# **DOWNSTRFAM**

KEY STATISTICS			\$ MILLION
	2014	2013	2012
Segment earnings [A]	3,411	3,869	5,382
Including:			
Revenue (including inter-segment sales)	378,046	404,427	424,410
Share of earnings of joint ventures and associates [A]	1,698	1,525	1,354
Production and manufacturing expenses	9,845	9,807	9,539
Selling, distribution and administrative expenses	12,489	13,114	12,860
Depreciation, depletion and amortisation	6,619	4,421	3,083
Net capital investment [B]	3,079	4,885	4,275
Refinery availability (%) [C]	94	92	93
Chemical plant availability (%) [C]	85	92	91
Refinery processing intake (thousand b/d)	2,903	2,915	2,819
Oil products sales volumes (thousand b/d)	6,365	6,164	6,235
Chemicals sales volumes (thousand tonnes)	17,008	17,386	18,669

- [A] See Notes 2 and 4 to the "Consolidated Financial Statements". Segment earnings are presented on a current cost of supplies basis.
- [B] See "Non-GAAP measures reconciliation"
- [C] The basis of calculation differs from that used for the "Refinery and chemical plant availability" measure in "Performance indicators", which excludes downtime due to uncontrollable factors.

#### **OVERVIEW**

Shell's Downstream organisation is made up of a number of different business activities, part of an integrated value chain, that collectively turn crude oil into a range of refined products, which are moved and marketed around the world for domestic, industrial and transport use. The products we sell include gasoline, diesel, heating oil, aviation fuel, marine fuel, liquefied natural gas (LNG) for transport, lubricants, bitumen, sulphur and liquefied petroleum gas (LPG). In addition, we produce and sell petrochemicals for industrial use worldwide.

Our Downstream activities comprise Refining, Pipelines, Marketing, Chemicals and Trading and Supply. Marketing includes Retail, Lubricants, Business to Business (B2B) and Alternative Energies. Chemicals has major manufacturing plants, located close to refineries, and its own marketing network. In Trading and Supply, we trade crude oil, oil products and petrochemicals, to optimise feedstocks for Refining and Chemicals, to supply our Marketing businesses and third parties, and for our own profit.

#### **BUSINESS CONDITIONS**

Industry refining margins were higher on average in 2014 than in 2013 in the key refining hubs of the USA and Singapore, and were little changed in Europe. In particular, margins improved in the USA where increased domestic crude oil and natural gas production lowered oil acquisition costs (relative to international prices). Some demand growth, especially around the summer driving season in the USA, also contributed to higher US Gulf Coast margins.

In 2015, increased demand for middle distillates is expected to be a key driver of refining margins, supported by demand for gasoline in the middle of the year. However, the overall outlook remains unclear because of continuing economic uncertainty, geopolitical tensions in some regions that could lead to supply disruptions and overcapacity in the global refining market.

In Chemicals, industry naphtha cracker margins increased from 2013, particularly in Asia where there was less cracker capacity available. US ethane cracker margins were high relative to naphtha cracker margins in other regions due to ample ethane supply. The outlook for petrochemicals for 2015 is dependent on the growth of the global economy, especially in Asia, and developments in raw material prices.

# **EARNINGS 2014-2013**

Segment earnings are presented on a current cost of supplies basis (see "Summary of results"), which in 2014 were \$4,366 million higher than earnings if presented on first-in, first-out basis (2013: \$353 million higher). Segment earnings in 2014 were \$3,411 million, 12% lower than 2013. Earnings in 2014 included net charges of \$2,854 million, mainly impairments, and in 2013 included net charges of \$597 million, described at the end of this section. Excluding the impact of these net charges, earnings in 2014 were 40% higher. The improvement was driven by higher realised refining margins from improved operating performance and a stronger industry environment, higher earnings from Trading and Supply, and lower costs mainly as a result of divestments. Partly offsetting these benefits were lower earnings from Chemicals, impacted by market conditions for intermediate products and shutdowns of some units at Moerdijk in the Netherlands.

