

Marie Emmerich/Suzanna

We unveil the ICIS Top 100 Chemical Companies, the global producers ranked by annual sales in US dollars. While there was little change among the top 10 giants, many leading companies are generating high growth and poised to move up in the years ahead

### COMPETITIVENESS

- 34** In the slow growth year of 2013 beset by price volatility, a number of players performed remarkably well. The Top 100 companies raised their sales by an average 3.7% in 2013 compared with 2012. Among the top 10, little has changed.

### TOP 100 RANKING

- 36** In the Top 100 rankings for global chemical producers, see which companies are moving up the ladder. Germany-based BASF has extended its lead with sales breaking above \$100bn for the first time. China's Sinopec is in the #2 position, followed by US-based ExxonMobil.

### BUBBLING UNDER


- 39** The revenue cutoff for the Top 100 of \$3.9bn was just out of reach for a number of companies. But plenty of heavy hitters and high growth firms are moving fast up the ranks. See which ones are poised to break through.

### ANALYTICS

- 40** Our data team slice and dice the data to present a series of infographics to give a view on major trends. See what share of sales the top 10 players have taken through the years, which companies have the best and worst return on sales, and how Top 100 sales move with the IPEX.

# ICIS Top 100 competitiveness on display

In the overall slow economic growth year of 2013, many in the ICIS Top 100 Chemical Companies performed remarkably well



Annual sales of the leaders have grown remarkably over the long run

**NIGEL DAVIS** LONDON

**T**he ICIS Top 100 Companies listing of the world's major chemical producers for 2013 highlights the financial performance of a wide range of companies in a difficult year.

Chemicals output growth was restricted globally in 2013, weighed down still in the aftermath of the 2008-2009 crash and financial crisis. Firms battled with low growth and price uncertainty. Some performed remarkably well against this backdrop while others faced stiff competition, particularly in the faster-growing markets in various parts of the world.

The ICIS Top 100 Companies ranks the world's largest chemical producers by sales expressed in US dollars, using year-end exchange rates. It presents an extensive set of comparable financial data on the sector's lead-

ing companies ranging from profits to assets and employees.

The data shown are taken from the financial reports and other sources of information for 2013, or the latest financial or fiscal year for some players. All the major chemical producers are included, and footnotes explain the background to some entries. ICIS uses corporate data wherever appropriate to capture as much financial information as possible on individual company performance. We split out the chemicals operations of the oil majors, often with their assistance.

The Top 100, therefore, reflects the performance of the leading producers of a significant number of intermediates and materials which underpin modern life. These range from industrial commodities to polymers, advanced materials and essential ingredients for the food, pharmaceuticals and personal care industries.

The rankings are by sales with volume growth and price performance, along with mergers and acquisitions (M&A) moving companies in the listing. The Top 100 companies raised their sales by an average 3.7% in 2013 compared with 2012. The ICIS Petrochemical Index (IPEX) – an indicator of global petrochemical prices – was essentially flat year on year. Exchange rate movements, year to year, can have an impact on the position a company holds in the table.

## **SLOW GLOBAL ECONOMIC GROWTH**

The main feature of 2013 was slow global economic growth, including the slowdown and increased competition in China, which had been the driver for so much chemicals demand; virtual stagnation in the eurozone; and a still slow-growing US economy.

Data collected by the American Chemistry Council (ACC) show that global chemical





REV FEATURES

sales in 2013 rose by 4.02%. Sales in this context are equal to shipments (value of output from a country), less exports, plus imports, and are equivalent to apparent consumption.

The data are telling. North America chemical sales (apparent demand) were 1.4% higher in 2013, while sales in Latin America were down 2.8%. Western Europe chemical sales were up 4.8% and Asia Pacific chemical sales (including China) up 6.4%. China chemical sales were 14.3% higher.

Of course, for the chemical producer, it depends on who is supplying product to meet demand in different parts of the world. Chemical shipments in 2013 (the data are, once again, from the ACC) were 4.0% higher year on year. They were up 1.4% in North America, down 1.3% in Latin America, climbed 4.1% in western Europe and were down 2.2% from the Africa, Middle East region. Asia Pacific shipments were 6.4%

higher while those from China were higher by 14.0%.

The Top 100 data show how producers performed against this challenging backdrop of increasing competition in the world's fastest developing chemicals markets, largely China and wider Asia Pacific.

### SALES GROWTH THROUGH THE YEARS

A sign of how strongly players in this industry are able to grow, even in these testing times, is that the cut-off point for inclusion in the Top 100 is now \$3.90bn. Ten years ago it was \$1.96bn, 20 years ago the analysis included 88 companies and the cut off was \$792m.

For some years now, ICIS has included a "bubbling under" section in its Top 100 to show which players might move into the main listing in future.

The ICIS Top 100 Chemical Companies is truly a global listing although it reflects a chemical industry dominated by players based in western Europe, the US and Japan. There is only one major chemical producer from the Middle East in the Top 50, Saudi Arabia's SABIC, and the listing for 2013 takes into account the privatisation of Iran's National Petrochemical Company (NPC) with companies once under its umbrella now held by other entities.

### MINOR CHANGES IN TOP 10

There is little change in the Top 10. Lyondell-Basell and Shell have swapped sixth and seventh places because the latter's sales declined further than the former's. A change in accounting practices helped depress Shell's full year reported chemicals sales volumes but the company said that chemicals trading volumes had been higher. Bayer has swapped with INEOS to take the number 10 position.

Lyondell-Basell reported lower sales in 2013 but record profits driven by the company's advantageous cost position in the US based on the ready availability and low price of natural gas liquids (NGLs), and shale gas condensate.

BASF pushed sales up by 2.6% in euro terms and 7.2% in US dollars. It is now a \$100bn-plus company, the first chemical producer to reach that level. China's Sinopec, a company run very much to fuel downstream manufacturing demand for petrochemical products and intermediates, grew much more strongly as China's appetite for chemicals continued to grow.

