energy institute

2025 | 74th edition

Statistical Review of World Energy

In collaboration with

KEARNEY

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The Energy Institute (EI) is the professional membership body for the world of energy. The EI Statistical Review of World Energy™ analyses data on world energy markets from the prior year. It has been providing timely, comprehensive and objective data to the energy community since 1952.

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Explore the data online

All the tables and charts found in the printed edition are available at **energyinst.org/statistical-review** alongside a number of extras, including:

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Foreword

The 74th edition of the Statistical Review of World Energy marks the third year under the custodianship of the Energy Institute (EI). This year's data captures a global energy sector in flux, navigating deepening climate impacts, intensifying geopolitical disruption and an increasingly complex energy transition.

Global average air temperatures in the last two years have regularly exceeded 1.5°C of warming from the pre-industrial age. Extreme weather events underscored this reality: tropical storms in Southeast Asia, and devastating floods in South America and Europe. Widespread droughts in Africa and Brazil, as well as increasing wildfires and heat-related deaths, underscore the need for urgent action.

Geopolitical tensions further complicate the energy outlook. From evolving US energy policy to the dramatic impact on Europe of Russia's invasion of Ukraine. Energy security and affordability remain central concerns competing with the need for climate action. These global disruptions are also contributing to a growing bifurcation in energy markets, with divergent regional strategies emerging; some doubling down on fossil fuel consumption and others accelerating decarbonisation pathways.

Amid this turbulence, energy remains indispensable to human activity and development. Yet the patterns of demand and supply are shifting. In 2024, global energy demand continued to grow alongside every major constituent part of the energy system. We are living in a time of energy addition, sustained by an increasingly disorderly transition. The rebound in natural gas consumption, particularly in Asia and Europe is notable. Encouragingly, renewables are also growing at a much higher rate.

China continues to play a disproportionate role in shaping the energy landscape. Its coal demand exceeds that of the rest of the world combined, but so does its rate of renewable energy deployment and electric vehicle sales. This duality exemplifies the broader global picture: rapid advances in clean energy coexist with ongoing fossil fuel dependencies, with coal, oil and gas, as well as renewables, all reaching record highs.

Energy security and affordability remain central concerns competing with the need for climate action

What remains clear is, to decarbonise the energy system, we will need to electrify. The record growth in electricity demand is an encouraging sign of this trend, with much of this growth satisfied by renewables.

Reflecting these dynamics, this year's Statistical Review introduces an updated metric: Total Energy Supply, aligned with the United Nations' guidelines. This harmonises the dataset with reporting from the IEA, Eurostat, and the EIA, offering a more complete picture of global energy flows as the world moves, unevenly but decisively, towards a new energy future.

The Energy Institute is proud to steward the Statistical Review of World Energy, a cornerstone resource for understanding and navigating global energy trends. As the chartered professional membership body for energy professionals worldwide, our mission is to provide a rigorous, independent, and accessible evidence base for decision-makers in governments, industry, academia and civil society.

We are deeply grateful to our co-authors Kearney and KPMG, S&P Global Commodity Insights and bp for their support, and to Heriot-Watt University for its data compilation. Together, we ensure that the Statistical Review continues to serve as the definitive reference for the global energy community.

Andy Brown
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President, Energy Institute

Dr Nick Wayth
CEng FEI FIMechE
CEO, Energy Institute

In collaboration with

Kearney

2024 marked a strategic inflection point for the global energy sector. Unlike the post-COVID rebound, this shift was fueled by escalating geopolitical tensions. In this new landscape, national priorities – such as energy security and technological sovereignty – are increasingly overshadowing climate objectives.

Amid these evolutions, companies began recalibrating their strategies in response to new market realities. Most oil and gas majors launched fundamental resets, refocusing on traditional core businesses, or adopted dual strategies. Power utilities doubled down on renewables and grid modernisation, particularly in their domestic markets, still with contrasted trends across geographies.

Overall, a new corporate strategy mindset has taken shape:

- Prioritise short-term profitability, with a sharper focus on portfolio optimisation and operational efficiency, including the use of AI-driven workflows.
- Delay non-core investments, awaiting clearer market signals and policy direction, and scale back immature renewable technology investments or high-risk energy ventures, redirecting focus towards proven technologies.
- Forge strategic alliances to bolster procurement strength and market positioning, enhancing overall corporate resilience.
- Refine or re-sequence ESG strategies considering uncertainties.

These changes point to an increasingly fragmented and volatile energy landscape. 2024 may well be seen as the beginning of a paradigm shift – where the energy transition is now tempered by a renewed focus on resilience and risk hedging in a world marked by growing uncertainty.

In this context, accurate and timely energy data is more vital than ever. Kearney is proud to have contributed to the Energy Institute Statistical Review of World Energy, supporting informed decision-making in a complex global environment.

Dr Romain Debarre
Partner and Managing Director,
Energy Transition Institute, Kearney

KPMG

Global energy demand is continuing to rise. The 2025 Statistical Review of World Energy reveals a global energy system being pulled in competing directions – electrifying at speed, yet still expanding fossil fuels; scaling renewables rapidly, yet falling short of climate targets; innovating in some regions, while stalling in others.

Nowhere is this clearer than in the renewables sector. Europe has faced a sharp reality check: rising interest rates and supply chain costs have combined to slow deployment. The US saw strong growth in 2024, but future momentum is uncertain as IRA subsidies face rollback. In contrast, China and many emerging markets continue to drive renewable growth at scale, quietly redefining the centre of gravity in the transition.

Leaders are now seeking to navigate a disorderly energy transition, one shaped by diverging regional trends, infrastructure constraints, and policy fragmentation. Key questions every business leader should consider, include:

- What does it mean for your strategy when the energy mix is shifting, but not in the way many expected, with gas, oil and coal continuing to play significant roles?
- How do you respond when electricity demand surges, renewables can't keep up everywhere, and energy systems are already straining under the pressure?
- Are your strategies focused where progress is happening – not just where it's expected?
- How are you preparing for a market where trade flows are shifting, policy signals are mixed, and volatility is here to stay?
- Can your business thrive in a world where complexity, fragmentation, and disruption are now the norm?

KPMG is proud to be working in collaboration with the Energy Institute on this review. In today's environment, leaders should have access to data, not just headlines, to help them make bold, forward-looking decisions.

Wafa Jafri
Lead of Energy and Natural Resources
Strategy and Partner, KPMG in the UK

2024 Key highlights

Global emissions from energy grew 1% in 2024, setting record levels for the fourth consecutive year. Simultaneously, the world saw a 2% annual rise in total energy demand, reaching a new high of 592 EJ.

Although wind and solar grew nearly nine times faster than total energy demand, fossil fuels also grew (just over 1%) in 2024. Whilst global natural gas demand rose 2.5%, consumption of crude oil remained flat in OECD countries after a fall of 0.7% the previous year. It rose 1% in non-OECD countries. All contributing factors to an energy transition that continues but is increasingly disorderly.

Energy developments

- At 4%, electricity demand growth continued to outpace total energy demand growth, an indicator that the world's energy system continues to electrify.
- Wind and solar continued to be the fastest-growing areas of the energy system increasing by 16% in 2024. China was responsible for 57% of new additions with solar almost doubling in just two years.
- Over the past decade China has nearly doubled its electricity supply adding 405 TWh more than Europe's entire 2024 electricity generation.
- In 2024 alone, across all forms of renewable energy, China added twice the amount of the US, Europe, and India's combined additions. Deployment of renewables in non-OECD countries has grown at twice the rate of OECD countries over the past decade.
- The Asia Pacific region has been at the forefront of realising the benefits of diversifying its energy mix. It accounted for 50% of the avoided fossil fuel use in 2024 followed by Europe at 22%. Excluding hydro, China was responsible for 57% of total global renewable power supply additions in 2024.

Energy-related carbon emissions

- Carbon emissions increased around 1% in 2024 exceeding the record level set the previous year to reach 40.8 $GtCO_2e$.
- Since 2010 renewables and nuclear have avoided emitting around 109 gigatonnes of energy-related greenhouse gas emissions, around 2.5 times the total amount emitted globally in 2024.
- China remains the world's largest single emitter of greenhouse gases, accounting for around a third of global emissions. Along with India, it contributed 62% of the increase in global emissions last year.
- For the second year in succession the US witnessed a drop in emissions with a fall of 36 $MtCO_2e$, 0.7% below its 2023 levels but below its ten-year average decline rate of 1% per annum.
- Adjusting for COVID, European emissions fell for the sixth consecutive year and are nearly 16% below where they were a decade ago and are now three times lower than China's.

Oil

- The US was the world's largest oil producer, accounting for a fifth of global production in 2024. Its production is now broadly equal to the combined output of Saudi Arabia and the Russian Federation.
- Oil remains the largest source of energy meeting 34% of total global demand in 2024. Although slowing, global demand increased by 0.7% to breach the 101 Mbbl/d level for the first time ever.
- Having initially rebounded following COVID, all regions exhibited either a slowing down or a plateauing in oil demand in 2024. OECD demand remained flat at 45 Mbbl/d whilst non-OECD demand grew by 0.7 Mbbl/d. Africa and the Middle East were the fastest-growing regions at 2.5% and 1.6% respectively.
- China displayed signs of oil demand peaking in 2023 registering a 1.2% drop in demand in 2024.
- Global demand for fuel oil and diesel/gasoil fell -2% and -0.5% respectively. This was largely driven by China with an increase in LNG-fuelled trucks reducing demand for diesel. Globally, demand increased for jet/kerosene (0.4 Mbbl/d), ethane and LPG (0.4 Mbbl/d), and gasoline (0.3 Mbbl/d).
- Oil prices continued to fall from their 2023 levels following Russia's invasion of Ukraine. Though, on average, they fell by -3%, they remain 27% above their 2019 pre-COVID levels.

Natural gas

- Global natural gas production rose to 4,124 bcm with the largest producers being the US, Russia, Iran, and China who, together, accounted for 53% of total global production. Over the last ten years, China has gone from being the world's sixth-largest gas producer to its fourth. Its domestic production now meets 56% of its domestic demand.
- Global natural gas demand returned to growth in 2024 rising 101 bcm (2.5%). Its share of global fossil fuels stood at 29% and it met a quarter of total global energy demand.
- All regions bar Africa saw gas demand rise in 2024. Asia Pacific saw the largest increase, a rise of 42 bcm, of which China represented two-thirds. The Commonwealth of Independent States (CIS) and North America witnessed rises of 22 bcm and 15 bcm respectively, whilst Europe experienced a modest increase of 6 bcm.

Coal

- For the past three years coal production in the Asia Pacific region has exceeded its demand. The surplus in 2024 was a record with production at over 6% of demand.
- Although coal reached a global record level of demand at 165 EJ, 83% of this was centred in the Asia Pacific region, 67% of which was attributable to China.
- Despite continuing record levels of investment in renewables, coal still dominates China's electricity sector generating 58% of its output in 2024. In Europe, coal consumption fell 7%.

For the first time ever, the contribution of coal to meeting Europe's total energy demand fell below that of nuclear.

- India's demand for coal rose 4% in 2024 and now equals that of the CIS, South and Central America, North America, and Europe combined. Conversely, demand across OECD countries, which has been in decline since 2007, fell by 4% in 2024 against an average decline rate of 6% per annum over the past 10 years.
- On average, coal prices around the world continued to fall, dropping by around 11% in 2024 and by 52% against their record highs in 2023.

Nuclear

- In 2024, nuclear rose 3% to meet just over 5% of total global energy demand. Around two-thirds of the increase in output were in France and Japan who both continued to return plants to service after prolonged outages.

Electricity

- Over the past 10 years, global electricity generation has grown on average at around 2.6% per annum, broadly twice the rate of total energy demand.
- Asia Pacific demand reached 52% of global electricity production in 2024, increasing around 5% to 16,132 TWh. North America and Europe rose by 2.2% and 1.5% respectively to reach a collective 9,514 TWh, 30% of global generation.
- With the exception of oil, generation from all sources increased globally in 2024. Wind and solar met 53% of the global increase in generation. Generation from renewables, including hydro, met 32% of global electricity supply last year.
- Of the global fossil fuel fleet, gas saw the biggest increase in generation, growing 2.5%, (172 TWh). Coal grew by 1.2% to reach 10,613 TWh to remain the largest source of generation globally.
- Over the past ten years coal's share of China's generation fleet has fallen from 70% to 58%. In India, its share has remained fixed at around 75%.
- In 2024 grid-scale battery electricity storage system (BESS) capacity more than doubled, rising 113% to reach 126 GW. China led the way in its deployment adding 67% of the increase. It now hosts 60% of total installed BESS capacity followed by the US at 20% and the UK at around 5%.

Wind and solar

- Generation from wind and solar increased its share of total global generation from 13% to 15% in 2024. The past ten years have witnessed a fourfold increase in their combined output with wind broadly responsible for 55% and solar 45% of their joint output.
- The biggest increase in wind and solar output was in the Asia Pacific region at 399 TWh. China was responsible for 91% of the region's growth and 57% of total global growth.
- Capacity additions of solar outpaced that of wind by 4-to-1 in 2024 with solar reaching a total global installed capacity of 1,865 GW compared to wind's 1,135 GW. China was host to 47% of the world's total installed solar and wind in 2024 at nearly twice the installed capacity of wind and solar in the US and Europe combined.
- Wind and solar supplied 28% of the European Union's electricity generation with solar surpassing coal for the first time.

Hydroelectricity

- Despite falls in North America, and South and Central America, hydro saw its biggest global annual increase (180 TWh) since 2010 when China's Three Gorges dam reached full capacity. Overall, hydro remains the largest source of renewable generation contributing 14% of total global electricity generation and 45% of total renewable generation in 2024.

Biofuels

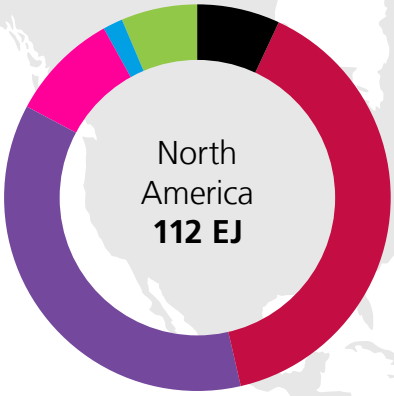
- Global demand for biofuels rose 3% in 2024 to reach a record level of 2.2 Mbbloe/d. Asia Pacific region grew the largest at 47 kbbloe/d followed by North America at 42 kbbloe/d.
- India and Indonesia jointly accounted for 63% of Asia Pacific's biofuel demand in 2024 with India growing 38%. At 194 kbbloe/d, Indonesia is the world's third-largest consumer of biofuels behind the US (899 kbbloe/d) and Brazil (432 kbbloe/d).
- Demand for biofuels in the EU fell by 11%, centred on biodiesel (-15%) with conventional diesel/gasoil registering a similar fall.

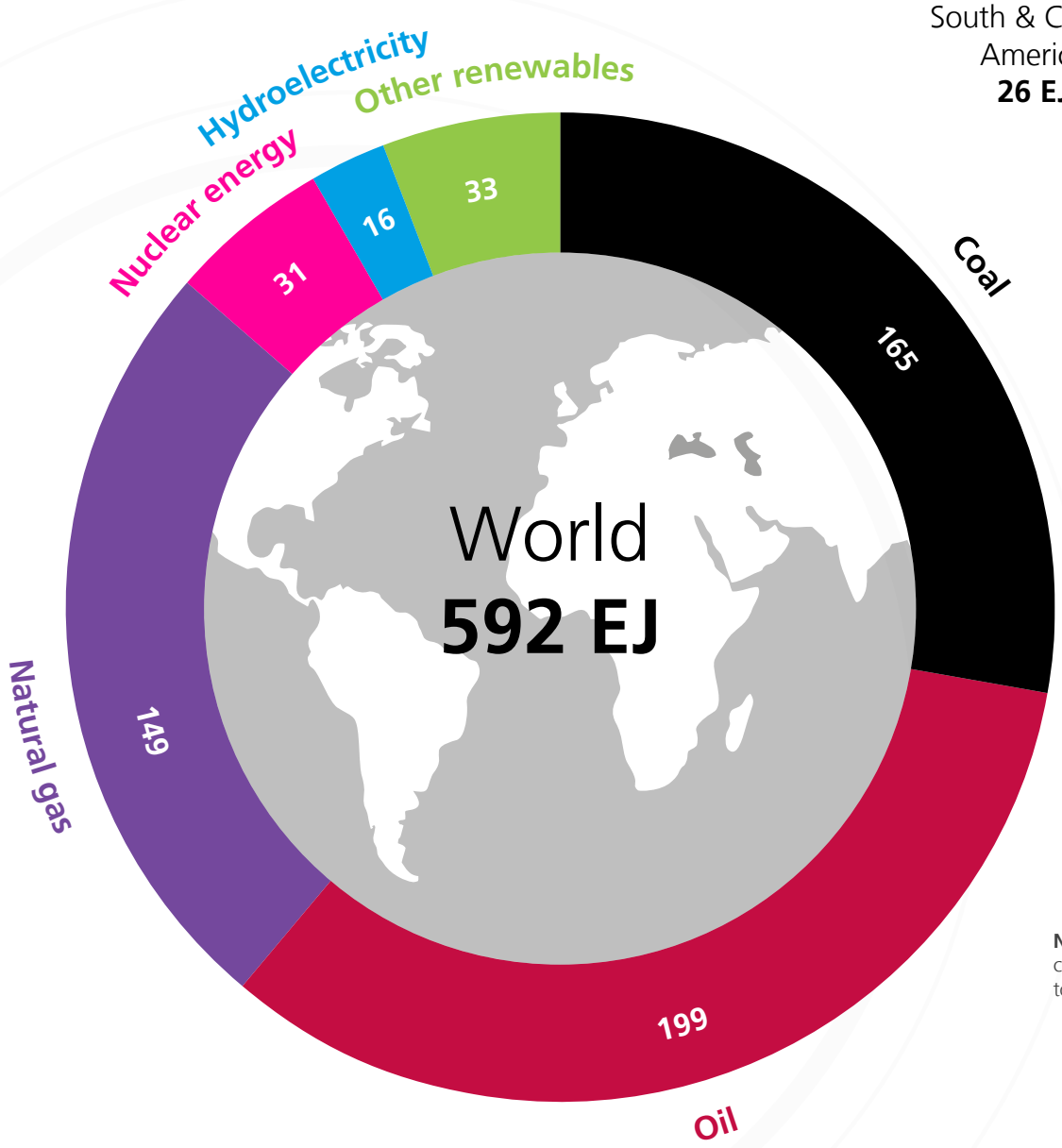
Key minerals

- Global rare earth metals mining increased by 3.2% in 2024 reaching 0.4 million tonnes. China maintained its dominance accounting for 71% of global production and 48% of worldwide reserves.
- Global production of lithium increased by 16%. Chile continued to be the second-largest lithium producer with a 23% share of global output. Its production grew by 18%, whilst Argentina saw a significant increase of 109%.
- On average, key mineral prices fell globally by 16% in 2024 with the biggest falls in lithium carbonate (-69%), natural graphite (-26%), and cobalt (-23%).

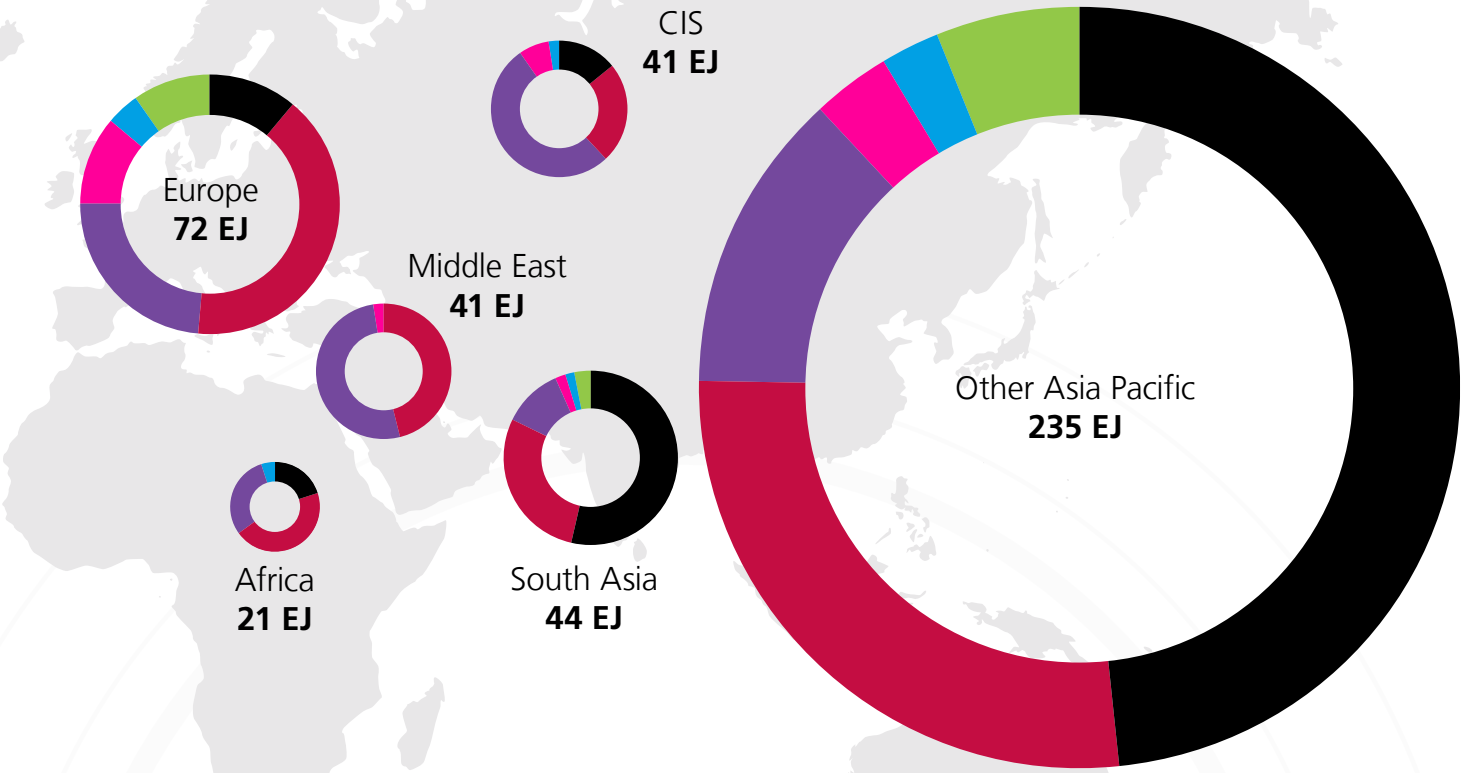
2024 Regional overview – access to energy and sustainability

Global energy demand increased 2% in 2024 with non-OECD countries dominating both the share of absolute demand and annual growth rates. Fossil fuels continue to underpin the energy system accounting for 87% of the energy mix.





Note: energy sources in the charts are ordered according to their carbon intensity.



Total energy demand increased across all regions, but the growth was far from evenly distributed, reflecting stark regional variations shaped by economic development, climate conditions, and energy policy. North America and Europe exhibited the slowest growth rates at 0.4% and 0.7%, respectively. However, in absolute terms, Africa had the smallest increase in energy demand, at 0.2 EJ. Its increase in demand was less than half of Europe's increased energy demand (0.5 EJ). The Asia Pacific region drove 68% of the total global energy demand increase and was responsible for 47% of total global energy demand. Total renewable energy demand increased by 7%, of which China alone was responsible for more than the rest of the world combined (at 56%). Global growth in electricity demand continues to outpace growth in total energy demand. All regions experienced significant growth in electricity demand in this new age of electricity, with Asia Pacific and the Middle East registering the greatest growth in electricity generation at 5.4% and 5.3%, respectively.

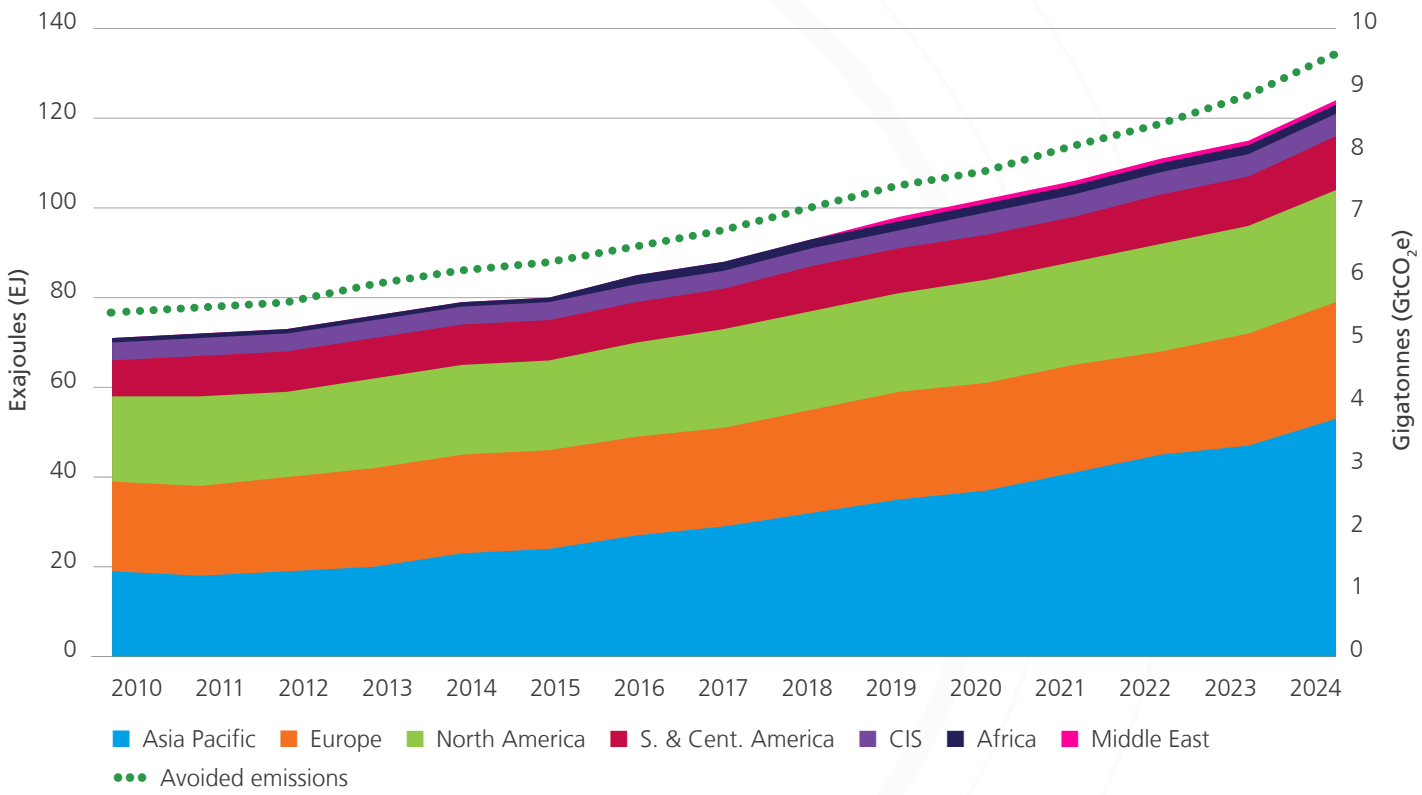
2024 Benefits from investing in low and zero-carbon energy

Since 2010 the world has avoided using 1,371 EJ of fossil fuels and emitting 109 gigatonnes of greenhouse gas emissions through renewables and nuclear

Back in 1990, renewables represented just 3% of the total global energy mix. Since then, the energy landscape has changed significantly as nations have sought to decarbonise their energy systems to tackle the effects of climate change. Since 2000, the annual growth rate of renewable energy has consistently been above that of all other forms of energy. Since 2006 its growth rate has averaged around four times that of the annual average growth rate of total global energy demand. Over the past five years, this has increased to over five times that rate. As a consequence and in recognition of the increasing contribution that renewables make to our everyday lives, starting in 2025, the way in which we measure total energy demand has changed. The previous fossil-fuel equivalent (or substitution) method used to calculate Primary Energy Consumption made sense in a world fuelled almost entirely by oil, gas and coal but is no longer relevant to today's energy system.

In this year's edition, we have adopted the Physical Energy Content method to create a view of Total Energy Supply, a measure of the total amount of energy that a country needs to supply in order to meet its final end-use demand. It reflects the energy that is either produced domestically or imported, minus what is exported or stored. Some energy sources are consumed directly whilst others may be converted into fuels or electricity for final consumption with transmission, distribution, and efficiency losses impacting throughout the system.

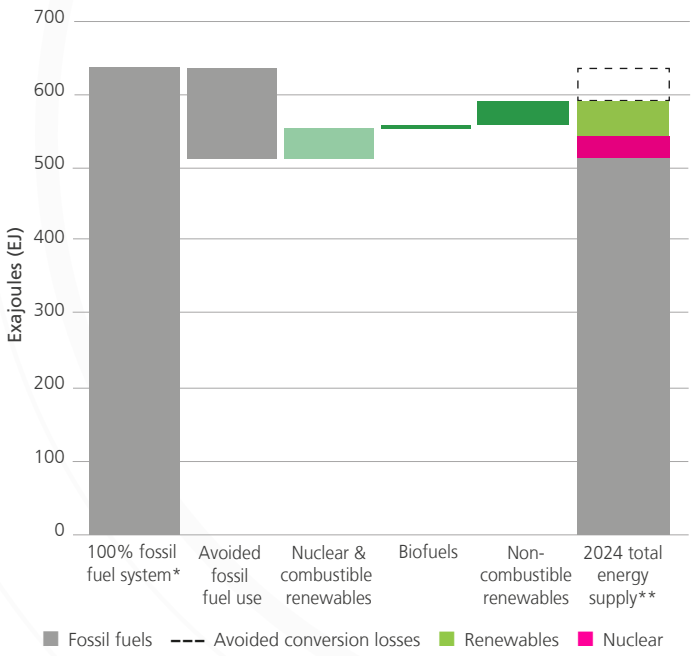
Avoided emissions and fossil fuel use by region



The new approach has the advantage of quantifying the benefits that low and zero-carbon energy have delivered in terms of reducing reliance on fossil fuels, avoiding greenhouse gas emissions, and improving the overall efficiency of the energy system. For instance, to undertake the same amount of work as fossil fuels, technologies such as wind, solar, and hydro enable us to supply significantly less clean electricity. Consequently, in 2024, the global energy system was effectively 7% more efficient in terms of the total amount of energy that it needed to supply to meet end-use demand.

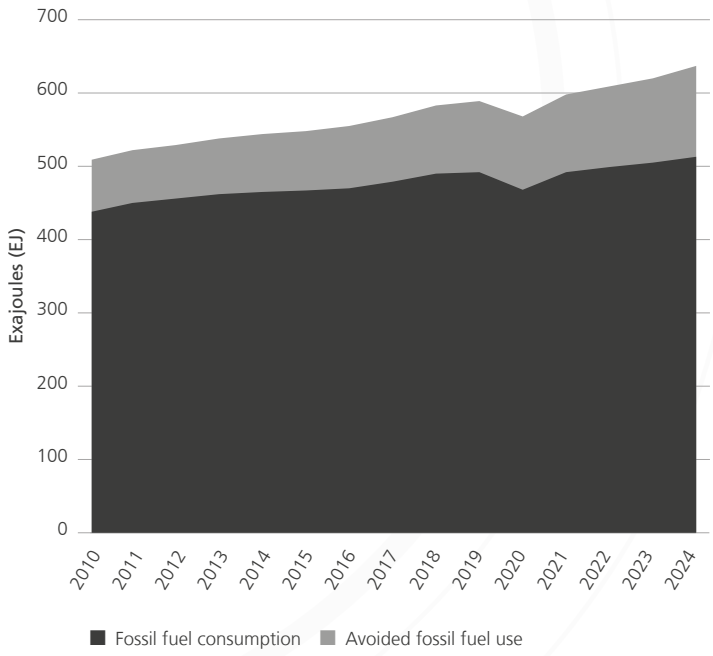
Since 2010, renewables and nuclear have avoided the use of 1,371 EJ of fossil fuels, nearly two and a half times the entire energy supplied globally in 2024. In addition to avoiding the need to explore for and produce fossil fuels, around 109 gigatonnes of energy-related greenhouse gas emissions have been avoided over this same period, 170% more than were emitted in 2024. The Asia Pacific region, underpinned by China which was responsible for nearly 60% of the renewable power supply additions in 2024, has been at the forefront of realising the benefits of transitioning away from fossil fuels. It was responsible for 43% of avoided fossil fuel use in 2024 followed by Europe and North America at 21% and 20% respectively.

Renewables and nuclear reduce fossil fuel dependency and increase energy system efficiency in 2024



* Calculated using fossil fuel equivalent method
** Calculated using physical energy content method

Avoided fossil fuels use by renewables and nuclear



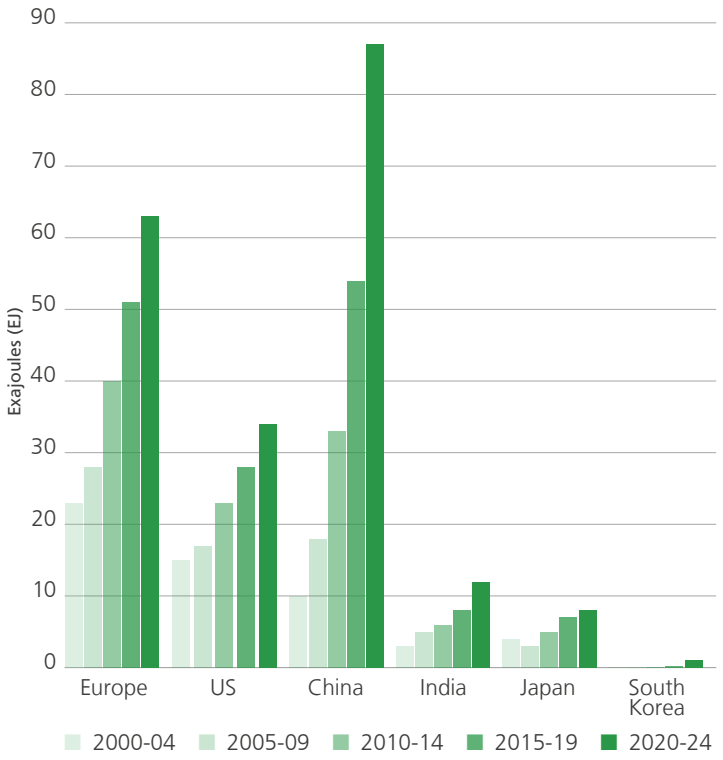
2024 Regional overview – energy security

Investing in the energy transition delivers energy security through reduced reliance on energy imports. This remains an untapped opportunity.

Over the past five years, the global energy system and international energy markets have been rocked by a series of seismic events causing supply chain disruption, energy supply shortages, record energy prices, and increased volatility across international markets. From COVID, conflict in Ukraine, heatwaves, droughts and floods intensified by climate change, to renewed tensions in the Middle East, vulnerabilities across every aspect of the energy system have been exposed. Where the energy transition initially focused on tackling climate change, these events have highlighted the need for resilient, decentralized, and clean energy systems. 2024 may well become seen as a beginning of a paradigm shift where the energy transition becomes increasingly associated with a need to deliver energy security through energy independence to protect countries from the types of shocks and uncertainty that such events bring.

Investment in renewables in particular is increasingly being seen as a cornerstone of energy security, enabling countries to disconnect their energy systems from global fuel markets and geopolitical tensions. Technologies such as wind, solar, hydro, and geothermal that draw on homegrown resources reduce the need to import energy from abroad. In addition, once built, they have low and predictable operating costs that shield economies from volatile international fossil fuel prices and bring stability to national budgets and household bills. Resilience is also improved through diversifying away from one or a limited number of energy sources or suppliers. As the world's leading investor in renewable energy, China is at the forefront of realising such benefits. Whilst it is still heavily reliant on energy imports, they met around 25% of its total energy demand in 2024, renewables have helped it avoid importing around 87 EJ over the past five years, more than Europe's total energy demand in 2024. Europe itself, along with the US, has also avoided the need to import significant volumes of energy over this same period, 63 EJ and 34 EJ respectively. In sharp contrast, Japan and South Korea, economies with significant energy-intensive manufacturing bases and each reliant on energy imports for meeting over 90% of their total energy demand, have collectively only managed to avoid importing just under 10 EJ over the same five-year period. Whilst renewables were responsible for generating a third of the world's electricity supply in 2024, they only met just over 8% of total global energy demand. Their potential to simultaneously deliver clean and independent energy systems for nations remains a vast, untapped opportunity.

Avoided fuel imports through deployment of renewables



In much the same way that renewables deliver energy security through energy independence, energy efficiency and demand reduction can have the same effect. In the wake of Russia's invasion of Ukraine, gas pipeline supplies to Europe were severely disrupted. In response to shortages, record high gas prices, and demand response mechanisms that encouraged (and often paid) end-users to reduce their consumption, particularly of electricity where gas-fired power generation often sets wholesale electricity prices, gas demand in Europe fell 13% in 2022, completely reversing the 2021 post-COVID rebound gains and bringing demand back down to its 2015 level.

However, whilst renewables can make a significant contribution to strengthening energy security, their deployment, particularly less dependable wind and solar, can, in turn, raise issues around electricity grid stability. Without careful strategic planning, energy security could be achieved at the expense of system stability. Countries such as Iceland, Bhutan, and Norway have already decarbonised a high proportion of their overall energy systems (85%, 80%, and 52% respectively). Moreover, others, such as Albania, Ethiopia, and Iceland have already achieved power generation fleets that are 100% renewable. The dominant technologies in these instances are dependable forms of renewable generation such as hydro and geothermal. As countries increasingly deploy wind and solar technologies, their integration and expansion will need to be carefully planned to ensure that, when they start to make material contributions, essential ancillary services such as frequency response, voltage control, inertia, and reserve margins are maintained. Pairing them with energy storage, synthetic inertia technologies, smart grids, increased interconnection with other grid networks, and demand response participation offer ways to ensure the continued stability and resilience of electricity grids.

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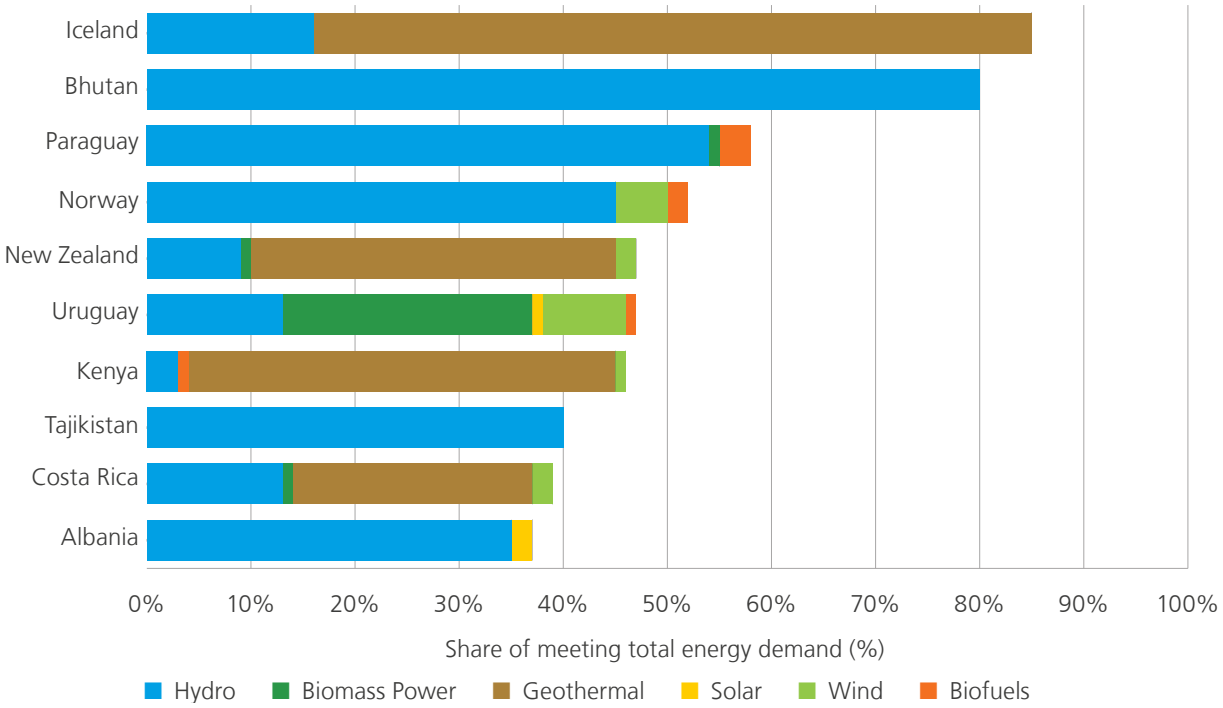
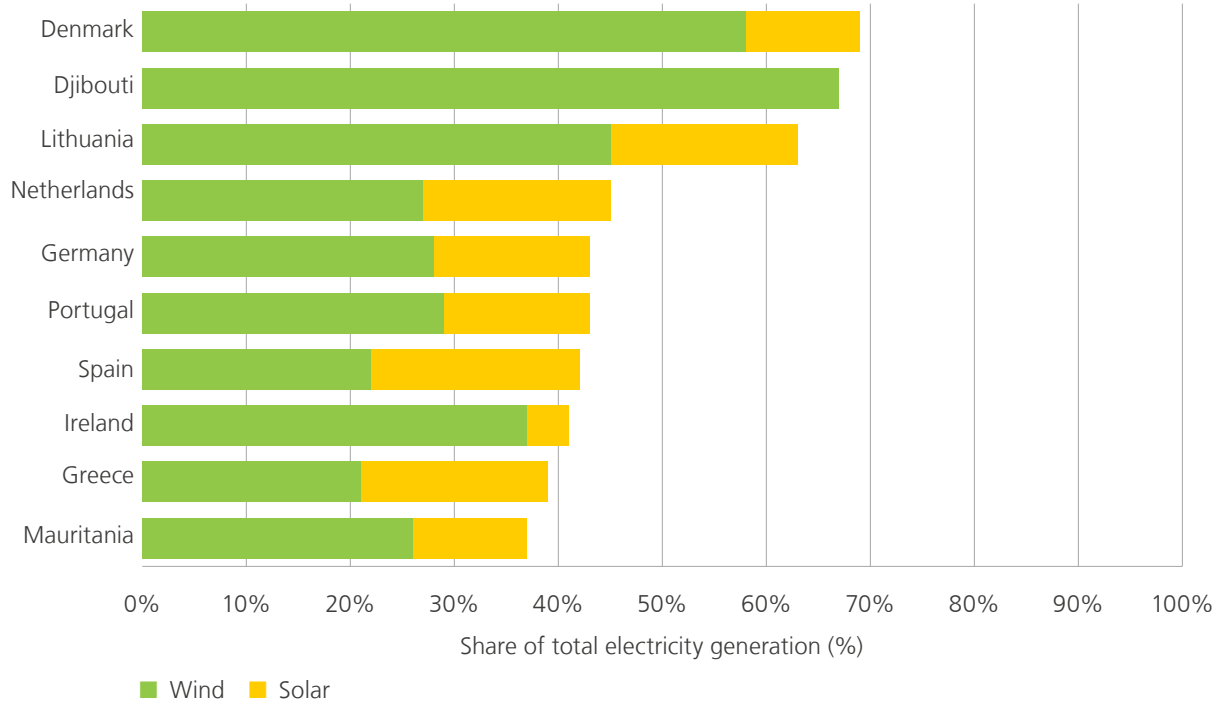
2024 top ten countries by renewable contributions



2024 top ten countries wind and solar penetration

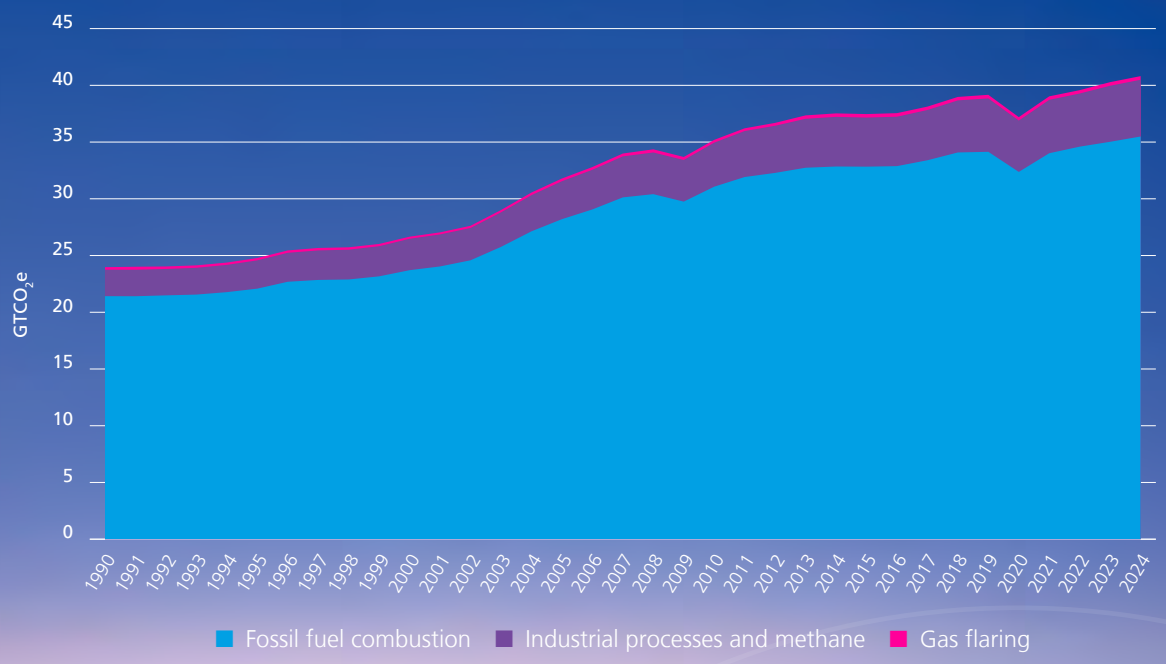


Total energy supply and carbon

In 2024, oil, gas, coal, nuclear, hydro and renewable energy all registered increases, that is, all forms of energy saw an increase in demand something that last occurred in 2006. Renewables, excluding hydro, remain the fastest growing energy source with a 9% increase followed by hydro at 4% and nuclear at 3%. In terms of fossil fuels, natural gas saw the greatest increase at 2.5%, followed by coal at 1% and oil only registered a minor increase of 0.6%. Oil remains the dominant energy source meeting 34% of total energy demand.

Carbon emissions increased 1% in 2024 exceeding the record level set the previous year reaching 40.8 $GtCO_2e$. US emissions dropped 0.7% below its 2023 levels against its ten-year average annual decline rate of 1% per annum. European emissions were nearly 16% below where they were a decade ago. CO_2 emissions from the combustion of fossil fuels are by far the largest source of energy-related greenhouse gas emissions contributing to 87% of the total.

Global emissions have increased on average 2.3% per annum since COVID



Post-COVID, Europe recorded a decline in energy-related emissions for the third year in a row, North America for the second year in a row

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Total energy Supply*

Exajoules	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	12.15	12.12	11.93	12.09	12.36	12.33	11.48	11.60	11.87	11.81	**11.87**	0.3%	-0.2%	2.0%
Mexico	7.92	7.88	8.13	8.31	8.11	8.00	7.24	7.62	7.97	8.03	**8.04**	†	0.2%	1.4%
US	92.43	91.56	91.15	91.07	94.41	93.57	86.21	90.79	92.25	91.20	**91.83**	0.4%	-0.1%	15.5%
Total North America	112.50	111.56	111.21	111.48	114.88	113.90	104.93	110.00	112.09	111.03	**111.75**	0.4%	-0.1%	18.9%
Argentina	3.38	3.45	3.45	3.41	3.36	3.15	2.93	3.23	3.39	3.35	**3.27**	-2.5%	-0.3%	0.6%
Brazil	10.50	10.40	9.92	10.04	9.93	10.13	9.59	10.26	10.31	10.58	**10.71**	1.0%	0.2%	1.8%
Chile	1.32	1.32	1.41	1.45	1.50	1.52	1.39	1.51	1.56	1.51	**1.54**	2.3%	1.6%	0.3%
Colombia	1.56	1.54	1.69	1.65	1.72	1.74	1.57	1.68	1.88	1.86	**1.88**	1.0%	1.9%	0.3%
Ecuador	0.61	0.60	0.58	0.58	0.62	0.61	0.51	0.62	0.66	0.69	**0.70**	1.3%	1.4%	0.1%
Peru	0.83	0.86	0.92	0.91	0.95	0.98	0.84	0.98	1.03	1.05	**1.13**	7.8%	3.2%	0.2%
Trinidad & Tobago	0.82	0.80	0.70	0.75	0.70	0.70	0.61	0.62	0.62	0.59	**0.58**	-2.8%	-3.5%	0.1%
Venezuela	3.15	3.03	2.82	2.72	2.23	1.99	1.51	1.78	1.93	2.10	**2.10**	-0.4%	-4.0%	0.4%
Other S. & Cent. America	3.46	3.63	3.79	3.79	3.87	3.94	3.49	3.72	3.80	3.94	**4.12**	4.1%	1.8%	0.7%
Total S. & Cent. America	25.63	25.63	25.29	25.29	24.88	24.76	22.44	24.39	25.18	25.66	**26.04**	1.2%	0.2%	4.4%
Austria	1.14	1.16	1.19	1.22	1.20	1.24	1.14	1.18	1.11	1.10	**1.12**	1.6%	-0.2%	0.2%
Belgium	2.34	2.35	2.57	2.59	2.55	2.65	2.34	2.64	2.47	2.27	**2.25**	-1.0%	-0.4%	0.4%
Czech Republic	1.74	1.71	1.68	1.78	1.78	1.74	1.62	1.70	1.64	1.50	**1.43**	-5.1%	-2.0%	0.2%
Finland	1.13	1.10	1.12	1.09	1.12	1.10	1.02	1.05	1.04	1.08	**1.06**	-3.0%	-0.7%	0.2%
France	10.21	10.35	10.08	10.10	10.16	9.94	8.77	9.41	8.27	8.57	**9.01**	4.8%	-1.2%	1.5%
Germany	12.78	12.89	13.11	13.34	12.93	12.50	11.52	11.99	11.31	10.14	**10.14**	-0.3%	-2.3%	1.7%
Greece	1.03	1.03	1.02	1.08	1.07	1.05	0.90	0.96	1.00	0.96	**1.01**	4.5%	-0.2%	0.2%
Hungary	0.87	0.92	0.94	0.99	0.99	1.00	0.98	1.02	0.96	0.90	**0.91**	0.7%	0.4%	0.2%
Italy	6.09	6.26	6.26	6.34	6.32	6.24	5.60	6.04	6.02	5.65	**5.60**	-1.1%	-0.8%	0.9%
Netherlands	3.62	3.65	3.70	3.71	3.61	3.58	3.42	3.48	3.22	3.10	**3.02**	-2.9%	-1.8%	0.5%
Norway	1.10	1.12	1.13	1.15	1.14	1.09	1.12	1.14	1.09	1.12	**1.12**	-0.3%	0.1%	0.2%
Poland	3.86	3.89	4.05	4.24	4.31	4.16	3.98	4.27	4.09	3.86	**3.80**	-1.7%	-0.1%	0.6%
Portugal	0.88	0.92	0.94	0.98	0.94	0.92	0.81	0.80	0.81	0.79	**0.77**	-2.6%	-1.3%	0.1%
Romania	1.23	1.23	1.23	1.27	1.28	1.26	1.21	1.28	1.18	1.15	**1.16**	0.1%	-0.6%	0.2%
Spain	5.08	5.24	5.24	5.42	5.41	5.31	4.63	4.96	5.20	5.00	**5.13**	2.3%	0.1%	0.9%
Sweden	1.80	1.76	1.82	1.88	1.84	1.86	1.65	1.78	1.72	1.65	**1.66**	0.6%	-0.8%	0.3%
Switzerland	1.04	1.01	0.96	0.96	0.98	1.02	0.92	0.85	0.92	0.95	**0.97**	2.7%	-0.7%	0.2%
Türkiye	5.00	5.33	5.63	6.12	6.11	6.19	6.16	6.72	6.70	6.66	**7.02**	5.1%	3.5%	1.2%
Ukraine	4.43	3.71	3.86	3.59	3.72	3.53	3.35	3.41	2.24	2.11	**2.16**	2.2%	-6.9%	0.4%
United Kingdom	7.95	7.97	7.87	7.81	7.74	7.49	6.65	6.75	6.73	6.42	**6.43**	-0.1%	-2.1%	1.1%
Other Europe	5.77	5.91	6.07	6.23	6.29	6.23	5.84	6.12	6.09	5.95	**5.89**	-1.3%	0.2%	1.0%
Total Europe	79.10	79.52	80.48	81.91	81.51	80.12	73.65	77.56	73.82	70.93	**71.66**	0.7%	-1.0%	12.1%
Azerbaijan	0.56	0.61	0.60	0.59	0.62	0.66	0.66	0.70	0.75	0.77	**0.73**	-5.8%	2.7%	0.1%
Belarus	1.06	0.96	0.98	1.00	1.10	1.11	1.03	1.13	1.10	1.11	**1.16**	3.8%	0.9%	0.2%
Kazakhstan	2.72	2.23	2.49	2.68	2.78	2.81	2.58	2.89	2.87	2.96	**3.00**	1.0%	1.0%	0.5%
Russian Federation	28.23	27.85	28.33	28.54	29.59	29.37	28.22	29.14	30.31	30.77	**31.77**	2.9%	1.2%	5.4%
Turkmenistan	1.02	1.16	1.26	1.16	1.32	1.26	1.60	1.60	1.70	1.58	**1.34**	-15.6%	2.7%	0.2%
Uzbekistan	2.00	1.91	1.83	1.89	1.91	1.92	1.91	2.04	2.10	2.12	**2.43**	14.4%	2.0%	0.4%
Other CIS	0.55	0.56	0.57	0.58	0.64	0.61	0.62	0.64	0.65	0.64	**0.66**	2.3%	1.7%	0.1%
Total CIS	36.14	35.28	36.05	36.44	37.96	37.74	36.62	38.15	39.48	39.96	**41.07**	2.5%	1.3%	6.9%
Iran	9.95	9.87	10.43	10.79	11.19	11.67	12.18	12.07	12.49	12.82	**12.82**	-0.3%	2.6%	2.2%
Iraq	1.70	1.68	1.80	2.14	2.23	2.37	2.11	2.20	2.43	2.57	**2.64**	2.4%	4.5%	0.4%
Israel	0.93	0.98	1.00	1.02	1.04	1.07	1.01	1.03	1.08	0.98	**0.94**	-3.8%	0.1%	0.2%
Kuwait	1.57	1.69	1.68	1.68	1.74	1.59	1.51	1.69	1.69	1.80	**1.89**	5.0%	1.8%	0.3%
Oman	1.14	1.21	1.22	1.27	1.35	1.34	1.30	1.43	1.52	1.56	**1.60**	2.4%	3.5%	0.3%
Qatar	1.86	2.14	2.11	2.03	2.06	2.11	1.85	1.95	2.03	2.22	**2.34**	5.2%	2.3%	0.4%
Saudi Arabia	10.55	11.00	11.45	11.45	11.17	10.68	10.39	10.73	11.33	11.50	**11.79**	2.3%	1.1%	2.0%
United Arab Emirates	4.09	4.40	4.57	4.36	4.07	4.36	4.24	4.45	4.87	5.15	**5.48**	6.1%	3.0%	0.9%
Other Middle East	2.18	2.03	1.96	2.03	2.05	2.06	1.96	1.95	1.91	1.94	**1.93**	-0.5%	-1.2%	0.3%
Total Middle East	33.98	35.01	36.21	36.77	36.90	37.27	36.56	37.50	39.34	40.52	**41.43**	2.0%	2.0%	7.0%
Algeria	2.11	2.22	2.22	2.24	2.41	2.50	2.33	2.54	2.64	2.82	**2.73**	-3.4%	2.6%	0.5%
Egypt	3.37	3.42	3.61	3.77	3.76	3.66	3.42	3.68	3.85	3.80	**3.90**	2.5%	1.5%	0.7%
Morocco	0.76	0.77	0.78	0.82	0.84	0.91	0.84	0.93	0.93	0.93	**0.95**	1.2%	2.2%	0.2%
South Africa	5.21	5.08	5.31	5.27	5.03	5.26	4.99	4.99	4.76	4.83	**4.82**	-0.5%	-0.8%	0.8%
Other Africa	6.02	6.43	6.42	6.80	7.12	7.32	7.02	8.03	8.26	8.36	**8.62**	2.9%	3.7%	1.5%
Total Africa	17.47	17.92	18.34	18.89	19.16	19.65	18.60	20.17	20.44	20.74	**21.03**	1.1%	1.9%	3.6%
Australia	5.46	5.57	5.55	5.55	5.58	5.74	5.35	5.29	5.49	5.44	**5.47**	0.4%	†	0.9%
Bangladesh	1.14	1.38	1.39	1.44	1.54	1.73	1.64	1.77	1.84	1.81	**1.89**	3.9%	5.2%	0.3%
China	117.56	118.57	118.50	122.83	128.43	134.05	137.98	145.23	146.56	154.68	**158.88**	2.4%	3.1%	26.8%
China Hong Kong SAR	1.14	1.18	1.21	1.29	1.31	1.24	0.93	0.88	0.78	0.90	**0.98**	8.4%	-1.5%	0.2%
India	26.50	27.41	28.69	29.65	31.28	31.88	30.06	32.70	34.31	37.06	**38.76**	4.3%	3.9%	6.5%
Indonesia	6.86	7.01	6.96	7.52	7.91	8.36	7.88	8.18	10.17	10.32	**11.07**	6.9%	4.9%	1.9%
Japan	18.93	18.61	18.37	18.54	18.40	18.04	16.56	17.27	17.13	16.67	**16.44**	-1.7%	-1.4%	2.8%
Malaysia	3.87	3.93	4.10	4.12	4.20	4.31	4.14	4.31	4.67	4.56	**4.76**	4.0%	2.1%	0.8%
New Zealand	0.94	0.96	0.97	0.99	0.98	1.00	0.93	0.92	0.90	0.91	**0.92**	1.0%	-0.2%	0.2%
Pakistan	2.64	2.79	3.03	3.25	3.30	3.29	3.22	3.62	3.33	3.04	**2.99**	-2.0%	1.3%	0.5%
Philippines	1.68	1.84	1.98	2.12	2.19	2.26	2.08	2.16	2.26	2.40	**2.54**	5.4%	4.2%	0.4%
Singapore	3.10	3.28	3.46	3.55	3.58	3.51	3.29	3.28	3.22	3.56	**3.79**	6.0%	2.0%	0.6%
South Korea	11.97	12.17	12.58	12.70	12.96	12.80	12.33	12.97	13.14	12.91	**13.15**	1.5%	0.9%	2.2%
Sri Lanka	0.28	0.29	0.33	0.36	0.36	0.37	0.34	0.34	0.30	0.31	**0.34**	9.2%	2.0%	0.1%
Taiwan	4.83	4.81	4.82	4.81	4.87	4.77	4.63	4.90	4.67	4.42	**4.37**	-1.5%	-1.0%	0.7%
Thailand	4.84	4.91	5.01	5.09	5.23	5.23	4.88	4.91	4.90	4.90	**5.02**	2.2%	0.4%	0.8%
Vietnam	2.22	2.57	2.77	2.90	3.39	3.93	3.93	3.77	3.90	4.27	**4.59**	7.0%	7.5%	0.8%
Other Asia Pacific	1.96	2.07	2.16	2.69	2.85	3.06	3.10	2.98	3.12	3.24	**3.29**	1.3%	5.3%	0.6%
Total Asia Pacific	215.90	219.35	221.88	229.40	238.37	245.56	243.27	255.49	260.69	271.43	**279.24**	2.6%	2.6%	47.2%
Total World	**520.73**	**524.27**	**529.47**	**540.19**	**553.65**	**559.00**	**536.07**	**563.26**	**571.04**	**580.28**	**592.22**	**1.78%**	**1.29%**	**100.00%**
of which: OECD	224.62	224.71	225.53	227.70	230.82	228.43	210.58	220.81	220.86	216.28	**217.81**	0.43%	-0.3%	36.8%
Non-OECD	296.11	299.56	303.95	312.49	322.83	330.57	325.49	342.45	350.19	364.00	**374.41**	2.58%	2.4%	63.2%
European Union	57.92	58.60	59.17	60.40	59.88	58.88	53.59	56.76	54.16	51.71	**52.02**	0.32%	-1.1%	8.8%

* In this review, energy supply comprises commercially-traded fuels, including modern renewables used to generate electricity.
† Less than 0.05%.
Energy from non-fossil fuel combustible electricity generation is accounted for on their input heat requirements and non-combustible renewables on the energy content of their gross electrical output.
See the appendix or **https://www.energyinst.org/statistical-review** for more details on this methodology.
Note: Growth rates are adjusted for leap years.

