

BP Statistical Review of World Energy June 2010



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Proved reserves

| | At end 1989 Thousand million barrels | At end 1999 Thousand million barrels | At end 2008 Thousand million barrels | At end 2009 | | | |
|--------------------------------------|---|---|---|-------------------------------|--------------------------------|-------------------|--------------|
| | | | | Thousand million tonnes | Thousand million barrels | Share of total | R/P ratio |
| US | 34.3 | 29.7 | 28.4 | 3.4 | 28.4 | 2.1% | 10.8 |
| Canada | 11.6 | 18.3 | 33.2 | 5.2 | 33.2 | 2.5% | 28.3 |
| Mexico | 52.0 | 21.5 | 11.9 | 1.6 | 11.7 | 0.9% | 10.8 |
| Total North America | 97.9 | 69.5 | 73.4 | 10.2 | 73.3 | 5.5% | 15.0 |
| Argentina | 2.2 | 3.1 | 2.5 | 0.3 | 2.5 | 0.2% | 10.2 |
| Brazil | 2.8 | 8.2 | 12.8 | 1.8 | 12.9 | 1.0% | 17.4 |
| Colombia | 2.0 | 2.3 | 1.4 | 0.2 | 1.4 | 0.1% | 5.4 |
| Ecuador | 1.4 | 4.4 | 6.5 | 0.9 | 6.5 | 0.5% | 36.1 |
| Peru | 0.8 | 0.9 | 1.1 | 0.2 | 1.1 | 0.1% | 21.1 |
| Trinidad & Tobago | 0.6 | 0.8 | 0.8 | 0.1 | 0.8 | 0.1% | 15.1 |
| Venezuela | 59.0 | 76.8 | 172.3 | 24.8 | 172.3 | 12.9% | * |
| Other S. & Cent. America | 0.6 | 1.3 | 1.4 | 0.2 | 1.4 | 0.1% | 26.8 |
| Total S. & Cent. America | 69.5 | 97.8 | 198.9 | 28.5 | 198.9 | 14.9% | 80.6 |
| Azerbaijan | n/a | 1.2 | 7.0 | 1.0 | 7.0 | 0.5% | 18.6 |
| Denmark | 0.6 | 0.9 | 0.8 | 0.1 | 0.9 | 0.1% | 9.5 |
| Italy | 0.8 | 0.9 | 1.0 | 0.1 | 0.9 | 0.1% | 27.2 |
| Kazakhstan | n/a | 25.0 | 39.8 | 5.3 | 39.8 | 3.0% | 64.9 |
| Norway | 8.4 | 10.9 | 7.5 | 0.9 | 7.1 | 0.5% | 8.3 |
| Romania | 1.2 | 1.2 | 0.5 | 0.1 | 0.5 | ♦ | 14.2 |
| Russian Federation | n/a | 59.2 | 74.3 | 10.2 | 74.2 | 5.6% | 20.3 |
| Turkmenistan | n/a | 0.5 | 0.6 | 0.1 | 0.6 | ♦ | 8.0 |
| United Kingdom | 3.8 | 5.0 | 3.1 | 0.4 | 3.1 | 0.2% | 5.8 |
| Uzbekistan | n/a | 0.6 | 0.6 | 0.1 | 0.6 | ♦ | 15.2 |
| Other Europe & Eurasia | 69.4 | 2.3 | 2.1 | 0.3 | 2.2 | 0.2% | 14.9 |
| Total Europe & Eurasia | 84.2 | 107.8 | 137.2 | 18.5 | 136.9 | 10.3% | 21.2 |
| Iran | 92.9 | 93.1 | 137.6 | 18.9 | 137.6 | 10.3% | 89.4 |
| Iraq | 100.0 | 112.5 | 115.0 | 15.5 | 115.0 | 8.6% | * |
| Kuwait | 97.1 | 96.5 | 101.5 | 14.0 | 101.5 | 7.6% | * |
| Oman | 4.3 | 5.7 | 5.6 | 0.8 | 5.6 | 0.4% | 18.9 |
| Qatar | 4.5 | 13.1 | 26.8 | 2.8 | 26.8 | 2.0% | 54.7 |
| Saudi Arabia | 260.1 | 262.8 | 264.1 | 36.3 | 264.6 | 19.8% | 74.6 |
| Syria | 2.0 | 2.3 | 2.5 | 0.3 | 2.5 | 0.2% | 18.2 |
| United Arab Emirates | 98.1 | 97.8 | 97.8 | 13.0 | 97.8 | 7.3% | * |
| Yemen | 2.0 | 1.9 | 2.7 | 0.3 | 2.7 | 0.2% | 24.5 |
| Other Middle East | 0.1 | 0.2 | 0.1 | † | 0.1 | ♦ | 9.4 |
| Total Middle East | 661.0 | 685.8 | 753.7 | 102.0 | 754.2 | 56.6% | 84.8 |
| Algeria | 9.2 | 11.3 | 12.2 | 1.5 | 12.2 | 0.9% | 18.5 |
| Angola | 2.1 | 5.1 | 13.5 | 1.8 | 13.5 | 1.0% | 20.7 |
| Chad | – | – | 0.9 | 0.1 | 0.9 | 0.1% | 20.9 |
| Republic of Congo (Brazzaville) | 0.7 | 1.7 | 1.9 | 0.3 | 1.9 | 0.1% | 19.4 |
| Egypt | 4.3 | 3.8 | 4.2 | 0.6 | 4.4 | 0.3% | 16.2 |
| Equatorial Guinea | – | 0.6 | 1.7 | 0.2 | 1.7 | 0.1% | 15.2 |
| Gabon | 1.0 | 2.6 | 3.7 | 0.5 | 3.7 | 0.3% | 44.1 |
| Libya | 22.8 | 29.5 | 44.3 | 5.8 | 44.3 | 3.3% | 73.4 |
| Nigeria | 16.0 | 29.0 | 37.2 | 5.0 | 37.2 | 2.8% | 49.5 |
| Sudan | 0.3 | 0.3 | 6.7 | 0.9 | 6.7 | 0.5% | 37.5 |
| Tunisia | 1.8 | 0.3 | 0.6 | 0.1 | 0.6 | ♦ | 18.4 |
| Other Africa | 0.9 | 0.7 | 0.6 | 0.1 | 0.6 | ♦ | 11.0 |
| Total Africa | 59.1 | 84.7 | 127.5 | 16.9 | 127.7 | 9.6% | 36.0 |
| Australia | 3.1 | 4.7 | 4.2 | 0.5 | 4.2 | 0.3% | 20.7 |
| Brunei | 1.2 | 1.3 | 1.1 | 0.1 | 1.1 | 0.1% | 17.6 |
| China | 16.0 | 15.1 | 14.8 | 2.0 | 14.8 | 1.1% | 10.7 |
| India | 4.3 | 5.0 | 5.8 | 0.8 | 5.8 | 0.4% | 21.1 |
| Indonesia | 5.1 | 5.2 | 3.7 | 0.6 | 4.4 | 0.3% | 11.8 |
| Malaysia | 3.7 | 5.0 | 5.5 | 0.7 | 5.5 | 0.4% | 20.4 |
| Thailand | 0.2 | 0.4 | 0.5 | 0.1 | 0.5 | ♦ | 3.8 |
| Vietnam | 0.1 | 1.8 | 4.7 | 0.6 | 4.5 | 0.3% | 35.7 |
| Other Asia Pacific | 0.9 | 1.4 | 1.4 | 0.2 | 1.3 | 0.1% | 11.2 |
| Total Asia Pacific | 34.7 | 39.9 | 41.7 | 5.6 | 42.2 | 3.2% | 14.4 |
| Total World | 1006.4 | 1085.6 | 1332.4 | 181.7 | 1333.1 | 100.0% | 45.7 |
| of which: European Union | 7.7 | 9.0 | 6.1 | 0.8 | 6.3 | 0.5% | 8.2 |
| OECD | 116.4 | 93.3 | 91.3 | 12.4 | 90.8 | 6.8% | 13.5 |
| OPEC | 763.2 | 831.9 | 1028.8 | 140.4 | 1029.4 | 77.2% | 85.3 |
| Non-OPEC† | 175.8 | 166.4 | 180.6 | 24.6 | 180.9 | 13.6% | 14.7 |
| Former Soviet Union | 67.3 | 87.2 | 123.0 | 16.7 | 122.9 | 9.2% | 25.5 |
| Canadian oil sands• | n/a | 163.3 | 143.3 | 23.3 | 143.3 | | |
| Proved reserves and oil sands | n/a | 1248.9 | 1475.7 | 205.0 | 1476.4 | | |

*More than 100 years.

