

## **Investment highlights**

#1 chemical company worldwide with balanced portfolio and long-term strategy

Competitive advantage based on unique Verbund concept and operational excellence

Superior growth opportunities through strong positioning in growth markets, acquisitions in core businesses and an excellent innovation platform

Innovator and solution provider for the challenges of the future

Sustainable value creation based on sound balance sheet and financial strength

## **Forward-looking statements**

This publication may contain forward-looking statements. These statements are based on current expectations, estimates and projections of BASF management and currently available information. They are not guarantees of future performance, involve certain risks and uncertainties that are difficult to predict and are based upon assumptions as to future events that may not prove to be accurate.

Many factors could cause the actual results, performance or achievements of BASF to be materially different from those that may be expressed or implied by such statements. Such factors include those discussed in BASF's Report 2008 on pages 112ff. We do not assume any obligation to update the forward-looking statements contained in this publication.

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The front and back covers show Andree van der Kloet, Gerd Kraemer, Daniel Dehos, and Dr. Liliana Parra Rapado of the Global Herbicide Research department of Crop Protection, Limburgerhof, Germany.

# History

Since 1865, we have been shaping the future with chemistry and combining innovation with tradition. We are proud of who we are and what we do: BASF – The Chemical Company. Chemistry is our strength. It makes us and our customers successful, today and in the future.









<u> 1865 –1901</u>

<u> 1901–1925</u>

1925-1945

1945-1953

Friedrich Engelhorn founds Badische Anilin & Soda Fabrik to produce coal tar dyes. Soon thereafter, the company gains a leading position in the world dyes market with methylene blue, alizarin and indigo.

The synthesis of ammonia by the Haber-Bosch process paves the way for the production of synthetic nitrogen fertilizers. In 1919, the Nobel Prize in chemistry is awarded to Fritz Haber.

BASF becomes part of IG Farbenindustrie AG. Advances in highpressure technology enable the production of synthetic gasoline and rubber and products from acetylene. In 1931, the Nobel Prize in chemistry is awarded to Carl Bosch. Reconstruction after the severe damage during the Second World War takes a number of years. BASF is reestablished as an independent company in 1952.









1953-1965

1965-2004

Since 2004

Highlight 2009

Germany's economic miracle paves the way for the plastics era. BASF expands into markets with products such as polystyrene, Styropor®, nylon and polyethylene. BASF develops into a transnational company with production sites in Europe, North and South America and Asia.

BASF is the world's leading chemical company. In 2005, the new Verbund site in Nanjing, China, begins operation. It represents the largest single investment project in BASF's history. In 2006, BASF buys Engelhard Corporation, USA, its biggest ever acquisition. In 2008, BASF is converted into a European Company (SE).

In April 2009, BASF acquired Ciba Holding AG, Switzerland, to strengthen its Performance Products segment and expand BASF's leading position in specialty chemicals.

# BASF-The Chemical Company

BASF is the world's leading chemical company – The Chemical Company.

Our portfolio ranges from chemicals, plastics and performance products to agricultural products, fine chemicals as well as oil and gas. As a reliable partner, we help our customers in virtually all industries to be more successful. Our high-value products and intelligent solutions play an important role in finding answers to global challenges such as climate protection, energy efficiency, nutrition and mobility.

In 2008, BASF posted sales of more than €62 billion and had approximately 97,000 employees as of the end of the year. These figures do not include the acquired Ciba businesses.





## **Board of Executive Directors**



Dr. Jürgen Hambrecht (Chairman of the Board of Executive Directors): 62, with BASF for 33 years

Legal, Taxes & Insurance; Strategic Planning & Controlling; Communications & Government Relations; Global HR – Executive Management & Development; Investor Relations; Chief Compliance Officer



**Dr. Kurt Bock:** 50, with BASF for 18 years

Chief Financial Officer; Catalysts; Market & Business Development North America; Regional Functions North America; Finance; Information Services; Corporate Controlling; Corporate Audit



**Dr. Martin Brudermüller:** 48, with BASF for 21 years

Performance Polymers; Polyurethanes; Market & Business Development Asia Pacific; Regional Functions & Country Management Asia Pacific; Styrenics



**Dr. Hans-Ulrich Engel:** 49, with BASF for 21 years

Oil & Gas; Region Europe; Global Procurement & Logistics



**Dr. John Feldmann:** 60, with BASF for 21 years

Construction Chemicals; Dispersions & Pigments; Care Chemicals; Paper Chemicals; Performance Chemicals; Polymer Research



**Dr. Andreas Kreimeyer:** 54, with BASF for 23 years

Research Executive Director; Inorganics; Petrochemicals; Intermediates; Chemicals Research & Engineering; BASF Future Business



**Dr. Stefan Marcinowski:** 56, with BASF for 30 years

Crop Protection; Coatings; Specialty Chemicals Research; BASF Plant Science; Region South America



**Dr. Harald Schwager:** 49, with BASF for 21 years

Industrial Relations Director; Human Resources; Environment, Health & Safety; Verbund Site Management Europe; Engineering & Maintenance

# Supervisory Board

**Dr. h.c. Eggert Voscherau**, Wachenheim, Germany Chairman of the Supervisory Board of BASF SE Former member of the Board of Executive Directors of BASF Aktiengesellschaft

**Michael Diekmann**, Munich, Germany Deputy Chairman of the Supervisory Board of BASF SE Chairman of the Board of Management of Allianz SE

Robert Oswald, Altrip, Germany
Deputy Chairman of the Supervisory Board of BASF SE
Chairman of the works council of the Ludwigshafen site of BASF SE
and Chairman of the joint council of BASF Group

**Ralf-Gerd Bastian**, Neuhofen, Germany Member of the works council of the Ludwigshafen site of BASF SE

**Wolfgang Daniel**, Limburgerhof, Germany Deputy Chairman of the works council of the Ludwigshafen site of BASF SE

**Prof. Dr. François Diederich**, Zurich, Switzerland Professor at the Swiss Federal Institute of Technology Zurich

**Franz Fehrenbach**, Stuttgart, Germany Chairman of the Board of Management of Robert Bosch GmbH

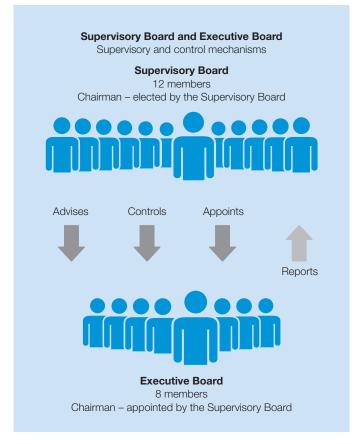
**Stephen K. Green**, London, United Kingdom Group Chairman of HSBC Holdings plc

Max Dietrich Kley, Heidelberg, Germany Lawyer, former Deputy Chairman of the Board of Executive Directors of BASF Aktiengesellschaft

**Denise Schellemans**, Kalmthout, Belgium Full-time trade union delegate

Ralf Sikorski, Wiesbaden, Germany Regional manager of the Rhineland-Palatinate/Saarland branch of the Mining, Chemical and Energy Industries Union (IG BCE)

**Michael Vassiliadis**, Hemmingen, Germany Member of the Central Board of Executive Directors of the Mining, Chemical and Energy Industries Union (IG BCE)



The Supervisory Board of BASF SE comprises 12 members. BASF SE is continuing the principle of parity between shareholder representatives and employee representatives. The six shareholder representatives were elected at the Annual Meeting on April 30, 2009.

The employee representatives have been appointed directly by the Agreement Concerning the Involvement of Employees with effect from March 18, 2009.

## **Transparent corporate management**

Effective and transparent corporate governance fosters the confidence of our domestic and international investors, the financial markets, our business partners, employees and the public in the management and supervision of the company. A two-tier administrative system comprised of the Executive Board and Supervisory Board plays a key role in managing and monitoring BASF in a responsible and value-driven manner.



# Financial Overview

## Ten-year summary

Million €	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Sales and earnings <sup>1</sup>										
Sales	29,473	35,946	32,500	32,216	33,361	37,537	42,745	52,610	57,951	62,304
Income from operations before depreciation and amortization (EBITDA)	4,671	5,986	4,142	5,105	5,110	7,685	8,233	9,723	10,225	9,562
EBITDA margin (%)	15.8	16.6	12.7	15.8	15.3	20.5	19.3	18.5	17.6	15.3
Income from operations (EBIT) before special items	2,950	3,400	2,293	2,881	2,993	5,230	6,138	7,257	7,614	6,856
EBIT before special items margin (%)	10.0	9.5	7.1	8.9	9.0	13.9	14.4	13.8	13.1	11.0
Income from operations (EBIT)	2,009	3,070	1,217	2,641	2,658	5,193	5,830	6,750	7,316	6,463
EBIT margin (%)	6.8	8.5	3.7	8.2	8.0	13.8	13.6	12.8	12.6	10.4
Income from ordinary activities	2,606	2,827	609	2,641	2,168	4,347	5,926	6,527	6,935	5,976
Extraordinary income	_	_	6,121	_	_	_	_	_	_	-
Income before taxes and minority interests	2,606	2,827	6,730	2,641	2,168	4,347	5,926	6,527	6,935	5,976
Income before minority interests	1,245	1,282	5,826	1,599	976	2,133	3,168	3,466	4,325	3,305
Net income	1,237	1,240	5,858	1,504	910	2,004	3,007	3,215	4,065	2,912
Capital expenditures and depreciation <sup>1</sup>										
Additions to tangible and intangible assets	3,253	6,931	3,313	3,055	3,415	2,163	2,523	10,039	4,425	3,634
Thereof property, plant and equipment	2,764	3,631	3,037	2,677	2,293	2,022	2,188	4,068	2,564	2,809
Depreciation of tangible and intangible assets	2,662	2,916	2,925	2,464	2,452	2,492	2,403	2,973	2,909	3,099
Thereof property, plant and equipment	2,018	2,245	2,307	2,012	1,951	2,053	2,035	2,482	2,294	2,481
Number of employees										
At year-end	104,628	103,273	92,545	89,389	87,159	81,955	80,945	95,247	95,175	96,924
Annual average	107,163	105,784	94,744	90,899	88,167	85,022	80,992	88,160	94,893	95,885
Personnel costs <sup>1</sup>	6,180	6,596	6,028	5,975	5,891	5,615	5,574	6,210	6,648	6,364
Key data <sup>1</sup>										
Earnings per share (€) <sup>2</sup>	1.00	1.01	4.86 <sup>3</sup>	1.30	0.81	1.83	2.87	3.19	4.16	3.13
Cash provided by operating activities	3,255	2,992	2,319	2,313	4,878	4,634	5,2504	5,940	5,807	5,023
Payments related to intangible assets and property, plant and equipment	2,939	2,906	2,811	2,410	2,071	2,057	1,948	2,411	2,562	2,521
Free cash flow	316	86	(492)	(97)	2,807	2,577	3,3024	3,529	3,245	2,502
Return on assets (%)	10.2	9.9	3.1	8.4	7.4	13.2	17.7	17.5	16.4	13.5
Return on equity after tax (%)	9.1	9.0	36.6 <sup>3</sup>	9.3	6.0	12.9	18.6	19.2	22.4	17.0
Free cash flow/sales (%)	1.1	0.2	(1.5)	(0.3)	8.4	6.9	7.7	6.7	5.6	4.0
Number of shares as of December 31 <sup>2</sup> (in thousands) <sup>5</sup>	1,241,970	1,214,798	1,166,802	1,140,632	1,113,286	1,080,880	1,028,758	999,360	956,370	918,479

Starting in 2005, the accounting and reporting of the BASF Group is performed in accordance with International Financial Reporting Standards (IFRS).

The 2004 figures have been reported in accordance with IFRS. The figures for the years up to and including 2003 were prepared according to the German Commercial Code.

2Adjusted for 2:1 stock split 2008

3Including extraordinary income

4Before external financing of pension obligations

5After deduction of repurchased shares earmarked for cancellation

## Ten-year summary\*

## **Balance sheet (German Commercial Code)**

Million €	1999	2000	2001	2002	2003
Intangible assets	2,147	4,538	3,943	3,464	3,793
Thereof goodwill	750	2,629	2,504	2,073	2,038
Tangible assets	12,416	13,641	14,190	13,745	13,070
Financial assets	1,507	3,590	3,360	3,249	2,600
Fixed assets	16,070	21,769	21,493	20,458	19,463
			,		
Inventories	4,028	5,211	5,007	4,798	4,151
Accounts receivable, trade	4,967	6,068	5,875	5,316	4,954
Other receivables	2,211	3,369	2,384	2,947	3,159
Deferred taxes	1,225	1,270	1,373	1,204	1,247
Marketable securities	518	364	383	132	147
Cash and cash equivalents	990	506	360	231	481
Current assets	13,939	16,788	15,382	14,628	14,139
Total assets	30,009	38,557	36,875	35,086	33,602
	4.500	1.555	1 101	1 100	4 405
Subscribed capital	1,590	1,555	1,494	1,460	1,425
Capital surplus	2,675	2,746	2,914	2,948	2,983
Paid-in capital	4,265	4,301	4,408	4,408	4,408
Retained earnings	9,002	8,851	12,222	12,468	12,055
Currency translation adjustment	549	662	532	(330)	(972)
Currency translation adjustment Minority interests	549 329	481	360	396	388
Currency translation adjustment Minority interests Stockholders' equity	549				
Currency translation adjustment  Minority interests  Stockholders' equity  Pensions and other long-term provisions	549 329	481	360	396	388
Currency translation adjustment  Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions	549 329 14,145	481 14,295 6,209	360 17,522 6,809	396 <b>16,942</b> 6,233	388 <b>15,879</b> 6,205
Currency translation adjustment  Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions	549 329 14,145 5,812 2,826	481 14,295 6,209 3,334	360 17,522 6,809 3,332	396 16,942 6,233 2,764	388 <b>15,879</b> 6,205 2,982
Currency translation adjustment Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions  Provisions	549 329 14,145 5,812 2,826	481 14,295 6,209 3,334	360 17,522 6,809 3,332	396 16,942 6,233 2,764	388 <b>15,879</b> 6,205 2,982
Currency translation adjustment  Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions  Provisions  Financial indebtedness	549 329 14,145 5,812 2,826 8,638	481 14,295 6,209 3,334 9,543	360 17,522 6,809 3,332 10,141	396 16,942 6,233 2,764 8,997	388 15,879 6,205 2,982 9,187
Currency translation adjustment  Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions  Provisions  Financial indebtedness  Accounts payable, trade	549 329 14,145  5,812 2,826 8,638	481 14,295 6,209 3,334 9,543 7,892	360 17,522 6,809 3,332 10,141 2,835	6,233 2,764 8,997	388 15,879 6,205 2,982 9,187
Currency translation adjustment Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions  Provisions  Financial indebtedness  Accounts payable, trade  Other liabilities	549 329 14,145  5,812 2,826 8,638  1,294 2,316	481 14,295 6,209 3,334 9,543 7,892 2,848	360 17,522 6,809 3,332 10,141 2,835 2,467	396 16,942 6,233 2,764 8,997 3,610 2,344	388 15,879 6,205 2,982 9,187 3,507 2,056
Currency translation adjustment Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions  Provisions  Financial indebtedness  Accounts payable, trade  Other liabilities  Liabilities	549 329 14,145  5,812 2,826 8,638  1,294 2,316 3,616	481 14,295 6,209 3,334 9,543 7,892 2,848 3,979	360 17,522 6,809 3,332 10,141 2,835 2,467 3,910	396 16,942 6,233 2,764 8,997 3,610 2,344 3,193	388 15,879 6,205 2,982 9,187 3,507 2,056 2,973
Currency translation adjustment Minority interests	549 329 14,145  5,812 2,826 8,638  1,294 2,316 3,616 7,226	481 14,295 6,209 3,334 9,543 7,892 2,848 3,979 14,719	360 17,522 6,809 3,332 10,141 2,835 2,467 3,910 9,212	396 16,942 6,233 2,764 8,997 3,610 2,344 3,193 9,147	388 15,879 6,205 2,982 9,187 3,507 2,056 2,973 8,536
Currency translation adjustment  Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions  Provisions  Financial indebtedness  Accounts payable, trade  Other liabilities  Liabilities  Provisions and liabilities	549 329 14,145  5,812 2,826 8,638  1,294 2,316 3,616 7,226	481 14,295 6,209 3,334 9,543 7,892 2,848 3,979 14,719	360 17,522 6,809 3,332 10,141 2,835 2,467 3,910 9,212	396 16,942  6,233 2,764 8,997  3,610 2,344 3,193 9,147  18,144	388 15,879 6,205 2,982 9,187 3,507 2,056 2,973 8,536
Currency translation adjustment Minority interests  Stockholders' equity  Pensions and other long-term provisions Tax and other short-term provisions  Provisions  Financial indebtedness Accounts payable, trade Other liabilities  Liabilities  Provisions and liabilities  Thereof long-term liabilities	549 329 14,145  5,812 2,826 8,638  1,294 2,316 3,616 7,226  15,864 7,529	481 14,295 6,209 3,334 9,543 7,892 2,848 3,979 14,719 24,262 9,059	360 17,522 6,809 3,332 10,141 2,835 2,467 3,910 9,212 19,353 9,955	396 16,942  6,233 2,764 8,997  3,610 2,344 3,193 9,147  18,144 9,211	388 15,879 6,205 2,982 9,187 3,507 2,056 2,973 8,536 17,723 10,285
Currency translation adjustment Minority interests  Stockholders' equity  Pensions and other long-term provisions  Tax and other short-term provisions  Provisions  Financial indebtedness  Accounts payable, trade  Other liabilities  Liabilities  Provisions and liabilities  Thereof long-term liabilities  Total stockholders' equity and liabilities	549 329 14,145  5,812 2,826 8,638  1,294 2,316 3,616 7,226  15,864 7,529  30,009	481 14,295  6,209 3,334 9,543  7,892 2,848 3,979 14,719  24,262 9,059  38,557	360 17,522  6,809 3,332 10,141  2,835 2,467 3,910 9,212  19,353 9,955  36,875	396 16,942  6,233 2,764 8,997  3,610 2,344 3,193 9,147  18,144 9,211  35,086	388 15,879 6,205 2,982 9,187 3,507 2,056 2,973 8,536 17,723 10,285
Currency translation adjustment Minority interests  Stockholders' equity  Pensions and other long-term provisions Tax and other short-term provisions  Provisions  Financial indebtedness Accounts payable, trade Other liabilities  Liabilities  Provisions and liabilities  Thereof long-term liabilities	549 329 14,145  5,812 2,826 8,638  1,294 2,316 3,616 7,226  15,864 7,529	481 14,295 6,209 3,334 9,543 7,892 2,848 3,979 14,719 24,262 9,059	360 17,522 6,809 3,332 10,141 2,835 2,467 3,910 9,212 19,353 9,955	396 16,942  6,233 2,764 8,997  3,610 2,344 3,193 9,147  18,144 9,211	388 15,879 6,205 2,982 9,187 3,507 2,056 2,973 8,536 17,723 10,285

<sup>\*</sup>Starting in 2005, the accounting and reporting of the BASF Group is performed in accordance with International Financial Reporting Standards (IFRS).

The 2004 figures have been reported in accordance with IFRS. The figures for the years up to and including 2003 were prepared in accordance with German Commercial Code.

## Balance sheet (IFRS)

Million €	2004	2005	2006	2007	2008
Intangible assets	3,607	3,720	8,922	9,559	9,889
Thereof goodwill	1,972	2,139	4,713	4,305	4,748
Property, plant and equipment	13,063	13,987	14,902	14,215	15,032
Investments accounted for using the equity method	1,100	244	651	834	1,146
Other financial assets	938	813	1,190	1,952	1,947
Deferred taxes	1,337	1,255	622	679	930
Other receivables and miscellaneous long-term assets	473	524	612	655	642
Long-term assets	20,518	20,543	26,899	27,894	29,586
Inventories	4,645	5,430	6,672	6,578	6,763
Accounts receivable, trade	5,861	7,020	8,223	8,561	7,752
Other receivables and miscellaneous short-term assets	2,133	1,586	2,607	2,337	3,948
Marketable securities	205	183	56	51	35
Cash and cash equivalents	2,086	908	834	767	2,776
Assets of disposal groups				614	-
Short-term assets	14,930	15,127	18,392	18,908	21,274
Total assets	35,448	35,670	45,291	46,802	50,860
		,	.,.	7,7	
Subscribed capital	1,383	1,317	1,279	1,224	1,176
Capital surplus	3,028	3,100	3,141	3,173	3,241
Retained earnings	11,923	11,928	13,302	14,556	13,250
Other comprehensive income	(60)	696	325	174	(96)
Minority interests	328	482	531	971	1,151
Stockholders' equity	16,602	17,523	18,578	20,098	18,722
Provisions for pensions and similar obligations	4,124	1,547	1,452	1,292	1,712
Other provisions	2,376	2,791	3,080	3,015	2,757
Deferred taxes	948	699	1,441	2,060	2,167
Financial indebtedness	1,845	3,682	5,788	6,954	8,290
Other liabilities	1,079	1,043	972	901	917
Long-term liabilities	10,372	9,762	12,733	14,222	15,843
Long-term nabilities	10,572	3,702	12,700	17,222	10,040
Accounts payable, trade	2,372	2,777	4,755	3,763	2,734
Provisions	2,364	2,763	2,848	2,697	3,043
Tax liabilities	644	887	858	881	860
Financial indebtedness	1,453	259	3,695	3,148	6,224
Other liabilities	1,641	1,699	1,824	1,976	3,434
Liabilities of disposal groups		-		17	- 0,101
Short-term liabilities	8,474	8,385	13,980	12,482	16,295
	<u> </u>			12,102	10,200
Total stockholders' equity and liabilities	35,448	35,670	45,291	46,802	50,860
Equity ratio (%)	47	49	41	43	37
Gearing ratio (%)	114	104	144	133	172
Net debt	1,212	3,033	8,649	9,335	11,738

## Factors influencing sales Contribution to sales growth (%)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Volumes	5.8	6.5	(0.3)	7.8	7.6	9.4	2.5	5.5	4.9	0.3
Prices	(3.9)	11.3	(1.4)	(5.2)	2.1	6.6	11.0	8.3	2.5	11.7
Currencies	1.6	6.6	(0.5)	(2.9)	(7.3)	(4.4)	1.0	(0.2)	(3.8)	(4.4)
Acquisitions/divestitures	3.1	(2.4)	(7.4)	(0.6)	1.2	0.9	(0.6)	9.5	6.6	(0.1)
Total	6.6	22.0	(9.6)	(0.9)	3.6	12.5	13.9	23.1	10.2	7.5

