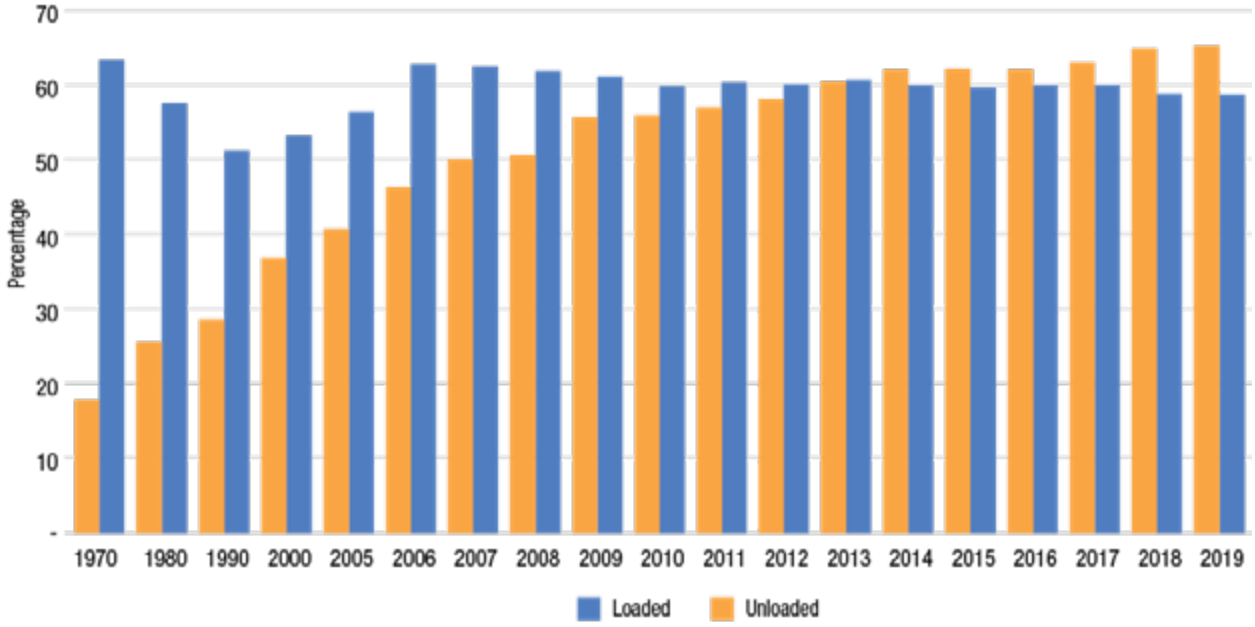
3. Regional and country grouping contribution to maritime trade

In 2019, developing economies continued to account for the lion's share of goods being loaded (58 per cent) and unloaded (65 per cent) in seaports worldwide (figure 1.2). Together, developed economies and economies in transition generated 42 per cent of global merchandise exports by sea (goods loaded) and imported 35 per cent (goods unloaded) of such global trade. While the role of developing regions as a source and destination for maritime trade is significant, developing economies are not a homogenous group. The grouping includes countries and economies in

Figure 1.2 **Participation of developing economies in international maritime trade, selected years**
(Percentage share in total tonnage)



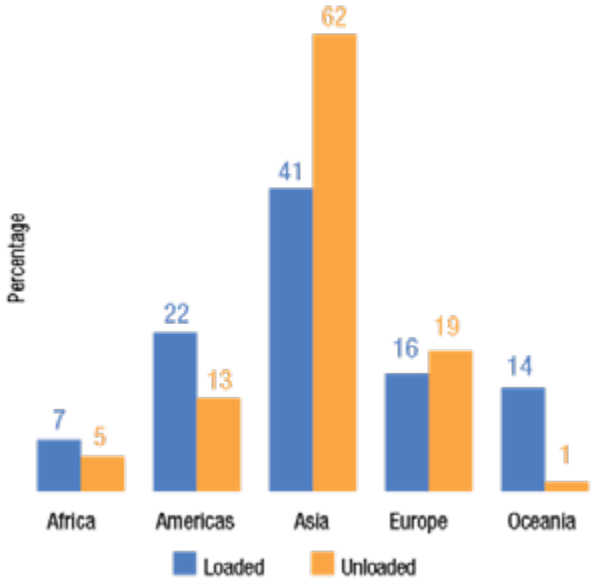
Source: UNCTAD calculations, based on the *Review of Maritime Transport*, various issues and table 1.2 of this report.