Total energy Supply by fuel*

Exajoules	2023 Oil	2023 Natural gas	2023 Coal	2023 Nuclear energy	2023 Hydro-electricity	2023 Renewables	2023 Total	2024 Oil	2024 Natural gas	2024 Coal	2024 Nuclear energy	2024 Hydro-electricity	2024 Renewables	2024 Total
Canada	4.30	4.47	0.37	0.96	1.30	0.40	**11.81**	4.35	4.63	0.29	0.93	1.24	0.43	**11.87**
Mexico	3.57	3.62	0.28	0.14	0.07	0.35	**8.03**	3.60	3.61	0.28	0.13	0.08	0.33	**8.04**
US	35.88	31.98	8.19	8.90	0.87	5.37	**91.20**	35.82	32.48	7.90	8.98	0.86	5.79	**91.83**
Total North America	43.75	40.07	8.84	10.00	2.24	6.13	**111.03**	43.77	40.72	8.48	10.05	2.18	6.55	**111.75**
Argentina	1.33	1.62	0.05	0.10	0.11	0.14	**3.35**	1.22	1.64	0.04	0.11	0.11	0.15	**3.27**
Brazil	5.13	1.08	0.57	0.16	1.53	2.10	**10.58**	5.14	1.13	0.53	0.17	1.49	2.25	**10.71**
Chile	0.81	0.27	0.14	–	0.08	0.20	**1.51**	0.86	0.26	0.13	–	0.10	0.21	**1.54**
Colombia	0.92	0.47	0.20	–	0.22	0.06	**1.86**	0.91	0.48	0.22	–	0.20	0.07	**1.88**
Ecuador	0.57	0.02	^	–	0.09	0.01	**0.69**	0.59	0.02	^	–	0.08	0.01	**0.70**
Peru	0.52	0.36	0.03	–	0.10	0.04	**1.05**	0.54	0.41	0.03	–	0.12	0.04	**1.13**
Trinidad & Tobago	0.07	0.52	–	–	–	^	**0.59**	0.07	0.51	–	–	–	^	**0.58**
Venezuela	0.76	1.07	0.01	–	0.26	^	**2.10**	0.68	1.14	0.01	–	0.26	^	**2.10**
Other S. & Cent. America	2.67	0.41	0.18	–	0.31	0.37	**3.94**	2.78	0.49	0.17	–	0.30	0.38	**4.12**
Total S. & Cent. America	12.78	5.82	1.17	0.26	2.72	2.91	**25.66**	12.78	6.08	1.12	0.29	2.65	3.12	**26.04**
Austria	0.48	0.25	0.10	–	0.15	0.12	**1.10**	0.47	0.25	0.10	–	0.16	0.14	**1.12**
Belgium	1.15	0.50	0.10	0.36	^	0.16	**2.27**	1.18	0.48	0.11	0.34	^	0.15	**2.25**
Czech Republic	0.39	0.24	0.45	0.33	0.01	0.08	**1.50**	0.41	0.24	0.36	0.32	0.01	0.09	**1.43**
Finland	0.32	0.04	0.09	0.37	0.05	0.20	**1.08**	0.31	0.05	0.08	0.36	0.05	0.22	**1.06**
France	2.80	1.23	0.18	3.69	0.20	0.48	**8.57**	2.79	1.15	0.18	4.15	0.26	0.48	**9.01**
Germany	4.20	2.62	1.75	0.08	0.07	1.42	**10.14**	4.24	2.83	1.58	–	0.08	1.41	**10.14**
Greece	0.62	0.19	0.05	–	0.01	0.09	**0.96**	0.62	0.24	0.04	–	0.01	0.10	**1.01**
Hungary	0.34	0.30	0.04	0.17	^	0.06	**0.90**	0.34	0.30	0.03	0.17	^	0.07	**0.91**
Italy	2.57	2.11	0.19	–	0.15	0.63	**5.65**	2.57	2.12	0.10	–	0.20	0.61	**5.60**
Netherlands	1.67	0.93	0.16	0.04	^	0.30	**3.10**	1.56	0.94	0.17	0.04	^	0.31	**3.02**
Norway	0.39	0.14	0.03	–	0.49	0.07	**1.12**	0.39	0.12	0.03	–	0.50	0.07	**1.12**
Poland	1.40	0.70	1.48	–	0.01	0.27	**3.86**	1.42	0.76	1.33	–	0.01	0.29	**3.80**
Portugal	0.45	0.16	^	–	0.04	0.13	**0.79**	0.44	0.13	^	–	0.05	0.14	**0.77**
Romania	0.47	0.33	0.11	0.12	0.07	0.06	**1.15**	0.50	0.34	0.09	0.12	0.05	0.06	**1.16**
Spain	2.51	1.06	0.11	0.62	0.09	0.61	**5.00**	2.67	1.02	0.10	0.60	0.12	0.62	**5.13**
Sweden	0.47	0.03	0.07	0.53	0.24	0.32	**1.65**	0.49	0.03	0.07	0.55	0.23	0.29	**1.66**
Switzerland	0.39	0.12	^	0.25	0.13	0.05	**0.95**	0.39	0.12	^	0.25	0.16	0.05	**0.97**
Türkiye	2.32	1.73	1.68	–	0.23	0.70	**6.66**	2.37	1.83	1.80	–	0.27	0.75	**7.02**
Ukraine	0.39	0.67	0.39	0.57	0.05	0.04	**2.11**	0.40	0.72	0.39	0.58	0.05	0.03	**2.16**
United Kingdom	2.67	2.29	0.18	0.44	0.02	0.81	**6.42**	2.68	2.23	0.17	0.44	0.02	0.89	**6.43**
Other Europe	2.59	0.96	1.02	0.44	0.30	0.64	**5.95**	2.63	0.98	0.91	0.43	0.27	0.67	**5.89**
Total Europe	28.59	16.60	8.18	8.03	2.31	7.23	**70.93**	28.85	16.87	7.62	8.36	2.51	7.44	**71.66**
Azerbaijan	0.26	0.50	^	–	0.01	^	**0.77**	0.26	0.46	^	–	0.01	^	**0.73**
Belarus	0.33	0.60	0.04	0.13	^	0.01	**1.11**	0.33	0.60	0.04	0.17	^	0.01	**1.16**
Kazakhstan	0.67	0.72	1.52	–	0.03	0.02	**2.96**	0.69	0.75	1.50	–	0.04	0.02	**3.00**
Russian Federation	7.48	16.32	3.82	2.37	0.72	0.06	**30.77**	7.66	17.17	3.75	2.35	0.76	0.07	**31.77**
Turkmenistan	0.31	1.27	–	–	^	^	**1.58**	0.31	1.03	–	–	^	^	**1.34**
Uzbekistan	0.24	1.69	0.16	–	0.03	^	**2.12**	0.24	1.97	0.18	–	0.03	0.02	**2.43**
Other CIS	0.20	0.20	0.08	0.03	0.12	^	**0.64**	0.20	0.20	0.09	0.03	0.13	0.01	**0.66**
Total CIS	9.48	21.31	5.62	2.53	0.91	0.10	**39.96**	9.69	22.18	5.55	2.56	0.97	0.13	**41.07**
Iran	3.71	8.88	0.07	0.07	0.08	0.01	**12.82**	3.76	8.83	0.07	0.08	0.07	0.01	**12.82**
Iraq	1.88	0.69	–	–	^	^	**2.57**	1.92	0.71	–	–	^	^	**2.64**
Israel	0.43	0.38	0.13	–	^	0.04	**0.98**	0.41	0.37	0.11	–	^	0.05	**0.94**
Kuwait	0.94	0.85	^	–	–	^	**1.80**	1.00	0.89	^	–	–	^	**1.89**
Oman	0.46	1.09	^	–	–	0.01	**1.56**	0.44	1.14	^	–	–	0.01	**1.60**
Qatar	0.64	1.58	^	–	–	0.01	**2.22**	0.66	1.67	^	–	–	0.01	**2.34**
Saudi Arabia	7.25	4.22	0.01	–	–	0.02	**11.50**	7.37	4.37	0.01	–	–	0.04	**11.79**
United Arab Emirates	2.20	2.41	0.10	0.38	–	0.06	**5.15**	2.29	2.57	0.11	0.44	–	0.06	**5.48**
Other Middle East	1.07	0.79	0.04	–	^	0.03	**1.94**	1.07	0.77	0.05	–	0.01	0.03	**1.93**
Total Middle East	18.57	20.89	0.35	0.45	0.09	0.17	**40.52**	18.94	21.33	0.35	0.52	0.08	0.21	**41.43**
Algeria	0.86	1.95	0.01	–	^	^	**2.82**	0.90	1.82	0.01	–	^	^	**2.73**
Egypt	1.49	2.16	0.05	–	0.05	0.04	**3.80**	1.58	2.15	0.07	–	0.05	0.05	**3.90**
Morocco	0.57	0.03	0.29	–	^	0.04	**0.93**	0.61	0.03	0.27	–	^	0.04	**0.95**
South Africa	1.04	0.17	3.44	0.09	0.01	0.08	**4.83**	0.96	0.17	3.51	0.09	^	0.08	**4.82**
Other Africa	4.95	2.13	0.46	–	0.54	0.29	**8.36**	5.10	2.23	0.45	–	0.56	0.29	**8.62**
Total Africa	8.91	6.45	4.25	0.09	0.60	0.45	**20.74**	9.16	6.41	4.30	0.09	0.61	0.46	**21.03**
Australia	2.17	1.39	1.51	–	0.05	0.32	**5.44**	2.23	1.33	1.52	–	0.05	0.34	**5.47**
Bangladesh	0.50	1.01	0.29	–	^	^	**1.81**	0.58	0.98	0.32	–	^	0.01	**1.89**
China	32.73	14.57	90.65	4.74	4.41	7.57	**154.68**	32.27	15.64	92.16	4.92	4.88	9.02	**158.88**
China Hong Kong SAR	0.57	0.17	0.15	–	–	0.01	**0.90**	0.65	0.20	0.13	–	–	0.01	**0.98**
India	10.58	2.23	22.09	0.53	0.54	1.09	**37.06**	10.90	2.53	22.97	0.60	0.56	1.20	**38.76**
Indonesia	3.09	1.56	4.32	–	0.09	1.26	**10.32**	3.16	1.70	4.72	–	0.10	1.39	**11.07**
Japan	6.78	3.30	4.54	0.85	0.27	0.94	**16.67**	6.42	3.27	4.53	0.93	0.29	1.00	**16.44**
Malaysia	1.76	1.58	1.03	–	0.12	0.08	**4.56**	1.80	1.66	1.08	–	0.12	0.09	**4.76**
New Zealand	0.32	0.14	0.04	–	0.10	0.32	**0.91**	0.32	0.11	0.05	–	0.09	0.35	**0.92**
Pakistan	0.81	1.36	0.47	0.24	0.14	0.03	**3.04**	0.83	1.33	0.41	0.25	0.14	0.03	**2.99**
Philippines	0.92	0.12	0.89	–	0.04	0.44	**2.40**	0.96	0.12	0.98	–	0.04	0.44	**2.54**
Singapore	3.09	0.44	0.01	–	–	0.01	**3.56**	3.29	0.47	0.01	–	–	0.01	**3.79**
South Korea	5.36	2.16	3.04	1.97	0.01	0.37	**12.91**	5.54	2.29	2.85	2.06	0.02	0.38	**13.15**
Sri Lanka	0.22	–	0.06	–	0.02	0.01	**0.31**	0.23	–	0.07	–	0.03	0.01	**0.34**
Taiwan	1.63	1.01	1.49	0.19	0.01	0.09	**4.42**	1.61	1.07	1.43	0.13	0.02	0.11	**4.37**
Thailand	2.30	1.70	0.60	–	0.02	0.27	**4.90**	2.38	1.74	0.61	–	0.02	0.27	**5.02**
Vietnam	1.30	0.26	2.28	–	0.29	0.14	**4.27**	1.40	0.22	2.50	–	0.32	0.15	**4.59**
Other Asia Pacific	1.21	0.40	1.27	–	0.34	0.02	**3.24**	1.26	0.35	1.28	–	0.37	0.02	**3.29**
Total Asia Pacific	75.34	33.41	134.74	8.52	6.46	12.97	**271.43**	75.85	35.02	137.63	8.88	7.03	14.83	**279.24**
Total World	**197.42**	**144.54**	**163.15**	**29.86**	**15.34**	**29.97**	**580.28**	**199.05**	**148.60**	**165.06**	**30.74**	**16.03**	**32.74**	**592.22**
of which: OECD	87.10	63.35	25.39	19.97	5.01	15.47	**216.28**	87.24	64.22	24.40	20.52	5.18	16.25	**217.81**
Non-OECD	110.32	81.20	137.76	9.89	10.33	14.50	**364.00**	111.81	84.38	140.66	10.22	10.85	16.49	**374.41**
European Union	21.68	11.42	5.34	6.76	1.18	5.33	**51.71**	21.86	11.63	4.71	7.09	1.33	5.40	**52.02**

* In this review, energy supply comprises commercially-traded fuels, including modern renewables used to generate electricity.
^ Less than 0.005.
Energy from non-fossil fuel combustible electricity generation is accounted for on their input heat requirements and non-combustible renewables on the energy content of their gross electrical output.
See the appendix or **https://www.energyinst.org/statistical-review** for more details on this methodology.

Total energy Supply per capita*

Gigajoule per capita	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24
Canada	340.9	337.1	328.2	328.6	331.5	326.3	300.8	301.6	305.7	300.40	**298.64**	-0.9%	-1.3%
Mexico	66.1	65.1	66.5	67.4	65.1	63.6	57.1	59.7	62.0	61.87	**61.48**	-0.9%	-0.7%
US	286.1	280.7	276.9	274.2	281.8	277.0	254.0	266.9	270.1	265.51	**265.85**	-0.1%	-0.7%
Total North America	235.1	230.9	228.0	226.4	231.2	227.2	208.0	217.3	220.2	216.64	**216.55**	-0.3%	-0.8%
Argentina	78.5	79.3	78.6	76.9	75.3	70.1	64.7	71.3	74.6	73.52	**71.64**	-2.8%	-0.9%
Brazil	52.5	51.6	48.8	49.0	48.2	48.8	46.0	48.9	49.0	50.09	**50.54**	0.6%	-0.4%
Chile	73.8	73.3	77.1	77.9	79.2	78.9	71.8	77.6	80.0	76.62	**78.16**	1.7%	0.6%
Colombia	33.5	32.8	35.7	34.4	35.1	34.9	31.0	32.8	36.4	35.59	**35.64**	-0.1%	0.6%
Ecuador	37.9	36.6	35.0	34.7	36.3	35.4	29.3	34.8	36.9	38.30	**38.57**	0.4%	0.2%
Peru	27.5	28.4	29.9	29.1	29.8	30.1	25.6	29.5	30.7	30.98	**33.14**	6.7%	1.9%
Trinidad & Tobago	579.7	558.3	490.4	515.8	475.0	473.2	411.6	418.9	416.4	392.62	**381.53**	-3.1%	-4.1%
Venezuela	104.2	99.2	91.8	89.1	74.9	68.9	53.0	63.0	68.4	74.21	**73.87**	-0.7%	-3.4%
Other S. & Cent. America	31.8	33.0	34.1	33.7	34.0	34.4	30.1	31.8	32.5	33.2	**34.3**	3.1%	0.8%
Total S. & Cent. America	51.8	51.3	50.2	49.7	48.5	47.9	43.1	46.6	47.9	48.47	**48.86**	0.5%	-0.6%
Austria	133.2	134.5	136.5	139.2	135.7	140.0	127.8	131.4	122.2	120.33	**122.69**	1.7%	-0.8%
Belgium	209.2	208.5	226.8	227.4	223.0	230.6	203.1	228.5	212.0	193.58	**191.75**	-1.2%	-0.9%
Czech Republic	165.9	162.2	159.6	169.2	169.1	165.1	153.1	161.7	153.8	138.95	**133.17**	-4.4%	-2.2%
Finland	206.5	200.4	203.9	198.3	203.2	199.7	185.1	189.0	187.4	193.64	**187.90**	-3.2%	-0.9%
France	157.9	159.5	154.9	154.8	155.1	151.2	133.1	142.4	124.7	129.05	**135.35**	4.6%	-1.5%
Germany	157.1	157.1	158.4	160.5	155.1	149.6	137.8	143.3	134.5	119.90	**119.88**	-0.3%	-2.7%
Greece	95.0	95.5	94.4	100.3	100.0	97.8	83.8	91.0	96.5	94.15	**100.62**	6.6%	0.6%
Hungary	88.7	93.6	95.6	101.0	101.7	102.7	100.7	105.5	99.0	93.39	**94.38**	0.8%	0.6%
Italy	100.5	103.4	103.6	105.0	104.8	103.8	93.5	101.2	101.0	94.95	**94.37**	-0.9%	-0.6%
Netherlands	212.6	213.1	215.2	214.5	207.4	204.2	194.1	196.5	179.6	171.57	**165.84**	-3.6%	-2.5%
Norway	214.8	216.8	216.2	217.5	214.4	203.1	208.0	211.2	200.1	202.30	**200.10**	-1.4%	-0.7%
Poland	100.7	101.6	105.8	110.9	112.6	109.0	104.3	112.3	106.7	99.50	**98.66**	-1.1%	-0.2%
Portugal	84.6	88.5	91.2	94.5	91.5	88.8	77.7	77.2	78.1	75.39	**73.69**	-2.5%	-1.4%
Romania	61.7	62.1	62.2	64.7	65.2	64.6	62.4	66.3	61.8	60.39	**60.97**	0.7%	-0.1%
Spain	108.6	112.2	112.0	115.6	115.0	112.0	97.2	104.0	108.7	104.31	**106.99**	2.3%	-0.2%
Sweden	185.2	180.1	183.7	187.2	180.7	180.9	159.8	170.6	164.3	156.45	**156.94**	†	-1.6%
Switzerland	127.2	121.5	114.0	113.6	115.3	118.8	106.5	97.3	104.6	106.63	**109.17**	2.1%	-1.5%
Türkiye	64.0	66.6	69.0	73.7	72.4	72.5	71.5	77.5	76.9	76.37	**80.28**	4.8%	2.3%
Ukraine	96.3	81.0	84.6	79.1	82.2	78.5	75.0	76.9	54.7	55.81	**57.02**	1.9%	-5.1%
United Kingdom	122.5	121.9	119.4	117.6	115.9	111.6	98.8	99.8	98.7	93.48	**93.02**	-0.8%	-2.7%
Other Europe	95.7	98.2	101.2	104.1	105.1	104.3	98.0	102.9	102.4	99.7	**98.8**	-1.2%	0.3%
Total Europe	118.5	118.5	119.4	121.1	120.1	117.7	108.0	113.7	108.4	104.28	**105.28**	0.7%	-1.2%
Azerbaijan	57.9	62.4	60.8	59.2	62.0	65.2	64.7	68.7	72.5	74.80	**70.54**	-5.9%	2.0%
Belarus	112.0	101.2	103.2	105.0	116.3	117.4	109.9	122.4	119.6	121.94	**127.68**	4.4%	1.3%
Kazakhstan	152.5	123.4	135.5	143.9	146.7	146.3	132.4	146.2	143.4	145.76	**145.71**	-0.3%	-0.5%
Russian Federation	194.8	191.7	194.3	195.2	202.1	200.4	192.8	199.8	208.2	211.59	**219.35**	3.4%	1.2%
Turkmenistan	168.1	186.6	197.3	179.0	197.6	185.5	230.1	225.8	234.9	214.33	**178.28**	-17.0%	0.6%
Uzbekistan	66.2	62.0	58.6	59.3	58.9	58.2	57.0	59.7	60.1	59.40	**66.82**	12.2%	0.1%
Other CIS	26.9	27.0	26.9	27.2	29.6	27.7	27.7	28.2	28.7	27.2	**27.6**	1.0%	0.3%
Total CIS	151.4	146.7	148.8	149.3	154.5	152.7	147.5	153.2	157.7	158.75	**162.70**	2.2%	0.7%
Iran	122.1	119.5	124.4	126.9	129.9	134.1	138.9	136.4	139.5	141.45	**139.98**	-1.3%	1.4%
Iraq	46.5	44.8	46.7	54.4	55.3	57.6	50.2	51.2	55.2	57.11	**57.39**	0.2%	2.1%
Israel	118.1	122.0	121.8	121.8	122.3	123.6	114.3	114.7	118.3	105.81	**100.66**	-5.1%	-1.6%
Kuwait	429.4	440.0	418.9	404.6	401.6	358.8	343.3	387.2	367.5	371.03	**382.95**	2.9%	-1.1%
Oman	284.2	290.3	277.6	279.2	294.4	292.8	287.6	317.6	320.7	308.08	**302.39**	-2.1%	0.6%
Qatar	839.2	883.0	812.2	750.2	747.5	752.9	659.2	694.5	702.6	745.25	**768.50**	2.8%	-0.9%
Saudi Arabia	364.0	367.1	372.7	372.1	367.7	350.5	335.4	342.6	352.1	345.61	**347.16**	0.2%	-0.5%
United Arab Emirates	496.1	507.6	506.1	472.2	435.7	465.1	448.6	454.7	475.1	483.66	**496.51**	2.4%	†
Other Middle East	30.6	27.9	26.6	27.1	26.8	26.3	24.5	23.7	23.3	22.2	**21.5**	-3.3%	-3.4%
Total Middle East	139.0	140.1	142.0	141.9	140.4	139.6	134.8	136.1	139.6	140.27	**140.46**	-0.1%	0.1%
Algeria	53.7	55.5	54.3	53.8	56.6	57.6	53.0	56.8	58.1	61.10	**58.38**	-4.7%	0.8%
Egypt	34.6	34.3	35.6	36.3	35.6	34.1	31.3	33.1	34.2	33.16	**33.51**	0.8%	-0.3%
Morocco	22.2	22.2	22.2	23.0	23.4	25.2	23.0	25.2	24.8	24.70	**24.82**	0.2%	1.1%
South Africa	93.7	89.5	92.7	91.4	85.8	88.2	82.3	81.2	76.4	76.47	**75.32**	-1.8%	-2.2%
Other Africa	6.3	6.5	6.3	6.5	6.6	6.6	6.2	6.9	7.1	6.9	**6.9**	0.4%	1.0%
Total Africa	14.7	14.7	14.7	14.7	14.6	14.6	13.5	14.3	14.1	14.01	**13.88**	-1.2%	-0.6%
Australia	231.3	232.5	228.2	224.5	222.1	225.3	207.8	203.8	209.5	205.51	**204.77**	-0.6%	-1.2%
Bangladesh	7.2	8.7	8.6	8.9	9.4	10.5	9.9	10.5	10.8	10.58	**10.90**	2.7%	4.2%
China	84.7	84.9	84.4	87.0	90.5	94.2	96.8	101.8	102.8	108.73	**111.94**	2.7%	2.8%
China Hong Kong SAR	156.0	159.5	162.8	173.7	175.2	165.7	123.9	117.1	104.7	121.27	**132.25**	8.8%	-1.6%
India	20.2	20.6	21.3	21.8	22.8	22.9	21.4	23.1	24.1	25.77	**26.72**	3.4%	2.8%
Indonesia	26.5	26.8	26.3	28.1	29.3	30.7	28.7	29.6	36.5	36.71	**39.05**	6.1%	4.0%
Japan	148.5	146.2	144.5	145.9	145.0	142.4	131.1	137.4	137.1	134.00	**132.81**	-1.2%	-1.1%
Malaysia	126.0	125.7	128.9	127.2	127.5	128.7	122.1	125.7	134.7	129.93	**133.80**	2.7%	0.6%
New Zealand	207.9	208.3	205.1	205.9	200.0	201.3	182.8	179.5	174.5	175.86	**176.66**	0.2%	-1.6%
Pakistan	12.3	12.8	13.8	14.5	14.6	14.2	13.7	15.1	13.7	12.30	**11.90**	-3.5%	-0.3%
Philippines	16.2	17.4	18.6	19.6	20.0	20.4	18.6	19.1	19.8	20.88	**21.90**	4.6%	3.1%
Singapore	567.4	593.8	620.0	633.2	634.6	618.5	584.7	591.5	569.9	615.46	**649.19**	5.2%	1.4%
South Korea	236.8	238.6	245.3	246.7	251.0	247.2	237.9	250.1	253.7	249.57	**254.21**	1.6%	0.7%
Sri Lanka	13.0	13.3	15.3	16.1	16.3	16.7	15.2	15.0	13.1	13.59	**14.79**	8.5%	1.3%
Taiwan	205.7	204.6	204.3	203.6	205.9	201.5	195.7	208.2	199.4	189.73	**188.21**	-1.1%	-0.9%
Thailand	68.9	69.7	70.7	71.5	73.3	73.1	68.2	68.4	68.4	68.34	**70.04**	2.2%	0.2%
Vietnam	24.2	27.7	29.5	30.5	35.2	40.4	40.0	38.2	39.1	42.60	**45.41**	6.3%	6.5%
Other Asia Pacific	11.1	11.6	11.9	14.7	15.3	16.2	16.2	15.4	16.1	16.4	**16.4**	0.2%	4.0%
Total Asia Pacific	53.1	53.4	53.5	54.9	56.5	57.8	56.8	59.4	60.3	62.42	**63.90**	2.1%	1.9%
Total World	**70.5**	**70.2**	**70.0**	**70.7**	**71.6**	**71.6**	**68.0**	**70.8**	**71.2**	**71.71**	**72.56**	**0.90%**	**0.28%**
of which: OECD	169.1	167.9	167.3	167.8	168.9	166.1	152.5	159.5	158.9	154.90	**155.49**	0.11%	-0.8%
Non-OECD	48.9	48.8	48.9	49.7	50.7	51.4	50.0	52.1	52.8	54.37	**55.38**	1.58%	1.2%
European Union	130.8	132.0	133.0	135.5	134.1	131.6	119.7	126.8	120.6	114.75	**115.53**	0.41%	-1.2%

* In this review, energy supply comprises commercially-traded fuels, including modern renewables used to generate electricity.
† Less than 0.05%.
Energy from non-fossil fuel combustible electricity generation is accounted for on their input heat requirements and non-combustible renewables on the energy content of their gross electrical output.
See the appendix or **https://www.energyinst.org/statistical-review** for more details on this methodology.
Note: Annual changes and share of total are calculated using exajoules figures. Growth rates are adjusted for leap years.

Carbon Carbon dioxide emissions from energy

Million tonnes of carbon dioxide	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	562.3	555.9	540.2	554.1	567.9	560.3	500.5	509.1	522.6	521.6	**522.5**	-0.1%	-0.7%	1.5%
Mexico	482.8	480.9	495.7	510.6	492.9	484.5	419.2	447.1	474.0	476.3	**477.9**	0.1%	-0.1%	1.3%
US	5252.5	5137.8	5039.3	4980.0	5134.6	4982.8	4468.4	4755.3	4801.9	4642.7	**4619.1**	-0.8%	-1.3%	13.0%
Total North America	**6297.5**	**6174.7**	**6075.2**	**6044.7**	**6195.3**	**6027.6**	**5388.0**	**5711.5**	**5798.5**	**5640.7**	**5619.6**	**-0.6%**	**-1.1%**	**15.8%**
Argentina	190.7	194.7	193.8	190.2	186.5	173.4	159.2	179.8	189.8	184.2	**177.1**	-4.1%	-0.7%	0.5%
Brazil	515.5	500.7	461.8	466.7	447.5	447.4	417.7	466.8	443.4	448.1	**446.7**	-0.6%	-1.4%	1.3%
Chile	87.2	87.4	92.2	93.9	93.5	94.8	85.1	93.8	93.6	84.1	**82.1**	-2.6%	-0.6%	0.2%
Colombia	94.9	93.3	103.4	96.7	100.4	102.9	91.6	95.9	110.1	109.6	**112.4**	2.4%	1.7%	0.3%
Ecuador	38.4	37.6	35.4	34.4	37.2	35.7	29.2	36.2	39.6	41.7	**43.1**	3.1%	1.2%	0.1%
Peru	46.8	49.2	53.2	51.0	52.8	54.4	45.3	54.0	57.6	59.1	**63.0**	6.4%	3.0%	0.2%
Trinidad & Tobago	24.7	23.8	21.5	20.7	19.6	19.0	16.4	15.5	16.3	15.7	**15.4**	-2.0%	-4.6%	†
Venezuela	181.7	172.1	159.2	149.9	123.8	111.3	77.7	93.6	103.6	115.0	**113.4**	-1.7%	-4.6%	0.3%
Central America	61.8	68.7	71.6	72.1	72.9	81.0	63.8	72.2	74.9	80.8	**82.4**	1.7%	2.9%	0.2%
Other Caribbean	107.0	111.4	114.3	111.1	113.7	113.0	102.5	103.5	104.6	105.6	**110.6**	4.4%	0.3%	0.3%
Other South America	35.4	35.7	37.4	38.4	39.4	40.1	36.1	41.5	42.5	43.8	**48.3**	10.0%	3.2%	0.1%
Total S. & Cent. America	**1384.3**	**1374.5**	**1343.8**	**1325.1**	**1287.4**	**1273.1**	**1124.6**	**1252.9**	**1276.0**	**1287.6**	**1294.5**	**0.3%**	**-0.7%**	**3.6%**
Austria	59.0	61.6	62.1	64.5	62.3	63.8	56.2	59.2	56.3	53.9	**52.6**	-2.8%	-1.1%	0.1%
Belgium	109.0	115.2	116.9	118.8	125.5	121.8	105.3	113.9	109.9	103.9	**104.5**	0.2%	-0.4%	0.3%
Bulgaria	43.2	45.9	43.1	45.9	42.7	41.5	36.1	42.0	46.3	34.9	**31.7**	-9.3%	-3.0%	0.1%
Croatia	15.8	16.2	16.7	17.1	16.3	16.3	14.9	15.7	16.4	17.2	**17.3**	0.1%	0.9%	†
Cyprus	7.3	7.5	8.1	8.3	8.2	8.2	7.0	7.2	7.7	7.6	**7.8**	1.6%	0.6%	†
Czech Republic	102.0	102.8	104.8	104.8	103.8	98.2	88.4	92.9	90.2	79.2	**71.5**	-10.0%	-3.5%	0.2%
Denmark	39.2	36.7	38.0	35.5	35.8	37.8	31.3	29.4	29.2	28.6	**28.2**	-1.7%	-3.2%	0.1%
Estonia	23.5	21.4	22.2	24.5	24.1	18.3	15.7	16.8	17.9	15.6	**14.6**	-6.5%	-4.6%	†
Finland	47.7	44.9	47.7	45.1	46.5	43.4	36.8	36.3	35.7	31.4	**29.4**	-6.8%	-4.7%	0.1%
France	304.4	308.9	314.2	319.1	309.1	301.7	254.9	281.1	276.9	258.1	**254.2**	-1.8%	-1.8%	0.7%
Germany	751.1	755.6	767.4	774.4	746.2	693.9	617.5	654.4	648.4	576.7	**569.7**	-1.5%	-2.7%	1.6%
Greece	76.1	73.8	70.7	75.0	73.6	69.6	56.3	59.6	63.5	59.9	**61.6**	2.6%	-2.1%	0.2%
Hungary	41.3	43.8	44.7	46.9	47.3	47.1	44.6	46.0	43.6	39.4	**39.1**	-0.9%	-0.5%	0.1%
Iceland	2.6	2.9	2.8	3.1	3.3	2.8	1.8	2.1	2.6	2.8	**2.9**	3.6%	1.0%	†
Ireland	37.2	38.7	40.4	39.3	39.1	37.6	33.4	35.5	36.2	33.6	**33.4**	-0.7%	-1.1%	0.1%
Italy	328.4	340.2	337.6	335.5	333.7	325.0	284.2	321.0	331.5	304.7	**296.4**	-3.0%	-1.0%	0.8%
Latvia	7.7	7.9	8.2	8.0	7.8	8.4	7.1	7.5	6.6	6.4	**6.2**	-2.3%	-2.0%	†
Lithuania	11.0	11.3	11.8	12.0	12.6	12.4	12.1	12.4	12.0	11.9	**11.8**	-1.1%	0.7%	†
Luxembourg	10.5	10.1	10.0	10.3	10.8	10.9	9.0	9.7	8.6	8.2	**8.4**	2.8%	-2.2%	†
Netherlands	202.5	207.7	208.0	204.3	198.1	193.8	173.1	177.0	166.9	156.5	**150.9**	-3.9%	-2.9%	0.4%
North Macedonia	7.7	7.4	7.5	7.8	7.5	8.3	7.0	7.1	7.9	7.8	**7.1**	-10.1%	-0.8%	†
Norway	37.2	37.8	36.8	37.0	37.2	35.9	33.5	34.5	34.6	33.4	**31.7**	-5.3%	-1.6%	0.1%
Poland	290.3	290.1	303.2	316.0	320.7	302.5	284.3	310.3	294.0	268.1	**257.1**	-4.4%	-1.2%	0.7%
Portugal	48.0	52.6	52.0	57.3	54.5	50.3	40.5	39.1	42.0	40.3	**38.4**	-4.9%	-2.2%	0.1%
Romania	70.7	71.5	69.1	72.6	72.2	70.7	64.5	69.6	65.8	61.6	**61.7**	-0.1%	-1.4%	0.2%
Slovakia	30.0	30.4	30.8	32.9	32.3	30.0	27.8	31.3	28.4	27.6	**26.6**	-3.9%	-1.2%	0.1%
Slovenia	12.6	12.7	13.6	13.9	13.9	13.3	11.9	12.1	11.6	10.9	**11.5**	5.4%	-0.9%	†
Spain	271.1	286.9	279.4	297.1	291.4	274.6	221.4	242.8	260.6	242.3	**250.1**	2.9%	-0.8%	0.7%
Sweden	44.5	44.7	44.8	44.9	40.9	41.2	38.9	41.4	38.4	37.0	**39.0**	4.9%	-1.3%	0.1%
Switzerland	38.9	39.6	38.1	38.9	37.1	38.2	32.8	31.7	34.2	34.0	**34.1**	0.1%	-1.3%	0.1%
Türkiye	335.1	341.1	359.2	404.2	401.8	394.0	384.6	420.7	420.1	414.8	**437.9**	5.3%	2.7%	1.2%
Ukraine	246.8	195.1	215.6	187.9	198.7	185.5	171.5	167.7	101.4	97.1	**99.6**	2.3%	-8.7%	0.3%
United Kingdom	460.6	440.4	414.7	404.2	396.9	380.6	324.0	339.5	339.1	326.2	**321.2**	-1.8%	-3.5%	0.9%
Other Europe	102.3	111.7	116.5	120.4	119.4	119.9	117.9	118.2	122.3	118.9	**117.6**	-1.3%	1.4%	0.3%
Total Europe	**4215.4**	**4215.3**	**4257.0**	**4327.4**	**4271.4**	**4097.7**	**3646.4**	**3885.4**	**3806.8**	**3550.6**	**3525.9**	**-1.0%**	**-1.8%**	**9.9%**
Azerbaijan	31.2	33.7	33.2	32.2	34.3	34.3	34.9	36.9	39.2	40.7	**38.9**	-4.7%	2.2%	0.1%
Belarus	59.1	54.8	54.9	55.6	60.5	60.8	55.8	58.0	56.4	53.3	**53.6**	0.1%	-1.0%	0.2%
Kazakhstan	218.0	174.0	195.5	211.3	218.6	217.0	199.3	220.3	219.6	229.5	**229.6**	-0.2%	0.5%	0.6%
Russian Federation	1551.5	1520.8	1529.3	1516.9	1573.3	1557.1	1459.8	1510.8	1597.3	1631.8	**1681.1**	2.7%	0.8%	4.7%
Turkmenistan	62.0	68.7	75.9	69.5	78.2	74.5	95.1	94.4	100.3	93.1	**79.6**	-14.8%	2.5%	0.2%
Uzbekistan	114.0	108.2	103.6	106.1	109.0	108.4	109.4	116.4	120.3	123.1	**139.8**	13.2%	2.1%	0.4%
Other CIS	27.5	28.8	29.3	29.7	33.1	31.1	31.5	33.5	33.2	32.2	**33.1**	2.4%	1.9%	0.1%
Total CIS	**2063.3**	**1989.1**	**2021.7**	**2021.3**	**2107.0**	**2083.3**	**1985.8**	**2070.4**	**2166.4**	**2203.8**	**2255.7**	**2.1%**	**0.9%**	**6.4%**
Iran	552.3	546.9	567.2	575.8	602.3	629.2	654.8	671.9	692.9	709.4	**709.0**	-0.3%	2.5%	2.0%
Iraq	118.3	117.3	124.2	148.6	153.1	158.7	140.5	148.6	163.9	174.4	**179.2**	2.5%	4.2%	0.5%
Israel	64.0	66.7	66.0	66.5	67.1	69.1	62.9	63.4	67.0	59.5	**56.2**	-5.7%	-1.3%	0.2%
Kuwait	87.4	94.6	93.7	94.2	97.0	88.2	82.1	94.9	93.4	99.5	**105.6**	5.8%	1.9%	0.3%
Oman	64.7	69.1	69.6	71.8	74.9	74.7	70.4	77.6	83.6	85.1	**87.7**	2.7%	3.1%	0.2%
Qatar	109.4	124.3	125.0	116.8	121.9	125.5	109.0	117.2	118.7	131.7	**135.6**	2.7%	2.2%	0.4%
Saudi Arabia	566.0	602.3	635.6	631.6	612.7	576.1	557.6	572.4	608.5	623.7	**636.4**	1.8%	1.2%	1.8%
United Arab Emirates	244.1	265.0	275.3	264.3	246.1	261.7	250.2	261.0	281.0	287.1	**302.5**	5.1%	2.2%	0.9%
Other Middle East	139.6	127.4	121.6	126.5	128.6	128.0	120.6	118.6	116.7	118.7	**118.4**	-0.5%	-1.6%	0.3%
Total Middle East	**1945.9**	**2013.4**	**2078.0**	**2096.1**	**2103.7**	**2111.3**	**2048.0**	**2125.5**	**2225.7**	**2289.1**	**2330.7**	**1.5%**	**1.8%**	**6.6%**
Algeria	123.6	129.0	127.7	130.7	137.3	142.4	132.7	144.5	150.2	160.1	**156.4**	-2.6%	2.4%	0.4%
Egypt	200.2	206.3	217.1	221.0	219.0	210.6	189.6	208.6	221.4	217.9	**226.2**	3.5%	1.2%	0.6%
Morocco	56.6	56.8	57.2	60.2	61.8	67.9	62.8	69.8	70.3	69.0	**69.1**	-0.1%	2.0%	0.2%
South Africa	467.8	454.6	473.7	470.0	449.3	470.9	451.0	444.6	423.6	432.6	**432.2**	-0.4%	-0.8%	1.2%
Eastern Africa	103.1	107.1	106.4	115.4	121.3	122.3	113.6	123.9	130.3	136.2	**137.7**	0.8%	2.9%	0.4%
Middle Africa	47.9	48.4	46.5	44.8	45.6	47.1	41.6	48.4	52.0	52.5	**53.2**	1.0%	1.0%	0.1%
Western Africa	136.9	157.2	155.9	163.3	172.4	180.2	184.0	212.7	212.9	207.5	**216.9**	4.2%	4.7%	0.6%
Other Northern Africa	74.8	68.0	69.7	74.4	75.7	76.5	68.7	82.2	86.4	91.1	**94.6**	3.6%	2.4%	0.3%
Other Southern Africa	12.9	13.3	13.4	14.0	14.8	14.1	12.1	13.8	13.5	13.4	**13.7**	2.1%	0.6%	†
Total Africa	**1223.8**	**1240.5**	**1267.6**	**1293.9**	**1297.1**	**1331.9**	**1256.3**	**1348.5**	**1360.5**	**1380.1**	**1399.9**	**1.2%**	**1.4%**	**3.9%**
Australia	399.2	407.6	406.2	404.5	402.8	407.0	376.6	369.3	376.9	373.3	**376.6**	0.6%	-0.6%	1.1%
Bangladesh	66.9	83.8	83.8	88.4	95.7	107.7	102.2	109.7	117.8	118.2	**125.4**	5.8%	6.5%	0.4%
China	9202.3	9148.0	8998.7	9239.3	9570.6	9890.9	10082.7	10470.9	10504.5	11007.5	**11172.8**	1.2%	2.0%	31.5%
China Hong Kong SAR	89.6	90.4	92.6	98.8	100.0	94.5	68.0	64.4	57.5	65.9	**70.7**	7.0%	-2.3%	0.2%
India	2048.6	2120.5	2216.6	2292.1	2390.7	2416.7	2247.7	2477.8	2600.4	2830.2	**2953.0**	4.1%	3.7%	8.3%
Indonesia	451.8	470.6	461.7	494.3	518.1	557.5	514.0	525.4	696.0	696.5	**746.9**	6.9%	5.2%	2.1%
Japan	1261.5	1223.3	1202.1	1196.6	1174.2	1135.5	1046.0	1080.3	1084.6	1027.0	**1005.4**	-2.4%	-2.2%	2.8%
Malaysia	243.2	247.1	252.5	241.3	251.3	255.9	251.3	259.3	284.8	284.1	**296.3**	4.0%	2.0%	0.8%
New Zealand	35.0	35.4	34.6	36.7	36.6	37.9	32.9	32.6	30.5	31.8	**32.1**	0.8%	-0.9%	0.1%
Pakistan	156.1	165.2	179.4	192.7	196.5	192.8	189.1	212.5	188.9	165.3	**160.4**	-3.2%	0.3%	0.5%
Philippines	97.0	106.1	116.1	128.5	133.0	139.9	126.6	134.3	141.2	152.9	**163.6**	6.7%	5.4%	0.5%
Singapore	199.1	210.9	225.6	236.8	233.7	226.4	211.4	213.8	213.3	231.4	**247.9**	6.9%	2.2%	0.7%
South Korea	618.1	623.4	640.2	650.3	675.6	648.7	600.4	623.2	616.4	601.4	**594.8**	-1.4%	-0.4%	1.7%
Sri Lanka	19.9	20.4	24.1	25.9	25.4	26.6	24.4	23.4	20.4	21.4	**23.2**	8.3%	1.6%	0.1%
Taiwan	275.6	275.8	281.0	287.1	284.7	278.9	265.6	280.8	272.8	265.0	**263.0**	-1.0%	-0.5%	0.7%
Thailand	273.6	281.2	286.8	287.7	293.2	288.4	270.0	265.9	270.8	265.7	**271.1**	1.8%	-0.1%	0.8%
Vietnam	148.8	177.6	191.3	195.2	238.8	291.8	291.2	271.7	270.8	308.9	**334.2**	7.9%	8.4%	0.9%
Other Asia Pacific	128.9	137.0	143.4	191.3	201.4	219.3	219.3	206.2	215.2	226.1	**228.2**	0.7%	5.9%	0.6%
Total Asia Pacific	**15715.2**	**15824.4**	**15836.5**	**16287.4**	**16822.4**	**17216.7**	**16919.4**	**17621.6**	**17962.8**	**18672.5**	**19065.7**	**1.8%**	**2.0%**	**53.7%**
Total World	**32845.4**	**32831.9**	**32879.8**	**33396.0**	**34084.2**	**34141.6**	**32368.5**	**34015.8**	**34596.6**	**35024.3**	**35491.8**	**1.1%**	**0.8%**	**100.0%**
of which: OECD	12585.7	12478.6	12407.7	12465.1	12559.5	12178.8	10917.7	11535.9	11624.7	11141.7	**11072.2**	-0.9%	-1.3%	31.2%
Non-OECD	20259.7	20353.3	20472.1	20930.9	21524.8	21962.8	21450.8	22479.9	22971.9	23882.6	**24419.6**	2.0%	1.9%	68.8%
European Union	2991.0	3046.4	3073.4	3133.3	3078.9	2942.3	2582.4	2772.6	2754.0	2525.8	**2483.5**	-1.9%	-1.8%	7.0%

† Less than 0.05%

Notes: The carbon emissions above reflect only those through consumption of oil, gas and coal for combustion-related activities, and are based on 'Default CO_2 Emissions Factors for Combustion' listed by the IPCC in its Guidelines for National Greenhouse Gas Inventories (2006).
This does not allow for any carbon that is sequestered, for other sources of carbon emissions, or for emissions of other greenhouse gases.
Our data is therefore not comparable to official national emissions data.
Annual changes and shares of total are calculated using million tonnes of carbon dioxide figures. Growth rates are adjusted for leap years.

Carbon Carbon dioxide emissions from natural gas flaring

Million tonnes of carbon dioxide	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	4.3	3.9	2.9	2.9	2.9	2.3	2.5	2.5	2.3	2.6	**2.4**	-9.8%	-5.8%	0.7%
Mexico	11.5	12.1	11.7	9.1	9.2	10.7	13.5	15.8	13.8	14.4	**12.8**	-11.7%	1.0%	4.0%
US	23.0	24.2	18.3	19.5	28.6	34.9	25.0	19.6	17.7	21.0	**24.7**	17.0%	0.7%	7.7%
Total North America	38.8	40.2	32.8	31.4	40.6	47.9	41.0	37.9	33.8	38.1	**39.8**	4.3%	0.3%	12.4%
Argentina	1.7	1.5	1.3	1.2	1.6	2.0	2.3	2.7	2.5	2.4	**2.2**	-5.6%	2.6%	0.7%
Bolivia	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	**0.1**	-5.0%	-0.2%	†
Brazil	3.4	3.0	3.4	2.6	2.4	2.7	2.3	2.2	2.0	2.7	**2.5**	-8.0%	-3.2%	0.8%
Colombia	1.7	1.6	1.2	1.1	1.0	1.1	0.8	0.7	0.5	0.7	**0.7**	0.7%	-8.5%	0.2%
Peru	0.5	0.5	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	**0.2**	-12.5%	-6.8%	0.1%
Trinidad & Tobago	0.7	0.6	0.5	0.5	0.5	0.8	0.4	0.3	0.3	0.3	**0.5**	80.3%	-2.2%	0.2%
Venezuela	21.1	20.0	20.5	16.1	18.7	21.2	18.9	18.5	19.7	19.1	**19.2**	0.3%	-0.9%	6.0%
Other S. & Cent. America	2.6	2.7	2.9	2.6	2.3	2.3	3.1	3.2	3.4	3.9	**3.5**	-12.0%	2.9%	1.1%
Total S. & Cent. America	31.8	30.1	30.2	24.4	26.7	30.3	28.2	28.0	28.9	29.4	**29.0**	-1.9%	-0.9%	9.0%
Denmark	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	**0.1**	19.6%	-8.5%	†
Germany	0.1	0.1	0.1	^	0.1	^	^	^	^	0.1	**0.1**	-17.5%	-4.1%	†
Italy	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	**0.1**	12.1%	-5.8%	†
Netherlands	^	0.1	0.1	^	^	^	^	^	0.1	^	**0.1**	11.4%	2.5%	†
Norway	0.7	0.8	0.8	0.5	0.4	0.3	0.3	0.4	0.3	0.3	**0.3**	1.9%	-9.1%	0.1%
Poland	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	**0.1**	-28.6%	1.9%	†
Romania	0.1	0.1	0.1	^	^	^	^	0.1	0.1	0.1	**0.1**	31.2%	-4.1%	†
Ukraine	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.3	0.2	0.2	**0.2**	-12.0%	-8.0%	0.1%
United Kingdom	2.7	2.7	2.8	2.8	2.5	2.4	2.2	1.8	1.2	1.4	**1.8**	27.4%	-4.3%	0.6%
Other Europe	1.0	0.9	0.9	0.6	0.7	0.9	0.8	0.8	0.7	0.7	**0.8**	7.3%	-2.3%	0.2%
Total Europe	5.6	5.5	5.7	4.7	4.5	4.2	3.9	3.8	2.8	3.0	**3.5**	13.6%	-4.7%	1.1%
Azerbaijan	0.7	0.4	0.5	0.4	0.5	0.5	0.3	0.3	0.4	0.8	**0.6**	-19.3%	-0.9%	0.2%
Kazakhstan	7.8	7.3	5.3	4.8	4.1	3.1	2.9	3.0	2.0	2.0	**1.9**	-4.6%	-13.0%	0.6%
Russian Federation	39.4	42.5	48.2	42.3	42.9	48.0	50.6	53.3	52.6	59.4	**57.8**	-2.9%	3.9%	18.0%
Turkmenistan	4.0	3.7	3.6	3.3	3.0	2.7	3.3	2.4	2.2	2.4	**2.6**	6.5%	-4.3%	0.8%
Uzbekistan	2.6	2.2	2.1	1.7	1.6	1.2	1.1	0.9	0.9	0.8	**0.7**	-8.1%	-11.9%	0.2%
Other CIS	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.3	**0.2**	-36.3%	4.2%	0.1%
Total CIS	54.5	56.2	59.8	52.6	52.1	55.9	58.4	60.1	58.2	65.7	**63.9**	-3.0%	1.6%	19.9%
Bahrain	0.1	0.1	0.2	0.3	0.2	0.4	0.5	0.3	0.2	0.2	**0.2**	-22.3%	6.8%	†
Iran	26.4	25.7	34.4	37.4	36.5	29.6	28.6	37.3	37.1	43.1	**41.6**	-3.9%	4.7%	13.0%
Iraq	27.9	32.0	35.3	35.4	35.5	35.8	34.7	35.8	35.9	35.6	**35.1**	-1.6%	2.3%	10.9%
Kuwait	3.1	2.0	2.6	1.8	2.0	1.7	1.8	2.1	1.5	1.6	**1.5**	-11.1%	-7.4%	0.5%
Oman	5.1	4.8	5.6	5.2	5.2	5.2	5.1	5.2	4.2	3.7	**4.4**	16.4%	-1.5%	1.4%
Qatar	3.2	2.8	2.8	2.6	2.6	3.3	2.6	2.8	2.6	2.6	**2.8**	6.9%	-1.2%	0.9%
Saudi Arabia	5.1	5.5	6.3	5.8	5.8	5.2	5.7	5.6	5.1	6.8	**5.9**	-14.0%	1.5%	1.8%
Syria	0.8	1.1	1.2	2.4	1.4	1.9	2.0	2.1	2.2	2.2	**2.2**	-1.3%	10.1%	0.7%
United Arab Emirates	2.2	2.3	2.0	2.2	2.6	2.0	2.2	2.0	2.2	2.1	**2.1**	-0.3%	-0.3%	0.7%
Other Middle East	2.4	1.3	0.7	0.8	0.9	1.4	1.7	1.9	1.4	0.9	**1.2**	26.5%	-6.7%	0.4%
Total Middle East	76.2	77.5	91.0	93.9	92.7	86.5	84.9	95.0	92.5	99.0	**96.8**	-2.5%	2.4%	30.2%
Algeria	18.5	19.5	19.5	18.6	19.0	19.6	18.8	16.4	17.3	16.7	**16.8**	0.2%	-1.0%	5.2%
Egypt	6.0	6.1	6.1	5.1	4.9	5.1	5.1	4.7	4.4	4.4	**4.2**	-4.1%	-3.5%	1.3%
Libya	5.9	5.4	4.9	8.0	9.4	10.2	5.0	12.0	11.0	13.6	**14.6**	6.4%	9.5%	4.5%
Nigeria	16.7	15.1	14.6	15.2	14.7	15.7	14.2	13.1	10.7	11.5	**13.8**	19.5%	-1.9%	4.3%
Other Africa	19.5	21.0	21.0	18.9	17.3	16.5	15.8	15.0	15.9	14.5	**16.8**	15.7%	-1.5%	5.2%
Total Africa	66.7	67.0	66.2	65.8	65.3	67.2	59.0	61.1	59.2	60.8	**66.2**	8.6%	-0.1%	20.6%
Australia	2.2	2.2	1.4	1.4	1.7	2.8	2.0	1.6	1.4	1.3	**1.9**	44.7%	-1.3%	0.6%
Bangladesh	^	0.1	^	^	^	^	^	0.1	^	^	**^**	-3.7%	2.5%	†
Brunei	0.4	0.4	0.6	0.6	0.4	0.6	0.3	0.4	0.2	0.3	**0.2**	-19.8%	-6.6%	0.1%
China	5.0	5.0	4.7	3.6	4.0	4.4	5.8	5.4	5.0	4.9	**4.8**	-2.2%	-0.6%	1.5%
India	4.8	5.4	4.9	4.1	3.7	3.6	4.1	3.8	4.1	4.1	**3.9**	-6.3%	-2.1%	1.2%
Indonesia	6.4	6.1	5.8	4.9	4.3	4.3	4.0	3.5	3.7	4.2	**3.9**	-6.8%	-4.8%	1.2%
Malaysia	7.2	7.9	6.9	6.2	5.1	5.5	5.4	4.3	3.5	3.4	**3.5**	0.7%	-7.0%	1.1%
Myanmar	0.1	0.1	0.1	0.1	0.1	0.1	0.1	^	^	^	**^**	5.0%	-15.7%	†
Pakistan	0.9	0.9	0.9	0.7	0.6	0.6	0.6	0.5	0.6	0.5	**0.5**	0.7%	-5.1%	0.2%
Thailand	0.9	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.5	0.5	**0.6**	21.5%	-4.4%	0.2%
Vietnam	2.1	2.0	1.8	1.9	1.6	1.6	1.4	1.1	1.2	1.3	**1.3**	-2.4%	-4.7%	0.4%
Other Asia Pacific	1.7	1.4	1.4	0.9	0.9	0.6	0.6	0.8	0.9	0.8	**0.9**	20.2%	-6.4%	0.3%
Total Asia Pacific	31.9	32.4	29.5	25.3	23.1	24.8	25.1	22.4	21.1	21.3	**21.6**	0.7%	-3.9%	6.7%
Total World	**305.6**	**309.0**	**315.2**	**298.1**	**305.0**	**316.8**	**300.5**	**308.3**	**296.6**	**317.4**	**320.7**	**0.8%**	**0.5%**	**100.0%**
of which: OECD	48.0	49.3	41.0	38.5	47.8	55.9	47.7	44.0	38.6	43.1	**45.9**	6.3%	-0.5%	14.3%
Non-OECD	257.6	259.6	274.2	259.6	257.2	260.9	252.8	264.3	258.0	274.3	**274.8**	-0.1%	0.7%	85.7%
European Union	1.6	1.4	1.4	1.0	1.2	1.2	1.1	1.2	1.0	1.0	**1.1**	5.7%	-3.5%	0.3%

^ Less than 0.05.
† Less than 0.005%.

Notes: Data from 2013 onward: Made utilising VIIRS Nightfire (VNF) nightly data produced by the Earth Observation Group, Payne Institute for Public Policy, Colorado School of Mines. From 2024, Energy Institute assessment. These data include flaring from upstream, downstream oil and gas.
Emissions have been calculated using flared natural gas volumes based on standard cubic metres (standardised using a Gross Calorific Value (GCV) of 40 MJ/m³) and the standard conversion factor for emissions from the IPCC. Perfect combustion has been assumed.
Annual changes and shares of total are calculated using million tonnes of carbon dioxide figures. Growth rates are adjusted for leap years.

Carbon Carbon dioxide equivalent emissions from energy, process emissions, methane and flaring

Million tonnes of carbon dioxide equivalent	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	622.8	616.9	602.2	620.6	637.5	629.9	566.1	577.7	594.4	600.8	**606.4**	0.6%	-0.3%	1.5%
Mexico	557.5	553.9	567.3	575.5	557.0	548.6	487.2	518.6	542.9	546.2	**544.2**	-0.6%	-0.2%	1.3%
US	5648.5	5540.6	5415.7	5374.6	5579.0	5474.3	4914.4	5197.2	5273.9	5132.4	**5110.0**	-0.7%	-1.0%	12.5%
Total North America	**6828.8**	**6711.4**	**6585.1**	**6570.7**	**6773.5**	**6652.8**	**5967.6**	**6293.5**	**6411.1**	**6279.4**	**6260.6**	**-0.6%**	**-0.9%**	**15.3%**
Argentina	221.5	225.7	223.9	220.2	218.1	207.2	190.1	214.6	226.6	222.8	**218.6**	-2.2%	-0.1%	0.5%
Brazil	576.9	561.3	520.3	523.5	503.3	506.3	478.5	529.2	506.5	524.5	**515.6**	-2.0%	-1.1%	1.3%
Chile	88.7	88.9	93.8	95.2	94.8	96.2	86.5	95.3	94.9	85.4	**83.5**	-2.5%	-0.6%	0.2%
Colombia	128.4	126.3	135.3	128.1	130.9	134.0	114.7	120.8	135.4	136.4	**139.0**	1.6%	0.8%	0.3%
Ecuador	50.5	49.2	47.2	45.7	48.0	46.7	39.1	46.5	50.4	55.8	**58.4**	4.4%	1.5%	0.1%
Peru	55.5	57.5	61.2	58.6	60.4	62.2	52.2	62.4	66.6	69.1	**72.8**	5.1%	2.8%	0.2%
Trinidad & Tobago	33.4	31.9	28.5	27.7	26.6	26.4	22.4	20.8	21.7	20.9	**20.8**	-0.6%	-4.6%	0.1%
Venezuela	359.3	342.7	320.2	287.8	244.1	214.5	156.4	174.8	194.1	219.2	**233.6**	6.3%	-4.2%	0.6%
Central America	66.0	73.0	75.7	76.4	76.9	84.7	67.1	75.6	78.5	84.4	**86.1**	1.8%	2.7%	0.2%
Other Caribbean	111.2	115.6	118.2	114.9	117.7	116.9	105.9	107.3	108.4	109.5	**114.4**	4.2%	0.3%	0.3%
Other South America	45.0	45.5	47.0	47.7	48.3	48.4	44.4	50.2	52.1	52.1	**57.3**	9.7%	2.5%	0.1%
Total S. & Cent. America	**1736.3**	**1717.4**	**1671.4**	**1625.9**	**1569.1**	**1543.6**	**1357.3**	**1497.4**	**1535.3**	**1580.0**	**1600.1**	**1.0%**	**-0.8%**	**3.9%**
Austria	61.3	63.8	64.4	66.7	64.6	66.0	58.5	61.4	58.5	56.1	**54.8**	-2.6%	-1.1%	0.1%
Belgium	111.7	117.7	119.4	121.2	128.1	124.7	107.9	116.6	112.7	106.2	**106.7**	0.2%	-0.5%	0.3%
Bulgaria	45.6	48.7	45.8	48.7	45.4	44.2	38.5	44.5	48.7	37.0	**33.5**	-9.7%	-3.0%	0.1%
Croatia	17.9	18.3	18.7	19.2	18.3	18.1	16.7	17.4	17.8	18.8	**18.9**	†	0.5%	†
Czech Republic	108.3	109.2	111.1	110.9	109.9	104.5	94.0	98.2	94.7	83.6	**75.4**	-10.1%	-3.6%	0.2%
Denmark	41.5	39.0	40.5	37.9	38.0	39.8	33.2	31.2	31.0	30.2	**29.8**	-1.7%	-3.3%	0.1%
Estonia	24.0	21.7	22.5	24.9	24.5	18.7	15.8	16.9	18.0	15.7	**14.7**	-6.5%	-4.8%	†
France	313.3	317.5	323.0	327.7	317.8	310.5	263.1	289.6	285.2	266.4	**262.1**	-1.9%	-1.8%	0.6%
Germany	768.2	772.5	784.5	792.5	763.9	711.7	635.1	672.5	665.6	592.0	**583.4**	-1.7%	-2.7%	1.4%
Greece	81.8	79.0	75.7	80.0	78.3	74.0	59.9	63.2	66.8	63.3	**64.6**	1.8%	-2.3%	0.2%
Hungary	43.0	45.6	46.5	48.8	49.3	49.5	47.0	48.2	45.5	41.3	**41.3**	-0.3%	-0.4%	0.1%
Ireland	38.9	40.6	43.1	42.1	42.0	40.3	35.8	38.1	38.6	35.7	**35.6**	-0.7%	-0.9%	0.1%
Italy	341.3	353.2	350.1	348.1	346.3	337.8	295.9	333.8	343.6	315.0	**305.6**	-3.2%	-1.1%	0.7%
Lithuania	11.4	11.9	12.3	12.4	13.1	13.0	12.6	13.0	12.7	12.4	**12.3**	-1.1%	0.7%	††
Netherlands	203.1	208.2	208.5	204.8	198.5	194.0	173.3	177.2	167.0	156.9	**151.4**	-3.8%	-2.9%	0.4%
North Macedonia	7.7	7.4	7.5	7.8	7.5	8.3	7.0	7.1	7.9	7.8	**7.1**	-10.1%	-0.8%	†
Norway	39.4	40.0	39.1	39.0	39.0	37.6	35.3	36.3	36.4	34.7	**33.2**	-4.7%	-1.7%	0.1%
Poland	319.5	319.7	334.1	347.7	353.0	335.4	317.3	343.7	326.4	296.7	**285.8**	-3.9%	-1.1%	0.7%
Romania	80.6	81.6	78.6	82.5	82.2	80.8	74.4	79.6	75.4	71.3	**71.0**	-0.6%	-1.3%	0.2%
Slovakia	31.5	31.9	32.4	34.5	33.8	31.5	29.4	32.8	30.0	29.0	**27.9**	-3.9%	-1.2%	0.1%
Slovenia	13.1	13.1	14.0	14.3	14.4	13.8	12.4	12.6	12.1	11.5	**12.1**	5.0%	-0.8%	†
Spain	280.4	296.3	288.9	306.7	301.3	283.8	229.8	251.5	268.4	250.4	**258.1**	2.8%	-0.8%	0.6%
Sweden	45.9	46.3	46.4	46.5	42.5	42.6	40.3	42.7	39.7	38.5	**40.3**	4.5%	-1.3%	0.1%
Türkiye	375.1	380.1	402.0	448.8	446.9	432.9	432.2	472.1	465.4	458.6	**483.5**	5.1%	2.6%	1.2%
Ukraine	280.6	225.4	246.0	217.2	229.6	215.5	200.8	196.8	123.3	121.7	**129.3**	5.9%	-7.5%	0.3%
United Kingdom	472.6	453.0	427.9	417.1	409.6	393.3	335.7	350.5	349.1	337.0	**332.3**	-1.7%	-3.5%	0.8%
Other Europe	276.4	288.2	293.9	302.7	298.6	293.2	264.4	262.9	270.1	281.2	**254.5**	-9.7%	-0.8%	0.6%
Total Europe	**4434.2**	**4429.8**	**4476.7**	**4550.6**	**4496.5**	**4315.5**	**3866.2**	**4110.5**	**4010.4**	**3768.9**	**3725.1**	**-1.4%**	**-1.7%**	**9.1%**
Azerbaijan	41.2	43.2	42.5	41.1	43.8	44.1	43.9	46.5	49.2	52.6	**48.0**	-8.9%	1.5%	0.1%
Belarus	62.9	58.1	58.3	59.2	64.5	65.0	59.3	61.5	59.6	56.1	**56.0**	-0.3%	-1.2%	0.1%
Kazakhstan	284.1	236.7	254.7	274.6	283.6	277.7	259.8	278.0	276.2	317.6	**297.6**	-6.6%	0.5%	0.7%
Russian Federation	2055.3	2029.5	2055.0	2052.9	2136.1	2139.2	2014.2	2101.9	2164.0	2193.3	**2249.6**	2.3%	0.9%	5.5%
Turkmenistan	135.3	143.6	148.6	141.7	152.2	150.3	169.2	179.5	186.7	221.4	**232.8**	4.8%	5.6%	0.6%
Uzbekistan	140.1	133.7	129.6	132.2	138.4	138.2	137.6	146.8	147.7	153.2	**166.8**	8.6%	1.8%	0.4%
Other CIS	29.9	31.3	31.7	33.3	37.5	35.9	36.2	38.6	38.2	37.5	**38.4**	2.3%	2.5%	0.1%
Total CIS	**2748.8**	**2676.1**	**2720.3**	**2735.1**	**2856.1**	**2850.4**	**2720.3**	**2852.9**	**2921.5**	**3031.7**	**3089.2**	**1.6%**	**1.2%**	**7.6%**
Iran	762.1	756.2	810.7	834.3	859.9	858.0	881.2	918.9	943.3	962.7	**962.1**	-0.3%	2.4%	2.4%
Iraq	234.6	252.4	276.1	302.3	312.5	322.2	291.9	303.8	328.6	287.4	**342.8**	19.0%	3.9%	0.8%
Israel	66.8	69.5	68.6	69.2	69.5	71.3	65.3	66.1	69.9	62.3	**59.1**	-5.3%	-1.2%	0.1%
Kuwait	113.5	119.6	121.1	119.1	122.4	113.3	105.3	118.7	118.8	131.6	**131.2**	-0.6%	1.5%	0.3%
Oman	87.5	92.0	94.4	95.5	99.9	99.8	95.2	104.1	110.4	110.6	**113.5**	2.3%	2.6%	0.3%
Qatar	134.3	148.9	149.8	141.1	146.2	150.0	132.4	141.3	143.1	163.8	**169.3**	3.1%	2.3%	0.4%
Saudi Arabia	670.6	709.5	746.8	734.9	719.3	679.1	658.8	676.5	720.0	729.2	**738.1**	0.9%	1.0%	1.8%
United Arab Emirates	296.9	321.0	330.8	317.8	299.4	316.5	301.6	312.5	336.8	341.6	**358.3**	4.6%	1.9%	0.9%
Other Middle East	174.4	151.9	142.4	151.2	151.6	152.2	144.6	143.8	142.2	147.5	**142.6**	-3.6%	-2.0%	0.3%
Total Middle East	**2540.6**	**2620.9**	**2740.8**	**2765.4**	**2780.8**	**2762.2**	**2676.3**	**2785.8**	**2913.2**	**2936.6**	**3017.1**	**2.5%**	**1.7%**	**7.4%**
Algeria	219.1	225.7	228.8	231.6	239.5	243.2	229.2	250.9	258.7	267.3	**256.9**	-4.1%	1.6%	0.6%
Egypt	249.0	255.1	267.7	270.4	268.9	260.1	236.1	257.1	274.8	273.6	**270.6**	-1.4%	0.8%	0.7%
Morocco	61.9	62.2	62.5	65.3	66.8	73.0	67.4	75.1	74.9	73.6	**73.6**	-0.3%	1.7%	0.2%
South Africa	506.6	493.5	512.8	508.8	488.3	509.9	488.1	480.3	459.9	486.0	**479.3**	-1.7%	-0.6%	1.2%
Eastern Africa	124.0	129.1	128.4	137.9	144.6	146.4	138.0	147.7	155.2	160.1	**161.0**	0.3%	2.6%	0.4%
Middle Africa	105.3	109.7	107.4	102.2	101.0	102.0	93.3	96.3	100.9	114.3	**115.7**	0.9%	0.9%	0.3%
Western Africa	238.6	256.1	248.6	258.5	269.9	283.0	281.9	305.0	295.4	294.1	**308.5**	4.6%	2.6%	0.8%
Other Northern Africa	123.0	113.9	113.7	138.4	148.8	154.3	107.5	168.2	160.8	159.4	**171.8**	7.5%	3.4%	0.4%
Other Southern Africa	13.2	13.6	13.6	14.4	15.3	14.7	12.6	14.3	14.0	13.9	**14.2**	2.2%	0.7%	†
Total Africa	**1640.6**	**1659.1**	**1683.5**	**1727.7**	**1743.0**	**1786.5**	**1654.2**	**1795.0**	**1794.6**	**1842.3**	**1851.6**	**0.2%**	**1.2%**	**4.5%**
Australia	456.4	467.0	464.4	464.2	463.0	472.4	440.7	430.0	437.6	437.6	**439.9**	0.3%	-0.4%	1.1%
Bangladesh	76.4	94.5	95.3	100.0	107.0	119.2	113.8	121.7	128.9	124.4	**135.5**	8.6%	5.9%	0.3%
China	10447.3	10335.2	10171.9	10434.1	10802.0	11194.4	11422.0	11827.2	11786.5	12356.3	**12533.4**	1.2%	1.8%	30.7%
China Hong Kong SAR	90.3	91.1	93.3	99.4	100.6	95.1	68.6	64.9	58.1	66.5	**71.3**	6.9%	-2.3%	0.2%
India	2254.6	2332.0	2434.5	2501.9	2622.2	2654.9	2460.5	2713.6	2869.8	3137.7	**3262.3**	3.7%	3.8%	8.0%
Indonesia	587.2	598.6	595.6	630.2	662.0	707.2	655.2	663.1	843.7	860.7	**917.4**	6.3%	4.6%	2.2%
Japan	1293.6	1254.5	1233.5	1228.3	1205.4	1165.6	1075.4	1109.5	1112.1	1052.8	**1031.0**	-2.3%	-2.2%	2.5%
Malaysia	271.5	275.5	280.0	267.2	276.5	281.6	278.1	285.4	310.4	321.4	**337.2**	4.6%	2.2%	0.8%
New Zealand	36.9	37.5	36.4	38.4	38.1	39.3	34.3	33.9	31.6	33.0	**33.2**	0.6%	-1.1%	0.1%
Pakistan	182.0	191.1	206.1	219.0	224.3	220.5	219.4	244.2	217.6	197.7	**194.5**	-1.9%	0.7%	0.5%
Philippines	106.5	116.6	126.2	139.7	144.8	151.6	136.5	144.7	152.3	164.0	**174.4**	6.1%	5.1%	0.4%
South Korea	643.5	649.2	666.9	676.7	700.4	673.7	623.3	647.0	639.9	624.4	**618.7**	-1.2%	-0.4%	1.5%
Taiwan	282.7	282.2	286.4	292.5	290.1	284.5	271.4	286.8	278.6	270.3	**268.3**	-1.0%	-0.5%	0.7%
Thailand	309.1	316.5	325.2	324.7	330.1	325.4	305.4	300.3	302.4	298.4	**306.0**	2.3%	-0.1%	0.7%
Vietnam	196.4	227.0	242.1	251.6	302.1	362.6	364.9	346.8	340.4	374.6	**398.7**	6.1%	7.3%	1.0%
Other Asia Pacific	363.6	384.2	414.2	481.3	490.0	505.8	486.0	475.9	479.3	523.3	**547.0**	4.2%	4.2%	1.3%
Total Asia Pacific	**17598.2**	**17652.7**	**17672.0**	**18149.3**	**18758.7**	**19253.9**	**18955.3**	**19694.9**	**19989.3**	**20842.8**	**21268.7**	**1.8%**	**1.9%**	**52.1%**
Total World	**37527.6**	**37467.3**	**37549.9**	**38124.7**	**38977.7**	**39164.9**	**37197.1**	**39030.0**	**39575.4**	**40281.9**	**40812.4**	**1.0%**	**0.8%**	**100.0%**
of which: OECD	13437.5	13335.9	13242.5	13320.0	13464.2	13128.7	11812.7	12438.1	12543.3	12102.0	**12011.1**	-1.0%	-1.1%	29.4%
Non-OECD	24090.1	24131.4	24307.4	24804.7	25513.5	26036.2	25384.4	26591.9	27032.1	28179.9	**28801.3**	1.9%	1.8%	70.6%
European Union	3115.9	3171.0	3198.5	3261.3	3207.2	3070.4	2705.1	2897.7	2872.7	2658.5	**2589.8**	-2.8%	-1.8%	6.3%

† Less than 0.05%.