†Less than 0.05.

♦Less than 0.05%.

‡Excludes Former Soviet Union.

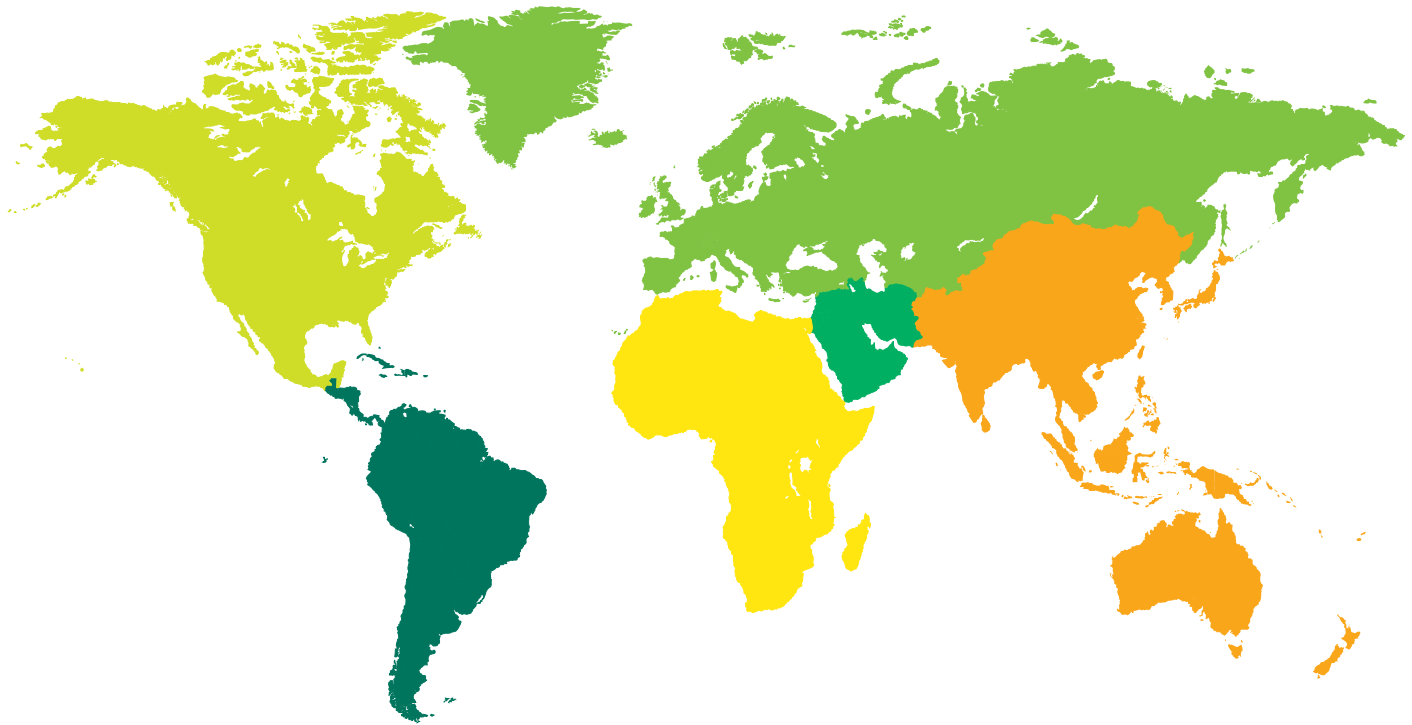
•Remaining established reserves, less reserves 'under active development'.

Notes: Proved reserves of oil – Generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions. **Reserves-to-production (R/P) ratio** – If the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that rate. **Source of data** – The estimates in this table have been compiled using a combination of primary official sources, third-party data from the OPEC Secretariat, *World Oil*, *Oil & Gas Journal* and an independent estimate of Russian reserves based on information in the public domain. Canadian proved reserves include an official estimate of 27.1 billion barrels for oil sands 'under active development'. Venezuelan reserves are taken from the *OPEC Annual Statistical Bulletin*, which notes that the figure includes "proven reserves of the Magna Reserve Project in the Orinoco Belt, which amounted to 94,168mb in 2008". Reserves include gas condensate and natural gas liquids (NGLs) as well as crude oil.

Annual changes and shares of total are calculated using thousand million barrels figures.

