Business review by segment

Segment overview (million €)

	Sales		Income from operations before depreciation and amortization (EBITDA)		Income from operations (EBIT) before special items	
	2011	**2010**	**2011**	**2010**	**2011**	**2010**
Chemicals	12,958	11,377	3,188	3,000	2,441	2,302
Plastics	10,990	9,830	1,678	1,721	1,203	1,284
Performance Products	15,697	12,288	2,312	2,162	1,727	1,554
Functional Solutions	11,361	9,703	921	861	559	467
Agricultural Solutions	4,165	4,033	981	938	810	749
Oil & Gas	12,051	10,791	2,616	2,977	2,111	2,430
Other[1]	6,275	5,851	297	(528)	(404)	(648)
	73,497	**63,873**	**11,993**	**11,131**	**8,447**	**8,138**

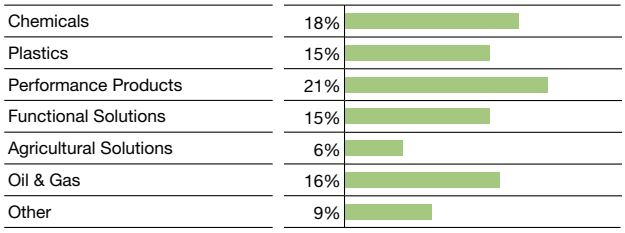
Segment overview (million €)

	Income from operations (EBIT)		Assets		Capital expenditures[2]	
	2011	**2010**	**2011**	**2010**	**2011**	**2010**
Chemicals	2,442	2,310	6,920	6,526	622	535
Plastics	1,259	1,273	5,297	5,114	423	250
Performance Products	1,361	1,345	13,680	13,409	648	3,000
Functional Solutions	427	457	9,725	9,364	359	208
Agricultural Solutions	808	749	5,350	5,063	150	145
Oil & Gas	2,111	2,334	10,232	9,150	1,274	996
Other[1]	178	(707)	9,971	10,767	170	170
	8,586	**7,761**	**61,175**	**59,393**	**3,646**	**5,304**

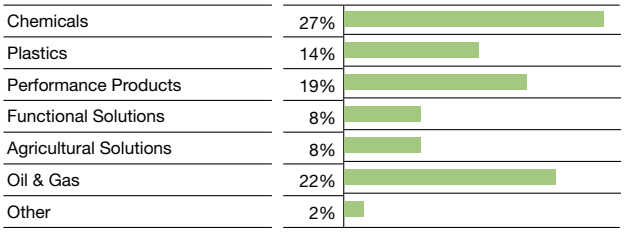
[1] Information on the composition of "Other" can be found in the Notes to the Consolidated Financial Statements from page 162 onward.

[2] Additions to property, plant and equipment (thereof from acquisitions: €66 million in 2011 and €833 million in 2010) and intangible assets (thereof from acquisitions: €141 million in 2011 and €1,906 million in 2010)

Sales by segment



Contributions to EBITDA by segment



Sales (million €)[1]

	1st quarter		2nd quarter		3rd quarter		4th quarter	
	2011	2010	2011	2010	2011	2010	2011	2010
Chemicals	3,276	2,588	3,392	2,970	3,168	2,874	3,122	2,945
Plastics	2,788	2,197	2,828	2,584	2,801	2,598	2,573	2,451
Performance Products	3,982	2,871	4,095	3,151	3,991	3,206	3,629	3,060
Functional Solutions	2,818	2,090	2,766	2,453	2,907	2,591	2,870	2,569
Agricultural Solutions	1,230	1,145	1,205	1,211	908	832	822	845
Oil & Gas	3,455	3,225	2,461	2,374	2,195	2,228	3,940	2,964
Other[2]	1,812	1,338	1,714	1,471	1,637	1,452	1,112	1,590
	19,361	**15,454**	**18,461**	**16,214**	**17,607**	**15,781**	**18,068**	**16,424**

Income from operations (EBIT) before special items (million €)[1]