varying stages of development and degrees of integration in the world's manufacturing and trading networks. Much of the growth recorded over the past decade is largely driven by fast growing emerging developing countries, most notably China. These countries have also been driving the structural shift in trade patterns observed since 2013, whereby volumes unloaded in developing countries exceeded volumes loaded. The shift is a reversal of a historical pattern where developing countries acted as suppliers of large-volume low-value raw materials imported by developed countries.

There is a predominance of Asian and intra-Asian trade in globalized production processes and value chain growth. A closer look at this trend indicates that the globalization of manufacturing processes has never been truly global. There is scope for other developing regions within and outside Asia to diversify their economies, expand their maritime transport capacity and participate more effectively in regional and international production processes. The marginal contribution of these economies to global value chains is reflected in their relatively limited contribution to container trade flows and global container port throughput. Maritime transport, combined with supportive trade and industrial policies, can be a catalyst for growth and greater integration in the world economy for a broader range of such developing countries.

In 2019, 41 per cent of the total goods loaded (exported) were sourced from Asia and 62 per cent of total goods unloaded (imported) were received in this same region (figure 1.3). The contribution of developing America and Africa to maritime trade flows remained marginal. In comparison, and as previously noted, Asia has benefited from a greater integration into global manufacturing and trading networks, promoting intraregional trade. Capitalizing on the fragmentation of globalized production processes, Asia has become a maritime hub that brings together over 50 per cent of global maritime trade volumes.

Figure 1.3 **International maritime trade, by region, 2019**
(Percentage share in total tonnage)



Source: UNCTAD calculations, based on data supplied by reporting countries and as published on government and port industry websites, and by specialist sources.

Note: Estimated figures are based on preliminary data or on the last year for which data were available.

4. Maritime trade underperformed across market segments

Dry cargo continued to account for over two thirds of total maritime trade volumes, while liquid bulk commodities, including crude oil, refined petroleum products, gas and chemicals, accounted for the remaining share. In 2019, growth in all market segments decelerated. Trade in dry cargo expanded at 1.1 per cent over 2018, and tanker trade volumes contracted by 1 per cent. A look at how the various market segments have evolved since 1990 shows that growth in maritime trade over the past three decades has been sustained by bullish trends in containerized trade volumes starting in the 2000s, coinciding with the wave of hyperglobalization (figures 1.4 and 1.5). It was also supported by the swift growth of trade in dry bulk commodities that accompanied the rapid industrial expansion of China that accelerated with its accession to the World Trade Organization (WTO) in 2001.

When adjusted for distances travelled, international maritime trade grew at a slightly faster rate of 1 per cent in 2019, supported by growing long-haul oil exports from Brazil and the United States to Asia. Clarksons Research estimates seaborne trade in ton-miles to have reached 59,503 billion ton-miles in 2019 (figure 1.6).