The spurt in sales reported by Mitsubishi Chemical reflects modest domestic demand growth in Japan and changes in the fiscal years of consolidated subsidiaries. Dow Chemical said that it had made sales gains on an adjusted basis in all geographic areas apart from Europe, Middle East and Africa and that emerging markets represented 35% of total sales for

the first time in the company's history. DuPont said that its sales volumes in 2013 were 5% higher and local selling prices down 1%.

### STRONG PROFIT GAINS

The thrust for most producers in 2013 was to contain costs and work to drive profits higher despite relatively weak demand growth and the difficult pricing environment. The operating profit data particularly illustrate that with some firms showing sharp gains on 2012.

Strong profits growth was shown by companies with an advantaged feedstock position, such as any petrochemical producer with cracker operations in the US or the Middle East.

Upstream players in other parts of the world generally were in a much higher feedstock cost position, particularly if they were cracking naphtha. Crude oil prices were remarkably stable through 2013 while naphtha prices remained high and climbed by close to 20% between May and December.

Olefins demand improved somewhat in 2013 and polymers growth was stronger in Europe. The so-called ethylene cycle, essentially the supply/demand balance for the most widely used petrochemical, continued to improve.

That was not the case in certain other markets where supply outstripped demand. The management of operating rates generally in 2013 was very much needed to maintain balance in some markets where demand growth was weak and uncertain.

### UNCERTAINTY PERSISTS

Uncertainty continued to plague the industry in 2013 and has continued to do so in 2014. Dow Chemical's CEO, Andrew Liveris, talked in the company's 2013 annual report about taking specific actions to generate strong financial performance in an increasingly uncertain and slow-growth world.

"It was a demanding year with a lot of headwind for the industry," said CEO Kurt Beck in BASF's annual report.

That headwind has eased somewhat in 2014 with most companies reporting top line growth in the first and second quarters compared with 2013. The momentum for growth from the world's economies, however, remains weak.

There was not as much red ink across the sector in 2013 as in previous years, and there were some encouraging turnarounds. Profit gains at the operating level were accompanied by astute financial and asset management which helped improve the level of profit available from sector companies to shareholders.

Chemical producers, large and small, recognise that they operate in a more challenging growth and cost environment but one in which there are clear opportunities for above average performance. ■

# THE ICIS TOP 100

Rank 2013	Company	Sales			Operating profit		Net profit		Total assets		R&D		Capital spending		Employee numbers	
		\$m 2013	% Change		\$m 2013	\$m 2012	\$m 2013	\$m 2012	\$m 2013	% Change	\$m 2013	% Change	\$m 2013	% Change	2013	% Change
			reporting currency	\$												
1	BASF <sup>a</sup>	101,906	2.6	7.2	10,019	8,889	6,670	6,354	88,694	7.2	2,528	10.7	6,420	21.3	112,206	1.3
2	Sinopec <sup>b</sup>	72,281	6.2	9.3	143	189	-	-	-	-	-	-	-	-	-	-
3	ExxonMobil <sup>b</sup>	59,273	-2.6	-2.6	5,180	4,885	3,828	3,898	27,475	5.2	-	-	1,112	11.5	-	-
4	Dow Chemical	57,080	0.5	0.5	6,804	1,665	4,447	842	69,501	-0.1	1,747	2.3	2,302	-11.9	53,000	-1.9
5	SABIC <sup>a</sup>	50,403	0.0	0.0	11,355	10,938	6,740	6,606	90,409	0.5	-	-	3,174	8.4	40,000	0.0
6	LyondellBasell Industries	44,062	-2.8	-2.8	5,102	4,676	3,857	2,848	27,298	12.7	150	-12.8	1,561	47.3	13,300	-1.5
7	Shell <sup>b</sup>	42,279	-7.6	-7.6	-	-	1,843	1,374	-	-	-	-	1,195	36.6	-	-
8	DuPont <sup>a</sup>	35,734	2.6	2.6	3,489	3,088	4,862	2,780	51,499	3.3	2,153	1.4	1,882	5.0	64,000	-8.6
9	Mitsubishi Chemical <sup>c</sup>	33,961	13.3	3.6	1,072	958	313	197	33,772	-3.8	1,303	-8.9	1,294	-7.8	56,031	1.6
10	Bayer <sup>d</sup>	29,251	0.5	5.0	2,306	2,272	-	-	36,117	4.1	1,584	13.6	1,904	17.6	57,200	3.6
11	INEOS <sup>i</sup>	27,864	-10.8	-6.8	-	-	-	-	-	-	-	-	-	-	-	-
12	Total <sup>a, iii</sup>	25,743	1.4	1.4	-	-	-	-	-	-	-	-	-	-	-	-
13	Linde Group <sup>p</sup>	22,944	5.2	9.9	2,991	2,709	1,814	1,624	45,115	-0.2	127	-4.8	2,978	21.3	63,487	1.2
14	LG Chem	21,920	-0.5	0.4	1,651	1,793	1,203	1,414	16,524	6.2	-	-	1,289	-28.0	21,966	-
15	Sumitomo Chemical <sup>c</sup>	21,779	14.9	5.1	980	478	359	-542	27,066	3.2	14	3.2	1,392	13.0	-	-
16	Air Liquide <sup>p</sup>	20,974	-0.7	3.8	3,591	3,330	2,347	2,185	34,571	4.8	365	7.8	2,970	12.2	50,000	1.0
17	AkzoNobel <sup>q/p</sup>	20,099	-5.2	-0.9	1,320	1,197	911	676	22,129	-5.9	514	1.5	917	-15.8	49,600	-2.0
18	Johnson Matthey <sup>c</sup>	18,598	4.0	14.0	747	581	565	412	6,318	17.4	-	-	-	-	-	-
19	Toray <sup>c</sup>	17,838	15.4	5.5	1,022	886	579	515	20,574	11.9	539	-4.8	1,106	6.3	45,881	7.7
20	Evonik <sup>b/t</sup>	17,735	-3.7	0.6	1,407	2,393	2,773	1,540	21,901	-3.2	543	7.8	1,485	24.5	33,650	1.1
21	Braskem	17,345	13.3	-1.7	1,160	777	215	-360	20,468	1.9	49	-5.4	2,395	75.7	8,096	9.9
22	PTT Global Chemical	16,787	-2.4	-8.7	1,064	1,172	1,017	1,111	13,216	-7.3	-	-	525	81.4	-	-
23	Reliance Industries <sup>c/h</sup>	16,074	10.5	-0.1	1,399	1,319	-	-	9,590	6.5	-	-	1,447	-3.4	-	-