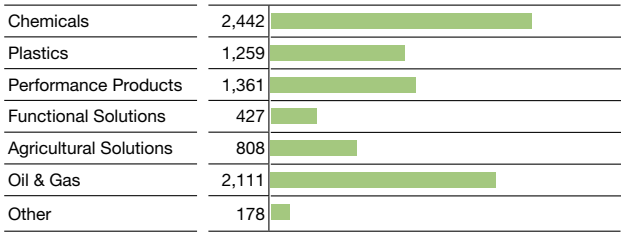
	1st quarter		2nd quarter		3rd quarter		4th quarter	
	2011	2010	2011	2010	2011	2010	2011	2010
Chemicals	765	461	674	687	621	617	381	537
Plastics	393	279	383	349	317	371	110	285
Performance Products	554	419	513	471	440	370	220	294
Functional Solutions	142	111	167	165	162	158	88	33
Agricultural Solutions	343	321	331	320	95	66	41	42
Oil & Gas	744	629	332	515	350	573	685	713
Other[2]	(209)	(266)	(163)	(301)	(21)	58	(11)	(139)
	2,732	**1,954**	**2,237**	**2,206**	**1,964**	**2,213**	**1,514**	**1,765**

Income from operations (EBIT) (million €)[1]

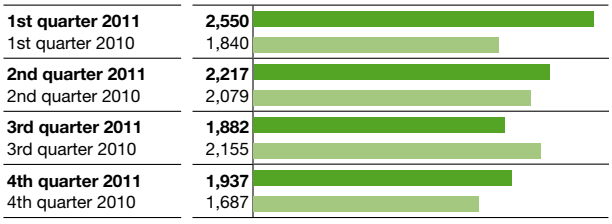
	1st quarter		2nd quarter		3rd quarter		4th quarter	
	2011	2010	2011	2010	2011	2010	2011	2010
Chemicals	765	461	686	687	612	619	379	543
Plastics	393	277	383	350	315	371	168	275
Performance Products	407	341	456	450	403	377	95	177
Functional Solutions	142	111	165	164	161	159	(41)	23
Agricultural Solutions	343	321	331	320	95	66	39	42
Oil & Gas	744	629	332	515	350	573	685	617
Other[2]	(244)	(300)	(136)	(407)	(54)	(10)	612	10
	2,550	**1,840**	**2,217**	**2,079**	**1,882**	**2,155**	**1,937**	**1,687**

[1] Quarterly results not audited
[2] Information on the composition of Other can be found in the Notes to the Consolidated Financial Statements from page 162 onward.

Contributions to EBIT by segment (million €)



EBIT BASF Group by quarter (million €)



Chemicals

Excellence in the Verbund, technology and cost leadership

The Chemicals segment consists of the Inorganics, Petrochemicals and Intermediates divisions. In our integrated production facilities – our Verbund – we produce a broad range of basic chemicals and downstream products in Europe, Asia and North America for our internal and external customers.

Segment strategy

We create value by driving growth with an attractive portfolio, investments in future markets and process and product innovations as well as by the competitive and flexible integration of our production into the BASF Verbund structures. We supply the BASF segments with basic chemicals for the production of high-value products. As a reliable supplier, we market our products to customers in downstream industries, primarily in the chemical, electronics, construction, textile, lumber, automotive, pharmaceutical and agrochemical industries. We continually improve our value-adding chains with innovations, capital expenditures and acquisitions in future markets. Technology and cost leadership are among our most important success factors. We achieve them by improving processes, implementing market-oriented business models, and efficiently using the synergy potential of our Verbund. We constantly optimize our portfolio and production structures and align them with regional market requirements.

Innovation

Our research activities are focused on the development of innovative production processes that will make us even more competitive. We are also continuously improving existing products and applications. In developing new products, we look at the needs of our external and internal customers and take advantage of the opportunities offered by value-adding chains in the Verbund and in the markets.

For example, we developed an innovative product line of iron salts based on our proven ultrapure iron technology which can be used to produce active ingredients for the treatment of iron deficiency anemia. Because our new iron salts satisfy the highest purity requirements, they conform to common international guidelines for use in medicines.

Products, customers and applications

Segment	Chemicals		
Division	**Inorganics**	**Petrochemicals**	**Intermediates**
Products	Basic products: ammonia, methanol, caustic soda, chlorine and standard alcoholates as well as sulfuric and nitric acid Specialties: chemicals for the semiconductor industry, salts, metal systems and organometallic compounds	Basic products: ethylene, propylene, butadiene, benzene, alcohols, solvents, plasticizers, alkylene oxides, glycols and acrylic monomers Specialties: special plasticizers such as Hexamoll DINCH, special acrylates	Basic products: butanediol and derivatives, alkylamines and alkanolamines, neopentylglycol, formic acid and propionic acid Specialties: specialty amines such as *tert*-Butylamine, gas scrubbing chemicals, hardeners for epoxy resin systems, vinyl monomers, acid chloride, chloroformate, chiral intermediates
Customer industries and applications	Use within BASF Verbund Specialties for the electronics, pharmaceutical, automotive and other industries	Use within BASF Verbund Chemical and plastics industries; detergent, automotive, packaging and textile industries; production of paints, coatings and cosmetics as well as oilfield, construction and paper chemicals	Use within BASF Verbund Starting materials for coatings, plastics, pharmaceuticals, textile fibers, crop protection products as well as detergents and cleaners