Notes: The emissions above are the sum of carbon dioxide emissions from energy (fossil fuel combustion), carbon dioxide emissions from flaring, methane emissions (in carbon dioxide equivalent) associated with the production, transportation and distribution of fossil fuels, and carbon dioxide emissions from industrial processes.

Data is shown only from 1990 to avoid structural breaks in the series. Data prior to 1990 can be found in the individual component emissions tables where available.

Annual changes and shares of total are calculated using million tonnes of carbon dioxide figures. Growth rates are adjusted for leap years.

Carbon Carbon capture, usage and storage (CCUS)

Capture capacity Million tonnes per year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	 2014–24	Share 2024
Canada	1.1	2.3	2.3	2.3	2.3	2.3	4.0	4.0	4.0	4.0	**4.0**	–	14.0%	6.9%
Mexico	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
US	19.5	19.5	19.5	21.9	21.9	21.8	21.8	22.0	22.7	23.9	**24.1**	0.9%	2.2%	41.7%
Total North America	20.5	21.7	21.7	24.1	24.1	24.1	25.8	25.9	26.7	27.9	**28.1**	0.7%	3.2%	48.7%
Brazil	2.1	2.8	4.1	4.6	6.5	8.9	9.6	10.3	10.5	10.6	**11.1**	4.7%	18.1%	19.2%
Total S. & Cent. America	2.1	2.8	4.1	4.6	6.5	8.9	9.6	10.3	10.5	10.6	**11.1**	4.7%	18.1%	19.2%
Norway	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	**1.7**	–	–	2.9%
Other Europe	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.7	0.7	**0.7**	9.2%	-5.1%	1.2%
Total Europe	2.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.4	2.4	**2.4**	2.6%	-1.8%	4.2%
Russian Federation	–	–	–	–	–	–	–	0.4	0.4	0.4	**0.4**	–	–	0.7%
Total CIS	–	–	–	–	–	–	–	0.4	0.4	0.4	**0.4**	–	–	0.7%
Qatar	–	0.2	0.2	0.2	0.2	2.3	2.3	2.3	2.3	2.3	**2.3**	–	–	3.9%
Saudi Arabia	–	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	**1.4**	–	–	2.4%
Other Middle East	0.3	0.3	1.1	1.1	1.1	1.1	1.4	1.4	1.4	1.4	**1.4**	–	16.4%	2.4%
Total Middle East	0.3	1.8	2.6	2.6	2.6	4.7	5.0	5.0	5.0	5.1	**5.1**	–	32.3%	8.8%
Total Africa	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Australia	–	–	–	–	–	4.0	4.0	4.0	4.0	4.0	**5.7**	42.5%	–	9.9%
China	0.3	0.4	0.4	0.4	0.7	0.7	0.7	0.9	2.2	3.5	**3.6**	1.5%	28.6%	6.2%
Other Asia Pacific	–	–	–	–	–	–	–	–	–	–	**1.3**	–	–	2.3%
Total Asia Pacific	0.3	0.4	0.4	0.4	0.7	4.7	4.7	4.9	6.2	7.5	**10.6**	40.9%	43.3%	18.4%
Total World	**26.1**	**29.7**	**31.8**	**34.7**	**37.0**	**45.4**	**48.1**	**49.6**	**51.1**	**54.0**	**57.8**	**7.1%**	**8.3%**	**100.0%**
of which: OECD	23.1	24.4	24.4	26.9	26.9	30.8	32.7	32.9	33.0	34.3	**36.2**	5.6%	4.6%	62.6%
Non-OECD	3.0	5.3	7.4	7.8	10.1	14.6	15.4	16.7	18.2	19.7	**21.7**	9.8%	21.7%	37.4%
European Union	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.1	0.1	**0.1**	25.0%	-15.8%	0.2%

^ Less than 0.05.
† Less than 0.05%.
Source: Rystad Energy. For further information visit **https://www.rystadenergy.com**

Carbon Prices

	Compliance Markets				Voluntary Markets				
	UK Emissions trading scheme GBP£/$MtCO_2e$	EU Emissions trading scheme EUR€/$MtCO_2e$	California carbon allowance USD$/$MtCO_2e$	Regional greenhouse gas initiative USD$/$MtCO_2e$	Platts CORSIA-eligible credits (CEC)	Platts carbon removal credits (CRC)	Platts CAC	Platts technological carbon capture	Platts renewable energy
					USD$/$MtCO_2e$				
2012	–	6.87	–	–	–	–	–	–	–
2013	–	4.53	–	–	–	–	–	–	–
2014	–	6.01	–	–	–	–	–	–	–
2015	–	7.72	–	–	–	–	–	–	–
2016	–	5.36	–	–	–	–	–	–	–
2017	–	5.84	–	–	–	–	–	–	–
2018	–	15.85	–	–	–	–	–	–	–
2019	–	24.91	–	–	–	–	–	–	–
2020	–	24.83	17.08	6.63	–	–	–	–	–
2021	66.76	53.52	23.43	9.63	4.16	14.53	7.32	112.80	4.53
2022	92.81	81.17	29.53	13.67	4.77	16.00	6.81	138.84	4.90
2023	63.53	85.27	34.08	13.98	1.41	13.36	3.02	129.72	2.41
2024	**45.90**	**66.47**	**36.19**	**22.97**	**14.41**	**12.50**	**1.82**	**124.76**	**1.43**

Source: S&P Global Commodity Insights, ©2025 by S&P Global Inc.

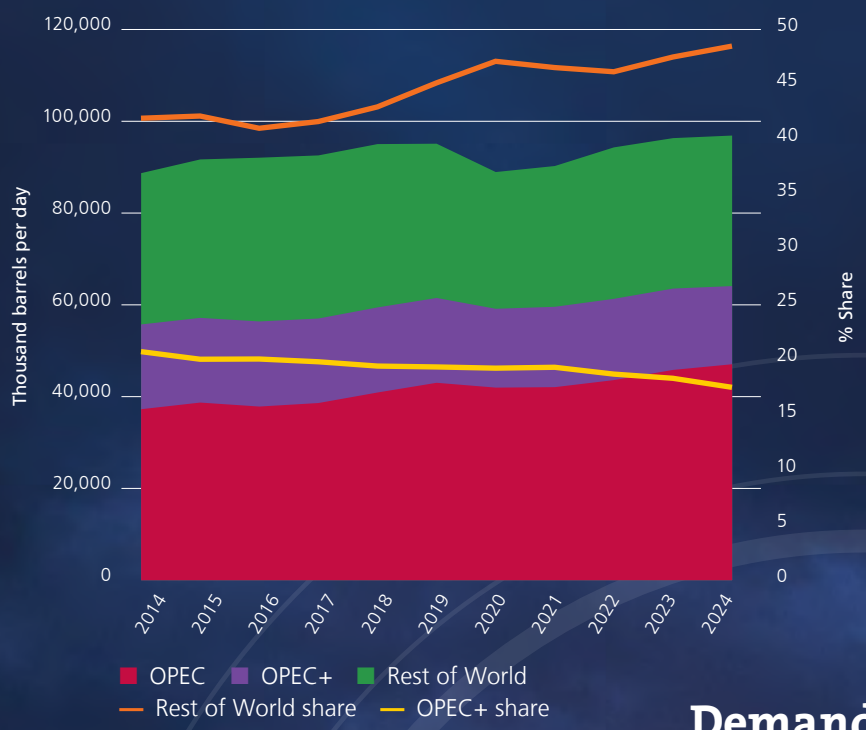
Oil

In 2024, global oil production rose 0.6% to 97 million barrels per day, with non-OPEC countries driving growth. The US led this expansion, with output reaching a record level, breaching the 20 Mbpd level for the first time, driven by enhanced shale extraction technologies and operational efficiencies. This surge brought US production close to the combined output of Saudi Arabia and Russia. South American producers, particularly Guyana and Argentina, also registered notable increases.

Demand patterns reflected global economic headwinds, with demand growing 0.7 Mbpd as post-pandemic momentum waned. China's economic slowdown significantly impacted Asia Pacific demand, with oil demand declining amid the country's rapid shift towards electric vehicles and LNG trucks. However, India and Southeast Asia provided offsetting growth. Kerosene demand rose nearly 8% in non-OECD countries as air travel recovered, whilst diesel softened in advanced economies due to freight weakness and efficiency improvements.

Refining capacity remained stable globally, though utilisation declined to around 80%. Africa's capacity expanded dramatically by 20%, primarily through Nigeria's multi-billion-dollar Dangote refinery commencing operations. China's throughput fell 4% despite capacity growth, reflecting weakened domestic demand. This rebalancing highlighted evolving supply-demand dynamics across regions, with structural shifts reshaping traditional oil market patterns.

Oil production



Demand patterns suggest a shift for oil towards non-fuel and petrochemical products

Oil Production*

Thousand barrels daily	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	4271	4388	4464	4813	5244	5371	5128	5414	5575	5648	**5888**	4.3%	3.3%	6.1%
Mexico	2784	2587	2456	2224	2068	1918	1910	1926	1943	2040	**1911**	-6.3%	-3.7%	2.0%
US	11796	12774	12359	13143	15329	17138	16498	16733	17925	19433	**20135**	3.6%	5.5%	20.8%
Total North America	**18851**	**19749**	**19279**	**20180**	**22641**	**24427**	**23536**	**24073**	**25443**	**27121**	**27934**	**3.0%**	**4.0%**	**28.8%**
Argentina	638	646	610	590	592	720	721	797	955	1072	**1214**	13.3%	6.7%	1.3%
Brazil	2341	2525	2607	2731	2691	2890	3030	2991	3112	3499	**3466**	-1.0%	4.0%	3.6%
Colombia	990	1006	886	854	865	886	781	736	754	779	**773**	-0.8%	-2.5%	0.8%
Ecuador	557	543	548	531	517	531	479	473	481	475	**475**	†	-1.6%	0.5%
Guyana	–	–	–	–	–	1	74	117	278	391	**616**	57.5%	–	0.6%
Peru	175	153	141	136	139	144	131	128	128	123	**125**	1.0%	-3.3%	0.1%
Trinidad & Tobago	114	109	97	99	87	82	76	77	74	74	**74**	0.1%	-4.2%	0.1%
Venezuela	2692	2864	2566	2209	1659	1053	676	665	726	843	**960**	13.9%	-9.8%	1.0%
Other S. & Cent. America	154	146	135	133	128	121	112	114	109	101	**96**	-5.3%	-4.6%	0.1%
Total S. & Cent. America	**7661**	**7991**	**7590**	**7285**	**6679**	**6428**	**6082**	**6097**	**6618**	**7358**	**7798**	**6.0%**	**0.2%**	**8.0%**
Denmark	167	158	142	138	116	103	72	66	65	60	**60**	0.9%	-9.6%	0.1%
Italy	120	113	78	86	97	89	113	103	94	90	**93**	3.1%	-2.5%	0.1%
Norway	1894	1953	2004	1982	1863	1750	2017	2037	1907	2024	**1833**	-9.4%	-0.3%	1.9%
Romania	84	83	79	76	75	75	72	70	66	63	**60**	-4.1%	-3.3%	0.1%
United Kingdom	854	964	1015	1005	1092	1118	1049	874	809	715	**653**	-8.6%	-2.6%	0.7%
Other Europe	341	331	312	302	307	302	289	289	271	277	**299**	8.0%	-1.3%	0.3%
Total Europe	**3460**	**3601**	**3629**	**3590**	**3550**	**3437**	**3611**	**3439**	**3213**	**3229**	**2999**	**-7.1%**	**-1.4%**	**3.1%**
Azerbaijan	851	841	828	782	784	763	703	708	669	621	**598**	-3.7%	-3.5%	0.6%
Kazakhstan	1701	1672	1637	1813	1900	1903	1796	1805	1771	1891	**1836**	-2.9%	0.8%	1.9%
Russian Federation	10927	11087	11342	11374	11562	11679	10666	11000	11202	11074	**10752**	-2.9%	-0.2%	11.1%
Turkmenistan	263	271	270	269	259	254	219	206	203	191	**188**	-1.3%	-3.3%	0.2%
Uzbekistan	63	60	57	61	64	62	44	46	45	43	**42**	-2.5%	-3.9%	†
Other CIS	35	36	36	37	38	39	39	41	43	44	**45**	2.4%	2.5%	†
Total CIS	**13840**	**13966**	**14171**	**14336**	**14607**	**14701**	**13468**	**13806**	**13933**	**13865**	**13461**	**-2.9%**	**-0.3%**	**13.9%**
Iran	3714	3853	4578	4939	4747	3502	3221	3680	3894	4573	**5062**	10.7%	3.1%	5.2%
Iraq	3239	3986	4423	4538	4632	4779	4114	4102	4520	4355	**4398**	1.0%	3.1%	4.5%
Kuwait	3106	3069	3150	3009	3050	2976	2721	2707	3023	2902	**2719**	-6.3%	-1.3%	2.8%
Oman	943	981	1004	971	978	971	951	971	1064	1049	**993**	-5.3%	0.5%	1.0%
Qatar	1892	1844	1846	1783	1798	1737	1703	1689	1729	1783	**1806**	1.2%	-0.5%	1.9%
Saudi Arabia	11519	11998	12406	11892	12261	11832	11039	10954	12140	11261	**10856**	-3.6%	-0.6%	11.2%
Syria	33	27	25	25	24	34	43	43	43	40	**35**	-12.7%	0.6%	†
United Arab Emirates	3592	3876	4020	3880	3894	3984	3702	3699	4120	4017	**4006**	-0.3%	1.1%	4.1%
Yemen	153	54	43	71	94	95	88	83	74	49	**47**	-5.9%	-11.2%	†
Other Middle East	214	213	214	208	207	214	202	208	209	208	**199**	-4.4%	-0.7%	0.2%
Total Middle East	**28405**	**29901**	**31709**	**31316**	**31685**	**30124**	**27783**	**28137**	**30816**	**30238**	**30119**	**-0.4%**	**0.6%**	**31.1%**
Algeria	1589	1558	1577	1540	1511	1487	1332	1353	1443	1466	**1380**	-5.8%	-1.4%	1.4%
Angola	1701	1796	1745	1671	1519	1420	1325	1177	1191	1150	**1181**	2.7%	-3.6%	1.2%
Chad	89	111	117	98	116	127	126	116	124	134	**128**	-4.4%	3.7%	0.1%
Republic of Congo	253	234	232	270	330	336	307	274	269	278	**267**	-4.1%	0.5%	0.3%
Egypt	714	726	691	660	674	653	632	608	616	610	**637**	4.4%	-1.1%	0.7%
Equatorial Guinea	284	260	223	195	176	160	158	131	121	88	**97**	9.8%	-10.2%	0.1%
Gabon	211	214	221	210	193	218	207	181	191	223	**224**	0.4%	0.6%	0.2%
Libya	495	412	388	892	1135	1196	423	1253	1109	1237	**1188**	-3.9%	9.1%	1.2%
Nigeria	2273	2199	1898	1966	2000	2093	1894	1678	1445	1540	**1641**	6.6%	-3.2%	1.7%
South Sudan	155	148	137	147	144	172	165	153	141	148	**86**	-41.4%	-5.7%	0.1%
Sudan	120	109	84	70	74	72	63	64	62	57	**38**	-34.5%	-10.9%	†
Tunisia	63	57	54	45	44	40	37	45	38	37	**33**	-13.1%	-6.4%	†
Other Africa	247	277	271	319	319	354	338	301	291	289	**395**	36.6%	4.8%	0.4%
Total Africa	**8196**	**8099**	**7636**	**8086**	**8237**	**8328**	**7009**	**7334**	**7039**	**7258**	**7294**	**0.5%**	**-1.2%**	**7.5%**
Australia	420	378	353	322	342	458	454	444	412	381	**365**	-4.2%	-1.4%	0.4%
Brunei	126	127	121	113	112	121	110	107	92	89	**99**	11.0%	-2.4%	0.1%
China	4246	4309	3999	3846	3802	3848	3901	3994	4111	4198	**4264**	1.6%	†	4.4%
India	914	904	896	897	892	851	795	770	740	729	**735**	0.8%	-2.2%	0.8%
Indonesia	847	838	873	837	808	781	742	692	647	638	**613**	-3.9%	-3.2%	0.6%
Malaysia	649	696	726	718	713	672	615	571	561	557	**535**	-3.8%	-1.9%	0.6%
Thailand	464	481	489	486	475	475	421	398	328	324	**353**	8.9%	-2.7%	0.4%
Vietnam	325	352	317	284	257	236	207	196	194	188	**177**	-6.1%	-5.9%	0.2%
Other Asia Pacific	292	293	277	269	230	227	204	195	167	157	**144**	-8.2%	-6.8%	0.1%
Total Asia Pacific	**8284**	**8378**	**8051**	**7773**	**7630**	**7669**	**7449**	**7366**	**7252**	**7261**	**7285**	**0.3%**	**-1.3%**	**7.5%**
Total World	**88697**	**91686**	**92065**	**92565**	**95029**	**95114**	**88938**	**90251**	**94313**	**96329**	**96890**	**0.6%**	**0.9%**	**100.0%**
of which: OECD	23580	24597	24014	24816	27259	29066	28246	28558	29697	31395	**31958**	1.8%	3.1%	33.0%
Non-OECD	65117	67089	68051	67749	67769	66048	60692	61693	64616	64934	**64932**	†	†	67.0%
OPEC	32969	34522	35680	35541	35589	33617	29795	30677	33000	32783	**32798**	†	-0.1%	33.9%
Non-OPEC	55728	57164	56385	57023	59440	61497	59143	59574	61313	63546	**64092**	0.9%	1.4%	66.1%
European Union	553	534	468	463	448	414	392	372	344	328	**330**	0.6%	-5.1%	0.3%

Source: includes data from FGE Iran Service.

* Includes crude oil, shale oil, oil sands, condensates (lease condensate or gas condensates that require further refining) and NGLs (natural gas liquids – ethane, LPG and naphtha separated from the production of natural gas).

Excludes liquid fuels from other sources such as biofuels and synthetic derivatives of coal and natural gas. This also excludes liquid fuel adjustment factors such as refinery processing gain. Excludes oil shales/kerogen extracted in solid form.

† Less than 0.05%.

Note: Annual changes and shares of total are calculated using thousand barrels daily figures.

Oil Production*

Million tonnes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	209.8	216.1	218.8	236.6	257.7	263.4	252.0	266.6	273.9	278	**290**	4.1%	3.3%	6.4%
Mexico	137.1	127.5	121.4	109.5	102.3	94.9	95.1	96.4	97.6	103	**96**	-6.3%	-3.5%	2.1%
US	524.1	566.7	542.9	574.3	670.0	751.1	713.5	717.9	766.2	830	**858**	3.1%	5.1%	18.9%
Total North America	**871.0**	**910.3**	**883.1**	**920.4**	**1030.0**	**1109.5**	**1060.6**	**1081.0**	**1137.7**	**1210**	**1244**	**2.6%**	**3.6%**	**27.4%**
Argentina	29.8	30.0	28.6	27.3	27.6	33.8	33.7	37.6	45.4	51	**59**	14.2%	7.0%	1.3%
Brazil	122.5	132.2	136.7	142.6	140.6	151.2	159.3	156.9	163.2	184	**182**	-1.1%	4.0%	4.0%
Colombia	52.2	53.0	46.8	45.0	45.6	46.7	41.3	38.8	39.7	41	**41**	-0.8%	-2.4%	0.9%
Ecuador	29.8	29.1	29.5	28.5	27.7	28.5	25.8	25.3	25.8	25	**26**	†	-1.5%	0.6%
Guyana	–	–	–	–	–	^	4	6	14	19	**31**	57.5%	–	0.7%
Peru	7.5	6.5	5.8	5.7	5.9	6.1	5.5	5.3	5.4	5	**5**	1.0%	-3.6%	0.1%
Trinidad & Tobago	5.1	4.8	4.3	4.4	3.9	3.7	3.4	3.5	3.4	3	**3**	-1.1%	-3.9%	0.1%
Venezuela	138.5	147.6	132.6	113.6	85.1	53.5	34.4	33.9	37.1	43	**50**	14.2%	-9.8%	1.1%
Other S. & Cent. America	7.7	7.4	6.8	6.7	6.4	6.1	5.7	5.8	5.6	5	**5**	-4.9%	-4.4%	0.1%
Total S. & Cent. America	**393.1**	**410.7**	**391.2**	**373.8**	**342.8**	**329.6**	**312.9**	**312.9**	**339.4**	**378**	**401**	**5.8%**	**0.2%**	**8.8%**
Denmark	8.1	7.7	6.9	6.7	5.6	5.0	3.5	3.2	3.2	3	**3**	0.9%	-9.6%	0.1%
Italy	5.8	5.5	3.8	4.1	4.7	4.3	5.4	4.9	4.5	4	**4**	3.0%	-2.5%	0.1%
Norway	85.4	88.0	90.7	89.4	83.9	79.2	92.6	94.3	89.2	95	**86**	-9.7%	0.1%	1.9%
Romania	4.1	4.0	3.8	3.6	3.6	3.6	3.5	3.3	3.1	3	**3**	-4.2%	-3.4%	0.1%
United Kingdom	39.9	45.3	47.4	46.6	50.9	51.8	49.0	40.9	37.8	33	**30**	-9.4%	-2.7%	0.7%
Other Europe	17.0	16.5	15.6	15.0	15.2	15.0	14.4	14.3	13.5	14	**15**	8.3%	-1.3%	0.3%
Total Europe	**160.2**	**166.9**	**168.2**	**165.5**	**163.9**	**158.8**	**168.4**	**161.0**	**151.3**	**152**	**142**	**-7.3%**	**-1.2%**	**3.1%**
Azerbaijan	42.1	41.7	41.1	38.7	38.8	37.6	34.6	34.6	32.7	30	**29**	-3.9%	-3.6%	0.6%
Kazakhstan	80.8	79.5	78.0	86.2	90.4	90.6	85.7	85.9	84.2	90	**88**	-3.0%	0.8%	1.9%
Russian Federation	537.4	544.6	558.5	558.5	567.9	573.4	524.4	538.8	548.5	542	**526**	-3.1%	-0.2%	11.6%
Turkmenistan	12.9	13.2	13.2	13.1	12.5	12.2	10.4	9.8	9.6	9	**9**	-1.0%	-3.5%	0.2%
Uzbekistan	2.9	2.7	2.6	2.8	2.9	2.8	2.0	2.1	2.1	2	**2**	-2.8%	-3.9%	†
Other CIS	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.1	2	**2**	2.4%	2.6%	†
Total CIS	**677.9**	**683.4**	**695.2**	**701.1**	**714.3**	**718.5**	**659.1**	**673.2**	**679.2**	**675**	**656**	**-3.1%**	**-0.3%**	**14.4%**
Iran	174.0	180.2	216.1	234.5	223.4	161.5	147.4	169.3	178.3	211	**234**	10.7%	3.0%	5.2%
Iraq	158.8	195.6	217.6	222.4	227.0	234.2	202.0	200.8	221.3	213	**216**	0.9%	3.1%	4.7%
Kuwait	150.2	148.2	152.7	145.0	146.8	143.4	131.2	130.0	145.5	140	**131**	-6.5%	-1.4%	2.9%
Oman	46.2	48.0	49.3	47.6	47.8	47.3	46.1	46.8	51.4	51	**48**	-5.5%	0.4%	1.1%
Qatar	79.9	77.4	77.6	74.8	75.1	72.3	71.6	70.4	72.0	74	**75**	1.3%	-0.6%	1.7%
Saudi Arabia	543.8	568.0	586.7	559.3	576.8	556.6	519.6	515.0	573.1	529	**510**	-3.8%	-0.6%	11.2%
Syria	1.5	1.2	1.1	1.1	1.1	1.5	2.0	2.0	2.0	2	**2**	-13.1%	1.3%	†
United Arab Emirates	162.9	175.1	181.6	174.9	176.0	179.9	166.9	166.0	185.5	180	**180**	-0.5%	1.0%	4.0%
Yemen	6.9	2.2	1.6	3.0	4.1	4.1	3.8	3.5	3.1	2	**2**	-7.2%	-12.7%	†
Other Middle East	10.5	10.5	10.6	10.2	10.2	10.4	9.9	10.2	10.2	10	**10**	-4.4%	-0.8%	0.2%
Total Middle East	**1334.8**	**1406.5**	**1495.0**	**1472.8**	**1488.3**	**1411.2**	**1300.4**	**1314.0**	**1442.4**	**1412**	**1407**	**-0.6%**	**0.5%**	**31.0%**
Algeria	68.8	67.2	68.4	66.6	65.3	64.3	57.6	58.2	62.1	63	**59**	-6.2%	-1.5%	1.3%
Angola	83.3	88.2	85.8	81.6	74.1	69.1	64.6	57.1	57.8	56	**57**	2.6%	-3.7%	1.3%
Chad	4.7	5.8	6.1	5.2	6.1	6.7	6.6	6.1	6.5	7	**7**	-4.4%	3.8%	0.1%
Republic of Congo	12.9	11.9	11.9	13.8	16.9	17.2	15.8	14.0	13.7	14	**14**	-4.1%	0.6%	0.3%
Egypt	35.1	35.4	33.8	32.2	32.8	31.8	31.1	29.6	30.0	30	**31**	4.5%	-1.2%	0.7%
Equatorial Guinea	13.3	12.1	10.3	9.0	8.1	7.4	7.4	6.1	5.6	4	**4**	7.3%	-10.6%	0.1%
Gabon	10.5	10.7	11.0	10.5	9.7	10.9	10.4	9.0	9.5	11	**11**	0.4%	0.6%	0.2%
Libya	23.2	19.4	18.2	42.1	53.4	56.1	19.6	58.8	51.9	58	**56**	-4.1%	9.2%	1.2%
Nigeria	109.2	105.7	91.3	94.4	96.2	100.9	91.4	80.7	69.3	74	**79**	6.5%	-3.2%	1.7%
South Sudan	7.7	7.3	6.8	7.3	7.1	8.4	8.1	7.5	6.9	7	**4**	-41.4%	-5.7%	0.1%
Sudan	5.9	5.4	4.2	3.4	3.7	3.6	3.1	3.2	3.1	3	**2**	-34.5%	-10.9%	†
Tunisia	2.9	2.6	2.4	2.1	2.0	1.8	1.7	2.1	1.8	2	**1**	-13.1%	-6.5%	†
Other Africa	12.3	13.7	13.5	15.7	15.7	17.4	16.7	14.8	14.3	14	**19**	37.2%	4.7%	0.4%
Total Africa	**389.7**	**385.4**	**363.7**	**383.8**	**391.1**	**395.6**	**334.0**	**347.1**	**332.4**	**343**	**345**	**0.5%**	**-1.2%**	**7.6%**
Australia	18.6	16.8	15.4	13.9	14.6	19.3	19.1	18.4	17.1	16	**15**	-4.7%	-2.2%	0.3%
Brunei	6.2	6.2	5.9	5.5	5.4	5.9	5.4	5.2	4.5	4	**5**	11.2%	-2.4%	0.1%
China	211.4	214.6	199.7	191.5	189.3	191.6	194.8	198.9	204.7	209	**213**	1.6%	0.1%	4.7%
India	41.6	41.2	40.6	40.4	39.5	37.5	35.1	34.0	33.0	33	**33**	0.7%	-2.3%	0.7%
Indonesia	41.0	40.6	42.6	40.9	39.5	38.1	36.3	33.7	31.5	31	**30**	-4.0%	-3.1%	0.7%
Malaysia	29.8	32.2	33.3	32.9	32.5	30.6	28.0	25.9	25.3	25	**24**	-4.2%	-2.1%	0.5%
Thailand	16.9	17.6	18.1	17.6	17.0	16.9	15.1	13.9	11.5	11	**12**	10.3%	-3.0%	0.3%
Vietnam	15.9	17.2	15.5	13.9	12.4	11.4	10.0	9.5	9.3	9	**9**	-6.2%	-6.0%	0.2%
Other Asia Pacific	13.0	13.1	12.4	12.0	10.3	10.1	9.2	8.7	7.5	7	**7**	-8.0%	-6.7%	0.1%
Total Asia Pacific	**394.4**	**399.4**	**383.5**	**368.5**	**360.6**	**361.5**	**353.1**	**348.2**	**344.4**	**345**	**347**	**0.3%**	**-1.3%**	**7.6%**
Total World	**4221.0**	**4362.4**	**4379.9**	**4385.9**	**4490.9**	**4484.7**	**4188.4**	**4237.4**	**4426.7**	**4514**	**4543**	**0.4%**	**0.7%**	**100.0%**
of which: OECD	1094.9	1140.1	1106.8	1138.4	1247.3	1327.3	1282.7	1292.7	1339.8	1413	**1436**	1.3%	2.7%	31.6%
Non-OECD	3126.1	3222.4	3273.1	3247.5	3243.6	3157.4	2905.8	2944.7	3087.0	3101	**3107**	-0.1%	-0.1%	68.4%
OPEC	1566.2	1641.8	1698.5	1686.2	1684.8	1585.9	1403.7	1441.7	1552.8	1540	**1543**	-0.1%	-0.1%	34.0%
Non-OPEC	2654.8	2720.6	2681.3	2699.7	2806.1	2898.8	2784.7	2795.6	2873.9	2974	**2999**	0.6%	1.2%	66.0%
European Union	27.0	26.1	22.9	22.6	21.9	20.2	19.2	18.1	16.8	16	**16**	0.5%	-5.1%	0.4%

Source: includes data from FGE Iran Service.

* Includes crude oil, shale oil, oil sands, condensates (lease condensate or gas condensates that require further refining) and NGLs (natural gas liquids – ethane, LPG and naphtha separated from the production of natural gas).

Excludes liquid fuels from other sources such as biofuels and synthetic derivatives of coal and natural gas. This also excludes liquid fuel adjustment factors such as refinery processing gain.

Excludes oil shales/kerogen extracted in solid form.

^ Less than 0.05.

† Less than 0.05%.

Note: Annual changes and shares of total are calculated using million tonnes figures. Growth rates are adjusted for leap years.

Oil Crude oil and condensate production in thousands of barrels per day*

Thousand barrels daily	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	3758	3863	3868	4216	4596	4690	4469	4745	4866	4935	**5135**	4.1%	3.2%	6.2%
Mexico	2429	2267	2154	1948	1833	1701	1705	1756	1785	1875	**1759**	-6.2%	-3.2%	2.1%
US	8781	9432	8850	9360	10959	12314	11323	11308	11992	12935	**13194**	2.0%	4.2%	15.9%
Total North America	**14968**	**15562**	**14872**	**15524**	**17389**	**18705**	**17497**	**17810**	**18643**	**19745**	**20088**	**1.7%**	**3.0%**	**24.3%**
Argentina	532	532	511	480	490	608	601	682	832	946	**1096**	15.8%	7.5%	1.3%
Brazil	2255	2437	2510	2622	2587	2788	2940	2905	3022	3402	**3358**	-1.3%	4.1%	4.1%
Colombia	990	1006	886	854	865	886	781	736	754	779	**773**	-0.8%	-2.5%	0.9%
Ecuador	557	543	548	531	517	531	479	473	481	475	**475**	†	-1.6%	0.6%
Guyana	–	–	–	–	–	1	74	117	278	391	**616**	57.5%	–	0.7%
Peru	121	104	91	88	92	95	84	82	86	80	**80**	-0.3%	-4.1%	0.1%
Trinidad & Tobago	81	79	71	72	63	59	57	60	58	60	**58**	-3.3%	-3.3%	0.1%
Venezuela	2578	2747	2461	2105	1571	974	624	616	679	798	**914**	14.4%	-9.9%	1.1%
Other S. & Cent. America	139	133	123	119	114	108	100	101	97	90	**85**	-5.0%	-4.8%	0.1%
Total S. & Cent. America	**7254**	**7581**	**7200**	**6871**	**6299**	**6050**	**5740**	**5772**	**6287**	**7022**	**7455**	**6.2%**	**0.3%**	**9.0%**
Denmark	167	158	142	138	116	103	72	66	65	60	**60**	0.9%	-9.6%	0.1%
Italy	120	113	78	86	97	89	112	100	92	88	**91**	2.9%	-2.7%	0.1%
Norway	1570	1614	1655	1629	1527	1449	1724	1784	1709	1818	**1641**	-9.7%	0.4%	2.0%
Romania	82	80	76	73	72	71	68	66	62	59	**57**	-4.6%	-3.6%	0.1%
United Kingdom	791	903	933	913	1002	1019	961	807	742	659	**592**	-10.2%	-2.9%	0.7%
Other Europe	327	317	297	284	289	285	274	273	256	262	**284**	8.4%	-1.4%	0.3%
Total Europe	**3056**	**3186**	**3180**	**3124**	**3103**	**3016**	**3210**	**3096**	**2927**	**2946**	**2725**	**-7.5%**	**-1.1%**	**3.3%**
Azerbaijan	849	840	826	781	783	762	702	707	667	618	**595**	-3.7%	-3.5%	0.7%
Kazakhstan	1701	1672	1637	1813	1900	1903	1796	1805	1771	1891	**1836**	-2.9%	0.8%	2.2%
Russian Federation	10479	10617	10863	10898	11083	11186	10192	10455	10669	10554	**10222**	-3.1%	-0.2%	12.3%
Turkmenistan	246	254	250	248	236	228	189	179	173	166	**165**	-0.7%	-3.9%	0.2%
Uzbekistan	63	60	57	61	64	62	44	46	45	43	**42**	-2.5%	-3.9%	0.1%
Other CIS	35	36	36	37	38	39	39	41	43	44	**45**	2.4%	2.5%	0.1%
Total CIS	**13373**	**13478**	**13670**	**13839**	**14104**	**14180**	**12963**	**13233**	**13368**	**13316**	**12905**	**-3.1%**	**-0.4%**	**15.6%**
Iran	3273	3392	4090	4491	4241	3023	2734	3184	3312	3940	**4340**	10.2%	2.9%	5.2%
Iraq	3198	3945	4375	4473	4568	4712	4049	4032	4446	4271	**4308**	0.9%	3.0%	5.2%
Kuwait	2830	2782	2860	2704	2737	2678	2438	2415	2707	2590	**2411**	-6.9%	-1.6%	2.9%
Oman	943	981	1004	971	978	971	951	971	1064	1049	**993**	-5.3%	0.5%	1.2%
Qatar	1426	1374	1373	1333	1328	1266	1276	1248	1267	1307	**1321**	1.0%	-0.8%	1.6%
Saudi Arabia	9941	10420	10688	10175	10533	10145	9430	9394	10509	9609	**9203**	-4.2%	-0.8%	11.1%
Syria	23	19	17	17	16	25	33	33	33	30	**26**	-15.7%	1.1%	†
United Arab Emirates	3053	3262	3366	3250	3293	3345	3094	3074	3464	3346	**3316**	-0.9%	0.8%	4.0%
Yemen	128	28	16	44	67	67	60	55	46	22	**19**	-13.0%	-17.4%	†
Other Middle East	204	203	204	198	196	196	184	193	193	193	**184**	-4.6%	-1.0%	0.2%
Total Middle East	**25020**	**26407**	**27994**	**27656**	**27956**	**26427**	**24250**	**24600**	**27041**	**26357**	**26120**	**-0.9%**	**0.4%**	**31.6%**
Algeria	1329	1290	1316	1287	1259	1239	1099	1105	1178	1193	**1109**	-7.1%	-1.8%	1.3%
Angola	1672	1780	1722	1632	1479	1373	1278	1130	1144	1103	**1130**	2.4%	-3.8%	1.4%
Chad	89	111	117	98	116	127	126	116	124	134	**128**	-4.4%	3.7%	0.2%
Republic of Congo	245	227	225	263	323	329	300	267	262	271	**260**	-4.2%	0.6%	0.3%
Egypt	667	662	631	603	617	597	587	561	571	565	**592**	4.8%	-1.2%	0.7%
Equatorial Guinea	266	242	204	174	157	144	143	119	108	78	**79**	0.9%	-11.4%	0.1%
Gabon	211	214	221	210	193	218	207	181	191	223	**224**	0.4%	0.6%	0.3%
Libya	480	402	377	879	1108	1160	389	1207	1060	1188	**1136**	-4.4%	9.0%	1.4%
Nigeria	2188	2119	1822	1890	1922	2014	1833	1620	1378	1471	**1557**	5.9%	-3.3%	1.9%
South Sudan	155	148	137	147	144	172	165	153	141	148	**86**	-41.4%	-5.7%	0.1%
Sudan	120	109	84	70	74	72	63	64	62	57	**38**	-34.5%	-10.9%	†
Tunisia	58	52	46	39	38	36	33	41	35	33	**29**	-13.1%	-6.8%	†
Other Africa	247	277	271	319	319	353	337	300	290	288	**394**	36.8%	4.8%	0.5%
Total Africa	**7726**	**7632**	**7171**	**7611**	**7749**	**7834**	**6561**	**6863**	**6542**	**6752**	**6760**	**0.1%**	**-1.3%**	**8.2%**
Australia	353	322	290	263	282	361	351	335	311	280	**266**	-5.3%	-2.8%	0.3%
Brunei	114	115	109	101	100	110	100	98	83	81	**91**	12.2%	-2.3%	0.1%
China	4246	4309	3999	3846	3802	3848	3901	3994	4111	4198	**4264**	1.6%	†	5.2%
India	778	772	752	744	719	677	636	620	609	605	**609**	0.6%	-2.4%	0.7%
Indonesia	789	786	829	801	772	745	708	659	612	606	**580**	-4.2%	-3.0%	0.7%
Malaysia	610	662	667	660	653	610	556	511	502	499	**479**	-4.2%	-2.4%	0.6%
Thailand	233	248	258	240	228	228	202	177	143	136	**153**	12.6%	-4.1%	0.2%
Vietnam	315	342	308	275	243	225	195	185	182	175	**164**	-6.5%	-6.3%	0.2%
Other Asia Pacific	257	260	246	237	204	202	184	177	151	143	**132**	-7.9%	-6.5%	0.2%
Total Asia Pacific	**7695**	**7816**	**7457**	**7167**	**7004**	**7006**	**6834**	**6755**	**6706**	**6724**	**6736**	**0.2%**	**-1.3%**	**8.1%**
Total World	**79091**	**81661**	**81545**	**81792**	**83605**	**83218**	**77054**	**78130**	**81515**	**82863**	**82788**	**-0.1%**	**0.5%**	**100.0%**
of which: OECD	19223	19938	19098	19639	21506	22833	21710	21851	22517	23642	**23745**	0.4%	2.1%	28.7%
Non-OECD	59868	61723	62447	62153	62099	60385	55345	56279	58998	59220	**59043**	-0.3%	-0.1%	71.3%
OPEC	29592	31042	32004	31901	31905	29980	26341	27213	29292	28980	**28856**	-0.4%	-0.3%	34.9%
Non-OPEC	49499	50619	49541	49891	51700	53238	50713	50917	52222	53883	**53933**	0.1%	0.9%	65.1%
European Union	542	522	456	450	436	402	382	359	333	316	**318**	0.4%	-5.2%	0.4%

Source: includes data from FGE Iran Service.
* Includes crude oil, shale/tight oil, oil sands, lease condensate or gas condensates that require further refining. Excludes liquid fuels from other sources such as biomass and synthetic derivatives of coal and natural gas.
† Less than 0.05%.
Note: Annual changes and shares of total are calculated using thousand barrels daily figures.

Oil Natural gas liquids production in thousands of barrels per day*

Thousand barrels daily	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	513	525	595	597	647	680	660	669	708	713	**753**	5.6%	3.9%	5.3%
Mexico	355	320	302	276	235	217	205	170	158	164	**152**	-7.6%	-8.2%	1.1%
US	3015	3342	3509	3783	4369	4824	5175	5425	5933	6499	**6941**	6.8%	8.7%	49.2%
Total North America	**3883**	**4187**	**4407**	**4656**	**5252**	**5722**	**6039**	**6263**	**6800**	**7376**	**7846**	**6.4%**	**7.3%**	**55.6%**
Argentina	105	114	99	110	102	112	120	114	123	126	**118**	-5.9%	1.1%	0.8%
Brazil	87	88	97	110	104	102	90	86	91	98	**108**	10.4%	2.2%	0.8%
Colombia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Ecuador	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Guyana	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Peru	54	49	50	48	47	49	48	46	43	43	**45**	3.3%	-1.8%	0.3%
Trinidad & Tobago	33	30	25	27	24	23	20	17	15	14	**16**	14.7%	-6.9%	0.1%
Venezuela	114	117	105	104	88	80	52	49	47	44	**47**	5.0%	-8.6%	0.3%
Other S. & Cent. America	14	13	12	15	14	13	13	13	12	11	**10**	-8.2%	-3.4%	0.1%
Total S. & Cent. America	**407**	**411**	**389**	**414**	**379**	**378**	**342**	**325**	**331**	**336**	**343**	**2.2%**	**-1.7%**	**2.4%**
Denmark	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Italy	–	–	–	–	–	–	1	2	2	2	**3**	11.2%	–	†
Norway	324	338	349	352	335	301	293	253	199	206	**192**	-6.9%	-5.1%	1.4%
Romania	3	3	4	3	3	4	4	4	4	3	**3**	4.5%	2.0%	†
United Kingdom	62	60	82	92	90	99	88	67	67	56	**61**	10.1%	-0.2%	0.4%
Other Europe	14	13	15	18	18	17	15	16	15	15	**15**	2.1%	0.8%	0.1%
Total Europe	**404**	**415**	**449**	**466**	**446**	**420**	**401**	**342**	**286**	**283**	**275**	**-2.8%**	**-3.8%**	**1.9%**
Azerbaijan	2	1	1	1	1	1	1	1	1	3	**3**	-5.3%	4.5%	†
Kazakhstan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Russian Federation	448	470	479	476	479	493	474	544	533	521	**529**	1.7%	1.7%	3.8%
Turkmenistan	17	17	20	21	23	27	30	27	30	24	**23**	-5.1%	3.2%	0.2%
Uzbekistan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other CIS	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total CIS	**467**	**488**	**500**	**497**	**503**	**521**	**505**	**573**	**565**	**549**	**556**	**1.3%**	**1.8%**	**3.9%**
Iran	441	461	488	448	506	479	487	496	582	633	**722**	14.1%	5.0%	5.1%
Iraq	40	41	48	64	64	68	64	70	74	84	**90**	7.5%	8.4%	0.6%
Kuwait	276	288	290	305	313	299	283	292	316	312	**308**	-1.5%	1.1%	2.2%
Oman	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Qatar	466	470	473	450	471	470	427	441	462	476	**485**	1.8%	0.4%	3.4%
Saudi Arabia	1577	1578	1718	1717	1728	1687	1609	1560	1631	1652	**1653**	†	0.5%	11.7%
Syria	10	8	8	8	8	9	10	10	10	10	**9**	-3.0%	-0.8%	0.1%
United Arab Emirates	539	614	654	630	600	639	608	625	656	671	**690**	2.9%	2.5%	4.9%
Yemen	25	26	26	27	28	28	28	28	28	28	**28**	-0.3%	0.9%	0.2%
Other Middle East	10	10	10	10	11	19	18	15	16	16	**15**	-0.9%	4.2%	0.1%
Total Middle East	**3386**	**3494**	**3715**	**3659**	**3730**	**3697**	**3534**	**3536**	**3775**	**3881**	**3999**	**3.1%**	**1.7%**	**28.4%**
Algeria	260	268	261	254	252	247	233	248	265	272	**272**	-0.3%	0.4%	1.9%
Angola	30	16	23	39	40	47	47	47	47	47	**51**	9.1%	5.6%	0.4%
Chad	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Republic of Congo	8	7	7	7	7	7	7	7	7	7	**7**	–	-1.3%	†
Egypt	47	64	60	57	58	56	44	47	45	45	**44**	-1.2%	-0.6%	0.3%
Equatorial Guinea	19	17	19	21	19	17	15	12	13	10	**18**	78.7%	-0.3%	0.1%
Gabon	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Libya	15	11	11	14	27	36	34	46	49	49	**52**	6.7%	13.2%	0.4%
Nigeria	86	80	76	77	79	79	61	59	67	69	**84**	21.4%	-0.2%	0.6%
South Sudan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Sudan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Tunisia	5	5	7	6	5	4	4	5	3	5	**4**	-12.9%	-2.7%	†
Other Africa	–	–	–	–	1	1	1	1	1	1	**1**	-10.6%	–	†
Total Africa	**470**	**468**	**465**	**475**	**487**	**495**	**447**	**471**	**496**	**506**	**534**	**5.6%**	**1.3%**	**3.8%**
Australia	67	56	64	59	60	97	103	109	101	101	**99**	-1.3%	4.0%	0.7%
Brunei	12	11	12	13	12	12	10	8	9	9	**9**	-0.3%	-3.4%	0.1%
China	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
India	136	133	144	153	173	174	159	151	131	124	**126**	1.7%	-0.8%	0.9%
Indonesia	58	52	44	36	36	35	34	33	34	32	**33**	1.7%	-5.6%	0.2%
Malaysia	39	35	59	58	60	62	59	60	59	57	**57**	-1.0%	3.9%	0.4%
Thailand	231	233	231	247	247	246	219	221	185	188	**199**	6.1%	-1.5%	1.4%
Vietnam	10	9	10	9	13	12	12	11	11	13	**13**	0.7%	2.8%	0.1%
Other Asia Pacific	36	33	31	32	26	26	21	17	16	15	**13**	-11.3%	-9.6%	0.1%
Total Asia Pacific	**588**	**562**	**594**	**606**	**626**	**664**	**615**	**610**	**545**	**538**	**548**	**2.0%**	**-0.7%**	**3.9%**
Total World	**9605**	**10025**	**10520**	**10773**	**11423**	**11896**	**11883**	**12121**	**12798**	**13467**	**14101**	**4.7%**	**3.9%**	**100.0%**
of which: OECD	4356	4659	4916	5177	5753	6233	6536	6707	7180	7753	**8213**	5.9%	6.5%	58.2%
Non-OECD	5249	5366	5604	5596	5670	5663	5347	5414	5619	5714	**5889**	3.1%	1.2%	41.8%
OPEC	3376	3480	3676	3641	3684	3637	3454	3464	3707	3804	**3942**	3.6%	1.6%	28.0%
Non-OPEC	6229	6545	6843	7132	7739	8259	8430	8657	9091	9663	**10159**	5.1%	5.0%	72.0%
European Union	12	12	12	13	12	11	11	13	11	11	**12**	6.7%	0.2%	0.1%

Source: Includes data from FGE, FGE Iran Service, and ICIS.
* Includes ethane, LPG and naphtha separated from the production of natural gas. Excludes condensates.
† Less than 0.05%.
Note: Annual changes and shares of total are calculated using thousand barrels daily figures.

Oil Total liquids consumption in thousands of barrels per day*

Thousand barrels daily	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	2470	2492	2482	2458	2532	2540	2231	2279	2373	2400	**2420**	0.8%	-0.2%	2.3%
Mexico	2093	2044	2091	2044	1925	1825	1611	1777	1939	1851	**1862**	0.5%	-1.2%	1.8%
US	19100	19532	19692	19952	20512	20543	18186	19890	20010	20275	**20307**	0.2%	0.6%	19.4%
Total North America	**23663**	**24067**	**24265**	**24454**	**24968**	**24909**	**22027**	**23946**	**24322**	**24527**	**24588**	**0.3%**	**0.4%**	**23.5%**
Argentina	741	758	743	729	694	610	529	631	717	695	**639**	-8.1%	-1.5%	0.6%
Brazil	3290	3231	3039	3076	3034	3132	2923	3059	3158	3273	**3274**	†	-0.1%	3.1%
Chile	347	340	359	366	379	378	346	380	411	406	**428**	5.3%	2.1%	0.4%
Colombia	373	376	417	415	435	437	364	429	498	481	**474**	-1.4%	2.4%	0.5%
Ecuador	260	254	240	237	255	249	203	249	271	285	**291**	2.1%	1.1%	0.3%
Peru	221	236	251	257	264	272	211	260	272	280	**292**	4.3%	2.8%	0.3%
Trinidad & Tobago	40	44	45	40	34	35	30	30	32	33	**33**	2.2%	-1.9%	†
Venezuela	809	711	628	548	425	411	230	247	304	362	**325**	-10.1%	-8.7%	0.3%
Central America	384	422	438	455	452	489	389	446	470	498	**518**	3.9%	3.0%	0.5%
Other Caribbean	629	659	677	672	679	632	546	554	561	565	**584**	3.4%	-0.7%	0.6%
Other South America	203	209	220	224	233	240	215	250	255	258	**268**	4.1%	2.8%	0.3%
Total S. & Cent. America	**7299**	**7241**	**7056**	**7019**	**6885**	**6887**	**5987**	**6534**	**6949**	**7134**	**7126**	**-0.1%**	**-0.2%**	**6.8%**
Austria	255	258	264	265	270	276	239	253	243	243	**239**	-1.5%	-0.6%	0.2%
Belgium	606	619	625	632	679	639	557	618	601	586	**596**	1.6%	-0.2%	0.6%
Bulgaria	88	98	101	105	105	109	99	104	111	110	**113**	2.6%	2.5%	0.1%
Croatia	66	68	68	73	71	71	60	65	69	76	**81**	7.3%	2.1%	0.1%
Cyprus	46	47	51	53	52	52	44	46	49	49	**50**	2.4%	0.9%	†
Czech Republic	199	191	179	213	214	218	190	209	200	198	**208**	4.9%	0.4%	0.2%
Denmark	155	158	158	158	160	197	165	143	150	162	**163**	0.3%	0.4%	0.2%
Estonia	29	29	29	30	30	27	28	28	28	27	**26**	-1.8%	-1.0%	†
Finland	207	207	210	208	208	208	187	183	192	175	**171**	-2.1%	-1.9%	0.2%
France	1619	1646	1614	1644	1605	1600	1340	1448	1448	1435	**1433**	-0.1%	-1.2%	1.4%
Germany	2344	2336	2377	2536	2408	2431	2214	2197	2244	2111	**2119**	0.3%	-1.0%	2.0%
Greece	284	297	297	301	298	308	251	266	303	301	**304**	1.0%	0.7%	0.3%
Hungary	147	157	155	168	180	181	168	182	180	176	**178**	0.9%	1.9%	0.2%
Iceland	16	17	19	21	23	20	13	15	18	19	**20**	3.4%	2.6%	†
Ireland	141	146	152	153	158	159	134	145	154	154	**158**	2.0%	1.2%	0.2%
Italy	1309	1329	1299	1309	1342	1317	1086	1210	1325	1297	**1289**	-0.6%	-0.2%	1.2%
Latvia	35	37	38	38	35	40	35	37	35	35	**33**	-5.3%	-0.6%	†
Lithuania	53	57	62	65	69	69	65	66	67	69	**68**	-1.5%	2.5%	0.1%
Luxembourg	57	56	56	59	63	64	52	56	51	50	**51**	3.5%	-1.0%	†
Netherlands	944	923	939	948	932	904	866	866	851	858	**805**	-6.2%	-1.6%	0.8%
North Macedonia	19	20	23	22	23	23	21	22	24	24	**24**	2.2%	2.7%	†
Norway	219	225	222	228	234	226	210	215	217	226	**233**	2.7%	0.6%	0.2%
Poland	518	544	588	666	689	707	668	699	726	726	**740**	1.9%	3.6%	0.7%
Portugal	238	244	245	246	237	253	208	216	234	227	**222**	-2.5%	-0.7%	0.2%
Romania	185	189	200	211	212	224	216	231	235	242	**254**	5.0%	3.2%	0.2%
Slovakia	71	78	80	90	91	86	86	91	92	91	**89**	-1.2%	2.3%	0.1%
Slovenia	50	49	52	54	56	54	46	49	51	48	**47**	-1.9%	-0.7%	†
Spain	1188	1232	1266	1281	1312	1314	1059	1167	1289	1255	**1310**	4.4%	1.0%	1.3%
Sweden	298	295	310	315	286	291	262	294	275	272	**258**	-4.9%	-1.4%	0.2%
Switzerland	225	228	216	223	215	221	183	184	189	193	**193**	0.2%	-1.5%	0.2%
Türkiye	758	887	943	1017	1022	1029	973	1036	1075	1147	**1166**	1.7%	4.4%	1.1%
Ukraine	245	216	229	231	241	242	229	232	202	205	**208**	1.1%	-1.6%	0.2%
United Kingdom	1532	1551	1593	1615	1597	1559	1240	1254	1351	1375	**1388**	0.9%	-1.0%	1.3%
Other Europe	294	305	325	341	338	350	326	341	366	362	**367**	1.5%	2.2%	0.4%
Total Europe	**14438**	**14737**	**14986**	**15519**	**15454**	**15468**	**13520**	**14170**	**14646**	**14523**	**14602**	**0.5%**	**0.1%**	**13.9%**
Azerbaijan	100	100	99	100	114	115	105	120	126	131	**128**	-2.4%	2.5%	0.1%
Belarus	164	138	147	147	171	175	166	170	162	161	**162**	0.3%	-0.1%	0.2%
Kazakhstan	294	274	279	283	304	307	264	327	323	333	**346**	3.8%	1.6%	0.3%
Russian Federation	3365	3277	3329	3336	3363	3429	3308	3530	3623	3777	**3862**	2.2%	1.4%	3.7%
Turkmenistan	154	127	177	141	151	140	190	165	183	163	**162**	-0.1%	0.5%	0.2%
Uzbekistan	91	92	108	110	116	123	125	127	134	135	**137**	1.5%	4.2%	0.1%
Other CIS	76	80	87	84	96	88	86	95	100	103	**102**	-1.1%	3.0%	0.1%
Total CIS	**4244**	**4089**	**4226**	**4201**	**4314**	**4376**	**4245**	**4534**	**4652**	**4804**	**4900**	**2.0%**	**1.4%**	**4.7%**
Iran	1807	1604	1659	1706	1772	1858	1788	1897	1906	1931	**1953**	1.1%	0.8%	1.9%
Iraq	689	684	688	828	814	799	693	777	852	906	**925**	2.1%	3.0%	0.9%
Israel	200	211	217	227	230	232	201	210	226	220	**209**	-5.0%	0.4%	0.2%
Kuwait	494	503	480	489	511	493	465	515	482	496	**519**	4.7%	0.5%	0.5%
Oman	182	186	190	208	224	217	181	199	227	227	**217**	-4.2%	1.8%	0.2%
Qatar	315	357	375	341	351	372	294	318	364	388	**397**	2.4%	2.3%	0.4%
Saudi Arabia	3789	3964	4100	4052	3871	3632	3437	3600	3854	3900	**3959**	1.5%	0.4%	3.8%
United Arab Emirates	881	912	995	984	984	962	877	959	1100	1138	**1183**	4.0%	3.0%	1.1%
Other Middle East	681	584	540	576	602	590	538	522	524	531	**532**	0.4%	-2.4%	0.5%
Total Middle East	**9039**	**9008**	**9243**	**9410**	**9359**	**9156**	**8473**	**8996**	**9535**	**9736**	**9895**	**1.6%**	**0.9%**	**9.4%**
Algeria	401	425	412	408	413	430	385	405	418	440	**461**	4.9%	1.4%	0.4%
Egypt	801	817	843	809	727	692	607	654	756	741	**782**	5.6%	-0.2%	0.7%
Morocco	272	268	275	291	287	293	258	291	299	299	**316**	5.5%	1.5%	0.3%
South Africa	551	602	579	581	565	557	478	505	505	508	**470**	-7.6%	-1.6%	0.4%
Eastern Africa	537	581	599	641	674	705	628	681	704	719	**732**	1.7%	3.1%	0.7%
Middle Africa	287	281	259	249	251	266	226	271	285	294	**298**	1.2%	0.4%	0.3%
Western Africa	737	771	785	828	878	921	921	1000	1031	985	**1017**	3.3%	3.3%	1.0%
Other Northern Africa	357	318	297	330	334	326	304	346	381	410	**430**	4.9%	1.9%	0.4%
Other Southern Africa	51	54	54	53	58	56	51	54	56	57	**57**	0.6%	1.2%	0.1%
Total Africa	**3992**	**4116**	**4104**	**4189**	**4188**	**4247**	**3859**	**4207**	**4434**	**4453**	**4562**	**2.4%**	**1.3%**	**4.4%**
Australia	1032	1021	1021	1068	1081	1069	919	944	1003	1061	**1091**	2.7%	0.5%	1.0%
Bangladesh	128	155	160	181	208	204	172	233	275	233	**264**	13.5%	7.5%	0.3%
China	11106	11962	12370	13070	13727	14410	14479	14966	15048	16664	**16473**	-1.1%	4.0%	15.7%
China Hong Kong SAR	335	368	380	428	435	408	285	255	216	271	**307**	13.5%	-0.9%	0.3%
India	3872	4190	4595	4769	5033	5216	4772	4897	5289	5550	**5757**	3.7%	4.0%	5.5%
Indonesia	1608	1526	1510	1614	1685	1697	1550	1631	1777	1810	**1860**	2.8%	1.5%	1.8%
Japan	4389	4245	4117	4096	3956	3860	3427	3500	3516	3436	**3252**	-5.3%	-3.0%	3.1%
Malaysia	810	762	846	805	815	882	747	721	871	948	**966**	1.9%	1.8%	0.9%
New Zealand	154	160	166	174	175	179	148	148	147	157	**158**	0.9%	0.3%	0.2%
Pakistan	458	505	566	589	503	458	449	518	506	410	**424**	3.4%	-0.8%	0.4%
Philippines	348	398	428	461	472	481	395	427	467	480	**505**	5.1%	3.8%	0.5%
Singapore	1229	1291	1360	1384	1415	1389	1267	1250	1228	1408	**1492**	6.0%	2.0%	1.4%
South Korea	2482	2595	2823	2817	2815	2804	2645	2832	2871	2812	**2908**	3.4%	1.6%	2.8%
Sri Lanka	108	105	127	138	138	144	122	116	98	110	**116**	5.3%	0.7%	0.1%
Taiwan	995	1020	1021	1013	1009	952	909	961	883	835	**824**	-1.3%	-1.9%	0.8%
Thailand	1209	1213	1241	1291	1324	1343	1212	1212	1269	1268	**1304**	2.8%	0.8%	1.2%
Vietnam	385	450	488	531	580	614	556	525	614	658	**707**	7.4%	6.3%	0.7%
Other Asia Pacific	369	437	420	440	526	563	571	567	605	603	**629**	4.4%	5.5%	0.6%
Total Asia Pacific	**31019**	**32403**	**33641**	**34867**	**35895**	**36673**	**34625**	**35705**	**36683**	**38713**	**39037**	**0.8%**	**2.3%**	**37.3%**
Total World	**93693**	**95660**	**97521**	**99659**	**101063**	**101715**	**92736**	**98092**	**101221**	**103890**	**104710**	**0.8%**	**1.1%**	**100.0%**
of which: OECD	46185	46861	47429	48155	48508	48323	42652	45573	46643	46620	**46684**	0.1%	0.1%	44.6%
Non-OECD	47508	48799	50092	51504	52555	53392	50085	52519	54578	57270	**58026**	1.3%	2.0%	55.4%
European Union	11170	11331	11460	11870	11812	11851	10376	10914	11254	11024	**11051**	0.2%	-0.1%	10.6%

* Inland demand plus international aviation and marine bunkers and refinery fuel and loss. Consumption of biogasoline (such as ethanol), biodiesel and derivatives of coal and natural gas are also included.
† Less than 0.05%.
Notes: Differences between these world consumption figures and world production statistics are accounted for by stock changes, consumption of non-petroleum additives and substitute fuels and unavoidable disparities in the definition, measurement or conversion of oil supply and demand data.
Annual changes and shares of total are calculated using thousand barrels daily figures.