## FOOTNOTES

<sup>a</sup> 2012 figures are restated

<sup>b</sup> Chemical segment figures. Includes intersegment revenues, e.g. revenue for sales of by-products to other divisions. For ExxonMobil, intersegment revenues of \$20.2bn in 2013 (\$22.2bn in 2012). Operating profit calculated by addition of earnings after income tax (US and non-US) and income tax (US and non-US). For Sinopec = external sales with intersegment sales

<sup>c</sup> Financial year-end March 31, 2014

<sup>d</sup> Excludes Pharmaceuticals and Consumer Health (2013 sales €18.9bn; 2012 sales €18.6bn)

<sup>e</sup> Announced in December 2012 divestment of the North American Decorative Paints business in 2013. Operating profit and net profit figures for 2012 exclude Q3 impairment charge of €2106m related to Decorative Paints

<sup>f</sup> Excludes real estate and energy business areas. Real Estate segment divested as of July 17, 2013 and deconsolidated. Lithium-ion business, classified as assets

held for sale as of December 31, 2013, reclassified as a discontinued operation

<sup>g</sup> 2012 figures restated to reflect: the group's new business organisation effective from January 1, 2013; chlorovinyls activities planned to be contributed to a 50:50 joint venture with INEOS

<sup>h</sup> Petrochemical figures. For SK Energy, the sales revenue figure includes intersegment sales

<sup>i</sup> Financial figures represent INEOS Group Holdings, Kerling, INEOS Industries and INEOS Paraform but excludes joint ventures

<sup>j</sup> Excludes homes, healthcare segments and critical care segments

<sup>k</sup> Financial year-end June 30, 2013 - chemical cluster only (polymers, solvents, olefins & surfactants, other chemical businesses). Sales represents external and intersegmental turnover

<sup>l</sup> Financial year-end May 31, 2014. Reflects (i) revised cost estimates and exit costs related to unprofitable contracts related to the industrial

segment totaling \$11.0m; (ii) the write-off of the company's various investments in Kemrock Industries and Exports Ltd totalling \$78.6m; (iii) the loss on the proposed settlement between the Building Solutions Group and the GSA for \$65.1m; (iv) the strategic repositioning of certain operations in Brazil for \$6.1m; and (v) restructuring expense for \$23.9m BP Petrochemicals figures only. Revenue represents third-party sales as well as other operating revenues and excludes the sales made by joint ventures, which are equity accounted. BP's underlying replacement cost profit, excluding joint venture interests in Europe

<sup>m</sup> 2012 figures restated to reflect adoption of IFRS 11 and reclassifications resulting from discontinued operations

<sup>n</sup> Adhesive Technologies segment only

<sup>p</sup> 2012 figures restated following adoption of the revised IAS 19, Employee Benefits

<sup>q</sup> Momenite Specialty Chemicals

listed as FY2013 financials for the Momenite holding company have not been filed

<sup>r</sup> Financial year-end September 30, 2013

<sup>s</sup> Performance Materials and Technologies figures used

<sup>t</sup> Figures are for petrochemicals and fertilizers only

<sup>v</sup> Financial year end October 28, 2013

<sup>w</sup> 2013 and 2012 sales represent total revenue. Last year's publication reflected operating revenue for 2012 and 2011

<sup>x</sup> Georgia Gulf is now known as Axiall Corp following a merger with the chemicals business of PPG Industries on January 28, 2013. Financial data includes merged business from January 28, 2013

<sup>y</sup> All company segments included. ICIS Top 100 listing last year excluded Optical and Specialty Materials, and Glass business segments