Refining made a profit in 2014, compared with a loss in 2013. Realised refining margins were significantly higher overall and higher in all regions except the US West Coast. The increase was driven by operational improvements and stronger industry margin environments in most regions. In Europe, despite a slightly weaker margin environment, realised margins benefited from strong operational performances at the Pernis and Rheinland sites. Realised margins in Canada were higher in 2014 because the Scotford Upgrader was shut for part of 2013. US Gulf Coast realised margins benefited from improved operational performance. The margin environment in Asia improved. There was a loss of margins from the Geelong refinery in Australia which was sold in 2014. US West Coast realised margins were lower mainly due to a maintenance shutdown at Puget Sound in 2014. Motiva's performance was stronger in 2014 through both improved operational performance and a stronger margin environment. Overall refinery availability increased to 94% from 92% in 2013.

Trading and Supply earnings were significantly higher than 2013, benefiting from increased price volatility and profitable short positions in an oil market where prices declined during the second half of 2014.

Chemicals earnings were lower than in 2013, impacted by two incidents at Moerdijk that disrupted operations. The first, an explosion and fire at the MSPO2 unit, caused a partial shutdown of the site but had only limited financial impact. The second incident, a contamination of the steam boiler water feed, caused a temporary shutdown of all units for the fourth quarter of 2014 with more significant financial impact.

We expect a significant impact to earnings in 2015 from some units continuing to be non-operational. Additionally, earnings decreased for intermediate products due to weaker general market conditions compared with 2013. Sales prices were higher in 2013 due to industry supply constraints caused by competitor production outages.

Marketing earnings were higher than in 2013 across most businesses despite the divestment of businesses in Australia and Italy. Driving the improvement were stronger unit margins, helped by premium product pricing in Retail, active price management in Lubricants and LPG, and lower costs in Retail. Earnings from Raizen, our biofuels joint venture in Brazil, were higher than in 2013 despite the negative effects of the weakening Brazilian real, mainly as a result of stronger unit margins in the Marketing business.

Oil products sales volumes were 3% higher than in 2013. Higher Trading volumes more than offset lower Marketing volumes, which were impacted by the sale of businesses in Australia and Italy. Excluding these portfolio effects, Marketing volumes were similar to 2013

Chemicals sales volumes were 2% lower than in 2013, mainly as a result of plant outages at Moerdijk. Chemicals plant availability decreased to 85% from 92% in 2013, mainly due to these outages.

Overall, operating expenses were 3% lower than in 2013. Production and manufacturing expenses were similar to 2013 as the effects of inflation and higher maintenance costs were offset by more favourable exchange rates and divestments. Selling, distribution and administrative expenses decreased due to divestments, reduced spending related to lower volumes in some businesses and more favourable exchange rates.

Depreciation, depletion and amortisation significantly increased in 2014 compared with 2013, mainly due to impairments described below. Excluding the impairments, depreciation decreased compared with 2013 due to divestments and reduced depreciation from impaired assets.

Segment earnings in 2014 included a net charge of \$2,854 million, primarily from impairments (mainly in respect of refineries in Asia and Europe) and also from restructuring charges, fair value accounting of commodity derivatives and a provision connected to a prior year sale obligation. Partly offsetting these charges was a gain related to Dutch pension plan amendments.

Segment earnings in 2013 included a net charge of \$597 million, resulting primarily from impairments and deferred tax adjustments which were partly offset by a beneficial tax rate change in the UK and gains on divestments.

# **EARNINGS 2013-2012**

Segment earnings in 2013 were \$3,869 million, 28% lower than in 2012. Segment earnings were 16% lower excluding the impact of the net charge of \$597 million in 2013 described above and the net gain of \$39 million in 2012 resulting from net gains on divestments and a tax credit, partly offset by legal and environmental provisions. The 16% decrease was mostly due to Refining making a loss, due to weaker margins, which was partly offset by higher contributions from Chemicals and Trading. Contributions from Marketing were broadly similar to 2012.