Proved reserves at end 2009

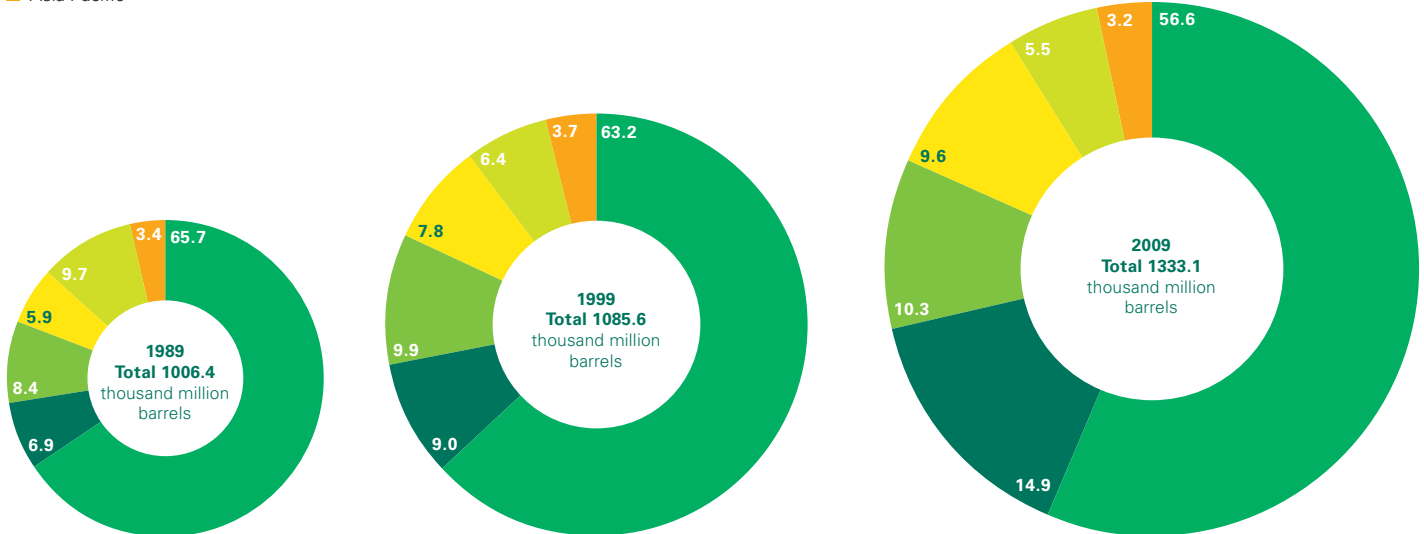
Thousand million barrels



Distribution of proved reserves in 1989, 1999 and 2009

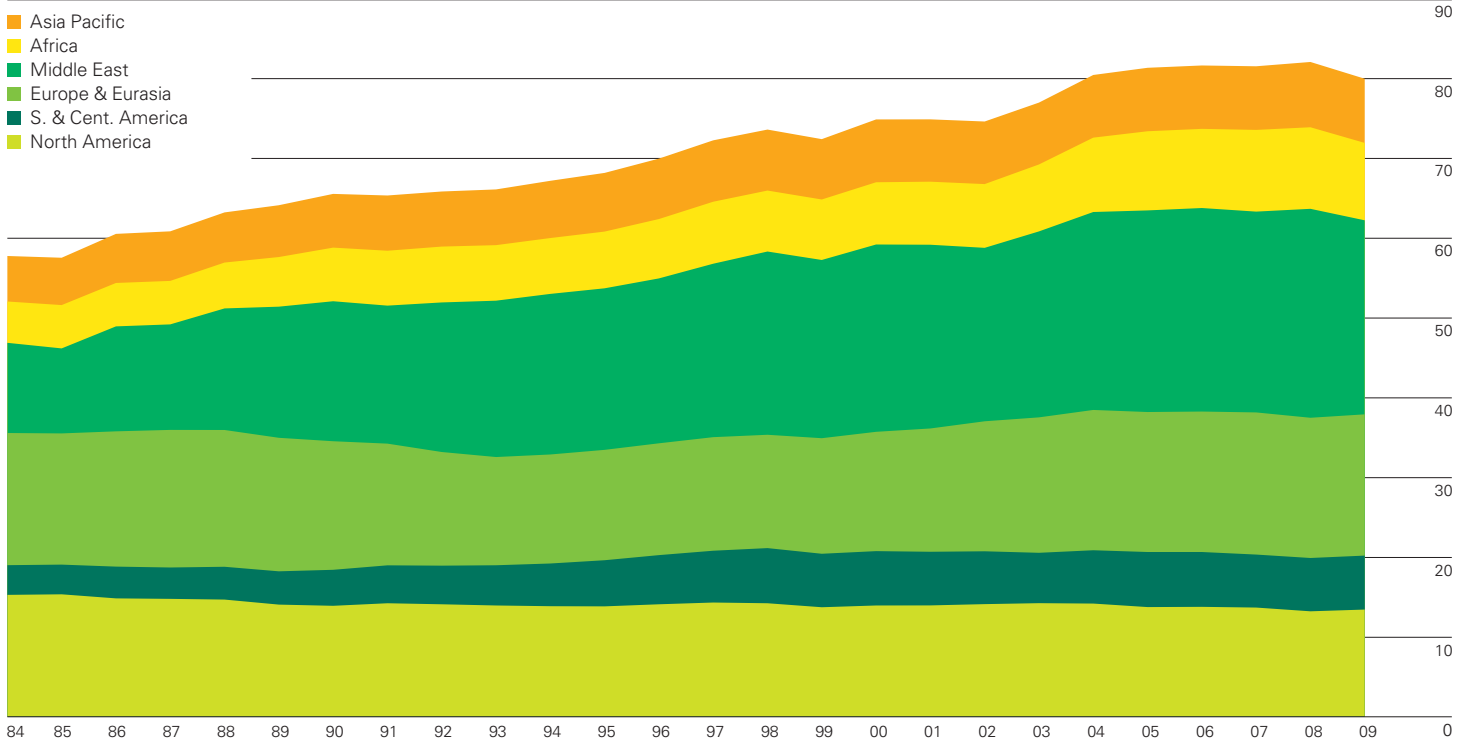
Percentage

- Middle East
- S. & Cent. America
- Europe & Eurasia
- Africa
- North America
- Asia Pacific



Production by region

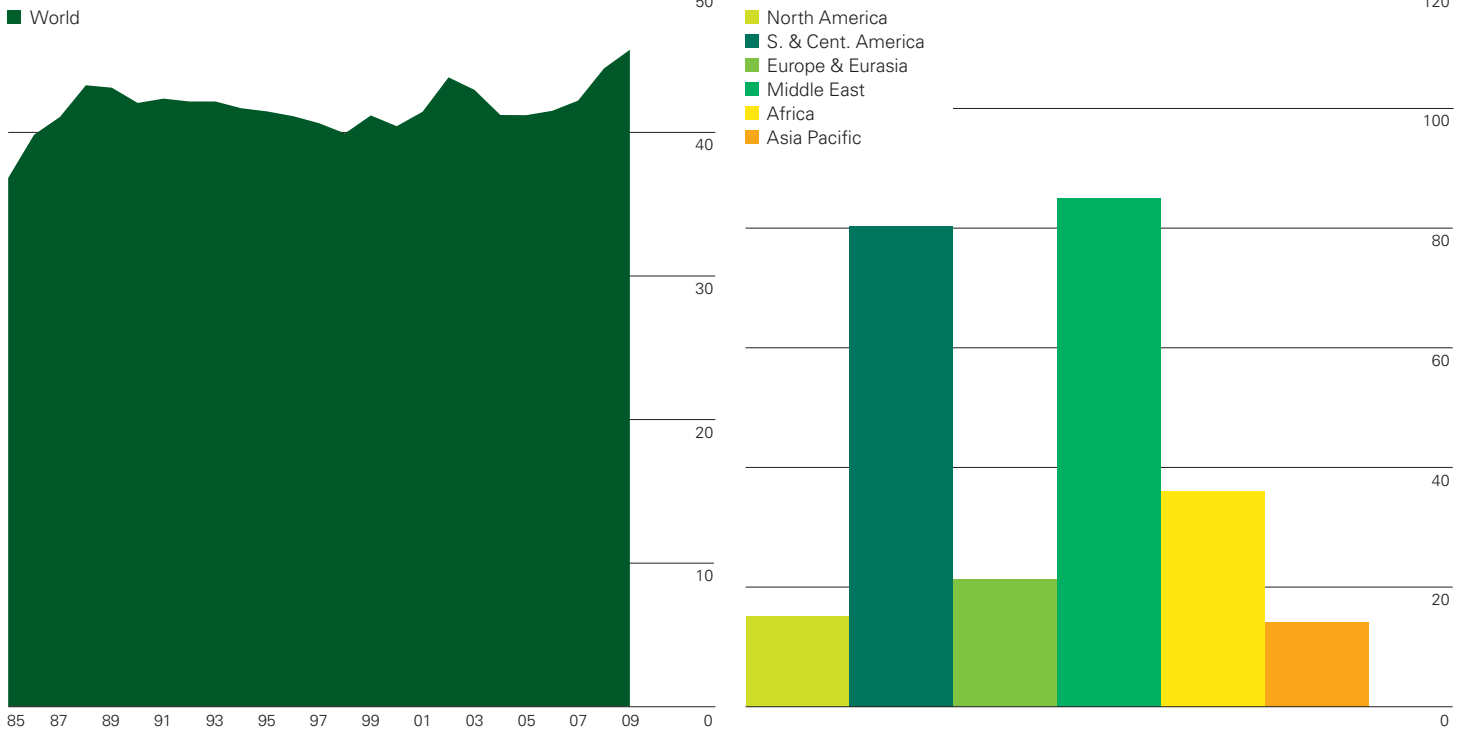
Million barrels daily



World oil production fell by 2 million b/d in 2009, the largest decline since 1982. OPEC production fell by 2.5 million b/d; Saudi Arabian output fell by 1.1 million b/d, the world's largest volumetric decline. Production outside OPEC rose by 450,000b/d, led by an increase of 460,000b/d in the US, the largest increase in the world and the strongest US growth since 1970.