Oil Consumption in thousands of barrels per day*

Thousand barrels daily	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	2411	2435	2427	2395	2466	2475	2171	2215	2294	2312.7	**2333.2**	0.9%	-0.3%	2.3%
Mexico	2087	2038	2085	2038	1918	1818	1602	1770	1931	1843.2	**1853.3**	0.5%	-1.2%	1.8%
US	18111	18499	18593	18845	19417	19424	17183	18785	18862	19013.8	**18995.0**	-0.1%	0.5%	18.7%
Total North America	**22609**	**22972**	**23105**	**23278**	**23801**	**23716**	**20957**	**22770**	**23088**	**23169.8**	**23181.5**	**0.1%**	**0.3%**	**22.9%**
Argentina	711	725	707	688	654	570	507	605	683	664.0	**604.3**	-9.0%	-1.6%	0.6%
Brazil	2770	2622	2489	2516	2389	2417	2268	2413	2513	2577.3	**2575.2**	-0.1%	-0.7%	2.5%
Chile	347	340	359	366	379	378	346	380	411	406.5	**428.1**	5.3%	2.1%	0.4%
Colombia	356	358	400	398	414	414	345	408	478	456.1	**449.0**	-1.5%	2.3%	0.4%
Ecuador	260	254	239	236	255	249	203	248	271	284.4	**290.3**	2.1%	1.1%	0.3%
Peru	213	227	241	246	254	262	201	248	260	267.6	**279.6**	4.5%	2.8%	0.3%
Trinidad & Tobago	40	44	45	40	34	35	30	30	32	32.5	**33.2**	2.2%	-1.9%	†
Venezuela	809	711	628	548	425	411	230	247	304	361.6	**325.1**	-10.1%	-8.7%	0.3%
Central America	383	421	437	453	451	488	388	445	470	497.1	**516.7**	3.9%	3.0%	0.5%
Other Caribbean	619	650	667	663	669	623	537	545	553	556.1	**575.1**	3.4%	-0.7%	0.6%
Other South America	198	203	213	217	225	231	207	241	247	250.1	**259.3**	3.7%	2.7%	0.3%
Total S. & Cent. America	**6707**	**6555**	**6425**	**6371**	**6150**	**6079**	**5262**	**5811**	**6220**	**6353.4**	**6336.1**	**-0.3%**	**-0.6%**	**6.2%**
Austria	244	247	253	254	259	265	230	244	234	231.5	**228.2**	-1.4%	-0.7%	0.2%
Belgium	597	613	615	620	668	628	541	600	583	567.7	**577.0**	1.6%	-0.3%	0.6%
Bulgaria	85	95	97	102	101	105	95	100	107	106.0	**108.6**	2.4%	2.4%	0.1%
Croatia	65	68	68	73	71	69	59	63	68	75.6	**81.2**	7.3%	2.2%	0.1%
Cyprus	45	46	51	52	52	52	44	45	48	48.1	**49.2**	2.3%	0.8%	†
Czech Republic	192	184	172	205	207	209	181	201	193	191.0	**199.5**	4.5%	0.4%	0.2%
Denmark	150	153	153	153	154	189	156	136	144	156.3	**157.1**	0.5%	0.5%	0.2%
Estonia	29	29	29	30	30	27	27	27	28	26.5	**25.9**	-2.1%	-1.2%	†
Finland	197	196	206	200	200	199	178	168	179	161.3	**157.1**	-2.6%	-2.2%	0.2%
France	1553	1579	1547	1577	1538	1528	1288	1388	1381	1364.2	**1359.7**	-0.3%	-1.3%	1.3%
Germany	2273	2269	2310	2468	2337	2362	2132	2122	2169	2033.9	**2051.5**	0.9%	-1.0%	2.0%
Greece	281	294	293	298	294	304	246	261	297	295.2	**298.3**	1.1%	0.6%	0.3%
Hungary	142	153	150	164	175	176	161	175	172	168.5	**170.6**	1.3%	1.9%	0.2%
Iceland	16	17	19	21	23	19	13	14	18	18.9	**19.6**	3.4%	2.3%	†
Ireland	138	143	150	149	155	154	130	141	149	147.5	**148.7**	0.8%	0.8%	0.1%
Italy	1286	1303	1276	1286	1314	1289	1059	1179	1295	1267.4	**1262.5**	-0.4%	-0.2%	1.2%
Latvia	34	36	37	38	34	39	34	36	34	34.3	**32.4**	-5.4%	-0.5%	†
Lithuania	51	56	61	63	67	67	62	63	64	65.7	**64.1**	-2.5%	2.3%	0.1%
Luxembourg	55	54	54	57	60	61	49	53	48	46.7	**48.2**	3.1%	-1.3%	†
Netherlands	934	915	932	939	917	887	846	846	826	834.4	**784.7**	-6.0%	-1.7%	0.8%
North Macedonia	19	20	23	22	23	23	21	22	24	24.0	**24.5**	2.2%	2.7%	†
Norway	216	221	215	217	226	215	201	206	209	217.3	**222.2**	2.3%	0.3%	0.2%
Poland	501	528	576	650	667	683	644	674	698	694.5	**704.7**	1.5%	3.5%	0.7%
Portugal	232	236	239	240	231	247	203	209	227	219.6	**213.1**	-3.0%	-0.8%	0.2%
Romania	181	184	193	204	204	215	206	221	224	231.3	**242.2**	4.7%	2.9%	0.2%
Slovakia	68	74	77	86	87	83	83	87	88	86.5	**85.3**	-1.4%	2.3%	0.1%
Slovenia	49	49	52	53	54	52	43	47	49	45.7	**45.2**	-1.2%	-0.8%	†
Spain	1159	1202	1233	1243	1262	1265	1016	1123	1247	1198.8	**1269.9**	5.9%	0.9%	1.3%
Sweden	282	277	288	294	261	266	237	266	240	239.8	**248.7**	3.7%	-1.2%	0.2%
Switzerland	225	227	214	220	211	216	179	180	185	188.3	**188.0**	-0.2%	-1.8%	0.2%
Türkiye	755	884	940	1014	1018	1025	970	1033	1072	1143.0	**1162.5**	1.7%	4.4%	1.1%
Ukraine	244	215	228	230	240	239	227	230	201	203.8	**206.0**	1.1%	-1.7%	0.2%
United Kingdom	1501	1526	1568	1590	1563	1515	1200	1216	1299	1315.5	**1325.1**	0.7%	-1.2%	1.3%
Other Europe	294	305	324	341	338	350	325	341	366	361.6	**366.9**	1.5%	2.2%	0.4%
Total Europe	**14091**	**14395**	**14644**	**15151**	**15041**	**15024**	**13084**	**13717**	**14165**	**14010.5**	**14128.1**	**0.8%**	**†**	**13.9%**
Azerbaijan	100	100	99	100	114	115	105	120	126	131.3	**128.2**	-2.4%	2.5%	0.1%
Belarus	163	137	147	147	171	174	166	170	162	161.5	**161.9**	0.3%	-0.1%	0.2%
Kazakhstan	294	274	279	283	304	307	264	327	323	333.5	**346.3**	3.8%	1.6%	0.3%
Russian Federation	3365	3277	3328	3334	3360	3425	3304	3523	3614	3765.0	**3846.3**	2.2%	1.3%	3.8%
Turkmenistan	154	127	177	141	151	140	190	165	183	162.5	**162.4**	-0.1%	0.5%	0.2%
Uzbekistan	91	92	108	110	116	123	125	127	134	135.2	**137.3**	1.5%	4.2%	0.1%
Other CIS	76	80	87	84	96	88	86	95	100	103.0	**102.0**	-1.1%	3.0%	0.1%
Total CIS	**4243**	**4088**	**4225**	**4199**	**4311**	**4372**	**4240**	**4527**	**4642**	**4792.1**	**4884.3**	**1.9%**	**1.4%**	**4.8%**
Iran	1807	1604	1659	1706	1772	1858	1788	1897	1906	1931.3	**1953.3**	1.1%	0.8%	1.9%
Iraq	689	684	688	828	814	799	693	777	852	906.0	**924.8**	2.1%	3.0%	0.9%
Israel	199	211	216	226	229	231	199	209	224	218.2	**206.9**	-5.1%	0.4%	0.2%
Kuwait	494	503	480	489	511	493	465	515	482	495.9	**519.2**	4.7%	0.5%	0.5%
Oman	182	186	190	208	224	217	181	199	227	226.9	**217.4**	-4.2%	1.8%	0.2%
Qatar	315	357	375	341	351	372	294	318	364	387.9	**397.3**	2.4%	2.3%	0.4%
Saudi Arabia	3789	3964	4100	4052	3871	3632	3437	3600	3854	3899.9	**3958.6**	1.5%	0.4%	3.9%
United Arab Emirates	881	912	995	984	984	962	877	959	1100	1137.7	**1183.3**	4.0%	3.0%	1.2%
Other Middle East	681	584	540	576	602	590	538	522	524	530.5	**532.5**	0.4%	-2.4%	0.5%
Total Middle East	**9038**	**9007**	**9242**	**9410**	**9358**	**9155**	**8472**	**8995**	**9533**	**9734.2**	**9893.3**	**1.6%**	**0.9%**	**9.8%**
Algeria	401	425	412	408	413	430	385	405	418	439.9	**461.4**	4.9%	1.4%	0.5%
Egypt	801	817	843	809	727	692	607	654	756	740.5	**781.7**	5.6%	-0.2%	0.8%
Morocco	272	268	275	291	287	293	258	291	299	299.3	**315.8**	5.5%	1.5%	0.3%
South Africa	549	600	577	579	563	554	475	502	501	505.2	**466.6**	-7.6%	-1.6%	0.5%
Eastern Africa	536	580	599	641	673	705	627	681	704	718.9	**731.1**	1.7%	3.2%	0.7%
Middle Africa	287	281	259	249	251	266	226	271	285	294.2	**297.7**	1.2%	0.4%	0.3%
Western Africa	737	771	785	828	878	921	921	1000	1031	985.0	**1017.3**	3.3%	3.3%	1.0%
Other Northern Africa	357	318	297	330	334	326	304	346	381	410.0	**430.1**	4.9%	1.9%	0.4%
Other Southern Africa	51	54	54	53	58	56	51	54	56	56.6	**56.9**	0.6%	1.2%	0.1%
Total Africa	**3990**	**4114**	**4102**	**4187**	**4185**	**4243**	**3855**	**4203**	**4430**	**4449.6**	**4558.7**	**2.5%**	**1.3%**	**4.5%**
Australia	1025	1016	1017	1063	1076	1064	915	941	999	1057.8	**1087.0**	2.8%	0.6%	1.1%
Bangladesh	128	155	160	181	208	204	172	233	275	232.9	**264.4**	13.5%	7.5%	0.3%
China	11018	11890	12297	13003	13641	14316	14404	14888	14970	16578.7	**16373.5**	-1.2%	4.0%	16.1%
China Hong Kong SAR	335	367	379	427	433	407	283	254	214	268.2	**304.6**	13.6%	-0.9%	0.3%
India	3865	4181	4574	4754	5004	5179	4738	4841	5209	5452.1	**5620.5**	3.1%	3.8%	5.5%
Indonesia	1576	1510	1459	1570	1621	1587	1406	1471	1597	1598.3	**1633.2**	2.2%	0.4%	1.6%
Japan	4380	4234	4103	4083	3941	3846	3412	3485	3502	3421.5	**3237.9**	-5.4%	-3.0%	3.2%
Malaysia	803	754	838	797	806	868	729	703	845	919.1	**934.4**	1.7%	1.5%	0.9%
New Zealand	154	160	165	174	175	179	148	148	147	156.7	**158.1**	0.9%	0.3%	0.2%
Pakistan	458	505	566	589	503	458	449	518	506	410.0	**423.8**	3.4%	-0.8%	0.4%
Philippines	338	386	415	446	457	465	381	412	451	462.8	**486.6**	5.1%	3.7%	0.5%
Singapore	1229	1291	1360	1384	1415	1389	1267	1250	1228	1407.6	**1491.9**	6.0%	2.0%	1.5%
South Korea	2473	2586	2811	2804	2800	2789	2630	2816	2856	2796.5	**2891.5**	3.4%	1.6%	2.9%
Sri Lanka	108	105	127	138	138	144	122	116	98	109.7	**115.5**	5.3%	0.7%	0.1%
Taiwan	995	1020	1021	1012	1009	952	909	961	883	834.8	**823.9**	-1.3%	-1.9%	0.8%
Thailand	1169	1171	1197	1243	1272	1285	1154	1160	1221	1216.9	**1252.8**	2.9%	0.7%	1.2%
Vietnam	385	450	488	531	580	614	556	525	614	658.5	**706.9**	7.4%	6.3%	0.7%
Other Asia Pacific	369	437	420	440	526	563	571	567	605	602.7	**629.4**	4.4%	5.5%	0.6%
Total Asia Pacific	**30808**	**32216**	**33400**	**34639**	**35603**	**36309**	**34248**	**35291**	**36218**	**38184.7**	**38436.1**	**0.7%**	**2.2%**	**37.9%**
Total World	**91488**	**93347**	**95142**	**97234**	**98449**	**98898**	**90118**	**95314**	**98297**	**100694.2**	**101418.0**	**0.7%**	**1.0%**	**100.0%**
of which: OECD	44750	45389	45891	46577	46885	46648	41110	43908	44890	44708.3	**44760.4**	0.1%	†	44.1%
Non-OECD	46738	47958	49251	50658	51564	52250	49008	51406	53407	55985.9	**56657.6**	1.2%	1.9%	55.9%
European Union	10862	11022	11157	11547	11451	11473	9997	10518	10841	10590.2	**10661.4**	0.7%	-0.2%	10.5%

* Inland demand plus international aviation and marine bunkers and refinery fuel and loss. Consumption of biogasoline (such as ethanol) and biodiesel are excluded while derivatives of coal and natural gas are included.
† Less than 0.05%.

Notes: Differences between these world consumption figures and world production statistics are accounted for by stock changes, consumption of non-petroleum additives and substitute fuels and unavoidable disparities in the definition, measurement or conversion of oil supply and demand data.
Annual changes and shares of total are calculated using thousand barrels daily figures.

Oil Consumption in exajoules*

Exajoules	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	4.59	4.61	4.56	4.51	4.66	4.64	4.01	4.12	4.27	4.3	**4.4**	1.0%	-0.5%	2.2%
Mexico	4.04	3.92	4.02	3.93	3.68	3.51	3.02	3.44	3.77	3.6	**3.6**	0.6%	-1.1%	1.8%
US	34.89	35.61	35.88	36.23	37.09	37.04	32.53	35.53	35.75	35.9	**35.8**	-0.5%	0.3%	18.0%
Total North America	**43.53**	**44.13**	**44.45**	**44.66**	**45.43**	**45.18**	**39.56**	**43.09**	**43.80**	**43.8**	**43.8**	**-0.2%**	**0.1%**	**22.0%**
Argentina	1.42	1.44	1.40	1.36	1.28	1.15	1.02	1.23	1.38	1.3	**1.2**	-8.8%	-1.5%	0.6%
Brazil	5.55	5.24	4.97	5.00	4.74	4.81	4.53	4.82	5.00	5.1	**5.1**	-0.1%	-0.8%	2.6%
Chile	0.70	0.68	0.72	0.73	0.76	0.76	0.69	0.76	0.82	0.8	**0.9**	5.3%	2.1%	0.4%
Colombia	0.72	0.72	0.81	0.80	0.84	0.83	0.69	0.82	0.96	0.9	**0.9**	-1.1%	2.4%	0.5%
Ecuador	0.53	0.51	0.48	0.47	0.51	0.49	0.40	0.49	0.54	0.6	**0.6**	2.3%	1.1%	0.3%
Peru	0.41	0.44	0.47	0.48	0.49	0.51	0.39	0.48	0.50	0.5	**0.5**	4.6%	2.7%	0.3%
Trinidad & Tobago	0.09	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.07	0.1	**0.1**	1.7%	-2.1%	†
Venezuela	1.63	1.42	1.25	1.08	0.86	0.84	0.49	0.52	0.63	0.8	**0.7**	-10.4%	-8.3%	0.3%
Central America	0.80	0.88	0.91	0.94	0.93	1.01	0.80	0.91	0.96	1.0	**1.1**	3.6%	2.8%	0.5%
Other Caribbean	1.29	1.36	1.40	1.37	1.39	1.31	1.14	1.14	1.16	1.2	**1.2**	3.6%	-0.8%	0.6%
Other South America	0.40	0.41	0.43	0.43	0.45	0.46	0.42	0.48	0.49	0.5	**0.5**	3.7%	2.8%	0.3%
Total S. & Cent. America	**13.52**	**13.20**	**12.93**	**12.75**	**12.33**	**12.26**	**10.61**	**11.71**	**12.52**	**12.8**	**12.8**	**-0.3%**	**-0.6%**	**6.4%**
Austria	0.51	0.51	0.53	0.53	0.54	0.55	0.48	0.50	0.49	0.5	**0.5**	-1.9%	-0.7%	0.2%
Belgium	1.22	1.25	1.27	1.29	1.38	1.29	1.11	1.23	1.19	1.2	**1.2**	1.6%	-0.4%	0.6%
Bulgaria	0.17	0.19	0.20	0.20	0.20	0.21	0.19	0.20	0.22	0.2	**0.2**	2.8%	2.5%	0.1%
Croatia	0.14	0.14	0.14	0.15	0.15	0.14	0.12	0.13	0.14	0.2	**0.2**	7.3%	2.2%	0.1%
Cyprus	0.10	0.10	0.11	0.11	0.11	0.11	0.09	0.10	0.10	0.1	**0.1**	2.3%	0.8%	0.1%
Czech Republic	0.39	0.38	0.35	0.42	0.42	0.42	0.37	0.41	0.39	0.4	**0.4**	4.4%	0.4%	0.2%
Denmark	0.31	0.32	0.32	0.32	0.32	0.39	0.33	0.29	0.30	0.3	**0.3**	1.3%	0.3%	0.2%
Estonia	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.1	**0.1**	-2.1%	-1.3%	†
Finland	0.39	0.39	0.41	0.40	0.40	0.39	0.35	0.33	0.35	0.3	**0.3**	-2.9%	-2.2%	0.2%
France	3.20	3.25	3.20	3.25	3.17	3.14	2.65	2.85	2.84	2.8	**2.8**	-0.5%	-1.4%	1.4%
Germany	4.67	4.67	4.76	5.07	4.81	4.86	4.40	4.36	4.47	4.2	**4.2**	0.7%	-1.0%	2.1%
Greece	0.59	0.61	0.61	0.63	0.62	0.64	0.52	0.55	0.62	0.6	**0.6**	0.9%	0.6%	0.3%
Hungary	0.28	0.30	0.30	0.33	0.35	0.35	0.32	0.35	0.35	0.3	**0.3**	1.1%	2.0%	0.2%
Iceland	0.03	0.04	0.04	0.04	0.05	0.04	0.03	0.03	0.04	^	**^**	3.4%	2.3%	†
Ireland	0.28	0.29	0.31	0.31	0.32	0.32	0.27	0.29	0.31	0.3	**0.3**	0.8%	0.8%	0.2%
Italy	2.61	2.65	2.60	2.60	2.66	2.61	2.15	2.39	2.63	2.6	**2.6**	-0.5%	-0.2%	1.3%
Latvia	0.07	0.07	0.08	0.08	0.07	0.08	0.07	0.07	0.07	0.1	**0.1**	-5.0%	-0.6%	†
Lithuania	0.11	0.12	0.13	0.13	0.14	0.14	0.13	0.13	0.13	0.1	**0.1**	-2.3%	2.4%	0.1%
Luxembourg	0.11	0.11	0.11	0.12	0.12	0.13	0.10	0.11	0.10	0.1	**0.1**	2.8%	-1.4%	0.1%
Netherlands	1.87	1.82	1.86	1.87	1.82	1.78	1.69	1.69	1.66	1.7	**1.6**	-6.9%	-1.8%	0.8%
North Macedonia	0.04	0.04	0.05	0.04	0.05	0.05	0.04	0.05	0.05	^	**0.1**	1.2%	2.8%	†
Norway	0.41	0.42	0.41	0.40	0.42	0.40	0.37	0.38	0.39	0.4	**0.4**	-0.7%	-0.6%	0.2%
Poland	1.00	1.05	1.16	1.31	1.34	1.37	1.29	1.35	1.40	1.4	**1.4**	1.2%	3.6%	0.7%
Portugal	0.47	0.48	0.49	0.49	0.47	0.50	0.41	0.42	0.46	0.5	**0.4**	-2.7%	-0.5%	0.2%
Romania	0.37	0.38	0.39	0.41	0.41	0.43	0.42	0.45	0.46	0.5	**0.5**	4.8%	3.0%	0.2%
Slovakia	0.14	0.15	0.16	0.18	0.18	0.17	0.17	0.18	0.18	0.2	**0.2**	-0.5%	2.4%	0.1%
Slovenia	0.10	0.10	0.11	0.11	0.11	0.11	0.09	0.10	0.10	0.1	**0.1**	-1.0%	-0.8%	†
Spain	2.44	2.52	2.59	2.61	2.64	2.65	2.13	2.35	2.61	2.5	**2.7**	6.0%	0.9%	1.3%
Sweden	0.56	0.55	0.57	0.58	0.51	0.52	0.48	0.53	0.48	0.5	**0.5**	4.3%	-1.3%	0.2%
Switzerland	0.46	0.47	0.44	0.45	0.43	0.44	0.37	0.37	0.38	0.4	**0.4**	-0.2%	-1.8%	0.2%
Türkiye	1.52	1.80	1.92	2.08	2.09	2.08	1.97	2.09	2.18	2.3	**2.4**	1.7%	4.5%	1.2%
Ukraine	0.48	0.43	0.45	0.45	0.47	0.46	0.44	0.44	0.39	0.4	**0.4**	1.1%	-1.9%	0.2%
United Kingdom	3.02	3.06	3.15	3.18	3.13	3.05	2.40	2.45	2.63	2.7	**2.7**	0.1%	-1.2%	1.3%
Other Europe	0.63	0.65	0.69	0.73	0.72	0.75	0.70	0.73	0.78	0.8	**0.8**	1.4%	2.3%	0.4%
Total Europe	**28.77**	**29.39**	**29.96**	**30.93**	**30.69**	**30.64**	**26.72**	**27.96**	**28.95**	**28.6**	**28.9**	**0.7%**	**†**	**14.5%**
Azerbaijan	0.20	0.20	0.20	0.20	0.23	0.23	0.21	0.24	0.25	0.3	**0.3**	-1.8%	2.6%	0.1%
Belarus	0.34	0.28	0.30	0.30	0.35	0.36	0.34	0.35	0.33	0.3	**0.3**	0.4%	-0.1%	0.2%
Kazakhstan	0.60	0.56	0.57	0.57	0.61	0.62	0.54	0.66	0.65	0.7	**0.7**	3.4%	1.4%	0.3%
Russian Federation	6.75	6.52	6.62	6.60	6.66	6.80	6.54	6.95	7.14	7.5	**7.7**	2.2%	1.3%	3.9%
Turkmenistan	0.30	0.25	0.35	0.27	0.29	0.26	0.37	0.31	0.35	0.3	**0.3**	0.2%	0.2%	0.2%
Uzbekistan	0.16	0.16	0.19	0.19	0.20	0.21	0.22	0.23	0.24	0.2	**0.2**	0.4%	3.9%	0.1%
Other CIS	0.15	0.16	0.17	0.16	0.19	0.17	0.17	0.18	0.19	0.2	**0.2**	-1.4%	2.8%	0.1%
Total CIS	**8.50**	**8.13**	**8.40**	**8.30**	**8.54**	**8.65**	**8.38**	**8.92**	**9.14**	**9.5**	**9.7**	**1.9%**	**1.3%**	**4.9%**
Iran	3.57	3.11	3.20	3.23	3.36	3.55	3.42	3.64	3.66	3.7	**3.8**	1.0%	0.5%	1.9%
Iraq	1.42	1.41	1.43	1.72	1.70	1.65	1.43	1.60	1.76	1.9	**1.9**	2.3%	3.1%	1.0%
Israel	0.39	0.42	0.43	0.45	0.45	0.46	0.40	0.41	0.45	0.4	**0.4**	-5.3%	0.5%	0.2%
Kuwait	0.92	0.95	0.91	0.92	0.96	0.92	0.86	0.97	0.90	0.9	**1.0**	6.1%	0.8%	0.5%
Oman	0.37	0.38	0.39	0.42	0.45	0.44	0.36	0.40	0.46	0.5	**0.4**	-2.8%	1.9%	0.2%
Qatar	0.49	0.57	0.61	0.55	0.56	0.61	0.46	0.50	0.59	0.6	**0.7**	3.7%	3.0%	0.3%
Saudi Arabia	7.05	7.43	7.65	7.52	7.12	6.67	6.32	6.60	7.11	7.2	**7.4**	1.5%	0.5%	3.7%
United Arab Emirates	1.70	1.76	1.91	1.90	1.89	1.86	1.67	1.85	2.13	2.2	**2.3**	4.0%	3.0%	1.2%
Other Middle East	1.39	1.19	1.10	1.18	1.23	1.20	1.10	1.06	1.06	1.1	**1.1**	0.2%	-2.6%	0.5%
Total Middle East	**17.31**	**17.23**	**17.63**	**17.88**	**17.73**	**17.37**	**16.02**	**17.03**	**18.11**	**18.6**	**18.9**	**1.7%**	**0.9%**	**9.5%**
Algeria	0.80	0.85	0.83	0.81	0.82	0.85	0.76	0.80	0.82	0.9	**0.9**	5.1%	1.2%	0.5%
Egypt	1.64	1.67	1.73	1.64	1.46	1.38	1.20	1.29	1.53	1.5	**1.6**	6.0%	-0.3%	0.8%
Morocco	0.54	0.52	0.54	0.57	0.55	0.56	0.49	0.56	0.57	0.6	**0.6**	6.0%	1.2%	0.3%
South Africa	1.14	1.24	1.19	1.20	1.16	1.14	0.99	1.04	1.04	1.0	**1.0**	-7.9%	-1.6%	0.5%
Eastern Africa	1.09	1.18	1.22	1.31	1.37	1.44	1.28	1.38	1.43	1.5	**1.5**	1.5%	3.1%	0.7%
Middle Africa	0.59	0.58	0.53	0.50	0.50	0.53	0.44	0.53	0.56	0.6	**0.6**	1.1%	†	0.3%
Western Africa	1.48	1.54	1.58	1.66	1.75	1.84	1.84	1.99	2.05	2.0	**2.0**	3.6%	3.3%	1.0%
Other Northern Africa	0.73	0.65	0.61	0.67	0.68	0.66	0.61	0.70	0.77	0.8	**0.9**	4.7%	1.7%	0.4%
Other Southern Africa	0.10	0.11	0.11	0.11	0.12	0.11	0.10	0.11	0.11	0.1	**0.1**	0.6%	1.2%	0.1%
Total Africa	**8.11**	**8.35**	**8.34**	**8.46**	**8.42**	**8.51**	**7.72**	**8.40**	**8.89**	**8.9**	**9.2**	**2.5%**	**1.2%**	**4.6%**
Australia	2.07	2.05	2.06	2.16	2.20	2.18	1.88	1.93	2.05	2.2	**2.2**	2.7%	0.8%	1.1%
Bangladesh	0.28	0.33	0.35	0.39	0.45	0.44	0.37	0.51	0.60	0.5	**0.6**	14.8%	7.7%	0.3%
China	22.11	23.80	24.56	25.86	27.10	28.41	28.65	29.43	29.51	32.7	**32.3**	-1.7%	3.9%	16.2%
China Hong Kong SAR	0.71	0.78	0.81	0.92	0.93	0.87	0.61	0.54	0.46	0.6	**0.7**	13.3%	-0.9%	0.3%
India	7.65	8.27	9.05	9.32	9.74	10.05	9.14	9.32	10.10	10.6	**10.9**	2.8%	3.6%	5.5%
Indonesia	3.10	2.96	2.85	3.06	3.16	3.08	2.71	2.83	3.09	3.1	**3.2**	2.2%	0.2%	1.6%
Japan	8.72	8.41	8.17	8.08	7.80	7.60	6.76	6.88	6.93	6.8	**6.4**	-5.6%	-3.0%	3.2%
Malaysia	1.55	1.44	1.60	1.50	1.53	1.66	1.38	1.34	1.62	1.8	**1.8**	2.0%	1.5%	0.9%
New Zealand	0.32	0.33	0.34	0.36	0.36	0.37	0.30	0.30	0.30	0.3	**0.3**	0.8%	0.2%	0.2%
Pakistan	0.97	1.06	1.18	1.22	1.03	0.92	0.90	1.04	1.02	0.8	**0.8**	2.3%	-1.6%	0.4%
Philippines	0.68	0.78	0.84	0.89	0.91	0.93	0.75	0.81	0.89	0.9	**1.0**	4.9%	3.5%	0.5%
Singapore	2.70	2.84	3.00	3.06	3.10	3.03	2.81	2.77	2.72	3.1	**3.3**	6.2%	2.0%	1.7%
South Korea	4.79	5.02	5.47	5.42	5.40	5.35	5.06	5.40	5.47	5.4	**5.5**	3.1%	1.5%	2.8%
Sri Lanka	0.22	0.21	0.26	0.28	0.28	0.29	0.25	0.24	0.20	0.2	**0.2**	5.0%	0.5%	0.1%
Taiwan	1.94	1.99	2.00	1.98	1.96	1.85	1.77	1.87	1.72	1.6	**1.6**	-1.2%	-1.8%	0.8%
Thailand	2.13	2.18	2.25	2.32	2.37	2.40	2.16	2.16	2.32	2.3	**2.4**	2.9%	1.1%	1.2%
Vietnam	0.77	0.90	0.98	1.06	1.15	1.22	1.11	1.04	1.21	1.3	**1.4**	7.1%	6.1%	0.7%
Other Asia Pacific	0.76	0.89	0.85	0.89	1.07	1.14	1.15	1.14	1.21	1.2	**1.3**	4.3%	5.3%	0.6%
Total Asia Pacific	**61.47**	**64.23**	**66.63**	**68.77**	**70.53**	**71.77**	**67.76**	**69.54**	**71.42**	**75.3**	**75.9**	**0.4%**	**2.1%**	**38.1%**
Total World	**181.21**	**184.66**	**188.33**	**191.75**	**193.65**	**194.39**	**176.76**	**186.65**	**192.82**	**197.4**	**199.1**	**0.6%**	**0.9%**	**100.0%**
of which: OECD	88.17	89.33	90.49	91.59	91.93	91.33	80.15	85.57	87.71	87.1	**87.2**	-0.1%	-0.1%	43.8%
Non-OECD	93.04	95.33	97.84	100.16	101.72	103.06	96.62	101.08	105.12	110.3	**111.8**	1.1%	1.9%	56.2%
European Union	22.26	22.59	22.91	23.66	23.45	23.50	20.51	21.52	22.23	21.7	**21.9**	0.6%	-0.2%	11.0%

* Inland demand plus international aviation and marine bunkers and refinery fuel and loss. Consumption of biogasoline (such as ethanol) and biodiesel are excluded while derivatives of coal and natural gas are included.
† Less than 0.05%.
Notes: Differences between these world consumption figures and world production statistics are accounted for by stock changes, consumption of non-petroleum additives and substitute fuels and unavoidable disparities in the definition, measurement or conversion of oil supply and demand data.
Annual changes and shares of total are calculated using exajoules figures. Growth rates are adjusted for leap years.

Oil Regional consumption – by product group

Thousand barrels daily	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
North America														
Light distillates	9914	10138	10310	10244	10234	10143	8715	9424	9474	9596	**9581**	-0.2%	-0.3%	9.4%
of which: gasoline	9566	9801	9965	9945	9932	9861	8450	9158	9250	9362	**9361**	†	-0.2%	9.2%
of which: naphtha	348	337	345	298	303	282	265	266	224	234	**220**	-6.1%	-4.5%	0.2%
Middle distillates	6678	6762	6619	6778	7076	6957	5745	6390	6653	6509	**6391**	-1.8%	-0.4%	6.3%
of which: diesel/gasoil	5001	4995	4777	4859	5112	4958	4540	4863	4866	4601	**4435**	-3.6%	-1.2%	4.4%
of which: jet/kerosene	1676	1767	1842	1920	1964	1999	1205	1526	1787	1908	**1956**	2.5%	1.6%	1.9%
Fuel oil	468	442	516	548	495	435	310	462	472	415	**395**	-4.7%	-1.7%	0.4%
Others	5549	5630	5659	5709	5996	6180	6187	6493	6489	6650	**6814**	2.5%	2.1%	6.7%
of which: ethane and LPG	3292	3361	3428	3453	3789	3836	4013	4084	4014	4175	**4255**	1.9%	2.6%	4.2%
Total North America	22609	22972	23105	23278	23801	23716	20957	22770	23088	23170	**23182**	0.1%	0.3%	22.9%
of which: US														
Light distillates	8287	8503	8613	8621	8633	8579	7419	8103	8045	8170	**8159**	-0.1%	-0.2%	8.0%
of which: gasoline	8056	8280	8394	8393	8400	8372	7235	7917	7907	8028	**8027**	†	†	7.9%
of which: naphtha	231	223	219	228	233	207	185	185	139	142	**133**	-6.5%	-5.4%	0.1%
Middle distillates	5519	5534	5438	5580	5815	5793	4793	5254	5417	5303	**5167**	-2.6%	-0.7%	5.1%
of which: diesel/gasoil	4040	3979	3815	3893	4103	4043	3709	3878	3852	3639	**3464**	-4.8%	-1.5%	3.4%
of which: jet/kerosene	1479	1555	1623	1687	1712	1750	1084	1376	1565	1664	**1704**	2.4%	1.4%	1.7%
Fuel oil	256	258	325	341	317	275	208	314	329	274	**288**	5.1%	1.2%	0.3%
Others	4049	4204	4216	4303	4652	4777	4763	5114	5071	5268	**5380**	2.1%	2.9%	5.3%
of which: ethane and LPG	2447	2493	2516	2570	2921	2967	3056	3228	3148	3286	**3380**	2.8%	3.3%	3.3%
Total US	18111	18499	18593	18845	19417	19424	17183	18785	18862	19014	**18995**	-0.1%	0.5%	18.7%
S. & Cent. America														
Light distillates	1752	1710	1724	1769	1652	1664	1333	1567	1724	1768	**1740**	-1.6%	-0.1%	1.7%
of which: gasoline	1539	1478	1503	1532	1439	1438	1165	1374	1496	1562	**1538**	-1.5%	†	1.5%
of which: naphtha	213	232	221	237	213	226	168	193	228	206	**202**	-1.8%	-0.5%	0.2%
Middle distillates	2686	2636	2572	2536	2581	2580	2202	2463	2672	2705	**2730**	0.9%	0.2%	2.7%
of which: diesel/gasoil	2353	2296	2238	2197	2220	2217	2013	2236	2360	2354	**2369**	0.7%	0.1%	2.3%
of which: jet/kerosene	334	339	334	339	361	362	189	227	312	352	**361**	2.7%	0.8%	0.4%
Fuel oil	731	727	665	602	553	577	528	574	557	579	**541**	-6.5%	-3.0%	0.5%
Others	1538	1482	1464	1464	1364	1259	1199	1207	1267	1301	**1324**	1.8%	-1.5%	1.3%
of which: ethane and LPG	870	876	888	901	827	717	717	730	765	775	**757**	-2.3%	-1.4%	0.7%
Total S. & Cent. America	6707	6555	6425	6371	6150	6079	5262	5811	6220	6353	**6336**	-0.3%	-0.6%	6.2%
of which: Brazil														
Light distillates	716	675	682	717	623	633	554	624	699	718	**687**	-4.3%	-0.4%	0.7%
of which: gasoline	576	522	541	556	483	481	450	495	542	580	**555**	-4.2%	-0.4%	0.5%
of which: naphtha	140	153	141	161	140	152	104	128	157	138	**132**	-4.4%	-0.6%	0.1%
Middle distillates	1168	1100	1030	1027	1045	1043	981	1063	1121	1151	**1158**	0.6%	-0.1%	1.1%
of which: diesel/gasoil	1039	973	913	911	915	922	918	987	1018	1038	**1038**	†	†	1.0%
of which: jet/kerosene	129	127	117	116	130	121	63	76	103	113	**120**	6.5%	-0.7%	0.1%
Fuel oil	191	187	141	137	112	108	112	135	100	93	**89**	-3.8%	-7.4%	0.1%
Others	695	661	636	635	609	633	622	591	593	616	**641**	4.0%	-0.8%	0.6%
of which: ethane and LPG	364	359	348	352	342	332	340	332	330	336	**340**	1.2%	-0.7%	0.3%
Total Brazil	2770	2622	2489	2516	2389	2417	2268	2413	2513	2577	**2575**	-0.1%	-0.7%	2.5%
Europe														
Light distillates	2928	2847	2849	2931	2873	2888	2644	2803	2756	2779	**2897**	4.2%	-0.1%	2.9%
of which: gasoline	1983	1929	1936	1942	2011	2053	1775	1924	2018	2106	**2200**	4.5%	1.0%	2.2%
of which: naphtha	945	918	914	989	863	835	869	880	739	673	**697**	3.5%	-3.0%	0.7%
Middle distillates	7443	7765	7915	8151	8139	8169	6811	7241	7678	7616	**7626**	0.1%	0.2%	7.5%
of which: diesel/gasoil	6132	6412	6515	6670	6589	6591	6060	6377	6373	6155	**6090**	-1.0%	-0.1%	6.0%
of which: jet/kerosene	1312	1353	1400	1481	1550	1578	752	863	1306	1461	**1536**	5.1%	1.6%	1.5%
Fuel oil	1011	944	952	1002	1000	959	806	813	859	813	**790**	-2.8%	-2.4%	0.8%
Others	2709	2838	2928	3066	3029	3008	2823	2860	2871	2803	**2816**	0.4%	0.4%	2.8%
of which: ethane and LPG	1318	1358	1409	1437	1457	1463	1365	1358	1316	1324	**1346**	1.7%	0.2%	1.3%
Total Europe	14091	14395	14644	15151	15041	15024	13084	13717	14165	14011	**14128**	0.8%	†	13.9%
of which: European Union														
Light distillates	2368	2321	2325	2418	2366	2360	2177	2332	2275	2252	**2343**	4.1%	-0.1%	2.3%
of which: gasoline	1463	1439	1445	1461	1541	1580	1374	1476	1550	1608	**1673**	4.0%	1.3%	1.6%
of which: naphtha	904	882	879	957	825	779	803	856	725	644	**671**	4.1%	-2.9%	0.7%
Middle distillates	5569	5771	5867	6022	6012	6077	5089	5388	5699	5573	**5576**	0.1%	†	5.5%
of which: diesel/gasoil	4721	4899	4958	5050	4990	5031	4613	4815	4827	4610	**4568**	-0.9%	-0.3%	4.5%
of which: jet/kerosene	848	872	909	973	1022	1046	476	573	872	964	**1008**	4.6%	1.7%	1.0%
Fuel oil	877	821	819	837	842	813	682	699	725	681	**661**	-2.9%	-2.8%	0.7%
Others	2048	2109	2146	2269	2231	2223	2049	2099	2143	2085	**2081**	-0.2%	0.2%	2.1%
of which: ethane and LPG	942	962	978	1002	1021	1024	950	954	941	941	**946**	0.5%	†	0.9%
Total European Union	10862	11022	11157	11547	11451	11473	9997	10518	10841	10590	**10661**	0.7%	-0.2%	10.5%
CIS														
Light distillates	1221	1195	1213	1201	1232	1208	1156	1247	1250	1244	**1275**	2.5%	0.4%	1.3%
of which: gasoline	1087	1052	1071	1051	1064	1040	989	1075	1097	1100	**1129**	2.7%	0.4%	1.1%
of which: naphtha	134	143	141	150	169	168	168	172	153	144	**146**	1.3%	0.9%	0.1%
Middle distillates	1441	1386	1425	1468	1510	1531	1443	1563	1665	1864	**1946**	4.4%	3.0%	1.9%
of which: diesel/gasoil	1149	1115	1079	1084	1149	1185	1148	1231	1381	1558	**1628**	4.5%	3.5%	1.6%
of which: jet/kerosene	292	271	346	384	361	346	295	332	284	306	**318**	3.9%	0.9%	0.3%
Fuel oil	522	422	431	364	377	392	357	333	317	309	**294**	-4.7%	-5.6%	0.3%
Others	1059	1085	1157	1165	1191	1240	1284	1384	1410	1375	**1368**	-0.5%	2.6%	1.3%
of which: ethane and LPG	634	684	736	736	749	790	820	859	880	847	**847**	†	2.9%	0.8%
Total CIS	4243	4088	4225	4199	4311	4372	4240	4527	4642	4792	**4884**	1.9%	1.4%	4.8%
Middle East														
Light distillates	2015	2044	2098	2205	2239	2197	1885	2106	2186	2252	**2287**	1.6%	1.3%	2.3%
of which: gasoline	1613	1639	1678	1784	1831	1830	1530	1689	1758	1810	**1840**	1.6%	1.3%	1.8%
of which: naphtha	401	405	420	421	408	367	355	417	428	442	**448**	1.4%	1.1%	0.4%
Middle distillates	2573	2490	2397	2296	2278	2399	2064	2193	2522	2614	**2641**	1.0%	0.3%	2.6%
of which: diesel/gasoil	2093	1920	1801	1728	1721	1810	1733	1788	1921	1952	**1964**	0.6%	-0.6%	1.9%
of which: jet/kerosene	480	569	596	568	557	588	330	405	601	662	**677**	2.2%	3.5%	0.7%
Fuel oil	2138	2136	2118	2193	2077	2025	2012	2125	2185	2218	**2253**	1.6%	0.5%	2.2%
Others	2313	2338	2630	2716	2764	2535	2511	2570	2640	2650	**2711**	2.3%	1.6%	2.7%
of which: ethane and LPG	1917	1897	2020	2090	2128	2062	2064	2109	2161	2122	**2165**	2.0%	1.2%	2.1%
Total Middle East	9038	9007	9242	9410	9358	9155	8472	8995	9533	9734	**9893**	1.6%	0.9%	9.8%

Oil Regional consumption – by product group (continued)

Thousand barrels daily	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Africa														
Light distillates	1078	1161	1191	1212	1243	1276	1210	1343	1402	1354	**1359**	0.4%	2.3%	1.3%
of which: gasoline	1072	1156	1185	1205	1236	1269	1203	1337	1395	1346	**1342**	-0.3%	2.3%	1.3%
of which: naphtha	6	5	6	7	7	7	7	7	7	7	**17**	128.4%	11.1%	†
Middle distillates	1892	1954	1903	1943	1957	1992	1745	1914	1988	2063	**2129**	3.2%	1.2%	2.1%
of which: diesel/gasoil	1597	1670	1638	1666	1683	1721	1586	1728	1765	1812	**1856**	2.4%	1.5%	1.8%
of which: jet/kerosene	294	284	265	277	274	272	158	186	223	251	**273**	8.8%	-0.7%	0.3%
Fuel oil	420	398	394	373	304	260	213	222	319	298	**311**	4.3%	-2.9%	0.3%
Others	601	601	613	659	681	714	687	724	723	735	**759**	3.3%	2.4%	0.7%
of which: ethane and LPG	411	417	430	461	484	497	493	522	530	556	**570**	2.5%	3.3%	0.6%
Total Africa	3990	4114	4102	4187	4185	4243	3855	4203	4430	4450	**4559**	2.5%	1.3%	4.5%
Asia Pacific														
Light distillates	9521	10319	10606	10979	11303	11572	11028	11831	11763	12382	**12606**	1.8%	2.8%	12.4%
of which: gasoline	5630	6178	6397	6610	6876	7122	6573	7004	6990	7414	**7591**	2.4%	3.0%	7.5%
of which: naphtha	3891	4141	4208	4370	4427	4450	4455	4827	4773	4968	**5015**	1.0%	2.6%	4.9%
Middle distillates	11090	11395	11517	11898	12139	11999	10182	10536	11010	12151	**12314**	1.3%	1.1%	12.1%
of which: diesel/gasoil	8658	8869	8844	9099	9216	9053	8280	8693	9218	9687	**9638**	-0.5%	1.1%	9.5%
of which: jet/kerosene	2431	2526	2673	2799	2922	2947	1902	1843	1792	2464	**2677**	8.6%	1.0%	2.6%
Fuel oil	2840	2818	2863	2755	2604	2383	2356	2521	2614	2757	**2652**	-3.8%	-0.7%	2.6%
Others	7358	7684	8414	9006	9557	10354	10682	10403	10831	10895	**10863**	-0.3%	4.0%	10.7%
of which: ethane and LPG	3377	3489	3881	4155	4405	4535	4439	4647	4665	4884	**5119**	4.8%	4.2%	5.0%
Total Asia Pacific	30808	32216	33400	34639	35603	36309	34248	35291	36218	38185	**38436**	0.7%	2.2%	37.9%
of which: China														
Light distillates	3269	3716	3889	4060	4324	4571	4476	4944	4862	5476	**5619**	2.6%	5.6%	5.5%
of which: gasoline	2236	2601	2699	2791	2978	3125	2921	3280	3021	3392	**3471**	2.3%	4.5%	3.4%
of which: naphtha	1032	1115	1190	1269	1346	1446	1555	1664	1841	2084	**2148**	3.1%	7.6%	2.1%
Middle distillates	4094	4197	4142	4257	4284	4095	3712	3906	3837	4616	**4584**	-0.7%	1.1%	4.5%
of which: diesel/gasoil	3506	3538	3403	3440	3378	3128	2928	3132	3362	3788	**3689**	-2.6%	0.5%	3.6%
of which: jet/kerosene	588	659	739	817	906	967	784	774	476	828	**895**	8.2%	4.3%	0.9%
Fuel oil	584	591	558	530	532	574	602	648	676	913	**768**	-15.9%	2.8%	0.8%
Others	3071	3386	3708	4157	4502	5075	5613	5390	5595	5573	**5402**	-3.1%	5.8%	5.3%
of which: ethane and LPG	998	1120	1310	1456	1531	1539	1507	1698	1675	1867	**1961**	5.0%	7.0%	1.9%
Total China	11018	11890	12297	13003	13641	14316	14404	14888	14970	16579	**16374**	-1.2%	4.0%	16.1%
of which: India														
Light distillates	655	760	808	807	844	878	826	866	900	961	**978**	1.8%	4.1%	1.0%
of which: gasoline	414	475	520	569	606	653	589	647	701	734	**760**	3.5%	6.3%	0.7%
of which: naphtha	240	285	288	238	238	225	237	218	199	227	**218**	-3.9%	-1.0%	0.2%
Middle distillates	1693	1772	1846	1876	1955	1964	1610	1726	1904	2010	**2069**	3.0%	2.0%	2.0%
of which: diesel/gasoil	1416	1491	1571	1627	1701	1728	1478	1585	1740	1826	**1870**	2.4%	2.8%	1.8%
of which: jet/kerosene	276	280	274	249	254	235	132	140	164	184	**199**	8.3%	-3.2%	0.2%
Fuel oil	107	113	136	122	120	114	104	111	124	121	**119**	-1.6%	1.1%	0.1%
Others	1411	1536	1785	1949	2086	2224	2198	2139	2280	2360	**2455**	4.0%	5.7%	2.4%
of which: ethane and LPG	613	661	749	857	971	1046	1079	1096	1098	1120	**1202**	7.3%	7.0%	1.2%
Total India	3865	4181	4574	4754	5004	5179	4738	4841	5209	5452	**5621**	3.1%	3.8%	5.5%
of which: Japan														
Light distillates	1554	1585	1537	1557	1487	1473	1352	1393	1318	1279	**1211**	-5.3%	-2.5%	1.2%
of which: gasoline	915	905	895	881	864	842	777	765	758	755	**739**	-2.1%	-2.1%	0.7%
of which: naphtha	639	680	642	676	623	631	575	628	560	524	**472**	-9.9%	-3.0%	0.5%
Middle distillates	1329	1291	1298	1308	1283	1263	1102	1105	1123	1147	**1130**	-1.5%	-1.6%	1.1%
of which: diesel/gasoil	808	789	787	783	782	772	725	733	737	718	**700**	-2.5%	-1.4%	0.7%
of which: jet/kerosene	522	502	511	525	501	492	377	372	386	429	**430**	0.2%	-1.9%	0.4%
Fuel oil	575	473	406	318	304	244	227	259	285	248	**177**	-28.7%	-11.1%	0.2%
Others	922	885	862	899	867	865	732	728	776	747	**719**	-3.8%	-2.5%	0.7%
of which: ethane and LPG	502	477	460	470	454	442	397	404	418	394	**381**	-3.2%	-2.7%	0.4%
Total Japan	4380	4234	4103	4083	3941	3846	3412	3485	3502	3422	**3238**	-5.4%	-3.0%	3.2%
World														
Light distillates	28429	29414	29991	30542	30777	30948	27971	30323	30554	31375	**31746**	1.2%	1.1%	31.3%
of which: gasoline	22490	23233	23736	24070	24387	24612	21686	23560	24004	24701	**25001**	1.2%	1.1%	24.7%
of which: naphtha	5938	6181	6255	6472	6389	6336	6285	6763	6551	6674	**6745**	1.1%	1.3%	6.7%
Middle distillates	33803	34387	34348	35070	35680	35627	30192	32299	34189	35522	**35779**	0.7%	0.6%	35.3%
of which: diesel/gasoil	26983	27277	26892	27302	27690	27535	25360	26917	27883	28118	**27980**	-0.5%	0.4%	27.6%
of which: jet/kerosene	6820	7111	7456	7768	7989	8092	4832	5382	6305	7404	**7799**	5.3%	1.3%	7.7%
Fuel oil	8129	7887	7939	7837	7411	7032	6582	7051	7323	7388	**7238**	-2.0%	-1.2%	7.1%
Others	21126	21659	22864	23785	24582	25291	25373	25641	26231	26410	**26656**	0.9%	2.4%	26.3%
of which: ethane and LPG	11819	12082	12793	13233	13839	13900	13912	14308	14333	14683	**15060**	2.6%	2.5%	14.8%
Total World	**91488**	**93347**	**95142**	**97234**	**98449**	**98898**	**90118**	**95314**	**98297**	**100694**	**101418**	**0.7%**	**1.0%**	**100.0%**
OECD														
Light distillates	16184	16425	16618	16756	16614	16503	14525	15639	15592	15653	**15721**	0.4%	-0.3%	15.5%
of which: gasoline	13108	13302	13486	13481	13531	13494	11652	12570	12789	12983	**13048**	0.5%	†	12.9%
of which: naphtha	3076	3123	3132	3275	3083	3010	2873	3069	2804	2670	**2673**	0.1%	-1.4%	2.6%
Middle distillates	16712	17134	17217	17655	17952	17834	14868	15986	16842	16699	**16597**	-0.6%	-0.1%	16.4%
of which: diesel/gasoil	12819	13109	13038	13293	13480	13308	12268	12961	13020	12490	**12241**	-2.0%	-0.5%	12.1%
of which: jet/kerosene	3893	4025	4180	4362	4472	4526	2600	3025	3822	4209	**4356**	3.5%	1.1%	4.3%
Fuel oil	2207	2016	2063	2007	1935	1728	1447	1645	1729	1582	**1473**	-6.8%	-4.0%	1.5%
Others	9646	9814	9993	10158	10384	10583	10269	10638	10726	10776	**10969**	1.8%	1.3%	10.8%
of which: ethane and LPG	5425	5510	5652	5702	6036	6105	6139	6220	6155	6277	**6393**	1.9%	1.7%	6.3%
Total OECD	44750	45389	45891	46577	46885	46648	41110	43908	44890	44708	**44760**	0.1%	†	44.1%
Non-OECD														
Light distillates	12245	12989	13373	13786	14163	14445	13446	14684	14962	15722	**16024**	1.9%	2.7%	15.8%
of which: gasoline	9383	9930	10250	10589	10857	11119	10033	10990	11215	11718	**11953**	2.0%	2.5%	11.8%
of which: naphtha	2863	3058	3123	3197	3306	3326	3412	3694	3747	4004	**4072**	1.7%	3.6%	4.0%
Middle distillates	17091	17254	17131	17415	17727	17793	15324	16313	17346	18823	**19182**	1.9%	1.2%	18.9%
of which: diesel/gasoil	14163	14168	13854	14009	14210	14227	13092	13956	14863	15628	**15739**	0.7%	1.1%	15.5%
of which: jet/kerosene	2927	3086	3276	3406	3517	3566	2231	2357	2483	3195	**3443**	7.7%	1.6%	3.4%
Fuel oil	5922	5871	5876	5829	5476	5304	5135	5405	5594	5806	**5764**	-0.7%	-0.3%	5.7%
Others	11480	11844	12871	13628	14198	14708	15104	15003	15505	15634	**15687**	0.3%	3.2%	15.5%
of which: ethane and LPG	6394	6572	7141	7532	7804	7795	7773	8088	8178	8406	**8667**	3.1%	3.1%	8.5%
Total Non-OECD	46738	47958	49251	50658	51564	52250	49008	51406	53407	55986	**56658**	1.2%	1.9%	55.9%

† Less than 0.05%.

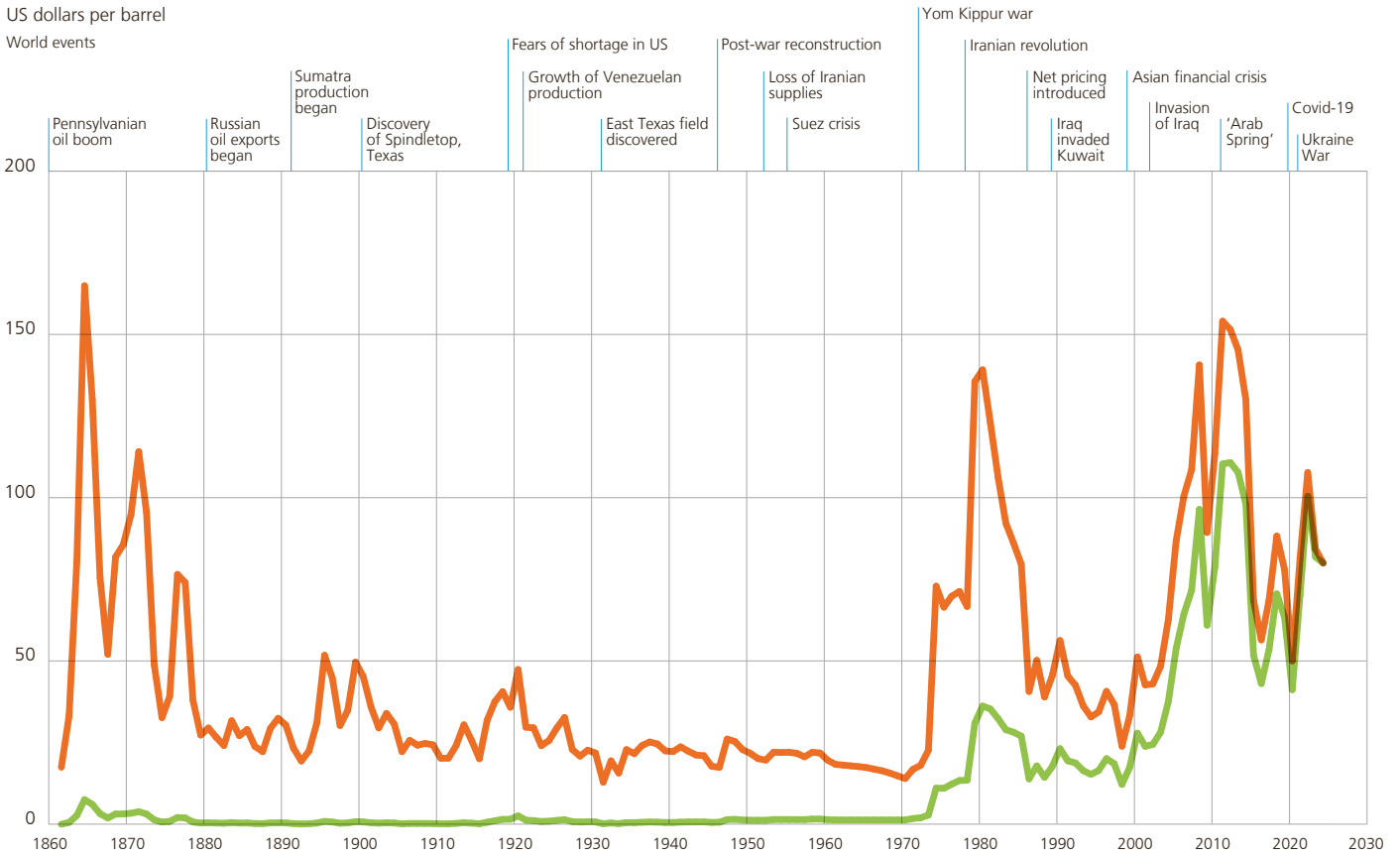
Notes: 'Light distillates' consists of aviation and motor gasolines and light distillate feedstock (LDF).
'Middle distillates' consists of jet and heating kerosenes, and gas and diesel oils (including marine bunkers).
'Fuel oil' includes marine bunkers and crude oil used directly as fuel.
'Others' consists of refinery gas, solvents, petroleum coke, lubricants, bitumen, wax, other refined products and refinery fuel and loss.
Annual changes and shares of total are calculated using thousand barrels daily figures.

Oil Spot crude prices

US dollars per barrel	Dubai $/bbl[1]	Brent $/bbl[2]	Nigerian Forcados $/bbl[3]	West Texas Intermediate $/bbl[4]
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	15.05
1987	16.95	18.44	18.39	19.19
1988	13.18	14.92	15.00	15.98
1989	15.59	18.23	18.30	19.67
1990	20.21	23.73	23.85	24.46
1991	16.70	20.00	20.11	21.53
1992	17.18	19.32	19.61	20.57
1993	14.99	16.97	17.41	18.45
1994	14.69	15.82	16.25	17.21
1995	16.08	17.02	17.26	18.42
1996	19.26	20.67	21.16	22.16
1997	18.31	19.09	19.33	20.61
1998	12.30	12.72	12.63	14.39
1999	16.90	17.97	17.98	19.31
2000	26.27	28.50	28.42	30.37
2001	22.78	24.44	24.23	25.93
2002	23.60	25.02	25.04	26.16
2003	26.75	28.83	28.68	31.06
2004	33.51	38.27	38.13	41.49
2005	46.78	54.52	55.69	56.59
2006	61.48	65.14	67.07	66.04
2007	67.92	72.39	74.48	72.20
2008	94.28	97.26	101.43	100.06
2009	61.14	61.67	63.35	61.92
2010	77.78	79.50	81.05	79.45
2011	105.93	111.26	113.65	95.04
2012	109.06	111.67	114.21	94.13
2013	105.47	108.66	111.95	97.99
2014	97.02	98.95	101.35	93.28
2015	51.22	52.39	54.41	48.71
2016	41.02	43.73	44.54	43.34
2017	53.02	54.19	54.31	50.79
2018	70.15	71.31	72.47	65.20
2019	63.71	64.21	64.95	57.03
2020	42.41	41.84	42.31	39.25
2021	68.91	70.91	69.76	68.10
2022	96.38	101.32	101.40	94.58
2023	82.09	82.64	83.60	78.88
2024	**79.61**	**80.76**	**81.75**	**75.87**

Source: S&P Global Commodity Insights, ©2025 by S&P Global Inc
[1] 1972-1985 Arabian Light, 1986-2024 Dubai dated.
[2] 1976-1983 Forties, 1984-2024 Brent dated.
[3] Forcados FOB Nigeria.
[4] 1976-1983 Posted WTI prices, 1984-2023 Spot WTI (Cushing) prices.

Crude oil prices 1861–2024



1861–1944 US Average. 1945–1983 Arabian Light posted at Ras Tanura.
1984–2024 Brent dated.