Realised refining margins were significantly lower than in 2012 due to a deterioration in industry conditions. Industry refining margins were lower in all regions, except for US Gulf Coast margins which were slightly higher. Lower US West Coast margins in 2013 reflected an excess supply of gasoline in the region. Margins in 2013 were also impacted by a narrower spread between the Brent and West Texas

Intermediate (WTI) crude oil price benchmarks, as an expansion in pipeline capacity increased the ability to move oil from the landlocked area of Cushing, Oklahoma, where WTI is delivered. In Europe, margins remained weak due to: low regional demand; increased imports from Asia, Russia and the USA; and limited export opportunities to the USA due to high gasoline inventories there. Margins in Asia-Pacific were impacted by excess capacity and weak demand due to an economic slowdown.

#### **NET CAPITAL INVESTMENT**

Net capital investment was \$3.1 billion in 2014 compared with \$4.9 billion in 2013. The decrease was primarily due to higher divestment proceeds, which were \$2.8 billion in 2014 compared with \$0.6 billion in 2013.

Capital investment was \$5.9 billion in 2014 compared with \$5.5 billion in 2013. In Refining and Chemicals, it increased by \$0.5 billion to \$3.7 billion and in Marketing it decreased by \$0.1 billion to \$2.2 billion. In 2014, 54% of our capital investment was used to maintain the integrity and performance of our asset base, compared with 61% in 2013.

#### PORTFOLIO ACTIONS

In Pipelines, we formed Shell Midstream Partners, L.P. (see "Business and property – Pipelines" in this section).

In Lubricants, with our joint-venture partner Hyundai Oilbank, we opened a base oil manufacturing plant in Daesan, South Korea (Shell interest 40%). The plant has the capacity to produce some 13 thousand barrels of AP1 Group II base oils per day. The first batch of base oil was successfully blended in the Zhapu lubricant oil blending plant in China in August 2014. Shell will take a majority of the output from this plant in the first few years which will significantly increase the volume of Group II base oils for our supply chain in the region.

In Chemicals, Shell has taken full control of Ellba Eastern (Pte) Ltd, through the acquisition of the outstanding 50% interest. The company, which was already operated by Shell, produces styrene monomer and propylene oxide. The buyout enables integration with and optimisation of Shell's existing asset base on Jurong Island, in Singapore, allowing for future growth. With our partner Qatar Petroleum, we have decided not to proceed with the Al Karaana petrochemicals project in Qatar.

Our Raízen joint venture in Brazil has commissioned a secondgeneration biofuels plant, which will use technology from logen Energy to produce about 40 million litres of cellulosic ethanol a year from leaves, bark and other sugar cane waste. Additionally, Raizen acquired the fuel distributor Distribuidora Latina and its 200-plus retail stations.

We continued to review our portfolio to divest positions that fail to deliver competitive performance or no longer meet our longer-term strategic objectives.

We sold the majority of our Downstream businesses in Australia and Italy. In Australia we retained the aviation business; in Italy we retained the lubricants business.

We sold our shareholdings in the Kralupy and Litvinov refineries in the Czech Republic. We announced the intention to explore viable options for the Port Dickson refinery in Malaysia (Shell interest 51%), including the potential sale or conversion of operations to a storage terminal.

We signed an agreement to sell our retail, commercial fuels and bitumen businesses and supply terminals in Norway to ST1. They will continue to operate under the Shell brand. We intend to continue to

# **DOWNSTREAM CONTINUED**

operate the aviation business as a joint venture with ST1. The Gasnor, marine and lubricants businesses are not included in the agreement.

We have announced our intention to sell the Fredericia refinery, retail, aviation and commercial fuels businesses in Denmark. We intend to continue to sell lubricants via a distributor.

#### **BUSINESS AND PROPERTY**

# Refining

We have interests in 24 refineries worldwide with the capacity to process a total of over 3.1 million barrels of crude oil per day (Shell share). Approximately 35% of our refining capacity is in Europe and Africa, with 39% in the Americas and 26% in Asia and Oceania.

The Port Arthur refinery in Texas, USA, owned by Motiva Enterprises LLC (Shell interest 50%), is the largest refinery in North America and includes one of the world's largest single-site base oil manufacturing plants.