<sup>z</sup> Financial year end December 21, 2013

<sup>aa</sup> Financial data relates to 2012 and

Rank 2013	Company	Sales			Operating profit		Net profit		Total assets		R&D		Capital spending		Employee numbers	
		% Change			\$m 2013	\$m 2012	\$m 2013	\$m 2012	\$m 2013	% Change	\$m 2013	% Change	\$m 2013	% Change	2013	% Change
		\$m 2013	reporting currency	\$												
24	Agrium <sup>a</sup>	15,727	-1.9	-1.9	1,630	2,216	1,063	1,498	15,977	1.1	-	-	1,755	43.3	15,800	9.0
25	Lotte Chemical	15,570	3.4	4.3	462	349	271	297	10,123	4.0	30	9.5	284	-49.5	-	-
26	Mitsui Chemicals <sup>c</sup>	15,200	11.4	1.8	242	46	-244	-86	13,901	-2.1	326	-4.0	1,099	82.7	14,271	11.1
27	PPG Industries <sup>y</sup>	15,108	11.8	11.8	1,489	1,057	1,156	836	15,863	-0.1	488	7.7	515	41.9	41,400	5.6
28	Merck Group	14,741	-0.4	4.1	2,219	1,270	1,666	763	28,680	0.5	2,072	4.0	561	29.2	38,154	-1.8
29	Syngenta	14,668	3.3	3.3	2,086	2,256	1,649	1,850	20,216	4.0	1,376	9.5	625	23.0	28,149	3.3
30	Formosa Chemicals & Fibre <sup>w</sup>	14,331	9.4	6.3	635	109	832	252	17,590	4.5	-	-	-	-	-	-
31	Yara International <sup>p</sup>	13,950	0.8	-7.6	1,284	2,005	1,005	1,905	14,661	0.4	21	6.7	729	13.7	9,759	21.2
32	Solvay <sup>e/p</sup>	13,691	-5.5	-1.2	891	1,557	372	742	25,394	5.1	326	0.3	1,116	7.8	29,400	1.0
33	Ecolab	13,253	11.9	11.9	1,561	1,289	968	704	19,637	11.7	188	2.7	625	8.8	45,415	11.1
34	DSM	13,250	5.3	10.1	697	576	371	380	16,555	4.9	732	44.9	1,013	11.9	24,349	3.6
35	Chevron Phillips Chemical	13,147	-0.7	-0.7	-	-	2,743	2,403	10,533	11.9	-	-	-	-	5,000	-
36	SK Energy <sup>h</sup>	12,069	1.4	2.3	799	706	-	-	5,705	93.6	-	-	-	-	-	-
37	Praxair	11,925	6.2	6.2	2,625	2,437	1,755	1,692	20,255	12.0	98	0.0	2,020	-7.3	27,560	3.8
38	LANXESS	11,434	-8.7	-4.6	-128	1,065	-231	671	9,383	-5.4	256	1.2	860	-6.3	17,430	2.8
39	Shin-Etsu <sup>c</sup>	11,316	13.7	4.0	1,687	1,667	1,103	1,122	21,343	4.7	423	5.7	649	-24.4	17,892	1.0
40	Borealis	11,220	7.9	12.8	269	208	582	633	10,612	15.7	150	18.9	378	-10.3	6,227	16.6
41	Henkel Adhesive Technologies <sup>o</sup>	11,182	-1.7	2.7	1,751	1,570	-	-	-	-	-	-	-	-	24,440	0.8
42	Asahi Kasei <sup>e/i</sup>	10,978	13.7	4.0	669	381	-	-	-	-	-	-	593	-24.9	-	-
43	Huntsman	10,847	-1.1	-1.1	510	845	128	363	9,188	3.4	140	-7.9	471	14.3	12,000	0.0
44	Sekisui Chemical <sup>c</sup>	10,782	7.6	-1.6	801	633	400	320	9,328	-2.5	-	-	-	-	-	-
45	Sasol <sup>k</sup>	10,658	11.1	-8.0	194	795	-	-	-	-	-	-	-	-	-	-
46	Sherwin-Williams	10,186	6.8	6.8	1,086	907	753	631	6,383	2.4	47	5.4	167	6.1	37,633	10.2
47	Air Products <sup>t</sup>	10,180	5.9	5.9	1,324	1,282	994	1,167	17,850	5.4	134	5.8	1,524	0.2	21,600	1.4
48	Eastman Chemical	9,350	15.4	15.4	1,862	800	1,165	437	11,845	1.2	193	-2.5	483	3.9	14,000	3.7
49	Mosaic <sup>aa</sup>	9,027	-10.1	-10.1	1,340	2,203	1,063	1,852	19,554	12.1	-	-	1,427	-14.8	8,200	-2.4

2013 calendar years. Mosaic has changed the financial year to end December 31 from May 31

<sup>cc</sup> Formed as a result of the Iranian constitution calling for privatization of state-owned industries/sectors. Data provided by the company to represent Chemical operations. Data provided by Persian Gulf Petrochemical Industry Company and TAPPICO in US dollars

<sup>dd</sup> Sales figure is before the elimination of intra group sales. Operating and net profit are adjusted operating and net profit in the 2013 ENI annual report

<sup>ee</sup> 2012 figures restated following adoption of new and revised Thai Financial and Reporting Standards (TFRS)

<sup>ff</sup> Financial year has been changed to end 31 December from 31 March. Data supplied by DIC and reflects adjusted figures for 2012

<sup>gg</sup> Results filed as Trinseo SA

<sup>hh</sup> Data provided by Mexichem in US dollars

<sup>ii</sup> Unaudited financial figures available

at time of completion

<sup>jj</sup> Petrochemical and Chemical segments combined

<sup>kk</sup> Results reflect acquisition of Spartech on March 13, 2013 and divestment of the vinyl dispersion, blending and suspension resin assets on May 30, 2013

<sup>ll</sup> Acquired assets comprising Certain Teed Corporation's Pipe and Foundation Group ("PFG") business on May 1, 2013. The acquisition is accounted for in the vinyls segment of the business

<sup>mm</sup> Company name changed to ADAMA Agricultural Solutions effective as of January 23, 2014

<sup>nn</sup> 2012 figures adjusted to reflect accounting of the company's 63.1% interest in Atlas using the equity method following adoption of new IASB accounting standards

<sup>oo</sup> Chemicals only - chemicals & plastics plus specialty chemicals & products

<sup>rr</sup> Supermetals business was divested in 2012. Includes the acquisition of Norit, completed July 31, 2012

<sup>ss</sup> Results of operations related to FMC Peroxygens segment reclassified as a discontinued operation on a retrospective basis

<sup>tt</sup> Chemicals sales figure

#### COMPANIES EXCLUDED

**PetroChina** – Does not segment chemicals from refining business. Total turnover of refining and chemicals business was CNY 871.8bn (\$144.0bn) for year ending December 31, 2013 (CNY 883.2bn in 2012). Production of commercial chemical products was 21.1m tonnes in 2013 and 21.8m tonnes in 2012

**Repsol** – No longer discloses its chemical figures

**Koch** – Does not segment chemical data

**OMV** – Includes petrochemical operations in its refining and marketing segment

**Shanghai Petrochemical Corp.** – Majority owned by Sinopec

**Samsung Total** – Sales equity accounted in Total and Samsung figures

**ChemChina** – Accounts not made public

by the company.

**China Blue Star Chem** – Majority owned by ChemChina

**Formosa Plastic Corp USA** – Not segmented in Formosa reports

**Nan Ya Plastics** – Sales a mixture of chemicals and processed items

**Yeochoon NCC** – Results included with Hanwha and Daelim

**Daelim** – Below Top 100 in sales as Yeochoon NCC accounted as equity firm

**Samsung** – Does not consolidate various chemicals company interests into one area

**Flint Group** – Accounts not made public by the company

**Lubrizol** – Acquired by Berkshire Hathaway on September 16, 2011.

Lubrizol business not segmented

**PIG** – Accounts not made public by the company.

#### EXCHANGE RATE

Key financial exchange rates used for 2013 data (2012 in parentheses): €/€ 1.378 (1.318) based on December 31 year-end, \$/¥ 103.0 (94.2) based on March 31 year-end.