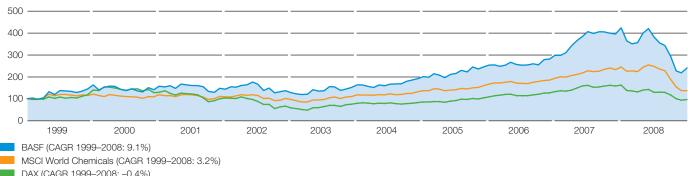
## Shareholder returns

Million €	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Share buybacks	256	700	1,300	500	500	726	1,435	938	1,899	1,618
Dividends	695	789	758	789	774	904	1,015	1,484	1,831	1,7915
Special dividends		425								
Total	951	1,914	2,058	1,289	1,274	1,630	2,450	2,422	3,730	3,409
Dividend per share (€)1	0.57	0.65	0.65	0.70	0.70	0.85	1.00	1.50	1.95	1.95
		+0.352								
Share price at year-end (€/share)¹	25.95	24.09	20.88	18.04	22.29	26.50	32.36	36.93	50.71	27.73
Dividend yield (%)	2.2	4.23	3.1	3.9	3.1	3.2	3.1	4.1	3.9	7.0
Payout ratio (%)	56	98³	134	52	85	45	34	46	45	62
Price/Earnings ratio (P/E ratio)	26.0	23.8	4.34	13.9	27.5	14.5	11.3	11.6	12.2	8.9
Free cash flow yield (%) <sup>6</sup>	1.0	0.3	(2.0)	(0.5)	11.3	9.0	9.4	9.6	6.7	9.8

<sup>&</sup>lt;sup>1</sup>Adjusted for 2:1 stock split 2008

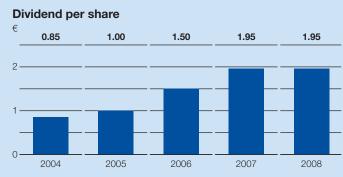
## Change in value of an investment in BASF shares 1999-2008

With dividends reinvested, indexed 500 -



DAX (CAGR 1999-2008: -0.4%)





<sup>&</sup>lt;sup>2</sup>Special dividend of stockholders' equity charged with 45% corporate income tax <sup>3</sup>Including special dividend of stockholders' equity charged with 45% corporate income tax

<sup>&</sup>lt;sup>4</sup>Including extraordinary income <sup>5</sup>With regard to the qualifying shares on December 31, 2008

 $<sup>^{\</sup>rm 6}\text{Free}$  cash flow per share at year-end dividend by share price at year-end

## Regional results\*

## Sales by location of company

Sales by location of	Company										
Million €	1999	2000	2001	2002	2003	Million €	2004	2005	2006	2007	2008
Europe	19,119	22,203	19,399	18,987	20,372	Europe	22,536	25,093	31,444	34,316	38,652
Thereof Germany	12,718	14,457	13,417	13,315	14,070	Thereof Germany	15,216	17,100	22,963	24,312	27,497
North America	6,783	8,441	7,772	7,932	7,214	North America	8,165	9,542	11,415	12,007	11,937
Asia Pacific Area, Africa	2,087	3,175	3,487	3,950	4,303	Asia Pacific	4,911	6,042	7,450	8,785	8,664
South America	1,484	2,127	1,842	1,347	1,472	South America, Africa, Middle East	1,925	2,068	2,301	2,843	3,051
Total	29,473	35,946	32,500	32,216	33,361	Total	37,537	42,745	52,610	57,951	62,304
Sales by location of	customer										
Million €	1999	2000	2001	2002	2003	Million €	2004	2005	2006	2007	2008
Europe	16,996	20,103	17,984	17,697	19,120	Europe	21,343	23,755	29,529	32,347	36,693
Thereof Germany	6,934	7,897	7,212	6,944	7,073	Thereof Germany	7,382	8,865	11,062	11,967	13,796
North America	6,733	8,419	7,654	7,808	7,163	North America	8,182	9,479	11,522	11,928	11,932
Asia Pacific Area, Africa	3,862	4,924	4,674	5,051	5,313	Asia Pacific	5,309	6,500	8,102	9,579	9,320
South America	1,842	2,500	2,188	1,660	1,765	South America, Africa, Middle East	2,703	3,011	3,457	4,097	4,359
Total	29,473	35,946	32,500	32,216	33,361	Total	37,537	42,745	52,610	57,951	62,304
Income from operati	ons (EBIT)										
Million €	1999	2000	2001	2002	2003	Million €	2004	2005	2006	2007	2008
Europe	1,258	2,577	1,926	2,357	2,224	Europe	4,236	4,385	5,485	5,415	5,822
Thereof Germany	542	1,864	1,347	1,690	1,642	Thereof Germany	3,131	3,019	4,125	4,226	4,744
North America	481	99	(678)	23	10	North America	286	855	869	762	73
Asia Pacific Area, Africa	144	161	(28)	203	218	Asia Pacific	361	297	181	828	254
South America	126	233	(3)	58	206	South America, Africa, Middle East	310	293	215	311	314

<sup>\*</sup>Starting in 2005, the accounting and reporting of the BASF Group is performed in accordance with International Financial Reporting Standards (IFRS).

The 2004 figures have been reported in accordance with IFRS. The figures for years up to and including 2003 were prepared according to the German Commercial Code. Effective January 1, 2005, companies in Asia are reported in the "Asia Pacific" region. South America, which was previously reported separately, is now reported together with the geographic regions of Africa and Middle East in the "South America, Africa, Middle East" region. The 2004 figures have been reported in accordance with this.

2,658

Total

5,193

5,830

6,750

2,641

## **Sensitivities**

Total

## Currency impact on BASF Group

Annual impact of US\$ change (US\$ exchange rate: -1 US\$-cent per €)

	Million €
Sales	+250
EBIT	+40

2,009

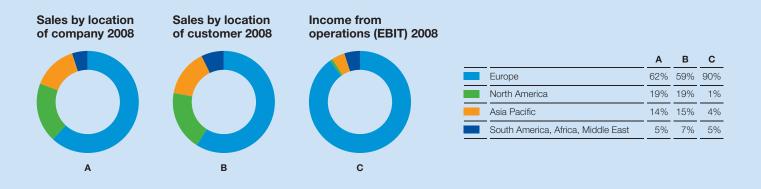
## Oil price impact on Oil & Gas segment

Annual impact of US\$1/bbl rise in annual average oil price (Brent)

1,217

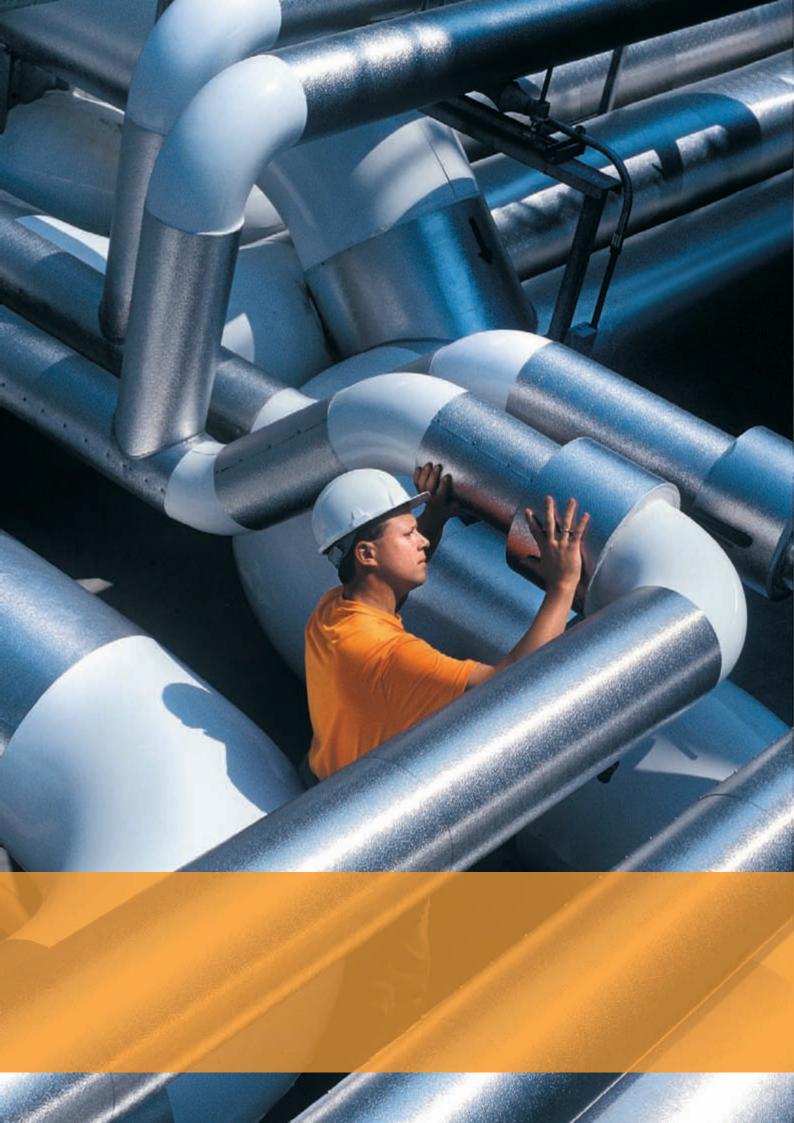
3,070

	Million €
Sales	+90
EBIT	+35
Net income	+7



7,316

6,463



# Strategy

BASF is the world's leading chemical company – The Chemical Company. We aim to constantly increase the value of our company by profitable growth, offering unique solutions for our customers to remain the number one in chemistry. With innovation and new technologies, we open up new market opportunities. We combine economic success with environmental protection and social responsibility. To realize our goals every day and across the company, the BASF team aligns its activities with four strategic guidelines.

Grow profitably above industry average

Constantly optimize portfolio

Set benchmark in operational excellence

Innovate for future profitable arowth

We earn a premium on our cost of capital

We help our customers to be more successful

Find new solutions for tomorrow's challenges of our customers

Interact quickly through transparent business models

Be first mover in emerging markets

Develop and retain industry's strongest talent pool

Build on diversity and inclusion

Anticipate demographic change through Generations@Work

Be passionate for winning trust and bringing values to life

We form the best team in industry

2,895

1,621

We ensure sustainable development Proactively address future challenges and societal demands

Demonstrate leadership in resource efficiency throughout the entire value chain

Design sustainability deeply into products, services and processes

## Generating a premium on our cost of capital Premium on cost of capital in million €

2005

1,982 2,354 2,126 3,000 2,500 2.000 1,500 1000 -

500

2004

Since January 1, 2008, Group corporate costs are no longer allocated to the segments, but rather reported under Other. The previous years' figures were not adjusted.

2006

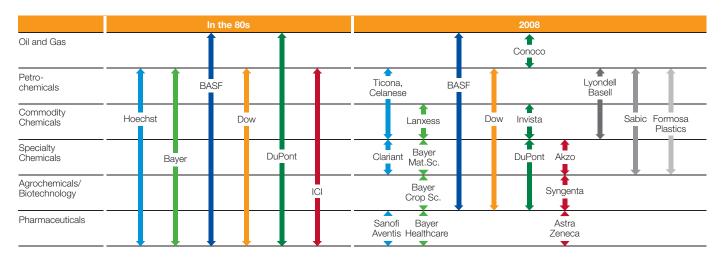
## Calculation of EBIT after cost of capital 2008

Million €.

EBIT BASF Group	6,463
less EBIT for activities not assigned to the segments <sup>1</sup>	(930)
less noncompensable foreign income taxes for oil production	1,851
less cost of capital <sup>2</sup>	3,921
EBIT after cost of capital	1,621

 $^1{\rm The}$  projected net expense is already provided for in the cost of capital percentage  $^2{\rm 10\%}$  on the average operating assets of the segments

## Strategic positioning of BASF



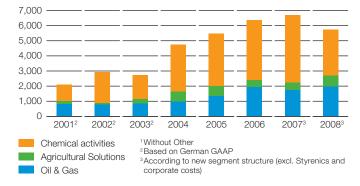
## More resilient to industry-specific demand fluctuations through portfolio changes

## Higher earnings base through Oil & Gas and Agricultural Solutions segments

The 2008 profitability of the Oil & Gas and Agricultural Solutions segments alone, both less affected by economic downturns, was almost 30 percent (or €0.6 billion) above the overall profitability of the BASF Group in 2001.

## EBIT before special items by activity 1

In million € without noncompensable foreign income taxes for oil production

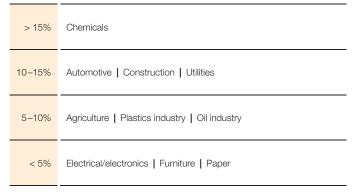


## Resilience to industry-specific demand fluctuations

BASF's strength is not only that it has a broad product range, but also that it supplies products to almost every industry. Moreover, this generates important incentives for innovation. This balance makes the company relatively resilient to factors affecting individual industries.

## BASF sales by industry

Percentage of sales in 2008\*

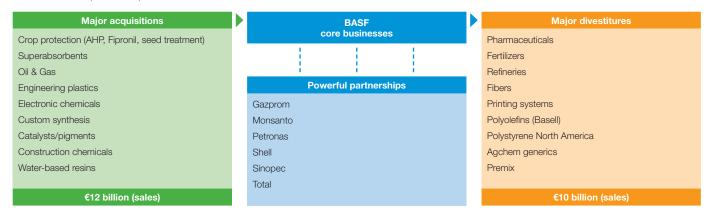


<sup>\*</sup>Other industries: approximately 10–15% of total sales in 2008, distribution by direct customers of BASF



#### Active portfolio management 1999-2008

BASF pursues an active portfolio management. Over the past years, we have continuously changed our portfolio through acquisitions, divestitures and partnerships.



#### **Partnerships**

Strategic partnerships with leading players are an important pillar in BASF's active portfolio management. These partnerships help improve the profitability of the overall portfolio. Among the most important partners for BASF are:

#### Gazprom

- Partner in natural gas trading activities since 1993. The joint ventures (e.g. Wingas) buy and sell natural gas as well as build and market natural gas transmission systems and storage facilities.
- E&P activities: Further joint projects include Achimgaz and Yuzhno Russkoye (for more details please see pages 70 and 71).

#### Monsanto

 The cooperation with Monsanto, which started in 2007, is described in detail on pages 28 and 29.

#### Petronas

- 40% partner in BASF Petronas Chemicals Sdn. Bhd. in Kuantan, Malaysia, since 1997.
- The joint venture operates a Verbund site with the production of syngas, oxo alcohols, acrylic monomers, phthalic anhydride and plasticizers as well as a butanediol plant since 2001.

#### Sinopec

- 50% partner in BASF-YPC Company Ltd., the integrated petrochemicals site in Nanjing, China, since 2000, with a total investment of US\$2.9 billion in the first phase. The plants started operations in 2005.
- BASF and Sinopec plan to expand the site with an investment volume of US\$900 million.

#### Total

- Via Atofina Petrochemicals Inc. 40% partner in BASF FINA Petrochemicals since 1998, which operates a world-class single-train liquids steam cracker in Port Arthur, Texas, USA since 2002.
- Partner in Sabina Petrochemicals LLC, a joint venture between Shell Chemical L.P., BASF Corporation and Atofina Petrochemicals Inc. since 1973, which operates a world-scale C4 olefins complex adjacent to the steam cracker in Port Arthur, Texas, USA since 2004.

## Our goal is to acquire businesses that

- 1. Generate profitable growth above the industry average
- 2. Are innovation-driven
- 3. Offer a special value proposition to customers
- 4. Reduce earnings cyclicality

## Financial acquisition criteria

- 1. Positive contribution to EPS: accretive by year three at the latest
- 2. Minimum discount rate: 9% applied on earnings after tax
- 3. Additional return requirements depending on country risk

## Commodities versus specialties: Basic definition principles

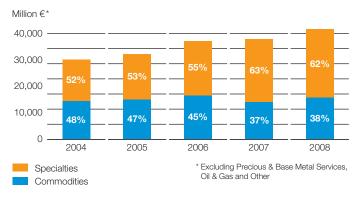
	Maximum commodity character	Maximum specialty character		Maximum commodity character	Maximum specialty character
Market pricing Is pricing public and are cost structures transparent to the customer? What are the main pricing drivers?	Public or based on cost- related formula  Raw material costs  Supply/demand balance	Value pricing decoupled from raw material cost cycle Prices reflect the value added to customer	Technical service and sales channel How are the products sold? Is technical service rele- vant for the customer?	Standard terms  No service needed	Longer-term customer specific commitments Customized package (e.g. technical service) is essential
Raw material costs How much does raw material account for in the sales price?	> 65%	< 40%	Entry barrier Are specific know-how and technology relevant?	Low barrier Know-how and technology are easily accessible	Long-term experience needed Advanced technology Patent protection
Substitutability – switching cost/time for the customer How easily can our customers switch to a different supplier?	Defined chemical entity Properties specified with few parameters Customer can easily switch to a different supplier	Customer's production process has to be adapted Switching takes significant amount of time and money Few suppliers	Competitors  How many competitors are in the strategically relevant market?  How do competitors behave?	Many  Competition driven by price, aim for higher market share and capacity utilization	Few  Competition by differentiation

## Increasing share of specialties

## Development of net sales to third parties

Acquisitions in 2006 contributed substantially to higher share of specialty businesses within chemical portfolio

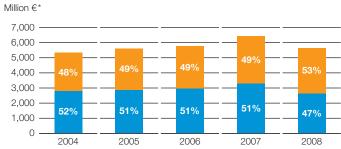
- CAGR (2004–2008): Specialties: 11.3% Commodities: 0.2%



## **Development of EBITDA**

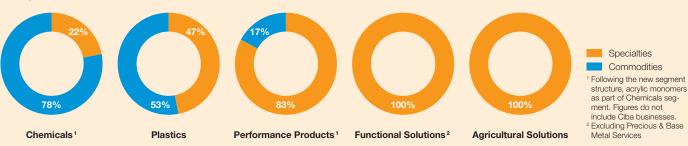
EBITDA improvement fueled by market growth, intelligent portfolio management as well as significant fixed cost savings

- CAGR (2004–2008): Specialties: 4.2% Commodities: -1.5%



## **Dedicated commodity and specialty businesses**

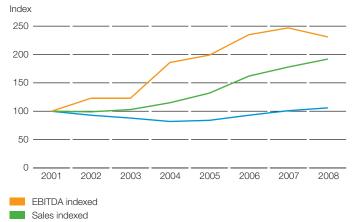
Sales split 2008



## Well positioned through operational excellence and solid financing

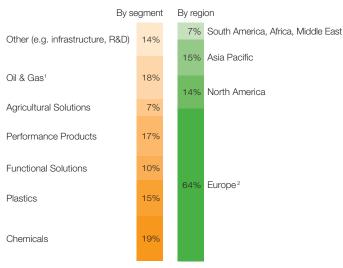
## Relentless fixed cost management

- Absolute level of fixed costs stable compared to last trough, while business increased significantly
- Acquisitions in 2006 pushed up fixed costs slightly
- Integration and restructuring of Ciba will impact fixed costs in 2009



## Reduced investment budget for 2009

(approx. €2 billion¹)



<sup>1</sup>Excluding Revus, Nord Stream offshore and Yuzhno Russkoye

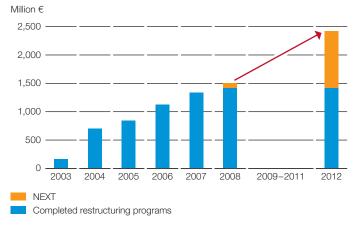
<sup>2</sup>Thereof 18 percentage points Oil & Gas

## Sustainable improvement of cost base: Our new excellence program NEXT

- Project timeline: 2008-2011
- More than 500 individual projects
- Potential earnings contribution: >€1 billion by 2012
- Non-recurring costs: €300 million
- Investment: €700 million

Fixed costs indexed

- Personnel reduction: >1,000 employees



Examples from the wide range of individual projects that make up NEXT:

## Smart investments

- Optimization of Asian sites
- Optimization of production in Antwerp, Belgium, and Port Arthur, Texas, USA

#### Process optimization:

- Accelerator project to simplify, optimize and standardize global sales, planning and procurement processes
- Efficiency program in Schwarzheide, Germany
- Maintenance

#### Bundling of resources:

- More efficient service structures in Europe
- Optimization of laboratories in Antwerp, Belgium, and logistics center in Geismar, Louisiana, USA

#### Energy efficiency:

- Heat integration
- Usage of waste heat

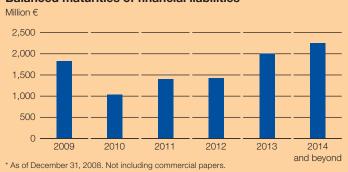
#### New IT technologies:

- World-wide integration of logistics, financial and services software
- Implementation of integrated bar code system

## Solid financing

Credit rating	<ul> <li>Strong investment grade rating: Moody's: A1/P-1 outlook stable; Standard &amp; Poor's: A+/A-1 outlook negative</li> <li>Committed to credit ratios that support a single A rating</li> </ul>
Bonds	<ul> <li>Bonds for a total €4.6 billion and GBP400 million issued between November 2008 and May 2009</li> </ul>
Commercial paper	<ul> <li>No difficulties in issuing commercial paper</li> <li>Commercial paper program of \$12.5 billion</li> </ul>
Syndicated loans	Broadly syndicated undrawn long-term back-up lines of \$6.0 billion     Financing for Ciba transaction guaranteed by short-term syndicated credit facility of CHF3.5 billion

## Balanced maturities of financial liabilities\*



## BASF + Ciba = consolidation and profitable growth

Ciba will be predominantly integrated into the Perfomance Products segment. Further information can be found in the Performance Products section on pages 50ff.

## Ciba's broad portfolio of specialty chemicals and solutions

Plastic Additives	Coating Effects	Water & Paper Treatment
Additives for polymers	Pigments and additives for automotive, packaging, electronics, construction,	Process and coating chemicals for paper industry
Process and lubricant additives	printing and plastics industries	Wastewater treatment
Personal & home care		Home care additives
Expert services		Oilfield & mining chemicals
Sales 2007: CHF2,161 million	Sales 2007: CHF1,837 million	Sales 2007: CHF2,525 million
EBIT* 2007: CHF323 million	EBIT* 2007: CHF219 million	EBIT* 2007: CHF116 million
Sales 2008: CHF1,930 million EBIT* 2008: CHF154 million	Sales 2008: CHF1,604 million FBIT* 2008: CHF158 million	Sales 2008: CHF2,385 million EBIT* 2008: CHF96 million
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<sup>\*</sup> Before restructuring charges. Operating result of Ciba in Q1 2009 was negative. The Ciba businesses will be negatively impacted by restructuring and integration costs in 2009 and will continue to post negative EBIT overall for the remainder of this year.