Reserves-to-production (R/P) ratios

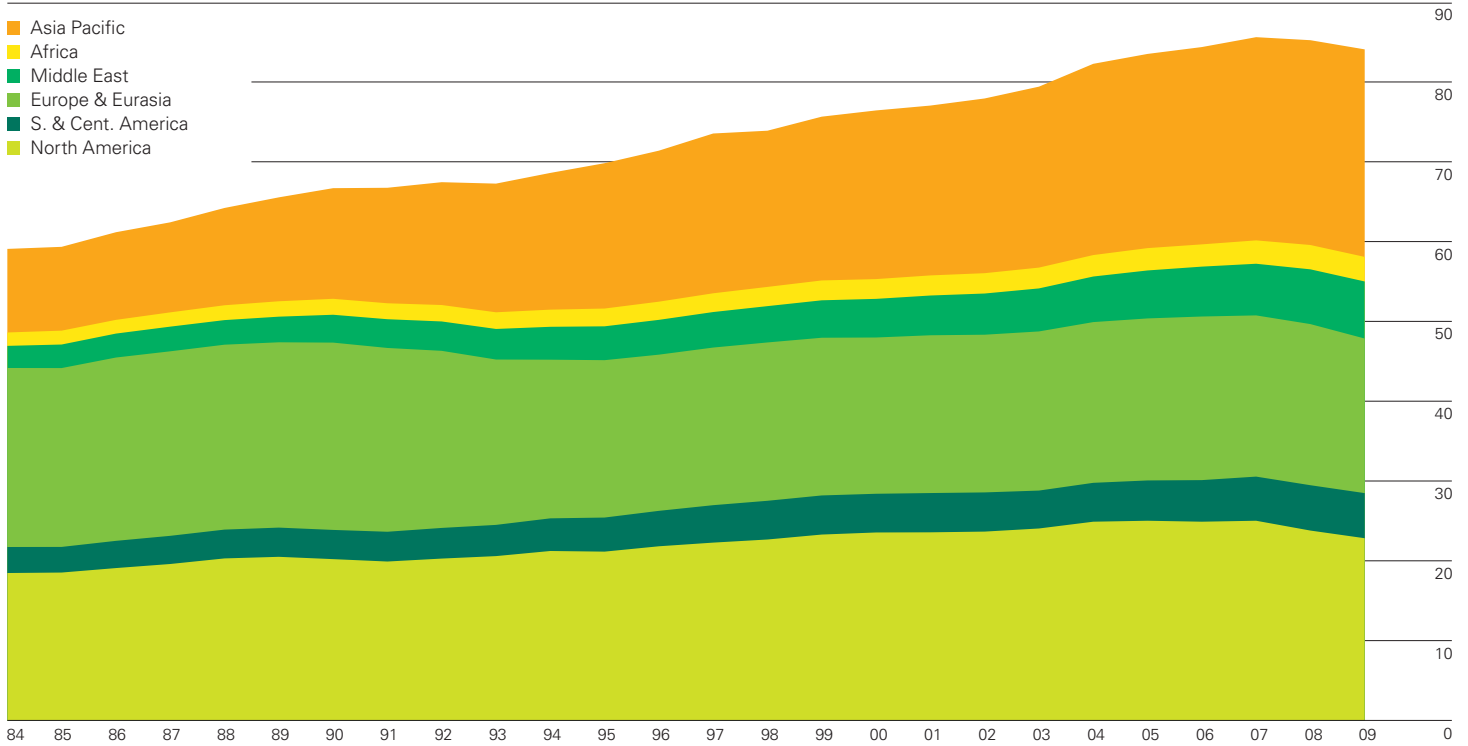
Years



Global proved oil reserves rose by 0.7 billion barrels to 1,333.1 billion barrels, with an R/P ratio of 45.7 years. Increases in Indonesia and Saudi Arabia more than offset declines in Norway, Mexico and Vietnam. The 2008 figure has been revised higher by 74.4 billion barrels, largely due to an increase in Venezuelan official reserves.

Consumption by region

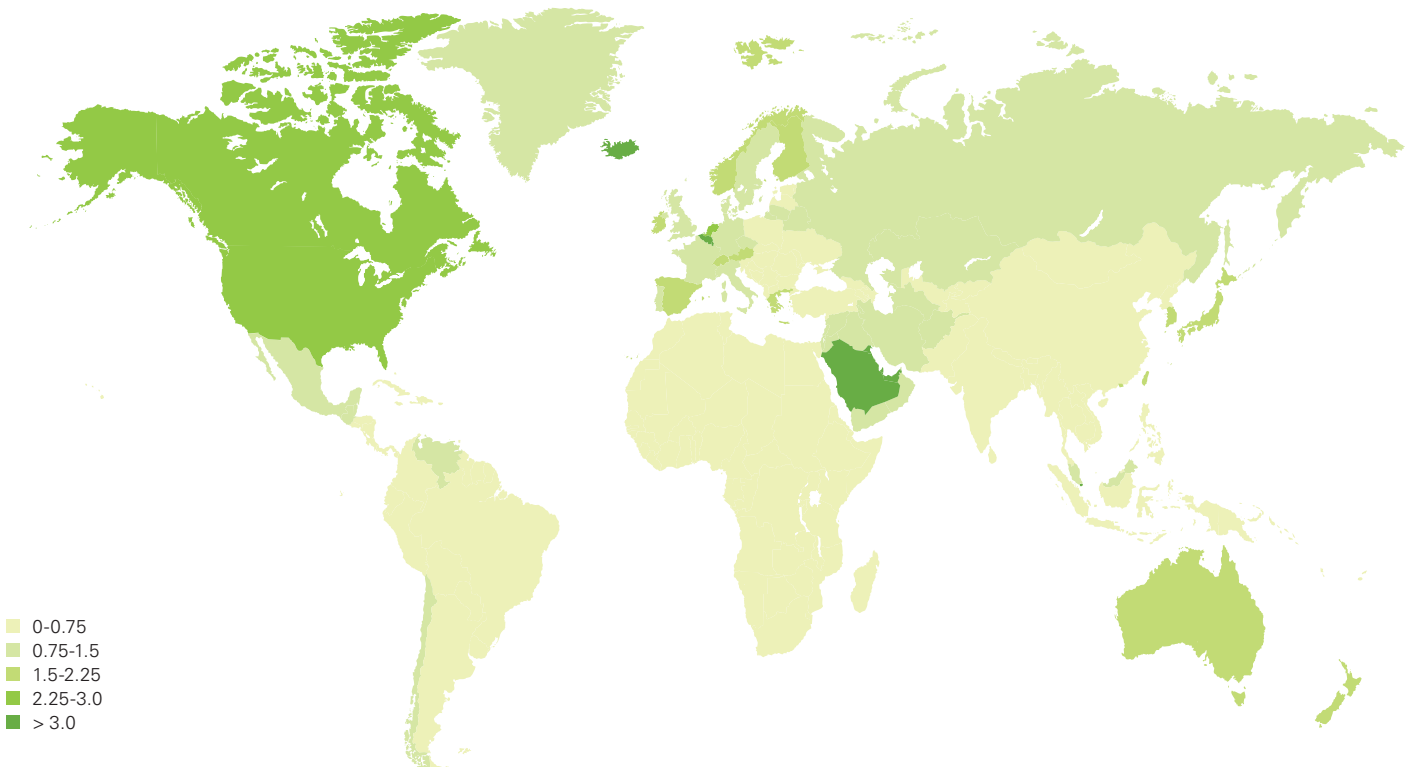
Million barrels daily



World oil consumption fell by 1.2 million b/d, a second consecutive decline and, like oil production, the largest decline since 1982. OECD consumption fell by 2 million b/d, a fourth consecutive annual decline. Consumption outside the OECD increased by 860,000b/d. Consumption declined in North America, South and Central America and Europe and Eurasia, outweighing modest increases in the Middle East, Africa and Asia-Pacific regions.