# SPECIAL REPORT ICIS TOP 100 CHEMICAL COMPANIES

Rank 2013	Company	Sales			Operating profit		Net profit		Total assets		R&D		Capital spending		Employee numbers	
		\$m 2013	% Change		\$m 2013	\$m 2012	\$m 2013	\$m 2012	\$m 2013	% Change	\$m 2013	% Change	\$m 2013	% Change	2013	% Change
			reporting currency	\$												
50	BP <sup>m</sup>	8,628	-12.5	-12.5	130	166	-	-	-	-	-	-	-	-	-	-
51	Formosa Petrochemical Corp <sup>h</sup>	8,445	5.9	3.0	-	-	-	-	-	-	-	-	-	-	-	-
52	Arkema	8,401	-4.6	-0.4	528	858	231	290	7,544	3.3	198	1.7	663	4.9	14,000	0.0
53	Persian Gulf Petrochemical Industry Company <sup>cc</sup>	8,117	-	-	1,442	735	722	225	13,442	-13.3	305	1.3	502	73.1	7,284	12.3
54	Versalis <sup>dd</sup>	8,071	-8.7	-4.6	-532	-637	-466	-521	-	-	-	-	433	90.7	5,708	0.7
55	Styrolution	7,990	-3.3	1.0	-	-	-	-	-	-	-	-	-	-	3,200	-
56	Ashland <sup>f</sup>	7,813	-4.8	-4.8	1,241	302	683	26	12,088	-3.5	178	29.9	314	5.4	14,600	0.0
57	Teijin <sup>c</sup>	7,614	5.2	-3.8	175	131	81	-309	7,458	-7.8	322	-8.6	300	-9.0	15,756	-5.3
58	Tosoh <sup>c</sup>	7,496	15.5	5.6	404	260	287	179	7,005	-10.2	121	-6.3	230	-17.3	11,421	1.4
59	Hanwha Chemical	7,448	12.9	14.0	93	2	8	28	12,130	4.2	62	-12.3	-	-	-	-
60	PotashCorp	7,305	-7.8	-7.8	2,616	3,019	1,785	2,079	17,958	-1.4	-	-	1,624	-23.9	5,338	-7.6
61	GS Caltex <sup>b</sup>	7,260	16.7	17.7	-	-	-	-	-	-	-	-	-	-	-	-
62	Formosa Plastics <sup>w</sup>	7,208	9.4	6.4	-	-	693	510	13,677	9.9	-	-	-	-	-	-
63	Indorama Ventures <sup>oo</sup>	7,004	8.7	1.7	202	275	46	95	5,778	2.5	-	-	208	-41.5	9,173	-
64	Alpek	6,875	-6.3	-7.3	223	577	69	338	4,437	-6.8	-	-	113	-2.7	4,550	-3.2
65	Clariant <sup>p</sup>	6,822	0.6	3.5	528	449	6	249	9,178	-11.2	223	16.9	328	-3.5	18,099	-14.6
66	Honeywell <sup>s</sup>	6,764	9.4	9.4	1,271	1,154	-	-	6,827	6.7	-	-	429	30.8	-	-
67	DIC <sup>ff</sup>	6,702	12.8	-7.2	382	402	255	204	-	-	188	-4.8	-	-	20,034	-1.6
68	Celanese	6,510	1.4	1.4	1,508	175	1,101	372	9,018	0.2	85	-18.3	370	2.5	7,430	-1.6
69	Orica <sup>f</sup>	6,445	3.4	-7.0	920	680	562	418	8,038	1.6	44	-9.4	507	-16.8	14,500	-3.3
70	PKN Orlen <sup>b</sup>	6,433	-1.0	1.6	436	389	-	-	-	-	-	-	174	13.1	-	-
71	SCG Chemicals	6,419	3.2	-3.5	-	-	345	88	5,871	1.6	-	-	-	-	-	-
72	ICL <sup>p</sup>	6,272	-3.1	-3.1	1,101	1,554	820	1,302	7,974	8.6	83	11.9	827	16.1	12,152	-1.0
73	Sojitz <sup>b/c</sup>	6,249	12.7	3.0	136	110	77	34	2,720	-6.7	-	-	9	-8.5	-	-
74	Wacker-Chemie <sup>p</sup>	6,170	-3.4	1.0	207	460	9	151	8,724	1.9	239	4.5	781	-37.2	16,009	-1.7
75	Dow Corning	5,711	-6.7	-6.7	-	-	376	188	12,302	-7.5	-	-	-	-	10,000	-16.7
76	CF Industries	5,475	-10.3	-10.3	2,412	2,959	1,465	1,849	10,678	5.0	-	-	824	57.4	2,800	12.0
77	K+S <sup>p</sup>	5,442	0.4	4.9	904	1,060	599	840	10,330	18.8	19	-25.1	1,023	66.7	14,421	0.4
78	EuroChem	5,381	6.3	-1.3	965	1,317	373	1,067	7,978	2.7	-	-	986	6.9	22,310	11.6
79	Trinseo <sup>ee</sup>	5,307	-2.7	-2.7	180	182	-22	30	2,575	-3.4	-	-	74	-38.0	2,100	0.0
80	NOVA Chemicals	5,278	4.4	4.4	905	859	658	544	6,205	10.6	49	8.9	470	77.4	2,600	4.0
81	Mitsubishi Gas Chemical <sup>c</sup>	5,190	14.3	4.5	111	121	145	-83	6,388	-2.0	-	-	285	-10.7	5,445	2.3
82	Mexichem <sup>hh</sup>	5,177	8.6	8.6	562	642	83	962	8,182	6.6	-	-	-	-	17,300	-3.9
83	Parsian Oil & Gas Development <sup>z/cc</sup>	5,098	-	-	1,812	1,844	1,737	1,586	4,994	8.1	-	-	1,377	109.9	6,285	-
84	Kaneka <sup>c</sup>	5,094	10.1	0.7	241	168	132	99	5,048	-1.8	-	-	339	0.5	-	-
85	Taiyo Nippon Sanso <sup>c</sup>	5,074	11.6	2.1	306	264	196	-22	7,102	8.7	-	-	-	-	-	-
86	Airgas <sup>c</sup>	5,073	2.3	2.3	631	596	351	341	5,793	3.1	-	-	355	8.9	16,000	6.7
87	Givaudan <sup>p</sup>	4,905	2.6	5.5	778	684	550	448	6,963	1.5	456	4.6	140	-17.6	9,331	2.3
88	Momentive Specialty Chemicals <sup>q</sup>	4,890	2.8	2.8	9	205	-634	346	2,866	-14.1	73	5.8	144	8.3	5,000	-2.0
89	Tasnee	4,853	1.6	1.6	823	1,098	314	470	12,604	3.7	-	-	275	5.2	-	-
90	Occidental Chemical <sup>b</sup>	4,673	2.0	2.0	743	720	-	-	3,947	2.4	-	-	424	18.8	3,100	3.3
91	Axiall <sup>x</sup>	4,666	40.3	40.3	371	238	165	121	5,877	226.3	-	-	196	144.2	6,000	0.0
92	Petronas Chemical Group <sup>h</sup>	4,636	-8.4	-14.6	1,322	1,421	1,069	1,255	8,458	-0.2	-	-	526	66.9	-	-
93	Compania Espanola de Petroleos (CEPSA) <sup>h</sup>	4,492	-1.2	3.2	-	-	-	-	-	-	-	-	-	-	-	-
94	RPM <sup>i</sup>	4,376	7.3	7.3	490	251	292	99	4,378	6.2	55	12.2	94	3.3	11,000	4.8
95	Valspar <sup>v</sup>	4,104	2.1	2.1	492	482	289	293	4,026	11.0	122	4.0	117	30.7	10,000	5.3
96	Lonza <sup>p</sup>	4,024	-8.7	-6.1	284	371	98	190	7,344	-4.5	125	-1.6	218	-31.0	9,935	-7.9
97	Daicel Chemical Industries <sup>c</sup>	4,016	15.4	5.5	368	278	222	163	4,949	1.0	-	-	-	-	-	-
98	Kuraray <sup>c/ii</sup>	4,013	11.9	2.4	481	522	285	306	6,156	-1.2	-	-	-	-	-	-
99	Showa Denko <sup>jj</sup>	3,965	31.1	7.8	66	-21	-	-	3,160	-15.7	-	-	92	-34.7	-	-
100	SIBUR <sup>h</sup>	3,903	-5.4	-12.2	-	367	-	-	-	-	-	-	-	-	-	-