## **Acquisition rationale**

## Offers world-class chemical solutions

- Creates leading positions in plastic additives and coating effect materials
- Enables repositioning of paper chemicals business to create highly efficient provider for the paper industry

## Integrates and strengthens attractive niche businesses

- Provides promising growth opportunities in, for example, oilfield & mining solutions, water treatment, electronics

#### Creates technology leader

- Builds on BASF's and Ciba's renowned R&D and application know-how
- Strengthens BASF's innovation power

#### Leverages BASF's Verbund competence and operational excellence

- Complements and extends BASF's value-added chains
- Broadens market access
- Leverages BASF's business platforms

#### Meets BASF's acquisition criteria

- BASF will quickly realize Ciba's full growth and earnings potential through integration and consolidation
- EPS-accretive in year 2

## **Enterprise value calculation**

Million CHF	Offer price CHF 50.00
Number of shares outstanding in million (fully diluted) <sup>1</sup>	67.5
Implied equity value	3,377
Short-term debt <sup>2</sup>	921
Long-term debt <sup>2</sup>	1,746
Cash <sup>2</sup>	474
Net debt	2,193
Net pension liabilities <sup>3</sup>	515
Enterprise value	6,085

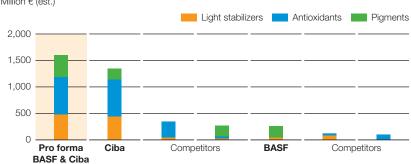
<sup>&</sup>lt;sup>1</sup> Outstanding and publicly available shares as of September 12, 2008 (66.9 million shares) plus 0.6 million shares to be transferred to employees <sup>2</sup> Short-term debt, long-term debt and cash items as of Ciba's 2<sup>nd</sup> quarter 2008 release

<sup>&</sup>lt;sup>3</sup>Net pension liabilities as of annual report 2007

## The acquisition of Ciba will substantially improve BASF's market positions\*

## A world-class supplier of plastic additives

#### Sales 2007\* Million € (est.)



Leading position in the global plastic additives market

- Ciba is the largest producer of light stabilizers and
- Ciba is renowned for its product innovations and strong global marketing

Ciba's plastic additives fill a strategic gap in BASF's plastics industry portfolio

Combination of BASF's know-how in plastic materials and conversion with Ciba's additives excellence

## Full portfolio of specialty coating effect materials

## Sales 2007



Create a world-class coating effect materials provider

- The portfolio encompasses the entire product spectrum from resins and pigments to additives

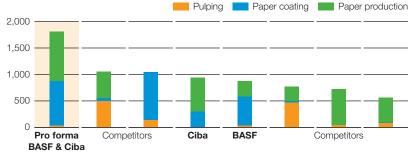
Complementary innovative coating technologies will drive future growth

- Water-based and UV-curing coatings are future technologies for VOC reduction and substitution of solvents
- Ciba adds additives know-how for water-based and **UV-curing coatings**

#### Leading player in paper chemicals

#### Sales 2007\*





Combine and reposition BASF's and Ciba's paper chemicals businesses to create a new highly efficient provider serving the paper industry

- Most comprehensive product range
- Increased scale and operational excellence
- Innovative system solutions
- Unique technical expertise

Source: BASF's own information and estimates

## **Segment structure of Performance Products**

Up to As of Ciba business lines March 31, 2009 April 1, 2009 integration planned after completion of acquisition Dispersions Acrylics & Dispersions Coating Effects & Pigments Care Chemicals Care Chemicals Paper Chemicals Paper Chemicals Performance Performance Plastic Additives Chemicals Chemicals

- Two-month discovery phase starts immediately after closing (April 9)
- Detailed analysis defines future positioning of combined businesses, optimal organizational structure and synergies
- Business integration phase starts in second half of 2009
- Fast integration of Ciba into market-oriented divisions of Performance Products segment
- Aim is to achieve synergies of at least 10% of Ciba's sales

<sup>\*</sup>The illustrations of the combined businesses refer to the communication at the time of announcement of the offer. Depending on the outcome of the discovery phase, it might be decided to allocate products differently.



## Verbund

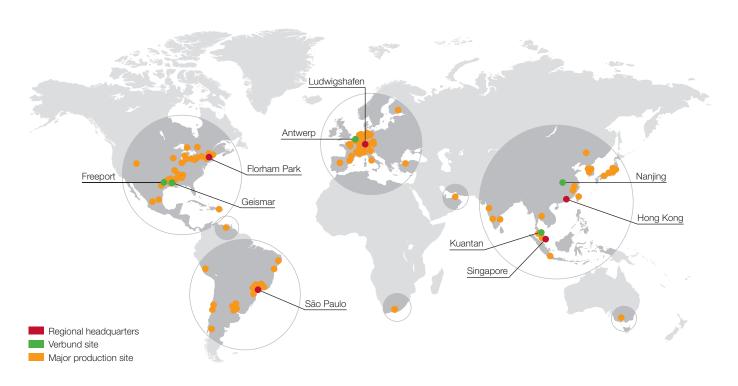
Our Verbund is one of BASF's greatest assets when it comes to using resources efficiently. It is the foundation for BASF's competitiveness and innovativeness in all regions.

At our Verbund sites, production plants, energy and waste flows, logistics, and site infrastructure are all integrated, so that chemical processes consume less energy, produce higher product yields and conserve resources.

Thanks to its logistically optimized Verbund structure, BASF saves around €500 million each year at its Ludwigshafen site alone.

By linking plants in a Production Verbund, we can create efficient valueadding chains from basic chemicals to higher value products such as aroma chemicals and crop protection products. In addition, by-products from one plant can be used as raw materials elsewhere. Production plants are connected by an intricate network of pipes that provides an environmentally friendly method of transporting raw materials and energy quickly and safely. The Verbund principle also applies to energy. Through energy integration the excess heat given off in chemical reactions is immediately converted into steam and is fed into the steam network so that it can be made available to other plants. As a result, approximately 1.6 million tons oil equivalent is saved globally by BASF. In 2008, emissions of greenhouse gases per metric ton of sales product were reduced by more than 14% compared to 2002.

The Verbund principle further extends to research and knowledge management through its network of brains. It includes close cooperation with customers and science as well as the dialog with neighbors at our sites.



## Size, scale and global positioning

Cost-efficient production through six world-scale Verbund sites in all major regions

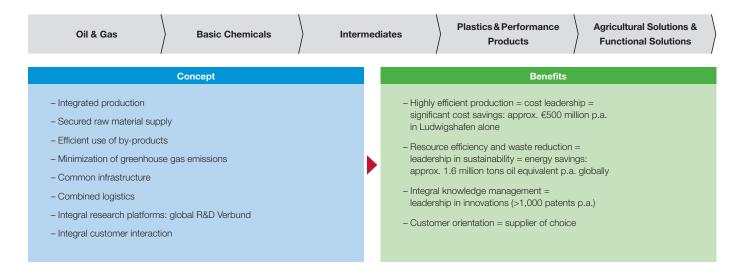
Preferred partner of choice through proximity to customers

Top 3 market position in 75% of all products and markets

Know-how Verbund with 70 major or strategic R&D sites and >1,900 research cooperations with customers, science and partners

## Unique Verbund concept: BASF's innovative approach to vertical integration and resource efficiency

Linking plants in a Production Verbund to create efficient value-added chains from basic chemicals to higher value products



#### Main raw materials for the Verbund

The major raw materials that feed BASF's Verbund production sites are hydrocarbon-based raw materials such as naphtha and LPG (liquefied petroleum gas). These are feedstocks for the steam crackers that are operated in Ludwigshafen, Germany; Antwerp, Belgium; Port Arthur, Texas, USA and Nanjing, China. BASF monitors the market for naphtha and hedges its exposure by using swaps and options. Other important hydrocarbon-based raw materials are natural gas, benzene and propylene. Further raw materials for BASF include cyclohexane, ammonia, ethylene and methanol. For its German operations, BASF primarily sources its natural gas from Russia by means of long-term natural gas supply contracts. In the United States, BASF secures its natural gas requirements based on shorter-term supply contracts related to national sources with various suppliers.

## Major raw materials

- Ammonia
- Benzene
- Cyclohexane
- Ethylene
- LPG/condensate
- Methanol
- Naphtha
- Natural gas
- Propylene
- Styrene

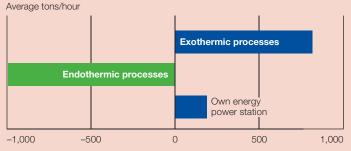
## Advantages for economic performance and the environment

- Most efficient use of raw materials and energy
- Conservation of natural resources
- Reduction of emissions and waste
- Innovations for BASF and our customers

#### Partners in the Verbund network

- Production plants
- Research units
- Customers
- Site community

## Example: Verbund energy savings in Antwerp, Belgium

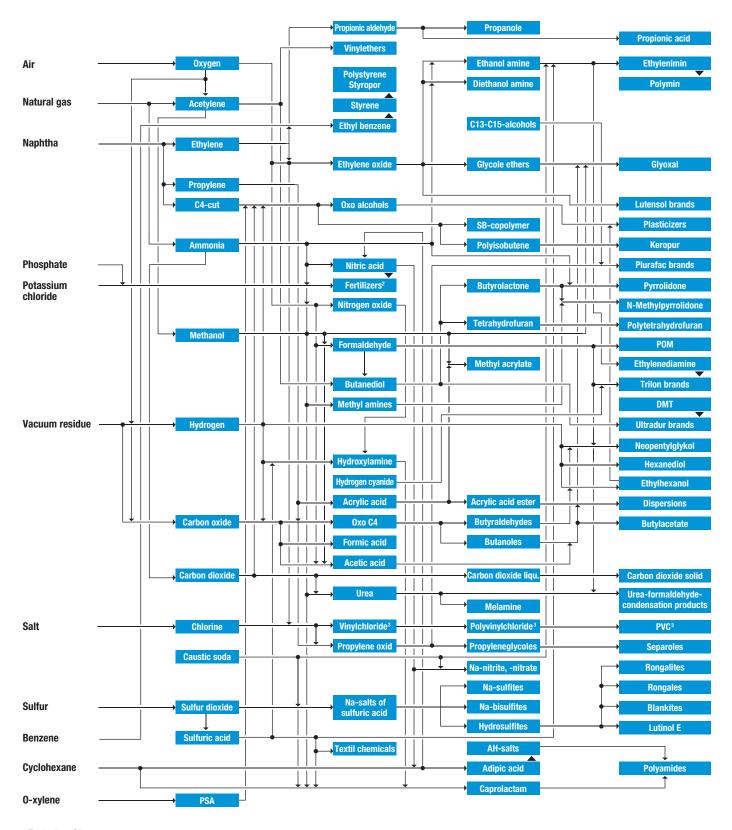


Through intelligent combination of production processes, the additional need for energy at our Antwerp site is minimal.

Steam consumption
Steam production

## Production in the Verbund<sup>1</sup>

This example of a production flow chart demonstrates how different value chains interact in a Verbund network.



<sup>&</sup>lt;sup>1</sup> Excluding Ciba <sup>2</sup> Exclusively sold to fertiva and Compo

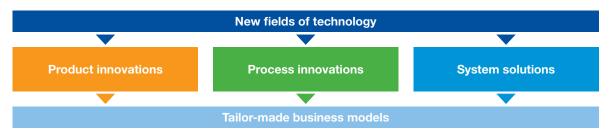
<sup>&</sup>lt;sup>3</sup> Ludwigshafen only, within Solvin JV



## Innovation

Research and development are essential to ensure profitable growth and to shape the future sustainably. Innovative products, improved processes and intelligent system solutions play a major role in ensuring BASF's success through the success of our customers.

#### Focus on market-driven innovations



#### Targeted sales from pipeline

All innovation projects throughout BASF are managed in the PhaseGate process. It consists of defined phases for the entire innovation process: opportunity fields for open idea finding, business cases with consistent project assessment, focused project work in lab phase, pilot phase and launch. Transparent go/stop decisions, based on predefined deliverables, including an update of the business case, defined success criteria and net present value calculations are taken at distinct gates.



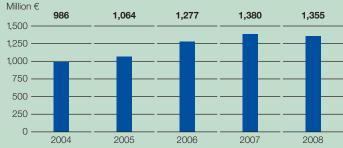
#### **Product innovation**

- We expect to generate annual sales of approx. €4 billion as of 2010 from new or improved products and applications that have been on the market for a maximum of five years
- As of 2015, we expect these sales to rise to €5 billion
- Up to 20% of this is expected to be top-line growth

### **Growth clusters**

- R&D expenditures for growth clusters of more than €900 million from 2006–2008 (approx. 25% funded by operating divisions, 75% corporate funding)
- For second phase (2009–2011), R&D expenditures for growth clusters of up to €1 billion planned
- First projects out of growth clusters came to market in 2007
- Targeted annual sales from growth clusters 2010: €500-€1,000 million 2015: €2,000-€4,000 million

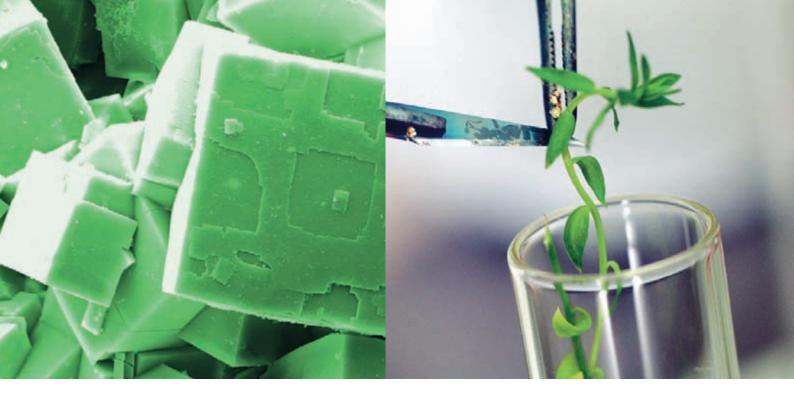
## R&D expenditures



## R&D expenditures based on sales (2008)

BASF total: 2.2%

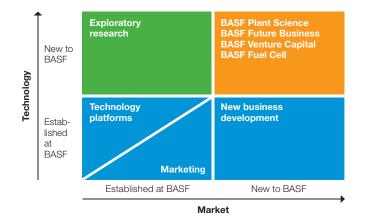
BASF excluding Oil & Gas sales: 2.9% (no significant R&D required for Oil & Gas segment)

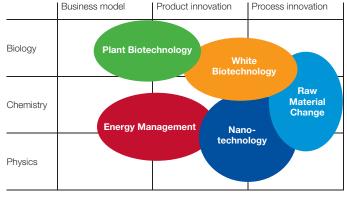


## **Innovation matrix at BASF**

Established technologies within BASF are developed further by our technology platforms. Their application to developed markets is pushed by marketing and technology platforms together. New business development is responsible for tapping new markets with established technologies. Our exploratory research opens new technologies for markets in which we are already active. BASF Plant Science, BASF Future Business, BASF Venture Capital and BASF Fuel Cell open up new technologies for emerging business fields.

As part of our research strategy, we combine key technology-driven topics of relevance to the future in five growth clusters: energy management, raw material change, nanotechnology, plant biotechnology and white biotechnology. These are cross-sectional technologies that transcend the conventional demarcation lines between specialist areas. Interdisciplinary and international cooperation ensure that BASF's innovative strength continues to grow.





#### Distribution of R&D spending 2008\* Chemicals 9 Plastics 11 Performance Products 17 **Functional Solutions** 14 Agricultural Solutions 24 Corporate research 24 (incl. plant biotechnology) 1 \*Excluding Ciba, acquired in April 2009

- Approximately one-third of R&D expenditures are for energy efficiency and climate protection
- Operational units finance approx. 76% of total R&D
- 72% of R&D expenditures in Germany; 17% in North America
- 8,900 employees in R&D worldwide; approx. 70 major or strategic sites
- 1,700 projects plus 1,000 further activities close to production and markets
- ->1,900 R&D collaborations worldwide; thereof 40% with industrial partners, approx. 60% outside Germany

#### Focus on five growth clusters

#### **Energy management**

BASF researchers are developing new technologies and materials in areas such as renewable energy sources, energy storage and energy conversion, for example for organic solar cells and lithium ion batteries.

- Development of new business areas based on economically attractive products and system solutions, combining internal know-how and collaboration with competence centers worldwide
- Expenditures 2006-2008: €90 million
- Projects: Membrane electrode assembly for fuel cells, OLED (organic light emitting displays) for lighting, photovoltaic, lithium ion battery materials, and thermoelectric

#### Raw material change

BASF experts are working on identifying cost-effective processes for the utilization of alternative raw materials such as natural gas, coal or renewable resources and are evaluating these processes according to technological, economic and environmental criteria.

- Increased usage of alkanes (natural gas = C1-C4) and coal as feedstocks for established value-added chains and usage of renewable resources (e.g. cellulose) as basis for selected products
- Technological leadership with alternative cost-competitive raw material sources, using special in-house competence in the areas of synthesis. catalysis, unit operations and process development
- Expenditures 2006-2008: €105 million
- Projects: Olefins from alkanes, coal to chemicals, utilization of biowaste, cellulose, lignine and glycerol

#### Nanotechnology

BASF is one of the world's leading companies in the field of chemical nanotechnology and already applies it in established areas of activity such as polymer dispersions and catalysts. This expertise is continuously expanded through intensive research into nanostructured materials and nanoparticles.

- Innovation for construction, households, automotive, personal care, electronics and energy
- Expertise in manufacturing and application of nanostructured materials and surfaces, formulations as well as process engineering
- Strategic partnerships to complement own strengths and to increase certainty of success
- Development of new markets and clients, competitive advantage through improved product properties
- Expenditures 2006-2008: €185 million
- Projects: Advanced materials for insulation, scratch-resistant coatings, nanocomposites, OLEDs and superhydrophilic/superhydrophobic surfaces

#### White (industrial) biotechnology

BASF combines its wide-ranging expertise in enzyme catalysis and fermentation technology with its core competencies in chemistry and material sciences to create novel solutions for the chemical industry. The focus is on new sustainable processes and enhanced bio-based products for BASF's customers.

- New products, processes and system solutions through fermentation and enzyme technology
- Production of chemicals and polymers based on renewable resources
- Market growth potential above average, broad know-how in enzyme catalysis and fermentation, application know-how
- Expenditures 2006-2008: €135 million
- Projects: Building blocks for pharmaceutical industry and plastics, natural compounds, feed additives, products for hygiene and cosmetics

#### Plant biotechnology

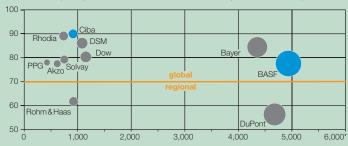
Experts from BASF Plant Science are developing plants for more efficient agriculture, improved nutrition and use as renewable raw materials.

- Strategic importance underlined by cooperation with Monsanto: goals are higher-yielding crops and crops that are more resistant to adverse environmental conditions such as drought for the crops corn (maize), soybeans, cotton and canola (oilseed rape) (see page 29)
- Complements BASF's strong position in agricultural and fine chemicals markets
- Expenditures 2006-2008: €410 million
- Projects: Higher yield and improved stress tolerance, potatoes with improved starch composition, oilseeds with healthy fatty acids, nutritionally enhanced corn

When founding metanomics Health in 2003, BASF started to adapt the know-how on measuring, modeling and mastering metabolic networks to humans and animals. This opens up a multitude of applications in the areas of toxicology, drug development, disease prognostics and diagnostics as well as health and nutrition.

## Global patent applications

Globalization (% of patent families with members in Europe, USA and Asia)



- High degree of global patent applications is important
- BASF is the leader with regard to the number of global patent applications
- 3 patent applications per day (2008)
- Portfolio of more than 130,000 patents and patent applications

Circle size = number of patent families
\* Total number of published patent applications (2003–2007, patent families, accumulated)

Source: WPIX by Thomson Reuters (Companies as in WPIX; DuPont incl. Pioneer Hi-Bred)

## Plant biotechnology: Targeting the needs of modern agriculture

Plant biotechnology is a key technology of the 21st century and will have a huge role to play in agriculture. The amount of land available for agriculture is limited, and we need more and more food and animal feed as well as renewable resources. Through plant biotechnology we can help to

achieve more efficient agriculture and healthier nutrition – both of which are very important considering the continuous growth of the world's population. This technology also allows us to make better use of plants as renewable resources and to actively help protect the climate.

## BASF's committment and strategy in plant biotechnology

- Focusing on the most attractive 2<sup>nd</sup> and 3<sup>rd</sup> generation agronomic and output traits from the very beginning
- Holding an extraordinary technology position for high-throughput gene identification based on a novel combination of "metabolic profiling" and "phenotypic screening"
- 3. Creating a strong development pipeline identifiying highly promising lead genes
- 4. Commercialization through tailor-made business models
- 5. Implementing a Plant Biotechnology operating division within the Agricultural Solutions segment when substantial revenues start

## BASF Plant Science has a strong development pipeline focusing on three main areas

#### Superior agricultural productivity

- Example: Monsanto collaboration covering yield and stress/ drought tolerance projects (see page 29)
- Example: Fungal-resistant potato
   Late blight destroys about 20% of the world's potato harvest every year. We transferred resistance genes from a wild potato to cultivated potatoes. Resistance proven in field trials.
- Example: Herbicide-tolerant soybean
   BASF, jointly with Embrapa, developed a new variety of herbicide-tolerant soybean. First registration in Brazil in 2008, first seeds expected to be available to Brazilian farmers from 2011 onwards.

#### Better, healthier nutrition/feed

Example: Poly-unsaturated fatty acids (PUFAs)
 PUFAs are nutritional supplements. Some are for baby food, others prevent aging, reduce cardiovascular diseases and arteriosclerosis. It is recommended to take 1 to 2 grams per day. Main sources today: fish, fish oil, algae. Project target is to produce PUFAs in oil crops.

#### Plants as renewable raw materials

- Example: Amflora potato producing amylopectin Europe produces about 2 million metric tons of potato starch each year, of which a large portion is used for industrial applications such as paper, yarns or glue. Its pure amylopectin starch makes Amflora a renewable raw material that helps to save material, energy and costs. Market potential: peak licensing income of €20–30 million in five years after market introduction. Product is in approval process in the EU.