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Oil Refining capacity

Thousand barrels daily*	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	1929	1931	1934	1970	1939	2054	2065	1954	1954	1954	**1954**	–	0.1%	1.9%
Mexico	1522	1522	1522	1546	1558	1558	1558	1558	1558	1558	**1558**	–	0.2%	1.5%
US	17967	18317	18617	18598	18808	18974	18143	17941	18061	18429	**18416**	-0.1%	0.2%	17.6%
Total North America	**21418**	**21770**	**22073**	**22113**	**22305**	**22586**	**21766**	**21453**	**21573**	**21941**	**21928**	**-0.1%**	**0.2%**	**21.0%**
Argentina	657	657	657	657	580	580	580	580	580	580	**600**	3.4%	-0.9%	0.6%
Brazil	2238	2281	2289	2285	2285	2290	2290	2303	2304	2290	**2290**	†	0.2%	2.2%
Chile	242	242	242	242	242	242	242	242	242	242	**242**	–	–	0.2%
Colombia	336	276	421	421	421	421	421	421	501	501	**501**	–	4.1%	0.5%
Curaçao	320	320	320	320	320	320	320	320	320	320	**320**	†	0.0%	0.3%
Ecuador	175	175	175	175	175	175	175	175	186	196	**196**	–	1.1%	0.2%
Netherlands Antilles	–	–	–	–	–	–	–	–	–	–	**–**	–	–	0.0%
Peru	253	253	253	253	253	253	253	276	283	283	**283**	†	1.1%	0.3%
Trinidad & Tobago	175	175	175	175	175	175	175	175	175	175	**175**	†	0.0%	0.2%
Venezuela	1303	1303	1303	1303	1303	1303	1303	1303	1303	1303	**1303**	–	0.0%	1.2%
Other S. & Cent. America	641	659	659	659	659	659	839	564	384	384	**384**	†	-5.0%	0.4%
Total S. & Cent. America	**6340**	**6341**	**6494**	**6490**	**6413**	**6418**	**6598**	**6359**	**6278**	**6274**	**6294**	**0.3%**	**-0.1%**	**6.0%**
Austria	193	193	193	193	193	193	193	193	193	193	**193**	–	–	0.2%
Belgium	776	776	776	776	776	776	776	645	645	645	**645**	†	-1.8%	0.6%
Bulgaria	195	195	195	195	195	195	195	195	195	195	**195**	–	–	0.2%
Czech Republic	175	175	175	175	175	175	175	175	175	175	**175**	–	–	0.2%
Denmark	180	180	180	181	181	181	181	181	181	181	**181**	–	†	0.2%
Finland	261	261	261	261	261	261	261	220	206	206	**206**	†	-2.3%	0.2%
France	1375	1375	1245	1245	1245	1245	1245	1170	1145	1145	**1145**	†	-1.8%	1.1%
Germany	2077	2049	2051	2069	2062	2062	2062	2121	2121	2076	**2076**	–	†	2.0%
Greece	498	528	528	528	528	528	528	528	528	528	**528**	†	0.6%	0.5%
Hungary	165	165	165	165	165	165	165	165	165	165	**165**	–	–	0.2%
Ireland	75	75	75	75	75	75	75	75	75	75	**75**	–	–	0.1%
Italy	1900	1900	1900	1900	1900	1900	1900	1900	1794	1794	**1803**	0.5%	-0.5%	1.7%
Lithuania	241	241	241	241	241	241	241	240	240	240	**240**	†	†	0.2%
Netherlands	1279	1298	1298	1299	1299	1291	1244	1238	1241	1241	**1241**	–	-0.3%	1.2%
Norway	342	342	342	342	342	342	342	226	226	226	**226**	–	-4.1%	0.2%
Poland	582	581	581	568	581	581	581	581	581	583	**583**	–	0.0%	0.6%
Portugal	330	330	330	330	330	330	330	225	225	225	**225**	†	-3.8%	0.2%
Romania	228	239	256	247	254	252	239	252	252	252	**252**	–	1.0%	0.2%
Slovakia	122	122	122	122	122	122	122	122	122	122	**122**	–	–	0.1%
Spain	1546	1562	1562	1562	1564	1586	1586	1591	1591	1591	**1591**	–	0.3%	1.5%
Sweden	454	454	454	454	454	454	454	454	454	454	**454**	†	–	0.4%
Switzerland	140	68	68	68	68	68	68	68	68	68	**68**	†	-7.0%	0.1%
Türkiye	596	596	596	596	818	822	822	822	822	822	**822**	–	3.3%	0.8%
Ukraine	258	250	250	250	250	250	250	250	250	250	**250**	–	-0.3%	0.2%
United Kingdom	1337	1337	1227	1227	1227	1227	1251	1251	1219	1219	**1219**	–	-0.9%	1.2%
Other Europe	519	519	519	501	501	501	501	501	501	377	**337**	-10.6%	-4.2%	0.3%
Total Europe	**15845**	**15812**	**15591**	**15569**	**15806**	**15824**	**15787**	**15388**	**15213**	**15046**	**15015**	**-0.2%**	**-0.5%**	**14.4%**
Azerbaijan	325	325	325	205	163	120	120	120	120	120	**120**	†	-9.5%	0.1%
Belarus	460	460	460	490	520	520	520	520	520	520	**520**	†	1.2%	0.5%
Kazakhstan	350	350	350	360	390	400	400	400	400	400	**400**	–	1.3%	0.4%
Russian Federation	6366	6457	6563	6590	6596	6661	6746	6801	6781	6781	**6781**	†	0.6%	6.5%
Turkmenistan	251	271	271	271	271	271	271	271	271	271	**271**	–	0.8%	0.3%
Uzbekistan	232	232	232	232	232	232	232	232	232	232	**232**	†	–	0.2%
Other CIS	35	44	46	49	49	52	62	73	73	67	**67**	–	6.7%	0.1%
Total CIS	**8019**	**8139**	**8247**	**8197**	**8221**	**8256**	**8351**	**8417**	**8397**	**8391**	**8391**	**†**	**0.5%**	**8.0%**
Bahrain	260	260	260	260	260	260	260	260	260	260	**260**	†	–	0.2%
Iran	2075	2075	2075	2220	2330	2495	2475	2423	2430	2454	**2460**	0.2%	1.7%	2.4%
Iraq	791	763	779	779	849	919	919	919	1150	1219	**1219**	–	4.4%	1.2%
Israel	301	301	301	301	301	301	301	301	301	301	**301**	†	–	0.3%
Kuwait	936	936	936	736	736	736	800	800	835	1309	**1430**	9.2%	4.3%	1.4%
Oman	222	222	222	222	222	282	304	304	304	396	**564**	42.4%	9.8%	0.5%
Qatar	283	283	429	429	429	429	429	429	429	429	**429**	–	4.2%	0.4%
Saudi Arabia	2899	2899	2901	2826	2835	2905	2947	2977	3224	3289	**3289**	†	1.3%	3.1%
United Arab Emirates	728	1149	1149	1229	1229	1307	1331	1246	1246	1259	**1271**	1.0%	5.7%	1.2%
Other Middle East	496	496	496	496	496	496	496	496	496	496	**496**	†	–	0.5%
Total Middle East	**8991**	**9384**	**9548**	**9498**	**9687**	**10130**	**10262**	**10155**	**10675**	**11412**	**11719**	**2.7%**	**2.7%**	**11.2%**
Algeria	651	651	651	657	657	657	657	657	657	657	**657**	†	0.1%	0.6%
Egypt	810	810	810	810	795	795	795	795	795	795	**825**	3.8%	0.2%	0.8%
Morocco	201	201	201	201	201	–	–	–	–	–	**–**	–	-100.0%	–
Nigeria	449	449	449	449	454	460	460	475	475	529	**1030**	94.7%	8.7%	1.0%
South Africa	520	520	520	520	520	520	520	395	259	215	**215**	–	-8.5%	0.2%
Other Africa	726	726	726	706	711	711	711	711	725	712	**759**	6.5%	0.4%	0.7%
Total Africa	**3357**	**3357**	**3357**	**3343**	**3338**	**3143**	**3143**	**3033**	**2911**	**2908**	**3486**	**19.9%**	**0.4%**	**3.3%**
Australia	655	486	461	469	474	474	474	311	235	235	**235**	†	-9.7%	0.2%
Bangladesh	43	43	43	43	43	43	48	43	43	43	**43**	–	–	†
China	15253	15024	14895	15231	15655	16199	16691	16990	17259	18428	**18514**	0.5%	2.0%	17.7%
India	4319	4307	4620	4699	4972	4994	5018	5005	5045	5085	**5172**	1.7%	1.8%	4.9%
Indonesia	1099	1111	1111	1111	1094	1111	1094	1094	1180	1242	**1259**	1.4%	1.4%	1.2%
Japan	3749	3721	3600	3343	3343	3343	3285	3285	3164	3069	**2955**	-3.7%	-2.4%	2.8%
Malaysia	612	612	618	625	625	625	625	955	955	955	**1155**	20.9%	6.6%	1.1%
New Zealand	136	136	136	136	136	136	136	135	76	30	**30**	†	-14.0%	†
Pakistan	390	389	389	401	401	401	430	430	430	430	**450**	4.7%	1.4%	0.4%
Philippines	271	271	271	271	271	271	180	180	180	180	**180**	†	-4.0%	0.2%
Singapore	1514	1514	1514	1514	1514	1514	1514	1461	1302	1302	**1302**	†	-1.5%	1.2%
South Korea	3123	3128	3259	3298	3346	3393	3334	3363	3363	3363	**3363**	–	0.7%	3.2%
Taiwan	1197	988	988	1083	1083	1083	1131	1131	1083	1083	**1083**	†	-1.0%	1.0%
Thailand	1252	1252	1235	1235	1235	1235	1245	1245	1245	1244	**1242**	-0.2%	-0.1%	1.2%
Vietnam	159	159	163	167	367	367	367	367	367	367	**367**	†	8.7%	0.4%
Other Asia Pacific	186	186	186	186	187	347	347	347	347	341	**341**	–	6.2%	0.3%
Total Asia Pacific	**33957**	**33326**	**33488**	**33811**	**34745**	**35535**	**35917**	**36340**	**36274**	**37397**	**37690**	**0.8%**	**1.0%**	**36.1%**
Total World	**97927**	**98129**	**98797**	**99022**	**100515**	**101892**	**101825**	**101145**	**101322**	**103370**	**104523**	**1.1%**	**0.7%**	**100.0%**
of which: OECD	44604	44668	44863	44699	45174	45522	44561	43701	43471	43654	**43536**	-0.3%	-0.2%	41.7%
Non-OECD	53323	53461	53934	54322	55341	56370	57264	57444	57851	59715	**60987**	2.1%	1.4%	58.3%
European Union	12824	12871	12761	12757	12772	12785	12725	12441	12299	12216	**12185**	-0.3%	-0.5%	11.7%

Source: Includes data from ICIS.
* Atmospheric distillation capacity at year end on a calendar-day basis.
† Less than 0.05%.

Oil Refinery throughput

Thousand barrels daily*	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	1615	1640	1594	1757	1653	1822	1585	1653	1696	1716	**1741**	1.5%	0.8%	2.1%
Mexico	1155	1064	933	767	612	592	591	712	816	792	**906**	14.3%	-2.4%	1.1%
US	15848	16188	16187	16590	16969	16563	14212	15147	15977	15967	**16224**	1.6%	0.2%	19.6%
Total North America	**18618**	**18892**	**18714**	**19114**	**19234**	**18977**	**16387**	**17512**	**18489**	**18475**	**18871**	**2.1%**	**0.1%**	**22.7%**
Argentina	526	536	511	500	470	476	417	472	489	519	**525**	1.2%	†	0.6%
Brazil	2085	1972	1812	1741	1733	1751	1769	1818	1935	2004	**1995**	-0.5%	-0.4%	2.4%
Chile	174	165	163	172	172	186	172	192	174	192	**190**	-1.1%	0.9%	0.2%
Colombia	193	201	285	307	373	381	361	358	420	419	**424**	1.2%	8.2%	0.5%
Curaçao	189	178	156	84	29	4	–	–	–	–	**–**	–	-100.0%	–
Ecuador	125	121	150	156	159	142	116	164	178	169	**160**	-5.0%	2.5%	0.2%
Netherlands Antilles	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Peru	188	188	194	213	209	192	105	138	133	173	**191**	10.2%	0.2%	0.2%
Trinidad & Tobago	105	125	148	131	99	–	–	–	–	–	**–**	–	-100.0%	–
Venezuela	920	863	654	649	401	352	160	230	282	231	**238**	3.2%	-12.6%	0.3%
Other S. & Cent. America	281	276	231	201	246	239	253	274	201	193	**253**	31.2%	-1.0%	0.3%
Total S. & Cent. America	**4787**	**4625**	**4306**	**4154**	**3890**	**3724**	**3354**	**3646**	**3811**	**3899**	**3976**	**2.0%**	**-1.8%**	**4.8%**
Austria	173	179	164	162	180	183	164	166	113	161	**162**	0.7%	-0.6%	0.2%
Belgium	645	644	640	685	663	693	545	577	558	606	**617**	1.8%	-0.4%	0.7%
Bulgaria	104	121	125	136	118	137	97	84	141	126	**133**	5.3%	2.5%	0.2%
Czech Republic	151	145	109	158	151	158	122	143	150	150	**132**	-12.5%	-1.3%	0.2%
Denmark	139	147	140	151	152	154	142	150	145	150	**137**	-8.6%	-0.2%	0.2%
Finland	225	197	226	226	233	240	219	159	186	197	**163**	-17.2%	-3.2%	0.2%
France	1096	1152	1122	1149	1085	978	665	683	829	912	**907**	-0.5%	-1.9%	1.1%
Germany	1833	1875	1887	1870	1752	1763	1685	1690	1801	1594	**1732**	8.6%	-0.6%	2.1%
Greece	416	436	464	483	489	462	445	476	442	469	**477**	1.6%	1.4%	0.6%
Hungary	131	130	133	131	141	137	135	134	129	139	**136**	-2.3%	0.4%	0.2%
Ireland	55	68	64	64	61	51	57	61	60	56	**40**	-28.4%	-3.2%	†
Italy	1198	1347	1293	1399	1346	1355	1105	1224	1317	1304	**1223**	-6.2%	0.2%	1.5%
Lithuania	151	170	187	197	195	191	157	160	165	183	**177**	-3.0%	1.6%	0.2%
Netherlands	1000	1055	1080	1060	1085	1124	983	1039	1001	1069	**945**	-11.5%	-0.6%	1.1%
Norway	274	293	230	281	305	265	237	222	145	159	**141**	-11.3%	-6.4%	0.2%
Poland	486	532	517	508	540	546	516	497	535	502	**520**	3.6%	0.7%	0.6%
Portugal	217	278	279	284	252	223	218	191	204	189	**216**	13.9%	†	0.3%
Romania	210	208	228	229	233	244	211	200	235	207	**220**	6.5%	0.5%	0.3%
Slovakia	105	119	115	112	109	103	112	111	108	105	**94**	-10.1%	-1.0%	0.1%
Spain	1185	1306	1302	1326	1363	1318	1105	1143	1275	1243	**1288**	3.7%	0.8%	1.6%
Sweden	380	401	395	392	406	337	349	366	369	352	**359**	1.8%	-0.6%	0.4%
Switzerland	98	56	59	57	61	55	56	46	61	57	**51**	-9.8%	-6.3%	0.1%
Türkiye	406	526	531	542	472	673	655	692	736	726	**699**	-3.8%	5.6%	0.8%
Ukraine	69	64	64	77	92	94	97	100	105	110	**115**	4.3%	5.2%	0.1%
United Kingdom	1125	1118	1071	1073	1041	1044	890	897	1017	952	**974**	2.3%	-1.4%	1.2%
Other Europe	128	141	148	164	163	124	110	114	122	119	**122**	2.3%	-0.5%	0.1%
Total Europe	**11998**	**12708**	**12573**	**12914**	**12689**	**12651**	**11076**	**11325**	**11949**	**11837**	**11778**	**-0.5%**	**-0.2%**	**14.2%**
Azerbaijan	135	130	120	118	122	124	118	133	126	126	**117**	-7.5%	-1.4%	0.1%
Belarus	448	462	372	364	366	359	326	330	296	337	**356**	5.7%	-2.3%	0.4%
Kazakhstan	361	342	339	355	374	392	367	391	457	419	**406**	-3.1%	1.2%	0.5%
Russian Federation	5926	5773	5715	5715	5836	5814	5492	5726	5534	5682	**5508**	-3.1%	-0.7%	6.6%
Turkmenistan	136	127	118	125	117	122	118	130	130	130	**130**	†	-0.5%	0.2%
Uzbekistan	69	70	72	75	81	73	70	72	67	76	**74**	-3.3%	0.7%	0.1%
Other CIS	4	7	8	9	11	7	4	12	18	23	**31**	33.3%	23.5%	†
Total CIS	**7078**	**6912**	**6744**	**6761**	**6907**	**6892**	**6496**	**6793**	**6628**	**6793**	**6621**	**-2.5%**	**-0.7%**	**8.0%**
Bahrain	257	266	258	262	260	264	230	223	251	246	**261**	6.1%	0.1%	0.3%
Iran	1778	1696	1687	1854	1919	1953	1907	1894	2066	2102	**2114**	0.6%	1.7%	2.5%
Iraq	486	408	439	526	693	740	632	716	807	892	**900**	0.8%	6.3%	1.1%
Israel	226	232	213	223	238	252	227	238	253	228	**228**	-0.3%	0.1%	0.3%
Kuwait	879	905	841	686	679	663	583	653	807	1047	**1248**	19.2%	3.6%	1.5%
Oman	180	190	178	232	304	257	221	253	277	281	**274**	-2.4%	4.3%	0.3%
Qatar	261	253	280	379	406	387	335	357	394	398	**397**	-0.3%	4.3%	0.5%
Saudi Arabia	2201	2447	2753	2802	2770	2581	2179	2536	2916	2707	**2762**	2.0%	2.3%	3.3%
United Arab Emirates	643	1098	1078	1119	1096	1037	936	1063	954	979	**977**	-0.2%	4.3%	1.2%
Other Middle East	264	221	191	219	187	170	170	162	176	149	**130**	-12.3%	-6.8%	0.2%
Total Middle East	**7176**	**7715**	**7917**	**8301**	**8551**	**8302**	**7420**	**8096**	**8902**	**9030**	**9291**	**2.9%**	**2.6%**	**11.2%**
Algeria	615	591	584	573	601	569	585	588	649	650	**649**	-0.1%	0.5%	0.8%
Egypt	530	530	509	508	522	565	605	600	629	535	**517**	-3.3%	-0.3%	0.6%
Morocco	105	53	–	–	–	–	–	–	–	–	**–**	–	-100.0%	–
Nigeria	64	22	62	81	36	8	0	3	6	18	**239**	1258.4%	14.1%	0.3%
South Africa	440	453	474	447	455	445	217	118	126	116	**116**	0.2%	-12.5%	0.1%
Other Africa	446	448	462	432	440	450	340	398	445	419	**422**	0.7%	-0.6%	0.5%
Total Africa	**2199**	**2096**	**2091**	**2041**	**2054**	**2037**	**1747**	**1706**	**1854**	**1737**	**1943**	**11.9%**	**-1.2%**	**2.3%**
Australia	538	427	433	419	474	465	388	328	264	264	**254**	-3.6%	-7.2%	0.3%
Bangladesh	24	25	23	28	25	28	22	31	28	29	**29**	1.1%	2.0%	†
China	10165	10824	11304	11844	12574	13433	13824	14421	13995	15214	**14629**	-3.8%	3.7%	17.6%
India	4475	4561	4930	5010	5154	5119	4493	4792	5082	5249	**5322**	1.4%	1.7%	6.4%
Indonesia	848	743	887	885	916	918	826	823	884	907	**807**	-11.0%	-0.5%	1.0%
Japan	3289	3258	3280	3214	3059	3046	2492	2488	2694	2545	**2353**	-7.5%	-3.3%	2.8%
Malaysia	531	494	548	543	513	560	531	508	634	661	**639**	-3.2%	1.9%	0.8%
New Zealand	101	109	107	108	103	110	76	74	18	–	**–**	–	-100.0%	–
Pakistan	232	257	242	261	275	243	210	240	231	222	**232**	4.6%	†	0.3%
Philippines	168	212	216	211	237	167	97	103	158	174	**174**	0.1%	0.4%	0.2%
Singapore	839	901	929	994	985	909	728	739	772	780	**794**	1.7%	-0.6%	1.0%
South Korea	2516	2784	2928	3061	3031	2922	2679	2634	2811	2758	**2807**	1.8%	1.1%	3.4%
Taiwan	850	838	861	848	889	890	726	770	815	807	**778**	-3.6%	-0.9%	0.9%
Thailand	961	1066	1022	1064	1093	990	982	976	1021	1054	**1085**	2.9%	1.2%	1.3%
Vietnam	129	155	155	141	221	276	276	308	356	332	**336**	1.3%	10.1%	0.4%
Other Asia Pacific	95	87	103	94	92	93	196	234	232	228	**251**	9.9%	10.1%	0.3%
Total Asia Pacific	**25760**	**26741**	**27969**	**28725**	**29642**	**30171**	**28544**	**29469**	**29995**	**31224**	**30491**	**-2.3%**	**1.7%**	**36.7%**
Total World	**77616**	**79689**	**80314**	**82010**	**82967**	**82755**	**75024**	**78547**	**81629**	**82994**	**82971**	**†**	**0.7%**	**100.0%**
of which: OECD	37143	38242	38133	38927	38766	38390	33343	34650	36470	36155	**36315**	0.4%	-0.2%	43.8%
Non-OECD	40473	41447	42181	43083	44201	44365	41681	43897	45159	46839	**46655**	-0.4%	1.4%	56.2%
European Union	9945	10568	10534	10791	10627	10449	9070	9292	9798	9747	**9716**	-0.3%	-0.2%	11.7%

Source: Includes data from ICIS.
* Atmospheric distillation capacity on a calendar-day basis.
† Less than 0.05%.

Oil Trade movements

Thousand barrels daily	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Imports														
US	9241	9451	10056	10147	9927	9141	7866	8475	8343	8556	**8429**	-1.5%	-0.9%	12.1%
Europe	12957	14005	14337	14966	14312	14179	12684	12824	14262	13494	**13824**	2.4%	0.7%	19.9%
China	7398	8333	9215	10241	10854	11603	12331	12498	12234	13889	**13400**	-3.5%	6.1%	19.3%
India	4155	4396	4945	4920	5196	5370	4898	5302	5753	5762	**5980**	3.8%	3.7%	8.6%
Japan	4383	4332	4180	4142	3940	3774	3305	3350	3465	3332	**3100**	-7.0%	-3.4%	4.5%
Rest of World	21193	22915	28421	25623	25578	25364	23484	24021	24056	24356	**24705**	1.4%	1.5%	35.6%
Total World	**59328**	**63431**	**71154**	**70039**	**69807**	**69431**	**64567**	**66471**	**68113**	**69388**	**69438**	**0.1%**	**1.6%**	**100.0%**
Exports														
Canada	3536	3837	3889	4233	4496	4656	4388	4632	4702	4896	**5135**	4.9%	3.8%	7.4%
Mexico	1293	1321	1405	1283	1302	1244	1242	1211	1167	1271	**1027**	-19.2%	-2.3%	1.5%
US	4033	4562	5082	5881	7039	8010	8136	7956	8806	9292	**9877**	6.3%	9.4%	14.2%
S. & Cent. America	3939	4103	5736	3989	3718	3473	3487	2992	3075	3683	**4319**	17.3%	0.9%	6.2%
Europe	2467	3065	4834	3384	3349	3188	3580	2799	2611	2396	**2123**	-11.4%	-1.5%	3.1%
Russian Federation	7792	8434	8811	8981	8024	8058	7357	7811	7631	6821	**7043**	3.3%	-1.0%	10.1%
Other CIS	2092	2045	2097	2232	2052	2064	2043	2047	1916	2182	**2122**	-2.8%	0.1%	3.1%
Saudi Arabia	7911	8008	8729	8352	8462	8323	7981	7662	8604	8164	**7654**	-6.3%	-0.3%	11.0%
Middle East (ex Saudi Arabia)	12699	13977	15905	16205	16034	14825	13612	15110	15949	16318	**16601**	1.7%	2.7%	23.9%
North Africa	1743	1747	1736	2594	2770	2738	1746	2268	2105	2223	**2151**	-3.2%	2.1%	3.1%
West Africa	4849	4889	4458	4492	4495	4602	4133	3790	3509	3434	**3465**	0.9%	-3.3%	5.0%
Asia Pacific (ex Japan)	6450	5895	6348	6549	6257	6305	5419	6001	5800	6381	**5757**	-9.8%	-1.1%	8.3%
Rest of World	524	1549	2124	1863	1809	1943	1442	2190	2239	2326	**2163**	-7.0%	15.2%	3.1%
Total World	**59328**	**63431**	**71154**	**70039**	**69807**	**69431**	**64567**	**66471**	**68113**	**69388**	**69438**	**0.1%**	**1.6%**	**100.0%**

Source: includes data from FGE Iran Service.
Notes: Unless otherwise stated, this table shows inter-regional trade based on the regional classification in the table 'Oil trade in 2022 and 2023'.
Does not include biofuels trade. Bunker fuel use is not included as exports. Intra-area movements (for example, between countries within Europe) are excluded.
Annual changes and shares of total are calculated using thousand barrels daily figures.

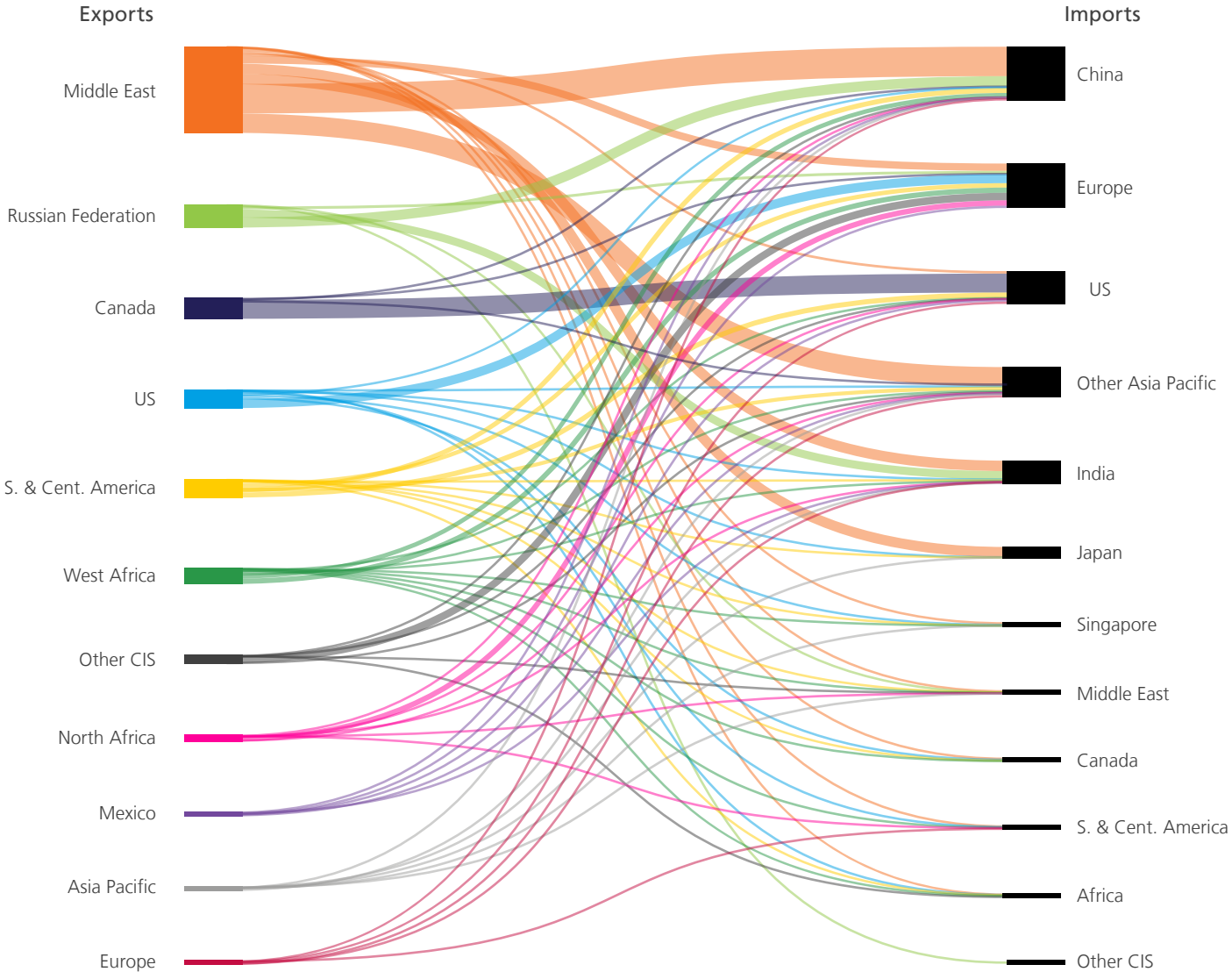
Oil Trade in 2023 and 2024

Million tonnes	2023 Crude imports	2023 Product imports	2023 Crude exports	2023 Product exports	2024 Crude imports	2024 Product imports	2024 Crude exports	2024 Product exports
Canada	25.6	22.6	209.4	33.0	25.1	22.4	219.4	35.6
Mexico	†	58.6	53.8	9.2	-	57.7	41.7	9.2
US	324.3	97.7	194.1	258.0	329.0	88.3	198.3	283.3
S. & Cent. America	20.3	106.7	154.4	27.9	20.7	110.1	184.1	30.3
Europe	457.3	206.2	12.3	102.8	463.4	218.0	12.4	89.9
Russian Federation	†	1.5	239.2	96.5	†	1.2	243.1	104.3
Other CIS	15.4	8.3	91.6	16.4	16.1	16.3	90.6	14.8
Iraq	†	6.8	186.1	19.0	†	5.3	179.6	25.1
Kuwait	†	0.2	81.1	37.7	–	0.3	60.1	42.9
Saudi Arabia	2.1	17.4	346.4	57.8	7.8	12.6	320.6	59.2
United Arab Emirates	5.1	27.9	168.8	93.9	5.4	31.6	182.7	95.3
Other Middle East	22.0	22.4	154.3	62.8	20.5	18.0	163.6	70.1
North Africa	3.9	35.9	78.2	31.2	2.2	37.6	73.1	32.9
West Africa	1.4	53.9	165.4	5.3	2.8	45.5	164.8	7.9
East & S. Africa	7.4	51.6	2.6	1.9	10.3	50.9	2.0	1.6
Australasia	8.4	58.6	10.0	4.9	7.8	53.9	9.1	5.1
China	572.5	114.4	0.8	61.1	554.1	110.5	0.9	56.7
India	230.6	54.0	0.1	94.4	238.6	57.6	0.1	90.2
Japan	125.5	38.8	†	12.5	115.0	38.3	0.1	9.9
Singapore	42.3	72.1	1.9	80.0	43.5	87.2	†	72.5
Other Asia Pacific	299.0	185.4	12.7	134.9	295.4	194.8	11.7	121.0
Total World	**2163.1**	**1241.3**	**2163.1**	**1241.3**	**2157.8**	**1257.9**	**2157.8**	**1257.9**

Thousand barrels daily	2023 Crude imports	2023 Product imports	2023 Crude exports	2023 Product exports	2024 Crude imports	2024 Product imports	2024 Crude exports	2024 Product exports
Canada	514	471	4206	690	504	467	4393	742
Mexico	‡	1225	1080	192	–	1202	835	192
US	6512	2043	3897	5394	6589	1841	3971	5906
S. & Cent. America	408	2231	3101	583	416	2296	3686	633
Europe	9183	4311	247	2149	9281	4544	249	1875
Russian Federation	1	32	4804	2018	1	25	4868	2175
Other CIS	310	173	1839	343	323	340	1814	308
Iraq	‡	141	3738	398	‡	111	3597	523
Kuwait	‡	5	1629	788	–	6	1203	895
Saudi Arabia	42	364	6956	1209	156	263	6420	1233
United Arab Emirates	102	583	3389	1964	107	658	3658	1986
Other Middle East	442	469	3099	1312	410	375	3276	1462
North Africa	78	751	1570	653	44	783	1464	687
West Africa	28	1128	3322	112	56	948	3301	165
East & S. Africa	148	1078	52	39	206	1062	40	34
Australasia	168	1226	202	103	156	1123	182	106
China	11497	2391	15	1276	11097	2303	18	1182
India	4632	1130	1	1974	4779	1201	1	1881
Japan	2521	811	‡	261	2302	798	2	205
Singapore	849	1507	38	1673	871	1819	‡	1512
Other Asia Pacific	6006	3877	254	2820	5917	4060	235	2522
Total World	**43440**	**25948**	**43440**	**25948**	**43215**	**26223**	**43215**	**26223**

Source: includes data from FGE Iran Service.
† Less than 0.05.
‡ Less than 0.5.
Notes: Does not include biofuels trade. Bunker fuel use is not included as exports. Intra-area movements (for example, between countries within Europe) are excluded.
Crude imports and exports include condensates.

Oil Inter-area movements 2024 – Crude trade



In 2024, international trade of crude oil was 2.2 billion tonnes, a modest rise of 1% over 2023. The Middle East remains the largest exporter, accounting for 40% of all exports. Saudia Arabia continues to be the largest single exporter, with the Russian Federation second and maintaining its 11% of global crude exports from 2023. Canada increased its exports by 4% in 2024 and is the world's third largest exporter.

For imports of crude oil, China remained the single largest importer at 0.6 billion tonnes accounting for 26% of total global trade in 2024. Europe had the second highest share of imports at 22%, followed by the US at 15%. Both Europe and the US decreased their imports of crude oil in 2024.

Oil Inter-area movements 2024 crude trade

Crude (million tonnes)

From	To: Canada	Mexico	US	S. & Cent. America	Europe	Russian Federation	Other CIS	Middle East	Africa	Australasia	China	India	Japan	Singapore	Other Asia Pacific	Total
Canada	–	–	203.1	†	5.9	–	–	†	†	–	9.2	0.4	†	–	0.8	**219.4**
Mexico	0.1	–	23.2	†	10.5	–	–	–	–	–	1.0	3.1	0.1	–	3.8	**41.7**
US	17.7	–	–	9.0	95.8	–	–	†	2.8	0.7	9.6	7.9	2.8	11.3	40.5	**198.3**
S. & Cent. America	0.9	–	53.6	–	47.2	–	–	1.6	2.6	0.1	52.6	8.9	1.7	3.4	11.5	**184.1**
Europe	†	–	3.7	0.6	–	–	†	†	0.1	–	4.1	2.3	–	0.5	1.2	**12.4**
Russian Federation	–	–	–	0.1	29.6	–	16.1	0.5	0.4	–	108.5	87.5	–	–	0.4	**243.1**
Other CIS	–	–	1.9	0.3	80.9	†	–	1.7	0.5	0.1	2.0	–	–	–	3.1	**90.6**
Iraq	–	–	9.9	–	38.2	–	†	0.5	0.1	–	63.8	50.1	–	1.5	15.5	**179.6**
Kuwait	–	–	1.1	–	0.3	–	–	2.8	†	–	16.0	6.0	8.1	†	25.8	**60.1**
Saudi Arabia	2.5	–	13.6	3.2	38.6	–	–	12.5	2.6	–	78.6	31.0	46.4	3.5	87.9	**320.6**
UAE	†	–	1.9	†	1.7	†	–	†	0.1	0.5	35.5	21.7	49.5	12.6	59.2	**182.7**
Other Middle East	†	–	–	†	0.6	–	†	8.9	†	–	121.5	3.4	5.3	5.2	18.7	**163.6**
North Africa	–	–	4.8	1.1	57.8	–	–	2.0	0.1	0.4	1.8	1.8	–	0.1	3.4	**73.1**
West Africa	3.9	–	12.2	6.4	55.7	–	–	2.6	5.9	0.3	46.6	13.2	–	1.6	16.4	**164.8**
East & S. Africa	–	–	–	†	0.5	–	–	†	†	–	0.5	–	†	0.3	0.6	**2.0**
Australasia	†	–	–	–	†	–	–	0.6	†	–	0.6	†	0.4	1.6	5.9	**9.1**
China	†	–	–	–	–	–	–	–	–	–	–	–	–	0.1	0.8	**0.9**
India	–	–	–	†	†	–	–	0.1	†	†	†	–	–	–	†	**0.1**
Japan	†	–	–	†	†	–	–	†	†	–	–	–	–	†	0.1	**0.1**
Singapore	–	–	–	–	†	–	–	–	–	†	–	–	–	–	†	**†**
Other Asia Pacific	†	–	†	†	0.1	–	–	†	†	5.7	2.1	1.4	0.6	1.8	–	**11.7**
Total imports	**25.1**	**–**	**329.0**	**20.7**	**463.4**	**†**	**16.1**	**33.6**	**15.3**	**7.8**	**554.1**	**238.6**	**115.0**	**43.5**	**295.4**	**2157.8**

Source: includes data from FGE Iran Service. † Less than 0.05.
Notes: Does not include biofuels trade. Bunker fuel use is not included as exports. Intra-area movements (for example, between countries within Europe) are excluded. Crude imports and exports include condensates.

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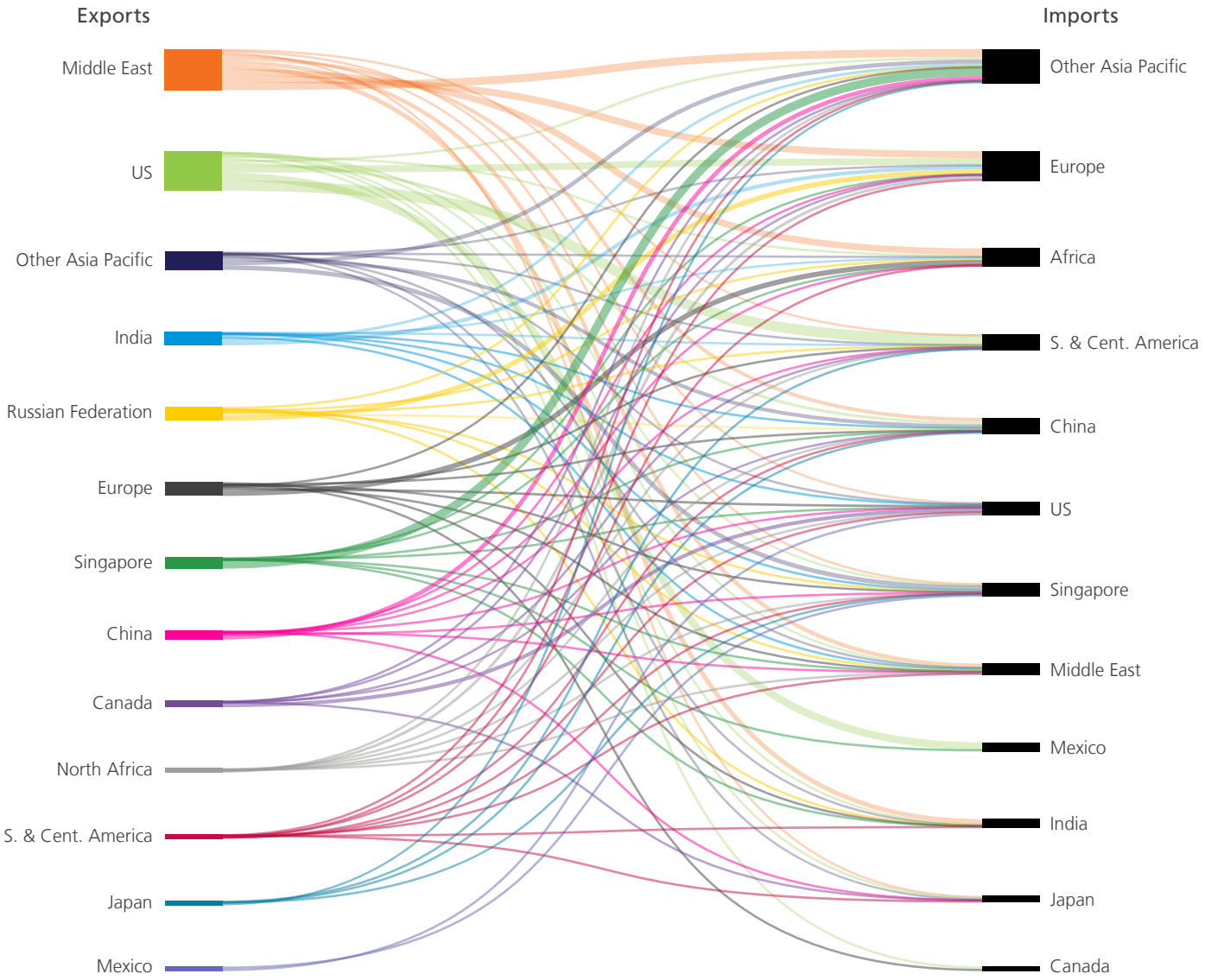
Oil Inter-area movements 2024 – Refined product



At 1.3 billion tonnes, international trade of refined product was around 58% that of crude oil trade in terms of tonnage and similar to 2023 levels. Between them, the Middle East and the US accounted for 46% of the total exports at 0.29 and 0.28 billion tonnes, respectively.

The Asia Pacific region accounted for 43% of total imports, with China accounting for 20% of the regions' total. Europe was the second-largest importer of refined products at 0.22 billion tonnes, a 13% increase on its 2023 imports.

Oil Inter-area movements 2024 refined product

Product (million tonnes)

From \ To	Canada	Mexico	US	S. & Cent. America	Europe	Russian Federation	Other CIS	Middle East	Africa	Australasia	China	India	Japan	Singapore	Other Asia Pacific	Total
Canada	–	†	27.7	2.9	0.7	–	†	†	†	†	1.0	†	2.4	0.1	0.8	**35.6**
Mexico	†	–	7.8	0.2	0.3	–	†	†	0.1	†	†	0.1	–	0.7	0.1	**9.2**
US	18.0	56.1	–	77.6	51.8	†	†	1.5	14.2	0.9	22.4	9.9	10.5	2.4	17.8	**283.3**
S. & Cent. America	†	0.1	8.0	–	3.7	†	†	0.8	3.0	†	5.6	2.1	0.8	4.9	1.2	**30.3**
Europe	3.4	†	18.0	8.4	–	0.1	2.2	8.8	37.7	0.4	1.4	1.0	†	4.3	4.1	**89.9**
Russian Federation	–	–	–	9.4	36.6	–	13.2	4.0	6.7	–	17.4	5.1	–	8.1	3.9	**104.3**
Other CIS	†	–	0.2	0.1	11.5	0.6	–	0.3	0.3	†	0.6	†	–	0.4	0.9	**14.8**
Iraq	–	–	3.0	†	7.5	–	†	4.9	0.2	–	2.6	2.2	†	1.3	3.4	**25.1**
Kuwait	0.1	–	1.5	0.8	14.3	–	†	2.9	4.3	†	2.0	3.7	3.7	1.5	8.2	**42.9**
Saudi Arabia	–	†	3.0	0.5	14.5	–	†	5.3	14.1	†	3.2	7.1	0.5	3.8	7.1	**59.2**
UAE	†	†	0.6	0.7	8.1	0.2	0.1	9.6	17.6	0.6	12.4	13.6	4.9	6.1	20.7	**95.3**
Other Middle East	0.1	†	1.1	0.8	7.2	†	0.5	7.6	11.3	0.2	7.1	8.4	3.3	3.7	18.8	**70.1**
North Africa	†	–	2.6	0.9	21.3	†	0.1	0.8	0.3	†	1.4	0.2	0.1	0.6	4.7	**32.9**
West Africa	†	–	1.1	0.6	1.7	†	†	†	0.5	†	0.8	†	–	1.4	1.8	**7.9**
East & S. Africa	†	†	†	0.1	0.2	†	–	0.1	1.1	†	†	†	†	0.1	†	**1.6**
Australasia	†	–	†	†	0.8	–	†	†	†	–	0.7	†	1.3	1.1	1.1	**5.1**
China	0.2	0.4	0.8	3.8	5.6	0.2	0.1	1.7	4.0	3.4	–	0.3	1.3	6.5	28.5	**56.7**
India	0.2	†	3.5	1.1	27.7	†	†	15.8	14.2	5.5	0.6	–	0.2	5.9	15.4	**90.2**
Japan	†	†	0.4	0.6	†	†	†	†	†	2.0	0.9	†	–	1.7	4.1	**9.9**
Singapore	†	0.6	1.3	0.1	0.7	†	†	0.5	1.2	11.1	3.2	1.3	0.3	–	52.1	**72.5**
Other Asia Pacific	0.4	0.3	7.7	1.6	3.7	0.1	0.1	3.2	3.0	29.7	27.1	2.4	8.9	32.7	–	**121.0**
Total imports	**22.4**	**57.7**	**88.3**	**110.1**	**218.0**	**1.2**	**16.3**	**67.8**	**134.0**	**53.9**	**110.5**	**57.6**	**38.3**	**87.2**	**194.8**	**1257.9**

Source: includes data from FGE Iran Service. † Less than 0.05.
Notes: Does not include biofuels trade. Bunker fuel use is not included as exports. Intra-area movements (for example, between countries within Europe) are excluded. Crude imports and exports include condensates.

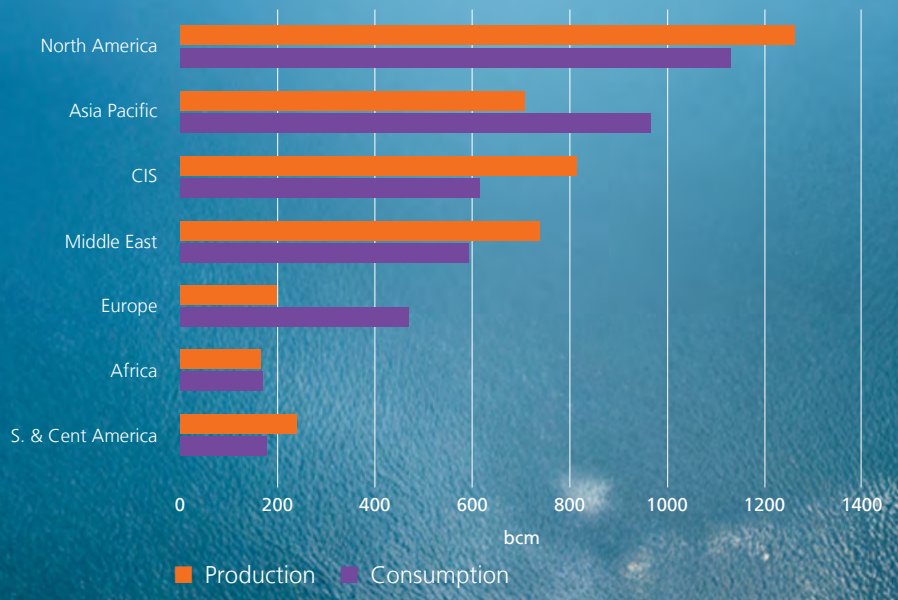
Natural gas

In 2024, global gas production increased by 1.2% to 4,124 bcm. The four largest producers were the US, Russia, Iran, and China who, together, accounted for 53% of total global production. European production continued its structural decline, falling by 3.4% from 2023, primarily due to decreases in Norway, the UK, and the Netherlands.

Global gas demand returned to growth in 2024 rising by 2.5% (101 bcm). Half of the demand growth was driven by the Asia Pacific region, led by China, Japan, and India. Meanwhile, Europe experienced a modest rebound, with demand increasing by 6 bcm to reach 469 bcm, marking its first rise since 2021.

Global LNG trade remained steady, with the US maintaining its position as the largest exporter, reaching 115 bcm. US LNG exports to Europe fell by 16 bcm from 2023, with most redirected to the Asia Pacific region. Global pipeline trade rose by 43 bcm, driven by Russia's increased exports, up 6 bcm to Europe, 8 bcm to neighbouring CIS countries, and 5 bcm to China.

The US alone accounted for 25% of global natural gas production and 22% of its consumption.



Half of gas growth was driven by the Asia Pacific region

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Natural gas Production in billion cubic metres*

Billion cubic metres	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	159.0	160.8	165.0	171.3	176.8	169.6	165.6	172.3	184.8	189.8	**194.2**	2.0%	2.0%	4.7%
Mexico	51.3	47.9	45.9	41.9	39.8	38.6	36.1	34.3	36.1	38.5	**35.8**	-7.4%	-3.5%	0.9%
US	704.7	740.3	727.4	747.1	840.9	928.1	924.8	944.5	990.7	1033.0	**1033.0**	-0.3%	3.9%	25.0%
Total North America	**915.0**	**949.0**	**938.3**	**960.3**	**1057.5**	**1136.3**	**1126.5**	**1151.1**	**1211.6**	**1261.4**	**1262.9**	**-0.2%**	**3.3%**	**30.6%**
Argentina	34.5	35.5	37.3	37.1	39.4	41.6	38.3	38.6	41.7	41.6	**44.1**	5.8%	2.5%	1.1%
Bolivia	20.4	20.1	18.9	18.6	17.3	15.1	14.7	15.1	13.6	11.8	**11.9**	0.6%	-5.3%	0.3%
Brazil	23.3	23.8	24.1	27.2	25.2	25.7	24.2	24.3	23.0	23.4	**22.8**	-2.8%	-0.2%	0.6%
Colombia	12.3	11.6	12.0	11.8	12.4	12.6	12.5	12.6	12.4	12.1	**11.1**	-8.3%	-1.1%	0.3%
Peru	13.1	12.7	14.0	13.0	12.8	13.5	13.2	12.4	15.0	15.4	**16.0**	3.2%	2.0%	0.4%
Trinidad & Tobago	38.1	36.0	31.3	31.9	34.0	34.6	29.5	24.7	26.0	25.0	**24.4**	-2.6%	-4.3%	0.6%
Venezuela	31.8	36.1	37.2	38.6	31.6	25.6	21.6	28.1	29.1	29.7	**31.7**	6.6%	†	0.8%
Other S. & Cent. America	2.6	2.9	3.1	3.1	3.1	3.3	2.7	2.6	2.8	2.9	**3.1**	4.7%	1.6%	0.1%
Total S. & Cent. America	**176.2**	**178.6**	**178.0**	**181.3**	**175.8**	**172.0**	**156.6**	**158.5**	**163.5**	**161.9**	**165.1**	**1.7%**	**-0.6%**	**4.0%**
Denmark	4.8	4.8	4.7	5.1	4.3	3.2	1.4	1.5	1.5	1.4	**1.8**	35.9%	-9.1%	†
Germany	8.1	7.5	6.9	6.4	5.5	5.3	4.5	4.5	4.3	3.8	**3.7**	-4.1%	-7.6%	0.1%
Italy	6.8	6.4	5.5	5.3	5.2	4.6	3.9	3.2	3.2	2.8	**2.8**	-1.9%	-8.5%	0.1%
Netherlands	60.4	45.9	44.3	37.9	32.5	27.7	20.1	18.0	15.0	9.9	**8.1**	-18.4%	-18.2%	0.2%
Norway	106.5	115.0	114.7	122.4	120.0	113.2	110.3	113.3	122.9	116.1	**113.2**	-2.8%	0.6%	2.7%
Poland	4.3	4.3	4.1	4.0	4.0	4.0	3.9	3.9	3.8	3.7	**3.6**	-2.7%	-1.9%	0.1%
Romania	10.2	10.2	9.1	10.0	10.0	9.6	8.6	8.6	8.8	8.9	**9.0**	0.7%	-1.3%	0.2%
Ukraine	20.2	18.8	19.0	19.4	19.7	19.4	19.1	18.7	17.5	17.7	**18.1**	2.0%	-1.1%	0.4%
United Kingdom	37.4	40.7	41.7	41.9	40.6	39.3	39.6	32.8	38.1	34.5	**30.7**	-11.2%	-2.0%	0.7%
Other Europe	6.3	6.1	8.7	9.0	8.4	7.4	6.3	5.4	5.1	5.2	**6.6**	27.2%	0.4%	0.2%
Total Europe	**265.1**	**259.7**	**258.8**	**261.4**	**250.1**	**233.8**	**217.7**	**209.9**	**220.2**	**203.9**	**197.5**	**-3.4%**	**-2.9%**	**4.8%**
Azerbaijan	18.4	18.8	18.3	17.8	18.8	23.9	25.9	31.8	34.1	35.6	**37.8**	5.9%	7.5%	0.9%
Kazakhstan	32.8	27.1	30.9	36.4	39.2	33.5	30.6	26.7	27.6	29.5	**29.7**	0.4%	-1.0%	0.7%
Russian Federation	591.2	584.4	589.3	635.6	669.1	679.0	638.4	702.1	618.4	586.4	**629.9**	7.1%	0.6%	15.3%
Turkmenistan	63.5	65.9	63.2	58.7	61.5	63.2	66.0	79.3	78.3	76.3	**73.5**	-4.0%	1.5%	1.8%
Uzbekistan	56.3	53.6	53.1	53.6	58.3	57.5	47.1	50.9	48.9	44.2	**42.2**	-4.8%	-2.8%	1.0%
Other CIS	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	**0.3**	3.1%	-1.2%	†
Total CIS	**762.4**	**750.2**	**755.1**	**802.3**	**847.2**	**857.4**	**808.4**	**891.2**	**807.6**	**772.3**	**813.3**	**5.0%**	**0.6%**	**19.7%**
Bahrain	14.7	14.6	14.4	14.5	14.6	16.3	16.4	16.6	15.8	15.8	**16.6**	4.9%	1.2%	0.4%
Iran	175.5	183.5	199.3	213.9	220.1	228.3	235.8	242.8	247.7	259.7	**262.9**	0.9%	4.1%	6.4%
Iraq	7.5	7.3	9.9	10.1	10.6	11.0	7.0	9.1	9.3	10.4	**11.9**	14.2%	4.7%	0.3%
Israel	7.1	7.9	8.8	9.3	9.9	10.0	14.7	18.3	20.8	19.8	**21.4**	7.9%	11.6%	0.5%
Kuwait	14.3	16.1	16.4	16.2	16.9	13.3	12.2	12.1	13.2	14.8	**14.9**	0.7%	0.4%	0.4%
Oman	29.3	30.7	31.5	32.3	36.3	36.7	36.9	40.3	42.1	43.2	**45.3**	4.7%	4.4%	1.1%
Qatar	169.4	175.9	174.8	170.5	175.2	177.2	174.9	177.0	178.5	181.0	**179.5**	-1.1%	0.6%	4.4%
Saudi Arabia	97.3	99.2	105.3	109.3	112.1	111.2	113.1	114.5	116.7	117.4	**121.5**	3.2%	2.2%	2.9%
Syria	4.6	4.1	3.5	3.5	3.5	3.3	2.9	3.1	2.5	2.6	**2.7**	4.5%	-5.1%	0.1%
United Arab Emirates	52.9	58.6	59.5	52.7	46.4	53.7	53.7	53.1	54.2	55.3	**61.4**	10.8%	1.5%	1.5%
Other Middle East	9.9	3.0	0.6	0.1	0.1	0.1	0.2	0.2	0.2	0.2	**0.3**	55.2%	-29.3%	†
Total Middle East	**582.5**	**600.8**	**624.2**	**632.5**	**645.8**	**660.9**	**667.8**	**687.1**	**701.0**	**720.0**	**738.4**	**2.3%**	**2.4%**	**17.9%**
Algeria	80.2	81.4	91.4	93.0	93.8	87.0	81.4	101.1	97.6	101.5	**94.7**	-7.0%	1.7%	2.3%
Egypt	47.0	42.6	40.3	48.8	58.6	64.9	58.5	67.8	64.5	57.1	**47.5**	-17.0%	0.1%	1.2%
Libya	11.8	12.9	12.7	14.2	14.0	16.0	12.7	15.3	14.6	14.8	**14.3**	-4.1%	1.9%	0.3%
Nigeria	40.0	47.6	42.6	47.2	48.3	49.3	49.4	52.4	47.1	44.4	**46.8**	5.3%	1.6%	1.1%
Other Africa	20.6	21.7	22.8	27.0	28.0	28.4	29.9	30.1	32.6	35.8	**36.2**	0.8%	5.8%	0.9%
Total Africa	**199.5**	**206.2**	**209.8**	**230.1**	**242.6**	**245.6**	**231.9**	**266.7**	**256.4**	**253.6**	**239.6**	**-5.8%**	**1.8%**	**5.8%**
Australia	65.3	74.3	94.1	110.3	127.4	146.1	145.7	147.9	154.2	150.7	**150.1**	-0.7%	8.7%	3.6%
Bangladesh	23.0	25.9	26.5	26.6	26.6	25.3	23.7	23.6	22.5	21.1	**19.7**	-6.8%	-1.5%	0.5%
Brunei	12.7	13.3	12.9	12.9	12.6	13.0	12.6	11.5	10.6	10.0	**10.4**	3.6%	-2.0%	0.3%
China	131.2	135.7	137.9	149.2	161.4	176.7	194.0	209.2	221.8	234.3	**248.4**	5.7%	6.6%	6.0%
India	29.4	28.1	26.6	27.7	27.5	26.9	23.8	28.5	29.8	31.6	**32.4**	2.2%	1.0%	0.8%
Indonesia	87.2	86.6	85.3	83.2	83.0	75.6	66.4	66.5	65.5	68.1	**71.4**	4.5%	-2.0%	1.7%
Malaysia	72.2	76.8	76.7	79.6	76.1	77.5	73.1	79.0	83.0	78.0	**80.4**	2.7%	1.1%	1.9%
Myanmar	16.5	19.2	18.3	17.8	17.0	18.5	17.5	17.2	16.8	15.2	**14.8**	-2.8%	-1.1%	0.4%
Pakistan	35.0	35.0	34.7	34.7	34.2	32.7	30.6	32.7	28.6	27.7	**26.1**	-6.2%	-2.9%	0.6%
Thailand	39.1	37.5	37.3	35.9	34.7	35.8	32.7	31.5	25.3	25.7	**28.5**	10.9%	-3.1%	0.7%
Vietnam	9.9	10.3	10.2	9.5	9.7	9.8	8.8	7.2	7.8	7.2	**6.1**	-15.6%	-4.7%	0.1%
Other Asia Pacific	23.1	27.9	29.0	29.2	26.9	28.7	29.0	27.2	23.9	21.5	**19.3**	-10.6%	-1.8%	0.5%
Total Asia Pacific	**544.4**	**570.7**	**589.4**	**616.5**	**637.0**	**666.5**	**658.0**	**682.1**	**690.0**	**691.1**	**707.5**	**2.1%**	**2.7%**	**17.2%**
Total World	**3445.1**	**3515.2**	**3553.6**	**3684.3**	**3856.0**	**3972.5**	**3867.0**	**4046.6**	**4050.4**	**4064.2**	**4124.5**	**1.2%**	**1.8%**	**100.0%**
of which: OECD	1241.4	1279.9	1290.8	1331.3	1434.9	1517.7	1496.5	1519.0	1599.1	1627.9	**1621.8**	-0.6%	2.7%	39.3%
Non-OECD	2203.8	2235.3	2262.8	2353.0	2421.0	2454.9	2370.4	2527.5	2451.2	2436.3	**2502.6**	2.4%	1.3%	60.7%
European Union	99.9	84.3	82.4	76.8	69.0	61.0	47.9	44.3	40.8	34.5	**33.0**	-4.5%	-10.5%	0.8%

Source: Includes data from Cedigaz. FGE MENA gas service.
* Excludes gas flared or recycled. Includes natural gas produced for Gas-to-Liquids transformation.
† Less than 0.05%.
Notes: As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar); as they are derived directly from measures of energy content using an average conversion factor and have been standardised using a Gross Calorific Value (GCV) of 40 MJ/m³, they do not necessarily equate with gas volumes expressed in specific national terms.
Annual changes and shares of total are calculated using billion cubic metres figures. Growth rates are adjusted for leap years.

Natural gas Production in exajoules*

Exajoules	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	5.72	5.79	5.94	6.17	6.36	6.11	5.96	6.20	6.65	6.83	**6.99**	2.0%	2.0%	4.7%
Mexico	1.85	1.73	1.65	1.51	1.43	1.39	1.30	1.24	1.30	1.39	**1.29**	-7.4%	-3.5%	0.9%
US	25.37	26.65	26.18	26.90	30.27	33.41	33.29	34.00	35.67	37.19	**37.19**	-0.3%	3.9%	25.0%
Total North America	**32.94**	**34.16**	**33.78**	**34.57**	**38.07**	**40.91**	**40.56**	**41.44**	**43.62**	**45.41**	**45.47**	**-0.2%**	**3.3%**	**30.6%**
Argentina	1.24	1.28	1.34	1.34	1.42	1.50	1.38	1.39	1.50	1.50	**1.59**	5.8%	2.5%	1.1%
Bolivia	0.74	0.72	0.68	0.67	0.62	0.54	0.53	0.55	0.49	0.43	**0.43**	0.6%	-5.3%	0.3%
Brazil	0.84	0.86	0.87	0.98	0.91	0.93	0.87	0.88	0.83	0.84	**0.82**	-2.8%	-0.2%	0.6%
Colombia	0.44	0.42	0.43	0.42	0.45	0.45	0.45	0.45	0.45	0.43	**0.40**	-8.3%	-1.1%	0.3%
Peru	0.47	0.46	0.50	0.47	0.46	0.49	0.48	0.45	0.54	0.56	**0.57**	3.2%	2.0%	0.4%
Trinidad & Tobago	1.37	1.29	1.13	1.15	1.22	1.24	1.06	0.89	0.94	0.90	**0.88**	-2.6%	-4.3%	0.6%
Venezuela	1.14	1.30	1.34	1.39	1.14	0.92	0.78	1.01	1.05	1.07	**1.14**	6.6%	†	0.8%
Other S. & Cent. America	0.09	0.10	0.11	0.11	0.11	0.12	0.10	0.09	0.10	0.11	**0.11**	4.7%	1.6%	0.1%
Total S. & Cent. America	**6.34**	**6.43**	**6.41**	**6.53**	**6.33**	**6.19**	**5.64**	**5.71**	**5.89**	**5.83**	**5.94**	**1.7%**	**-0.6%**	**4.0%**
Denmark	0.17	0.17	0.17	0.18	0.15	0.12	0.05	0.05	0.05	0.05	**0.07**	35.9%	-9.1%	†
Germany	0.29	0.27	0.25	0.23	0.20	0.19	0.16	0.16	0.15	0.14	**0.13**	-4.1%	-7.6%	0.1%
Italy	0.25	0.23	0.20	0.19	0.19	0.17	0.14	0.11	0.11	0.10	**0.10**	-1.9%	-8.5%	0.1%
Netherlands	2.17	1.65	1.59	1.37	1.17	1.00	0.72	0.65	0.54	0.35	**0.29**	-18.4%	-18.2%	0.2%
Norway	3.83	4.14	4.13	4.41	4.32	4.08	3.97	4.08	4.43	4.18	**4.08**	-2.8%	0.6%	2.7%
Poland	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.13	**0.13**	-2.7%	-1.9%	0.1%
Romania	0.37	0.37	0.33	0.36	0.36	0.35	0.31	0.31	0.32	0.32	**0.32**	0.7%	-1.3%	0.2%
Ukraine	0.73	0.68	0.68	0.70	0.71	0.70	0.69	0.67	0.63	0.64	**0.65**	2.0%	-1.1%	0.4%
United Kingdom	1.35	1.46	1.50	1.51	1.46	1.41	1.42	1.18	1.37	1.24	**1.11**	-11.2%	-2.0%	0.7%
Other Europe	0.23	0.22	0.31	0.32	0.30	0.27	0.23	0.19	0.18	0.19	**0.24**	27.2%	0.4%	0.2%
Total Europe	**9.54**	**9.35**	**9.32**	**9.41**	**9.00**	**8.42**	**7.84**	**7.56**	**7.93**	**7.34**	**7.11**	**-3.4%**	**-2.9%**	**4.8%**
Azerbaijan	0.66	0.68	0.66	0.64	0.68	0.86	0.93	1.15	1.23	1.28	**1.36**	5.9%	7.5%	0.9%
Kazakhstan	1.18	0.98	1.11	1.31	1.41	1.21	1.10	0.96	0.99	1.06	**1.07**	0.4%	-1.0%	0.7%
Russian Federation	21.28	21.04	21.21	22.88	24.09	24.44	22.98	25.28	22.26	21.11	**22.68**	7.1%	0.6%	15.3%
Turkmenistan	2.29	2.37	2.28	2.11	2.21	2.27	2.38	2.85	2.82	2.75	**2.64**	-4.0%	1.5%	1.8%
Uzbekistan	2.03	1.93	1.91	1.93	2.10	2.07	1.70	1.83	1.76	1.59	**1.52**	-4.8%	-2.8%	1.0%
Other CIS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	3.1%	-1.2%	†
Total CIS	**27.45**	**27.01**	**27.19**	**28.88**	**30.50**	**30.87**	**29.10**	**32.08**	**29.07**	**27.80**	**29.28**	**5.0%**	**0.6%**	**19.7%**
Bahrain	0.53	0.53	0.52	0.52	0.53	0.59	0.59	0.60	0.57	0.57	**0.60**	4.9%	1.2%	0.4%
Iran	6.32	6.61	7.18	7.70	7.92	8.22	8.49	8.74	8.92	9.35	**9.46**	0.9%	4.1%	6.4%
Iraq	0.27	0.26	0.36	0.36	0.38	0.39	0.25	0.33	0.33	0.37	**0.43**	14.2%	4.7%	0.3%
Israel	0.26	0.28	0.32	0.34	0.36	0.36	0.53	0.66	0.75	0.71	**0.77**	7.9%	11.6%	0.5%
Kuwait	0.51	0.58	0.59	0.58	0.61	0.48	0.44	0.44	0.47	0.53	**0.54**	0.7%	0.4%	0.4%
Oman	1.06	1.11	1.13	1.16	1.31	1.32	1.33	1.45	1.52	1.55	**1.63**	4.7%	4.4%	1.1%
Qatar	6.10	6.33	6.29	6.14	6.31	6.38	6.30	6.37	6.43	6.52	**6.46**	-1.1%	0.6%	4.4%
Saudi Arabia	3.50	3.57	3.79	3.93	4.04	4.00	4.07	4.12	4.20	4.22	**4.37**	3.2%	2.2%	2.9%
Syria	0.17	0.15	0.13	0.13	0.12	0.12	0.11	0.11	0.09	0.09	**0.10**	4.5%	-5.1%	0.1%
United Arab Emirates	1.90	2.11	2.14	1.90	1.67	1.93	1.93	1.91	1.95	1.99	**2.21**	10.8%	1.5%	1.5%
Other Middle East	0.36	0.11	0.02	^	^	^	0.01	0.01	0.01	0.01	**0.01**	55.2%	-29.3%	†
Total Middle East	**20.97**	**21.63**	**22.47**	**22.77**	**23.25**	**23.79**	**24.04**	**24.74**	**25.24**	**25.92**	**26.58**	**2.3%**	**2.4%**	**17.9%**
Algeria	2.89	2.93	3.29	3.35	3.38	3.13	2.93	3.64	3.51	3.65	**3.41**	-7.0%	1.7%	2.3%
Egypt	1.69	1.53	1.45	1.76	2.11	2.34	2.10	2.44	2.32	2.06	**1.71**	-17.0%	0.1%	1.2%
Libya	0.43	0.46	0.46	0.51	0.50	0.58	0.46	0.55	0.52	0.53	**0.51**	-4.1%	1.9%	0.3%
Nigeria	1.44	1.71	1.53	1.70	1.74	1.77	1.78	1.89	1.70	1.60	**1.69**	5.3%	1.6%	1.1%
Other Africa	0.74	0.78	0.82	0.97	1.01	1.02	1.08	1.08	1.17	1.29	**1.30**	0.8%	5.8%	0.9%
Total Africa	**7.18**	**7.42**	**7.55**	**8.28**	**8.73**	**8.84**	**8.35**	**9.60**	**9.23**	**9.13**	**8.62**	**-5.8%**	**1.8%**	**5.8%**
Australia	2.35	2.67	3.39	3.97	4.59	5.26	5.25	5.33	5.55	5.43	**5.41**	-0.7%	8.7%	3.6%
Bangladesh	0.83	0.93	0.95	0.96	0.96	0.91	0.85	0.85	0.81	0.76	**0.71**	-6.8%	-1.5%	0.5%
Brunei	0.46	0.48	0.47	0.46	0.45	0.47	0.46	0.42	0.38	0.36	**0.37**	3.6%	-2.0%	0.3%
China	4.72	4.88	4.97	5.37	5.81	6.36	6.98	7.53	7.99	8.43	**8.94**	5.7%	6.6%	6.0%
India	1.06	1.01	0.96	1.00	0.99	0.97	0.86	1.03	1.07	1.14	**1.16**	2.2%	1.0%	0.8%
Indonesia	3.14	3.12	3.07	2.99	2.99	2.72	2.39	2.40	2.36	2.45	**2.57**	4.5%	-2.0%	1.7%
Malaysia	2.60	2.77	2.76	2.86	2.74	2.79	2.63	2.84	2.99	2.81	**2.89**	2.7%	1.1%	1.9%
Myanmar	0.60	0.69	0.66	0.64	0.61	0.67	0.63	0.62	0.61	0.55	**0.53**	-2.8%	-1.1%	0.4%
Pakistan	1.26	1.26	1.25	1.25	1.23	1.18	1.10	1.18	1.03	1.00	**0.94**	-6.2%	-2.9%	0.6%
Thailand	1.41	1.35	1.34	1.29	1.25	1.29	1.18	1.13	0.91	0.92	**1.03**	10.9%	-3.1%	0.7%
Vietnam	0.35	0.37	0.37	0.34	0.35	0.35	0.32	0.26	0.28	0.26	**0.22**	-15.6%	-4.7%	0.1%
Other Asia Pacific	0.83	1.01	1.04	1.05	0.97	1.03	1.04	0.98	0.86	0.78	**0.69**	-10.6%	-1.8%	0.5%
Total Asia Pacific	**19.60**	**20.55**	**21.22**	**22.19**	**22.93**	**23.99**	**23.69**	**24.56**	**24.84**	**24.88**	**25.47**	**2.1%**	**2.7%**	**17.2%**
Total World	**124.03**	**126.55**	**127.93**	**132.64**	**138.81**	**143.01**	**139.21**	**145.68**	**145.81**	**146.31**	**148.48**	**1.2%**	**1.8%**	**100.0%**
of which: OECD	44.69	46.08	46.47	47.93	51.66	54.64	53.88	54.69	57.57	58.61	**58.39**	-0.6%	2.7%	39.3%
Non-OECD	79.34	80.47	81.46	84.71	87.16	88.38	85.34	90.99	88.24	87.71	**90.10**	2.4%	1.3%	60.7%
European Union	3.60	3.03	2.96	2.76	2.48	2.19	1.72	1.60	1.47	1.24	**1.19**	-4.5%	-10.5%	0.8%

Source: Includes data from Cedigaz. FGE MENA gas service.
* Excludes gas flared or recycled. Includes natural gas produced for Gas-to-Liquids transformation.
^ Less than 0.005.
† Less than 0.05%.
Notes: Annual changes and shares of total are calculated using exajoules figures.
Growth rates are adjusted for leap years.