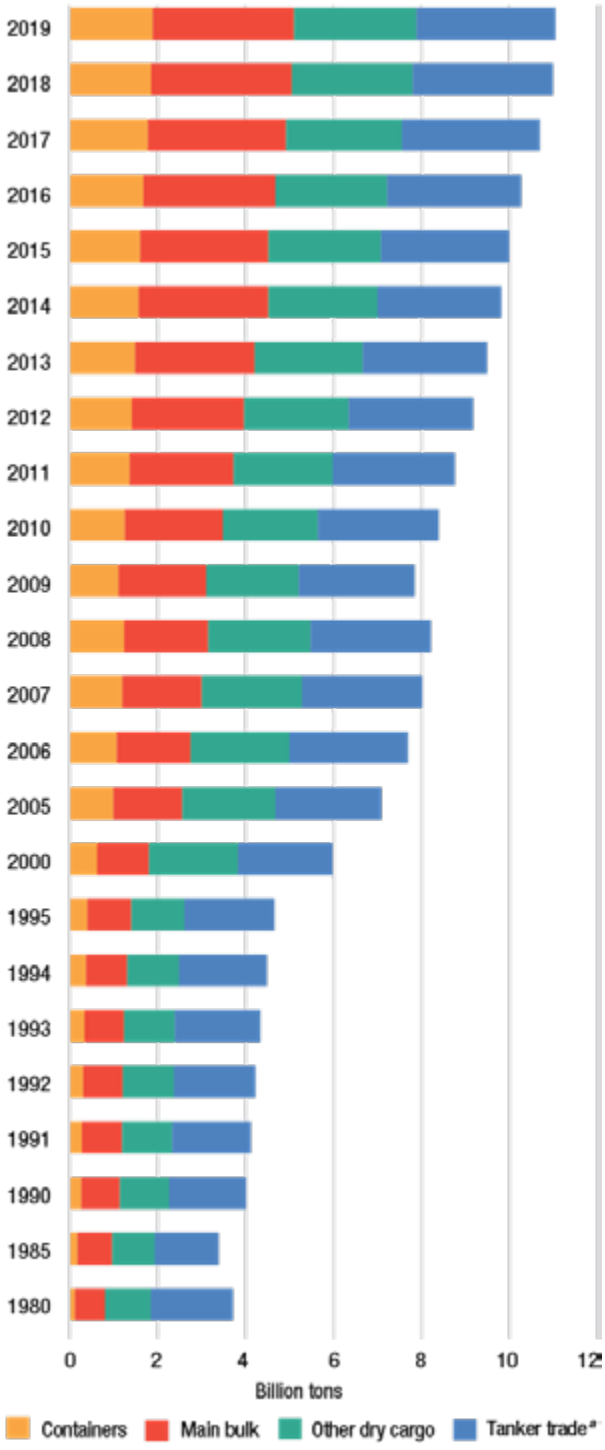
Figure 1.7 shows that trade in ton-miles by cargo expanded in varying degrees. Trade in container and dry bulk commodities has fuelled much of the growth over the past two decades. The number of cargo ton-miles generated by dry cargo has been rising steadily over the years. In 2002, China imported 121.7 million tons of iron ore and coal, accounting for 11.8 per cent of the global iron ore and coal trade by sea (Clarksons Research, 2006). In less than two decades, these volumes increased to 1.3 billion tons, bringing the country' market share to nearly 50 per cent of the world total (Clarksons Research, 2020b). Gas trade in ton-miles expanded swiftly to 9.9 per cent in 2019. Other segments recorded relatively smaller growth; ton-miles generated by trade in chemicals expanded by 3.2 per cent, followed by container trade (1.9 per cent) and other dry cargo (1.6 per cent). Growth in ton-miles produced by trade in oil and major bulk commodities contracted in 2019, reflecting declines in iron ore trade following the disruption to mining activities in Brazil caused by the Vale dam collapse.

5. Demand and supply-side pressures weighed on key market segments

Trade in oil weakened, while trade in gas remained robust

Since the onset of the shale revolution in the United States, developments in the country's energy sector have played a significant role in shaping global tanker trade. This was apparent throughout 2019, with a

Figure 1.4 **Development of international maritime trade by cargo type, selected years**
(Billion tons loaded)