#### Strong development pipeline in plant biotechnology<sup>1</sup>

	Discovery Identifying genes & POC <sup>2</sup> up to 6 years	Stage I Look for POC II <sup>2</sup> up to 4 years	Stage II Early product development up to 3 years	Stage III Advanced product development up to 2 years	Stage IV Pre-Laund up to 3 ye		Market value in US\$
Superior agricultural productivity	Herbicide tole	rance					< 100 million
	BASF-Monsanto collaboration (see overleaf)					> 2 billion	
	Fungal resista	nce					< 100 million
Better and healthier nutrition/feed	Improved ami	no acid					
	Omega-3 & 6 f	atty acids					300-500 million
Plants as renewable raw materials	Amylopectin						100–150 million
	High oil						

#### Valuation metrics:

- Market value is given for all projects in stage II through IV
- Market value reflects the additional value generated through the plant biotech trait across the respective value chain
- Market value is based on projectspecific business models including assumptions of market size and penetration

## BASF Plant Science - global R&D network with 8 sites in 5 countries



- Extraordinary bundling of diverse, innovative technologies:
  - in-house developments
- partnering with and founding of start-ups
- acquisitions
- 700 employees in North America and EU
- 40 collaborations worldwide
- More than 150 external researchers
- Expenditures 1998-2008: €1 billion

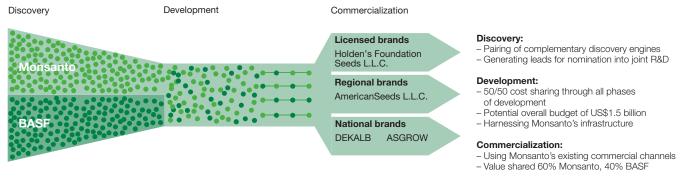
<sup>&</sup>lt;sup>1</sup> Light-colored bars show advances achieved in 2008

<sup>&</sup>lt;sup>2</sup>POC = 'Proof of Concept' in model crop; POC II: 'Proof of Concept' in target crop

## Plant biotechnology: Strategic partnership with Monsanto

In March 2007, BASF and Monsanto started a long-term joint research, development and commercialization collaboration in plant biotechnology that will focus on the development of high-yielding crops and crops that

are more tolerant to adverse environmental conditions such as drought. Target crops are corn, soybean, cotton and canola.



The progress of the collaboration shows the strength of the combined discovery engines:

- BASF and Monsanto are exchanging hundreds of gene constructs
- Gene pool increased significantly: more than 90% of gene nominations from Monsanto's and BASF's research programs unique
- Over 17 million metabolic data points already generated
- Two projects advanced to the next stage in 2008

We are on track to reach our mid-term targets:

- A first product to emerge from the collaboration: launch of a drought-tolerant corn from 2012 onwards, first regulatory submission in 2008
- -6-10% yield increase per product generation

## Monsanto collaboration: Joint pipeline<sup>1</sup>

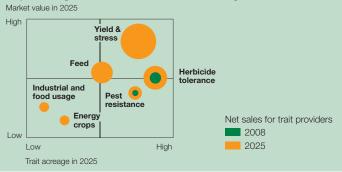
This illustrates in more detail the joint BASF-Monsanto pipeline derived from the BASF Plant Science pipeline on page 28 (orange).

	<b>Discovery</b> Identifying genes & POC <sup>2</sup>	Stage I Look for POC II <sup>2</sup>	Stage II Early product development	Stage III Advanced product development	Stage IV Pre-Launch	Market value 2020 in US\$
Drought-tolerant corn family	Drought-tolera 2nd generation	nt corn drought-tolerant co	rn			300-500 million
Nitrogen-utilization corn family	Nitrogen-utiliza	tion corn				300-500 million
Broad-acre higher- yielding corn family	Higher-yielding	g corn				> 1 billion
Broad-acre higher- yielding soybean family	Higher-yielding 2 <sup>nd</sup> generation	soybean				300-500 million
Drought-tolerant cotton family	Drought-tolera	int cotton				
Broad-acre higher- yielding canola fam.	Higher-yielding	g + RR2yield canola	3			< 150 million <sup>3</sup>

## Valuation metrics:

- Valuation reflects annual gross sales value of trait in 2020 (~ farm gate level)
- Gross sales are presented for initial country of launch only
- Acreage opportunities reflect Monsanto's 2007 market penetration through the current channels
- Projects are valued as families

## Expected global market for biotechnological traits 2025



- Total projected market value for biotech traits in 2025 is estimated at US\$50 billion (from around US\$7 billion in 2008)
- Market is dominated by agronomic traits and commodities
- Yield/stress is the major market

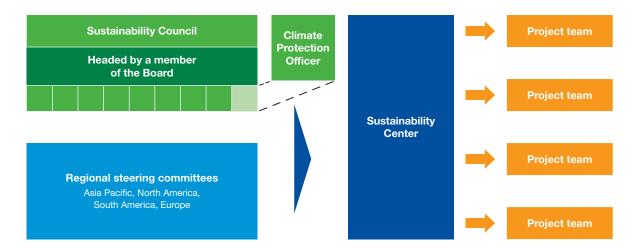
 $<sup>^1\</sup>text{Light-colored}$  bars show advances achieved in 2008  $^2\text{POC}$  = 'Proof of Concept' in model crop; POC II: 'Proof of Concept' in target crop <sup>3</sup>Only value of higher-yielding trait incorporated in yield and stress collaboration



# Sustainability

As a globally operating company, we are aware of our social responsibility, which is why we take an active role in shaping sustainable development in our sphere of influence. For BASF, sustainability means integrating social and environmental issues into our business processes. This is how we contribute to the quality of life for current and future generations.

For BASF, sustainable development means combining business success, environmental protection and social responsibility. The sustainability strategy is part of BASF's four strategic guidelines.



The **Sustainability Council** ensures that BASF Group policy is in accordance with the principle of sustainability and develops the sustainability strategy.

Regional steering committees manage the global implementation of the sustainability strategy.

The Climate Protection Officer coordinates BASF's activities for climate protection.

The Sustainability Center coordinates internal projects and the stakeholder dialog.

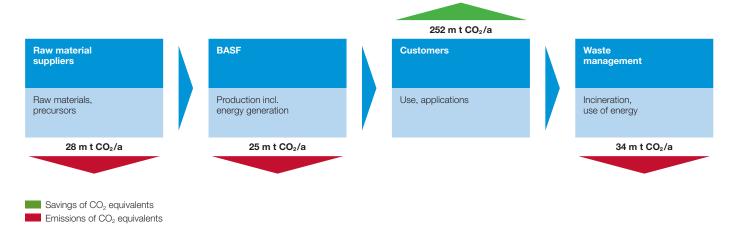
Project teams made up of experts from operating units draw up concrete measures.

## Strategy BASF 2015: "Ensure sustainable development"

Sustainable development influences our business activities at different levels: it minimizes our risks and helps to create value. To recognize new challenges at an early stage and respond to them, we systematically pursue sustainability issues (e.g. climate protection, demographic change, water availability and quality) that are relevant for us.

## BASF's corporate carbon footprint: Our products help to protect the climate

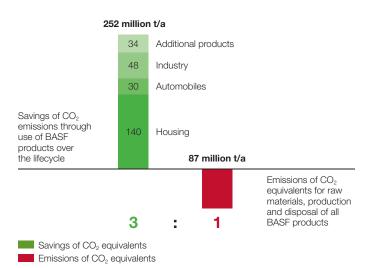
## BASF presents a comprehensive carbon footprint for its operations



Based on 2006 data, the analysis includes not only the emissions from BASF's own sites, but also the raw materials and precursors, including their manufacture, and the disposal of all chemical products at the end of their lifecycle.

At the same time, BASF has reviewed its product portfolio to determine to what extent greenhouse gases can be saved when BASF products are used by customers. This comparison of emissions and savings represents BASF's corporate carbon footprint.

## CO<sub>2</sub> savings from BASF products outweigh emissions caused during production and disposal by a factor of 3:1



The products sold by BASF in 2006 enable savings of 252 million metric tons of  $CO_2$  emissions globally.

Adding up all the emissions from raw materials and upstream products involved in our own production processes and the disposal of all products results in a total volume of about 87 million metric tons of  $\rm CO_2$  equivalents.

In the long term, BASF aims to maintain or even improve this factor by introducing new products and innovations and by continuously reducing our own emissions. To increase this factor, BASF develops innovative technologies and materials for sustainable climate protection. More than one-third of BASF's entire research spending – about €400 million annually – goes into energy efficiency, climate protection, saving resources, and renewable resources.

## **Dow Jones Sustainability Index: Best Chemical Company**

In 2008, BASF was named as the chemical sector leader in the Dow Jones Sustainability Index (DJSI World). For the eighth year in succession, BASF shares were included in the most important sustainability index worldwide.

## **Europe's Most Socially Responsible Company**

In 2008, the rankings honored BASF as the European company that shows the most extensive commitment to its sustainable development responsibilities. The assessment rated the 90 largest European companies listed on the Dax or Stoxx in terms of sustainable development.

## Carbon Disclosure Leadership Index: Top Ranking

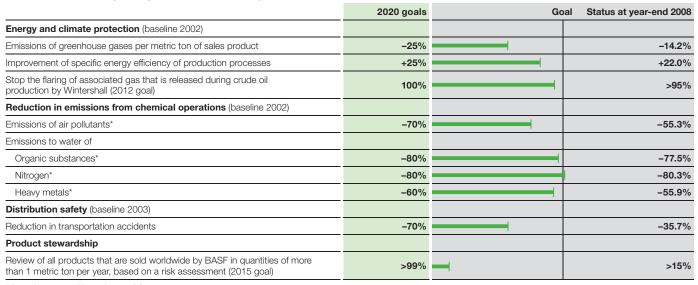
In 2008, BASF achieved the top ranking in the Carbon Disclosure Leadership Index (carbon intensive industries). The index contains companies that distinguish themselves in addressing the challenges of climate change.

#### **BASF** and Grameen Healthcare Trust cooperate

Social business is a new business model for BASF. In March 2009, BASF and Grameen Healthcare Trust announced the establishment of a joint social business venture. The purpose of the company is to improve the health and business opportunities of the poor of Bangladesh.

## Our goals

## Environment, safety and product stewardship



<sup>\*</sup> Assuming comparable product portfolio

## **Employees and society**

	2020 goals	Goa	Status at year-end 2008
Occupational safety (baseline 2002)			
Reduction in lost time injuries per million working hours	-80%		-45.5%
Health protection (baseline 2004)			
Reduction in cases of occupational diseases	-80%		-23.3%
Senior executives	Long-term goals		
International proportion of senior executives	Increase the proportion executives (baseline 2	30.2%	
Women in senior executive positions	Increase the proportion executives (baseline 2	5.7%	
Senior executives with international experience	Increase the proportion international experien	73.7%	
Leadership feedback	2008 goal	2008 goal	
Mandatory leadership feedback for senior executives worldwide	80% of senior execut standardized leadersh	76.9%	
Employee survey	2009 goal		
Global employee survey	Implement a global er BASF Group	Data collected, subsequent process initiated	

## We set ourselves ambitious climate protection goals

Increase energy efficiency in production by 25% up to 2020 compared with 2002 Reduce specific greenhouse gas emissions by 25% up to 2020 compared with 2002 Maintain or even improve the factor of 3:1 in our corporate carbon footprint

# **Business Segments**

Our business portfolio is well balanced and offers strong growth opportunities. It consists of six segments with 14 operating divisions.







## **36 Chemicals**

- 38 Inorganics
- 40 Petrochemicals
- 42 Intermediates

## **44 Plastics**

- 46 Performance Polymers
- 48 Polyurethanes

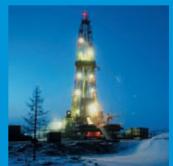
## **50 Performance Products**

- 52 Dispersions & Pigments
- 53 Care Chemicals
- 54 Paper Chemicals
- 55 Performance Chemicals









**56 Functional Solutions** 

58 Catalysts 60 Construction Chemicals 62 Coatings

64 Agricultural Solutions

66 Crop Protection

68 Oil & Gas

70 Exploration & Production and Natural Gas Trading



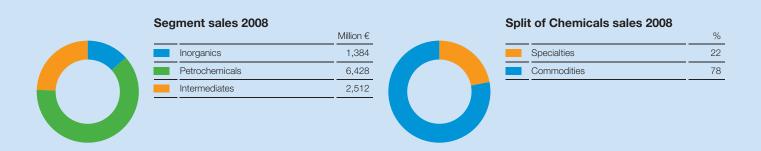
## Chemicals

Our organic and inorganic basic chemicals are used to supply raw materials to our value-added chains and marketed to our external customers. Cost leadership is achieved thanks to integrated production facilities, modern large-scale plants and our Research Verbund. We enhance our portfolio of higher-value products and system solutions through innovations and acquisitions.

#### Segment data\*

2006	2007	Q1	Q2	Q3	Q4	2008
9,161	9,358	2,561	2,863	2,788	2,112	10,324
17.4	16.1	16.1	17.6	17.7	14.8	16.6
1,134	1,192	331	339	378	336	1,384
5,754	5,696	1,555	1,868	1,759	1,246	6,428
2,273	2,470	675	656	651	530	2,512
2,064	2,416	651	514	530	293	1,988
22.5	25.8	25.4	18.0	19.0	13.9	19.3
1,588	1,889	524	378	396	123	1,421
17.3	20.2	20.5	13.2	14.2	5.9	13.8
1,337	1,903	524	378	396	78	1,376
14.6	20.3	20.5	13.2	14.2	3.7	13.3
	9,161 17.4 1,134 5,754 2,273 2,064 22.5 1,588 17.3 1,337	9,161 9,358 17.4 16.1 1,134 1,192 5,754 5,696 2,273 2,470  2,064 2,416 22.5 25.8 1,588 1,889 17.3 20.2 1,337 1,903	9,161         9,358         2,561           17.4         16.1         16.1           1,134         1,192         331           5,754         5,696         1,555           2,273         2,470         675           2,064         2,416         651           22.5         25.8         25.4           1,588         1,889         524           1,337         1,903         524	9,161         9,358         2,561         2,863           17.4         16.1         16.1         17.6           1,134         1,192         331         339           5,754         5,696         1,555         1,868           2,273         2,470         675         656           2,064         2,416         651         514           22.5         25.8         25.4         18.0           1,588         1,889         524         378           17.3         20.2         20.5         13.2           1,337         1,903         524         378	9,161         9,358         2,561         2,863         2,788           17.4         16.1         16.1         17.6         17.7           1,134         1,192         331         339         378           5,754         5,696         1,555         1,868         1,759           2,273         2,470         675         656         651           2,064         2,416         651         514         530           22.5         25.8         25.4         18.0         19.0           1,588         1,889         524         378         396           17.3         20.2         20.5         13.2         14.2           1,337         1,903         524         378         396	9,161         9,358         2,561         2,863         2,788         2,112           17.4         16.1         16.1         17.6         17.7         14.8           1,134         1,192         331         339         378         336           5,754         5,696         1,555         1,868         1,759         1,246           2,273         2,470         675         656         651         530           2,064         2,416         651         514         530         293           22.5         25.8         25.4         18.0         19.0         13.9           1,588         1,889         524         378         396         123           17.3         20.2         20.5         13.2         14.2         5.9           1,337         1,903         524         378         396         78

<sup>\*</sup>As of January 1, 2008, we restructured our segments on the basis of similar products, production processes and customer industries. The previous years' figures have been adjusted accordingly.



## **Inorganics**



Attractive business mix of commodities and specialties

BASF's Inorganics division manufactures a broad range of chemical products of which approximately 50% are used captively. The products sold to external customers are used worldwide in many different industries. The Inorganics division is successful in managing a complex portfolio consisting of commodities (mainly for captive use in BASF's Verbund) and specialties (typically unique products with strong market expertise, significant growth potential and high market shares).

#### Main products

#### Inorganic specialties

BASF offers a wide range of inorganic specialties which includes carbonyl iron powder, hydroxylamine free base, hydroxylammonium sulfate, boron specialties and BASF's innovative Catamold® line of products for powder injection molding of metal and ceramic components. The Catamold® line is especially suited for manufacturing tiny, intricate devices such as watch casings and orthodontic appliances. BASF sells these products globally to manufacturers in the automotive, construction and medical sectors, among other industries.

#### Electronic materials

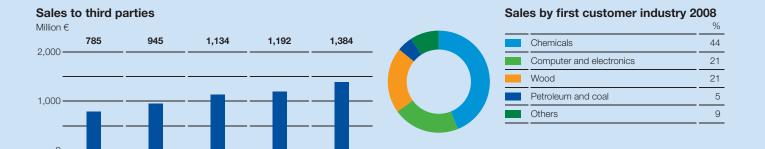
BASF produces inorganic specialties in electronic grade, such as hydroxylamine free base for use in manufacturing semiconductors, light-emitting diodes, and flat and plasma screen displays.

#### Inorganic chemicals

BASF produces inorganic chemicals, which are the starting materials for fertilizers, plastics, amines and other high-value chemicals. The products range from basic chemicals such as chlorine, sodium hydroxide, nitric acid and sulfuric acid to inorganic salts such as sodium and potassium alcoholates to ammonium salts. More than half of these products are for captive use within BASF's Verbund. The remaining products are sold primarily to other chemical companies.

#### Glues and impregnating resins

BASF offers a wide variety of tailor-made adhesives for the wood products industry. These adhesives are used to bind together the particles, fibers and strands found in all types of particle boards. In addition, BASF produces impregnating resins, which are used to manufacture decorative paper and laminated flooring. BASF is also a producer of glues and impregnating resin raw materials such as ammonia, formaldehyde, methanol, urea and melamine. Europe is the primary market for this group of products.



Margins in major commodity products (e.g. ammonia and caustic soda)

Cost leadership and competitiveness along the various inorganic value chains

Growth and innovation with specialties in customer industries (e.g. electronics and inorganic specialties)

#### **Key capabilities of BASF**

Cost leadership in commodities through worldscale plants and Verbund integration

Strong technology platform for developing new specialties and finding new applications for established specialties

Building partnerships with innovative customers

#### **BASF** market position

Electronic materials: leading market positions in Asia and Europe | Inorganic specialties: leading market positions in Europe and North America | Inorganic chemicals #1 in inorganic salts in Europe | Glues and impregnating resins #1 in glues in Europe, among top three in impregnating resins and melamine in Europe

#### Main competitors

Arkema, Air Products, DSM, Evonik, Yara

#### **BASF** levers to outperform markets

Strong technology position for new specialties and new applications for established specialties | Partnerships with innovative customers | Cost leadership in commodities through world-scale plants and Verbund integration

#### Focus of R&D

Electronic materials, inorganic specialties as well as glues and resins are the main focus of innovation in Inorganics. Inorganic specialties focus on new product development. Electronic materials focus on new product development for future technology nodes of the electronics industry. Glues and resins focus on new products and engage in process-improving innovation projects.

#### Acquisitions/JVs/Investments (2006–2008)

Product group	Description	Year
Electronic materials	Start-up of clean room laboratory in Ludwigs- hafen, Germany, for process chemicals for the semiconductor industry	2006
Catalysts	Acquisition of Engelhard Corp. and transfer of catalyst business from Inorganics division to newly established Catalysts division	2006
Electronic materials	Start-up of the Electronic Materials Center Europe in Ludwigshafen, Germany	2007
Inorganic chemicals	Start-up of new nitric acid plant in Antwerp	2008
·		

#### Major annual capacities of BASF

Ammonia	Ludwigshafen, Germany	875 kt
	Antwerp, Belgium	650 kt
Caustic soda	Ludwigshafen, Germany	360 kt
Chlorine	Ludwigshafen, Germany	385 kt
Formaldehyde condensation products	Ludwigshafen, Germany	750 kt
Methanol	Ludwigshafen, Germany	450 kt
Sulfuric acid	Ludwigshafen, Germany	500 kt
	Antwerp, Belgium	220 kt
Urea	Ludwigshafen, Germany	545 kt



#### **Innovation examples**

1. CMP Slurries: Chemical-mechanical planarization of copper layers, based on cleaning issues for the semiconductor industry.

2. Advanced Kaurit® brands: Meet major challenges of the woodworking industry in terms of reduced formaldehyde emissions, or add value for end consumers in terms of lightweight wood panels (Kaurit® light).

### **Petrochemicals**



Petrochemicals are the heart of our unique Verbund concept

The Petrochemicals division is the cornerstone of BASF's petrochemical-based value chains throughout the regions. The division manufactures and markets a broad portfolio of basic products. Major importance is attached to providing highly competitive, intelligent solutions for the raw material requirements of external and internal customers.

#### Main products

#### Cracker products

BASF produces the entire range of cracker products from ethylene and propylene to butadiene and benzene. Of these, propylene is the most important starting product for BASF's value-added chains.

#### Alkylene oxides and glycols

Ethylene oxide derived from ethylene is used mainly to produce surfactants, ethanolamines, glycols and glycol ethers. Ethylene glycol is a product used in antifreeze by the automotive industry and for the production of fibers, films and PET (polyethylene terephthalate) plastic bottles by polyester manufacturers. Propylene oxide is synthesized from propylene and serves as a base for a wide variety of products, including hydraulic fluids, solvents and propylene glycol.

#### Solvents

BASF offers a wide range of oxygenated, halogen-free solvents that are used to dissolve other chemicals and facilitate chemical reactions. BASF is the world's largest producer of oxo alcohols and is also a major producer of acetates, glycol ethers, glycol ether acetates and specialty solvents. Customers are primarily in the coatings, pharmaceuticals and cosmetics industries.

#### Plasticizers and plasticizer raw materials

BASF manufactures standard and specialty plasticizers, which are used in chemical processes to make rigid plastics flexible. BASF also sells the plasticizer precursor phthalic anhydride for use in dyestuffs and unsa-

turated polyester resins, and markets plasticizers based on higher alcohols. Our latest specialty product is the plasticizer Hexamoll® DINCH, used for sensitive applications.

#### Acrylic monomers (as of April 1, 2009)

BASF is the world's largest producer of acrylic monomers, which are sold to internal and external customers in the form of acrylic acid, acrylic esters and specialty acrylates. Acrylic monomers are used as precursors to manufacture polymer dispersions for various applications, superabsorbents, detergents, flocculants and fibers for a wide range of industries.

#### **BASF** market position

Oxo C4 alcohols #1 | Plasticizers #2 | Plasticizer alcohols #2 | Ethylene oxide and ethylene glycols #2 in Europe | Acrylic monomers #1

#### Main competitors

Cracker products: Dow, ExxonMobil Chemical, Sabic, Shell Chemicals | Solvents: Dow, Eastman, Oxea, Quilu, Ineos, Shell | Plasticizers: Exxon-Mobil Chemical, Eastman, Evonik, UPC, Aekyung | Plasticizer alcohols: ExxonMobil Chemical, Evonik, Kyowa, FPC | Alkylene oxides and glycols: Dow, Sabic, Shell Chemicals, Ineos | Acrylic monomers: Rohm & Haas, Nippon Shokubai, Dow, Arkema, FPC

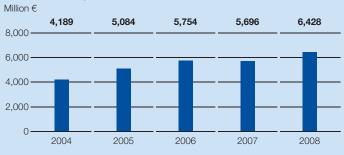
#### **BASF** levers to outperform markets

Plasticizers: Innovative products, e.g. Hexamoll® DINCH; portfolio with toxicologically advantegeous products | Solvents: New competitive products (2-PH) and optimized production structure | General: Leading technology position, backward integration

#### Focus of R&D

The focus of R&D activities is on developing new and improved processes by adapting and optimizing feedstocks to supply our Verbund value chains at competitive costs. Product innovation is primarily focused on new applications for plasticizers within and outside PVC.