### **Pipelines**

Shell Pipeline Company owns and operates seven tank farms across the USA and transports more than 1.5 billion barrels of crude oil and refined products a year through 3,800 miles of pipelines in the Gulf of Mexico and five US states. Our various non-operated ownership interests provide a further 8,000 pipeline miles and offer opportunities for sharing best practices with other pipeline operators.

We carry more than 40 types of crude oil and more than 20 grades of gasoline, as well as diesel fuel, aviation fuel, chemicals and ethylene.

Shell Midstream Partners L.P., was formed to own, operate, develop and acquire pipelines and other midstream assets, and was listed on the New York Stock Exchange under the ticker symbol "SHLX" on October 29, 2014. The partnership's initial assets, which include a portion of Shell's interest in four pipelines that transport crude oil and refined products offshore from the Gulf of Mexico and along the US Gulf Coast and East Coast, consist of interests in entities that own crude oil and refined products pipelines which serve as key infrastructure for transporting growing volumes of oil, produced onshore and offshore, to Gulf Coast refining markets. It also delivers refined products from those refineries to major demand centres. Shell controls the general partner and holds a majority share in the limited partnership.

### Marketing

#### RFTAII

There were close to 43,000 Shell-branded retail stations in over 70 countries at the end of 2014. We have more than 100 years' experience in fuel development. In recent years, we have concentrated on developing fuels with special formulations designed to clean engines and improve performance. We sell such fuels under the Shell V-Power brand in more than 60 countries.

#### **LUBRICANTS**

Across approximately 100 countries we make, market or sell technically-advanced lubricants not only for passenger cars, trucks and coaches but also for industrial machinery in the manufacturing, mining, power generation, agriculture and construction sectors.

We lead the global market in branded lubricants. Our passenger car and heavy-duty engine oil brands are the most popular in the USA and China – the world's largest markets for lubricants.

We have a global lubricants supply chain with a network of eight base oil manufacturing plants, 50 lubricant blending plants, 18 grease plants and four gas-to-liquids base oil storage hubs.

Through our marine activities we primarily provide lubricants, but also fuels and related technical services, to the shipping and maritime sectors. We supply almost 100 grades of lubricants and 10 types of fuel to vessels worldwide, ranging from large ocean-going tankers to small fishing boats.

#### **BUSINESS TO BUSINESS**

Our Business to Business (B2B) activities encompass the sale of fuels and speciality products and services to a broad range of commercial customers.

Shell Aviation fuels more than 7,000 aircraft every day at approximately 800 airports in around 40 countries. On average, we refuel an aircraft every 12 seconds.

Shell Gas (LPG) provides liquefied petroleum gas and related services to retail, commercial and industrial customers for cooking, heating, lighting and transport.

Shell Commercial Fuels provides transport, industrial and heating fuels. Our range of products, from reliable main-grade fuels to premium products, can offer tangible benefits. These include fuel economy, enhanced equipment performance, reduction in maintenance frequency and costs as well as environmental benefits, such as reduced emissions. We continue to pursue opportunities in the LNG for transport sector, developing projects that provide us and our customers with the best commercial value. Shell is the first customer of a new, dedicated LNG for transport infrastructure at the Gas Access to Europe (Gate) terminal in the port of Rotterdam in the Netherlands. Shell has committed to buy capacity from the Gate terminal, which has enabled investment in the terminal expansion.

Shell Bitumen supplies on average 11,000 tonnes of products every day to 1,600 customers worldwide and invests in technology research and development to create innovative products.

Shell Sulphur Solutions is a business which manages the complete value chain of sulphur, from refining to marketing. The business provides sulphur for industries such as mining and textiles and also develops new products which incorporate sulphur, such as fertilisers.

#### ALTERNATIVE ENERGIES

Raízen, our joint venture in Brazil, produces ethanol from sugar cane, and manages a retail network. With an annual production capacity of more than 2 billion litres, it is one of the largest biofuel producers in the world. We investigate alternative energy technologies with a long-term view to develop them into profitable business opportunities. We were one of the first companies to invest in advanced biofuels and continue to research and explore the potential of hydrogen as a fuel.