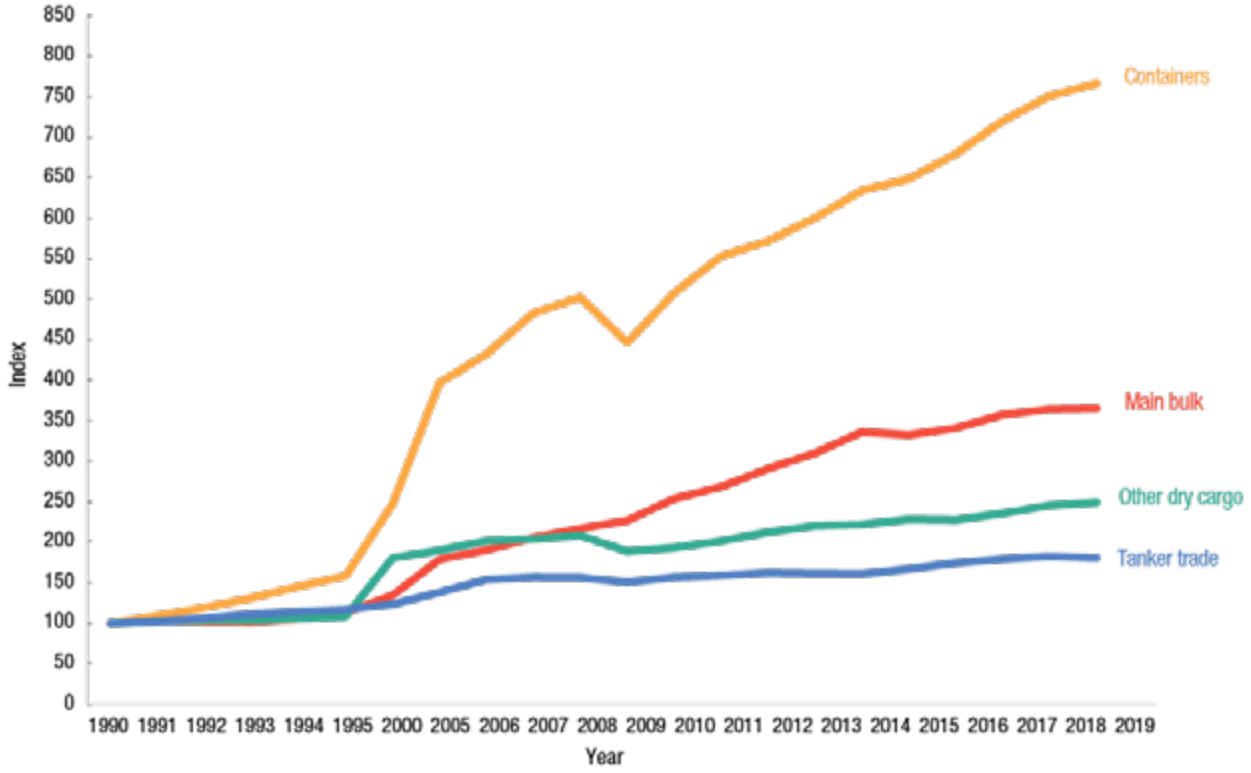


Source: UNCTAD, Review of Maritime Transport, various issues. For 2006–2019, the breakdown by cargo type is based on Clarksons Research, 2020a, *Shipping Review and Outlook*, spring 2020 and *Seaborne Trade Monitor, various issues*.

Note: 1980–2005 figures for main bulk include iron ore, grain, coal, bauxite/alumina and phosphate. With regard to data starting in 2006, main bulk figures include iron ore, grain and coal only. Data relating to bauxite/alumina and phosphate are included under "other dry cargo".

[a] Tanker trade includes crude oil, refined petroleum products, gas and chemicals.

Figure 1.5 Development of international maritime trade by cargo type, selected years
(Index: 1990 = 100)



Source: UNCTAD, *Review of Maritime Transport*, various issues. For 2006–2019, the breakdown by cargo type is based on Clarksons Research, 2020a, *Shipping Review and Outlook,* spring 2020 *and Seaborne Trade Monitor*, various issues.

Note: 1980–2005 figures for main bulk include iron ore, grain, coal, bauxite/alumina and phosphate. Since 2006, main bulk figures include iron ore, grain and coal only. Data relating to bauxite/alumina and phosphate are included under "other dry cargo". Tanker trade includes crude oil, refined petroleum products, gas and chemicals.

decline in United States crude oil imports and a rise in its long-haul exports. Overall tanker trade contracted by 1 per cent in 2019, owing to lower volumes of crude oil and refined petroleum products (table 1.5). An overview of global players in the oil and gas sector is presented in table 1.6.