#### Sales to third parties



# 0

#### Sales by first customer industry 2008

	%
Chemicals	48
Plastics and rubber	27
Petroleum and coal	16
Others	9

Competitive raw material supply
Cost leadership
Economies of scale
Leading process technology
Efficient production process
High capacity utilization

#### **Key capabilities of BASF**

World-scale production facilities
Production close to customers in growth regions
Strong market position and application know-how
Cost benefits from backward integration
(Verbund) and leading technology position

#### Acquisitions/JVs/Investments (2006–2008)

Product group	Description	Year
Cyclohexane	New plant in Mannheim, Germany	2006
2-Propylheptanol	Conversion of 2-ethylhexanol in Pasadena, Texas, USA	2006
Ethylene, propylene, benzene	Steamcracker expansion in Antwerp, Belgium	2007
Plasticizers	New DPHP plant in Pasadena, Texas, USA	2007
Hexamoll® DINCH	Capacity expansion in Ludwigshafen, Germany	2007
Oxo C4 alcohols	Capacity expansion in Nanjing, China	2008
Acrylic acid	Capacity expansion in Antwerp, Belgium	2008

#### Investments (from 2009 onwards)

Product group	Description	Year
2-Propylheptanol/INA	Capacity expansion in Ludwigshafen, Germany	2009
Propylene	Propylene pipeline Ludwigshafen – Karlsruhe, Germany	2009
Ethylene	Member of Joint Venture EPS (Ethylene pipeline Southern Germany)	2010
Ethylene, propylene	Steamcracker expansion in Nanjing, China	2010
Butadiene, ethylene oxide, butylglycol ether, 2-propylheptanol	2 <sup>nd</sup> phase in Nanjing, China	n/a.

#### Divestitures/Shutdowns (2006–2008)

Product group	Description	Year
	Divestiture of stake in ethylene cracker in Geismar, Louisiana, USA	2007

#### Major annual capacities of BASF

Ethylene	Antwerp, Belgium	1,080 kt
Litylone	Port Arthur, Texas, USA <sup>1</sup>	935 kt
	Ludwigshafen, Germany	620 kt
	Nanjing, China <sup>2</sup>	600 kt
Propylene	Port Arthur, Texas, USA <sup>1</sup>	830 kt
Торуюно	Antwerp, Belgium	650 kt
	Ludwigshafen, Germany	350 kt
	Tarragona, Spain <sup>3</sup>	350 kt
	Nanjing, China <sup>2</sup>	300 kt
Butadiene	Port Arthur, Texas, USA <sup>4</sup>	410 kt
	Ludwigshafen, Germany	105 kt
Benzene	Ludwigshafen, Germany	300 kt
	Antwerp, Belgium	280 kt
	Nanjing, China <sup>2</sup>	130 kt
	Port Arthur, Texas, USA <sup>4</sup>	110 kt
Cyclohexane	Ludwigshafen, Germany	130 kt
Ethylene oxide (equivalents)	Antwerp, Belgium	500 kt
	Ludwigshafen, Germany	345 kt
	Nanjing, China <sup>2</sup>	250 kt
	Geismar, Louisiana, USA	220 kt
Oxo C4 alcohols	Ludwigshafen, Germany	560 kt
	Freeport, Texas, USA	300 kt
	Kuantan, Malaysia <sup>1</sup>	250 kt
	Nanjing, China <sup>2</sup>	305 kt
Plasticizers (incl. Hexamoll® DINCH)	Ludwigshafen, Germany	400 kt
	Pasadena, Texas, USA	125 kt
	Kuantan, Malaysia <sup>1</sup>	100 kt
	Cornwall, Canada	35 kt
Acrylic acid	Antwerp, Belgium	320 kt
	Ludwigshafen, Germany	305 kt
	Freeport, Texas, USA	230 kt
	Nanjing, China <sup>2</sup>	160 kt
	Kuantan, Malaysia1	160 kt
1DACE 600/ 2DACE 600/ 3DACE 610/	4DACE 040/	

<sup>1</sup>BASF 60% <sup>2</sup>BASF 50% <sup>3</sup>BASF 51% <sup>4</sup>BASF 24%



- Product innovation Monoropylene glycol: Design of new process based on glycerin, byproduct of biodiesel, nearly completed.
- 2. Process innovation New production process for plasticizers: Higher capacities, reduced alcohol loss, reduced waste water.
- 3. Product/process innovation DPHP plasticizer: High-value application properties and cost-effective raw material source.

## **Intermediates**

BASE

Well prepared for the future with strong portfolio and innovation pipeline

The Intermediates division manufactures approximately 600 products which are sold worldwide. They are generally quite resilient to economic cycles and are often the result of multi-step production processes within BASF. Customers typically purchase them as precursors for their downstream chemicals. Besides external sales, the division sells its products within BASF, with internal transfers accounting for approximately 25% of the division's total sales.

#### Main products

#### Amines

BASF is among the world's top three producers of amines, which are principally used to make detergents and cleaning products, process chemicals, agricultural products and pharmaceuticals. BASF offers approximately 140 different amines worldwide. Key products include ethanolamines, ethyleneamines, alkylamines, alkylalkanolamines and various specialty and aromatic amines. Several chiral intermediates are of increasing importance for pharmaceuticals and agricultural products. We offer systems of amines and epoxy resins for the manufacture of composite materials, especially in the windmill industry. As gas treatment technology we offer aMDEA®, short for activated methyldiethanolamine, for the removal of acid gases such as hydrogen sulfide and carbon dioxide.

#### Butanediol and its derivatives

BASF is the world's largest manufacturer of 1,4-butanediol, which is a chemical building block for products such as polyesters and polyure-thanes. Its derivatives are used to manufacture products ranging from fibers to paints and include tetrahydrofurane, PolyTHF®, gamma-butyrolactone and N-methylpyrrolidone.

#### Polyalcohols and specialties

Being the leading manufacturer of 1,6-hexanediol (HDO®) and neopentylglycol (Neol®) worldwide, we offer these products as well as further polyalcohols mainly for the production of a wide range of coatings. In addition, BASF offers specialties such as carbonates and various special acetylenics, such as vinylmonomers and higher alkylpyrrolidones.

#### Acids and specialty intermediates

This product group comprises both commodity acid products and specialty intermediate products. Carbon acids such as formic acid, propionic acid and 2-ethylhexanoic acid can be used to manufacture preservatives for the feed and food industries as well as auxiliaries for textile and leather applications. Specialty intermediates, such as derivatives of phosgene including acid chlorides and chloroformates, glyoxal and its derivatives, glutaraldehyde and various other chemicals, such as formamide and triphenylphosphine, are often used in the manufacture of paper, polymers, pharmaceuticals and agricultural products.

#### **BASF** market position

BASF is among the top three producers worldwide of the main products of its four strategic intermediates business units (see above).

#### Main competitors

Amines: Taminco, Dow, Huntsman | Butanediol and derivatives: ISP, Invista, LyondellBasell, Dairen, Mitsubishi, new entrants, esp. Chinese | Polyalcohols and specialties: Eastman, Perstorp, Ube | Acids and specialty intermediates: Kemira, Perstorp, Eastman

#### Sales to third parties Sales by first customer industry 2008 Million € 1.987 2.470 2.512 2.002 2.273 Chemicals 74 4 000 Plastics and rubber 18 3,000 Others 8 2 000 1 000

Achieving technological and cost leadership Offering customized innovative products and system solutions Global production presence

#### **Key capabilities of BASF**

Global set-up

Leading market positions

Technology leadership

Economies of scale, cost leader at Verbund sites

Highly qualified and experienced personnel with strong market knowledge and technical capabilities to provide superior solutions to our customers

#### Focus of R&D

Innovation in Intermediates is key for all product groups to grow businesses and improve profitability. Whereas for butanediol and derivatives the focus lies on process improvements, the focus for amines, polyalcohols, acids and specialties is on developing many new products using value chain integration, our broad technological strength and close customer partnerships.

#### Acquisitions/JVs/Investments (2006–2008)

Product group	Description	Year
Alkylethanolamines	New plant in Geismar, Louisiana, USA	2007

#### Investments (from 2009 onwards)

Product group	Description	Year
Cyclododecanone	New plant in Ludwigshafen, Germany	2009
Methylamines	New plant in Geismar, Louisiana, USA	2011
Ethanolamines/ethyleneamines/ alkylethanolamines	New plant in Nanjing, China	n/a.
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#### Divestitures/Shutdowns (2006-2008)

Product group	Description	Year
THF, PolyTHF®	Closure in Yokkaichi, Japan	2006

#### **Divestitures/Shutdowns** (from 2009 onwards)

Product group	Description	Year
Butanediol/THF	Closure in Ulsan, Korea	2009

#### Major annual capacities of BASF

1,4-Butanediol equivalents	535 kt
1,6-Hexanediol (HDO®)	42 kt
Alkylamines	221 kt
Ethanolamines and derivatives	285 kt
Formic acid	255 kt
Neopentylglycol (Neol®)	165 kt
PolyTHF®	185 kt
Propionic acid	149 kt



- 1. Carbon dioxide (CO<sub>2</sub>) scrubbing: Together with RWE Power and the Linde Group we develop new processes for CO<sub>2</sub> capture from combustion gases in coal-fired power plants.
- 2. Ionic liquids for photovoltaic processes: G24 Innovations Limited (G24i), Wales, and BASF jointly initiated a program to develop ionic liquids to further improve the performance and efficiency of G24i's solar cells using a proprietary dye-sensitized thin film technology.
- 3. CDon (cyclododecanone): BASF is building a production plant in Ludwigshafen, Germany, for CDon. The innovative process consists of three stages instead of the five previously required.
- 4. Baxxodur®: To provide greater efficiency in manufacturing high-performance wind turbine rotors we are offering new systems based on epoxy resins and curing agents sold under the Baxxodur® brand



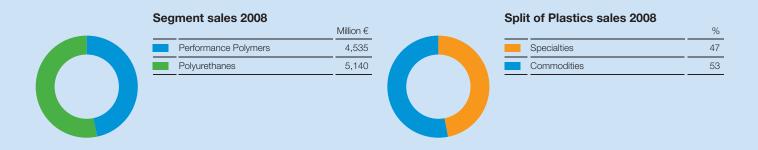
## **Plastics**

BASF is one of the world's leading suppliers of plastics – the energy-efficient material. In standard plastics, we have a portfolio of focused product lines and efficient marketing processes. In our business with specialties, we offer a wide range of high-value products, system solutions and services. In close collaboration with our customers, we are constantly extending this range and adding new applications.

#### Segment data\*

Million €	2006	2007	Q1	Q2	Q3	Q4	2008
Sales to third parties	9,461	9,976	2,547	2,654	2,592	1,882	9,675
Share of total BASF sales (%)	18.0	17.2	16.0	16.3	16.4	13.2	15.5
Thereof Performance Polymers	4,612	4,810	1,221	1,259	1,236	819	4,535
Polyurethanes	4,849	5,166	1,326	1,395	1,356	1,063	5,140
Income from operations before depreciation and amortization (EBITDA)	1,597	1,655	459	392	300	(189)	962
EBITDA margin (%)	16.9	16.6	18.0	14.8	11.6	(10.0)	9.9
Income from operations (EBIT) before special items	1,196	1,261	359	291	198	(304)	544
EBIT before special items margin (%)	12.6	12.6	14.1	11.0	7.6	(16.2)	5.6
Income from operations (EBIT)	1,180	1,172	358	291	194	(313)	530
EBIT margin (%)	12.5	11.7	14.1	11.0	7.5	(16.6)	5.5

<sup>\*</sup>As of January 1, 2008, we restructured our segments on the basis of similar products, production processes and customer industries. The previous years' figures have been adjusted accordingly.



# Performance Polymers

Leading supplier of engineering plastics, extrusion polymers and polyamide intermediates, specialty plastics and foams



BASF's Performance Polymers division is one of the world's leading suppliers of engineering plastics, extrusion polymers, specialty plastics and foams, as well as polyamide intermediates, which can be found in a broad spectrum of industries including automotive, electrical and electronics, packaging, textile and carpet fibers, building and construction as well as home and leisure.

#### Main products

#### PA (Polyamide) and intermediates

Ultramid®, Miramid® and Capron® are the trade names for BASF's engineering plastics based on polyamide 6, polyamide 6.6 and other copolymers. They offer toughness and strength as well as both heat and chemical resistance. Its primary applications include automotive engine intake manifolds and flame-retardant plastics for electrical components. Ultramid® is also the trade name for BASF's base resin of polyamide 6 and 6.6 sold in the fibers and extrusion market. Its primary applications include carpets and textiles as well as films for food packaging. Intermediates include caprolactam for polyamide 6 and adipic acid.

#### PBT (Polybutylene terephthalate)

Ultradur® is the trade name for BASF's engineering plastic based on PBT. It features high stiffness, strength, dimensional stability and heat and aging resistance. Its primary applications include electrical connectors and automotive components.

#### POM (Polyoxymethylene)

Ultraform® is the trade name for BASF's POM plastic. It offers high stiffness and strength, resilience and low wear. Its primary applications include clips and fasteners as well as mechanical and precision engineering devices.

#### Expandable Polystyrene (EPS)

Styropor® and its refinement Neopor® are insulating materials at the fore-front of eco-efficient construction and offer advantages with regard to conservation of resources and cost efficiency.

#### Specialty foams

Basotect® is a flexible, open cell foam made from melamine resin. It is used for sound and thermal insulation in the building and transportation industry as well as a cleaning sponge in the consumer industry.

#### Biodegradable plastics

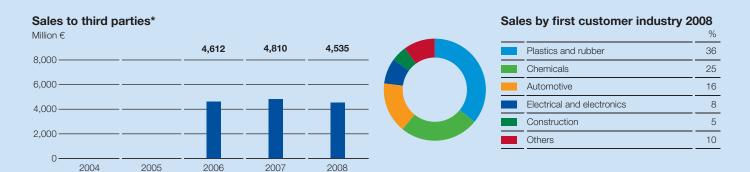
Under the brand name Ecoflex®, BASF offers biodegradable, aliphatically aromatic copolyesters. Ecoflex® is mainly used for the packaging industry (shopping bags, organic waste bags) and mulch films. Ecovio® L is the first biodegradable and biobased polyester of BASF (based on Ecoflex® and 45% polylactic acid).

#### **BASF** market position

Engineering plastics #2 | Extrusion #1 | Expandable polystyrene #1 | Foams among top 3 |

#### Main competitors

Engineering plastics: DuPont, Rhodia, Lanxess, Ticona, Sabic | Caprolactam: DSM, CPDC, Ube | Ultramid® (spinning polymers): LiPeng, Zig Shen, Honeywell | Ultramid® (extrusion polymers): Ube, DSM, Lanxess | EPS: Loyal, Xingda, Taita |



Portfolio shift to higher value-added products
Global optimization along the entire value chain
Disciplined capital expenditure
Business model focused processes
Innovation

#### **Key capabilities of BASF**

Operational excellence (reliability, cost leadership)

Global integration of production and supply patterns

Innovation in products, applications, processes and business models

Technical, engineering and application competence

Close customer relationship and ability to serve key customers globally

#### **BASF** levers to outperform markets

Strong customer focus in R&D | Innovation in products, applications and process development as well as business models | Close customer relationships with ability to serve key customers globally | Globally best business for commodities | Unique value propositions for specialty plastics

#### Focus of R&D

Innovations focus on developing new applications for engineering plastics and specialty plastics in close cooperation with customers, developing engineering plastics, specialty plastics, packaging materials and foams with enhanced properties and securing competitiveness of our value chains.

#### Acquisitions/JVs/Investments (2006–2008)

Product group	Description	Year
PBT	New PBT plant at Kuantan, Malaysia; 50:50 joint venture between BASF and Toray	2006
Compounds	New compounding plant in Altamira, Mexico	2006
Compounds	New compounding plant in Pudong/Shanghai, China	2007
Polyamide 6	New production line for PA 6 polymers in Freeport, Texas, USA	2007
Ultradur <sup>®</sup>	Acquisition of Sabic Innovation Plastics' shares in the joint venture for PBT production in Schwarzheide, Germany	2007
Ultraform®, Ultrason®	Expansion of capacities in Ludwigshafen, Germany	2008
Styropor®, Neopor® (EPS)	Additional production capacity	2008

#### Investments (from 2009 onwards)

Product group	Description	Year
Compounds	New compounding plant in Thane, India	2009
Biodegradable plastics	Additional production capacity	2010

#### Divestitures/Shutdowns (2006–2008)

Product group	Description	Year
Polyamide 6	Shutdown of PA 6 production facilities in Enka, North Carolina, USA	2007
Adipodinitril (ADN)	Closure of adipodinitril plant in Seal Sands, UK	2008
Acrylonitrile (AN)	Divestiture of the Seal Sands site, UK	2008
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#### Major annual capacities of BASF

Canrolastam	800 kt
Caprolactam	800 KI
Polyamide	720 kt
PBT	130 kt
POM	55 kt
Ultrason®	12 kt
Compounding	460 kt
Styropor®/Neopor®	870 kt
Ecoflex®	14 kt

# Sales by region 2008 (location of customer) Europe Asia Pacific South America, Africa, Middle East 6

- 1. Ecoflex®: BASF's completely biodegradable and compostable plastic. It is ideal for trash bags or disposable packaging as it decomposes in compost within a few weeks or in soil without leaving any residues.
- 2. Basotect®: First fire-proof sofa made of flame-resistant melamine resin.
- 3. Ultramid® TOP for online coatable car body parts: It offers extremely high heat stability which is indispensable for body parts made of plastic. Thus a part made of Ultramid® TOP can be mounted very early onto the raw car.
- 4. Automotive Seat: BASF and Recaro used the design and functions of the sporty seat from the OPS model of Opel Corsa to create and build a seat prototype for which nearly all parts are produced using BASF materials.

## **Polyurethanes**

World leader in isocyanates with a strong focus on specialties through system houses



BASF's Polyurethanes division is one of the world's three largest global producers of polyurethanes: important versatile specialty plastics used to produce a wide spectrum of rigid, flexible, foamed and compact components for consumer products.

#### Main products

#### MDI (Diphenylmethane diisocyanate)

MDI is a versatile isocyanate that can be used to make flexible foams as well as semi-rigid and rigid polyurethane plastics. Its primary applications include furniture interiors, automotive components and shoe soles.

#### TDI (Toluene diisocyanate)

TDI is an isocyanate used primarily in the manufacture of flexible foams. Its primary applications include foam cushions for furniture and automotive components.

#### PEOL (Polyether polyols)

Polyether polyols are combined with isocyanates to make virtually all polyurethane products, other than those made with polyester polyols. Its primary applications include rigid and flexible foams.

#### Polvester polvols

Polyester polyols are combined with isocyanates to make primarily semirigid polyurethane plastics. Its primary applications include cable sheathing and shoe soles.

#### Polyurethane systems

BASF's worldwide polyurethane systems group offers tailor-made polyurethane products for a wide variety of applications. BASF develops ready-to-use, tailor-made polyurethane systems for customers. Automotive OEM (original equipment manufacturer) suppliers comprise a significant customer group. OEM suppliers make seats, steering wheels, fenders and dashboards using BASF's polyurethane systems.

#### TPU (Thermoplastic polyurethane elastomers)

TPU is sold under the trade name Elastollan® and is based on both polyether polyols and polyester polyols. It is supplied in granular form to customers who use it primarily to make flexible plastic cable coverings. Customers for these products are primarily in the automotive and cable and wire industries.

#### Cellular elastomers

Cellular elastomers are sold under the names Cellasto®, Elastocell® and Emdicell® and are shock-absorbing, rigid plastics. Microcellular polyure-thane parts for antivibration applications are sold, for example, as molded end products for use as shock absorbers and buffers in the automotive industry.

#### **BASF** market position

MDI among top 2 | TDI among top 2 | PEOL among top 3 | PU Specialties #1

#### Main competitors

MDI: Bayer Material Science, Huntsman Polyurethanes, Dow, Yantai | TDI: Bayer Material Science, Dow, Borsodchem, Mitsui | PO/PEOL: Dow, Bayer Material Science, Shell | Specialties: Bayer Material Science, Dow, Huntsman Polyurethanes, Lubrizol

#### **BASF** levers to outperform markets

World-scale production plants in all major regions with debottlenecking potential | Innovative, cost-leading HPPO technology | Successful global system house concept | Strong innovation pipeline

#### Sales to third parties Sales by first customer industry 2008 Million € 3.495 4.849 5.166 5.140 4.291 Construction 22 8 000 Furniture 20 6,000 18 Automotive Electrical and electronics 11 4 000 6 Footwear 2 000 Others 23

Supply and demand balance MDI, TDI, PO Cost leadership along the entire value chain Main raw materials benzene, toluene, propylene

Constant flow of innovative products and system solutions

Size and setup of specialty business

#### **Key capabilities of BASF**

Globally balanced strong market position with local production

Cost (integrated world-scale plants) and technology leadership (isocyanates and HPPO)

World leader in PU specialties (systems, TPU, Cellasto®)

Capacity to innovate und launch new products

#### Focus of R&D

Process innovation aims to optimize existing production processes and develop new, highly efficient processes offering considerable cost advantages. One example is the innovative HPPO process, for which we successfully started production of a world-scale plant in Antwerp, Belgium in 2008, together with Dow. In polyurethane product and system development, we work closely with our customers to improve existing solutions and find new ones. Furthermore, we are developing new applications such as Elastocoast®, a PU-based solution to protect dams and dykes against storms.

#### Acquisitions/JVs/Investments (2006–2008)

Product group	Description	Year
TDI/MDI	Joint venture investment in Caojing, China	2006
Systems	Acquisition of PCC, The Netherlands, and other smaller acquisitions and joint ventures	2007/ 2008
MDI	Expansion investment in Antwerp, Belgium	2007
HPPO	Joint venture investment in Antwerp, Belgium	2008
PEOL	Expansion in Geismar, Louisiana, USA	2008
Systems	Acquisition of polyurethane specialities for car window encapsulation from Recticel	2008

#### Investments (from 2009 onwards)

Product group	Product group Description	
Systems	System house in Malacky, Slovakia	2009
Systems	System house in Srem, Poland	2010
MDI	Investment in China under examination	2013
TDI	Joint venture investment in Europe under examination	n/a.

#### Divestitures/Shutdowns (2006-2008)

Product group	Description	Year
Systems	Closure of site in Carrollton, Texas, USA	2006

#### Major annual capacities of BASF

MDI	1,280 kt
TDI	560 kt
Polyols	700 kt
Propylene oxide	925 kt*

<sup>\*</sup>Of which 800 kt are only for polyurethane applications

#### Global PU system houses





- 1. SPS (Sandwich Plate System): Refurbishing the grandstand of the Ascot Racecourse with SPS terraces as a newly developed application.
- 2. HPPO: Innovative process to produce propylene oxide, smaller plant footprint, smaller specific investment, water as only by-product.
- 3. Lupranol Balance®: New polyol on the basis of a renewable raw material for matresses.
- 4. Elastollan®: Printable films with outstanding low-temperature flexibility for decorative protection on skis and snowboards.