Natural gas Consumption in billion cubic metres*

Billion cubic metres	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	109.8	110.3	105.6	109.6	117.7	118.7	115.3	118.6	123.8	124.1	**128.5**	3.3%	1.6%	3.1%
Mexico	78.8	80.8	85.3	89.7	92.2	95.3	95.1	93.9	93.3	100.5	**100.3**	-0.5%	2.4%	2.4%
US	722.3	743.6	749.1	739.8	822.0	851.0	835.3	836.4	880.4	888.4	**902.2**	1.3%	2.2%	21.9%
Total North America	**911.0**	**934.7**	**940.0**	**939.1**	**1031.8**	**1064.9**	**1045.7**	**1049.0**	**1097.5**	**1113.1**	**1131.0**	**1.3%**	**2.2%**	**27.4%**
Argentina	46.2	46.7	48.2	48.3	48.7	46.6	43.9	45.9	45.9	44.9	**45.6**	1.2%	-0.1%	1.1%
Brazil	40.7	42.9	37.1	37.6	35.9	35.7	31.4	40.4	32.0	29.9	**31.4**	4.7%	-2.6%	0.8%
Chile	4.4	4.8	5.9	5.6	5.6	6.5	6.2	6.8	7.3	7.6	**7.1**	-6.8%	4.9%	0.2%
Colombia	11.4	11.2	12.1	11.8	12.7	12.9	13.1	12.6	12.6	13.1	**13.4**	2.7%	1.7%	0.3%
Ecuador	0.9	0.8	0.9	0.9	0.8	0.7	0.6	0.6	0.5	0.5	**0.6**	28.0%	-3.2%	†
Peru	7.4	7.6	8.5	7.5	8.0	8.2	8.2	8.9	9.8	10.1	**11.3**	12.2%	4.3%	0.3%
Trinidad & Tobago	20.5	19.6	16.9	18.3	17.4	17.5	15.2	15.6	15.5	14.5	**14.1**	-3.4%	-3.7%	0.3%
Venezuela	34.0	37.0	37.2	38.6	31.6	25.6	21.6	28.1	29.1	29.7	**31.7**	6.6%	-0.7%	0.8%
Central America	–	–	–	–	0.2	0.5	0.4	0.3	0.6	1.2	**1.2**	1.2%	–	†
Other Caribbean	3.7	3.7	3.8	3.5	4.0	4.5	4.6	5.5	5.3	6.0	**6.6**	9.3%	6.0%	0.2%
Other South America	3.5	3.4	3.6	3.9	4.0	3.9	3.4	3.7	3.9	4.3	**5.9**	38.2%	5.4%	0.1%
Total S. & Cent. America	**172.6**	**177.8**	**174.3**	**176.1**	**169.0**	**162.5**	**148.6**	**168.5**	**162.3**	**161.6**	**168.9**	**4.2%**	**-0.2%**	**4.1%**
Austria	7.5	8.0	8.3	9.1	8.7	8.9	8.5	9.0	7.9	6.9	**6.8**	-1.1%	-1.0%	0.2%
Belgium	14.5	15.8	16.2	16.4	16.9	17.4	17.0	17.0	14.6	13.8	**13.3**	-4.0%	-0.9%	0.3%
Bulgaria	2.7	3.0	3.1	3.2	3.0	2.8	2.9	3.3	2.7	2.5	**2.7**	7.1%	-0.1%	0.1%
Croatia	2.3	2.4	2.5	2.9	2.7	2.8	2.9	2.8	2.5	2.5	**2.4**	-5.7%	0.1%	0.1%
Czech Republic	7.2	7.5	8.2	8.4	8.0	8.3	8.5	9.1	7.4	6.7	**6.7**	-0.4%	-0.7%	0.2%
Denmark	3.3	3.3	3.4	3.2	3.1	2.9	2.3	2.4	1.7	1.6	**1.6**	0.6%	-6.8%	†
Estonia	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.3	**0.3**	7.9%	-3.9%	†
Finland	2.7	2.3	2.0	1.8	2.1	2.0	2.1	2.1	1.1	1.2	**1.3**	8.6%	-7.1%	†
France	37.9	40.8	44.5	44.8	42.8	43.7	40.6	43.0	38.6	34.1	**32.0**	-6.4%	-1.7%	0.8%
Germany	73.9	77.0	84.9	87.7	85.9	89.3	87.1	91.7	75.6	72.8	**78.6**	7.6%	0.6%	1.9%
Greece	3.2	3.4	4.4	5.4	5.2	5.8	6.3	7.0	6.2	5.4	**6.7**	23.6%	7.8%	0.2%
Hungary	8.1	8.7	9.3	9.9	9.6	9.8	10.2	10.8	9.2	8.2	**8.2**	†	0.1%	0.2%
Ireland	4.3	4.4	4.9	5.0	5.2	5.3	5.3	5.1	5.2	4.8	**5.0**	2.6%	1.4%	0.1%
Italy	59.0	64.3	67.5	71.6	69.2	70.8	67.6	72.4	65.2	58.6	**58.9**	0.3%	†	1.4%
Latvia	1.3	1.3	1.3	1.2	1.4	1.3	1.1	1.2	0.8	0.8	**0.8**	6.2%	-4.3%	†
Lithuania	2.4	2.4	2.1	2.2	2.2	2.2	2.4	2.2	1.6	1.6	**1.7**	8.4%	-3.4%	†
Luxembourg	1.0	0.9	0.8	0.8	0.8	0.8	0.7	0.8	0.6	0.6	**0.6**	4.9%	-4.7%	†
Netherlands	34.3	33.8	35.2	36.3	35.6	37.2	36.1	34.9	27.5	25.9	**26.1**	0.6%	-2.7%	0.6%
North Macedonia	0.1	0.1	0.2	0.3	0.2	0.3	0.3	0.4	0.3	0.4	**0.3**	-6.0%	9.9%	†
Norway	4.2	4.5	4.3	4.5	4.4	4.5	4.4	4.2	3.9	3.8	**3.4**	-11.0%	-2.3%	0.1%
Poland	17.0	17.1	18.3	19.2	19.9	20.9	21.1	22.4	18.6	19.4	**21.0**	7.6%	2.1%	0.5%
Portugal	4.1	4.8	5.1	6.3	5.8	6.1	6.0	5.8	5.6	4.5	**3.7**	-18.1%	-1.2%	0.1%
Romania	10.9	10.4	10.5	11.3	11.6	10.8	11.3	11.6	9.7	9.1	**9.5**	3.4%	-1.4%	0.2%
Slovakia	4.4	4.5	4.5	4.8	4.7	4.8	4.8	5.3	4.4	4.2	**4.3**	3.2%	-0.1%	0.1%
Slovenia	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	**0.8**	8.0%	1.3%	†
Spain	27.5	28.5	29.1	31.7	31.5	36.0	32.5	34.3	33.0	29.5	**28.4**	-4.0%	0.3%	0.7%
Sweden	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.1	0.8	0.9	**1.0**	8.0%	1.2%	†
Switzerland	3.1	3.3	3.5	3.5	3.3	3.4	3.4	2.8	3.7	3.4	**3.4**	1.2%	1.1%	0.1%
Türkiye	46.6	46.0	44.5	51.6	47.2	43.4	46.2	57.3	50.9	48.1	**50.9**	5.6%	0.9%	1.2%
Ukraine	40.3	32.0	31.4	30.2	30.6	28.3	29.3	27.3	18.3	18.7	**19.9**	6.1%	-6.8%	0.5%
United Kingdom	70.1	72.0	79.9	78.2	78.8	77.9	73.5	77.0	70.5	63.6	**61.9**	-3.0%	-1.2%	1.5%
Other Europe	4.1	4.5	4.6	5.3	5.3	5.5	5.5	6.2	6.7	6.7	**6.5**	-2.8%	4.7%	0.2%
Total Europe	**500.2**	**509.2**	**537.1**	**559.2**	**548.3**	**555.4**	**542.1**	**571.6**	**495.9**	**461.2**	**468.7**	**1.4%**	**-0.6%**	**11.4%**
Azerbaijan	9.9	11.1	10.9	10.6	10.8	11.8	12.4	12.8	13.6	14.0	**12.8**	-9.1%	2.6%	0.3%
Belarus	19.1	17.9	17.8	18.2	19.3	19.2	17.8	18.8	18.5	16.8	**16.8**	-0.3%	-1.3%	0.4%
Kazakhstan	14.8	13.8	15.0	16.7	16.7	19.7	17.7	21.6	21.3	20.0	**20.7**	3.7%	3.4%	0.5%
Russian Federation	422.2	408.7	420.6	431.1	454.5	444.3	423.5	431.5	448.4	453.4	**477.0**	4.9%	1.2%	11.6%
Turkmenistan	20.0	25.4	25.1	24.8	28.4	27.7	34.3	35.8	37.5	35.3	**28.5**	-19.4%	3.6%	0.7%
Uzbekistan	48.5	46.3	43.3	44.8	44.4	44.6	43.6	47.4	48.2	46.9	**54.6**	16.0%	1.2%	1.3%
Other CIS	5.3	5.2	5.1	5.1	5.9	5.6	5.8	5.9	5.9	5.6	**5.6**	†	0.6%	0.1%
Total CIS	**539.8**	**528.4**	**538.0**	**551.2**	**580.0**	**572.9**	**555.0**	**573.8**	**593.4**	**591.9**	**616.0**	**3.8%**	**1.3%**	**14.9%**
Iran	173.4	184.0	196.3	205.0	212.6	218.4	236.8	229.5	239.4	246.6	**245.4**	-0.8%	3.5%	5.9%
Iraq	7.5	7.3	9.9	11.4	14.6	19.5	18.5	16.4	18.4	19.2	**19.8**	2.5%	10.1%	0.5%
Israel	7.2	8.0	9.2	9.8	10.6	10.7	11.3	11.7	12.1	10.5	**10.4**	-1.5%	3.7%	0.3%
Kuwait	17.9	20.3	21.1	21.0	21.2	18.4	17.9	19.8	21.7	23.7	**24.6**	3.7%	3.3%	0.6%
Oman	21.3	23.1	22.9	23.4	25.0	25.0	26.0	28.5	29.2	30.2	**31.7**	4.5%	4.0%	0.8%
Qatar	38.0	43.5	41.7	41.1	41.7	41.5	38.6	40.3	40.1	43.8	**46.5**	5.9%	2.0%	1.1%
Saudi Arabia	97.3	99.2	105.3	109.3	112.1	111.2	113.1	114.5	116.7	117.4	**121.5**	3.2%	2.2%	2.9%
United Arab Emirates	63.9	71.3	71.5	65.7	58.1	67.0	67.7	65.3	66.4	67.0	**71.3**	6.2%	1.1%	1.7%
Other Middle East	20.9	22.5	23.1	22.9	21.9	23.0	23.0	23.4	22.1	21.9	**21.4**	-2.8%	0.2%	0.5%
Total Middle East	**447.4**	**479.3**	**501.1**	**509.6**	**517.8**	**534.6**	**552.8**	**549.4**	**566.1**	**580.3**	**592.5**	**1.8%**	**2.9%**	**14.4%**
Algeria	36.1	37.9	38.6	39.5	43.4	45.1	43.4	48.2	50.3	54.2	**50.5**	-7.1%	3.4%	1.2%
Egypt	46.2	46.0	49.4	55.9	59.6	59.0	58.3	62.1	60.6	60.0	**59.8**	-0.7%	2.6%	1.4%
Morocco	1.2	1.2	1.2	1.2	1.1	1.0	0.8	0.8	0.2	0.9	**0.9**	1.3%	-2.6%	†
South Africa	4.3	4.3	3.7	4.0	4.4	4.3	4.0	4.2	4.3	4.7	**4.8**	0.3%	1.0%	0.1%
Eastern Africa	1.3	1.6	2.0	2.0	2.1	2.4	2.3	2.7	2.9	2.9	**2.6**	-12.4%	7.5%	0.1%
Middle Africa	3.9	4.2	5.5	5.5	5.6	5.0	5.4	6.0	6.4	5.8	**5.8**	1.1%	4.2%	0.1%
Western Africa	16.0	23.9	21.1	22.1	23.6	24.3	26.0	34.5	33.0	32.6	**35.5**	8.3%	8.3%	0.9%
Other Northern Africa	11.3	11.6	13.6	15.4	15.6	16.6	14.1	18.1	17.7	17.8	**18.2**	1.5%	4.8%	0.4%
Total Africa	**120.2**	**130.8**	**135.0**	**145.6**	**155.3**	**157.7**	**154.2**	**176.5**	**175.4**	**179.1**	**178.0**	**-0.9%**	**4.0%**	**4.3%**
Australia	37.6	39.0	38.0	37.3	37.2	44.1	42.3	39.6	43.2	38.6	**37.0**	-4.5%	-0.2%	0.9%
Bangladesh	23.0	25.9	26.5	26.6	27.4	30.9	29.9	30.6	28.7	28.1	**27.3**	-3.1%	1.7%	0.7%
China	188.4	194.7	209.4	241.3	283.9	308.4	336.6	380.3	377.6	404.8	**434.4**	7.0%	8.7%	10.5%
China Hong Kong SAR	2.4	3.0	3.1	3.1	3.0	3.1	4.9	4.8	4.5	4.8	**5.4**	11.6%	8.6%	0.1%
India	48.5	47.8	50.8	53.6	58.0	59.2	60.4	62.4	58.3	62.0	**70.3**	13.0%	3.8%	1.7%
Indonesia	44.1	46.9	44.0	50.0	43.1	40.7	37.7	40.8	39.8	43.4	**47.3**	8.5%	0.7%	1.1%
Japan	124.8	118.7	116.4	117.0	115.7	108.1	104.1	102.7	99.5	91.6	**90.9**	-1.0%	-3.1%	2.2%
Malaysia	44.7	46.8	45.0	45.0	44.7	45.2	43.6	51.4	51.9	43.8	**46.2**	5.0%	0.3%	1.1%
New Zealand	5.2	4.8	4.8	5.0	4.5	4.8	4.6	3.9	3.7	3.9	**3.0**	-21.3%	-5.3%	0.1%
Pakistan	35.0	36.5	38.7	40.7	43.6	44.5	41.2	44.9	38.2	37.8	**37.1**	-2.3%	0.6%	0.9%
Philippines	3.5	3.3	3.8	3.8	4.1	4.2	3.8	3.3	3.1	3.2	**3.4**	4.7%	-0.5%	0.1%
Singapore	10.4	11.6	11.9	12.3	12.3	12.5	12.6	13.4	13.1	12.3	**13.0**	5.0%	2.3%	0.3%
South Korea	50.0	45.6	47.6	49.8	57.8	56.0	57.5	62.4	62.4	60.1	**63.6**	5.7%	2.4%	1.5%
Taiwan	18.9	20.2	21.0	23.2	23.7	23.3	24.9	27.3	28.1	27.9	**29.6**	5.8%	4.6%	0.7%
Thailand	49.9	51.0	50.6	50.1	50.0	50.9	46.9	47.0	44.3	47.2	**48.2**	2.0%	-0.3%	1.2%
Vietnam	9.9	10.3	10.2	9.5	9.7	9.8	8.8	7.2	7.8	7.2	**6.1**	-15.6%	-4.7%	0.1%
Other Asia Pacific	10.3	11.6	11.1	11.3	10.9	11.4	12.2	11.9	11.1	11.0	**9.8**	-11.0%	-0.5%	0.2%
Total Asia Pacific	**706.5**	**717.8**	**732.9**	**779.5**	**829.5**	**857.3**	**872.0**	**933.7**	**915.3**	**928.0**	**972.7**	**4.5%**	**3.2%**	**23.6%**
Total World	**3397.6**	**3478.0**	**3558.4**	**3660.3**	**3831.7**	**3905.3**	**3870.4**	**4022.6**	**4006.0**	**4015.1**	**4127.8**	**2.5%**	**2.0%**	**100.0%**
of which: OECD	1591.1	1623.7	1658.7	1681.4	1770.8	1813.0	1774.8	1808.8	1794.1	1759.6	**1783.9**	1.1%	1.2%	43.2%
Non-OECD	1806.5	1854.3	1899.7	1978.9	2060.9	2092.4	2095.6	2213.8	2211.8	2255.5	**2344.0**	3.6%	2.6%	56.8%
European Union	331.5	346.8	368.6	385.9	378.7	392.6	380.0	397.0	342.2	317.1	**323.0**	1.6%	-0.3%	7.8%

Source: Includes data from Cedigaz, FGE MENA gas service.

* Excludes natural gas converted to liquid fuels but includes derivatives of coal as well as natural gas consumed in Gas-to-Liquids transformation.

† Less than 0.05%.

Notes: As far as possible, the data above represent standard cubic metres (measured at 15°C and 1013 mbar); as they are derived directly from measures of energy content using an average conversion factor and have been standardised using a Gross Calorific Value (GCV) of 40 MJ/m³, they do not necessarily equate with gas volumes expressed in specific national terms. The difference between these world consumption figures and the world production statistics is due to variations in stocks at storage facilities and liquefaction plants, together with unavoidable disparities in the definition, measurement or conversion of gas supply and demand data.

Annual changes and shares of total are calculated using billion cubic metres figures. Growth rates are adjusted for leap years.

Natural gas Consumption in exajoules*

Exajoules	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	3.95	3.97	3.80	3.95	4.24	4.27	4.15	4.27	4.46	4.5	**4.6**	3.3%	1.6%	3.1%
Mexico	2.84	2.91	3.07	3.23	3.32	3.43	3.42	3.38	3.36	3.6	**3.6**	-0.5%	2.4%	2.4%
US	26.00	26.77	26.97	26.63	29.59	30.64	30.07	30.11	31.69	32.0	**32.5**	1.3%	2.2%	21.9%
Total North America	**32.79**	**33.65**	**33.84**	**33.81**	**37.15**	**38.34**	**37.65**	**37.76**	**39.51**	**40.1**	**40.7**	**1.3%**	**2.2%**	**27.4%**
Argentina	1.66	1.68	1.74	1.74	1.75	1.68	1.58	1.65	1.65	1.6	**1.6**	1.2%	-0.1%	1.1%
Brazil	1.46	1.55	1.34	1.35	1.29	1.29	1.13	1.46	1.15	1.1	**1.1**	4.7%	-2.6%	0.8%
Chile	0.16	0.17	0.21	0.20	0.20	0.23	0.22	0.25	0.26	0.3	**0.3**	-6.8%	4.9%	0.2%
Colombia	0.41	0.40	0.43	0.43	0.46	0.46	0.47	0.45	0.45	0.5	**0.5**	2.7%	1.7%	0.3%
Ecuador	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	^	**^**	28.0%	-3.2%	†
Peru	0.27	0.28	0.31	0.27	0.29	0.30	0.29	0.32	0.35	0.4	**0.4**	12.2%	4.3%	0.3%
Trinidad & Tobago	0.74	0.71	0.61	0.66	0.63	0.63	0.55	0.56	0.56	0.5	**0.5**	-3.4%	-3.7%	0.3%
Venezuela	1.22	1.33	1.34	1.39	1.14	0.92	0.78	1.01	1.05	1.1	**1.1**	6.6%	-0.7%	0.8%
Central America	–	–	–	–	0.01	0.02	0.01	0.01	0.02	^	**^**	1.2%	–	†
Other Caribbean	0.13	0.13	0.14	0.12	0.14	0.16	0.17	0.20	0.19	0.2	**0.2**	9.3%	6.0%	0.2%
Other South America	0.13	0.12	0.13	0.14	0.14	0.14	0.12	0.13	0.14	0.2	**0.2**	38.2%	5.4%	0.1%
Total S. & Cent. America	**6.21**	**6.40**	**6.27**	**6.34**	**6.08**	**5.85**	**5.35**	**6.07**	**5.84**	**5.8**	**6.1**	**4.2%**	**-0.2%**	**4.1%**
Austria	0.27	0.29	0.30	0.33	0.31	0.32	0.31	0.32	0.28	0.2	**0.2**	-1.1%	-1.0%	0.2%
Belgium	0.52	0.57	0.58	0.59	0.61	0.63	0.61	0.61	0.52	0.5	**0.5**	-4.0%	-0.9%	0.3%
Bulgaria	0.10	0.11	0.11	0.12	0.11	0.10	0.11	0.12	0.10	0.1	**0.1**	7.1%	-0.1%	0.1%
Croatia	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.10	0.09	0.1	**0.1**	-5.7%	0.1%	0.1%
Czech Republic	0.26	0.27	0.29	0.30	0.29	0.30	0.30	0.33	0.27	0.2	**0.2**	-0.4%	-0.7%	0.2%
Denmark	0.12	0.12	0.12	0.12	0.11	0.10	0.08	0.09	0.06	0.1	**0.1**	0.6%	-6.8%	†
Estonia	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	^	**^**	7.9%	-3.9%	†
Finland	0.10	0.08	0.07	0.07	0.08	0.07	0.07	0.07	0.04	^	**^**	8.6%	-7.1%	†
France	1.36	1.47	1.60	1.61	1.54	1.57	1.46	1.55	1.39	1.2	**1.2**	-6.4%	-1.7%	0.8%
Germany	2.66	2.77	3.06	3.16	3.09	3.21	3.14	3.30	2.72	2.6	**2.8**	7.6%	0.6%	1.9%
Greece	0.11	0.12	0.16	0.19	0.19	0.21	0.23	0.25	0.22	0.2	**0.2**	23.6%	7.8%	0.2%
Hungary	0.29	0.31	0.34	0.36	0.35	0.35	0.37	0.39	0.33	0.3	**0.3**	†	0.1%	0.2%
Ireland	0.16	0.16	0.18	0.18	0.19	0.19	0.19	0.18	0.19	0.2	**0.2**	2.6%	1.4%	0.1%
Italy	2.12	2.32	2.43	2.58	2.49	2.55	2.43	2.61	2.35	2.1	**2.1**	0.3%	†	1.4%
Latvia	0.05	0.05	0.05	0.04	0.05	0.05	0.04	0.04	0.03	^	**^**	6.2%	-4.3%	†
Lithuania	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.06	0.1	**0.1**	8.4%	-3.4%	†
Luxembourg	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	^	**^**	4.9%	-4.7%	†
Netherlands	1.24	1.22	1.27	1.31	1.28	1.34	1.30	1.25	0.99	0.9	**0.9**	0.6%	-2.7%	0.6%
North Macedonia	^	^	0.01	0.01	0.01	0.01	0.01	0.01	0.01	^	**^**	-6.0%	9.9%	†
Norway	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.14	0.1	**0.1**	-11.0%	-2.3%	0.1%
Poland	0.61	0.62	0.66	0.69	0.72	0.75	0.76	0.81	0.67	0.7	**0.8**	7.6%	2.1%	0.5%
Portugal	0.15	0.17	0.18	0.23	0.21	0.22	0.22	0.21	0.20	0.2	**0.1**	-18.1%	-1.2%	0.1%
Romania	0.39	0.37	0.38	0.41	0.42	0.39	0.41	0.42	0.35	0.3	**0.3**	3.4%	-1.4%	0.2%
Slovakia	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.19	0.16	0.2	**0.2**	3.2%	-0.1%	0.1%
Slovenia	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	^	**^**	8.0%	1.3%	†
Spain	0.99	1.03	1.05	1.14	1.13	1.30	1.17	1.24	1.19	1.1	**1.0**	-4.0%	0.3%	0.7%
Sweden	0.03	0.03	0.04	0.03	0.04	0.04	0.04	0.04	0.03	^	**^**	8.0%	1.2%	†
Switzerland	0.11	0.12	0.13	0.13	0.12	0.12	0.12	0.10	0.13	0.1	**0.1**	1.2%	1.1%	0.1%
Türkiye	1.68	1.65	1.60	1.86	1.70	1.56	1.66	2.06	1.83	1.7	**1.8**	5.6%	0.9%	1.2%
Ukraine	1.45	1.15	1.13	1.09	1.10	1.02	1.06	0.98	0.66	0.7	**0.7**	6.1%	-6.8%	0.5%
United Kingdom	2.52	2.59	2.88	2.82	2.84	2.80	2.64	2.77	2.54	2.3	**2.2**	-3.0%	-1.2%	1.5%
Other Europe	0.15	0.16	0.17	0.19	0.19	0.20	0.20	0.22	0.24	0.2	**0.2**	-2.8%	4.7%	0.2%
Total Europe	**18.01**	**18.33**	**19.34**	**20.13**	**19.74**	**19.99**	**19.52**	**20.58**	**17.85**	**16.6**	**16.9**	**1.4%**	**-0.6%**	**11.4%**
Azerbaijan	0.35	0.40	0.39	0.38	0.39	0.42	0.45	0.46	0.49	0.5	**0.5**	-9.1%	2.6%	0.3%
Belarus	0.69	0.64	0.64	0.66	0.70	0.69	0.64	0.68	0.66	0.6	**0.6**	-0.3%	-1.3%	0.4%
Kazakhstan	0.53	0.50	0.54	0.60	0.60	0.71	0.64	0.78	0.77	0.7	**0.7**	3.7%	3.4%	0.5%
Russian Federation	15.20	14.71	15.14	15.52	16.36	16.00	15.25	15.54	16.14	16.3	**17.2**	4.9%	1.2%	11.6%
Turkmenistan	0.72	0.91	0.90	0.89	1.02	1.00	1.23	1.29	1.35	1.3	**1.0**	-19.4%	3.6%	0.7%
Uzbekistan	1.75	1.67	1.56	1.61	1.60	1.61	1.57	1.71	1.74	1.7	**2.0**	16.0%	1.2%	1.3%
Other CIS	0.19	0.19	0.19	0.18	0.21	0.20	0.21	0.21	0.21	0.2	**0.2**	†	0.6%	0.1%
Total CIS	**19.43**	**19.02**	**19.37**	**19.84**	**20.88**	**20.62**	**19.98**	**20.66**	**21.36**	**21.3**	**22.2**	**3.8%**	**1.3%**	**14.9%**
Iran	6.24	6.62	7.07	7.38	7.66	7.86	8.52	8.26	8.62	8.9	**8.8**	-0.8%	3.5%	5.9%
Iraq	0.27	0.26	0.36	0.41	0.53	0.70	0.67	0.59	0.66	0.7	**0.7**	2.5%	10.1%	0.5%
Israel	0.26	0.29	0.33	0.35	0.38	0.39	0.41	0.42	0.44	0.4	**0.4**	-1.5%	3.7%	0.3%
Kuwait	0.64	0.73	0.76	0.76	0.76	0.66	0.64	0.71	0.78	0.9	**0.9**	3.7%	3.3%	0.6%
Oman	0.77	0.83	0.83	0.84	0.90	0.90	0.94	1.02	1.05	1.1	**1.1**	4.5%	4.0%	0.8%
Qatar	1.37	1.57	1.50	1.48	1.50	1.50	1.39	1.45	1.44	1.6	**1.7**	5.9%	2.0%	1.1%
Saudi Arabia	3.50	3.57	3.79	3.93	4.04	4.00	4.07	4.12	4.20	4.2	**4.4**	3.2%	2.2%	2.9%
United Arab Emirates	2.30	2.57	2.58	2.36	2.09	2.41	2.44	2.35	2.39	2.4	**2.6**	6.2%	1.1%	1.7%
Other Middle East	0.75	0.81	0.83	0.83	0.79	0.83	0.83	0.84	0.80	0.8	**0.8**	-2.8%	0.2%	0.5%
Total Middle East	**16.11**	**17.25**	**18.04**	**18.34**	**18.64**	**19.25**	**19.90**	**19.78**	**20.38**	**20.9**	**21.3**	**1.8%**	**2.9%**	**14.4%**
Algeria	1.30	1.37	1.39	1.42	1.56	1.62	1.56	1.73	1.81	2.0	**1.8**	-7.1%	3.4%	1.2%
Egypt	1.66	1.66	1.78	2.01	2.15	2.13	2.10	2.24	2.18	2.2	**2.2**	-0.7%	2.6%	1.4%
Morocco	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.01	^	**^**	1.3%	-2.6%	†
South Africa	0.15	0.16	0.13	0.14	0.16	0.15	0.14	0.15	0.15	0.2	**0.2**	0.3%	1.0%	0.1%
Eastern Africa	0.05	0.06	0.07	0.07	0.08	0.09	0.08	0.10	0.10	0.1	**0.1**	-12.4%	7.5%	0.1%
Middle Africa	0.14	0.15	0.20	0.20	0.20	0.18	0.20	0.22	0.23	0.2	**0.2**	1.1%	4.2%	0.1%
Western Africa	0.58	0.86	0.76	0.79	0.85	0.87	0.93	1.24	1.19	1.2	**1.3**	8.3%	8.3%	0.9%
Other Northern Africa	0.41	0.42	0.49	0.56	0.56	0.60	0.51	0.65	0.64	0.6	**0.7**	1.5%	4.8%	0.4%
Total Africa	**4.33**	**4.71**	**4.86**	**5.24**	**5.59**	**5.68**	**5.55**	**6.36**	**6.31**	**6.4**	**6.4**	**-0.9%**	**4.0%**	**4.3%**
Australia	1.35	1.40	1.37	1.34	1.34	1.59	1.52	1.42	1.56	1.4	**1.3**	-4.5%	-0.2%	0.9%
Bangladesh	0.83	0.93	0.95	0.96	0.99	1.11	1.08	1.10	1.03	1.0	**1.0**	-3.1%	1.7%	0.7%
China	6.78	7.01	7.54	8.69	10.22	11.10	12.12	13.69	13.60	14.6	**15.6**	7.0%	8.7%	10.5%
China Hong Kong SAR	0.09	0.11	0.11	0.11	0.11	0.11	0.18	0.17	0.16	0.2	**0.2**	11.6%	8.6%	0.1%
India	1.75	1.72	1.83	1.93	2.09	2.13	2.17	2.25	2.10	2.2	**2.5**	13.0%	3.8%	1.7%
Indonesia	1.59	1.69	1.58	1.80	1.55	1.47	1.36	1.47	1.43	1.6	**1.7**	8.5%	0.7%	1.1%
Japan	4.49	4.27	4.19	4.21	4.17	3.89	3.75	3.70	3.58	3.3	**3.3**	-1.0%	-3.1%	2.2%
Malaysia	1.61	1.69	1.62	1.62	1.61	1.63	1.57	1.85	1.87	1.6	**1.7**	5.0%	0.3%	1.1%
New Zealand	0.19	0.17	0.17	0.18	0.16	0.17	0.16	0.14	0.13	0.1	**0.1**	-21.3%	-5.3%	0.1%
Pakistan	1.26	1.32	1.39	1.47	1.57	1.60	1.48	1.62	1.37	1.4	**1.3**	-2.3%	0.6%	0.9%
Philippines	0.13	0.12	0.14	0.14	0.15	0.15	0.14	0.12	0.11	0.1	**0.1**	4.7%	-0.5%	0.1%
Singapore	0.37	0.42	0.43	0.44	0.44	0.45	0.45	0.48	0.47	0.4	**0.5**	5.0%	2.3%	0.3%
South Korea	1.80	1.64	1.72	1.79	2.08	2.02	2.07	2.25	2.25	2.2	**2.3**	5.7%	2.4%	1.5%
Taiwan	0.68	0.73	0.75	0.84	0.85	0.84	0.90	0.98	1.01	1.0	**1.1**	5.8%	4.6%	0.7%
Thailand	1.80	1.83	1.82	1.80	1.80	1.83	1.69	1.69	1.60	1.7	**1.7**	2.0%	-0.3%	1.2%
Vietnam	0.35	0.37	0.37	0.34	0.35	0.35	0.32	0.26	0.28	0.3	**0.2**	-15.6%	-4.7%	0.1%
Other Asia Pacific	0.37	0.42	0.40	0.41	0.39	0.41	0.44	0.43	0.40	0.4	**0.4**	-11.0%	-0.5%	0.2%
Total Asia Pacific	**25.44**	**25.84**	**26.38**	**28.06**	**29.86**	**30.86**	**31.39**	**33.61**	**32.95**	**33.4**	**35.0**	**4.5%**	**3.2%**	**23.6%**
Total World	**122.31**	**125.21**	**128.10**	**131.77**	**137.94**	**140.59**	**139.33**	**144.81**	**144.21**	**144.5**	**148.6**	**2.5%**	**2.0%**	**100.0%**
of which: OECD	57.28	58.45	59.71	60.53	63.75	65.27	63.89	65.12	64.59	63.3	**64.2**	1.1%	1.2%	43.2%
Non-OECD	65.03	66.76	68.39	71.24	74.19	75.33	75.44	79.70	79.63	81.2	**84.4**	3.6%	2.6%	56.8%
European Union	11.94	12.48	13.27	13.89	13.63	14.13	13.68	14.29	12.32	11.4	**11.6**	1.6%	-0.3%	7.8%

Source: Includes data from Cedigaz, FGE MENA gas service.
* Excludes natural gas converted to liquid fuels but includes derivatives of coal as well as natural gas consumed in Gas-to-Liquids transformation.
^ Less than 0.005.
† Less than 0.05%.
Notes: The difference between these world consumption figures and the world production statistics is due to variations in stocks at storage facilities and liquefaction plants, together with unavoidable disparities in the definition, measurement or conversion of gas supply and demand data.
Annual changes and share of total are calculated using exajoules figures. Growth rates are adjusted for leap years.

Natural gas Prices

	LNG USD$/mmBTU						Natural gas USD$/mmBTU				Hydrogen USD$/kg				Ammonia USD$/mt			
	Japan[1]	South Korea[2]	Japan Korea Marker[2] (Platts JKM)	China[2] (Mainland)	West India marker[2] (Platts WIM)	North West European marker[2] (Platts NWE)	Zeebrugge[2]	UK NBP[3]	Netherlands TTF[3]	US Henry Hub[4]	US Gulf Coast[5]	Northwest Europe[5]	Middle East[5]	Far East Asia[5]	US Gulf Coast[6]	Northwest Europe[6]	Middle East[7]	Far East Asia[6]
1984	5.10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1985	5.23	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1986	4.10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	116	88	–
1987	3.35	–	–	–	–	–	–	–	–	–	–	–	–	–	–	140	102	139
1988	3.07	3.16	–	–	–	–	–	–	–	–	–	–	–	–	–	130	160	131
1989	3.10	3.22	–	–	–	–	–	–	–	1.70	–	–	–	–	106	120	75	121
1990	3.49	3.82	–	–	–	–	–	–	–	1.64	–	–	–	–	118	135	88	153
1991	3.81	3.62	–	–	–	–	–	–	–	1.49	–	–	–	–	125	139	106	163
1992	3.45	3.49	–	–	–	–	–	–	–	1.77	–	–	–	–	110	113	86	120
1993	3.37	3.25	–	–	–	–	–	–	–	2.12	–	–	–	–	128	130	99	129
1994	3.05	2.98	–	–	–	–	–	–	–	1.92	–	–	–	–	190	185	159	197
1995	3.29	3.50	–	–	–	–	–	–	–	1.69	–	–	–	–	217	231	191	239
1996	3.47	3.76	–	–	–	–	–	1.87	–	2.76	–	–	–	–	207	222	175	214
1997	3.70	3.71	–	–	–	–	–	1.96	–	2.53	–	–	–	–	180	188	165	199
1998	2.92	2.82	–	–	–	–	–	1.86	–	2.08	–	–	–	–	137	147	125	158
1999	3.01	2.97	–	–	–	–	–	1.58	–	2.27	–	–	–	–	112	120	110	138
2000	4.48	4.71	–	–	–	–	–	2.71	–	4.23	–	–	–	–	171	181	158	200
2001	4.39	4.81	–	–	–	–	–	3.17	–	4.07	–	–	–	–	161	161	132	178
2002	4.09	4.17	–	–	–	–	–	2.37	–	3.33	–	–	–	–	135	138	112	142
2003	4.57	4.87	–	–	–	–	–	3.33	–	5.63	–	–	–	–	231	222	185	211
2004	4.94	5.61	–	–	–	–	–	4.46	–	5.85	–	–	–	–	282	274	258	284
2005	5.79	7.20	–	–	–	–	7.11	7.11	5.81	8.80	–	–	–	–	318	299	268	290
2006	6.87	8.52	–	3.23	–	–	7.63	7.49	7.26	6.74	–	–	–	–	322	330	268	317
2007	7.49	8.85	–	3.99	–	–	6.09	5.98	5.90	6.95	–	–	–	–	340	352	276	320
2008	12.21	12.98	–	5.44	–	–	10.78	10.66	10.67	8.84	–	–	–	–	600	610	506	553
2009	8.80	10.07	5.28	4.45	–	–	4.84	4.79	4.91	3.92	–	–	–	–	279	304	238	280
2010	10.54	9.60	7.72	6.20	7.00	7.23	6.61	6.52	6.69	4.38	–	–	–	–	412	412	348	416
2011	14.37	12.25	14.02	9.07	12.76	10.61	9.14	9.00	9.18	3.99	–	–	–	–	578	592	527	584
2012	16.17	14.29	15.12	10.77	12.93	10.75	9.39	9.42	9.37	2.75	–	–	–	–	609	620	552	644
2013	15.54	14.49	16.56	11.15	14.97	12.61	10.52	10.60	10.52	3.72	–	–	–	–	547	560	503	582
2014	15.74	15.82	13.86	11.76	13.18	10.84	8.13	8.22	8.11	4.34	–	–	–	–	548	592	505	565
2015	10.12	10.54	7.45	8.66	7.42	6.33	6.41	6.52	6.45	2.61	–	–	–	–	458	479	426	477
2016	6.77	6.82	5.72	6.54	5.68	4.77	4.50	4.65	4.53	2.81	–	–	–	–	280	316	274	329
2017	7.85	7.83	7.13	7.33	6.98	5.94	5.66	5.78	5.71	2.96	–	–	–	–	283	342	281	314
2018	9.74	9.97	9.76	9.43	9.34	7.95	7.84	7.97	7.88	3.12	–	–	–	–	314	354	310	361
2019	9.75	9.57	5.49	9.15	5.17	4.71	4.39	4.46	4.46	2.51	–	–	–	–	250	297	237	291
2020	7.64	7.47	4.39	6.73	4.13	3.19	3.07	3.17	3.13	1.99	–	–	–	–	236	263	221	277
2021	9.90	10.56	18.60	10.66	17.37	16.18	15.57	15.45	15.67	3.84	–	–	–	–	617	648	543	597
2022	16.86	20.47	33.98	15.58	31.85	32.74	30.96	24.55	37.09	6.38	2.25	–	4.67	7.78	1164	1264	941	959
2023	13.24	15.56	13.77	12.12	13.14	12.25	12.69	12.30	12.87	2.53	1.52	3.92	2.92	3.90	513	544	419	497
2024	**11.73**	**12.02**	**11.91**	**11.05**	**11.49**	**10.74**	**10.84**	**10.69**	**10.89**	**2.25**	**1.29**	**3.19**	**2.67**	**3.14**	**489**	**526**	**356**	**410**

[1] **Source:** EDMC Energy Trend, bp analysis to 1987. From 1988, S&P Global Commodity Insights, ©2025 by S&P Global Inc.
[2] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc.
[3] **Source:** ICIS Heren Energy Ltd to 2004. From 2005, S&P Global Commodity Insights, ©2025 by S&P Global Inc.
[4] **Source:** US Energy Information Administration (EIA) to 2004. From 2005, S&P Global Commodity Insights, ©2025 by S&P Global Inc.
[5] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc, carbon neutral hydrogen ex-works $/kg.
[6] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc, CFR $/mt.
[7] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc, FOB $/mt.
Note: cfr = cost+freight (average prices), fob = free on board (average prices).

Hydrogen

Production capacity thousand tonnes/yr	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014-24	Share 2024
North America														
Blue	970.9	1299.4	1475.4	1475.4	1475.4	1475.4	2019.1	2019.1	1729.1	2329.8	**2329.8**	–	9.1%	54.5%
Green	3.9	19.7	19.7	19.7	59.9	60.0	82.2	85.3	113.8	114.3	**132.8**	16.2%	42.3%	3.1%
Total North America	974.8	1319.1	1495.1	1495.1	1535.3	1535.4	2101.4	2104.4	1842.9	2444.1	**2462.7**	0.8%	9.7%	57.6%
S. & Cent. America														
Blue	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Green	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	1.2	**2.1**	69.3%	35.4%	†
Total S. & Cent. America	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	1.2	**2.1**	69.3%	35.4%	†
Europe														
Blue	–	13.5	95.4	95.4	95.4	92.9	92.9	92.9	92.9	93.2	**93.2**	–	–	2.2%
Green	2.6	2.6	2.7	15.4	19.4	19.8	22.2	24.4	30.5	46.2	**60.6**	31.1%	37.0%	1.4%
Total Europe	2.6	16.1	98.1	110.8	114.8	112.6	115.1	117.3	123.4	139.4	**153.8**	10.3%	50.4%	3.6%
CIS														
Blue	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Green	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total CIS	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Middle East														
Blue	77.5	214.4	214.4	214.4	214.4	214.4	214.4	214.4	230.0	230.0	**230.0**	–	11.5%	5.4%
Green	–	–	–	–	–	–	–	0.1	0.1	0.1	**0.5**	460.1%	–	†
Total Middle East	77.5	214.4	214.4	214.4	214.4	214.4	214.4	214.5	230.1	230.1	**230.5**	0.2%	11.5%	5.4%
Africa														
Blue	–	–	–	–	–	–	–	–	1.7	1.9	**2.3**	22.6%	–	0.1%
Green	–	–	–	–	–	–	–	–	1.7	1.9	**2.3**	22.6%	–	0.1%
Total Africa	–	–	–	–	–	–	–	–	–	1.7	**1.7**	–	–	†
Asia Pacific														
Blue	1153.8	1153.8	1228.8	1228.8	1228.8	1228.8	1228.8	1153.8	1223.8	1224.2	**1224.2**	–	0.6%	28.6%
Green	0.4	0.4	0.6	0.6	1.2	1.6	3.5	8.5	42.7	96.5	**201.0**	108.3%	85.0%	4.7%
Total Asia Pacific	1154.3	1154.3	1229.4	1229.4	1230.0	1230.5	1232.3	1162.4	1266.6	1320.7	**1425.2**	7.9%	2.1%	33.3%
World														
Blue	2202.3	2681.2	3014.0	3014.0	3014.0	3011.5	3555.3	3480.3	3275.9	3877.3	**3877.3**	–	5.8%	90.7%
Green	7.0	22.8	23.0	35.7	80.6	81.5	108.1	118.5	189.2	260.2	**399.3**	53.5%	49.8%	9.3%
Total World	**2209.3**	**2703.9**	**3037.0**	**3049.8**	**3094.6**	**3093.0**	**3663.3**	**3598.7**	**3465.1**	**4137.5**	**4276.6**	**3.4%**	**6.8%**	**100.0%**
OECD														
Blue	970.9	1312.9	1645.8	1645.8	1645.8	1643.3	2187.0	2112.0	1822.0	2423.4	**2423.4**	0.0%	9.6%	56.7%
Green	6.5	22.3	22.3	35.1	79.6	80.3	105.6	111.4	147.3	165.0	**199.5**	20.9%	40.8%	4.7%
Total OECD	977.4	1335.2	1668.1	1680.9	1725.4	1723.6	2292.7	2223.4	1969.4	2588.4	**2622.9**	1.3%	10.4%	61.3%
Non-OECD														
Blue	1231.4	1368.2	1368.2	1368.2	1368.2	1368.2	1368.2	1368.2	1453.9	1453.9	**1453.9**	0.0%	1.7%	34.0%
Green	0.5	0.5	0.7	0.7	1.0	1.2	2.4	7.1	41.9	95.2	**199.8**	109.9%	81.0%	4.7%
Total Non-OECD	1231.9	1368.8	1368.9	1368.9	1369.2	1369.4	1370.7	1375.3	1495.7	1549.1	**1653.7**	6.8%	3.0%	38.7%

† Less than 0.05%.
Source: Rystad Energy. For further information please contact **info@rystadenergy.com**

Natural gas Inter-regional trade

Billion cubic metres	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
US														
Pipeline imports	71.8	71.6	79.5	80.5	76.7	73.3	68.2	75.9	82.1	80.8	**87.7**	8.1%	2.0%	9.9%
LNG imports	1.7	2.5	2.4	2.2	2.1	1.5	1.3	0.6	0.7	0.5	**0.5**	0.1%	-11.6%	0.1%
Total imports	**73.5**	**74.1**	**82.0**	**82.7**	**78.8**	**74.7**	**69.5**	**76.5**	**82.8**	**81.3**	**88.1**	**8.1%**	**1.8%**	**10.0%**
Pipeline exports	40.4	47.2	58.7	65.7	67.8	77.4	78.9	84.3	82.9	89.0	**91.0**	2.0%	8.5%	10.3%
LNG exports*	0.4	0.7	4.0	17.1	28.6	47.4	61.3	94.5	104.5	114.5	**115.2**	0.4%	75.1%	13.0%
Total exports	**40.8**	**47.9**	**62.7**	**82.8**	**96.3**	**124.8**	**140.2**	**178.8**	**187.4**	**203.5**	**206.2**	**1.1%**	**17.6%**	**23.3%**
Other North America														
Pipeline imports	40.4	47.2	58.7	65.7	67.8	77.4	78.9	84.3	82.9	89.0	**91.0**	2.0%	8.5%	10.3%
LNG imports	9.8	7.4	5.9	7.0	7.5	7.1	3.4	1.6	0.9	1.2	**1.3**	16.9%	-18.0%	0.2%
Total imports	**50.2**	**54.7**	**64.5**	**72.7**	**75.3**	**84.5**	**82.2**	**85.9**	**83.8**	**90.2**	**92.4**	**2.2%**	**6.3%**	**10.4%**
Pipeline exports	71.8	71.6	79.5	80.5	76.7	73.3	68.2	75.9	82.1	80.8	**87.7**	8.1%	2.0%	9.9%
LNG exports*	^	^	^	^	0.1	^	^	^	^	0.1	**0.4**	506.2%	58.1%	†
Total exports	**71.9**	**71.6**	**79.6**	**80.6**	**76.7**	**73.3**	**68.2**	**75.9**	**82.1**	**80.9**	**88.0**	**8.5%**	**2.1%**	**9.9%**
Brazil														
Pipeline imports	11.4	11.2	9.8	8.4	7.6	6.4	6.2	7.1	6.1	5.4	**4.9**	-9.4%	-8.1%	0.6%
LNG imports	7.1	6.8	2.6	1.7	2.9	3.2	3.3	10.1	2.3	1.3	**3.0**	128.8%	-8.3%	0.3%
Total imports	**18.5**	**18.0**	**12.4**	**10.1**	**10.5**	**9.7**	**9.5**	**17.2**	**8.4**	**6.7**	**7.9**	**17.4%**	**-8.1%**	**0.9%**
LNG exports*	0.2	^	0.6	0.2	0.1	–	–	0.1	–	0.2	**–**	-100.0%	-100.0%	–
Total exports	**0.2**	**^**	**0.6**	**0.2**	**0.1**	**–**	**–**	**0.1**	**–**	**0.2**	**–**	**-100.0%**	**-100.0%**	**–**
Other S&C America														
LNG imports	4.0	3.6	5.6	5.0	5.3	5.1	6.4	10.3	7.5	9.5	**9.5**	-1.0%	9.1%	1.1%
Total imports	**4.0**	**3.6**	**5.6**	**5.0**	**5.3**	**5.1**	**6.4**	**10.3**	**7.5**	**9.5**	**9.5**	**-1.0%**	**9.1%**	**1.1%**
Pipeline exports	11.4	11.2	9.8	8.4	7.6	6.4	6.2	7.1	6.1	5.4	**4.9**	-9.4%	-8.1%	0.6%
LNG exports*	14.7	12.8	12.9	12.3	15.1	17.6	15.7	9.3	12.1	11.7	**10.3**	-11.9%	-3.5%	1.2%
Total exports	**26.1**	**24.1**	**22.7**	**20.7**	**22.7**	**24.1**	**21.9**	**16.4**	**18.2**	**17.1**	**15.2**	**-11.1%**	**-5.3%**	**1.7%**
Europe														
Pipeline imports	209.4	215.0	230.6	247.2	247.4	236.9	211.0	232.7	151.8	108.2	**113.3**	4.4%	-6.0%	12.8%
of which: Russian Federation	164.0	169.4	176.3	193.0	193.2	191.3	167.4	167.7	86.5	45.5	**51.4**	12.8%	-11.0%	5.8%
Africa	29.1	29.9	38.6	37.2	37.4	26.7	25.2	37.2	34.0	32.7	**30.7**	-6.4%	0.5%	3.5%
Other CIS	7.6	8.1	8.2	8.1	9.2	11.5	13.3	18.7	22.3	24.9	**24.4**	-2.2%	12.3%	2.8%
Middle East	8.7	7.5	7.4	8.9	7.6	7.4	5.1	9.1	9.1	5.2	**6.8**	30.0%	-2.4%	0.8%
LNG imports	48.8	52.7	51.7	59.6	65.8	112.7	111.3	106.3	166.0	160.0	**126.4**	-21.2%	10.0%	14.3%
Total imports	**258.2**	**267.7**	**282.3**	**306.8**	**313.1**	**349.6**	**322.2**	**339.0**	**317.8**	**268.2**	**239.7**	**-10.9%**	**-0.7%**	**27.1%**
LNG exports*	9.7	7.7	6.0	2.8	6.3	2.1	2.2	3.1	1.8	1.5	**1.2**	-15.8%	-18.6%	0.1%
Total exports	**9.7**	**7.7**	**6.0**	**2.8**	**6.3**	**2.1**	**2.2**	**3.1**	**2.1**	**2.3**	**2.1**	**-9.4%**	**-14.3%**	**0.2%**
Russian Federation														
Pipeline imports	33.1	26.5	24.3	28.6	24.6	30.3	10.7	14.8	7.7	5.7	**5.4**	-5.8%	-16.6%	0.6%
Total imports	**33.1**	**26.5**	**24.3**	**28.6**	**24.6**	**30.3**	**10.7**	**14.8**	**7.7**	**5.7**	**5.4**	**-5.8%**	**-16.6%**	**0.6%**
Pipeline exports	189.6	194.2	202.0	219.7	222.4	220.7	197.4	201.3	125.0	88.8	**108.2**	21.5%	-5.5%	12.2%
of which: Europe	164.0	169.4	176.3	193.0	193.2	191.3	167.4	167.7	86.5	45.5	**51.4**	12.8%	-11.0%	5.8%
Other CIS	25.6	24.8	25.7	26.7	29.2	29.2	26.1	26.0	23.8	22.0	**30.0**	35.9%	1.6%	3.4%
LNG exports	13.6	14.6	14.6	15.4	24.9	39.1	41.8	39.5	43.4	42.1	**44.3**	5.1%	12.5%	5.0%
Total exports	**203.2**	**208.8**	**216.7**	**235.2**	**247.3**	**259.8**	**239.2**	**240.9**	**168.4**	**130.8**	**152.5**	**16.2%**	**-2.8%**	**17.2%**
Other CIS														
Pipeline imports	26.3	25.4	26.3	28.8	30.4	29.8	26.7	26.9	24.3	22.4	**30.4**	35.5%	1.5%	3.4%
Total imports	**26.3**	**25.4**	**26.3**	**28.8**	**30.4**	**29.8**	**26.7**	**26.9**	**24.3**	**22.4**	**30.4**	**35.5%**	**1.5%**	**3.4%**
Pipeline exports	75.4	72.6	72.8	78.0	80.8	85.2	61.5	75.4	69.9	67.0	**69.6**	3.7%	-0.8%	7.9%
of which: China	27.4	28.7	33.0	36.7	45.0	43.0	37.3	41.7	39.8	36.4	**39.9**	9.3%	3.8%	4.5%
Europe	7.6	8.1	8.2	8.1	9.2	11.5	13.3	18.7	22.3	24.9	**24.4**	-2.2%	12.3%	2.8%
Middle East	7.3	9.3	7.3	4.6	2.0	0.4	0.2	0.2	0.2	^	**–**	-100.0%	-100.0%	–
Russian Federation	33.1	26.5	24.3	28.6	24.6	30.3	10.7	14.8	7.7	5.7	**5.4**	-5.8%	-16.6%	0.6%
Total exports	**75.4**	**72.6**	**72.8**	**78.0**	**80.8**	**85.2**	**61.5**	**75.4**	**69.9**	**67.0**	**69.6**	**3.7%**	**-0.8%**	**7.9%**
Middle East														
Pipeline imports	7.6	9.6	7.3	4.6	2.1	1.6	0.6	0.8	1.0	0.4	**0.5**	15.3%	-23.5%	0.1%
of which: Africa	0.3	0.3	–	–	0.1	1.2	0.4	0.6	0.8	0.4	**0.5**	18.2%	6.3%	0.1%
Other CIS	7.3	9.3	7.3	4.6	2.0	0.4	0.2	0.2	0.2	†	**-**	-100.0%	-100.0%	–
LNG imports	2.5	5.5	8.1	9.9	6.7	5.4	5.4	3.9	4.4	3.3	**4.8**	46.5%	6.6%	0.5%
Total imports	**10.1**	**15.1**	**15.4**	**14.6**	**8.9**	**7.0**	**6.0**	**4.7**	**5.4**	**3.7**	**5.3**	**42.8%**	**-6.2%**	**0.6%**
Pipeline exports	9.3	8.1	8.0	11.0	8.8	8.0	7.7	13.9	15.5	13.8	**17.0**	22.6%	6.2%	1.9%
LNG exports	129.4	121.2	120.3	119.2	123.3	123.5	123.6	124.0	128.3	124.5	**124.1**	-0.6%	-0.4%	14.0%
Total exports	**138.7**	**129.3**	**128.3**	**130.1**	**132.1**	**131.5**	**131.3**	**137.8**	**143.8**	**138.3**	**141.1**	**1.7%**	**0.2%**	**15.9%**
Africa														
Pipeline imports	–	–	–	–	–	–	2.1	4.0	6.2	9.1	**10.6**	16.8%	–	1.2%
LNG imports	–	3.1	9.2	6.2	2.8	–	–	–	–	^	**3.6**	999.0%	–	0.4%
Total imports	**–**	**3.1**	**9.2**	**6.2**	**2.8**	**–**	**2.1**	**4.0**	**6.2**	**9.1**	**14.2**	**55.8%**	**–**	**1.6%**
Pipeline exports	29.4	30.2	38.6	37.2	37.5	27.9	25.6	37.8	34.8	33.1	**31.2**	-6.1%	0.6%	3.5%
of which: Europe	29.1	29.9	38.6	37.2	37.4	26.7	25.2	37.2	34.0	32.7	**30.7**	-6.4%	0.5%	3.5%
Middle East	0.3	0.3	–	–	0.1	1.2	0.4	0.6	0.8	0.4	**0.5**	18.2%	6.3%	0.1%
LNG exports	49.5	47.7	44.7	53.6	53.1	61.6	55.9	58.1	54.0	54.4	**50.8**	-6.8%	0.3%	5.7%
Total exports	**78.9**	**77.9**	**83.3**	**90.8**	**90.6**	**89.5**	**81.5**	**95.9**	**88.8**	**87.5**	**82.0**	**-6.5%**	**0.4%**	**9.3%**
China														
Pipeline imports	30.3	32.4	36.8	39.9	47.9	47.7	45.1	53.2	58.4	61.3	**71.3**	15.9%	8.9%	8.1%
of which: Other Asia	2.9	3.8	3.7	3.2	2.9	4.4	3.9	3.9	4.0	3.7	**4.7**	26.9%	5.0%	0.5%
Russian Federation	–	–	–	–	–	0.3	3.9	7.6	14.7	21.3	**26.7**	25.2%	–	3.0%
Other CIS	27.4	28.7	33.0	36.7	45.0	43.0	37.3	41.7	39.8	36.4	**39.9**	9.3%	3.8%	4.5%
LNG imports	27.3	27.0	36.8	52.9	73.5	84.7	94.0	110.1	87.0	97.8	**105.2**	7.2%	14.5%	11.9%
Total imports	**57.5**	**59.4**	**73.5**	**92.8**	**121.3**	**132.5**	**139.1**	**163.4**	**145.4**	**159.2**	**176.5**	**10.6%**	**11.9%**	**19.9%**
LNG exports*	–	–	–	–	–	0.1	–	–	0.8	1.3	**1.1**	-18.1%	–	0.1%
Total exports	**2.4**	**3.0**	**3.1**	**3.1**	**3.0**	**3.2**	**4.9**	**4.8**	**5.3**	**5.7**	**5.5**	**-3.9%**	**8.7%**	**0.6%**
India														
LNG imports	19.1	20.0	24.3	26.0	30.5	32.4	36.6	33.8	28.4	30.4	**37.9**	24.2%	7.1%	4.3%
Total imports	**19.1**	**20.0**	**24.3**	**26.0**	**30.5**	**32.4**	**36.6**	**33.8**	**28.4**	**30.4**	**37.9**	**24.2%**	**7.1%**	**4.3%**
LNG exports*	–	0.4	0.1	0.1	–	0.1	–	–	–	–	**–**	–	–	–
Total exports	**–**	**0.4**	**0.1**	**0.1**	**–**	**0.1**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
OECD Asia														
Pipeline imports	5.2	5.8	5.5	4.9	4.9	4.3	5.3	4.8	2.3	0.9	**–**	-100.0%	-100.0%	–
LNG imports	147.0	133.5	122.2	120.7	123.2	109.4	106.6	115.3	103.3	98.5	**102.8**	4.1%	-3.5%	11.6%
Total imports	**152.2**	**139.3**	**127.7**	**125.6**	**128.2**	**113.8**	**111.9**	**120.1**	**105.6**	**99.4**	**102.8**	**3.2%**	**-3.9%**	**11.6%**
LNG exports*	5.6	12.0	22.8	32.2	41.9	53.0	55.5	59.5	49.6	55.6	**57.1**	2.3%	26.0%	6.4%
Total exports	**5.6**	**12.0**	**22.8**	**32.2**	**41.9**	**53.0**	**55.5**	**59.5**	**49.6**	**55.6**	**57.1**	**2.3%**	**26.0%**	**6.4%**
Other Asia														
LNG imports	15.7	19.7	23.8	27.7	35.2	45.3	49.1	56.2	56.2	63.8	**70.4**	10.0%	16.2%	8.0%
Pipeline imports	2.4	3.0	3.1	3.1	3.0	3.1	4.9	4.8	4.5	4.4	**4.4**	0.5%	6.3%	0.5%
Total imports	**18.1**	**22.7**	**27.0**	**30.8**	**38.2**	**48.4**	**54.1**	**61.1**	**60.8**	**68.1**	**74.8**	**9.4%**	**15.3%**	**8.4%**
Pipeline exports	8.1	9.5	9.2	8.1	7.8	8.7	9.2	8.7	6.3	4.5	**4.7**	2.5%	-5.4%	0.5%
of which: China	2.9	3.8	3.7	3.2	2.9	4.4	3.9	3.9	4.0	3.7	**4.7**	26.9%	5.0%	0.5%
OECD Asia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
LNG exports*	59.8	64.9	66.7	66.0	62.2	62.4	61.5	60.5	62.2	60.5	**60.8**	0.2%	0.2%	6.9%
Total exports	**67.9**	**74.4**	**75.9**	**74.2**	**69.9**	**71.1**	**70.6**	**69.1**	**68.4**	**65.1**	**65.5**	**0.4%**	**-0.4%**	**7.4%**
World														
Pipeline trade	437.9	447.7	481.8	511.8	512.4	510.8	459.6	509.3	427.4	387.7	**419.5**	7.9%	-0.4%	47.4%
LNG trade	282.9	281.9	292.6	319.0	355.5	406.9	417.3	448.4	456.8	466.2	**465.3**	-0.5%	5.1%	52.6%
Total trade	**720.8**	**729.6**	**774.4**	**830.8**	**867.9**	**917.7**	**877.0**	**957.7**	**884.1**	**854.0**	**884.8**	**3.3%**	**2.1%**	**100.0%**

* LNG exports include re-exports.
^ Less than 0.05.
† Less than 0.05%.
Pipeline and LNG trade excludes intra-regional trade.
Notes: As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) and has been standardised using a gross calorific value (GCV) of 40 MJ/m³.
Annual changes and share of totals are calculated using billion cubic metres figures.
Growth rates are adjusted for leap years.