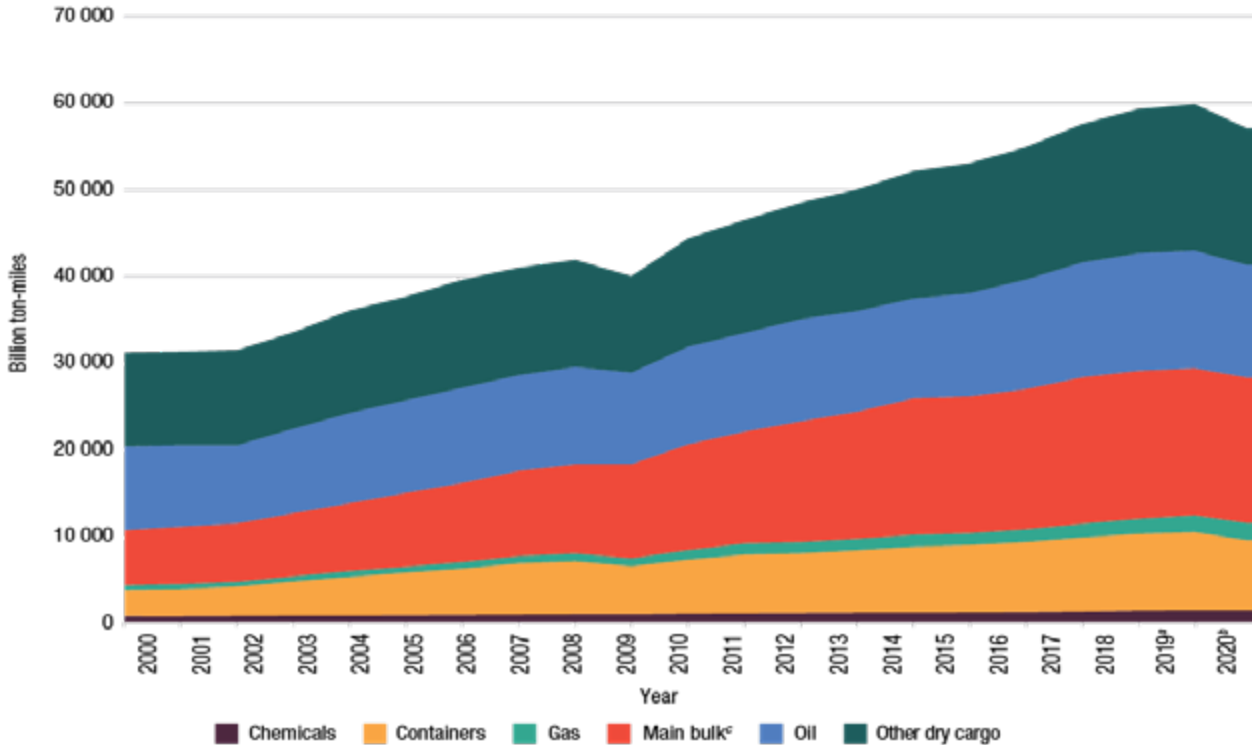
Crude oil trade decreased by 1.1. per cent in 2019. Downside factors include the cuts in supply by members of the Organization of the Petroleum Exporting Countries aimed at supporting oil prices, as well as disruptions affecting exports from the Islamic Republic of Iran and the Bolivarian Republic of Venezuela. The impact on exports from Western Asia resulting from the attacks on Saudi oil infrastructure was limited. Pressure on the demand side include lower global oil demand, a sharp reduction in United States imports and a decline in global refinery activity. However, expansion in exports from Brazil and the United States have supported long-haul journeys from the Atlantic to Asia. Crude oil imports to China increased by 10.6 per cent in 2019, compared with the previous year, while imports to the United States declined (Clarksons Research, 2020c). In Asia, extended refinery maintenance and smaller refining margins contributed to limiting import growth (Clarksons Research, 2020d).