## Performance Products

Our innovative solutions contribute to the functionality and performance of industrial and consumer products produced by virtually all manufacturing industries all over the world. Our solutions also help our customers to run their processes more successfully. We are the preferred partner for developing new products, system solutions and applications in close cooperation with our customers.

Our broad range of customer industries and our regional portfolio make us less sensitive to sectoral volatilities. The Ciba acquisition will complement our portfolio and will make BASF the leading supplier of performance chemicals.

#### Segment data\*

This data does not reflect the new structure of the segment as of April 1, 2009, but refers to the structure during the reported periods.

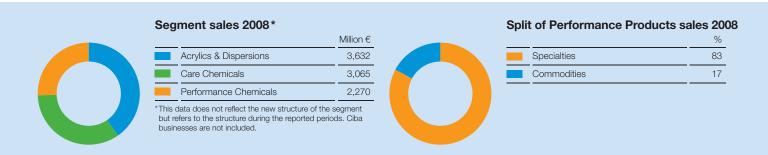
Million €	2006	2007	Q1	Q2	Q3	Q4	2008
Sales to third parties	8,494	8,862	2,206	2,297	2,370	2,094	8,967
Share of total BASF sales (%)	16.1	15.3	13.9	14.1	15.0	14.6	14.4
Thereof Acrylics & Dispersions	3,387	3,522	861	929	981	861	3,632
Care Chemicals	3,093	3,029	763	781	795	729	3,065
Performance Chemicals	2,014	2,311	582	587	594	507	2,270
Income from operations before depreciation and amortization (EBITDA)	1,059	1,143	339	357	349	241	1,286
EBITDA margin (%)	12.5	12.9	15.4	15.5	14.7	11.5	14.3
Income from operations (EBIT) before special items	671	712	223	226	233	103	785
EBIT before special items margin (%)	7.9	8.0	10.1	9.8	9.8	4.9	8.8
Income from operations (EBIT)	431	681	231	249	233	74	787
EBIT margin (%)	5.1	7.7	10.5	10.8	9.8	3.5	8.8

<sup>\*</sup>As of January 1, 2008, we restructured our segments on the basis of similar products, production processes and customer industries. The previous years' figures have been adjusted accordingly.

To better serve the different customer industries and lay the foundation for the rapid and efficient Ciba integration, the Performance Products segment has been reorganized effective April 1, 2009.

The following chapter refers to the new segment structure and lists the products that were expected to be part of each division at the time of publishing. This includes the planned attribution of Ciba businesses. Depending on the outcome

of the discovery phase, it might be decided that some products will be attributed to other divisions than initially planned. For certain product groups of Ciba, for example water treatment, there has been no indication made as to attribution to divisions at the time of publishing. For updates, financial figures and more details, please follow the further information that will be published by BASF over the course of the year.



# Dispersions & Pigments

Leading global supplier of raw materials for the coating and paint industry



With the acquisition of Ciba, BASF has become the leading global supplier of raw materials for the coating and paint industry. Effective April 1, 2009, all BASF businesses serving this industry have been merged in the new division Dispersions & Pigments. The dispersions business of the former Acrylics & Dispersions division has been extended by the coating pigments and resins business that was part of the Performance Chemicals division. The majority of Ciba's Coating Effects business will be integrated into this division. The final set-up will be decided after the discovery phase of the integration by mid of 2009.

#### Main products

#### Dispersions, UV hotmelts and construction polymers

BASF's polymer dispersions are water-based systems used in the production of adhesives, sealants, paints, non-wovens and construction materials. BASF's strength lies in the backward integration into acrylics, our deep technical expertise and excellent application know-how. For example, the company supports customers with a technical coating center for aqueous pressure-sensitive adhesives and UV hot melt adhesives strengthening BASF's position as the world's leading manufacturer of adhesive raw materials. BASF's construction polymers are primarily used in the growing dry mortar industry improving the rheology and flowability in various applications.

#### Resins

BASF offers a wide range of resins that are used in radiation curing, high-solid and conventional industrial coatings. Main applications are wood and automotive as well as protective coatings. The wide variety of product groups includes polyisocyanates, acrylic oligomers, vinyl-chloride copolymers, aldehyde and amino resins. The product portfolio

was expanded to include water-based resins used in coatings and inks through the acquisition of Johnson Polymer in 2006. BASF is the global market leader in water-based resins for printing applications and has a strong position in radiation curable resins for wood coatings in Europe. The acquired high solid polyols together with our polyisocyanates enable BASF to offer special customer solutions fulfilling volatile organic compound (VOC) regulatory requirements.

#### Pigments

BASF offers organic and inorganic pigments, effect pigments, pigment preparations and functional colorants. The product portfolio has been expanded to include mica-based pearlescent pigments and specialty minerals through the acquisition of Engelhard Corp. Ciba's pigment portfolio is to a great extent complementary. Whereas BASF's core pigment competency lies in blue and green colorants, Ciba adds mainly red and yellow pigment technology. Ciba strengthens the joint portfolio particularly with high performance pigments for high-quality coatings. Together, we offer a unique portfolio to the automotive industry, decorative and industrial paint industry, packaging industry, and graphic arts industry covering pigments, pigment preparations and dyes across the entire color range.

#### Additives

The acquisition of Ciba expands the portfolio into photo-initiators, light stabilizers and additives and strengthens BASF's formulation expertise. Ciba is the market leader with light stabilizers and photo-initiators for coatings. The broad additives portfolio also includes antioxidants, corrosion inhibitors, dye stabilizers and optical brighteners. Additives maintain or improve desirable properties – or suppress the adverse properties – of materials. They improve for example the stability of these materials during processing, thereby facilitating or improving the efficiency of industrial processes. The industries demanding our additive products are mainly the same as for pigments and resins. Together, we are thus in the position to offer a new and unique portfolio of solutions to our customers.

- 1. AQAGloss®: Innovative binder for water-based coatings for haze-free and highgloss surfaces. A genuine alternative to traditional solvent-based coatings complying with the very latest environmental standards (e.g. VOC Directive 2010).
- 2. COL.9°: Environmental friendly, water-based binder for architectural coatings with greatly improved dirt-pick-up resistance for "ever-clean" facades.
- 3. Lumogen Black®: New pigments for solar heat management: cuts solar heat build-up from incident sunlight in half; increases comfort and durability of outdoor construction elements; black cars stay cool in the sun; increases service life of decorative coatings and printing.
- 4. Joncryl® U6336 and Joncryl® U4190: Cost-effective water-based polyurethane technologies. The new solvent-free polyurethane hybrid Joncryl® U6336 and the polyurethane dispersion Joncryl® U4190 offer various excellent mechanical properties such as abrasion and scratch resistance, chemical resistance and warmth of wood. These innovative products are used in coating formulations for high-quality wooden furniture and parquet flooring applications.

### **Care Chemicals**



Providing essential products and solutions to human well-being

BASF's Care Chemicals division develops, produces and markets a comprehensive range of products for the pharmaceutical, nutrition, professional cleaning, home and personal care industries, as well as various industrial applications. Our products fulfill the highest safety standards and meet official regulations regarding sustainability and traceability. Effective April 1, 2009, the superabsorbents business will strengthen the division's portfolio with additional consumer-related products for the hygiene industry. Ciba's home and personal care businesses, consisting mainly of skin and sun care products and detergent additives, will complement the Care Chemicals product portfolio.

#### Main products

#### Aroma chemicals, vitamins and carotenoids

BASF's aroma chemicals, the vitamins A and E, and carotenoids originate from the citral value chain, which is integrated into the BASF Verbund. Technology leadership and backward integration form the basis for our leading position in these products. Aroma chemicals are sold to the flavor and fragrance industry and find their use mainly in food, home and personal care products. Vitamins and carotenoids are important ingredients for animal and human nutrition.

#### Pharmaceutical ingredients and services

BASF supplies the pharmaceutical industry with high-quality products that meet official specifications and cGMP requirements. We are the market leader for active pharmaceutical ingredients (API) such as caffeine, ibuprofen, pseudoephedrine and offer a broad portfolio of smaller volume specialty API. We produce highly functional excipients that satisfy the needs of the pharmaceutical industry for innovative dosage forms. We also offer custom synthesis services based on a broad range of technical capabilities to the pharmaceutical industry, which are complemented by flexible, multiproduct cGMP plants and BASF's chemical research & development skills.

#### Water-soluble polymers

The water-soluble polymers product portfolio comprises functional polymers based on BASF's monomers. These products are used for example as dispersing agents, dye transfer inhibitors and thickeners in detergents formulations, and as styling and conditioning ingredients for hair care formulations.

#### Superabsorbents

Superabsorbents are polymers that can absorb and retain extremely large amounts of a liquid relative to their own mass. The largest use of superabsorbents is in disposable hygiene products, such as baby diapers, protective adult underwear and feminine care products. Today BASF is a major player in the superabsorbent industry.

#### **UV** filters

With our leading position in UV filters for sun and skin care applications, we offer the full range of UVA and UVB filters.

#### Non-ionic surfactants

BASF's non-ionic surfactants are derived from various petrochemicalbased raw materials, especially ethylene oxide, aliphatic alcohols, and propylene oxide. Non-ionic surfactants can be found in a wide number of applications ranging from detergents and cleaners to textile manufacture and coatings additives.

#### Chelating agents

BASF produces a whole range of highly efficient chelating agents, which distinguish themselves through their performance and their eco-profile. Main applications are in dishwashing and professional cleaning, but BASF's chelating agents are also used in technical applications.

- 1. Trilon® M, a high-performing strong chelating agent, and Lutensol® M, a cost-competitive surfactant: sustainable products meeting the market needs especially in the detergents and cleaners industry.
- 2. Kolicoat® IR: an innovative pharmaceutical excipient for instant-release tablet coatings with clear benefits for patients and drug manufacturers. The use of Kolicoat® IR significantly accelerates the film-coating process and therefore cuts production costs. Kolicoat® IR also ensures that tablets are much more convenient to take, because Kolicoat® IR-coated tablets have a very smooth surface that makes them much easier to swallow.
- 4. Multi-nutrient sachets for social business: BASF has established a new business model, the joint social business venture between BASF SE and Grameen Healthcare Trust. Care Chemicals provides dietary supplements in the form of multi-nutrient sachets helping to combat malnutrition and improving the business opportunities of the poor in Bangladesh.
- 5. HySorb™: Superabsorbent polymers are made from partially neutralized, lightly cross-linked polyacrylic acids. HySorb™ are superabsorbent polymers for ultrathin infant diapers.

## **Paper Chemicals**



New world market leader in paper chemicals

Effective April 1, 2009, BASF has founded a new division Paper Chemicals. This division initially consists of BASF's business with wet end chemicals, coating chemicals and kaolin minerals. Following the completion of the discovery phase, Ciba's business with products for paper manufacturing and paper coating will be integrated into the new division. The current range consists of products for uncoated and coated paper as well as board manufacturing and finishing. The knowledge of the various interactions in the complex papermaking process enables BASF to tailor the exact combination of chemicals to the individual requirements of a particular customer in order to ensure that their mills and machines operate at highest technology standard and optimum cost-efficiency.

#### Main products

BASF offers the paper industry a comprehensive range of chemical products for paper manufacturing and paper coating. This includes process chemicals that optimize costs and improve machine productivity, functional chemicals that give paper certain attributes, as well as paper coating chemicals that help to enhance the aesthetics and performance of printed paper and board. Ciba's product portfolio completes the product range, for example by adding optical brighteners for paper making and paper coating, as well as broadening the offer for the paper making process in retention and fixation technologies. Jointly, we are the leading supplier of chemicals offering tailor-made solutions to the paper industry.

#### Process Chemicals

For an efficient formation of the paper sheet, BASF sells a wide range of different polymers as retention aids based on polyethylenimine, polyvinylamine and polyacrylamide. Several microparticle systems from Ciba's portfolio, either silica or bentonite-based, complement the portfolio. Fixatives neutralize detrimental substances within the papermaking process. BASF is a leading supplier for fixatives and offers a most comprehensive

product portfolio including different classes of chemicals. Foam and dispersed air are a threat to the productivity of paper machines. As market leader for defoamers and deaerators, BASF offers innovative and highly effective product solutions.

#### Functional chemicals

One of the key requirements of packaging producers is a reduction of production costs via increased paper strength and machine speed. BASF meets this demand with innovative dry strength agents, which are based on polyvinylamine or copolymers of vinylformamide and acrylic acid. Sizing agents enhance the print quality and writability of paper products. BASF sells product solutions for wet end and surface treatment of paper and board. Products based on pure alkyl diketene and alkenyl succinic anhydride as well as polymer modified alkyl diketene are used for stock sizing. Anionic and cationic rosin dispersions complement the portfolio of internal sizes. Polymeric dispersions and polymer modified alkyl diketene are highly efficient surface sizing agents. BASF offers economic coloration solutions for paper and board. The product portfolio is based on basic dyes, acid dyes, direct dyes and pigment dyes.

#### Coating chemicals

The combined paper coating chemicals portfolio of BASF and Ciba offers solutions based on various technologies capable of serving different customer needs. Whether it is enhanced print quality, appearance optimization or cost-saving solutions that is needed, our wide product range and the global expertise help to achieve customers' targets. Together we are the leading supplier of paper coating binders and coating additives. Economies of scale and efficient production and supply chains are key in providing cost-efficient products and reliable quality and logistics solutions.

#### Kaolin

BASF extended its product portfolio with kaolin through the acquisition of Engelhard Corp. in 2006. Kaolin minerals are extracted from mines and are primarily used as coating pigments in the paper industry. BASF owns several kaolin reserves in the state of Georgia, USA. We offer an exceptionally broad line of kaolin-based pigments that give papermakers the coating and filler pigment solution they need to optimize paper properties and maximize value.

- 1. Polyvinylamine (PVAm): An innovative polymer class with a unique combination of properties for a wide range of applications. PVAm products are marketed to increase the strength of recycled paper-based packaging grades, as well as to improve paper machine efficiency and runability. They are applied for retention and fixative applications with tailored property profiles. Unlike many other paper chemicals, PVAm grades are adsorbable organic halogen compounds (AOX) and formaldehyde-free. The products are approved by the German risk assessment authority BfR and the US authority FDA for food contact papers.
- 2. Process innovation system solutions for paper manufacturing: Reduced overall costs of paper production by choosing and metering tailor-made combinations of paper chemicals. A number of well-proven and tailor-made system solutions are provided to customers to reduce energy and/ or fibre costs or to improve machine runnability. Here is one example: a customized combination of a retention and a fixation agent of specific chemistry helps paper producers to save several hundred thousand euros per year by reducing machine breakdowns. This synergistic system solution realizes far greater value for our customers than a simple optimization of an individual chemical application.

## Performance Chemicals

HOSES!
PHINTS

D-BASE

Innovative partner adding value for specific customer industries

BASF's Performance Chemicals division provides innovative and specific solutions for defined customer industries including plastics, automotive, refineries, oilfield and mining as well as leather and textiles. BASF's leading position will be strengthened with the acquisition of Ciba's Plastic Additives business. This business as well as others such as oilfield and mining will be integrated into the Performance Chemicals division, once the final set-up has been decided during the discovery phase.

#### Main products

#### Plastic additives

Ciba's Plastic Additives business line will be integrated into the Performance Chemicals division after the discovery phase. With the acquired business BASF will become the leading supplier of stabilizers and additive systems to the plastics, rubber and adhesive industries. The product range includes processing stabilizers such as antioxidants, polymer protection products such as UV absorbers and high-performance light stabilizer (HALS) amines, and specialty additives such as products for polymer recycling. Main fields of application are automotive molded parts such as dashboards, agricultural film, and construction materials as well as packaging, electronics and consumer goods such as household appliances and toys.

#### Chemicals for the automotive and refinery industry

We are one of the leading suppliers of performance chemicals for the automotive and refinery industry. Our portfolio will be complemented by the process and lubricant additives business from Ciba and contributes to the comfort and safety of many everyday products, from fuels, coolants and brake fluids to adhesives and sealants. As a leading producer of polyisobutene (PIB), BASF offers a broad, globally available product portfolio of low, medium and high molecular weight grades. Our low molecular weight PIB is a precursor for engine, oil and fuel additives, while applications of our medium and high molecular weight PIB range from adhesives and sealants to chewing gum base.

#### Oilfield and mining chemicals

With the acquisitions of Engelhard Corp. and Degussa Construction Chemicals, BASF has expanded its range of oilfield solutions and will strengthen its portfolio even further by integrating Ciba's Oilfield Chemicals business line. We provide products for all stages of oil and gas exploration. The range includes drilling fluid additives, cementing additives, stimulation products and production chemicals. In addition, by bundling BASF's mining chemicals activities with Ciba's Mining Chemicals business we will lay a new foundation for further growth in this industry.

#### Textile chemicals

BASF supplies products and solutions for all essential textile processing steps. We offer textile auxiliaries for weaving, pretreatment and dyeing, as well as comprehensive solutions for pigment printing, finishing and textile coating. These products are used in a wide range of textile articles, including apparel, home textiles and technical textiles. BASF textile chemicals deliver high quality, comfort and easy care through innovative effects and functions and help customers fulfill the latest ecological requirements and standards.

#### Leather chemicals

BASF offers leather chemicals for the entire process of leather production, from the beamhouse and tanning through to finishing. BASF's leather chemicals offer eco-efficient products and solutions that help customers meet the latest ecological requirements and standards. BASF's expertise covers a broad spectrum of applications, such as leathers for shoes, automotive, furniture, garment and accessories.

- 1. Steron®: An innovative coating technology that can be used for the surface coating of diverse carriers, for example leather, especially in matters of design. This technology combines the properties of high-quality surface finishing and breathability, and can be produced cost-effectively, even in small amounts. Steron®-coated materials are used in the production of upholstered furniture and in the fashion, shoe or electronics industries.
- 2. Uvinul® 5080 H: A new high-performance light stabilizer (HALS) for polyurethanes. Based on a novel molecular architecture, the product combines properties that seem to be mutually exclusive and offers excellent protection properties. Uvinul® 5080 H was developed together with N.V. Recticel S.A., Belgium, the market leader for polyurethane dashboard systems for high-end automotive applications.
- 3. Glysantin® Dynamic Protect/G 40: A new high-performance coolant. We have achieved a significant improvement in corrosion protection through the innovative combination of organic additives with highly reactive silicon compounds. After extensive tests in the technical center and practical trials at Volkswagen AG, BASF's development partner, Glysantin® Dynamic Protect/G 40 is now available to the end user.
- 4. e-textiles: BASF has developed a technology to firmly link flexible textiles with electronic components. This process can easily be scaled up to industrial production scale and opens the opportunity to new textile applications, e.g. in construction or automotive. This technology is used in cooperation with textile manufacturers to co-develop new textile products. The first products based on this technology will be launched in the course of 2009.



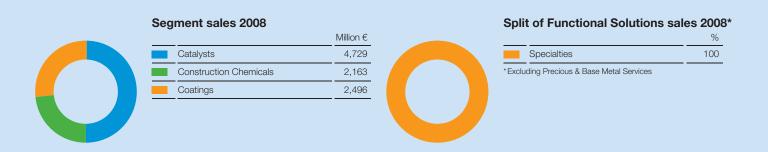
## **Functional Solutions**

The Functional Solutions segment consists of the Catalysts, Construction Chemicals and Coatings divisions. These divisions develop innovative, sector and customer-specific products and system solutions, in particular for the automotive and construction industries.

#### Segment data\*

Million €	2006	2007	Q1	Q2	Q3	Q4	2008
Sales to third parties	5,906	9,491	2,394	2,490	2,479	2,025	9,388
Share of total BASF sales (%)	11.2	16.4	15.0	15.3	15.7	14.2	15.1
Thereof Catalysts	2,411	4,804	1,313	1,265	1,225	926	4,729
Construction Chemicals	1,081	2,100	455	563	621	524	2,163
Coatings	2,414	2,587	626	662	633	575	2,496
Income from operations before depreciation and amortization (EBITDA)	595	876	227	193	200	(56)	564
EBITDA margin (%)	10.1	9.2	9.5	7.8	8.1	(2.8)	6.0
Income from operations (EBIT) before special items	473	557	140	111	117	(103)	265
EBIT before special items margin (%)	8.0	5.9	5.8	4.5	4.7	(5.1)	2.8
Income from operations (EBIT)	338	434	137	108	112	(206)	151
EBIT margin (%)	5.7	4.6	5.7	4.3	4.5	(10.2)	1.6

<sup>\*</sup>As of January 1, 2008, we restructured our segments on the basis of similar products, production processes and customer industries. The previous years' figures have been adjusted accordingly.



## **Catalysts**

Combining the strengths of two catalyst pioneers to expand the world's leading catalyst business

BASF's Catalysts division is the global market leader in catalysis. The division develops and produces mobile emissions catalysts as well as process catalysts and technologies for a broad range of customers worldwide. The division also provides precious and base metals and related services. BASF Catalysts expands its leading role in catalyst technology through continuous process and product innovation.

#### Main products

#### Mobile emissions catalysts

Mobile emissions catalysts enable cost-effective regulatory compliance by providing technologies that control emissions from gasoline- and diesel-powered passenger cars, trucks, buses, motorcycles and offroad vehicles.

#### Process catalysts & technologies

Process catalysts include chemical-process catalysts for chemical, petrochemical, polyolefin, and fine chemical customers, as well as aluminas and adsorbents. In addition, petroleum refining customers are served with refining catalysts and additives, some based on the division's unique Distributed Matrix Structure (DMS) technology platform. The product offering also includes customized process catalysts, such as those that enable gas-to-liquid conversion.

#### Precious & base metal services

Precious & base metal services support the catalysts business and BASF customers with services related to precious and base metals. The business purchases, sells, refines and distributes these metals and provides storage and transportation services. It also provides a variety of pricing and delivery arrangements to meet the logistical, financial and price-risk management requirements of BASF, its customers and suppliers. In addition, the business produces precious-metal salts and solutions. In 2008, precious & base metal services accounted for sales of €2,467 million.

#### **BASF** market position

Mobile emissions catalysts #1 | Refinery catalysts #3 | Chemical catalysts #1

#### Main competitors

Mobile emissions catalysts: Johnson Matthey, Umicore | Refinery catalysts: Grace, Albemarle, CRI | Chemical catalysts: Süd-Chemie, Degussa, Haldor Topsoe

#### **BASF** levers to outperform markets

Largest global catalyst R&D capability | Recognized precious metals expertise | Operational excellence in catalyst production and use | Strong customer relationships | Unrivaled position in Asia Pacific

#### Sales to third parties Sales by first customer industry 2008\* Million € 2.411\* 4.804 4.729 Motor vehicles 47 8 000 -Chemicals 21 Petroleum and coal 20 12 Others 4,000 \*Excluding Precious & Base Metal Services 2 000 2005 2008

\*As of June 6, 2006, following the acquisition of Engelhard Corp.