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Natural gas LNG imports

Billion cubic metres	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	0.5	0.6	0.3	0.4	0.6	0.5	0.8	0.7	0.3	0.2	**0.4**	64.7%	-3.0%	0.1%
Mexico	9.3	6.8	5.6	6.6	6.9	6.6	2.5	0.9	0.6	0.9	**1.0**	4.8%	-20.3%	0.2%
US	1.7	2.5	2.4	2.2	2.1	1.5	1.3	0.6	0.7	0.5	**0.5**	0.1%	-11.6%	0.1%
Total North America	**11.5**	**10.0**	**8.3**	**9.2**	**9.6**	**8.6**	**4.6**	**2.2**	**1.6**	**1.6**	**1.8**	**12.0%**	**-16.8%**	**0.3%**
Argentina	6.2	5.6	5.1	4.6	3.6	1.8	1.8	3.7	2.4	2.7	**1.7**	-38.5%	-12.3%	0.3%
Brazil	7.1	6.8	2.6	1.7	2.9	3.2	3.3	10.1	2.3	1.3	**3.0**	128.8%	-8.3%	0.5%
Chile	3.5	3.7	4.5	4.4	4.3	3.3	3.7	4.5	3.3	3.6	**3.0**	-16.3%	-1.6%	0.6%
Other S. & Cent. America	2.8	2.8	3.0	2.8	3.7	4.8	5.1	6.0	6.2	8.2	**9.5**	15.3%	13.1%	1.7%
Total S. & Cent. America	**19.6**	**18.9**	**15.2**	**13.5**	**14.5**	**13.1**	**13.9**	**24.3**	**14.2**	**15.8**	**17.2**	**8.2%**	**-1.3%**	**3.2%**
Belgium	2.9	3.6	2.4	1.3	3.3	7.3	6.4	5.4	12.5	11.8	**7.7**	-34.5%	10.5%	1.4%
France	6.9	6.4	9.1	10.9	12.7	23.2	19.0	17.6	35.4	29.4	**25.7**	-12.7%	14.0%	4.7%
Italy	4.5	5.9	5.9	8.3	8.2	13.5	12.5	9.5	14.7	16.3	**14.6**	-11.0%	12.5%	2.7%
Spain	16.2	13.7	13.8	16.6	15.0	22.0	20.9	20.4	28.8	24.9	**18.4**	-26.3%	1.3%	3.4%
Türkiye	7.1	7.5	7.6	10.9	11.4	12.9	14.8	13.9	15.1	14.8	**12.0**	-19.1%	5.4%	2.2%
United Kingdom	11.2	13.7	10.7	6.6	7.2	17.1	18.6	15.0	26.1	19.4	**9.7**	-50.1%	-1.4%	1.8%
Other European Union	3.3	5.2	6.9	10.2	13.4	23.5	23.8	25.5	39.4	51.0	**45.3**	-11.5%	29.8%	8.3%
Rest of Europe	^	–	^	0.1	^	^	0.1	0.1	0.1	0.2	**0.1**	-26.2%	26.7%	†
Total Europe	**52.1**	**56.0**	**56.4**	**64.8**	**71.2**	**119.4**	**116.1**	**107.5**	**172.0**	**167.7**	**133.5**	**-20.6%**	**9.9%**	**24.5%**
Egypt	–	3.9	10.7	8.3	3.2	–	–	–	–	^	**3.9**	55621.6%	–	0.7%
Kuwait	3.6	4.3	4.7	4.8	4.3	5.1	5.7	7.7	8.5	8.9	**9.7**	8.7%	10.5%	1.8%
United Arab Emirates	1.6	2.9	4.2	3.0	1.0	1.6	1.5	1.7	0.9	1.1	**1.2**	12.4%	-2.9%	0.2%
Other Middle East & Africa	0.1	2.7	4.8	5.3	4.0	2.7	1.9	0.2	0.1	0.2	**1.3**	642.0%	25.1%	0.2%
Total Middle East & Africa	**5.3**	**13.7**	**24.5**	**21.4**	**12.5**	**9.4**	**9.1**	**9.6**	**9.5**	**10.2**	**16.1**	**58.2%**	**11.7%**	**3.0%**
China	27.3	27.0	36.8	52.9	73.5	84.7	94.0	110.1	87.0	97.8	**105.2**	7.2%	14.5%	19.3%
India	19.1	20.0	24.3	26.0	30.5	32.4	36.6	33.8	28.4	30.4	**37.9**	24.2%	7.1%	7.0%
Japan	121.8	115.9	113.6	113.9	113.0	105.5	101.7	100.4	97.3	89.5	**89.0**	-0.9%	-3.1%	16.4%
Malaysia	2.2	2.2	1.5	2.0	1.8	3.3	3.6	2.3	3.9	3.2	**4.2**	29.4%	6.6%	0.8%
Pakistan	–	1.5	4.0	6.1	9.4	11.8	10.6	12.2	9.5	10.1	**11.0**	8.6%	–	2.0%
Singapore	2.6	3.0	3.2	4.1	4.5	5.0	5.7	5.0	5.3	6.8	**8.4**	22.6%	12.6%	1.5%
South Korea	51.8	45.8	46.3	51.4	60.2	55.6	55.4	64.1	63.8	60.7	**63.6**	4.4%	2.1%	11.7%
Taiwan	18.6	19.6	20.4	22.7	22.9	22.8	24.3	26.7	27.5	27.4	**29.1**	5.9%	4.6%	5.3%
Thailand	1.9	3.6	3.9	5.2	6.0	6.7	7.5	9.2	11.5	16.1	**15.8**	-2.1%	23.9%	2.9%
Other Asia Pacific	–	–	–	–	0.8	5.7	6.6	7.6	6.9	9.2	**11.4**	24.7%	–	2.1%
Total Asia Pacific	**245.2**	**238.5**	**253.9**	**284.5**	**322.6**	**333.6**	**346.2**	**371.6**	**341.3**	**351.2**	**375.5**	**6.6%**	**4.4%**	**69.0%**
Total World	**333.6**	**337.1**	**358.3**	**393.3**	**430.4**	**484.2**	**489.9**	**515.2**	**538.5**	**546.6**	**544.1**	**-0.7%**	**5.0%**	**100.0%**

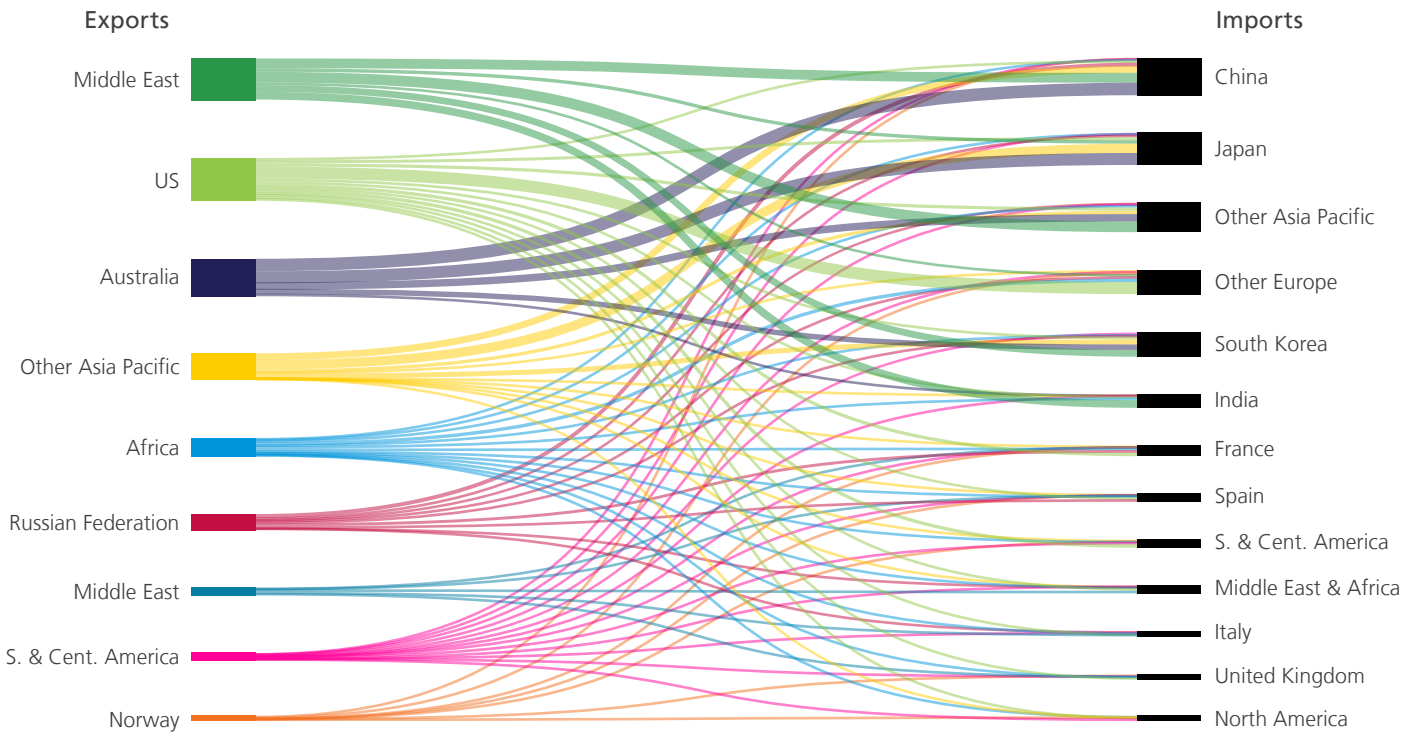
Source: Includes GIIGNL, S&P Global Commodity Insights.
Gross LNG trade.
^ Less than 0.05.
† Less than 0.05%.
Notes: Annual changes and share of totals are calculated using billion cubic metres figures.
Growth rates are adjusted for leap years.

Natural gas LNG exports

Billion cubic metres	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
US	0.4	0.7	4.0	17.1	28.6	47.4	61.3	94.5	104.5	114.5	**115.2**	0.4%	75.1%	21.2%
Peru	5.7	5.0	5.5	5.5	4.8	5.3	5.0	3.5	5.1	5.4	**4.7**	-13.7%	-2.0%	0.9%
Trinidad & Tobago	17.6	16.4	14.3	13.5	16.6	17.1	14.3	9.1	10.5	10.5	**10.3**	-1.5%	-5.2%	1.9%
Other Americas*	0.2	†	0.6	0.3	0.1	0.1	0.5	0.7	0.8	1.0	**0.4**	-64.0%	7.3%	0.1%
Total Americas	**23.9**	**22.1**	**24.5**	**36.5**	**50.1**	**69.9**	**81.2**	**107.8**	**121.0**	**131.3**	**130.6**	**-0.9%**	**18.5%**	**24.0%**
Russian Federation	13.6	14.6	14.6	15.4	24.9	39.1	41.8	39.5	43.4	42.1	**44.3**	5.1%	12.5%	8.1%
Norway	4.6	5.6	6.1	5.4	6.8	6.9	4.3	0.2	3.7	5.5	**6.4**	17.3%	3.3%	1.2%
Other Europe*	8.4	5.4	4.5	2.5	5.0	1.9	2.7	4.1	4.2	3.8	**1.9**	-49.0%	-13.7%	0.4%
Total Europe & CIS	**26.6**	**25.6**	**25.3**	**23.4**	**36.7**	**47.9**	**48.8**	**43.7**	**51.3**	**51.3**	**52.7**	**2.4%**	**7.1%**	**9.7%**
Oman	10.6	10.2	11.0	11.4	13.6	14.1	13.2	14.1	15.3	15.3	**16.0**	3.9%	4.2%	2.9%
Qatar	103.6	105.6	107.3	103.6	104.9	105.8	106.5	106.8	110.5	108.4	**106.9**	-1.6%	0.3%	19.6%
United Arab Emirates	8.6	7.6	7.7	7.3	7.4	7.7	7.6	8.8	7.5	7.7	**8.6**	11.9%	0.1%	1.6%
Yemen	9.4	1.9	–	–	–	–	–	–	–	–	**–**	–	-100.0%	†
Total Middle East	**132.2**	**125.4**	**126.0**	**122.3**	**125.9**	**127.5**	**127.3**	**129.6**	**133.3**	**131.4**	**131.5**	**-0.2%**	**-0.1%**	**24.2%**
Algeria	17.4	16.6	15.5	16.4	13.1	16.8	14.5	15.6	14.3	17.8	**16.0**	-10.4%	-0.9%	2.9%
Angola	0.4	–	0.9	5.0	5.2	5.8	6.1	4.7	4.2	4.9	**4.9**	-0.7%	27.3%	0.9%
Egypt	0.4	–	0.8	1.2	2.0	4.7	1.8	9.1	9.2	4.9	**0.9**	-81.8%	7.1%	0.2%
Nigeria	26.1	26.9	24.6	28.3	27.8	28.8	28.4	23.4	20.0	17.6	**18.4**	4.5%	-3.4%	3.4%
Other Africa	5.0	5.0	4.4	4.8	5.4	5.6	5.1	5.4	6.3	9.2	**11.0**	19.6%	8.3%	2.0%
Total Africa	**49.5**	**48.5**	**46.2**	**55.7**	**53.5**	**61.6**	**55.9**	**58.1**	**54.0**	**54.4**	**51.2**	**-6.0%**	**0.4%**	**9.4%**
Australia	32.0	39.9	60.4	76.6	91.8	104.7	106.0	108.5	107.4	107.4	**106.8**	-0.8%	12.8%	19.6%
Brunei	8.6	8.7	8.6	9.1	8.5	8.8	8.4	7.5	6.5	6.2	**6.4**	4.2%	-2.9%	1.2%
Indonesia	21.7	21.6	22.4	21.7	20.8	16.5	16.8	14.6	15.6	16.1	**16.5**	2.0%	-2.7%	3.0%
Malaysia	34.0	34.3	33.6	36.1	33.0	35.2	32.5	32.9	36.6	35.5	**36.0**	1.3%	0.6%	6.6%
Papua New Guinea	5.0	10.1	10.9	11.1	9.5	11.6	11.5	11.5	11.5	11.5	**11.1**	-3.9%	8.3%	2.0%
Other Asia Pacific*	0.2	0.8	0.5	0.8	0.6	0.5	1.4	1.0	1.3	1.5	**1.3**	-13.3%	23.5%	0.2%
Total Asia Pacific	**101.5**	**115.5**	**136.4**	**155.4**	**164.3**	**177.3**	**176.8**	**176.0**	**178.9**	**178.2**	**178.2**	**-0.3%**	**5.8%**	**32.8%**
Total LNG exports	**333.6**	**337.1**	**358.3**	**393.3**	**430.4**	**484.2**	**489.9**	**515.2**	**538.5**	**546.6**	**544.1**	**-0.7%**	**5.0%**	**100.0%**

Source: Includes GIIGNL, S&P Global Commodity Insights.
Gross LNG trade.
* Largely consists of re-exports.
† Less than 0.05%.
Notes: Annual changes and share of totals are calculated using billion cubic metres figures.
Growth rates are adjusted for leap years.

Natural gas Major trade movements 2024 – LNG



LNG trade remained relatively flat in 2024, with the US retaining its position as the largest exporter followed closely by Qatar and Australia. Collectively, they accounted for 60% of total global LNG exports. China increased LNG imports by 7% in 2024, to remain the largest importer of LNG, with over one-third of its imports coming from Australia. The Asia Pacific region alone was responsible for 69% of all LNG imports, with China accounting for one third of these imports. Europe's LNG imports fell 21% in 2024, despite this Europe's LNG imports from the Russian Federation increased marginally to 21.4 bcm. The US remains the largest supplier of LNG to Europe, despite a fall of 16 bcm most of which was redirected to the Asia Pacific region.

Natural gas Trade movements 2024 as liquefied natural gas*

Billion cubic metres To	From US	Peru	Trinidad & Tobago	Other Americas*	Norway	Other Europe*	Russian Federation	Oman	Qatar	United Arab Emirates	Yemen	Algeria	Angola	Egypt	Nigeria	Other Africa	Australia	Brunei	Indonesia	Malaysia	Papua New Guinea	Other Asia Pacific*	**Total imports**
Canada	†	0.2	0.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**0.4**
Mexico	0.2	–	0.2	–	–	–	–	–	–	–	–	–	–	–	0.1	–	–	–	0.5	–	–	–	**1.0**
US	–	–	0.3	†	0.1	†	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	†	**0.5**
North America	**0.2**	**0.2**	**0.7**	**†**	**0.1**	**†**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**0.1**	**–**	**–**	**–**	**0.5**	**–**	**–**	**†**	**1.8**
Argentina	1.4	–	0.2	–	–	0.1	–	–	–	–	–	0.1	–	–	–	–	–	–	–	–	–	–	**1.7**
Brazil	2.9	–	†	–	–	†	–	–	–	–	–	–	–	–	0.1	–	–	–	–	–	–	–	**3.0**
Chile	1.2	–	1.7	–	–	–	–	–	–	–	–	–	–	–	–	0.1	–	–	–	–	–	–	**3.0**
Other S. & Cent. America	4.6	–	2.8	0.3	0.2	0.1	–	–	–	–	–	–	–	0.1	1.3	†	–	–	0.1	–	–	–	**9.5**
S. & Cent. America	**10.1**	**–**	**4.7**	**0.3**	**0.2**	**0.2**	**–**	**–**	**–**	**–**	**–**	**0.1**	**–**	**0.1**	**1.4**	**0.1**	**–**	**–**	**0.1**	**–**	**–**	**–**	**17.2**
Belgium	1.1	–	–	–	–	–	3.4	–	3.1	–	–	–	–	–	0.1	–	–	–	–	–	–	–	**7.7**
France	9.5	0.3	†	–	0.9	0.1	8.4	–	0.4	–	–	4.6	0.2	0.1	1.0	0.1	–	–	–	–	–	0.1	**25.7**
Italy	5.0	–	0.2	–	–	0.2	0.1	–	6.6	–	–	2.0	0.3	0.1	–	0.2	–	–	–	–	–	–	**14.6**
Spain	5.1	0.1	0.2	–	0.2	0.3	6.5	–	1.0	–	–	2.3	0.2	–	2.2	0.3	–	–	†	–	–	–	**18.4**
Türkiye	4.9	–	0.2	–	0.1	0.3	0.5	–	–	–	–	5.5	–	0.2	0.1	0.3	–	–	–	–	–	–	**12.0**
United Kingdom	6.8	–	0.7	–	0.2	–	–	–	0.8	–	–	0.5	0.3	0.1	0.2	0.1	–	–	–	–	–	–	**9.7**
Other European Union	28.4	1.3	1.9	0.1	4.5	0.1	2.5	–	2.5	–	–	0.8	0.4	0.1	2.3	0.1	–	–	–	–	–	0.2	**45.3**
Rest of Europe	–	–	–	–	–	0.1	†	–	–	–	–	–	–	–	–	–	–	–	–	–	–	†	**0.1**
Europe	**60.7**	**1.7**	**3.3**	**0.1**	**6.0**	**1.1**	**21.4**	**–**	**14.6**	**–**	**–**	**15.6**	**1.3**	**0.5**	**5.8**	**1.0**	**–**	**–**	**†**	**–**	**–**	**0.3**	**133.5**
Egypt	3.3	–	†	–	–	0.2	–	–	–	–	–	–	–	–	0.3	0.1	–	–	–	–	–	–	**3.9**
Kuwait	0.9	–	0.1	–	–	–	0.3	0.3	6.0	–	–	–	0.4	–	1.6	0.2	–	–	–	–	–	–	**9.7**
United Arab Emirates	0.1	–	–	–	–	–	–	–	1.1	–	–	–	–	–	–	–	–	–	–	–	–	–	**1.2**
Other Middle East & Africa	1.2	–	–	–	–	0.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	†	**1.3**
Middle East & Africa	**5.4**	**–**	**0.1**	**–**	**–**	**0.3**	**0.3**	**0.3**	**7.1**	**–**	**–**	**–**	**0.4**	**–**	**1.9**	**0.3**	**–**	**–**	**–**	**–**	**–**	**†**	**16.1**
China	5.8	0.4	0.3	†	0.1	0.1	11.4	1.5	25.2	1.3	–	†	–	0.2	1.9	1.6	35.8	1.1	4.9	10.5	3.3	–	**105.2**
India	7.3	–	0.5	–	–	0.2	–	2.0	15.3	4.6	–	–	2.5	–	2.0	3.2	0.2	–	0.1	–	–	–	**37.9**
Japan	8.6	0.6	0.1	†	–	–	7.7	4.6	3.9	1.3	–	0.1	–	–	0.7	0.6	34.2	3.7	4.3	13.2	5.0	0.3	**89.0**
Malaysia	0.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.2	3.4	–	–	–	0.1	†	**4.2**
Pakistan	–	–	–	–	–	–	–	–	9.8	–	–	–	–	–	1.0	0.1	–	–	0.1	–	–	–	**11.0**
Singapore	1.5	–	0.3	–	–	–	–	–	2.3	–	–	–	–	–	†	1.4	2.5	–	0.1	0.1	–	0.1	**8.4**
South Korea	7.8	1.1	†	–	–	0.1	2.9	6.5	12.2	0.6	–	–	–	0.1	1.3	0.9	15.6	0.8	4.2	8.4	0.8	0.3	**63.6**
Taiwan	2.9	0.5	–	–	–	–	0.6	0.4	7.4	0.6	–	–	–	–	0.4	0.4	11.0	0.5	1.2	1.4	1.9	–	**29.1**
Thailand	2.9	0.1	0.3	–	–	–	–	0.7	3.1	0.2	–	0.1	0.6	–	0.7	0.7	2.8	0.2	0.9	2.3	–	0.2	**15.8**
Other Asia Pacific	1.4	–	–	–	–	–	–	–	6.0	–	–	0.1	0.1	–	1.2	0.5	1.4	0.2	0.3	0.2	–	0.1	**11.4**
Asia Pacific	**38.7**	**2.8**	**1.6**	**†**	**0.1**	**0.3**	**22.6**	**15.7**	**85.2**	**8.6**	**–**	**0.3**	**3.2**	**0.3**	**9.1**	**9.6**	**106.8**	**6.4**	**15.9**	**36.0**	**11.1**	**0.9**	**375.5**
Total exports	**115.2**	**4.7**	**10.3**	**0.4**	**6.4**	**1.9**	**44.3**	**16.0**	**106.9**	**8.6**	**–**	**16.0**	**4.9**	**0.9**	**18.4**	**11.0**	**106.8**	**6.4**	**16.5**	**36.0**	**11.1**	**1.3**	**544.1**

Source: Includes data from GIIGNL, S&P Global Commodity Insights.
* Includes re-exports.
† Less than 0.05.
Note: As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) and has been standardised using a gross calorific value (GCV) of 40 MJ/m³.

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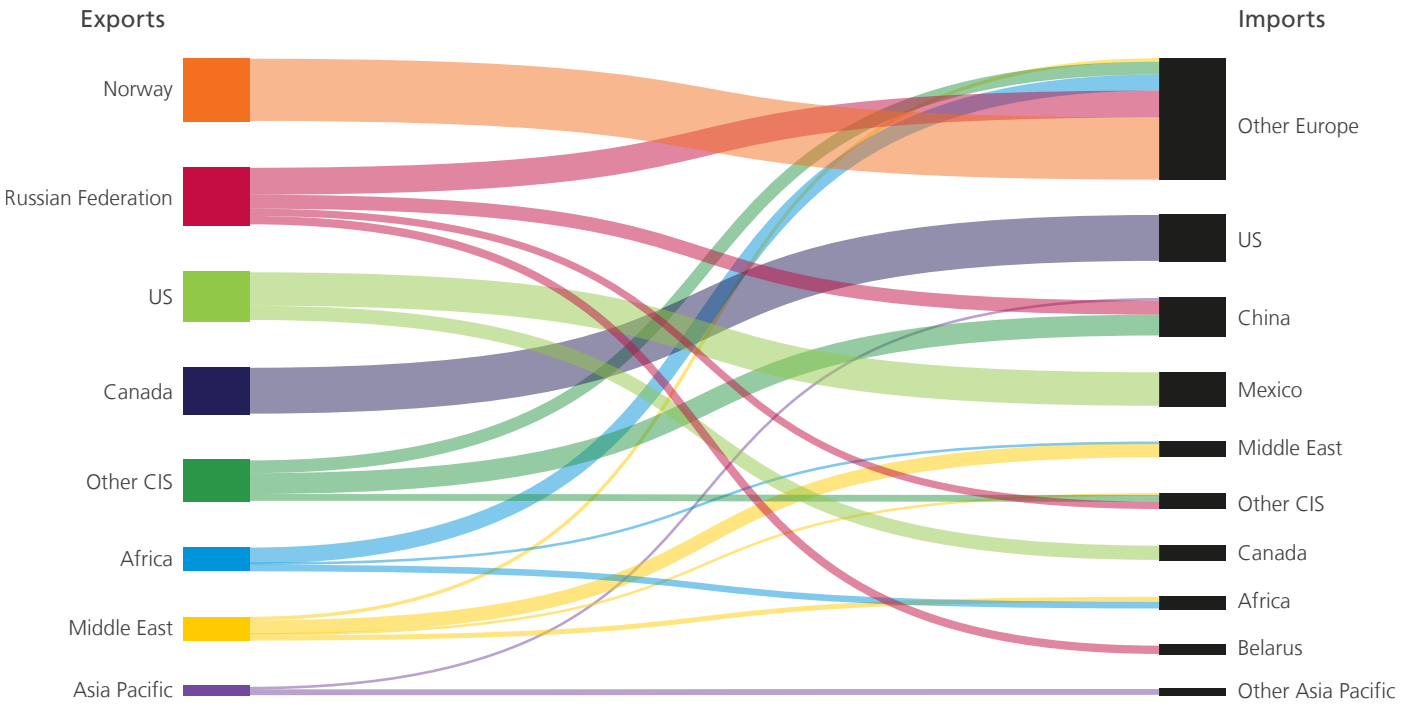
Natural gas Major trade movements 2024 – pipeline



Total 'inter-regional' pipeline trade increased for the first time since 2021, largely driven by a 22% increase in Russian Federation pipeline exports. It increased exports to Europe by 6 bcm, to neighbouring CIS countries by 8 bcm, and to China by 5 bcm. Europe is the largest player in global pipeline trade, responsible for 40% of global imports and 20% of exports. Norway remains the largest supplier of pipeline gas to its European counterparts, supplying more than half of their pipeline imports. Significant trade between the North American pipeline network continues, with the US and Canada exporting 91 bcm and 88 bcm, respectively. 70% of US pipeline exports were to Mexico and the remaining 30% to Canada.

Natural gas Trade movements 2024 by pipeline

Billion cubic metres To	From Canada	Mexico	US	Bolivia	Other S. & Cent. America	Norway	Other Europe	Azerbaijan	Kazakhstan	Russian Federation	Turkmenistan	Uzbekistan	Iran	Qatar	Other Middle East	Algeria	Libya	Other Africa	Indonesia	Myanmar	Other Asia Pacific	**Total imports**
Canada	–	–	27.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**27.2**
Mexico	–	–	63.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**63.9**
US	87.6	†	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**87.7**
North America	**87.6**	**†**	**91.0**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**178.7**
Argentina	–	–	–	1.1	0.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**1.2**
Brazil	–	–	–	4.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**4.9**
Other S. & Cent. America	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**–**
S. & Cent. America	**–**	**–**	**–**	**6.1**	**0.1**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**6.1**
European Union	–	–	–	–	–	87.3	–	11.9	–	27.2	–	–	–	–	–	29.3	1.3	–	–	–	–	**157.2**
Rest of Europe	–	–	–	–	–	31.4	–	12.4	–	24.2	–	–	6.8	–	–	–	–	–	–	–	–	**74.8**
Europe	**–**	**–**	**–**	**–**	**–**	**118.7**	**–**	**24.4**	**–**	**51.4**	**–**	**–**	**6.8**	**–**	**–**	**29.3**	**1.3**	**–**	**–**	**–**	**–**	**232.0**
Belarus	–	–	–	–	–	–	–	–	–	15.9	–	–	–	–	–	–	–	–	–	–	–	**15.9**
Kazakhstan	–	–	–	–	–	–	–	–	–	0.4	0.6	–	–	–	–	–	–	–	–	–	–	**1.0**
Russian Federation	–	–	–	–	–	–	–	–	0.7	–	4.7	–	–	–	–	–	–	–	–	–	–	**5.4**
Other CIS	–	–	–	–	–	–	–	–	–	13.7	6.8	0.2	0.4	–	–	–	–	–	–	–	–	**21.1**
CIS	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**0.7**	**29.8**	**12.1**	**0.2**	**0.4**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**43.2**
United Arab Emirates	–	–	–	–	–	–	–	–	–	–	–	–	–	17.4	–	–	–	–	–	–	–	**17.4**
Other Middle East	–	–	–	–	–	–	–	–	–	–	–	–	7.8	1.6	–	–	–	0.5	–	–	–	**9.9**
Middle East	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**7.8**	**18.9**	**–**	**–**	**–**	**0.5**	**–**	**–**	**–**	**27.3**
South Africa	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	9.2	–	–	–	**9.2**
Other Africa	–	–	–	–	–	–	0.8	–	–	–	–	–	–	–	9.8	3.4	–	–	–	–	–	**14.0**
Africa	**–**	**–**	**–**	**–**	**–**	**–**	**0.8**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**9.8**	**3.4**	**–**	**9.2**	**–**	**–**	**–**	**23.2**
Australia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**–**
China	–	–	–	–	–	–	–	–	4.5	26.7	32.8	2.5	–	–	–	–	–	–	–	4.7	–	**71.3**
Malaysia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**–**
Singapore	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3.9	–	2.0	**6.0**
Thailand	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5.3	–	**5.3**
Asia Pacific	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**4.5**	**26.7**	**32.8**	**2.5**	**–**	**–**	**–**	**–**	**–**	**–**	**3.9**	**10.0**	**2.0**	**82.5**
Total exports	**87.6**	**†**	**91.0**	**6.1**	**0.1**	**118.7**	**0.8**	**24.4**	**5.2**	**108.2**	**44.9**	**2.7**	**15.0**	**18.9**	**9.8**	**32.8**	**1.3**	**9.7**	**3.9**	**10.0**	**2.0**	**593.3**

Source: Includes data from FGE MENA gas service, S&P Global Commodity Insights.
† Less than 0.05.
Note: Intra-region trade is excluded. For example, trade between countries within Other Europe is excluded. Region coverage varies compared to 'inter-regional trade' table, e.g. Norway exports to EU, Non-EU is included above, but part of Europe in 'Inter-regional trade' table.
As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) and has been standardised using a gross calorific value (GCV) of 40 MJ/m³.

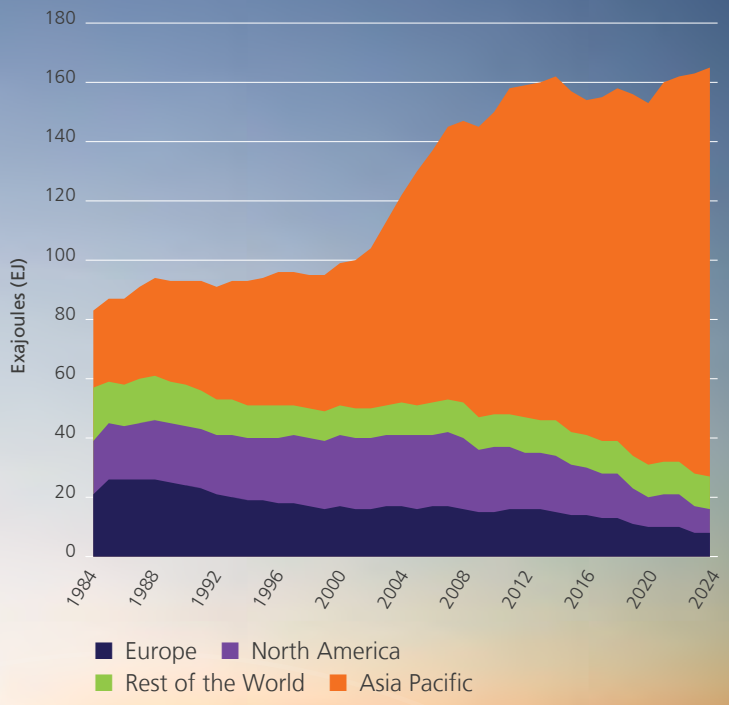
Coal

In 2024, global coal production reached a new record high of 182 EJ, surpassing the previous peak set in 2023, though the pace of growth slowed compared to the past three years. The Asia Pacific region continued to expand, with India and Indonesia recording significant production increases of 7% and 8%, respectively. Yet China remained by far the largest producer globally – India and Indonesia combined produced only 37% of China's total output. Africa remained relatively stable, with production rising by less than 2%. Meanwhile, Europe, South & Central America, and the Commonwealth of Independent States all saw continued declines. Production in North America also fell with the US recording its lowest level for over 44 years.

Global coal demand continued to grow in 2024, rising by 1% to reach 165 EJ. The Commonwealth of Independent States, North America, and South & Central America all saw declines in demand. Europe remained the fastest-declining region globally, with a 7% drop from the previous year. However, these reductions were not enough to offset overall global growth, as the Asia Pacific region – driven by China – continued to expand, with regional demand increasing by around 2%.

US coal production reached its lowest level for over 44 years

Global coal consumption



Coal Production*

Million tonnes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	67.8	61.8	62.4	60.6	55.2	53.2	46.1	47.6	47.6	48.8	**42.6**	-12.9%	-4.5%	0.5%
Mexico	14.9	12.3	11.4	12.9	11.9	9.8	7.7	5.5	5.5	5.2	**5.2**	-0.5%	-10.0%	0.1%
US	907.2	813.7	660.8	702.7	686.0	640.8	485.7	523.8	539.0	524.3	**464.6**	-11.6%	-6.5%	5.0%
Total North America	989.9	887.8	734.5	776.2	753.0	703.7	539.6	577.0	592.2	578.3	**512.4**	-11.6%	-6.4%	5.5%
Brazil	9.4	8.0	7.5	5.8	6.4	5.8	7.1	8.0	7.6	7.7	**7.6**	-1.3%	-2.1%	0.1%
Colombia	88.6	86.7	91.5	91.8	87.9	88.5	56.8	63.7	66.8	68.0	**52.7**	-22.6%	-5.1%	0.6%
Venezuela	0.8	0.8	0.7	0.7	0.7	0.4	0.3	0.2	0.2	0.3	**0.3**	9.1%	-9.7%	†
Other S. & Cent. America	4.5	3.4	2.8	1.8	1.6	1.1	0.4	0.2	0.3	0.4	**0.4**	3.4%	-21.6%	†
Total S. & Cent. America	103.2	99.0	102.6	100.2	96.7	95.9	64.6	72.1	74.9	76.3	**61.0**	-20.3%	-5.1%	0.7%
Bulgaria	31.3	35.9	31.3	34.3	30.6	28.3	22.6	28.4	35.6	21.1	**15.1**	-28.7%	-7.1%	0.2%
Czech Republic	47.1	46.5	45.5	44.9	43.8	41.0	31.6	31.5	35.1	30.2	**25.1**	-16.8%	-6.1%	0.3%
Germany	185.8	184.3	175.4	175.1	168.8	131.3	107.4	126.3	130.8	102.3	**91.9**	-10.4%	-6.8%	1.0%
Greece	50.8	46.2	32.6	37.7	36.5	27.4	14.1	12.4	14.3	10.8	**6.5**	-39.8%	-18.6%	0.1%
Hungary	9.6	9.3	9.2	8.0	7.9	6.8	6.1	5.0	4.9	4.1	**3.9**	-4.7%	-8.6%	†
Poland	137.1	135.8	131.0	127.1	122.4	112.4	100.7	107.6	107.8	88.7	**85.2**	-4.2%	-4.6%	0.9%
Romania	23.6	25.5	23.0	25.8	23.7	21.7	15.0	17.7	18.2	14.8	**12.6**	-15.0%	-6.1%	0.1%
Serbia	29.8	37.8	38.5	39.8	37.6	38.9	39.7	36.4	35.1	31.9	**31.3**	-2.4%	0.5%	0.3%
Spain	3.9	3.1	1.7	3.0	2.4	0.1	0.1	0.1	0.1	^	**^**	–	-36.5%	†
Türkiye	65.2	58.4	73.0	74.1	83.9	87.1	74.7	86.5	95.3	74.2	**87.0**	16.9%	2.9%	0.9%
Ukraine	45.7	30.4	32.2	24.7	26.8	26.1	24.4	23.8	20.3	19.7	**17.4**	-11.9%	-9.2%	0.2%
United Kingdom	11.6	8.6	4.2	3.0	2.8	2.6	1.7	1.1	0.7	0.5	**0.1**	-79.0%	-37.5%	†
Other Europe	67.2	64.5	61.7	65.1	66.3	56.8	50.2	47.6	50.7	45.6	**40.7**	-11.0%	-4.9%	0.4%
Total Europe	708.8	686.3	659.4	662.6	653.5	580.5	488.3	524.3	548.8	443.9	**416.9**	-6.3%	-5.2%	4.5%
Kazakhstan	114.0	107.3	103.1	112.3	118.5	115.0	113.4	116.2	117.8	116.4	**112.6**	-3.6%	-0.1%	1.2%
Russian Federation	357.5	372.5	386.6	411.0	441.3	440.7	398.6	432.6	437.3	430.7	**427.2**	-1.1%	1.8%	4.6%
Uzbekistan	4.4	3.5	3.9	4.0	4.2	4.0	4.1	5.1	5.4	6.5	**7.5**	14.5%	5.5%	0.1%
Other CIS	4.1	4.0	4.6	5.7	7.7	7.9	6.3	6.6	8.6	8.5	**9.0**	5.7%	8.1%	0.1%
Total CIS	480.0	487.3	498.1	533.0	571.6	567.6	522.4	560.5	569.0	562.1	**556.2**	-1.3%	1.5%	6.0%
Total Middle East	1.5	1.6	1.8	1.8	2.2	2.0	2.1	2.4	4.9	9.2	**11.0**	18.8%	22.2%	0.1%
South Africa	261.4	252.2	249.7	252.3	250.0	254.4	248.1	233.7	229.9	233.6	**235.0**	0.3%	-1.1%	2.5%
Zimbabwe	5.8	4.3	2.7	2.9	3.3	2.6	2.7	3.2	3.9	5.0	**5.8**	15.9%	†	0.1%
Other Africa	9.4	9.7	9.2	16.7	20.3	15.2	13.6	17.8	23.9	24.5	**26.2**	6.6%	10.8%	0.3%
Total Africa	276.6	266.2	261.7	271.9	273.7	272.3	264.4	254.8	257.8	263.1	**267.0**	1.2%	-0.4%	2.9%
Australia	505.3	503.7	502.1	487.2	502.0	505.4	467.9	478.8	458.5	460.4	**462.9**	0.3%	-0.9%	5.0%
China	3873.9	3746.5	3410.6	3523.6	3697.7	3846.3	3901.6	4125.8	4558.6	4723.3	**4780.0**	0.9%	2.1%	51.7%
India	646.2	674.2	689.8	711.7	760.4	753.9	760.2	812.1	910.8	1011.3	**1085.1**	7.0%	5.3%	11.7%
Indonesia	458.1	461.6	456.2	461.2	557.8	616.2	563.7	614.0	687.4	775.2	**836.1**	7.6%	6.2%	9.0%
Japan	1.3	1.2	1.3	1.4	1.0	0.8	0.8	0.7	0.7	0.6	**0.5**	-18.5%	-8.8%	†
Mongolia	24.4	24.1	35.1	49.5	54.6	57.1	43.1	32.3	39.3	83.2	**106.5**	27.7%	15.9%	1.2%
New Zealand	4.0	3.4	2.9	2.9	3.2	3.0	2.8	2.9	2.6	2.6	**2.5**	-3.8%	-4.5%	†
Pakistan	3.4	3.3	4.1	4.2	4.4	7.1	9.6	9.7	12.3	17.4	**19.1**	9.5%	18.9%	0.2%
South Korea	1.7	1.8	1.7	1.5	1.2	1.1	1.0	0.9	0.8	0.6	**0.5**	-16.0%	-11.0%	†
Thailand	18.0	15.2	17.0	16.3	14.9	14.1	13.3	14.2	13.6	12.8	**12.8**	-0.7%	-3.4%	0.1%
Vietnam	41.1	41.7	38.7	38.4	42.4	46.4	44.6	48.3	49.9	47.3	**43.8**	-7.5%	0.6%	0.5%
Other Asia Pacific	44.2	47.7	64.2	61.6	58.8	64.9	60.8	57.4	64.2	67.2	**67.2**	-0.3%	4.3%	0.7%
Total Asia Pacific	5621.7	5524.3	5223.8	5359.5	5698.3	5916.3	5869.4	6197.2	6798.8	7202.0	**7417.1**	2.7%	2.8%	80.3%
Total World	**8181.6**	**7952.4**	**7481.8**	**7705.2**	**8049.0**	**8138.1**	**7750.8**	**8188.3**	**8846.3**	**9134.9**	**9241.5**	**0.9%**	**1.2%**	**100.0%**
of which: OECD	2146.4	2016.1	1842.3	1872.4	1856.2	1740.8	1427.3	1514.8	1532.3	1441.0	**1347.0**	-6.8%	-4.6%	14.6%
Non-OECD	6035.3	5936.3	5639.5	5832.8	6192.9	6397.4	6323.5	6673.5	7314.0	7693.9	**7894.6**	2.3%	2.7%	85.4%
European Union	527.3	521.3	481.6	492.2	473.4	397.3	318.8	348.9	368.1	291.3	**255.7**	-12.5%	-7.0%	2.8%

* Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels. Includes coal produced for Coal-to-Liquids and Coal-to-Gas transformations.

^ Less than 0.005.

† Less than 0.05%.

Notes: Annual changes and shares of total are calculated using million tonnes figures.
Growth rates are adjusted for leap years.

Coal Production*

Exajoules	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	1.50	1.35	1.37	1.33	1.23	1.20	1.15	1.21	1.22	1.27	**1.14**	-10.2%	-2.7%	0.6%
Mexico	0.30	0.29	0.25	0.31	0.28	0.23	0.19	0.14	0.14	0.13	**0.13**	-0.5%	-8.2%	0.1%
US	20.33	17.99	14.70	15.66	15.40	14.29	10.73	11.62	12.07	11.78	**10.61**	-10.2%	-6.3%	5.8%
Total North America	22.14	19.63	16.33	17.30	16.90	15.72	12.07	12.97	13.42	13.18	**11.88**	-10.1%	-6.0%	6.5%
Brazil	0.15	0.12	0.11	0.09	0.10	0.09	0.10	0.12	0.11	0.11	**0.11**	-1.4%	-3.3%	0.1%
Colombia	2.55	2.49	2.63	2.64	2.53	2.55	1.63	1.83	1.92	1.96	**1.52**	-22.6%	-5.1%	0.8%
Venezuela	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	^	0.01	**0.01**	9.1%	-12.2%	†
Other S. & Cent. America	0.12	0.10	0.08	0.05	0.05	0.03	0.01	0.01	0.01	0.01	**0.01**	2.7%	-21.7%	†
Total S. & Cent. America	2.85	2.74	2.85	2.81	2.69	2.68	1.76	1.96	2.04	2.08	**1.64**	-21.3%	-5.4%	0.9%
Bulgaria	0.21	0.25	0.21	0.24	0.21	0.20	0.16	0.20	0.25	0.15	**0.11**	-28.7%	-6.9%	0.1%
Czech Republic	0.71	0.71	0.67	0.64	0.62	0.56	0.43	0.44	0.48	0.41	**0.34**	-16.2%	-7.0%	0.2%
Germany	1.85	1.79	1.66	1.65	1.58	1.19	0.98	1.15	1.19	0.92	**0.82**	-10.4%	-7.8%	0.5%
Greece	0.27	0.24	0.17	0.19	0.18	0.13	0.07	0.06	0.07	0.05	**0.03**	-39.8%	-18.8%	†
Hungary	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	**0.03**	-4.7%	-8.8%	†
Poland	2.26	2.22	2.18	2.08	1.98	1.87	1.68	1.76	1.71	1.49	**1.39**	-6.8%	-4.8%	0.8%
Romania	0.19	0.20	0.18	0.19	0.17	0.16	0.11	0.13	0.12	0.09	**0.08**	-14.9%	-8.1%	†
Serbia	0.24	0.30	0.30	0.30	0.28	0.29	0.30	0.26	0.25	0.23	**0.23**	-2.4%	-0.6%	0.1%
Spain	0.07	0.05	0.03	0.05	0.04	^	^	^	^	^	**^**	†	-35.8%	†
Türkiye	0.68	0.54	0.65	0.63	0.69	0.73	0.66	0.75	0.83	0.64	**0.75**	15.9%	0.9%	0.4%
Ukraine	1.09	0.72	0.76	0.57	0.61	0.60	0.53	0.52	0.44	0.43	**0.38**	-11.9%	-10.0%	0.2%
United Kingdom	0.29	0.21	0.11	0.08	0.08	0.07	0.05	0.03	0.02	0.01	**^**	-79.0%	-36.7%	†
Other Europe	0.64	0.59	0.59	0.60	0.60	0.52	0.46	0.44	0.46	0.42	**0.37**	-10.9%	-5.3%	0.2%
Total Europe	8.57	7.88	7.58	7.28	7.08	6.36	5.47	5.77	5.84	4.87	**4.53**	-7.2%	-6.2%	2.5%
Kazakhstan	2.09	1.66	1.75	1.92	1.98	1.88	1.86	1.92	1.95	2.01	**1.94**	-3.6%	-0.7%	1.1%
Russian Federation	7.39	7.80	8.12	8.62	9.23	9.23	8.41	9.23	9.33	9.20	**9.12**	-1.1%	2.1%	5.0%
Uzbekistan	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.08	**0.09**	14.5%	5.6%	†
Other CIS	0.06	0.07	0.07	0.09	0.12	0.12	0.11	0.11	0.14	0.14	**0.15**	9.4%	9.1%	0.1%
Total CIS	9.60	9.57	10.00	10.68	11.37	11.28	10.42	11.33	11.49	11.42	11.30	-1.3%	1.6%	6.2%
Total Middle East	0.03	0.03	0.04	0.04	0.05	0.04	0.04	0.04	0.06	0.07	**0.08**	10.4%	10.7%	†
South Africa	6.20	5.96	6.01	5.97	6.01	6.02	5.88	5.53	5.44	5.53	**5.56**	0.3%	-1.1%	3.1%
Zimbabwe	0.16	0.12	0.07	0.08	0.09	0.07	0.07	0.09	0.11	0.13	**0.16**	15.9%	†	0.1%
Other Africa	0.24	0.25	0.24	0.43	0.53	0.39	0.35	0.46	0.61	0.63	**0.67**	6.6%	10.8%	0.4%
Total Africa	6.59	6.33	6.32	6.49	6.63	6.48	6.30	6.08	6.16	6.29	**6.39**	1.3%	-0.3%	3.5%
Australia	12.81	12.80	12.83	12.50	13.09	13.18	12.03	12.25	11.69	11.74	**11.82**	0.3%	-0.8%	6.5%
China	78.05	76.59	70.82	73.17	76.87	79.76	80.51	83.44	91.32	93.36	**94.48**	0.9%	1.9%	51.8%
India	11.28	11.77	11.89	11.99	12.80	12.60	12.59	13.38	15.05	16.83	**18.05**	7.0%	4.8%	9.9%
Indonesia	10.15	10.19	9.87	9.69	11.44	12.84	11.78	12.68	13.95	15.73	**16.97**	7.6%	5.3%	9.3%
Japan	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	**0.01**	-18.5%	-8.5%	†
Mongolia	0.47	0.46	0.67	0.94	1.04	1.09	0.82	0.62	0.75	1.59	**2.03**	27.7%	15.9%	1.1%
New Zealand	0.10	0.09	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.07	**0.06**	-3.9%	-4.8%	†
Pakistan	0.06	0.06	0.08	0.08	0.08	0.13	0.18	0.18	0.23	0.33	**0.36**	9.5%	18.9%	0.2%
South Korea	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	**0.01**	-16.0%	-10.6%	†
Thailand	0.19	0.16	0.18	0.17	0.16	0.15	0.14	0.15	0.14	0.13	**0.13**	-0.7%	-3.7%	0.1%
Vietnam	0.96	0.98	0.91	0.90	0.99	1.09	1.05	1.13	1.17	1.11	**1.03**	-7.5%	0.6%	0.6%
Other Asia Pacific	1.09	1.13	1.40	1.33	1.22	1.38	1.30	1.21	1.36	1.43	**1.43**	-0.5%	2.7%	0.8%
Total Asia Pacific	115.25	114.27	108.78	110.91	117.82	122.32	120.50	125.15	135.76	142.35	146.39	2.6%	2.4%	80.3%
Total World	**165.02**	**160.44**	**151.89**	**155.50**	**162.54**	**164.89**	**156.55**	**163.29**	**174.77**	**180.27**	**182.23**	**0.8%**	**1.0%**	**100.0%**
of which: OECD	44.37	41.31	37.86	38.34	38.24	36.44	29.96	31.58	31.66	30.71	**28.82**	-6.4%	-4.2%	15.8%
Non-OECD	120.65	119.13	114.03	117.16	124.31	128.45	126.59	131.71	143.12	149.56	**153.40**	2.3%	2.4%	84.2%
European Union	5.97	5.82	5.47	5.42	5.16	4.42	3.67	3.96	4.04	3.31	**2.94**	-11.4%	-6.8%	1.6%

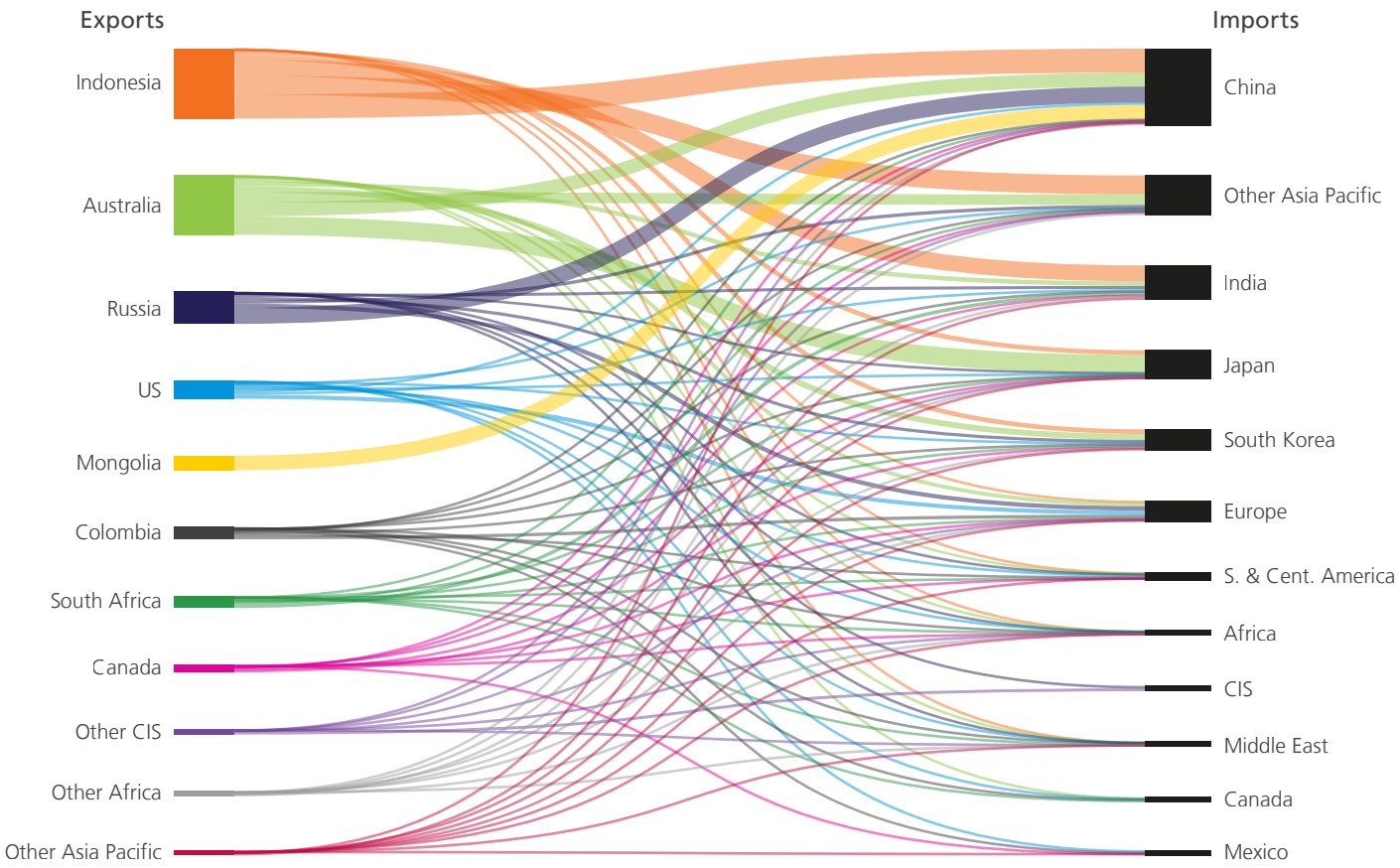
* Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels. Includes coal produced for Coal-to-Liquids and Coal-to-Gas transformations.

^ Less than 0.005.

† Less than 0.05%.

Notes: Annual changes and shares of total are calculated using exajoules figures.
Growth rates are adjusted for leap years.

Coal Trade movements



Notes: Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels. Intra-area movements (for example, between countries in Europe) are excluded.

Overall, international coal trade increased by 1.3% in 2024 to 36 EJ matching the 2018 record high. The Asia Pacific region remains the dominant player in global coal trade, accounting for over 84% of total imports, led by China and India. China's coal imports hit a record 11.6 EJ, up 14% from 2023, retaining its position as a key buyer from Australia, Indonesia and the Russian Federation. Indonesia remained the largest coal exporter, with 11 EJ, a 5% increase over 2023, while Australia remains the second-largest exporter with a 4% increase.

European imports contracted by 17%, and coal from the Russian Federation to the EU fell by 13% in 2024, deepening the post-2022 shift toward alternative suppliers. Japan and South Korea continued gradual reductions, with coal imports down 1% and 4% respectively, reflecting cleaner energy shifts.

Coal Inter-area movements 2024

From	To													
Exajoules	Canada	Mexico	US	S. & Cent. America	Europe	CIS	Middle East	Africa	China	India	Japan	South Korea	Other Asia Pacific	**Total**
Canada	–	†	0.02	†	0.06	†	†	†	0.23	0.04	0.25	0.25	0.07	**0.92**
US	0.13	†	–	0.29	0.64	†	0.01	0.28	0.33	0.40	0.32	0.13	0.13	**2.64**
Colombia	0.04	0.10	0.02	0.32	0.51	–	0.08	0.04	0.20	0.04	0.04	0.26	0.05	**1.73**
Europe	†	†	†	0.01	–	†	†	0.02	†	0.07	†	†	0.01	**0.12**
Russian Federation	–	–	–	0.03	0.67	0.04	0.01	0.05	2.49	0.48	0.03	0.49	0.53	**4.81**
Other CIS	–	–	†	†	0.13	0.46	0.01	0.01	0.01	†	0.01	†	0.02	**0.64**
South Africa	†	–	†	0.01	0.19	–	0.09	0.14	0.02	0.57	0.09	0.17	0.35	**1.63**
Other Africa	–	–	†	–	0.02	–	0.03	0.11	0.03	0.18	†	0.05	0.10	**0.54**
Australia	†	–	–	0.17	0.61	–	†	0.01	2.17	0.71	2.85	0.91	1.63	**9.07**
China	†	†	†	0.01	0.04	†	0.02	†	–	0.02	0.03	0.03	0.18	**0.34**
Indonesia	†	–	†	0.01	0.07	–	†	†	3.74	2.48	0.72	0.73	2.95	**10.72**
Mongolia	–	–	–	–	†	–	–	–	2.27	–	–	–	–	**2.27**
Other Asia Pacific	†	†	†	†	0.02	†	0.01	†	0.12	0.24	0.02	0.04	–	**0.44**
Rest of World	†	†	†	0.01	0.02	†	†	†	†	0.06	†	0.02	†	**0.12**
Total imports	**0.18**	**0.11**	**0.05**	**0.87**	**2.99**	**0.50**	**0.26**	**0.68**	**11.62**	**5.30**	**4.35**	**3.07**	**6.02**	**35.99**

Notes: Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels.
Intra-area movements (for example, between countries in Europe) are excluded.
† Less than 0.05%.

Coal Trade movements

Exajoules	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Imports														
Canada	0.26	0.22	0.19	0.22	0.23	0.21	0.17	0.19	0.18	0.19	**0.18**	-8.1%	-3.6%	0.5%
Mexico	0.22	0.23	0.21	0.32	0.32	0.25	0.13	0.05	0.05	0.12	**0.11**	-8.6%	-6.4%	0.3%
US	0.28	0.28	0.25	0.19	0.15	0.17	0.65	0.14	0.16	0.11	**0.05**	-50.0%	-15.1%	0.2%
S. & Cent. America	1.06	1.00	1.06	1.20	1.18	1.12	1.04	1.25	1.05	0.96	**0.87**	-10.1%	-2.0%	2.4%
Europe	6.09	6.03	5.40	5.83	6.34	5.08	3.93	4.44	4.94	3.57	**2.99**	-16.6%	-6.9%	8.3%
CIS	0.56	0.53	0.48	0.60	0.65	0.70	0.66	0.64	0.49	0.49	**0.50**	1.8%	-1.0%	1.4%
Middle East	0.49	0.38	0.34	0.36	0.37	0.34	0.38	0.34	0.25	0.24	**0.26**	8.4%	-6.1%	0.7%
Africa	0.37	0.44	0.50	0.63	0.82	0.92	0.52	0.68	0.73	0.76	**0.68**	-11.1%	6.2%	1.9%
China	6.62	4.69	5.65	5.87	6.00	6.40	6.61	6.68	5.83	10.16	**11.62**	14.0%	5.8%	32.3%
India	4.65	4.92	6.46	5.25	5.68	4.70	4.74	4.67	4.99	5.35	**5.30**	-1.3%	1.3%	14.7%
Japan	5.00	5.05	5.01	5.06	5.00	4.90	4.56	4.84	4.82	4.39	**4.35**	-1.1%	-1.4%	12.1%
South Korea	3.43	3.54	3.53	3.89	3.90	3.73	3.28	3.35	3.36	3.19	**3.07**	-3.9%	-1.1%	8.5%
Other Asia Pacific	2.73	3.96	4.60	4.90	5.34	5.22	6.36	6.23	5.53	5.89	**6.02**	1.8%	8.2%	16.7%
Total World	**31.76**	**31.27**	**33.69**	**34.32**	**35.99**	**33.72**	**33.03**	**33.51**	**32.37**	**35.43**	**35.99**	**1.3%**	**1.3%**	**100.0%**
Exports														
Canada	1.00	0.86	0.78	0.95	1.03	1.02	0.95	0.96	0.97	0.99	**0.92**	-7.2%	-0.9%	2.5%
US	2.38	1.89	1.52	2.41	2.89	2.21	1.74	2.18	2.23	2.47	**2.64**	6.6%	1.1%	7.3%
Colombia	2.27	2.19	2.33	2.48	2.42	2.09	1.82	1.68	1.61	1.62	**1.73**	6.3%	-2.7%	4.8%
Europe	0.13	0.10	0.13	0.19	0.25	0.24	0.21	0.22	0.15	0.20	**0.12**	-41.5%	-0.9%	0.3%
Russian Federation	3.78	4.11	4.47	5.09	5.76	5.79	5.66	6.03	5.32	5.46	**4.81**	-12.0%	2.4%	13.4%
Other CIS	0.51	0.48	0.45	0.50	0.49	0.55	0.63	0.65	0.69	0.66	**0.64**	-3.3%	2.3%	1.8%
South Africa	2.18	2.30	2.16	2.68	2.95	1.41	1.73	1.62	1.72	1.74	**1.63**	-6.4%	-2.9%	4.5%
Other Africa	0.18	0.26	2.02	0.66	0.24	0.28	0.74	0.37	0.47	0.56	**0.54**	-5.1%	11.8%	1.5%
Australia	9.12	9.95	9.87	9.63	9.71	9.60	9.33	9.60	8.21	8.72	**9.07**	3.7%	-0.1%	25.2%
China	0.36	0.45	0.51	0.40	0.41	0.31	0.18	0.28	0.31	0.31	**0.34**	9.7%	-0.3%	1.0%
Indonesia	8.42	7.48	7.73	8.01	8.49	8.49	8.79	8.98	9.19	10.15	**10.72**	5.3%	2.4%	29.8%
Mongolia	0.53	0.41	0.73	0.95	0.99	1.04	0.83	0.49	0.90	1.96	**2.27**	15.4%	15.6%	6.3%
Other Asia Pacific	0.77	0.65	0.77	0.32	0.29	0.60	0.34	0.36	0.44	0.46	**0.44**	-4.3%	-5.3%	1.2%
Rest of World	0.14	0.14	0.22	0.06	0.08	0.09	0.08	0.08	0.15	0.13	**0.12**	-3.1%	-1.0%	0.3%
Total World	**31.76**	**31.27**	**33.69**	**34.32**	**35.99**	**33.72**	**33.03**	**33.51**	**32.37**	**35.43**	**35.99**	**1.3%**	**1.3%**	**100.0%**

Notes: Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels.
Intra-area movements (for example between countries in Europe) are excluded.
Annual changes and shares of total are calculated using exajoules figures. Growth rates are adjusted for leap years.

