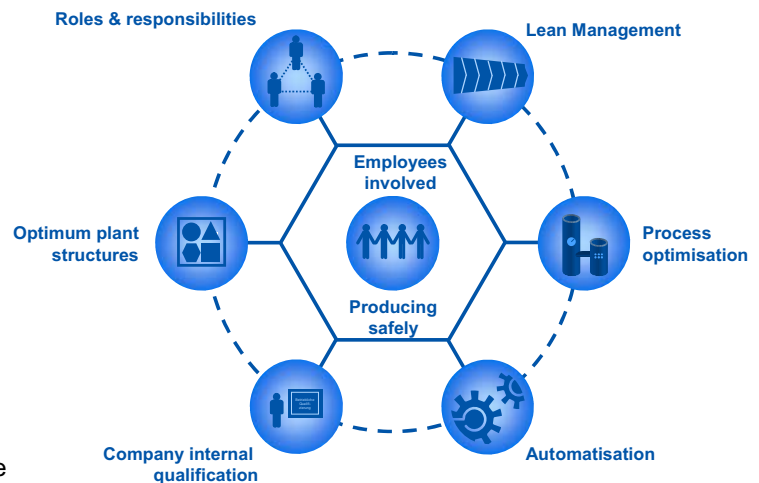
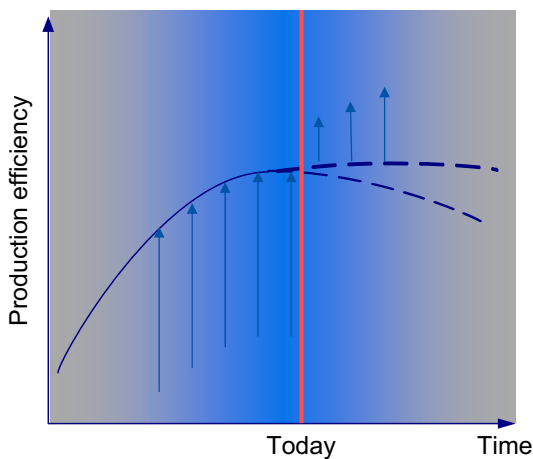
### Excellent innovation platform

- Product and system innovation as growth drivers
- Strong pipeline of innovations

### Growth target:

We strive to outperform global chemical production growth by at least 2 percentage points p.a.

## BASF Antwerp in 2020 Operational excellence



## BASF Antwerp in 2020 Sustainable energy management

- Sustainable energy policy
  - Energy market functioning properly (regulatory stability, strong liberalized markets, interconnected infrastructure)
  - Balanced energy mix → supply security for high base load
  - Energy mix composition to evolve through sustainable innovation → evaluation based on reliability and life cycle sustainability
- Consistent implementation
  - Energy efficiency through avoidance, optimization & integration
  - Cogeneration: Zandvliet Power & decentralized, integrated units



## BASF Antwerp in 2020 Talent management

- Focus on expert knowledge & leadership skills | stronger differentiation
- Lean organization
- Continuous personal development
- Flexibility, mobility & diversity
- Social media networking & knowledge sharing via interactive platforms