Technology innovation

Tightening of clean air regulations driving demand for new mobile emissions catalysts

Rising raw material costs and alternative raw material sources driving process catalyst demand

Production efficiency

Strict working capital management

#### **Key capabilities of BASF**

Technology leadership in mobile emissions and process catalysis

Fundamental understanding of precious metal markets

Partnerships with industry leaders
Strong position in Asia through joint ventures

#### Focus of R&D

Innovation in Catalysts is crucial for all our product groups. For mobile emissions catalysts the focus lies on improved products to meet new exhaust gas standards especially for diesel. For process catalysts, priority is given to developing new and improved products.

#### BASF is the market leader for automotive catalysts in Asia



#### Mobile emissions catalysts market share

41% BASF market share in Asia including our joint ventures in Korea and Japan

Currently serving >50% of global transplant business from Japan and Korea

Leveraging BASF's regional strength especially in rapidly growing Chinese market

#### Acquisitions/JVs/Investments (2006-2008)

Product group	Description	Year
Catalysts	Acquisition of Engelhard Corp.	2006
Mobile emissions catalysts	Acquisition of Guilin REEcat Catalyst Co., Ltd., China's market leader in small engine and motorcycle catalysts	
Mobile emissions catalysts	Capacity expansion in Huntsville, Alabama, USA	2008
Mobile emissions catalysts	Capacity expansion in Chennai, India	2008
Polyolefin catalysts	Capacity expansion in Pasadena, Texas, USA, and Tarragona, Spain	2008
Chemical catalysts	Capacity expansion in DeMeern, The Netherlands	2008

#### **Investments** (from 2009 onwards)

Product group	Description	Year
Mobile emissions catalysts	Capacity expansion in Shanghai, China	2009
Mobile emissions catalysts	New manufacturing plant in Moscow region, Russia	2009



- 1. HDXtra™: Catalyst that increases diesel yields from crude oil refining.
- 2. Lean  $NO_x$  Trap: Patented catalyst technology converts nitrogen oxide to nitrogen.
- 3. Novel Metal Zeolites: New high-performance materials for mobile nitrogen oxide reduction.

## **Construction Chemicals**



Leading solution provider in construction chemicals

BASF's Construction Chemicals division provides chemical systems and formulations for the construction industry. This business offers major innovation potential and relatively high and robust margins. BASF is a world leader in the dynamic construction market.

#### Main products

#### Admixture systems

BASF technologies for admixture systems optimize the properties of concrete. They particularly contribute if used in extreme environments or in complex construction projects, such as bridges, skyscrapers and tunnels. Our well known admixture brands include: Glenium®, Rheobuild® and Pozzolith®. In underground construction, admixtures and machinery are offered under the Meyco® brand.

#### Construction systems

Construction systems protect and repair structures. BASF offers adhesives (PCI®), repair mortars (Emaco®), sports and industrial flooring (Conipur®, Ucrete®, Mastertop®), sealants (Masterflex®, Sonolastic®), waterproofing membranes (Masterseal®), and products for wall systems and facades (Heck®, Senergy®, Colfirmit®, Rajasil®).

#### **BASF** market position

Admixture systems: global #1 | Construction systems: globally among top 3, sports flooring global #1

#### Main competitors

Admixture systems: Sika, W.R. Grace, Mapei | Construction systems: RPM, Mapei, Bostik, Sika

#### Growth above construction industry

Construction industry volume (€4,200 billion in 2008)

- Biggest industry of national economies
- Growth depending on macroeconomics

#### Construction chemicals market (€28 billion in 2008)

- Growth 1.5-3% higher than construction industry growth
- Chemicals growth driven by demand for materials with improved functionality allowing for differentiated building materials and reduced total construction cost (material and labor)

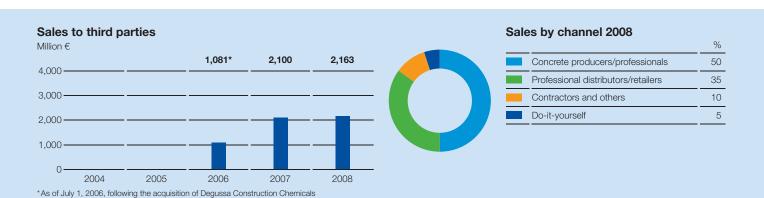
BASF Construction Chemicals strives to outperform the construction chemicals market growth rate.

#### **BASF** levers to outperform markets

Focus on growth markets, megatrends and lead customers | Further growth potential within BASF Verbund (e.g. global presence, R&D, backward integration) | High-value solutions for our customers

#### Focus of R&D

The main targets are to improve the durability of concrete, develop customized admixtures that reduce the overall construction cost and produce completely new polymers based on novel molecular architectures. Fundamental research into mineralogy and the interaction of polymers and hydraulic binders are crucial for future success. Furthermore, we are focusing on reactive resins, non-reactive/water-based polymers and new formulations as well as steady improvements from batch to continuous production processes.



Products matching a broad variety of customer needs

Reliability of product performance
Quality of sales and technical service
Developing customized solutions
Anticipating future market trends

#### **Key capabilities of BASF**

Customer orientation, proximity to market, experienced staff, high flexibility, established brands

Integration into BASF product, technology, and know-how Verbund

#### Acquisitions/JVs/Investments (2006–2008)

Product group	Description	Year	
Construction Chemicals	truction Chemicals Acquisition of Degussa Construction Chemicals		
Concrete admixtures	Acquisition of Hi Con in Sichuan, China	2007	
Concrete admixtures	Investment in concrete admixture in Zibo, China	2007	
Concrete admixtures	Investment in concrete admixture in Ploiesti, Romania	2007	
Construction systems – flooring	Investment in tinting concept in Schaffhausen, Switzerland	2007	
Construction systems – sealants	Investment in polyurethane sealants in Colorado, USA	2007	
Construction systems – tile fixing	Investment in tile adhesive sytems in Foshan, China	2007	
Concrete admixtures	Investment in concrete admixtures in Guaratinguetá, Brazil	2008	
Concrete admixtures	Investment in concrete admixtures in Wuhan, China	2008	
Concrete admixtures	Investment in concrete admixtures in Kolkata, India	2008	
Concrete admixtures & construction systems	Investment in concrete admixtures, water- proofing, precision grouting and other con- struction systems in Karachi, Pakistan	2008	
Concrete admixtures	Investment in concrete admixtures in Huzhou, China	2008	
Concrete admixtures	Acquisition of Kejie Admixture Science & Technology Co. Ltd., Guangdong, China	2008	

#### Divestitures/Shutdowns (from 2009 onwards)

Product group	Description	Year
Concrete admixtures	Divestiture of the admixture systems business of BASF Construction Chemicals (Korea)	2009

#### **Construction Chemicals target customers**

Business area	Customer industries		
Admixture systems	Ready-mix concrete		
	Precast concrete		
	Manufactured concrete products		
	Tunnel building		
	Mining		

Invisible contribution:

Products for improving the workability and final properties of concrete

Business area	Customers
Construction systems	Construction industry, especially:
	- Distributors
	- Contractors and applicators
	- Owners of buildings

Visible contribution:

Finished products for bonding, protecting and repairing building materials



- 1. RheoFIT®: Innovative admixtures for better concrete products addressing key requirements: fit for economics, fit for performance, fit for aesthetics, and fit for durability.
- 2. Glenium® SKY: Ensures a constant high-quality concrete with a low water/cement ratio and provides a concrete with extended workability.
- 3. Sonolastic®: Next generation sealant and adhesive products with new superior properties.
- 4. Nanosilent®: Self-levelling isolation mortar that combines three steps into a single operation: levelling, isolation and footfall sound reduction.
- 5. Nanocrete®: Easily useable repair mortars with improved shrinkage compensation and adhesive properties.
- 6. RheoMATRIX®: Unique stabilizer providing superior robustness in highly fluid concretes, enabling the construction industry to save time and money while increasing concrete durability and quality.

## **Coatings**

Coatings combine protection and aesthetics with eco-efficiency in tailor-made customer products and processes



BASF's Coatings division offers innovative and environmentally friendly products for the automotive industry, including both finishes and refinishes, and for particular segments of the industrial coatings market. BASF also sells decorative paints mainly in South America for interior and exterior use in residential and commercial buildings. We combine protection and aesthetics with eco-efficiency in tailor-made customer products and processes.

#### Main products

Automotive OEM (Original Equipment Manufacturer) coatings solutions BASF offers complete automobile coatings solutions including e-coat (CathoGuard®), primer (StarBloc®), basecoat (ColorPro®) and clearcoat (ProGloss®) as well as extensive technical support to most of the world's leading automobile manufacturers.

#### Automotive refinish/commercial transport coatings solutions

For the refinishing of cars and commercial vehicles, BASF offers topcoat and undercoat materials under the global brands Glasurit® and R-M®, which are sold to paint distributors and automotive repair shops. BASF is a leader in the field of waterborne coatings as well as high-solid systems, enhanced by added-value tools for end users.

#### Industrial coatings solutions

BASF offers environmentally efficient systems for coating industrial products, such as Coiltec®, a universal chromate-free coil coating primer. Application technologies include precoatings, electro-deposition and liquid coatings that are used on household appliances, radiator components, industrial buildings, ships and wind turbines.

#### Decorative paints

For interior and exterior use in buildings, BASF offers decorative paints, marketed under the well known premium brand Suvinil® in South America and sold under the Relius® brand in Europe.

#### **BASF** market position

Global #3 in OEM automotive coatings | Global #3 in automotive refinish coatings | Global #3 in coil coatings | Decorative paints South America #1

#### Main competitors

Automotive OEM coatings: DuPont, PPG, Kansai Paint | Automotive refinish coatings: DuPont, PPG, Akzo | Industrial coatings: Akzo, Valspar, DuPont | Decorative paints South America: Akzo, Sherwin Williams

#### **BASF** levers to outperform markets

Leading application know-how | Global production and market presence | Technical support on-site with the customer | Innovative products and processes

#### Sales to third parties Sales by first customer industry 2008 Million € 2.022 2.587 2.496 2.180 2.414 Automotive 4 000 Construction 18 3,000 Metal 9 Others 5 2 000 1,000

2008

Combination of protection and aesthetics as value indicator

Managing raw material price pressure, especially solvents and resins

Value pricing of additional services along the supply chain

Efficient distribution channels in end-user markets Innovation transfer into the market

#### **Key capabilities of BASF**

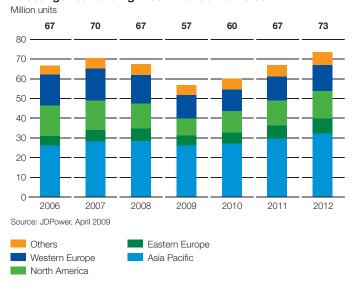
Strong premium brands in end-user markets Innovative long-term cooperation with leading OEM customers

End-user services creating additional value and long-term relationships

Services and tools within automotive industry for handling of color complexity

Leveraging strong market position and application know-how from mature markets into growing markets

#### Passenger car and light commercial vehicles



#### Focus of R&D

Our innovation efforts for the automotive industry are focused on close partnerships with our customers in order to formulate, for instance, new coatings solutions for integrated processes, unique eco-efficient colors, and extremely durable clear coats by using the latest crosslinking technologies (e.g. nano architectures, UV technology). Additional research topics are improved products for new technology markets (e.g. wind energy) and ecological requirements (e.g. chromate-free coil coating primer).

#### Acquisitions/JVs/Investments (2006-2008)

Product group	Description	Year	
Automotive OEM	New plant in Pavlovski Posad, Russia	2007	
Decorative paints	Resin expansion in Demarchi, Brazil	2008	
Automotive OEM and Refinish	Acquisition of remaining 50% of joint venture with Yasar, Turkey	2008	

#### Acquisitions/Investments (from 2009 onwards)

Product group	Description	Year
Automotive OEM	Water-based coatings expansion in Würzburg, Germany	2009
Automotive OEM	Acquisition of motorcycle coatings business from NTL and set-up of regional platform for ASEAN in Thailand	2009

#### Divestitures/Shutdowns (2006–2008)

Product group	Description	Year
Automotive OEM	utomotive OEM Closure of powder coatings plant Morganton, North Carolina, USA	
Industrial Coatings	Sale of coil coatings business in Belvidere, New Jersey, USA	2008
Industrial Coatings	Closure of Decatur site in Alabama, USA	2008
	<u>·</u>	



- 1. Integrated Process: Reduction of one process step by integration of functionality of one layer into another coatings layer, creating synergies for our OEM customers.
- 2. UV-curing Refinish BaseCoat: Eco-friendly and economical fast curing resulting in high scratch resistance, extreme hardness and durability.
- 3. Blade protect: Easily applicable coating that substantially extends lifetime of rotor blades in wind energy mills particularly on leading edges suffering from abrasion.
- 4. Coating as a decorative element: Positioning of decorative paints in South America as aesthetic elements aimed at end customers by offering small color test products as well as online color environment simulators.



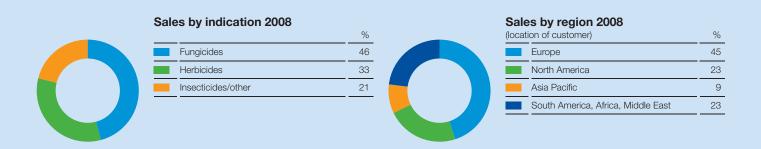
## Agricultural Solutions

Our crop protection products safeguard crops and thus protect harvests. We strengthen our competitive position with innovative products. Our research in plant biotechnology focuses on plants for a superior agricultural productivity, for healthier nutrition and for renewable raw materials. BASF Plant Science is working on most attractive agronomic and output traits of second and third generation with R&D expenditures of €410 million in 2006–2008 mainly reported under Other (see pages 27 to 29).

#### Segment data\*

2006	2007	Q1	Q2	Q3	Q4	2008
3,079	3,137	946	1,159	636	668	3,409
5.9	5.4	5.9	7.1	4.0	4.7	5.5
688	718	306	422	78	99	905
22.3	22.9	32.3	36.4	12.3	14.8	26.5
402	526	259	363	31	53	706
13.1	16.8	27.4	31.3	4.9	7.9	20.7
472	516	259	363	31	52	705
15.3	16.4	27.4	31.3	4.9	7.8	20.7
	3,079 5.9 688 22.3 402 13.1 472	3,079 3,137 5.9 5.4 688 718 22.3 22.9 402 526 13.1 16.8 472 516	3,079 3,137 946 5.9 5.4 5.9 688 718 306 22.3 22.9 32.3 402 526 259 13.1 16.8 27.4 472 516 259	3,079     3,137     946     1,159       5.9     5.4     5.9     7.1       688     718     306     422       22.3     22.9     32.3     36.4       402     526     259     363       13.1     16.8     27.4     31.3       472     516     259     363	3,079     3,137     946     1,159     636       5.9     5.4     5.9     7.1     4.0       688     718     306     422     78       22.3     22.9     32.3     36.4     12.3       402     526     259     363     31       13.1     16.8     27.4     31.3     4.9       472     516     259     363     31	3,079     3,137     946     1,159     636     668       5.9     5.4     5.9     7.1     4.0     4.7       688     718     306     422     78     99       22.3     22.9     32.3     36.4     12.3     14.8       402     526     259     363     31     53       13.1     16.8     27.4     31.3     4.9     7.9       472     516     259     363     31     52

<sup>\*</sup>As of January 1, 2008, we restructured our segments on the basis of similar products, production processes and customer industries. The previous years' figures have been adjusted accordingly.



## **Crop Protection**



Innovative solutions for modern agriculture

BASF's Crop Protection division directs major resources towards meeting the needs of the high-value agricultural markets in Western and Central Europe, North America, Brazil, Argentina and Japan. The division pursues to sustain its role as a leading innovator by continuing its extensive research and development activities. We aim to achieve a 25% EBITDA margin before special items under optimal conditions.

#### Main products

#### F 500<sup>®</sup> (pyraclostrobin)

F 500° is a highly effective fungicide, is safe for crops and has a favorable toxicological and ecotoxicological profile. F 500° has been approved in more than 60 countries for over 150 crops in over 100 indications. Products containing F 500° have been launched successfully in all regions. Development of Plant Health, a novel high-value market segment, is based on F 500° fungicide.

#### Boscalid

Boscalid is one of the most recent active ingredients from our research and is highly effective for controlling fungal diseases, especially in fruits and vegetables. With its broad spectrum of activity and crop uses, Boscalid is the backbone of our specialty crop business, complementing our strobilurins and other molecules. Launched in 2003, it has received registrations in over 50 countries for more than 200 crops in over 100 indications.

#### The Clearfield® production system

The Clearfield® production system combines herbicide-resistant seeds developed by using enhanced plant breeding methods (non-GMO) with custom-designed herbicide solutions. Clearfield® crops currently being marketed include canola, sunflower, corn, rice and wheat.

#### Fipronil

Fipronil is an active ingredient of a unique class of insecticide chemistry. It plays a strategic role in BASF's insecticides portfolio. Fipronil puts the Crop Protection division in a position to strongly participate in ongoing and future shifts in agricultural demand towards more modern insecticides. Furthermore, it gives BASF a strong position in attractive non-crop market segments, such as structural/urban pest control, turf and ornamental plants.

#### **BASF** market position

Fungicides #3 | Herbicides #5 | Insecticides #3

#### Main competitors

Fungicides: Syngenta, Bayer | Herbicides: Monsanto, Syngenta, Bayer, Dow | Insecticides: Bayer, Syngenta

#### **BASF** levers to outperform markets

Innovative solutions | Focus on high-value markets and products | High share of sales with new active ingredients

#### Focus of R&D

Significant R&D activities focusing on fungicides, insecticides and selected herbicides, where further market growth and high demand for innovation is expected.

#### Sales to third parties Sales by first customer industry 2008 Million € 3,354 3.137 3.409 3.298 3.079 Agriculture 86 4 000 Non-Agricultural\* 14 3,000 Agua-culture, forestry, home and garden, industrial weed control, ornamentals, public health, turf, urban pest control 2 000 1 000

2005

New products from research pipeline or from acquisitions

Alignment of resources as well as product and service offering to customers' needs in high-value and innovation-driven markets

Effective management of assets and costs

#### **Key capabilities of BASF**

Strong R&D engine, building on track record of successful innovations

Focus on high-value markets and products Strict portfolio management

#### Powerful agrochemical R&D pipeline

Increased peak sales potential due to high demand for our innovative products

Active ingredients/ projects	Market segments	Peak sales potential
F500® (F), Boscalid (F))	Field crops, specialty crops	€1,400 million*
Tritosulfuron (H)	Field crops	
Chlorfenapyr (I)	Non-crop	
Dimoxystrobin (F) Metrafenone (F) Orysastrobin (F)	Field crops, specialty crops	
Topramezone (H)	Field crops	
Metaflumizone (I)	Specialty crops	
F500® Seed treatment (F)	Field crops, seed treatment	
2 Fungicides	Field crops, specialty crops, seed treatment	€700 million
1 Herbicide (Kixor™)	Field crops, specialty crops	
2 Herbicide-tolerant projects	Field crops	
1 Insecticide	Non-crop	
	projects  F500® (F), Boscalid (F))  Tritosulfuron (H)  Chlorfenapyr (I)  Dimoxystrobin (F) Metrafenone (F) Orysastrobin (F)  Topramezone (H)  Metaflumizone (I)  F500® Seed treatment (F)  2 Fungicides  1 Herbicide (Kixor™)  2 Herbicide-tolerant projects	Folo® (F), Boscalid (F))  Tritosulfuron (H)  Chlorfenapyr (I)  Dimoxystrobin (F) Metrafenone (F) Orysastrobin (F)  Topramezone (H)  Metaflumizone (I)  Field crops  Metaflumizone (I)  Specialty crops  Field crops  Metaflumizone (I)  Field crops  Metaflumizone (I)  Field crops  Field crops  Field crops, seed treatment  Field crops, specialty crops, seed treatment  1 Herbicide (Kixor™)  Field crops, specialty crops, seed treatment  1 Herbicide (Kixor™)  Field crops, specialty crops Field crops, specialty crops seed treatment  Field crops, specialty crops Field crops, specialty crops Field crops, specialty crops Field crops Field crops Field crops Field crops

<sup>\*</sup>Thereof products launched and in launch reached 70% in 2008

#### Acquisitions/JVs/Investments (2006-2008)

Product group	Description	Year
Non-crop insecticides	Acquisition of Sorex Group pest control business in USA and United Kingdom	2008

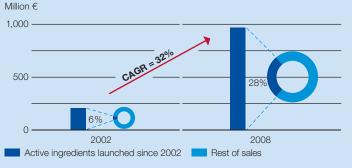
#### Divestitures/Shutdowns (2006–2008)

Product group	Description	
Micro Flo	Divestiture of major assets (U.S. market)	2006
Manufacturing site	Closure of agrochemical synthesis in Thane, India	2006
Terbufos	Divestiture of worldwide assets (no production)	2006

#### Investments (from 2009 onwards)

Product group	Description	Year
Kixor™	New production capacity in USA	2010
F 500®, Boscalid, Fipronil, Metazachlor	Capacity expansion in Europe, USA and South America	2010

#### Share of innovative new active ingredients in total sales



- 1. Plant Health: Pioneering a novel high-value market segment with F500® fungicide.
- 2. Boscalid active ingredient: Broad spectrum fungicide in launch with successfull expansion of market potential.
- 3. F500® seed treatment successfully launched: Introducing Plant Health effects into seed treatment solutions.
- 4. Innovative herbicide in development: Kixor™ – highly effective herbicide
- against important broadleaf weeds in key crops and excellent control of major glyphosate resistant weeds.
- 5. New herbicide-tolerant project in development: Next generation of herbicide-resistant crops in cooperation with Monsanto.
- 6. New products from BASF Technology Verbund, such as Interceptor™: The long-lasting insecticide nets for malaria control.

F = Fungicide

H = Herbicide

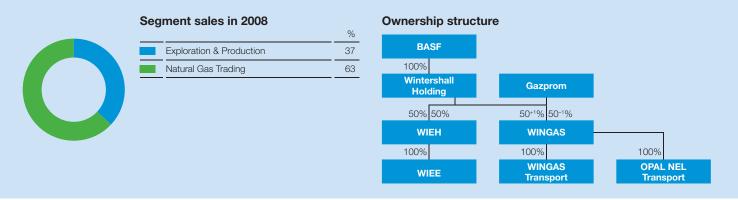


## Oil & Gas

As the largest German producer of oil and gas, we benefit from our many years of expertise in exploration and production. We concentrate on oil and gas-rich regions in Europe, North Africa, South America, Russia and the Caspian Sea region. Together with our partner Gazprom, we are tapping into the growth opportunities arising from increased demand for natural gas in Europe and the liberalization of European gas markets through our "Gas for Europe" strategy.