Strategy

- Supplying the value-adding chains in the BASF Verbund and marketing our products to external customers
- Most important success factors are technology and cost leadership
- Product portfolio and regional production structures are continuously optimized

Products

- Inorganics: basic products for our Verbund and specialties for the electronics and other industries
- Petrochemicals: broad range of basic products as well as specialties, for example, for the chemical and plastics industries
- Intermediates: most comprehensive intermediates portfolio in the world, such as starting materials for coatings, plastics or pharmaceuticals

Baxxodur systems
Shortened manufacturing process for wind turbine rotor blades

Value for BASF
We aim for

€300 million
in **annual sales** in wind energy growth market by 2020

Value for our customers

30%
shorter process for manufacturing wind turbine rotor blades

Value for BASF With our performance portfolio for wind energy, we are shaping one of the most dynamic growth markets in the world; we aim to increase our annual sales in this market to around €300 million by 2020. In addition to Baxxodur systems, we offer our customers coating systems, foams, grouts and concrete admixtures for wind turbine foundations and towers, as well as hydraulic fluids and lubricants for the gearbox.

Value for our customers Our Baxxodur systems help to improve efficiency in the production of wind turbines: Our broad range of hardeners, accelerators and additives for the professional processing of epoxy resin can reduce the manufacturing process of rotor blades by up to 30%.

With the Thomas Alva Edison Patent Award, we received special recognition in 2011 for our new catalyst systems for the purification of exhaust gases in diesel-powered vehicles. This system stands apart from conventional solutions because it works efficiently and reliably even in very low temperatures, thanks in particular to a special adamantylammonium salt that was developed by our Intermediates division and made ready for production in less than a year. The new catalyst system has been produced at various plants in the Verbund in Ludwigshafen and in the United States since 2010 and is marketed by the Catalysts division.

→ **For more on catalyst systems, see page 63**

Marketing and customer relations

For standard products, our priority is supplying customers reliably and cost-efficiently. Internally, we supply nearly all BASF divisions with our products. We offer organic and inorganic specialties together with the corresponding technical applications know-how. In these areas, our development laboratories work particularly closely with our customers and partners.

In order to further improve our market position in South America and to serve our customers there even better and faster, we started up a sodium methylate production plant in Guaratinguetá, Brazil. Sodium methylate is a reliable and efficient catalyst for the production of biodiesel. The new plant has an annual capacity of 60,000 metric tons.

With more than 300 reference plants, BASF is today one of the world's leading suppliers in the gas treatment business. BASF began the industrial, amine-based separation of carbon dioxide from syngas, which is required for ammonia production, as early as 1971. Our portfolio was extended step by step, incorporating technologies such as the purification of natural gas, refinery off-gas, flue gas and biogas. Today, under the brand name Oase®, we have a comprehensive offering ranging from technology, gas treatment chemicals and technical support services to on-site training of personnel at our customers' plants.

Innovation

- Focus on innovative production processes to strengthen our competitiveness
- New product line of ultrapure iron salts for the treatment of iron deficiency anemia
- Thomas Alva Edison Patent Award for innovative catalyst system

Marketing and customer relations

- Reliable and cost-efficient marketing of standard products
- Marketing of organic and inorganic specialties with the corresponding technical applications know-how
- Our development laboratories collaborate closely with customers and partners

Capital expenditures

Location	Project	Additional annual capacity through expansion (metric tons)	Total annual capacity (metric tons)	Startup
Antwerp, Belgium	Construction: oleum plant	n/a	420,000	2011
Camaçari, Brazil	Construction: acrylic acid complex		160,000	2014
Geismar, Louisiana	Construction: methylamines plant		n/a	2011
Guaratinguetá, Brazil	Construction: sodium methylate plant		60,000	2011
Ludwigshafen, Germany	Construction: ethylene pipeline[1]		n/a	2012
	Construction: Hexamoll DINCH plant	100,000	200,000	2013
Nanjing, China	Construction: *tert*-Butylamine plant		n/a	2013
	Expansion: steam cracker[2]	140,000	740,000	2011
	Construction: 2-propylheptanol plant[2]		80,000	2011
	Expansion: ethylene oxide plant[2]	80,000	330,000	2011
	Construction: butadiene plant[2]		130,000	2011
	Construction: isobutene plant[2]		60,000	2011
	Construction: amine complex[2]		130,000	2011/2012