Consumption per capita 2009

Tonnes

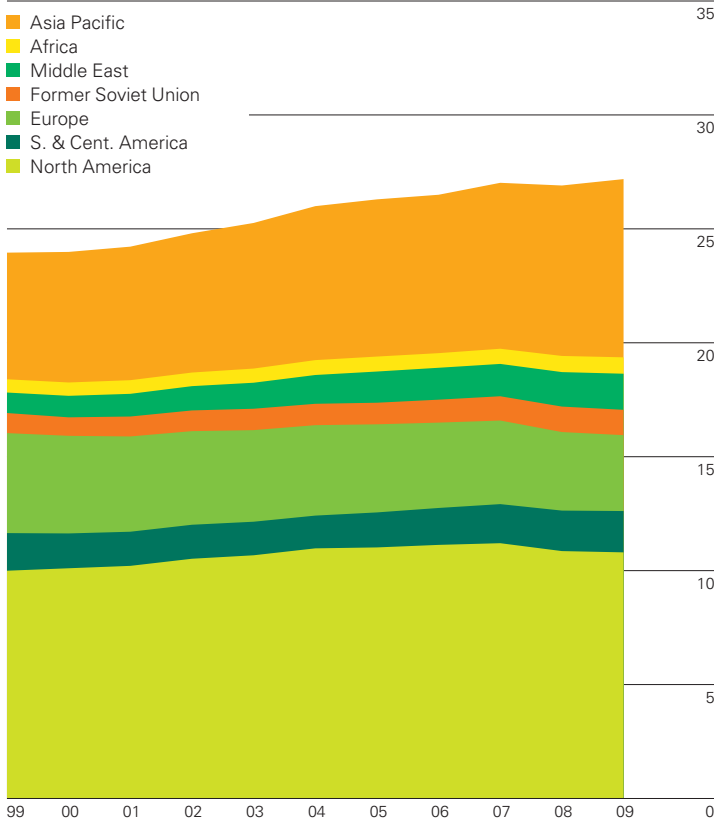


Product consumption by region

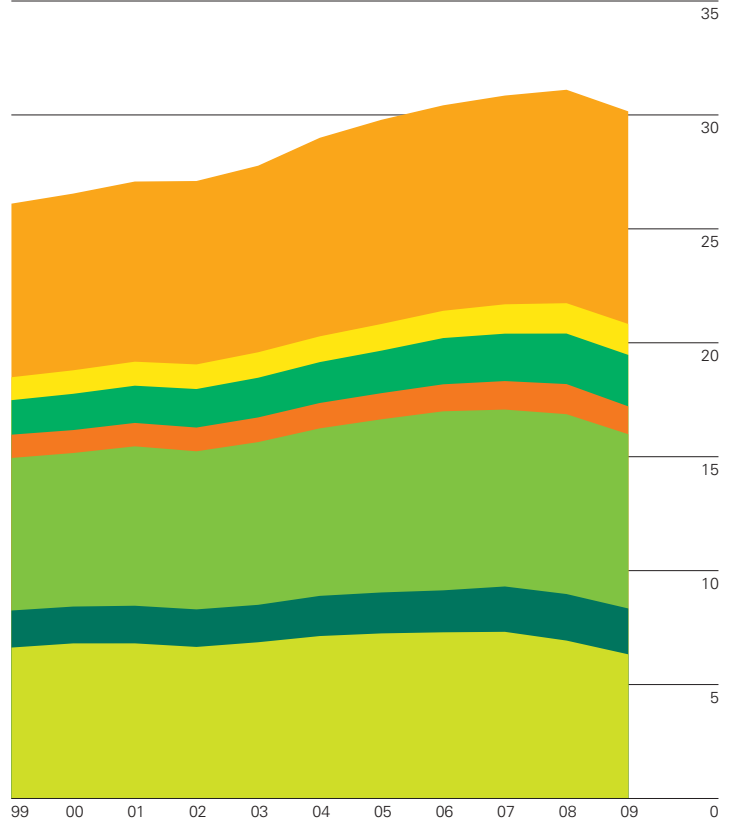
Million barrels daily

Light distillates

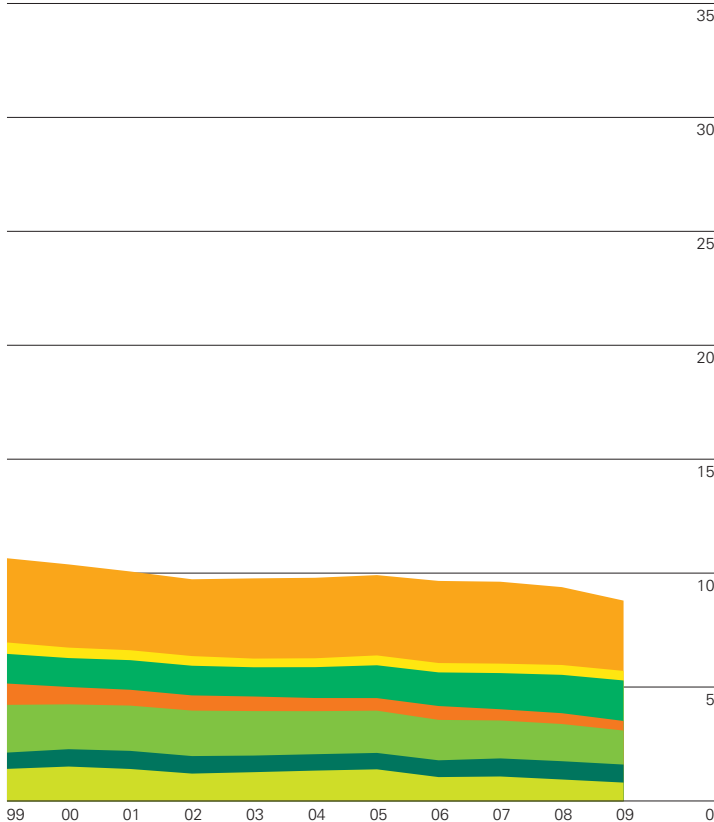
- Asia Pacific
- Africa
- Middle East
- Former Soviet Union
- Europe
- S. & Cent. America
- North America



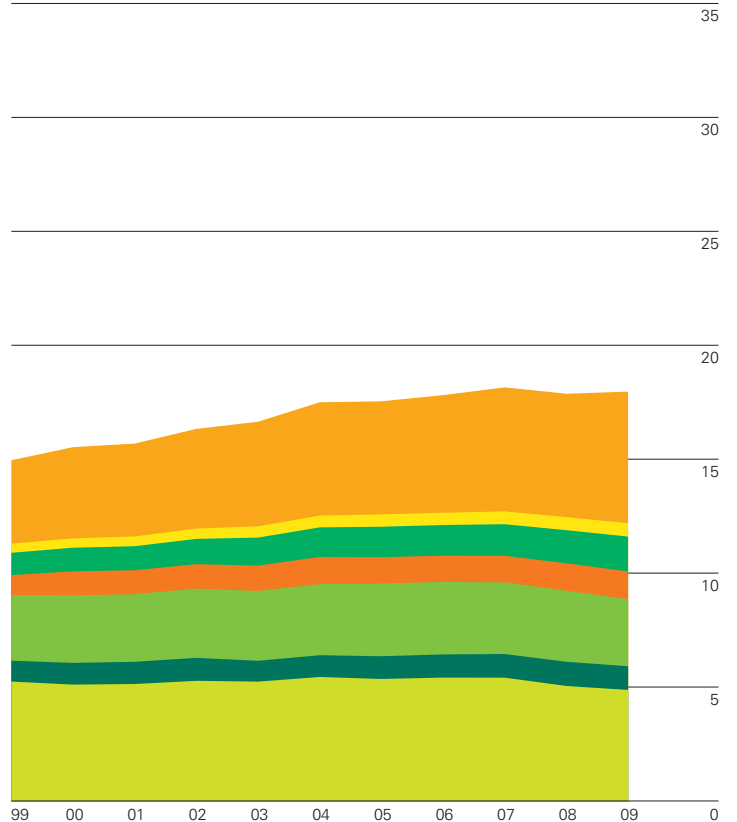
Middle distillates



Fuel oil



Others



Consumption growth was below the 10-year average for all refined product groups. Middle distillates consumption declined for the first time since 1982, falling in all regions but the Middle East and Africa. Fuel oil consumption experienced the largest decline since 1985.



Spot crude prices

| US dollars per barrel | Dubai \$/bbl* | Brent \$/bbl† | Nigerian Forcados \$/bbl | West Texas Intermediate \$/bbl‡ |
|-----------------------|---------------|---------------|--------------------------|---------------------------------|
| 1972 | 1.90 | - | - | - |
| 1973 | 2.83 | - | - | - |
| 1974 | 10.41 | - | - | - |
| 1975 | 10.70 | - | - | - |
| 1976 | 11.63 | 12.80 | 12.87 | 12.23 |
| 1977 | 12.38 | 13.92 | 14.21 | 14.22 |
| 1978 | 13.03 | 14.02 | 13.65 | 14.55 |
| 1979 | 29.75 | 31.61 | 29.25 | 25.08 |
| 1980 | 35.69 | 36.83 | 36.98 | 37.96 |
| 1981 | 34.32 | 35.93 | 36.18 | 36.08 |
| 1982 | 31.80 | 32.97 | 33.29 | 33.65 |
| 1983 | 28.78 | 29.55 | 29.54 | 30.30 |
| 1984 | 28.06 | 28.78 | 28.14 | 29.39 |
| 1985 | 27.53 | 27.56 | 27.75 | 27.98 |
| 1986 | 13.10 | 14.43 | 14.46 | 15.10 |
| 1987 | 16.95 | 18.44 | 18.39 | 19.18 |
| 1988 | 13.27 | 14.92 | 15.00 | 15.97 |
| 1989 | 15.62 | 18.23 | 18.30 | 19.68 |
| 1990 | 20.45 | 23.73 | 23.85 | 24.50 |
| 1991 | 16.63 | 20.00 | 20.11 | 21.54 |
| 1992 | 17.17 | 19.32 | 19.61 | 20.57 |
| 1993 | 14.93 | 16.97 | 17.41 | 18.45 |
| 1994 | 14.74 | 15.82 | 16.25 | 17.21 |
| 1995 | 16.10 | 17.02 | 17.26 | 18.42 |
| 1996 | 18.52 | 20.67 | 21.16 | 22.16 |
| 1997 | 18.23 | 19.09 | 19.33 | 20.61 |
| 1998 | 12.21 | 12.72 | 12.62 | 14.39 |
| 1999 | 17.25 | 17.97 | 18.00 | 19.31 |
| 2000 | 26.20 | 28.50 | 28.42 | 30.37 |
| 2001 | 22.81 | 24.44 | 24.23 | 25.93 |
| 2002 | 23.74 | 25.02 | 25.04 | 26.16 |
| 2003 | 26.78 | 28.83 | 28.66 | 31.07 |
| 2004 | 33.64 | 38.27 | 38.13 | 41.49 |
| 2005 | 49.35 | 54.52 | 55.69 | 56.59 |
| 2006 | 61.50 | 65.14 | 67.07 | 66.02 |
| 2007 | 68.19 | 72.39 | 74.48 | 72.20 |
| 2008 | 94.34 | 97.26 | 101.43 | 100.06 |
| 2009 | 61.39 | 61.67 | 63.35 | 61.92 |

*1972-1985 Arabian Light, 1986-2009 Dubai dated.