#### Segment data

Million €	2006	2007	Q1	Q2	Q3	Q4	2008
Sales to third parties	10,687	10,517	3,744	3,201	3,182	4,318	14,445
Share of total BASF sales (%)	20.3	18.1	23.5	19.6	20.2	30.2	23.2
Thereof Exploration & Production	4,555	4,365	1,383	1,388	1,415	1,122	5,308
Natural Gas Trading	6,132	6,152	2,361	1,813	1,767	3,196	9,137
Income from operations before depreciation and amortization (EBITDA)	3,781	3,592	1,118	1,167	1,011	1,113	4,409
EBITDA margin (%)	35.4	34.2	29.9	36.5	31.8	25.8	30.5
Thereof Exploration & Production	3,023	2,901	910	1,086	1,011	737	3,744
Natural Gas Trading	758	691	208	81	_	376	665
Income from operations (EBIT) before special items	3,260	3,031	984	1,026	870	964	3,844
EBIT before special items margin (%)	30.5	28.8	26.3	32.1	27.3	22.3	26.6
Thereof Exploration & Production	2,655	2,486	812	980	905	622	3,319
Natural Gas Trading	605	545	172	46	(35)	342	525
Income from operations (EBIT)	3,265	3,031	984	1,026	870	964	3,844
EBIT margin (%)	30.6	28.8	26.3	32.1	27.3	22.3	26.6
Thereof Exploration & Production	2,660	2,486	812	980	905	622	3,319
Natural Gas Trading	605	545	172	46	(35)	342	525
Noncompensable foreign income taxes for oil production	1,282	1,302	458	577	531	285	1,851



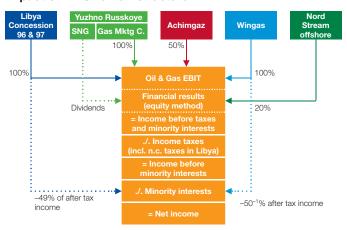
## **Exploration** & Production

Sustainable earnings through focused E&P activities and selective technology development



Exploration and production is performed by Wintershall Holding AG and its subsidiaries. Wintershall focuses its activities on core regions: Europe, North Africa, South America, Russia and the Caspian Sea. Based on current activities in Qatar, Wintershall is evaluating further opportunities in the Middle East. In Europe, the business is driven by the integration of the E&P business and the gas distribution, storage and trading business, which are combined in our "Gas for Europe" strategy.

#### Projects with Gazprom – Impact on BASF's P&L structure



#### **BASF** levers to outperform markets

Partnership with Gazprom, access to gas resources | Technology for developing complex oil and gas reservoirs (e.g. extended reach drilling, enhanced oil recovery) | Integrated upstream/midstream player | Lean organization

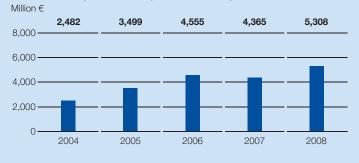
#### **BASF** benefits from E&P business

Long-term security of gas supply in Europe | Hydrocarbon hedge | Significant cash flow | Sustainable profitability

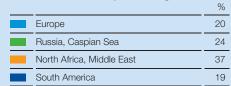
#### Acquisitions/JVs/Investments (2006–2008)

Description	Year
Development of Carina/Aries gas field, Argentina	2006
Mittelplate oil field, offshore Germany, installation of higher capacity drilling rig	2006
Exploration license award in Area 201 (Kufra), Libya	2006
Asset swap with Gazprom; farm-in Yuzhno Russkoye, Russia	2007
Exploration license award in Block 3, Qatar	2007
Exploration license award in Block 4N, Qatar	2008
Acquisition of Revus Energy ASA, Norway	2008
Exploration license awards in the North Sea (Norway)	2008
Exploration license award in Chile	2008
Acquisition of shares in two exploration blocks in Argentina	2008

#### Sales development in exploration and production



### Production 2008 by core region



Exploration success, successful acquisitions and farm-ins

Selective technology development and deployment

Lean organization
Integrated gas business

#### **Key capabilities of BASF**

Focus on core regions

Technology for the development of complex reservoirs and longstanding experience in enhanced oil recovery (EOR)

Partnership with Gazprom: direct involvement in the production of natural gas in West Siberia

#### Investments (from 2009 onwards)

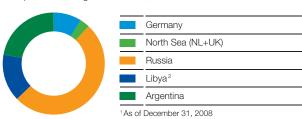
Description	Year
Achimgaz, development of gas/condensate field, Russia	2005-2015
Gas field development in Yuzhno Russkoye, Russia	2007–2013
Water flooding project, Libya	2009
Gas field development in E18, The Netherlands	2009
Gas field development in P9a, The Netherlands	2009
Gas field development in Aguada Pichana, Argentina	2009

#### Divestitures/Shutdowns (2006–2008)

Description	Year
49% of a German Wintershall subsidiary holding Libyan concessions 96 and 97 were transferred to OAO Gazprom as part of the Yuzhno	2007
Russkoye asset swap	

#### **Reserves**

Total proven oil and gas reserves 1: 1,149 million boe



<sup>&</sup>lt;sup>2</sup>Libyan concessions 96 and 97 at 51%

#### **Exploration and production**



#### Europe

- Traditional strength in oil and gas
- Base for technological expertise

#### Russia

%

9

3

51

15

22

%

45

55

- Development of Siberian gas

#### Caspian Sea

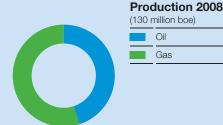
 Exploration in Russian and Turkmen sectors

#### North Africa/Middle East

- Established player in Libya since 1958
- Exploration activities in Qatar and Oman
- Additional growth opportunities

#### South America

- Established production in Argentina and further exploration
- Exploration in Chile



#### **Projects**

1. Achimgaz: Total reserves: 200 billion m³ gas, 40 million tons condensate; development cost: €1.1 billion (100%), BASF share €0.6 billion; production startup in July 2008.

2. Asset swap with Gazprom: 600 billion m³ gas reserves in Yuzhno Russkoye, Russia; development cost €1.9 billion (100%), BASF share €0.7 billion; production start in 2007; BASF with 25% less one share and 10% non-voting shares significantly improves its reserve base and long-term production volumes; Gazprom extends its Wingas participation (50% less one share, up from 35%); Gazprom participates with 49% share in a German Wintershall subsidiary holding Libyan onshore concessions 96 and 97.

3. Integration of Revus Energy ASA: With the acquisition of Revus Energy ASA, Wintershall now has interests in more than 60 licenses in Norway and 30 licenses in the UK.

## Natural Gas Trading

Wingas – more energy together. Securing natural gas supply for Europe.

The natural gas trading business is mainly performed by Wingas GmbH & Co. KG and its subsidiaries. Wingas is a joint venture of Wintershall Holding AG in Kassel, Germany's largest crude oil and natural gas producer, and Russia's OAO Gazprom. Wingas has been supplying natural gas to public utilities, regional gas suppliers, industrial facilities and power plants in Germany and other European countries since 1993. Wingas also operates and markets storage capacity as well as fiber-optic capacity. Wingas subsidiary Wingas Transport is operating and marketing more than 2,000 km of pipeline network capacity in Germany. Other gas trading joint ventures with Gazprom are WIEH, focusing on sales in Eastern Germany, and WIEE, which is active in Romania and Bulgaria. In 2008, total sales were 42 billion cubic meters, of which 30 billion cubic meters came from Wingas.

#### **BASF** levers to outperform markets

Partnership with Gazprom, access to long-term gas resources in a market environment of rapidly increasing import demand | Strong focus on storage (largest storage facility in Western Europe) to benefit from growing demand for flexibility and security of supply | High-performing pipeline network in the heart of Europe (turntable for gas) | Lean organization

#### BASF benefits from natural gas trading business

Long-term security of gas supply in Europe | Sustainable profitability through a strong downstream position in a growing European gas market | Contribution to reduce volatility of BASF Group earnings | Part of the value-generating gas chain (upstream/midstream/downstream)

#### Acquisitions/JVs/Investments (2006–2008)

Description	begin	end
Extension of STEGAL, WEDAL pipelines in Germany		2006
Acquisition of 50% of HydroWINGAS, United Kingdom		2007
Haidach gas storage facility, Austria (first phase)	2005	2007

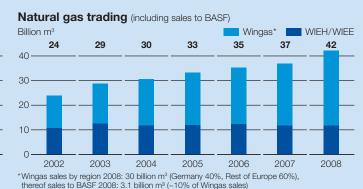
#### Investments (from 2009 onwards)

Description	begin	end
Ostseepipeline-Anschlussleitung (OPAL)		2011
Haidach gas storage facility, Austria (second phase)	2007	2011
Nord Stream I+II offshore pipeline project	2007	2012
Jemgum gas storage, Germany	2007	2013
Norddeutsche Erdgasleitung (NEL)	2009	2012
Saltfleetby gas storage, United Kingdom	2009	2012

#### Divestitures/Shutdowns (2006–2008)

Description	Year
15% less one share of Wingas were transferred from Wintershall to OAO Gazprom as part of the asset swap between Wintershall and Gazprom	2007

# Sales development in natural gas trading Million € 2,781 4,157 6,132 6,152 9,137 12,000 9,000 6,000 9,000



Oil price volatility and time lag effects

Weather conditions

Spot market opportunities

Long-term access to gas reserves, transport and storage capacity

Liberalization of European natural gas markets

#### **Key capabilities of BASF**

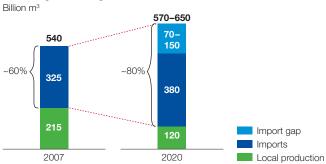
Portfolio of supply and sales contracts (diversified in regions, price indexations and customer segments) with integrated storage facilities

Partnership with Gazprom, largest gas reserve holder worldwide

Integrated value chain from production in Siberia to infrastrucure (pipelines/storage) and gas trading with focus on Western Europe

Modern high-performance gas transportation system as logistics hub in Central Europe

#### Growing natural gas demand in EU 27



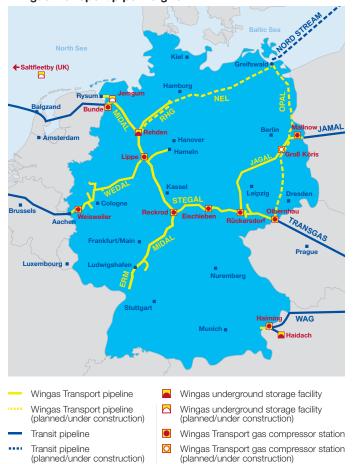
#### Time-lag effect in natural gas trading

In continental Europe, natural gas prices under long-term contracts are linked to the prices of oil products, e.g. light fuel oil, and therefore fluctuate with the oil price. The pricing scheme for import gas differs from the pricing scheme for selling the gas to our customers:

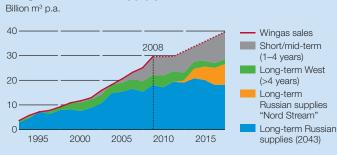
- For import gas the price is calculated on the basis of the average oil price of the last nine months with a monthly adaptation.
- The sales price is calculated on the basis of the average oil price of only the first six months of that nine-month period with a quarterly adaptation

As a result, in times of continuously rising oil prices the import price follows the oil price quicker than the sales price and the margin of the gas trading business is squeezed – leading to a negative time-lag effect. Conversely in times of continuously falling oil prices import prices fall quicker than sales prices resulting in higher margins – a positive time-lag effect.

#### Wingas Transport pipeline grid



#### Wingas diversified supply portfolio



#### **Projects**

- 1. Nord Stream: Largest single infrastructure project for European supply, Gazprom 51%, E.ON 20%, BASF 20%, Gasunie 9%, total capacity 55 billion m³ p.a., total investment offshore €7.4 billion. (Source: Nord Stream AG)
- 2. OPAL: WINGAS 80% and E.ON Ruhrgas 20%, total capacity >35 billion m³ p.a., following the completion of the regional planning procedures in Mecklenburg Western Pomerania, Brandenburg and Saxony, the planning approval processes for the OPAL connecting
- pipeline are now underway in these states. (Source: OPAL NEL Transport GmbH)
- 3. NEL: WINGAS 75% and E.ON Ruhrgas 25%, total capacity >20 billion m³ p.a., the planning approval process is set to begin in 2009. The 440 kilometer long NEL will be used to transport Russian natural gas from the Nord Stream Baltic Sea pipeline landing point in Lubmin near Greifswald towards Rehden in Lower Saxony. (Source: OPAL NEL Transport GmbH)

#### Supplementary information concerning oil and gas producing activities

The following tables provide supplemental information on the exploration and production business sector of the Oil & Gas segment. In the absence of detailed disclosure rules in this area under IFRS, the Group has elected to voluntarily disclose the data that would have been required under SFAS No.69 (Disclosure of Oil and Gas Producing Activities). In order to present an economically meaningful reporting of the cooperation with Gazprom in the Yuzhno Russkoye project, several modifications have been

made to SFAS 69. BASF has an interest of 35% in the economic rewards of the Yuzhno Russkoye field through Severneftegazprom (SNG), the company that holds the production license. SNG is accounted for by the equity method. In addition, a fully consolidated Gas Trading Company has been established to sell BASF's share of natural gas from the Yuzhno Russkoye gas field (see graph on page 70).

- The following figures do not include sales for merchandise and services, such as oil trading activities or revenues for joint venture services.
- Only income and expenses that are directly associated with Wintershall's oil and gas production activities are stated. These amounts do not include financing costs (such as interest expenses) or corporate overheads.
- Due to contractual rules, figures below do not include any volumes or values from the Achimgaz project.
- The following figures include "at equity" companies such as SNG or Wolgodeminoil (50/50-JV with Lukoil).
- A fully consolidated Gas Trading Company buys BASF's share of gas from SNG and sells the gas to Gazprom according to agreed formulas.
   Therefore only the net margin is reported as sales in the income statement.
- The table on the right hand side shows the main differences between figures from those provided for Exploration & Production in BASF's consolidated reporting for the Oil & Gas segment and the supplementary information concerning oil and gas producing activities.

The regions include the following countries with operational activities:

- Russia/Caspian Sea region: Russia, Turkmenistan
- Rest of Europe: Denmark, United Kingdom, The Netherlands, Norway, Romania

Supplementary **Consolidated BASF** information on Oil & Gas reporting (pp. 69-73) segment (pp. 74-75) All Revenues and Included Included expenses directly associated with the oil and gas production of consolidated activities Other items of consoli-Included Not included dated activities in E&P (e.g., sales for merchandise (Oil Trading) and joint venture services) Achimgaz Consolidated at 50% Not included (Service Contract)

Not included in seament

income from operations.

included as "at equity" in

Revenues recorded on a

financial result

net margin basis

Included

Included

Revenues recorded on a

net margin basis

Not included

- North Africa/Middle East: Qatar, Libya, Mauritania, Oman
- South America: Argentina, Chile

"At equity" companies such as Severneftegaz-

prom or Wolgodeminoil

Gas Trading Company

for Yuzhno Russkove

Corporate overhead

costs and financing

costs

#### Operating results of operations from oil and gas producing activities

<b>2008</b> (million €)		Rest of	Russia, Caspian Sea	North Africa,	South	
	Germany	Europe	region	Middle East	America	Total
Sales crude oil (incl. condensate and LPG)	460	39	62	2,753	145	3,459
Sales natural gas	300	452	456	8	147	1,363
Local duties (royalties, export, etc.)	129	5	53	136	80	403
Total sales (net of duties)	631	486	465	2,625	212	4,419
Production costs	97	82	25	158	63	425
Exploration expenses	12	134	27	44	12	229
Depreciation, amortization and impairment	59	111	55	57	37	319
Other	(4)	9	20	19	4	48
Operating income before taxes	467	150	338	2,347	96	3,398
Income taxes	136	51	92	2,203	23	2,505
Operating income after taxes	331	99	246	144	73	893
Minority interests <sup>1</sup>	_	_	_	87	_	87
Operating income after taxes and minority interests	331	99	246	57	73	806
Thereof at equity companies <sup>2</sup>	_	_	78	_	_	78
Operating income after taxes, minority interests and at equity companies	331	99	168	57	73	728

Gazprom share in a subsubsidiary holding Libyan concessions

<sup>&</sup>lt;sup>2</sup>SNG, Wolgodeminoil

#### Oil and gas reserves

Proved oil and gas reserves are the estimated volumes of crude oil, natural gas and natural gas liquids that are shown by geological and engineering data with reasonable certainty to be recoverable in future years from known reserves under existing economic and operating conditions. Accordingly, reserve estimates could be materially different from the quantities of oil and natural gas that are ultimately recovered. To reduce uncertainties, Wintershall has used independent, internationally recognized reserve audi-

tors for some years to audit the reserves of its major oil and gas fields. The tables below show the estimated net quantities of the company's proved oil and gas reserves and proved developed oil and gas reserves as of December 31, 2008 as well as changes in estimated proved reserves as a result of production and other factors. Due to contractual rules, figures below do not include any volumes or values from the Achimgaz project.

2008 Oil	Germany	Rest of Europe	Russia, Caspian Sea region	North Africa, Middle East	South America	Total
Proved developed and undeveloped oil reserves as of January 1, millions of barrels (MMbbl)	63	1	11	270	45	390
Revisions and other changes	_	_	2	60	(1)	61
Extensions and discoveries	_	_	_		_	-
Purchase/sale of reserves	_	12	_		_	12
Production	8	1	1	44	5	59
Proved reserves as of December 31	55	12	12	286	39	404
Minority interests <sup>1</sup>	_	_	_	133	_	133
Proved reserves after minority interests	55	12	12	153	39	271
Thereof at equity companies <sup>2</sup>	_	_	12		_	12
Proved reserves after minority interests and at equity companies	55	12	_	153	39	259
Minority interests in production <sup>1</sup>	_	_	_	21	_	21
Proved developed reserves as of December 31	40	7	12	282	32	373

<sup>&</sup>lt;sup>1</sup>Gazprom share in a subsubsidiary holding Libyan concessions

Wolgodeminoil

2008 Gas	Germany	Rest of Europe	Russia, Caspian Sea region	North Africa, Middle East	South America	Total
Proved developed and undeveloped gas reserves as of January 1, Billion Standard Cubic Feet (BSCF)¹	365	170	3,239	194	1,337	5,305
Revisions and other changes	(11)	16	375	25	63	468
Extensions and discoveries	_	24	_	_	_	24
Purchase/sale of reserves	_	(4)	_	_	_	(4)
Production	41	62	182	27	119	431
Proved reserves as of December 31	313	144	3,432	192	1,281	5,362
Minority interests <sup>2</sup>	_	_	_	94	_	94
Proved reserves after minority interests	313	144	3,432	98	1,281	5,268
Thereof at equity companies <sup>3</sup>	_	_	3,432	_	_	3,432
Proved reserves after minority interests and at equity companies	313	144	_	98	1,281	1,836
Minority interests in production <sup>2</sup>		_	_	13	_	13
Proved developed reserves as of December 31	308	126	2,512	190	1,007	4,143

<sup>&</sup>lt;sup>1</sup>The natural gas volumes can be converted with the factor 6 BSCF per MMBOE (Million Barrel Oil Equivalent).

3 SNG

#### Costs incurred in oil and gas property acquisition, exploration and development activities

Costs incurred represent amounts capitalized or charged against income as incurred in connection with oil and gas property acquisition, exploration and development activities.

<b>2008</b> (million €)	Germany	Rest of Europe	Russia, Caspian Sea region	North Africa, Middle East	South America	Total
Acquisitions		559	-	_	_	559
Exploration	15	113	24	75	12	239
Development	75	33	50	89	40	287
Total net costs	90	705	74	164	52	1,085

<sup>&</sup>lt;sup>2</sup>Gazprom share in a subsubsidiary holding Libyan concessions

## Other

#### Financial data

Million €	2006	2007	Q1	Q2	Q3	Q4	2008
Sales to third parties	5,822	6,610	1,523	1,641	1,725	1,207	6,096
Thereof: Styrenics <sup>1</sup>	3,313	3,518	776	862	858	586	3,082
Income from operations before depreciation and amortization (EBITDA)	(61)	(175)	(145)	(12)	(297)	(98)	(552)
Income from operations (EBIT) before special items	(333)	(362)	(135)	13	(277)	(310)	(709)
Income from operations (EBIT)	(272)	(421)	(190)	(56)	(327)	(47)	(930)
Thereof: Group corporate costs <sup>2</sup>	(206)	(237)	(57)	(60)	(62)	(64)	(243)
Corporate research costs	(258)	(323)	(82)	(85)	(69)	(89)	(325)
Currency results, hedges and other valuation effects	86	90	27	(25)	(69)	(161)	(209)

<sup>&</sup>lt;sup>1</sup> As of December 31, 2007, BASF's styrene (SM), polystyrene (PS), styrene-butadiene-copolymer (SBC) and acrylonitrile butadiene styrene (ABS) businesses, which are managed under the name Styrenics, are reported under Other.

Business activities not allocated to any operating division are shown under Other and include, among other things:

Sale of feedstock

- Engineering and other services
- Remaining fertilizer activities
- Rental income and leases

As of December 31, 2007, parts of the former Styrenics division were classified as a disposal group. These concerned BASF's styrene monomer (SM), polystyrene (PS), styrene butadiene copolymer (SBC) and acrylonitrile butadiene styrene (ABS) businesses with plants in Antwerp, Belgium; Altamira, Mexico; Sao Jose dos Campos, Brazil; Ulsan, South Korea; and Dahej, India. In 2008, the planned sale could not be carried out. Due to the underlying macroeconomic conditions and the changes on the capital market, a divesture is no longer likely in the near future. As of December 31, 2008, the assets and liabilities of the disposal group were therefore reported under continuing operations.

As of January 1, 2008, Group corporate costs are no longer allocated to the segments but reported in Other. Group corporate costs consist of the expenses for steering the BASF Group. In 2008, these costs amounted to about €240 million.

The income from operations recorded under Other also includes the cost of corporate research predominantly for the growth clusters described on page 27. Furthermore, Other includes foreign currency results from the hedging of forecasted sales not allocated to the segments; the hedging of cross-segment net positions of monetary assets and liabilities; and the translation of financial indebtedness.

#### Composition of assets

Million €	2006	2007	2008
Assets of businesses included under Other	3,523	3,045	3,081
Financial assets	1,841	2,786	3,093
Deferred tax assets	622	679	930
Cash and cash equivalents/marketable securities	890	818	2,811
Defined benefit assets	367	417	165
Miscellaneous receivables/prepaid expenses	922	1,140	2,512
Total assets of Other	8,165	8,885	12,592

<sup>&</sup>lt;sup>2</sup> As of January 1, 2008, Group corporate costs, which consist of the expenses for steering the BASF Group, are no longer allocated to the segments but reported in Other.

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#### The following publications are also available

BASF In Brief 2008 BASF Report 2008 Quarterly Reports Facts and Figures 2009

#### Important dates

Interim report second quarter 2009 July 30, 2009

Interim report third quarter 2009 October 29, 2009

Full year results 2009 February 25, 2010

Interim report first quarter 2010 and Annual Meeting April 29, 2010, Mannheim

Ex-dividend date 2010 April 30, 2010