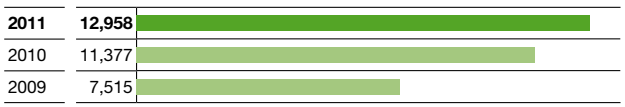
[1] Participation through investment in Ethylen-Pipeline-Süd GmbH & Co. KG
[2] Operated by a joint venture company in which BASF has a 50% stake and which is proportionally consolidated in the Group Consolidated Financial Statements

Production capacities of significant products[3]

	Sites				
Product	Europe	North America	Asia Pacific	South America, Africa, Middle East	Annual capacity (metric tons)
Acrylic acid	X	X	X		1,190,000
Alkyl amines	X	X	X		250,000
Formic and propionic acid	X		X		255,000 150,000
Ammonia	X				1,525,000
Benzene	X	X	X		820,000
Butadiene	X	X	X		645,000
Butanediol equivalents	X	X	X		535,000
Chlorine	X				385,000
Ethanolamines and derivatives	X		X		400,000
Ethylene	X	X	X		3,375,000
Ethylene oxide	X	X	X		1,395,000
Formaldehyde condensate	X				750,000
Neopentyl glycol	X	X	X		165,000
Oxo-C_4 alcohols (calculated as butyraldehyde)	X	X	X		1,495,000
PolyTHF	X	X	X		185,000
Propylene	X	X	X		2,550,000
Plasticizers	X	X	X		660,000

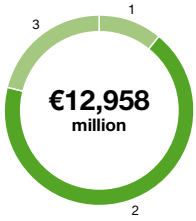
[3] All capacities included at 100%, including plants belonging to joint ventures

Sales – Chemicals
(million €)



Sales by division

1	Inorganics	11%
2	Petrochemicals	68%
3	Intermediates	21%



Segment data Chemicals (million €)

		2011	2010	Change in %
Sales to third parties		12,958	11,377	13.9
Thereof Inorganics		1,415	1,255	12.7
Petrochemicals		8,839	7,593	16.4
Intermediates		2,704	2,529	6.9
Intersegmental transfers		6,295	5,476	15.0
Sales including intersegmental transfers		19,253	16,853	14.2
Income from operations before depreciation and amortization (EBITDA)		3,188	3,000	6.3
EBITDA margin	%	24.6	26.4	–
Income from operations (EBIT) before special items		2,441	2,302	6.0
Income from operations (EBIT)		2,442	2,310	5.7
Income from operations (EBIT) after cost of capital		1,686	1,722	(2.1)
Assets		6,920	6,526	6.0
Research and development expenses		132	130	1.5
Additions to property, plant and equipment and intangible assets		622	535	16.3

In the Chemicals segment, we increased sales to third parties in 2011 by €1,581 million to reach €12,958 million. This significant growth was primarily attributable to higher raw material prices, which we were able to pass on in almost all business areas (volumes –1%, prices 16%, portfolio 2%, currencies –3%). Income from operations grew by €132 million to reach €2,442 million. Our programs to reduce costs and increase efficiency contributed to this earnings growth.

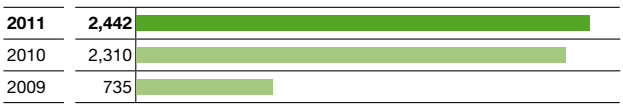
We expect sales in 2012 to be higher than in the previous year. Additional capacities will increase pressure on margins, especially for cracker products. Earnings are not expected to match the level of 2011.

Inorganics

Our sales to third parties were €1,415 million in 2011, exceeding the previous year's level by €160 million (volumes 5%, prices 9%, currencies –1%). In addition to increased demand, in particular from the electronics and pharmaceutical industries, higher sales prices for basic products were a major factor driving this significant sales growth.

Our income from operations improved considerably compared with the previous year. Higher margins, especially for ammonia and urea, as well as our strict cost discipline had a positive influence on earnings growth.

In the fourth quarter of 2011, we increased our annual capacity for sodium methylate production by 60,000 metric tons with the startup of a new plant in Guaratinguetá, Brazil. Furthermore, we started operations at a new oleum and sulfur plant in Antwerp, Belgium, raising annual capacity at this site to 420,000 metric tons.

Factors influencing sales – Chemicals

Income from operations – Chemicals
(million €)