Other tanker trade experienced difficulty in 2019, contracting by nearly 1 per cent. Major setbacks included slower global economic growth and extended refinery maintenance periods, with many refiners adjusting production in preparation for the coming into force on 1 January 2020 of the IMO 2020 regulation on a sulphur cap for marine fuels. In addition, naphtha faced competition from liquefied petroleum gas as a petrochemical feedstock, arbitrage opportunities were limited (Clarksons Research, 2020e) and fuel oil trade declined. The latter accounts for over 20 per cent of trade in seaborne refined petroleum products (Clarksons Research, 2020d).

Mexican imports, a key driver of global trade growth in recent years, dropped in 2019 as domestic supply increased. Growth in imports to Latin America and rising exports from China provided support to product tanker demand.

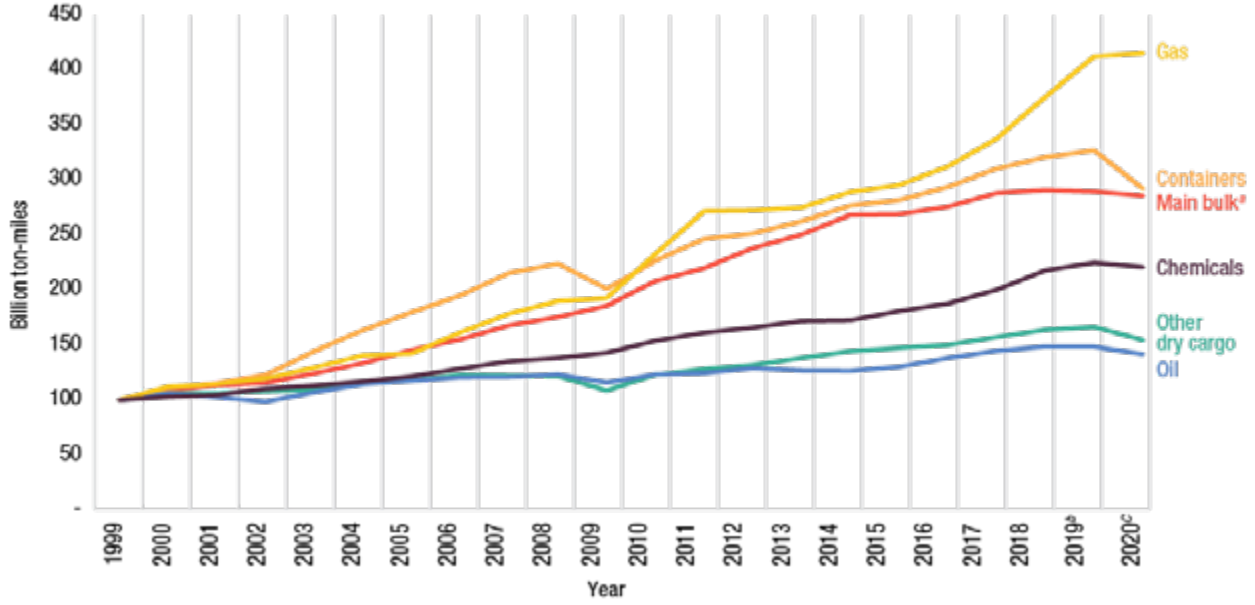
Trade in gas remained strong, with volumes expanding by nearly 11 per cent in 2019. Trade in liquefied natural gas increased by 11.9 per cent, supported by project start-ups in Australia and the United States. In comparison, trade in liquefied petroleum gas grew by 6 per cent, driven largely by growing supply in Australia, Canada and the United States (Clarksons Research, 2020c). Despite the

Figure 1.6 International maritime trade in cargo ton-miles, 2000–2020
(Billion ton-miles)



Source: Clarksons Research, 2020a, *Shipping Review and Outlook*, spring.
Note: Seaborne trade data in ton-miles are estimated by Clarksons Research. Given methodological differences, containerized trade data in tons sourced from Clarksons Research are not comparable with data in TEUs sourced from MDS Transmodal.
[a] Estimated.
[b] Forecast.
[c] Includes iron ore, grain and coal.