#### Chemicals

#### MANUFACTURING

Our plants produce a range of base chemicals, including ethylene, propylene and aromatics, as well as intermediate chemicals, such as styrene monomer, propylene oxide, solvents, detergent alcohols, ethylene oxide and ethylene glycol. We have the capacity to produce nearly 6 million tonnes of ethylene a year.

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#### MARKETING

We sell petrochemicals to about 1,000 major industrial customers worldwide. Our Chemicals business is one of the top 10 chemicals enterprises in the world by revenue. Its products are used to make numerous everyday items, from clothing and cars to detergents and bicycle helmets.

# Trading and Supply

We trade in physical and financial contracts, lease storage and transportation capacities, and manage shipping activities globally.

With more than 1,500 storage tanks and approximately 150 distribution facilities in around 25 countries, our supply and distribution infrastructure is well positioned to make deliveries around the world. This includes supplying feedstocks for our refineries and chemical plants and finished products such as gasoline, diesel and aviation fuel to our Marketing businesses and customers.

# DOWNSTREAM BUSINESS ACTIVITIES WITH IRAN, SUDAN AND SYRIA

#### Iran

Shell transactions with Iran are disclosed separately. See "Section 13(r) of the US Securities Exchange Act of 1934 Disclosure".

#### Sudan

We ceased all operational activities in Sudan in 2008. We have, however, continued soil remediation in 2014 related to earlier operations in the country.

### Syria

We are in compliance with all EU and US sanctions. We supply limited quantities of polyols via a Netherlands-based distributor to private sector customers in Syria. Polyols are commonly used for the production of foam in mattresses and soft furnishings.

#### DOWNSTREAM DATA TABLES

The tables below reflect Shell subsidiaries, the 50% Shell interest in Motiva in the USA and instances where Shell owns the crude oil or feedstocks processed by a refinery. Other joint ventures and associates are only included where explicitly stated.

OIL PRODUCTS - COST C PROCESSED OR CONSUM		PER BARREL	
	2014	2013	2012
Total	82.76	90.36	106.82

[A] Includes Upstream margin on crude oil supplied by Shell subsidiaries, joint ventures and associates.

CRUDE DISTILLATION CAPACITY [A]	THOUSAND	B/CALEND	AR DAY [B]
	2014	2013	2012
Europe	1,033	1,033	1,084
Asia	810	810	664
Oceania	80	118	158
Africa	82	82	83
Americas	1,212	1,212	1,212
Total	3,217	3,255	3,201

<sup>[</sup>A] Average operating capacity for the year, excluding mothballed capacity.

ETHYLENE CAPACITY [A]	THOUSAND TONNES/YEA			
	2014	2013	2012	
Europe	1,659	1,659	1,659	
Asia	1,922	1,922	1,922	
Oceania	_	_	_	
Africa	_	_	_	
Americas	2,212	2,212	2,212	
Total	5,793	5,793	5,793	

[A] Includes the Shell share of capacity entitlement (offtake rights) of joint ventures and associates, which may be different from nominal equity interest. Nominal capacity is quoted as at December 31.

OIL PRODUCTS - CRUDE OIL PROCESSED [A] THOUSAND B/D						
	2014	2013	2012			
Europe	941	1,010	1,069			
Asia	688	706	<i>7</i> 61			
Oceania	59	116	93			
Africa	69	61	70			
Americas	1,149	1,100	1,024			
Total	2,906	2,993	3,017			

[A] Includes natural gas liquids, share of joint ventures and associates and processing for others

REFINERY PROCESSING INTAKE [A]		THOL	JSAND B/D
	2014	2013	2012
Crude oil	2,716	2,732	2,620
Feedstocks	187	183	199
Total	2,903	2,915	2,819
Europe	941	933	970
Asia	639	634	520
Oceania	64	105	150
Africa	69	54	62
Americas	1,190	1,189	1,117
Total	2,903	2,915	2,819

[A] Includes crude oil, natural gas liquids and feedstocks processed in crude distillation units and in secondary conversion units.