# BUBBLING UNDER

Rank 2013	Company	Sales			Operating profit		Net profit		Total assets		R&D		Capital spending		Employee numbers	
		\$m 2013	% Change reporting currency	\$	\$m 2013	\$m 2012	\$m 2013	\$m 2012	\$m 2013	% Change	\$m 2013	% Change	\$m 2013	% Change	2013	% Change
101	FMC <sup>ss</sup>	3,875	13.6	13.6	616	598	294	416	5,235	19.7	118	5.1	222	25.2	5,600	-1.8
102	JSR <sup>c</sup>	3,827	6.1	-2.9	350	374	244	321	4,866	-5.1	-	-	205	-30.7	-	-
103	TAPPICO <sup>cc</sup>	3,796	-	-	1,703	1,180	1,668	1,018	5,793	47.5	-	-	1,754	-	-	-
104	PolyOne <sup>kk</sup>	3,771	31.8	31.8	232	138	244	72	2,944	38.4	53	27.4	76	33.1	7,000	40.0
105	Westlake Chemical <sup>ll</sup>	3,759	5.3	5.3	953	615	610	386	4,061	19.0	-	-	679	75.5	2,200	10.0
106	Denki Kagaku Kogyo (Denka) <sup>c</sup>	3,657	10.3	0.9	206	200	132	119	4,187	-5.0	-	-	-	-	-	-
107	Cabot <sup>rr</sup>	3,463	4.9	4.9	384	409	153	388	4,233	-3.8	74	1.4	264	-6.0	4,638	-3.9
108	Incitec Pivot <sup>r</sup>	3,180	-2.8	-12.5	333	739	348	527	7,179	-1.4	10	5.0	422	-35.1	5,286	0.8
109	Pemex <sup>h</sup>	3,081	14.0	12.8	-1,164	-806	-1,140	-869	8,536	-7.9	-	-	306	37.0	-	-
110	Makhteshim-Agan Industries <sup>mm</sup>	3,076	8.5	8.5	309	282	127	123	4,457	7.3	34	12.0	85	-14.8	4,564	1.4
111	Kemira	3,071	-0.5	3.9	59	44	-36	30	3,046	-6.2	44	-20.4	186	5.3	4,453	-8.3
112	Industries Qatar <sup>a/t</sup>	3,066	6.7	3.6	-	-	-	-	6,714	-5.1	-	-	-	-	-	-
113	W.R. Grace	3,061	-3.0	-3.0	-	-	256	40	5,396	6.0	65	1.1	156	12.8	6,700	3.1
114	Methanex <sup>nn</sup>	3,024	18.9	18.9	464	-59	377	-35	3,443	4.8	-	-	269	136.7	1,000	-
115	IFF	2,953	4.7	4.7	485	443	354	254	3,332	2.6	260	11.2	134	6.4	6,000	5.3
116	Nippon Shokubai <sup>c</sup>	2,933	12.1	2.5	133	107	102	89	-	-	-	-	-	-	-	-
117	Zeon <sup>c</sup>	2,877	18.2	8.1	290	252	191	157	3,600	-3.2	-	-	-	-	-	-
118	Ube <sup>c/oo</sup>	2,850	4.7	-4.2	4	66	-	-	-	-	-	-	-	-	-	-
119	Asahi Glass <sup>b</sup>	2,761	13.0	-7.1	169	194	-	-	2,761	-7.1	-	-	197	-48.2	-	-
120	Tata Chemical <sup>c</sup>	2,677	7.9	-2.4	223	300	-172	74	-	-	-	-	-	-	-	-



In partnership with



## THE ICIS & ELGI INDUSTRIAL LUBRICANTS CONFERENCE

Tracking markets, technologies and regulations in the new reality of base oil supply  
Thursday 20<sup>th</sup> – Friday 21<sup>st</sup> November 2014 • NH Grand Hotel Krasnapolsky, Amsterdam, The Netherlands  
[www.icisconference.com/industriallubricants](http://www.icisconference.com/industriallubricants)

**Secure your place today to explore solutions to fundamental issues, bottlenecks and technical challenges:**

- ✓ Get to grips with **global base oil dynamics**
- ✓ Understand the **impact on lubricant formulation** of re-categorisation and labelling required by **REACH** and **GHS**
- ✓ Explore the market for **metalworking fluids**, including the regulation and health and safety
- ✓ Plot the **technical and market trends** in greases and liquid lubricants

Plus much more! Visit the website for full details.