†1976-1983 Forties, 1984-2009 Brent dated.

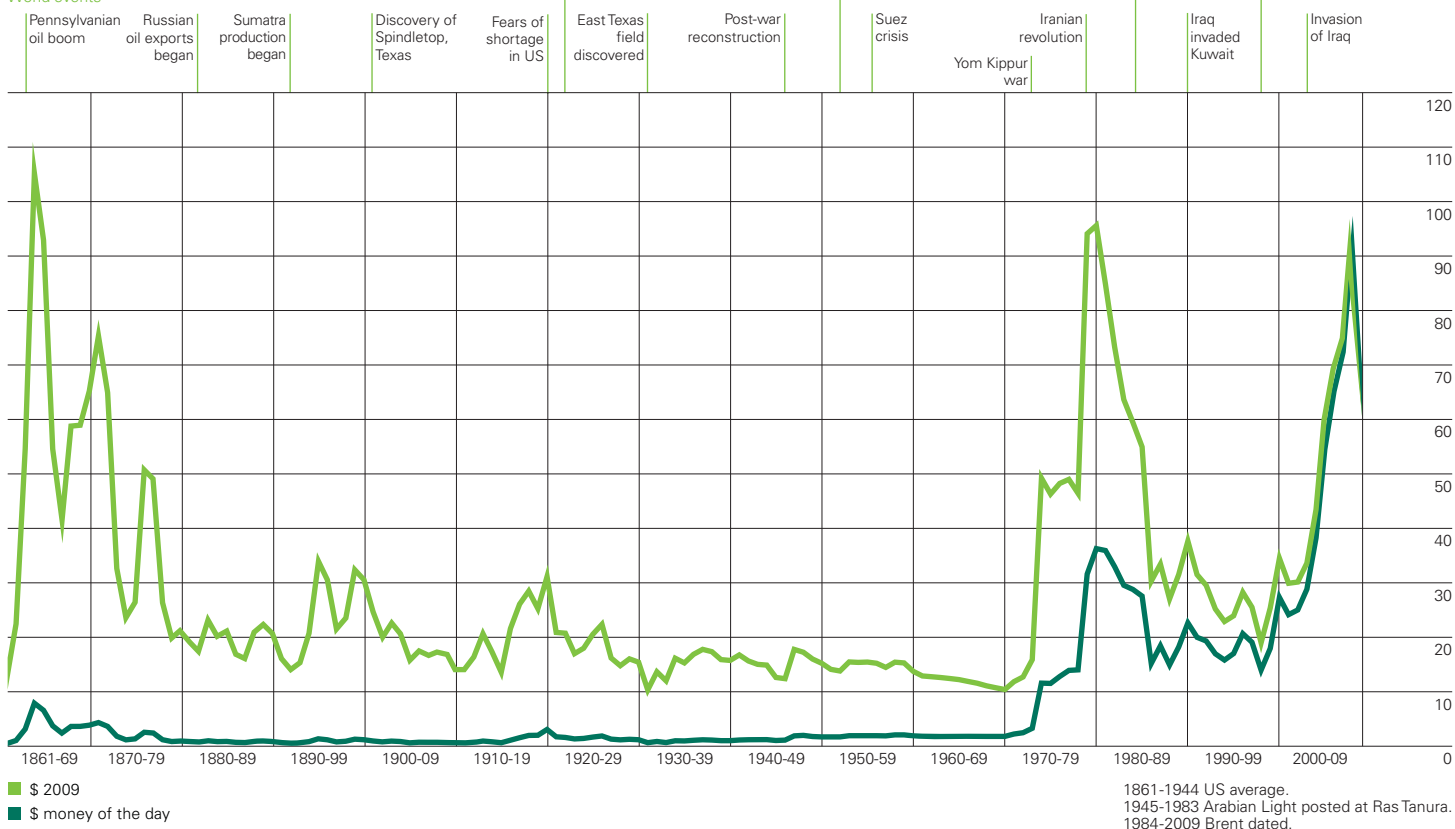
‡1976-1983 Posted WTI prices, 1984-2009 Spot WTI (Cushing) prices.

Source: Platts.

Crude oil prices 1861-2009

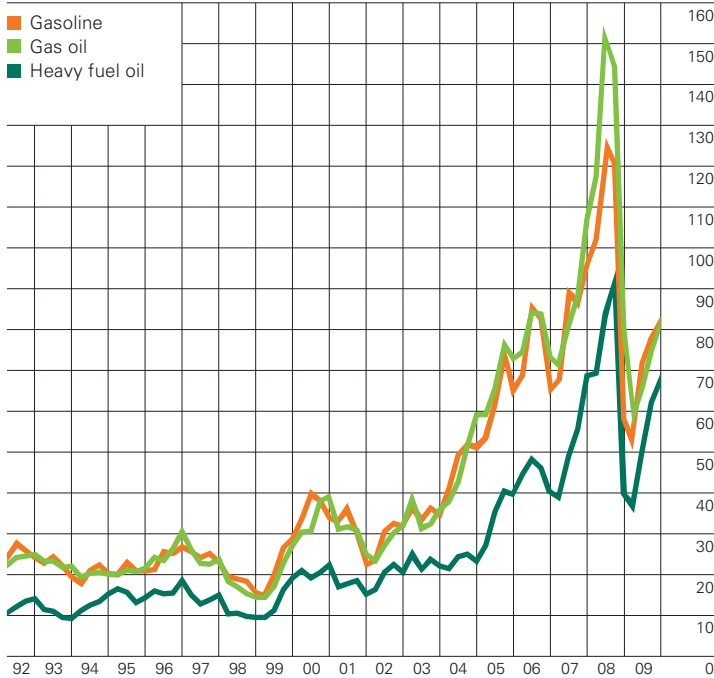
US dollars per barrel

World events



Rotterdam product prices

US dollars per barrel

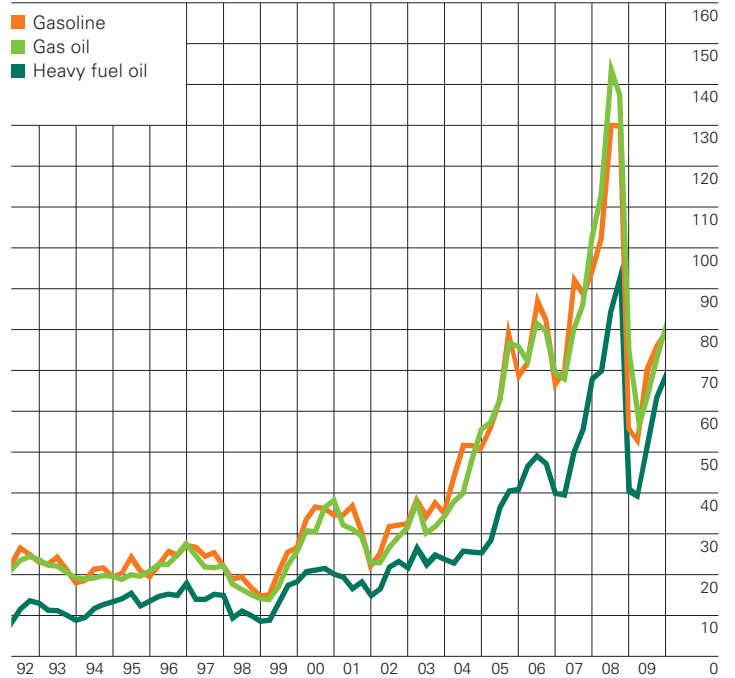


First quarter 1992: leaded gasoline.
From second quarter 1992: unleaded gasoline.

Source: Platts.