REFINERY PROCESSING OUTTURN [A]		THOU	ISAND B/D
	2014	2013	2012
Gasolines	1,049	1,049	995
Kerosines	331	368	321
Gas/Diesel oils	1,047	1,014	996
Fuel oil	316	274	256
Other	395	389	452
Total	3,138	3,094	3,020

[A] Excludes "own use" and products acquired for blending purposes.

<sup>[</sup>B] Calendar day capacity is the maximum sustainable capacity adjusted for normal unit downtime.

# **DOWNSTREAM CONTINUED**

OIL PRODUCT SALES VOL	UMES [A]	THOUSA	ND B/D
	2014	2013	2012
Europe			
Gasolines	405	415	450
Kerosines	264	226	234
Gas/Diesel oils	841	962	909
Fuel oil	176	194	180
Other products	205	168	184
Total	1,891	1,965	1,957
Asia			
Gasolines	343	325	352
Kerosines	191	191	172
Gas/Diesel oils	515	483	515
Fuel oil	325	322	355
Other products	441	255	220
Total	1,815	1,576	1,614
Oceania			
Gasolines	52	87	93
Kerosines	48	51	48
Gas/Diesel oils	64	115	107
Fuel oil	_	_	4
Other products	10	19	26
Total	174	272	278
Africa			
Gasolines	36	45	58
Kerosines	9	9	16
Gas/Diesel oils	52	43	53
Fuel oil	_	3	9
Other products	7	15	13
Total	104	115	149
Americas			
Gasolines	1,268	1,149	1,123
Kerosines	206	234	264
Gas/Diesel oils	583	519	528
Fuel oil	68	96	89
Other products	256	238	233
Total	2,381	2,236	2,237
Total product sales [B]			
Gasolines	2,104	2,021	2,076
Kerosines	718	711	734
Gas/Diesel oils	2,055	2,122	2,112
Fuel oil	569	615	637
Other products	919	695	676
Total	6,365	6,164	6,235
TOTAL	0,000	0,104	

<sup>[</sup>A] Excludes deliveries to other companies under reciprocal sale and purchase arrangements, which are in the nature of exchanges. Sales of condensate and natural gas liquids are included.

CHEMICALS SALES VOLUM	<b>ES</b> [A]	THOUSAND	TONNES
	2014	2013	2012
Europe			
Base chemicals	3,287	3,423	3,771
First-line derivatives and others	2,019	2,281	2,626
Total	5,306	5,704	6,397
Asia			
Base chemicals	2,220	2,266	2,588
First-line derivatives and others	2,901	2,989	3,074
Total	5,121	5,255	5,662
Oceania			
Base chemicals	-	_	-
First-line derivatives and others	35	62	75
Total	35	62	75
Africa			
Base chemicals	-	_	-
First-line derivatives and others	43	47	54
Total	43	47	54
Americas			
Base chemicals	3,251	3,218	3,336
First-line derivatives and others	3,252	3,100	3,145
Total	6,503	6,318	6,481
Total product sales			
Base chemicals	8,758	8,907	9,695
First-line derivatives and others	8,250	8,479	8,974
Total	17,008	17,386	18,669

<sup>[</sup>A] Excludes feedstock trading and by-products.

<sup>[</sup>B] Certain contracts are held for trading purposes and reported net rather than gross. The effect in 2014 was a reduction in oil product sales of 1,067,000 b/d (2013: 921,000 b/d; 2012: 856,000 b/d).