Figure 1.7 International maritime trade in cargo ton-miles, 1999–2020
(Billion ton-miles; index: 1999 = 100)



Source: Clarksons Research, 2020a, *Shipping Review and Outlook*, spring.
Note: Seaborne trade data in ton-miles are estimated by Clarksons Research. Given methodological differences, containerized trade data in tons sourced from Clarksons Research are not comparable with data in TEUs sourced from MDS Transmodal.
[a] Includes iron ore, grain and coal.
[b] Estimated.
[c] Forecast.

Table 1.5	Tanker trade, 2018–2019 (Million tons and annual percentage change)		
Tanker trade[a]	2018	2019	Percentage change 2018–2019
Crude oil	1 881	1 860	-1.1
Other tanker trade[a] *of which:*	1 320	1 308	-0.9
Gas	416	461	10.8
Total tanker trade	**3 201**	**3 169**	**-1.0**

Sources: UNCTAD calculations, derived from table 1.2 of this report.

Note: Gas figures are derived from Clarksons Research, 2020c, *Seaborne Trade Monitor*, Volume 7, No. 6, June.

[a] Includes refined petroleum products, gas and chemicals.

Table 1.6	Major producers and consumers of oil and natural gas, 2019 (World market share in percentage)		
World oil production	Percentage	World oil consumption	Percentage
Western Asia	32	Asia and the Pacific	36
North America	23	North America	23
Transition economies	16	Europe	15
Developing America	9	Western Asia	9
Africa	9	Developing America	9
Asia and the Pacific	8	Transition economies	4
Europe	3	Africa	4
Oil refinery capacities		**Oil refinery throughput**	
Asia and the Pacific	35	Asia and the Pacific	37
North America	21	North America	22
Europe	15	Europe	15
Western Asia	11	Western Asia	11
Transition economies	8	Transition economies	8
Developing America	7	Developing America	5
Africa	3	Africa	2
World natural gas production		**World natural gas consumption**	
North America	27	North America	25
Transition economies	21	Asia and the Pacific	22
Western Asia	17	Transition economies	15
Asia and the Pacific	17	Western Asia	15
Europe	6	Europe	13
Developing America	6	Developing America	6
Africa	6	Africa	4

Source: UNCTAD calculations, based on data published in British Petroleum 2020, *BP [British Petroleum] Statistical Review of World Energy 2020*, June 2020.

Note: Oil includes crude oil, shale oil, oil sands and natural gas liquids. The latter term excludes liquid fuels from other sources such as biomass and coal derivatives.

trade tensions, long-haul United States exports to Asia continued to expand steadily due to substitution trends and limited growth in Western Asian exports stemming from sanctions and supply cuts. With regard to imports, China and India remained key markets. Imports into China picked up speed in 2019 compared with 2018, supported by its petrochemical sector demand and the coming online of new propane dehydrogenation capacity. Reduced shipments from the United States were offset by increased imports from Africa, Australia and Western Asia. In India, import demand for liquefied petroleum gas was supported by the continued rollout of liquefied petroleum gas infrastructure in rural areas under a government subsidy programme.

While trade in chemicals rose rapidly in 2018, there was little growth in the segment in 2019, reflecting pressure on demand. In China, demand for palm oil soared in 2019, given higher domestic soybean oil prices as a consequence of the trade tensions and the African swine fever affecting pig farming in China, causing a reduction in soymeal feed. Strong demand in India for palm oil, following a decline in import taxes in January 2020, supported growth in this segment. Trade in palm oil remains highly sensitive to policy shifts, such as the rise in Indian import duties on Malaysian palm oil (The Indian Express, 2020), the decision by the European Union to phase out palm oil-based biofuel by 2030 and higher taxes on Indonesian biofuel and liquefied petroleum gas.