US Gulf Coast product prices

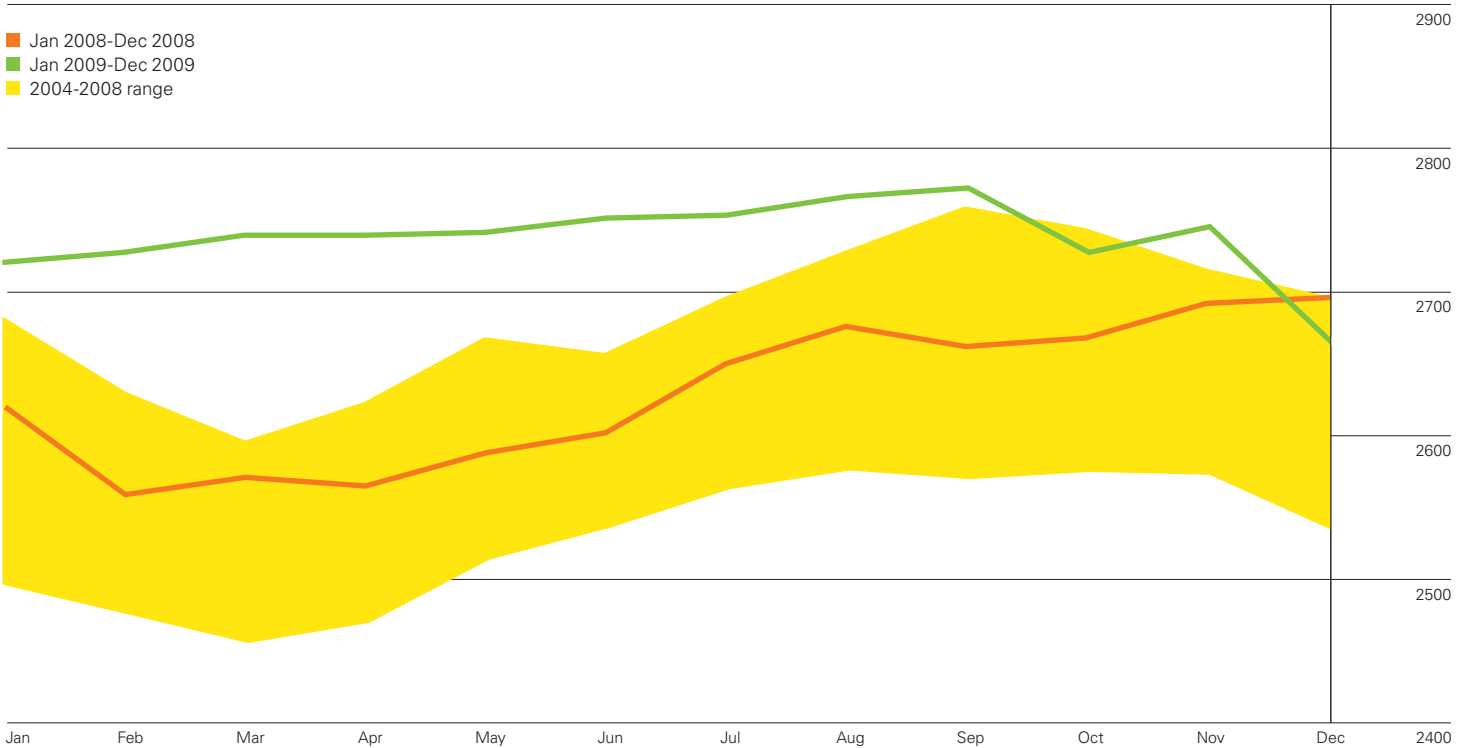
US dollars per barrel



Source: Platts.

OECD total commercial oil stocks

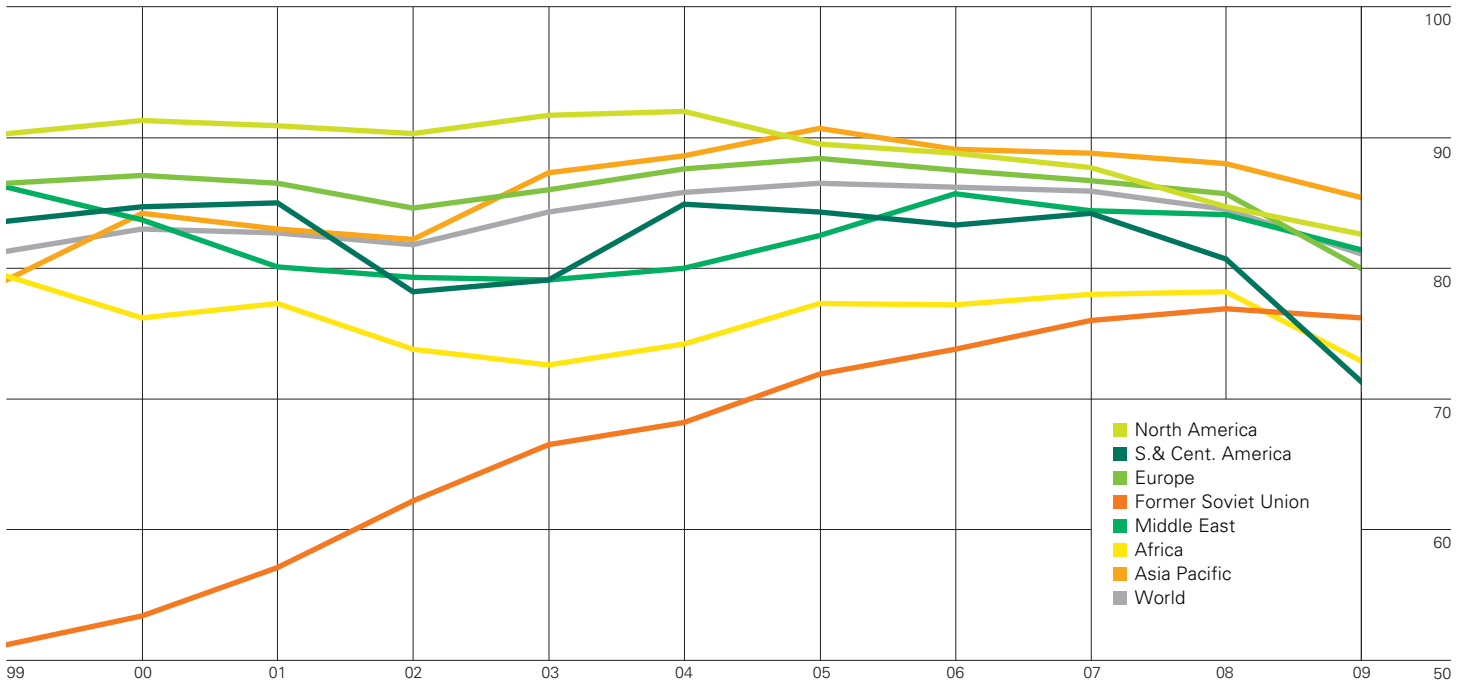
Million barrels



Source: Monthly Oil Data Service © OECD/IEA, 2010.