# MANUFACTURING PLANTS AT DECEMBER 31, 2014

REFINERIES IN OPER	ATION	_					
REFINERIES IN OPER	AIION			Tho	ousand barrels/cal	endar dav. 10	0% capacity[B]
	Location	Asset class	Shell interest (%)[A]	Crude distillation capacity	Thermal cracking/ visbreaking/ coking	Catalytic cracking	Hydro- cracking
Europe							
Denmark	Fredericia	•	100	63	40	_	-
Germany	Harburg	•	100	58	14	-	-
	Miro [C]		32	310	65	89	-
	Rheinland	<b>.</b> •	100	325	44	_	80
	Schwedt [C]		38	220	47	50	-
Netherlands	Pernis		100	404	45	48	81
Asia							
Japan	Mizue (Toa) [C]	• •	18	64	24	38	-
	Yamaguchi [C]	•	13	110	_	25	_
	Yokkaichi [C]	• •	26	234	_	55	_
Malaysia	Port Dickson	•	51	107	_	39	_
Pakistan	Karachi [C]		30	43	_	-	-
Philippines	Tabangao		67	96	31	-	_
Saudi Arabia	Al Jubail [C]	• •	50	292	85	-	45
Singapore	Pulau Bukom		100	462	77	34	55
Africa							
South Africa	Durban [C]	•	38	165	23	34	_
Americas							
Argentina	Buenos Aires	• •	100	100	18	20	_
Canada							
Alberta	Scotford	•	100	92	_	-	62
Ontario	Sarnia	•	100	71	5	19	9
USA							
California	Martinez	•	100	144	42	65	37
Louisiana	Convent [C]	•	50	227	-	82	45
	Norco [C]		50	229	25	107	39
Texas	Deer Park		50	312	79	63	53
	Port Arthur [C]	•	50	569	138	81	67
Washington	Puget Sound	• •	100	137	23	52	_

<sup>[</sup>A] Shell interest rounded to nearest whole percentage point; Shell share of production capacity may differ.

[B] Calendar day capacity is the maximum sustainable capacity adjusted for normal unit downtime.

[C] Not operated by Shell.

Integrated refinery and chemical complex.
 Refinery complex with cogeneration capacity.
 Refinery complex with chemical unit(s).

# **DOWNSTREAM CONTINUED**

			Thous	and tonnes/year, Shell	share capacity	
	Location	Ethylene	Styrene monomer	Ethylene glycol	Higher olefins[B]	Additional products
Europe		·				
Germany	Rheinland	272	_	_	-	Α
Netherlands	Moerdijk [C]	972	725	155	_	Α, Ι
UK	Mossmorran [D]	415	_	_	_	_
	Stanlow [D]	_	-	-	330	I
Asia						
China	Nanhai [D]	475	320	175	-	A, I, P
Japan	Yamaguchi [D]	_	_	_	11	Α, Ι
Saudi Arabia	Al Jubail [D]	366	400	_	_	А, О
Singapore	Jurong Island	281	1,069	1,005	_	A, I, P, O
• .	Pulau Bukom	800	-	_	-	Α, Ι
Americas						
Canada	Scotford	_	485	520	-	Α, Ι
USA	Deer Park	836	_	_	_	Α, Ι
	Geismar	_	_	400	920	I
	Norco	1,376	-	-	_	Α
Total		5,793	2,999	2,255	1,261	

- [A] Shell share of capacity of subsidiaries, joint arrangements and associates (Shell and non-Shell operated), excluding capacity of the Infineum additives joint ventures.

  [B] Higher olefins are linear alpha and internal olefins (products range from C6-C2024).
- [C] Due to a fire and separate breakdown of the steam boilers in 2014, Moerdijk was not fully in operation at December 31, 2014.
- [D] Not operated by Shell.
- A Aromatics, lower olefins.
  I Intermediates.
- P Polyethylene, polypropylene.
- O Other.

OTHER CHEMI	CAL LOCATIONS	
	Location	Products
Europe		
Germany	Karlsruhe	Α
	Schwedt	Α
Netherlands	Pernis	A, I, O
Asia		
Japan	Kawasaki	A, I
	Yokkaichi	Α
Malaysia	Bintulu	1
	Port Dickson	Α
Africa		
South Africa	Durban	1
Americas		
Argentina	Buenos Aires	
Canada	Sarnia	A, I
USA	Martinez	0
	Mobile	Α
	Puget Sound	1

A Aromatics, lower olefins.

- I Intermediates.
- O Other.