**Confirmed speakers include:**

- **Valentina Serra-Holm**, Marketing Director for Naphthenics, **NYNAS AB**
- **Katty Hoste**, Marketing Specialist, **CHEVRON BASE OILS**
- **Caroline Huot**, Managing Director, **UNIMARINE LUBRICANTS**

**Previous attendees of ICIS conferences have said:**

"Great use of my time"  
Global Industry Liaison Manager, **INFINEUM**  
"Well organised and a lot of fruitful information"  
Strategic Buyer, **STATOIL**

**SAVE  
€300\***

**REGISTER  
BY FRIDAY 12<sup>TH</sup>  
SEPTEMBER**



Media partner



**For more information and to book your place:**

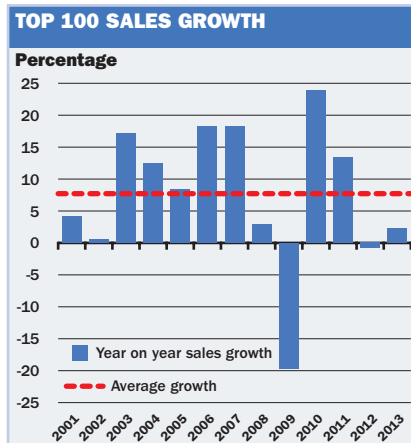
[www.icisconference.com/industriallubricants](http://www.icisconference.com/industriallubricants) • [events.registration@icis.com](mailto:events.registration@icis.com) • +44 (0) 20 8652 3887

\*Quote **ZYG73030** when booking to save €300

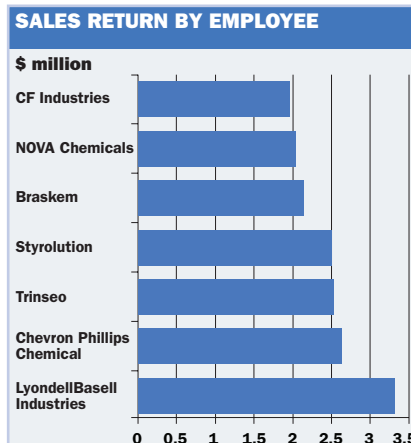
# ICIS Top 100 metrics

Our global analytics team slices and dices the numbers to bring you interesting comparisons and trends for the ICIS Top 100 Chemical Companies

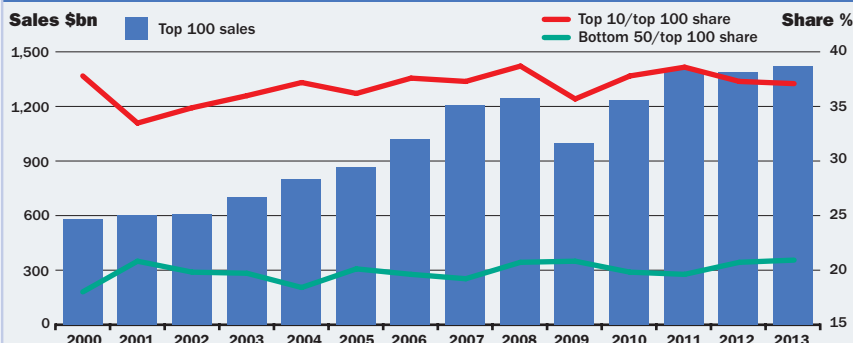
FAHEEM BEHARDIEN LONDON



The Top 100 sales total has returned to growth with a 2.3% increase in 2013, representing a market that has more than doubled since 2003, and has had average annual growth of 7.8% since 2000. The global economic recovery remains stop-start, as total sales in recent years have illustrated, but further signs of stable growth correspond with the \$1.4 trillion (€1.02 trillion) in total sales registered by the world's elite producers in 2013.



## PERCENTAGE SHARE OF TOP 100 SALES



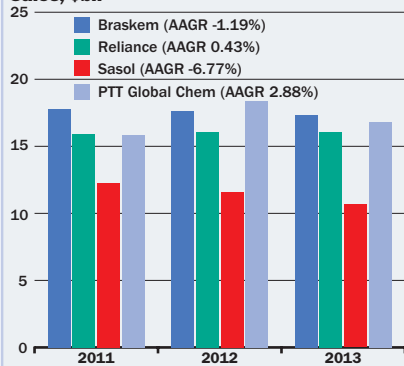
The bottom half of the Top 100 listing has increased its share to 20.9%, the highest this century. This comes on the back of new entries from two Iranian privatised companies and inclusion of Taiwan's Formosa Petrochemical Corp and South Korea's GS Caltex. US-based Axiall, which was part of the bubbling under section last year, has risen 13 places to enter the Top 100 at the 91 position, on boosted sales following the inclusion of the former PPG commodity chemicals business from 28 January 2013.

Extracting the best out of the workforce is imperative in pushing efficiency. LyondellBasell heads the field in the sales/employee race, while BASF has the largest workforce of those disclosing employee numbers.