Refinery utilization

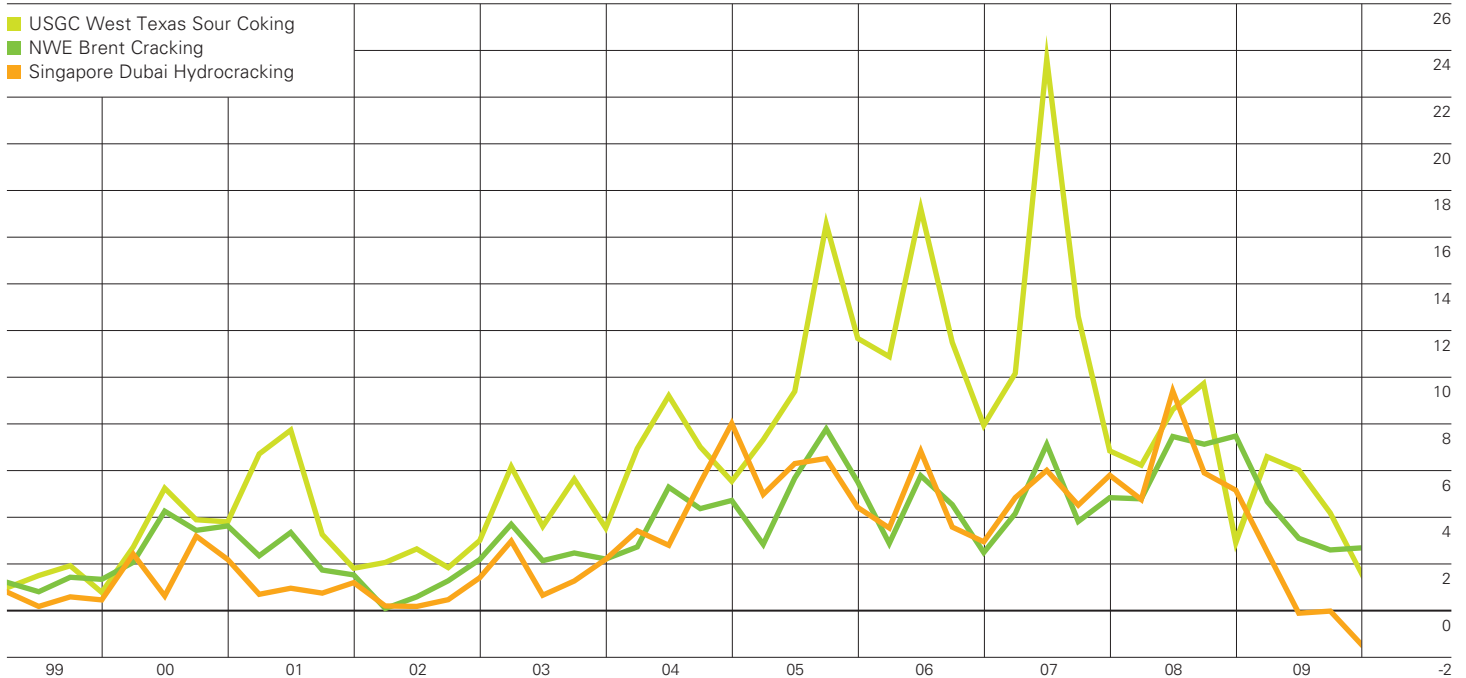
Percentage



Global crude runs fell by 1.5 million b/d in 2009 but continued to grow in China and India, where several new refining facilities commissioned. Most of the 2 million b/d increase in global refining capacity last year was also in China and India, allowing installed capacity in the non-OECD to overtake that of the OECD for the first time. Global average refinery utilization fell to 81.1%, the lowest level since 1994.

Regional refining margins

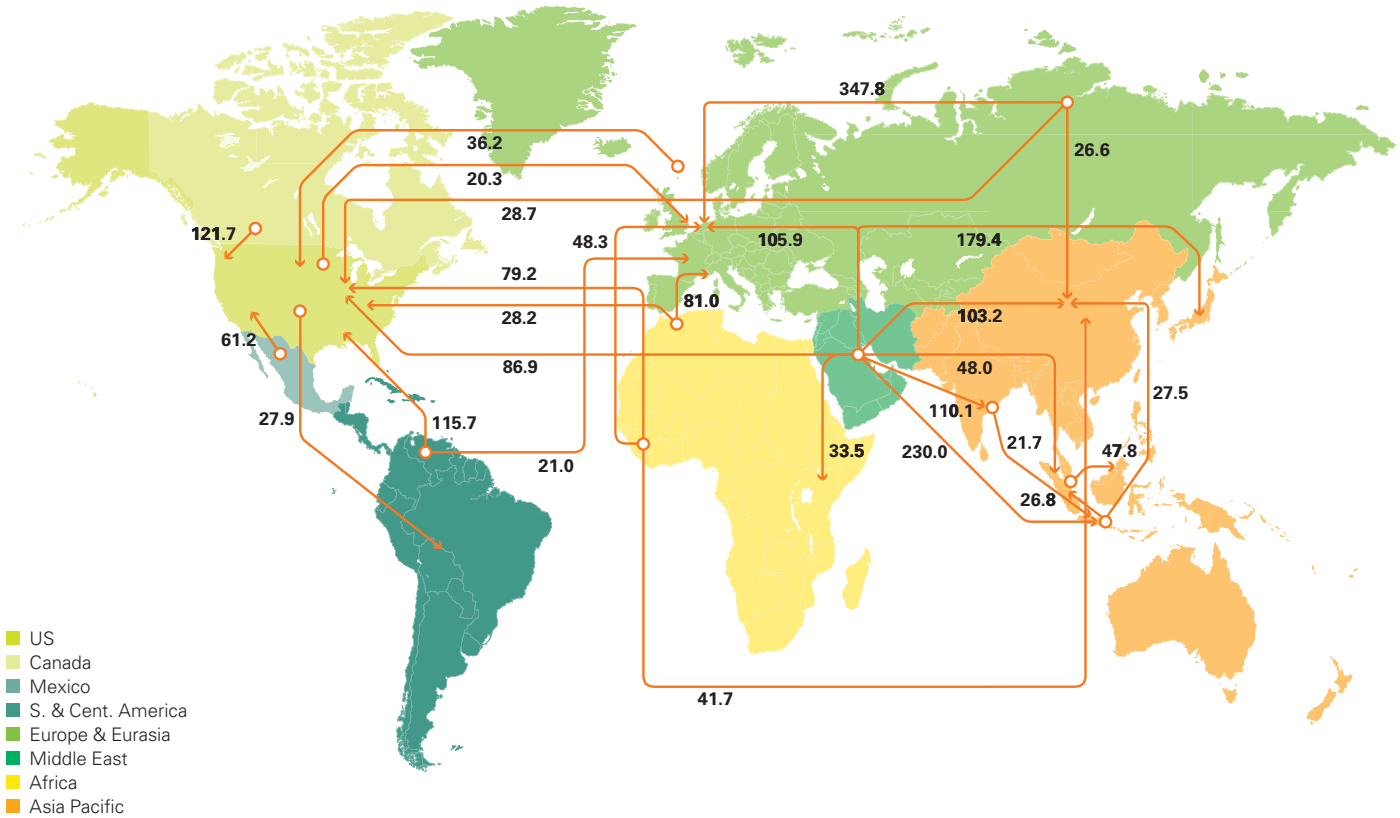
US dollars per barrel



Note: The refining margins presented are benchmark margins for three major global refining centres: US Gulf Coast (USGC), North West Europe (NWE – Rotterdam) and Singapore. In each case, they are based on a single crude oil appropriate for that region and have optimized product yields based on a generic refinery configuration (cracking, hydrocracking or coking), again appropriate for that region. The margins are on a semi-variable basis, i.e. the margin after all variable costs and fixed energy costs.

Major trade movements 2009

Trade flows worldwide (million tonnes)



Imports and exports 2009

| | Million tonnes | | | | Thousand barrels daily | | | |
|------------------------|----------------|-----------------|---------------|-----------------|------------------------|-----------------|---------------|-----------------|
| | Crude imports | Product imports | Crude exports | Product exports | Crude imports | Product imports | Crude exports | Product exports |
| US | 442.8 | 122.0 | 2.2 | 89.5 | 8893 | 2550 | 44 | 1871 |
| Canada | 39.1 | 15.3 | 96.5 | 25.7 | 785 | 320 | 1938 | 538 |
| Mexico | 0.5 | 21.0 | 63.8 | 8.0 | 9 | 439 | 1282 | 168 |
| S. & Cent. America | 25.1 | 41.3 | 128.9 | 54.4 | 504 | 863 | 2588 | 1137 |
| Europe | 513.3 | 152.0 | 23.1 | 72.9 | 10308 | 3177 | 464 | 1523 |
| Former Soviet Union | 0.9 | 3.2 | 342.0 | 105.1 | 18 | 67 | 6868 | 2197 |
| Middle East | 7.0 | 10.5 | 822.1 | 91.6 | 140 | 219 | 16510 | 1916 |
| North Africa | 18.4 | 10.0 | 111.1 | 25.3 | 369 | 209 | 2232 | 528 |
| West Africa | † | 12.1 | 212.3 | 5.3 | 1 | 254 | 4263 | 110 |
| East & Southern Africa | 21.9 | 5.7 | 14.8 | 0.3 | 439 | 119 | 297 | 6 |
| Australasia | 22.8 | 17.1 | 12.8 | 2.0 | 458 | 358 | 258 | 42 |
| China | 203.5 | 49.8 | 4.7 | 29.4 | 4086 | 1041 | 94 | 614 |
| India | 145.8 | 10.4 | 0.1 | 35.4 | 2928 | 217 | 1.9 | 740 |
| Japan | 176.5 | 35.3 | – | 16.5 | 3545 | 738 | – | 345 |
| Singapore | 46.3 | 79.8 | 2.3 | 72.0 | 930 | 1668 | 47 | 1505 |
| Other Asia Pacific | 228.6 | 127.6 | 40.2 | 59.9 | 4590 | 2667 | 807 | 1252 |
| Unidentified* | – | 0.9 | 15.5 | 20.6 | – | 18 | 311 | 430 |
| Total World | 1892.5 | 714.0 | 1892.5 | 714.0 | 38005 | 14925 | 38005 | 14925 |

*Includes changes in the quantity of oil in transit, movements not otherwise shown, unidentified military use, etc.

†Less than 0.05.

Note: Bunkers are not included as exports. Intra-area movements (for example, between countries in Europe) are excluded.