## BIGGEST PLAYERS OUTSIDE THE TOP THREE REGIONS\*

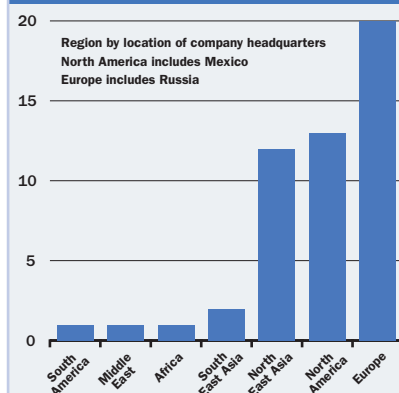
Sales, \$bn



NOTE: \*Graphic excludes SABIC

With the recent slowdown in China growth, the next big player in other developing markets is always being searched for. Here the top companies outside North America, Europe and Northeast Asia are assessed. Of the four companies, all except Thailand's PTT Global managed a sales increase (in domestic reporting currency) in 2013. However, South Africa-based Sasol and Brazil-based Braskem sales were particularly weighed down by weaker currencies versus the US dollar. Average annual growth rates (AAGR) were negative (in dollar terms) for both, while India's Reliance remained steady. PTT Global shows a fluctuating sales trend over the period, but has the highest average yearly growth rate.

## TOP 50 CONSTITUENTS BY REGION



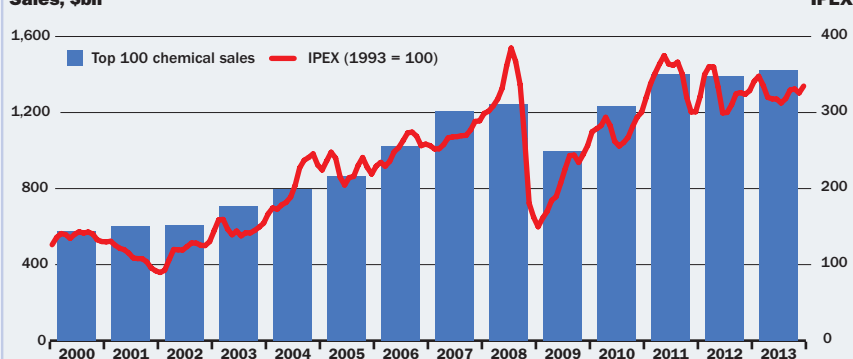
Despite the lacklustre European market, the region holds the lion's share of producers (aided by a stronger euro) when it comes to the top half of the listing. Half of the Asian contingent consists of Japanese companies, with the seven companies reporting higher sales (in yen) in the year due to smoother operations compared with recent years, which were impacted by natural disasters. China's Sinopec leads the way in the region, finishing second in the overall list, recording a 9.3% sales rise in dollar terms. Continued political disruptions in parts of the Middle East leave SABIC as the sole representative. It is worth noting that the Iranian petrochemical industry has been privatised with a hope of stimulating growth within the sector.



Download the ICIS Top100 Chemical Companies. Visit [icis.com/pages/icis-top-100-chemical-companies](http://icis.com/pages/icis-top-100-chemical-companies)

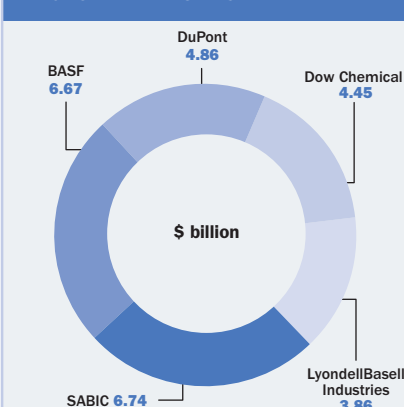
## ICIS TOP 100 SALES VS IPEX

Sales, \$bn



The ICIS Petrochemical Index (IPEX) edged down by 0.1% in 2013, mainly the result of a decline in the Asian and European sub indexes with the latter falling by 1.0%. According to the Business of Chemistry Industrial Production Index, published by the American Chemistry Council (ACC), chemical production (excluding pharmaceuticals) increased by 2.7%, which is in line with the rise in the Top 100 Sales.

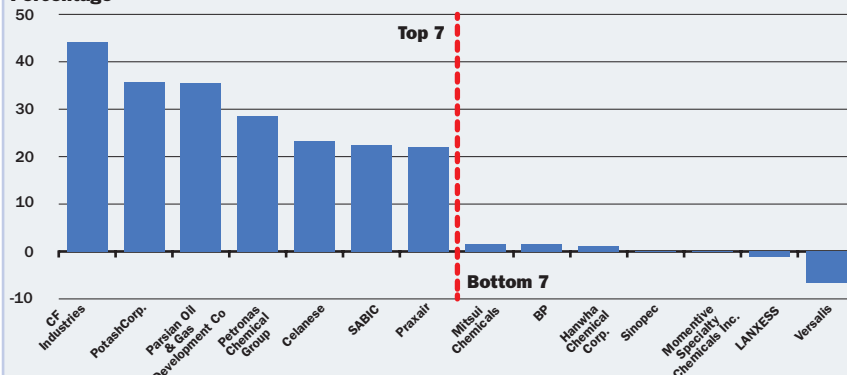
## LARGEST NET PROFITS



There are familiar faces in the top five but ExxonMobil gives way to Dow Chemical after significantly stronger displays by the latter company's Performance Materials and Performance Plastics segments.

## BEST &amp; WORST RETURN ON SALES 2013

Percentage



CF Industries and PotashCorp have dominated the top two positions in this category for three consecutive years, illustrating their dominance in the fertilizer market. Petronas and new entry, Celanese, round off the top five. Petronas increased its profit margin by more than 2.0 percentage points, aided by an 11.4% cut in depreciation and amortization and a huge 22.4% drop in selling, general and administration (SG&A) costs.



# Univar = *Chemistry Delivered*<sup>TM</sup>

Univar safely delivers chemistry – products, expertise, and relationships – that help our customers improve the quality of life through affordable energy, clean drinking water, reliable food sources and products that improve our health, homes and environment.

Learn more at [www.univar.com](http://www.univar.com).

+1 855 888 8648

© 2013. Univar USA Inc. All rights reserved. UNIVAR, the hexagon, and other identified trademarks are the property of Univar Inc., Univar USA Inc. or affiliated companies.