Mined energy resource prices

	Coal $/te								Uranium $/lb
	United States[1]	Colombia[2]	Northwest Europe[3]	South Africa[4]	Indonesia[5]	South China[6]	Japan[7]	Australia[8]	Canada[9]
1987	–	–	31.30		–	–	–	–	–
1988	–	–	39.94		–	–	–	–	–
1989	–	–	42.08		–	–	–	–	–
1990	31.59	–	43.48		–	–	–	–	–
1991	29.01	–	42.80		–	–	–	–	–
1992	28.53	–	38.53		–	–	–	–	–
1993	29.85	–	33.68		–	–	–	–	–
1994	31.72	–	37.18		–	–	–	–	–
1995	27.01	–	44.50		–	–	–	–	–
1996	29.86	–	41.25		–	–	–	–	–
1997	29.76	–	38.92		–	–	–	–	–
1998	31.00	–	32.00		–	–	–	–	–
1999	31.29	–	28.79		–	–	–	–	–
2000	29.90	–	35.99		–	27.52	–	–	–
2001	50.15	–	39.03		–	31.78	37.69	–	–
2002	33.20	–	31.65		–	33.19	31.47	–	–
2003	38.52	–	43.60		–	31.74	39.61	–	–
2004	64.90	–	72.13		–	42.76	74.22	–	–
2005	70.12	–	60.54		–	51.34	64.62	–	–
2006	57.82	–	64.11		–	53.53	65.22	–	–
2007	49.73	–	88.79		–	61.23	95.59	–	–
2008	117.42	–	147.67		–	104.97	157.88	–	–
2009	60.73	–	70.39		–	87.86	83.59	–	–
2010	67.87	59.21	92.50		–	110.08	108.47	–	–
2011	84.75	79.73	121.48		–	127.27	126.13	–	–
2012	67.28	65.02	92.50		–	111.89	100.30	–	–
2013	69.72	54.18	81.69		–	95.42	90.07	–	–
2014	67.08	50.25	75.38	62.80	–	84.12	76.13	–	–
2015	51.57	47.31	56.79	47.48	–	67.53	60.10	–	–
2016	51.45	52.62	60.09	53.04	–	71.35	71.66	–	–
2017	63.83	68.75	84.51	71.59	–	94.72	96.02	–	–
2018	72.84	72.76	91.83	78.03	–	99.45	112.73	71.13	–
2019	57.16	51.26	60.17	55.67	50.53	35.20	73.57	54.24	–
2020	42.77	45.16	50.13	48.30	45.22	30.64	61.03	44.75	30.46
2021	68.54	100.39	122.60	96.49	95.22	124.70	114.59	83.26	35.16
2022	157.57	248.37	291.28	212.99	127.65	177.78	214.57	174.49	49.78
2023	73.59	99.87	129.54	99.66	84.61	120.65	130.25	103.59	60.37
2024	**77.67**	**82.90**	**112.00**	**88.41**	**73.52**	**102.00**	**115.39**	**89.41**	**86.24**

[1] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc. Prices are for CAPP 12,500 Btu, 1.2 SO_2 coal, FOB to 2023. From 2024, NAPP FOB Baltimore 6,900 kcal/kg NAR).
[2] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc 6,000 kcal/kg NAR FOB.
[3] **Source:** IHS Northwest Europe prices for 1990-2000 average monthly marker prices, 2001-2018 average weekly prices. From 2019, monthly average of S&P Global Commodity Insights, ©2025 by S&P Global Inc Thermal Coal CIF ARA 6,000 kcal/kg NAR.
[4] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc FOB Richards Bay 5500 kcal/kg NAR 7-45 Day $/mt.
[5] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc FOB Kalimantan 5,000 kcal/kg GAR.
[6] South China prices are the average monthly price for 2000-2005, weekly prices 2006 -2018, from 2019 monthly average of S&P Global Commodity Insights, ©2025 by S&P Global Inc CFR South China 5,500 kilocalories per kilogram NAR.
[7] **Source:** 2001-2018 IHS Japan prices basis = 6,000 kilocalories per kilogram NAR CIF. From 2019, monthly average of S&P Global Commodity Insights, ©2025 by S&P Global Inc NEAT 5,750 kcal/kg NAR.
[8] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc FOB Newcastle High Ash 5500 kcal/kg NAR 7-45 Day $/mt.
[9] **Source:** S&P Global Commodity Insights, ©2025 by S&P Global Inc Uranium U3O8 Spot Canada Mo01 $/lb.
Note: NAPP = North Appalachian, CIF = cost+insurance+freight (average prices); FOB = Free on Board, NAR = Net As Received, CFR = Cost+Freight.

Coal Consumption*

Exajoules	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	0.82	0.77	0.77	0.79	0.65	0.61	0.53	0.47	0.39	0.37	**0.29**	-21.4%	-9.8%	0.2%
Mexico	0.53	0.53	0.52	0.64	0.57	0.54	0.24	0.20	0.24	0.28	**0.28**	1.2%	-6.1%	0.2%
US	18.04	15.58	14.26	13.87	13.28	11.34	9.20	10.57	9.91	8.19	**7.90**	-3.8%	-7.9%	4.8%
Total North America	19.39	16.89	15.55	15.30	14.50	12.49	9.97	11.24	10.54	8.84	**8.48**	-4.3%	-7.9%	5.1%
Argentina	0.06	0.06	0.04	0.05	0.05	0.03	0.04	0.05	0.05	0.05	**0.04**	-25.4%	-4.6%	†
Brazil	0.73	0.74	0.67	0.70	0.69	0.65	0.58	0.71	0.59	0.57	**0.53**	-7.5%	-3.2%	0.3%
Chile	0.32	0.31	0.31	0.32	0.31	0.31	0.26	0.29	0.24	0.14	**0.13**	-7.6%	-8.5%	0.1%
Colombia	0.22	0.21	0.23	0.17	0.16	0.19	0.17	0.14	0.18	0.20	**0.22**	13.1%	-0.1%	0.1%
Ecuador	^	^	^	^	^	^	^	^	^	^	**^**	-67.6%	-3.3%	†
Peru	0.04	0.03	0.04	0.03	0.03	0.03	0.02	0.03	0.03	0.03	**0.03**	-10.0%	-3.5%	†
Trinidad & Tobago	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Venezuela	0.01	0.01	0.01	0.01	^	^	^	^	0.01	0.01	**0.01**	9.1%	0.9%	†
Central America	0.04	0.05	0.06	0.04	0.06	0.07	0.06	0.07	0.05	0.06	**0.04**	-28.8%	-0.6%	†
Other Caribbean	0.08	0.08	0.08	0.07	0.07	0.10	0.12	0.11	0.12	0.12	**0.13**	3.4%	4.4%	0.1%
Other South America	^	^	^	^	^	^	^	^	^	^	**^**	0.9%	2.3%	†
Total S. & Cent. America	1.50	1.48	1.43	1.40	1.38	1.39	1.26	1.40	1.26	1.17	**1.12**	-4.6%	-2.9%	0.7%
Austria	0.13	0.14	0.13	0.13	0.12	0.12	0.10	0.11	0.10	0.10	**0.10**	-0.2%	-2.2%	0.1%
Belgium	0.14	0.14	0.13	0.13	0.13	0.13	0.10	0.11	0.12	0.10	**0.11**	9.9%	-2.6%	0.1%
Bulgaria	0.27	0.27	0.24	0.26	0.23	0.21	0.17	0.22	0.26	0.15	**0.11**	-26.5%	-8.1%	0.1%
Croatia	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	**0.01**	-34.3%	-9.9%	†
Cyprus	^	^	^	^	^	^	^	^	^	^	**^**	-43.6%	21.5%	†
Czech Republic	0.69	0.68	0.69	0.67	0.67	0.60	0.52	0.54	0.56	0.45	**0.36**	-20.4%	-6.3%	0.2%
Denmark	0.11	0.08	0.09	0.07	0.07	0.04	0.03	0.04	0.04	0.03	**0.02**	-31.7%	-15.9%	†
Estonia	0.17	0.15	0.16	0.18	0.18	0.13	0.10	0.11	0.12	0.11	**0.10**	-8.8%	-5.6%	0.1%
Finland	0.19	0.16	0.18	0.17	0.18	0.15	0.11	0.12	0.12	0.09	**0.08**	-16.8%	-8.7%	†
France	0.39	0.37	0.36	0.39	0.36	0.29	0.20	0.27	0.23	0.18	**0.18**	†	-7.5%	0.1%
Germany	3.33	3.29	3.20	3.01	2.90	2.25	1.85	2.24	2.31	1.75	**1.58**	-10.3%	-7.2%	1.0%
Greece	0.28	0.24	0.18	0.20	0.20	0.13	0.08	0.07	0.07	0.05	**0.04**	-26.4%	-18.1%	†
Hungary	0.09	0.10	0.09	0.09	0.09	0.08	0.07	0.06	0.05	0.04	**0.03**	-16.5%	-10.4%	†
Iceland	^	^	^	^	^	^	^	^	^	^	**^**	28.9%	1.8%	†
Ireland	0.08	0.09	0.09	0.08	0.06	0.04	0.04	0.05	0.04	0.02	**0.02**	-27.7%	-14.7%	†
Italy	0.55	0.52	0.46	0.40	0.37	0.28	0.21	0.23	0.31	0.19	**0.10**	-48.0%	-15.7%	0.1%
Latvia	^	^	^	^	^	^	^	^	^	^	**^**	-20.0%	-14.8%	†
Lithuania	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	^	**^**	-18.7%	-8.2%	†
Luxembourg	^	^	^	^	^	^	^	^	^	^	**^**	-13.9%	-9.5%	†
Netherlands	0.38	0.46	0.43	0.39	0.35	0.27	0.17	0.23	0.23	0.16	**0.17**	9.3%	-7.5%	0.1%
North Macedonia	0.05	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.04	0.03	**0.03**	-23.1%	-5.3%	†
Norway	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	**0.03**	3.8%	-1.1%	†
Poland	2.07	2.04	2.07	2.08	2.09	1.86	1.72	1.90	1.78	1.48	**1.33**	-10.5%	-4.3%	0.8%
Portugal	0.11	0.14	0.12	0.14	0.11	0.05	0.02	0.01	^	^	**^**	19.7%	-45.7%	†
Romania	0.24	0.25	0.22	0.23	0.21	0.21	0.15	0.17	0.15	0.11	**0.09**	-17.8%	-9.3%	0.1%
Slovakia	0.14	0.14	0.13	0.14	0.14	0.11	0.10	0.12	0.10	0.10	**0.08**	-19.4%	-5.5%	†
Slovenia	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	**0.04**	20.8%	-1.9%	†
Spain	0.49	0.57	0.44	0.56	0.48	0.21	0.12	0.13	0.16	0.11	**0.10**	-10.1%	-14.8%	0.1%
Sweden	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	**0.07**	0.3%	-2.0%	†
Switzerland	0.01	0.01	^	^	^	^	^	^	^	^	**^**	†	-6.0%	†
Türkiye	1.51	1.45	1.61	1.65	1.71	1.76	1.70	1.74	1.76	1.68	**1.80**	7.1%	1.8%	1.1%
Ukraine	1.49	1.14	1.36	1.08	1.17	1.09	0.96	0.95	0.45	0.39	**0.39**	-0.7%	-12.6%	0.2%
United Kingdom	1.26	1.00	0.51	0.41	0.35	0.25	0.23	0.23	0.21	0.18	**0.17**	-8.2%	-18.2%	0.1%
Other Europe	0.50	0.58	0.60	0.59	0.59	0.57	0.59	0.56	0.54	0.52	**0.50**	-3.9%	-0.1%	0.3%
Total Europe	14.88	14.24	13.74	13.29	12.98	11.06	9.57	10.44	9.93	8.18	**7.62**	-7.0%	-6.5%	4.6%
Azerbaijan	^	^	^	^	^	^	^	^	^	^	**^**	†	-29.0%	†
Belarus	0.03	0.03	0.03	0.04	0.05	0.06	0.04	0.04	0.04	0.04	**0.04**	-1.3%	1.4%	†
Kazakhstan	1.55	1.14	1.34	1.47	1.52	1.44	1.37	1.40	1.41	1.52	**1.50**	-2.1%	-0.4%	0.9%
Russian Federation	3.67	3.86	3.74	3.51	3.63	3.57	3.28	3.41	3.82	3.82	**3.75**	-2.0%	0.2%	2.3%
Uzbekistan	0.07	0.05	0.06	0.06	0.09	0.08	0.10	0.09	0.11	0.16	**0.18**	8.8%	10.4%	0.1%
Other CIS	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.09	0.08	**0.09**	13.1%	2.5%	0.1%
Total CIS	5.39	5.17	5.25	5.16	5.38	5.23	4.87	5.04	5.47	5.62	**5.55**	-1.5%	0.3%	3.4%
Iran	0.04	0.05	0.04	0.04	0.06	0.07	0.08	0.07	0.08	0.07	**0.07**	1.9%	5.7%	†
Israel	0.28	0.27	0.23	0.21	0.20	0.21	0.18	0.16	0.16	0.13	**0.11**	-12.8%	-8.7%	0.1%
Kuwait	0.01	0.01	0.01	0.01	0.01	0.01	^	^	^	^	**^**	†	-8.1%	†
Oman	^	^	^	^	^	^	^	^	0.01	^	**^**	30.8%	12.7%	†
Qatar	^	^	^	^	^	^	^	^	^	^	**^**	15.6%	-10.8%	†
Saudi Arabia	0.01	^	^	^	^	^	^	^	^	0.01	**0.01**	10.8%	0.8%	†
United Arab Emirates	0.08	0.07	0.08	0.09	0.08	0.07	0.09	0.11	0.10	0.10	**0.11**	7.3%	2.9%	0.1%
Other Middle East	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.03	0.04	**0.05**	17.8%	6.5%	†
Total Middle East	0.44	0.42	0.38	0.38	0.37	0.38	0.37	0.37	0.37	0.35	**0.35**	0.5%	-2.2%	0.2%
Algeria	0.01	0.01	^	0.01	0.02	0.02	0.01	0.01	0.01	0.01	**0.01**	-17.7%	-1.8%	†
Egypt	0.02	0.03	0.05	0.05	0.09	0.08	0.03	0.05	0.04	0.05	**0.07**	39.9%	15.5%	†
Morocco	0.17	0.19	0.18	0.19	0.22	0.28	0.29	0.31	0.31	0.29	**0.27**	-9.3%	4.6%	0.2%
South Africa	3.75	3.52	3.78	3.72	3.53	3.76	3.68	3.59	3.38	3.44	**3.51**	1.9%	-0.6%	2.1%
Eastern Africa	0.24	0.21	0.16	0.20	0.22	0.19	0.20	0.22	0.25	0.29	**0.29**	1.8%	2.0%	0.2%
Middle Africa	^	^	^	0.01	0.01	0.01	0.01	0.01	0.02	0.02	**0.02**	-7.7%	39.9%	†
Western Africa	0.03	0.03	0.05	0.05	0.05	0.05	0.05	0.08	0.08	0.09	**0.07**	-18.3%	10.6%	†
Other Northern Africa	–	–	–	–	^	^	^	^	^	^	**^**	†	–	†
Other Southern Africa	0.06	0.06	0.06	0.07	0.07	0.06	0.05	0.06	0.06	0.06	**0.06**	4.2%	-0.4%	†
Total Africa	4.27	4.04	4.29	4.29	4.21	4.46	4.32	4.34	4.14	4.25	**4.30**	1.0%	0.1%	2.6%
Australia	1.88	1.95	1.94	1.88	1.83	1.75	1.69	1.63	1.54	1.51	**1.52**	0.8%	-2.1%	0.9%
Bangladesh	0.03	0.11	0.08	0.09	0.10	0.17	0.19	0.15	0.20	0.29	**0.32**	8.8%	25.3%	0.2%
China	82.10	80.38	78.03	78.90	80.47	82.52	84.25	87.54	87.83	90.65	**92.16**	1.4%	1.2%	55.8%
China Hong Kong SAR	0.34	0.28	0.28	0.26	0.27	0.26	0.14	0.15	0.15	0.15	**0.13**	-14.8%	-9.5%	0.1%
India	15.84	16.17	16.52	17.05	17.93	17.96	16.97	19.27	20.02	22.09	**22.97**	3.7%	3.8%	13.9%
Indonesia	1.69	1.92	1.96	2.04	2.36	2.88	2.76	2.75	4.38	4.32	**4.72**	9.0%	10.8%	2.9%
Japan	4.99	5.03	5.02	5.10	4.99	4.91	4.57	4.93	4.92	4.54	**4.53**	-0.4%	-1.0%	2.7%
Malaysia	0.64	0.73	0.78	0.87	0.93	0.88	1.04	0.96	0.99	1.03	**1.08**	5.1%	5.4%	0.7%
New Zealand	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.07	0.05	0.04	**0.05**	29.1%	-1.1%	†
Pakistan	0.24	0.24	0.26	0.34	0.48	0.51	0.57	0.64	0.54	0.47	**0.41**	-11.7%	5.8%	0.3%
Philippines	0.45	0.49	0.55	0.65	0.68	0.73	0.73	0.79	0.80	0.89	**0.98**	9.3%	8.2%	0.6%
Singapore	0.02	0.02	0.02	0.04	0.02	0.02	0.02	0.02	0.02	0.01	**0.01**	-10.6%	-2.5%	†
South Korea	3.57	3.58	3.49	3.70	3.81	3.59	3.18	3.27	3.15	3.04	**2.85**	-6.5%	-2.2%	1.7%
Sri Lanka	0.04	0.05	0.05	0.06	0.05	0.06	0.07	0.07	0.07	0.06	**0.07**	17.7%	6.1%	†
Taiwan	1.70	1.65	1.67	1.70	1.70	1.67	1.56	1.68	1.58	1.49	**1.43**	-4.5%	-1.7%	0.9%
Thailand	0.75	0.73	0.75	0.75	0.80	0.71	0.76	0.78	0.71	0.60	**0.61**	1.3%	-2.0%	0.4%
Vietnam	0.87	1.10	1.19	1.19	1.58	2.09	2.20	2.09	1.93	2.28	**2.50**	9.3%	11.1%	1.5%
Other Asia Pacific	0.62	0.57	0.67	1.15	1.13	1.26	1.23	1.10	1.15	1.27	**1.28**	0.4%	7.6%	0.8%
Total Asia Pacific	115.81	115.06	113.33	115.80	119.21	122.04	121.98	127.87	130.02	134.74	**137.63**	1.9%	1.7%	83.4%
Total World	**161.68**	**157.30**	**153.96**	**155.61**	**158.03**	**157.06**	**152.34**	**160.71**	**161.74**	**163.15**	**165.06**	**0.9%**	**0.2%**	**100.0%**
of which: OECD	43.01	40.22	38.08	37.81	36.58	32.43	27.73	30.23	29.24	25.39	**24.40**	-4.1%	-5.5%	14.8%
Non-OECD	118.68	117.08	115.89	117.81	121.45	124.63	124.61	130.48	132.50	137.76	**140.66**	1.8%	1.7%	85.2%
European Union	10.02	9.99	9.59	9.47	9.08	7.31	6.03	6.89	6.89	5.34	**4.71**	-12.1%	-7.3%	2.9%

* Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels.
Excludes coal converted to liquid or gaseous fuels, but includes coal consumed in transformation processes.
^ Less than 0.005.
† Less than 0.05%.

Notes: Differences between these consumption figures and the world production statistics are accounted for by stock changes, and unavoidable disparities in the definition, measurement or conversion of coal supply and demand data.
Annual changes and share of total are calculated using exajoules figures.
Growth rates are adjusted for leap years.

Electricity, renewables and nuclear energy

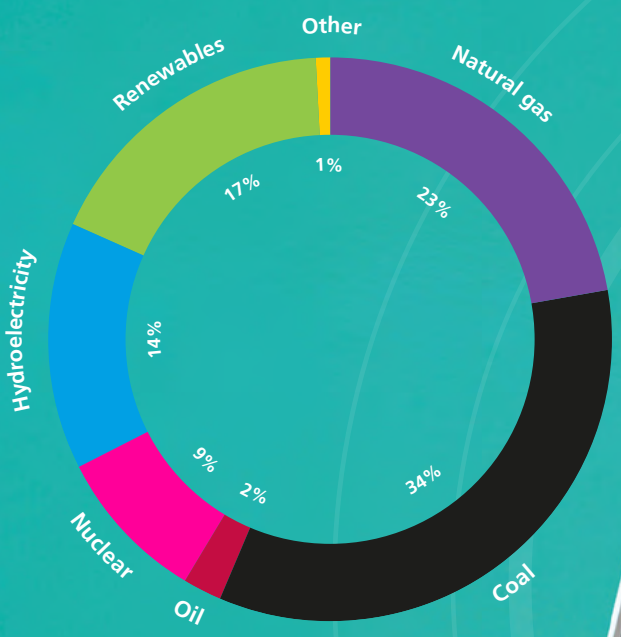
Electricity generation increased by 4% in 2024, to reach a record level of 31,256 TWh. In the last decade, global electricity generation has grown at 2.6% per annum, which is double the annual growth rate of total energy demand over the same period (1.3%). This highlights how the global energy system is electrifying at pace.

With the exception of oil, electricity generation from all sources increased globally in 2024. Amongst fossil fuels, gas saw the biggest increase in generation, growing 2.5% and coal grew by 1.2% to reach 10,613 TWh and remained the largest source of generation. Generation from renewables, excluding hydro, increased by 14% and now accounts for 17% of total generation – when including hydroelectricity, it accounted for 31%. In 2024, total installed solar capacity increased by 32%, and total installed wind capacity increased by 11%.

Global biofuels production grew by over 8%, with the US the largest global producer with a 37% share of global production. Additionally, the US, Brazil, and Europe combined account for around 75% of global biofuels use.

Over the last 10 years, global electricity generation has grown at double the annual growth rate of energy demand

Generation from low and zero-carbon sources surpassed 40% of total electricity generated in 2024



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Electricity Generation*

Terawatt-hours	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	653.0	661.1	667.1	669.3	661.2	655.7	655.9	652.4	664.1	641.4	**636.8**	-1.0%	-0.3%	2.0%
Mexico	303.3	310.3	320.3	329.1	349.3	344.6	325.7	328.6	340.1	351.7	**355.2**	0.7%	1.6%	1.1%
US	4363.3	4349.9	4348.9	4303.8	4464.5	4414.1	4287.6	4400.9	4537.7	4499.1	**4634.8**	2.7%	0.6%	14.8%
Total North America	**5319.5**	**5321.3**	**5336.3**	**5302.2**	**5475.0**	**5414.4**	**5269.2**	**5381.9**	**5541.9**	**5492.2**	**5626.8**	**2.2%**	**0.6%**	**18.0%**
Argentina	138.6	145.4	147.2	145.6	146.8	139.5	144.6	153.2	145.6	148.6	**152.5**	2.4%	1.0%	0.5%
Brazil	590.5	581.2	578.9	589.3	601.4	633.3	628.8	656.4	677.2	708.1	**745.7**	5.0%	2.4%	2.4%
Chile	71.6	74.5	77.7	78.6	82.3	83.6	83.7	87.4	88.0	89.0	**91.1**	2.0%	2.4%	0.3%
Colombia	72.7	75.0	74.4	75.0	78.3	80.4	79.4	86.0	89.9	93.7	**95.8**	2.0%	2.8%	0.3%
Ecuador	24.3	26.0	27.3	28.0	29.2	32.3	31.2	32.2	33.0	35.4	**34.4**	-3.1%	3.5%	0.1%
Peru	45.5	48.3	51.7	52.7	55.0	57.0	52.8	57.5	59.8	62.2	**63.4**	1.7%	3.4%	0.2%
Trinidad & Tobago	9.4	9.6	9.4	9.3	9.2	9.2	9.2	9.3	9.5	9.5	**9.8**	2.3%	0.3%	†
Venezuela	131.0	126.3	116.2	110.3	92.3	78.1	76.6	75.2	76.4	81.0	**83.3**	2.6%	-4.4%	0.3%
Central America	49.4	52.2	53.8	54.5	56.4	59.3	57.2	61.6	63.0	65.6	**66.9**	1.8%	3.1%	0.2%
Other Caribbean	76.0	77.8	78.7	74.4	76.2	79.5	78.7	80.2	79.6	84.2	**86.6**	2.6%	1.3%	0.3%
Other South America	80.9	82.7	91.3	87.9	87.9	80.1	74.2	71.8	74.5	82.3	**76.8**	-6.9%	-0.5%	0.2%
Total S. & Cent. America	**1290.0**	**1299.0**	**1306.6**	**1305.8**	**1315.0**	**1332.4**	**1316.4**	**1370.7**	**1396.5**	**1459.4**	**1506.3**	**2.9%**	**1.6%**	**4.8%**
Austria	65.6	65.5	68.5	71.3	68.6	74.2	72.6	70.9	69.2	74.5	**83.2**	11.4%	2.4%	0.3%
Belgium	72.5	69.7	85.6	86.6	75.0	93.6	89.5	100.5	95.9	83.7	**75.4**	-10.1%	0.4%	0.2%
Bulgaria	47.5	49.2	45.3	45.6	46.8	44.3	40.8	47.6	50.5	40.3	**38.5**	-4.7%	-2.1%	0.1%
Croatia	13.6	11.4	12.8	12.0	13.6	12.8	13.4	15.2	14.2	17.5	**15.4**	-12.3%	1.3%	†
Cyprus	4.4	4.5	4.9	5.0	5.0	5.1	4.8	5.1	5.3	5.3	**5.7**	7.0%	2.8%	†
Czech Republic	86.0	83.9	83.3	87.0	88.0	87.0	81.4	84.9	84.7	76.9	**73.9**	-4.3%	-1.5%	0.2%
Denmark	32.2	28.9	30.5	31.0	30.4	29.5	28.7	33.1	35.1	33.7	**35.5**	5.0%	1.0%	0.1%
Estonia	12.4	10.4	12.2	13.2	12.4	7.6	6.1	7.2	8.9	5.7	**6.3**	9.3%	-6.6%	†
Finland	68.1	68.6	68.8	67.5	70.3	68.7	69.3	72.1	72.2	81.5	**83.2**	1.7%	2.0%	0.3%
France	565.2	572.1	556.7	554.5	574.4	563.4	525.0	547.8	467.2	518.3	**561.3**	8.0%	-0.1%	1.8%
Germany	626.6	647.0	649.2	652.3	641.4	608.2	574.7	587.1	577.9	511.3	**497.3**	-3.0%	-2.3%	1.6%
Greece	50.5	51.9	54.4	55.3	53.3	48.6	48.3	54.7	52.7	49.9	**55.7**	11.2%	1.0%	0.2%
Hungary	29.4	30.4	31.9	32.9	32.1	34.3	34.9	36.1	35.8	35.5	**37.4**	5.0%	2.4%	0.1%
Iceland	18.1	18.8	18.5	19.2	19.8	19.5	19.1	19.6	20.1	20.2	**19.6**	-3.6%	0.8%	0.1%
Ireland	26.3	28.4	30.6	31.0	31.3	31.1	32.5	32.0	34.0	31.9	**31.6**	-1.2%	1.8%	0.1%
Italy	279.8	283.0	289.8	295.8	289.7	293.9	280.5	289.1	284.0	264.7	**272.4**	2.6%	-0.3%	0.9%
Latvia	5.1	5.5	6.4	7.5	6.7	6.4	5.7	5.8	5.0	6.4	**6.1**	-4.9%	1.7%	†
Lithuania	4.4	4.9	4.3	4.2	3.5	4.0	5.5	5.1	4.8	6.0	**7.8**	30.2%	5.9%	†
Luxembourg	3.0	2.8	2.2	2.2	2.2	1.9	2.2	2.2	2.3	2.5	**2.9**	15.1%	-0.1%	†
Netherlands	103.4	110.2	115.2	117.2	114.4	121.4	123.3	122.1	121.6	121.3	**123.2**	1.2%	1.8%	0.4%
North Macedonia	5.4	5.6	5.6	5.6	5.6	5.9	5.3	5.5	5.9	6.9	**5.7**	-16.9%	0.6%	†
Norway	142.0	144.5	149.1	149.6	147.1	134.9	155.2	157.9	146.7	154.9	**158.1**	1.8%	1.1%	0.5%
Poland	159.1	164.9	166.6	170.5	170.0	164.0	158.0	179.6	179.7	167.4	**169.7**	1.1%	0.6%	0.5%
Portugal	52.8	52.4	60.3	59.4	59.6	53.2	53.1	51.0	48.8	49.0	**50.5**	2.7%	-0.4%	0.2%
Romania	63.3	66.3	65.1	64.3	64.8	59.5	55.8	59.3	55.9	58.0	**54.3**	-6.6%	-1.5%	0.2%
Slovakia	27.4	26.9	27.1	27.7	27.0	28.4	28.8	30.0	26.8	29.9	**29.7**	-1.0%	0.8%	0.1%
Slovenia	17.4	15.1	16.5	16.3	16.3	16.1	17.2	15.9	13.6	15.9	**17.7**	10.9%	0.1%	0.1%
Spain	278.8	281.0	274.6	275.6	274.5	267.5	263.4	274.3	292.5	285.9	**285.6**	-0.4%	0.2%	0.9%
Sweden	153.7	162.1	156.1	164.3	163.4	168.4	163.8	171.8	173.1	166.1	**172.4**	3.5%	1.2%	0.6%
Switzerland	72.0	67.9	63.3	63.3	67.6	71.9	70.2	64.7	64.2	72.4	**80.3**	10.5%	1.1%	0.3%
Türkiye	252.0	261.8	274.4	297.3	304.8	303.9	306.7	334.7	328.4	331.1	**352.9**	6.3%	3.4%	1.1%
Ukraine	182.8	163.7	164.6	156.0	159.9	154.1	147.8	156.5	111.5	103.9	**101.1**	-3.0%	-5.7%	0.3%
United Kingdom	338.1	338.9	339.2	338.2	333.8	327.2	310.3	307.9	324.9	292.7	**284.9**	-2.9%	-1.7%	0.9%
Other Europe	80.2	85.2	89.0	82.9	92.5	87.6	86.7	94.8	89.7	97.0	**92.5**	-4.8%	1.4%	0.3%
Total Europe	**3938.9**	**3983.6**	**4022.5**	**4062.6**	**4065.8**	**3998.1**	**3880.6**	**4042.2**	**3903.2**	**3818.3**	**3887.6**	**1.5%**	**-0.1%**	**12.4%**
Azerbaijan	24.7	24.7	25.0	24.3	25.2	26.1	25.8	27.9	29.0	29.3	**28.4**	-3.4%	1.4%	0.1%
Belarus	34.7	34.2	33.6	34.5	38.9	40.5	38.7	41.2	39.7	41.8	**43.9**	4.7%	2.4%	0.1%
Kazakhstan	94.6	91.6	94.6	103.1	107.3	106.5	108.6	115.1	113.5	113.6	**118.5**	4.1%	2.3%	0.4%
Russian Federation	1064.2	1067.5	1091.0	1091.2	1109.2	1118.1	1085.4	1157.1	1166.9	1178.2	**1209.3**	2.4%	1.3%	3.9%
Turkmenistan	20.1	21.5	22.6	22.8	24.2	22.5	25.8	28.4	32.6	33.5	**37.3**	11.0%	6.4%	0.1%
Uzbekistan	55.4	57.3	59.1	60.8	62.9	63.5	66.5	71.4	74.3	78.0	**81.3**	3.9%	3.9%	0.3%
Other CIS	44.1	44.0	43.5	46.3	48.6	49.2	49.1	50.2	49.8	49.6	**51.5**	3.6%	1.6%	0.2%
Total CIS	**1337.9**	**1340.9**	**1369.3**	**1383.0**	**1416.4**	**1426.4**	**1400.0**	**1491.2**	**1505.8**	**1524.0**	**1570.2**	**2.7%**	**1.6%**	**5.0%**
Iran	275.6	280.2	286.1	305.2	312.4	318.9	337.2	356.4	367.1	382.0	**395.8**	3.3%	3.7%	1.3%
Iraq	71.2	75.3	86.3	93.6	99.0	115.2	116.8	118.1	131.3	147.1	**169.5**	14.9%	9.1%	0.5%
Israel	61.3	64.3	67.4	67.7	69.3	72.4	72.8	73.8	76.0	76.6	**80.6**	4.9%	2.8%	0.3%
Kuwait	65.1	68.3	70.1	72.8	74.2	75.1	74.8	80.8	83.5	88.0	**89.5**	1.4%	3.2%	0.3%
Oman	29.1	32.8	34.2	36.1	37.7	38.8	38.3	41.0	42.5	45.0	**48.5**	7.3%	5.2%	0.2%
Qatar	38.7	41.5	42.3	45.6	47.9	49.9	49.3	51.6	54.6	56.3	**58.7**	4.0%	4.3%	0.2%
Saudi Arabia	328.2	350.6	357.7	395.0	374.8	378.5	380.9	392.9	409.8	429.2	**454.6**	5.6%	3.3%	1.5%
United Arab Emirates	116.5	127.4	129.6	134.6	136.0	138.5	137.3	149.1	155.4	167.5	**177.3**	5.5%	4.3%	0.6%
Other Middle East	97.1	93.9	93.0	95.7	103.4	108.6	102.4	99.4	90.6	94.2	**94.4**	-0.1%	-0.3%	0.3%
Total Middle East	**1083.0**	**1134.4**	**1166.8**	**1246.2**	**1254.7**	**1295.9**	**1309.8**	**1363.1**	**1410.9**	**1485.9**	**1568.7**	**5.3%**	**3.8%**	**5.0%**
Algeria	64.2	68.8	71.0	76.0	76.7	81.5	79.2	85.4	91.2	95.6	**101.1**	5.4%	4.6%	0.3%
Egypt	171.2	181.8	188.2	193.2	199.4	200.6	198.6	209.7	216.7	221.9	**237.4**	6.7%	3.3%	0.8%
Morocco	29.3	30.3	30.7	31.6	34.4	40.1	38.5	41.0	41.2	42.2	**43.5**	2.7%	4.0%	0.1%
South Africa	254.8	250.4	253.1	255.4	256.3	252.6	239.5	244.4	234.9	224.5	**235.8**	4.7%	-0.8%	0.8%
Eastern Africa	93.6	98.7	97.2	103.5	108.8	110.9	110.9	117.2	123.4	127.0	**129.1**	1.4%	3.3%	0.4%
Middle Africa	31.6	34.1	34.7	36.0	39.8	41.9	43.4	46.2	46.6	48.7	**49.1**	0.6%	4.5%	0.2%
Western Africa	64.1	64.4	69.1	71.7	74.3	82.1	87.9	94.8	95.7	101.9	**104.5**	2.2%	5.0%	0.3%
Other Northern Africa	56.9	57.2	51.3	53.9	55.2	56.7	51.1	56.7	56.5	56.4	**56.5**	-0.2%	-0.1%	0.2%
Other Southern Africa	5.0	5.0	4.7	5.7	5.0	4.5	4.9	4.7	5.5	6.1	**7.0**	14.7%	3.4%	†
Total Africa	**770.7**	**790.7**	**799.9**	**827.1**	**850.0**	**870.9**	**853.8**	**900.1**	**911.7**	**924.3**	**963.9**	**4.0%**	**2.3%**	**3.1%**
Australia	247.6	254.0	258.2	259.0	262.6	265.9	265.2	267.5	272.9	273.1	**281.6**	2.8%	1.3%	0.9%
Bangladesh	57.7	62.1	70.2	73.7	79.7	84.7	84.7	95.0	100.2	100.3	**107.4**	6.8%	6.4%	0.3%
China	5794.5	5814.6	6133.2	6604.4	7166.1	7503.4	7779.1	8534.2	8848.7	9456.4	**10086.9**	6.4%	5.7%	32.3%
China Hong Kong SAR	39.9	38.0	38.2	37.0	36.5	36.9	35.3	37.2	36.4	38.0	**39.0**	2.4%	-0.2%	0.1%
India	1258.7	1310.6	1394.9	1462.4	1571.7	1611.2	1571.0	1683.3	1806.1	1919.0	**2030.2**	5.5%	4.9%	6.5%
Indonesia	228.6	234.0	247.9	254.7	283.8	295.4	291.8	309.1	333.5	350.6	**375.1**	6.7%	5.1%	1.2%
Japan	1062.7	1030.1	1063.7	1076.9	1082.9	1047.4	1011.0	1034.7	1040.6	1006.7	**1016.4**	0.7%	-0.4%	3.3%
Malaysia	147.5	150.1	156.7	160.6	170.6	178.5	174.0	178.6	197.7	202.3	**213.5**	5.2%	3.8%	0.7%
New Zealand	44.0	44.7	44.2	44.6	44.7	45.1	44.5	44.6	44.7	44.7	**45.0**	0.5%	0.2%	0.1%
Pakistan	106.3	110.5	115.6	127.1	137.1	136.8	134.8	147.7	146.9	138.4	**133.7**	-3.7%	2.3%	0.4%
Philippines	77.3	82.4	90.8	94.4	101.0	107.5	103.3	107.8	113.3	119.9	**129.9**	8.0%	5.3%	0.4%
Singapore	49.3	50.3	51.6	52.2	52.9	54.1	53.1	55.8	57.1	57.4	**59.6**	3.6%	1.9%	0.2%
South Korea	540.4	547.8	561.0	576.4	592.9	586.8	577.1	607.8	622.6	617.5	**625.4**	1.0%	1.5%	2.0%
Sri Lanka	12.9	13.2	14.4	15.0	16.2	16.8	16.9	17.9	17.4	16.8	**18.9**	12.0%	3.9%	0.1%
Taiwan	260.0	258.1	264.1	270.3	275.5	274.2	280.0	291.0	288.2	282.3	**288.6**	1.9%	1.0%	0.9%
Thailand	173.8	177.8	179.8	176.7	177.8	186.5	176.5	176.4	180.4	190.5	**199.5**	4.5%	1.4%	0.6%
Vietnam	141.3	161.9	179.2	194.7	217.2	236.9	244.0	253.6	265.1	276.6	**303.6**	9.5%	8.0%	1.0%
Other Asia Pacific	91.1	93.6	112.2	122.9	130.6	132.5	144.5	152.4	161.7	168.3	**177.9**	5.4%	6.9%	0.6%
Total Asia Pacific	**10333.3**	**10433.9**	**10975.9**	**11603.0**	**12399.8**	**12800.7**	**12986.7**	**13994.5**	**14533.5**	**15258.9**	**16132.4**	**5.4%**	**4.6%**	**51.6%**
Total World	**24073.3**	**24303.8**	**24977.4**	**25730.0**	**26776.6**	**27138.7**	**27016.6**	**28543.7**	**29203.6**	**29963.2**	**31255.9**	**4.0%**	**2.6%**	**100.0%**
of which: OECD	10972.1	11020.2	11129.1	11182.9	11377.0	11236.3	10940.5	11254.4	11359.5	11195.0	**11449.7**	2.0%	0.4%	36.6%
Non-OECD	13101.3	13283.7	13848.2	14547.1	15399.5	15902.4	16076.2	17289.3	17844.2	18768.2	**19806.2**	5.2%	4.2%	63.4%
European Union	2850.7	2898.4	2919.7	2952.1	2936.7	2895.2	2781.4	2902.7	2814.0	2741.5	**2794.6**	1.7%	-0.2%	8.9%

* Based on gross output.
† Less than 0.05%.
Notes: Annual changes and shares of total are calculated using terawatt-hours figures.
Growth rates are adjusted for leap years.

Electricity Generation by fuel*

Terawatt-hours	2023 Oil	2023 Natural gas	2023 Coal	2023 Nuclear energy	2023 Hydro-electricity	2023 Renew-ables	2023 Other‡	2023 Total	2024 Oil	2024 Natural Gas	2024 Coal	2024 Nuclear energy	2024 Hydro-electric	2024 Renew-ables	2024 Other‡	2024 Total
Canada	6.8	102.3	23.6	88.4	360.7	58.7	0.8	**641.4**	7.3	109.0	25.0	85.5	343.2	66.1	0.8	**636.8**
Mexico	35.3	219.2	13.5	12.4	20.6	50.7	–	**351.7**	33.8	221.7	12.4	12.3	23.5	51.5	–	**355.2**
US	17.5	1942.0	738.6	815.7	241.4	733.7	10.3	**4499.1**	16.4	2005.2	712.4	823.1	238.7	830.0	8.9	**4634.8**
Total North America	**59.6**	**2263.5**	**775.7**	**916.5**	**622.8**	**843.0**	**11.1**	**5492.2**	**57.5**	**2335.9**	**749.8**	**920.9**	**605.5**	**947.5**	**9.7**	**5626.8**
Argentina	9.0	76.3	1.8	9.0	31.5	20.2	0.8	**148.6**	5.8	82.0	1.3	10.4	29.7	22.8	0.5	**152.5**
Brazil	9.1	38.6	13.3	14.5	426.0	204.2	2.4	**708.1**	10.6	48.8	16.2	15.8	413.2	238.0	3.1	**745.7**
Other S. & Cent. America	72.9	117.6	37.4	–	297.7	77.2	^	**602.8**	74.1	118.1	37.1	–	292.9	85.9	–	**608.1**
Total S. & Cent. America	**91.0**	**232.5**	**52.5**	**23.5**	**755.2**	**301.5**	**3.2**	**1459.4**	**90.6**	**248.8**	**54.6**	**26.2**	**735.7**	**346.7**	**3.6**	**1506.3**
France	1.8	31.8	0.8	338.2	55.7	82.2	7.7	**518.3**	1.9	18.5	0.7	380.5	70.9	79.9	8.9	**561.3**
Germany	4.9	76.7	124.8	7.2	19.9	255.2	22.6	**511.3**	5.0	78.4	106.4	–	22.2	261.8	23.5	**497.3**
Italy	11.1	119.0	14.4	–	40.5	76.1	3.6	**264.7**	13.0	109.8	13.1	–	55.2	78.1	3.2	**272.4**
Netherlands	1.5	46.0	10.7	4.0	0.1	56.7	2.4	**121.3**	1.4	44.0	10.1	3.6	0.1	62.2	1.8	**123.2**
Poland	2.0	16.5	100.6	–	2.4	43.4	2.4	**167.4**	2.1	19.3	95.2	–	2.2	48.7	2.1	**169.7**
Spain	9.3	64.3	4.5	56.9	25.0	118.7	7.3	**285.9**	9.1	51.5	3.4	54.6	34.4	125.0	7.6	**285.6**
Türkiye	0.5	69.5	119.8	–	64.0	76.2	1.3	**331.1**	0.7	65.9	122.7	–	74.9	87.3	1.3	**352.9**
Ukraine	0.9	8.1	22.5	52.1	12.7	7.7	–	**103.9**	0.6	8.1	19.6	53.0	12.8	7.1	–	**101.1**
United Kingdom	1.9	101.7	3.8	40.6	5.5	130.3	8.9	**292.7**	1.5	86.3	1.9	40.6	5.8	138.9	10.0	**284.9**
Other Europe	16.6	111.4	121.2	236.7	416.8	291.6	27.6	**1221.7**	16.8	106.8	110.4	233.9	419.6	324.6	27.2	**1239.2**
Total Europe	**50.5**	**644.7**	**523.0**	**735.6**	**642.6**	**1138.1**	**83.8**	**3818.3**	**52.1**	**588.6**	**483.7**	**766.1**	**698.0**	**1213.7**	**85.5**	**3887.6**
Kazakhstan	0.6	33.2	65.3	–	8.8	5.7	–	**113.6**	1.7	34.7	64.0	–	11.3	6.8	–	**118.5**
Russian Federation	9.1	533.3	204.1	217.4	200.9	8.2	5.3	**1178.2**	8.6	545.8	215.2	215.7	210.5	8.3	5.2	**1209.3**
Other CIS	5.0	157.0	8.7	14.4	43.7	2.8	0.6	**232.2**	4.8	153.8	9.4	18.5	47.5	7.7	0.6	**242.4**
Total CIS	**14.7**	**723.6**	**278.1**	**231.8**	**253.4**	**16.7**	**5.8**	**1524.0**	**15.2**	**734.3**	**288.6**	**234.2**	**269.2**	**22.8**	**5.7**	**1570.2**
Iran	28.0	322.0	0.7	6.6	22.8	1.9	–	**382.0**	26.6	340.0	0.7	7.3	18.9	2.2	–	**395.8**
Saudi Arabia	159.0	265.5	–	–	–	4.7	–	**429.2**	156.8	288.0	–	–	–	9.8	–	**454.6**
United Arab Emirates	^	118.4	–	34.4	–	14.7	–	**167.5**	^	121.0	–	40.6	–	15.6	–	**177.3**
Other Middle East	133.2	332.6	16.2	–	2.7	22.3	0.2	**507.1**	141.0	356.7	15.2	–	2.9	25.0	0.2	**541.1**
Total Middle East	**320.2**	**1038.4**	**16.9**	**41.1**	**25.5**	**43.6**	**0.2**	**1485.9**	**324.4**	**1105.8**	**16.0**	**48.0**	**21.8**	**52.6**	**0.2**	**1568.7**
Egypt	16.6	179.4	–	–	15.1	10.9	–	**221.9**	17.8	193.0	–	–	14.4	12.2	–	**237.4**
South Africa	3.6	–	188.1	8.1	2.0	18.5	4.3	**224.5**	1.9	–	202.3	7.8	1.1	18.2	4.6	**235.8**
Other Africa	43.3	216.0	40.2	–	150.1	27.7	0.5	**477.9**	43.7	219.2	42.3	–	154.6	30.4	0.5	**490.7**
Total Africa	**63.5**	**395.4**	**228.3**	**8.1**	**167.1**	**57.1**	**4.8**	**924.3**	**63.4**	**412.2**	**244.6**	**7.8**	**170.1**	**60.7**	**5.1**	**963.9**
Australia	4.9	46.7	125.6	–	15.1	80.0	0.9	**273.1**	5.1	49.1	127.3	–	12.8	85.9	1.3	**281.6**
China	9.3	297.8	5752.7	434.7	1226.0	1668.2	67.7	**9456.4**	9.4	320.7	5827.6	450.9	1354.3	2044.6	79.4	**10086.9**
India	2.5	50.8	1445.4	48.2	149.4	221.2	1.3	**1919.0**	2.7	56.4	1517.9	54.7	156.5	240.5	1.4	**2030.2**
Indonesia	6.6	61.0	216.8	–	24.6	40.6	1.1	**350.6**	7.1	66.1	228.4	–	26.5	45.9	1.1	**375.1**
Japan	30.0	320.7	302.1	77.5	74.5	148.3	53.6	**1006.7**	23.0	318.1	300.6	84.9	79.4	153.7	56.7	**1016.4**
Malaysia	2.4	69.7	93.0	–	32.4	4.7	–	**202.3**	2.4	73.7	98.0	–	34.4	5.0	–	**213.5**
South Korea	6.9	167.7	199.1	180.5	3.7	55.3	4.2	**617.5**	6.7	175.9	188.2	188.8	4.3	56.4	5.1	**625.4**
Taiwan	3.8	111.6	119.2	17.8	4.0	21.2	4.8	**282.3**	4.2	122.5	113.3	12.2	4.2	27.3	4.9	**288.6**
Thailand	0.9	129.4	30.4	–	6.6	23.2	–	**190.5**	0.3	136.4	33.3	–	6.4	23.2	–	**199.5**
Vietnam	1.3	26.4	129.8	–	80.6	38.1	0.5	**276.6**	0.2	21.8	152.8	–	88.7	39.6	0.4	**303.6**
Other Asia Pacific	37.1	229.8	172.3	22.4	177.2	44.3	0.9	**683.9**	30.5	234.8	188.6	22.8	185.0	49.0	0.9	**711.6**
Total Asia Pacific	**105.5**	**1511.5**	**8586.4**	**781.1**	**1794.2**	**2345.2**	**135.0**	**15258.9**	**91.6**	**1575.5**	**8776.0**	**814.2**	**1952.6**	**2771.1**	**151.3**	**16132.4**
Total World	**704.9**	**6809.7**	**10461.0**	**2737.6**	**4260.8**	**4745.3**	**244.1**	**29963.2**	**694.7**	**7001.2**	**10613.2**	**2817.5**	**4452.9**	**5415.2**	**261.2**	**31255.9**
of which: OECD	147.8	3504.3	1875.1	1830.6	1391.1	2293.6	152.4	**11195.0**	141.2	3532.2	1807.6	1881.0	1439.1	2491.3	157.4	**11449.7**
Non-OECD	557.1	3305.3	8585.8	907.0	2869.6	2451.7	91.7	**18768.2**	553.5	3469.0	8805.6	936.4	3013.9	2923.9	103.8	**19806.2**
European Union	44.5	456.0	333.9	619.6	328.8	892.8	65.9	**2741.5**	46.7	419.2	296.6	649.5	368.5	946.6	67.5	**2794.6**

* Based on gross output.
‡ Includes uncategorised generation, statistical differences and sources not specified elsewhere e.g. pumped hydro, non-renewable waste and heat from chemical sources.
^ Less than 0.05.

Electricity Grid-scale battery energy storage systems (BESS)

Installed capacity (Gigawatts)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Growth rate per annum 2024	Growth rate per annum 2014-24	Share 2024
Canada	^	^	^	^	^	^	0.1	0.1	0.1	0.4	**2.4**	497.7%	78.9%	1.9%
Mexico	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
US	0.2	0.4	0.5	0.7	0.9	1.1	1.7	4.8	9.0	15.3	**25.7**	68.1%	60.4%	20.3%
Total North America	**0.2**	**0.4**	**0.6**	**0.8**	**1.0**	**1.1**	**1.7**	**4.9**	**9.1**	**15.7**	**28.0**	**78.9%**	**61.3%**	**22.2%**
Chile	^	^	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	**0.3**	94.3%	26.4%	0.3%
Other S. & Cent. America	^	^	^	^	^	^	^	^	^	0.1	**0.1**	8.7%	49.7%	0.1%
Total S. & Cent. America	**^**	**^**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.3**	**0.5**	**60.0%**	**29.6%**	**0.4%**
Germany	^	^	0.2	0.2	0.4	0.5	0.6	0.7	1.2	1.7	**2.4**	40.8%	62.5%	1.9%
Ireland	–	–	–	–	–	–	^	0.2	0.3	0.5	**0.9**	62.0%	–	0.7%
United Kingdom	^	^	0.1	0.2	0.6	0.8	1.0	1.6	2.5	4.1	**5.7**	40.9%	83.1%	4.5%
Other Europe	^	^	0.1	0.1	0.1	0.1	0.1	0.4	1.0	1.3	**2.1**	59.6%	53.1%	1.6%
Total Europe	**0.1**	**0.1**	**0.3**	**0.5**	**1.1**	**1.4**	**1.7**	**2.9**	**5.1**	**7.6**	**11.1**	**45.6%**	**68.1%**	**8.8%**
Total CIS	**^**	**^**	**^**	**^**	**^**	**^**	**^**	**^**	**^**	**^**	**0.3**	**999.0%**	**60.0%**	**0.3%**
Total Middle East	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**^**	**^**	**^**	**0.5**	**999.0%**	**–**	**0.4%**
South Africa	–	–	–	–	–	–	–	–	–	^	**0.4**	999.0%	–	0.3%
Other Africa	–	–	^	^	^	^	^	0.1	0.2	0.2	**0.2**	10.0%	–	0.2%
Total Africa	**–**	**–**	**^**	**^**	**^**	**^**	**^**	**0.1**	**0.2**	**0.2**	**0.6**	**169.8%**	**–**	**0.5%**
Australia	–	–	^	0.1	0.2	0.3	0.4	0.7	0.9	1.7	**4.5**	169.0%	–	3.6%
China	^	0.1	0.1	0.1	0.2	0.4	0.8	1.8	8.6	30.4	**75.2**	147.0%	112.0%	59.6%
Japan	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.4	**0.6**	37.0%	23.0%	0.5%
South Korea	^	0.1	0.3	0.5	0.8	0.9	1.4	1.6	1.7	1.8	**2.7**	51.8%	60.9%	2.1%
Other Asia Pacific	^	^	^	^	^	^	0.1	0.1	0.4	1.0	**2.1**	106.7%	115.2%	1.7%
Total Asia Pacific	**0.1**	**0.2**	**0.5**	**0.8**	**1.3**	**1.8**	**2.9**	**4.5**	**11.9**	**35.4**	**85.2**	**140.7%**	**89.5%**	**67.5%**
Total World	**0.5**	**0.7**	**1.4**	**2.2**	**3.5**	**4.4**	**6.4**	**12.5**	**26.4**	**59.2**	**126.1**	**112.9%**	**74.7%**	**100.0%**
of which: OECD	0.4	0.6	1.3	2.1	3.2	3.9	5.5	10.4	17.1	27.3	**47.6**	74.0%	60.1%	37.7%
Non-OECD	^	0.1	0.1	0.1	0.3	0.5	0.9	2.1	9.4	31.9	**78.6**	146.3%	109.9%	62.3%
European Union	^	0.1	0.2	0.3	0.4	0.5	0.7	1.2	2.4	3.2	**4.8**	47.5%	59.2%	3.8%

^ Less than 0.05.
† Less than 0.05%.
Source: Rystad Energy. For further information please contact **info@rystadenergy.com**

Hydroelectricity Generation*

Terawatt-hours	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	382.50	382.19	385.43	394.59	385.89	381.77	386.54	382.43	397.73	360.7	**343.2**	-5.1%	-1.1%	7.7%
Mexico	38.89	30.89	30.03	30.88	32.23	23.60	26.82	34.72	35.56	20.6	**23.5**	13.9%	-4.9%	0.5%
US	255.75	246.45	263.76	296.81	289.51	285.47	282.78	248.96	251.27	241.4	**238.7**	-1.4%	-0.7%	5.4%
Total North America	**677.14**	**659.54**	**679.23**	**722.27**	**707.64**	**690.84**	**696.14**	**666.11**	**684.56**	**622.8**	**605.5**	**-3.0%**	**-1.1%**	**13.6%**
Argentina	32.42	32.34	29.75	31.59	32.28	27.50	23.67	19.65	22.77	31.5	**29.7**	-6.1%	-0.9%	0.7%
Brazil	373.44	359.74	380.91	370.91	388.97	397.88	396.38	362.82	427.11	426.0	**413.2**	-3.3%	1.0%	9.3%
Chile	23.05	23.62	19.69	21.33	23.37	21.44	21.72	18.07	20.39	23.4	**26.5**	12.9%	1.4%	0.6%
Colombia	44.74	44.68	46.79	57.33	56.65	54.44	49.84	60.50	64.34	59.8	**54.5**	-9.2%	2.0%	1.2%
Ecuador	11.46	13.10	15.83	20.09	20.68	24.64	24.33	25.57	24.64	25.3	**22.6**	-11.0%	7.0%	0.5%
Peru	22.21	23.69	24.14	29.07	30.74	31.46	30.51	31.93	29.74	29.1	**32.0**	9.8%	3.7%	0.7%
Trinidad & Tobago	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Venezuela	80.36	74.74	62.96	70.04	65.28	62.79	67.19	67.85	68.51	72.6	**72.8**	–	-1.0%	1.6%
Central America	21.56	22.51	22.78	27.11	26.84	21.58	26.93	29.85	31.43	25.4	**28.6**	12.5%	2.9%	0.6%
Other Caribbean	1.77	1.36	1.91	2.70	2.43	1.62	1.77	1.98	1.98	1.6	**1.9**	19.3%	0.9%	†
Other South America	68.23	67.43	74.55	70.93	69.92	62.17	54.75	50.77	54.19	60.3	**53.8**	-11.1%	-2.3%	1.2%
Total S. & Cent. America	**679.25**	**663.21**	**679.32**	**701.10**	**717.16**	**705.53**	**697.10**	**668.97**	**745.11**	**755.2**	**735.7**	**-2.8%**	**0.8%**	**16.5%**
Austria	41.01	37.16	39.97	38.29	37.64	40.83	42.00	38.89	34.63	40.7	**44.8**	9.8%	0.9%	1.0%
Belgium	0.29	0.32	0.37	0.27	0.29	0.30	0.27	0.42	0.27	0.4	**0.5**	29.7%	6.1%	†
Bulgaria	4.60	5.65	3.88	2.83	5.15	2.93	2.82	4.82	3.80	3.1	**2.9**	-6.8%	-4.6%	0.1%
Croatia	9.01	6.39	6.85	5.31	7.70	5.83	5.66	7.13	5.46	8.2	**6.8**	-17.3%	-2.8%	0.2%
Cyprus	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Czech Republic	1.91	1.80	2.00	1.87	1.63	2.01	2.14	2.41	2.10	2.4	**2.7**	12.1%	3.4%	0.1%
Denmark	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.01	^	**^**	-0.9%	2.6%	†
Estonia	0.03	0.03	0.04	0.03	0.02	0.02	0.03	0.02	0.02	^	**^**	31.6%	1.6%	†
Finland	13.40	16.77	15.80	14.77	13.30	12.42	15.88	15.79	13.49	15.2	**14.3**	-6.1%	0.7%	0.3%
France	62.83	54.56	59.92	48.96	63.92	56.03	61.70	58.65	44.27	55.7	**70.9**	26.9%	1.2%	1.6%
Germany	19.59	18.98	20.55	20.15	17.69	19.73	18.32	19.66	17.62	19.9	**22.2**	11.3%	1.3%	0.5%
Greece	4.48	6.10	5.54	3.96	5.74	4.00	3.34	5.90	3.86	3.8	**3.2**	-15.9%	-3.2%	0.1%
Hungary	0.30	0.23	0.26	0.22	0.22	0.22	0.24	0.21	0.18	0.2	**0.2**	3.9%	-2.6%	†
Iceland	12.87	13.78	13.47	14.06	13.81	13.46	13.16	13.80	14.20	14.2	**13.6**	-4.8%	0.5%	0.3%
Ireland	0.71	0.81	0.68	0.69	0.69	0.89	0.93	0.75	0.70	0.9	**0.8**	-18.7%	0.8%	†
Italy	58.55	45.54	42.43	36.20	48.82	46.36	47.63	45.39	28.40	40.5	**55.2**	35.9%	-0.6%	1.2%
Latvia	1.99	1.87	2.53	4.38	2.43	2.11	2.60	2.71	2.75	3.8	**3.2**	-15.8%	4.9%	0.1%
Lithuania	0.40	0.35	0.45	0.60	0.43	0.35	0.30	0.38	0.46	0.5	**0.4**	-3.7%	0.9%	†
Luxembourg	0.11	0.10	0.12	0.09	0.09	0.11	0.09	0.11	0.06	0.1	**0.1**	22.0%	0.1%	†
Netherlands	0.11	0.09	0.10	0.06	0.07	0.07	0.05	0.09	0.05	0.1	**0.1**	22.2%	-2.7%	†
North Macedonia	1.21	1.87	1.90	1.11	1.79	1.16	1.28	1.45	1.35	1.6	**1.4**	-16.0%	1.3%	†
Norway	135.47	137.30	142.81	142.37	138.97	125.29	140.92	143.97	128.24	136.7	**139.6**	1.8%	0.3%	3.1%
Poland	2.18	1.83	2.14	2.56	1.97	1.96	2.12	2.34	1.97	2.4	**2.2**	-9.8%	†	†
Portugal	15.57	8.66	15.72	5.90	12.39	8.82	12.08	11.91	6.55	12.0	**14.8**	22.8%	-0.5%	0.3%
Romania	18.52	16.63	18.03	14.49	17.66	15.58	15.38	17.41	13.98	18.1	**13.8**	-24.1%	-2.9%	0.3%
Slovakia	4.21	3.87	4.36	4.32	3.59	4.36	4.52	4.26	3.68	4.7	**4.9**	5.0%	1.6%	0.1%
Slovenia	6.09	3.81	4.50	3.87	4.70	4.48	4.93	4.71	3.15	5.0	**5.3**	5.7%	-1.3%	0.1%
Spain	39.17	28.14	36.39	18.32	34.33	22.49	30.51	29.63	17.59	25.0	**34.4**	37.4%	-1.3%	0.8%
Sweden	63.76	75.31	62.13	65.06	62.15	65.30	72.29	73.79	69.81	66.1	**64.6**	-2.5%	0.1%	1.5%
Switzerland	38.04	38.26	34.63	34.10	34.61	37.63	37.46	36.57	29.57	37.0	**44.9**	21.2%	1.7%	1.0%
Türkiye	40.64	67.15	67.23	58.22	59.94	88.82	78.09	55.93	66.80	64.0	**74.9**	16.7%	6.3%	1.7%
Ukraine	8.48	5.40	7.68	8.95	10.43	6.51	7.56	10.44	11.02	12.7	**12.8**	–	4.2%	0.3%
United Kingdom	5.89	6.30	5.37	5.88	5.44	5.93	6.88	5.42	5.66	5.5	**5.8**	3.8%	-0.2%	0.1%
Other Europe	32.57	32.31	35.68	28.57	38.72	32.24	29.65	40.17	33.58	42.0	**36.6**	-13.0%	1.2%	0.8%
Total Europe	**643.99**	**637.36**	**653.55**	**586.47**	**646.37**	**628.23**	**660.87**	**655.14**	**565.27**	**642.6**	**698.0**	**8.3%**	**0.8%**	**15.7%**
Azerbaijan	1.30	1.64	1.96	1.75	1.77	1.56	1.07	1.28	1.60	1.8	**2.9**	64.8%	8.4%	0.1%
Belarus	0.12	0.11	0.14	0.41	0.32	0.35	0.40	0.37	0.37	0.3	**0.3**	-10.6%	8.3%	†
Kazakhstan	8.26	9.27	11.62	11.21	10.38	9.99	9.66	9.21	9.20	8.8	**11.3**	27.5%	3.1%	0.3%
Russian Federation	173.39	167.99	184.61	185.16	190.64	194.38	212.44	214.53	197.67	200.9	**210.5**	4.5%	2.0%	4.7%
Turkmenistan	^	^	^	^	^	^	^	^	^	^	**^**	†	†	†
Uzbekistan	6.19	6.02	6.86	7.93	5.90	6.46	5.00	5.01	5.31	7.0	**8.2**	16.9%	2.9%	0.2%
Other CIS	31.88	30.39	30.67	33.89	35.31	35.70	34.13	34.37	34.06	34.6	**36.1**	3.9%	1.2%	0.8%
Total CIS	**221.14**	**215.43**	**235.87**	**240.35**	**244.31**	**248.45**	**262.70**	**264.78**	**248.21**	**253.4**	**269.2**	**6.0%**	**2.0%**	**6.0%**
Iran	14.50	13.25	15.42	17.23	9.84	33.87	23.21	13.83	14.00	22.8	**18.9**	-17.5%	2.7%	0.4%
Iraq	2.84	2.55	3.37	2.18	1.82	4.96	4.16	3.35	2.65	1.4	**1.4**	†	-6.9%	†
Israel	0.01	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	^	**^**	-0.1%	6.3%	†
Kuwait	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Oman	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Qatar	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
United Arab Emirates	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other Middle East	2.59	0.94	1.35	1.21	1.12	1.74	1.62	1.38	1.47	1.3	**1.5**	14.6%	-5.3%	†
Total Middle East	**19.94**	**16.77**	**20.17**	**20.64**	**12.80**	**40.59**	**29.01**	**18.58**	**18.15**	**25.5**	**21.8**	**-14.9%**	**0.9%**	**0.5%**
Algeria	0.19	0.15	0.07	0.06	0.12	0.15	0.05	0.01	0.02	^	**0.1**	76.0%	-12.4%	†
Egypt	13.59	13.68	13.20	12.79	12.92	13.12	14.08	14.90	14.71	15.1	**14.4**	-4.8%	0.6%	0.3%
Morocco	1.64	1.89	1.26	1.18	1.69	1.26	0.87	0.82	0.35	0.2	**0.1**	-13.3%	-21.7%	†
South Africa	1.80	0.73	0.62	0.78	1.10	0.74	1.47	2.02	3.10	2.0	**1.1**	-45.2%	-4.8%	†
Eastern Africa	65.72	65.01	61.47	64.51	68.40	68.49	73.49	77.14	80.94	81.5	**82.4**	0.8%	2.3%	1.9%
Middle Africa	21.02	21.22	22.28	25.20	28.35	29.88	32.81	34.53	35.55	38.4	**39.3**	2.1%	6.5%	0.9%
Western Africa	17.87	15.96	18.40	18.79	19.94	22.51	22.44	24.30	25.71	27.9	**30.0**	7.4%	5.3%	0.7%
Other Northern Africa	0.06	0.07	0.05	0.02	0.02	0.07	0.05	0.03	0.01	^	**^**	73.4%	-11.8%	†
Other Southern Africa	2.30	2.27	1.99	2.21	1.87	1.61	2.16	1.76	1.54	2.1	**2.7**	27.9%	1.4%	0.1%
Total Africa	**124.17**	**120.97**	**119.33**	**125.53**	**134.41**	**137.84**	**147.41**	**155.51**	**161.93**	**167.1**	**170.1**	**1.5%**	**3.2%**	**3.8%**
Australia	14.48	14.09	17.63	13.50	17.31	14.02	14.42	15.94	16.66	15.1	**12.8**	-15.0%	-1.2%	0.3%
Bangladesh	0.57	0.90	0.88	1.03	0.87	0.82	0.70	0.68	0.78	0.7	**1.0**	45.0%	5.8%	†
China	1059.69	1114.52	1153.27	1165.07	1198.89	1272.54	1321.71	1300.00	1298.12	1226.0	**1354.3**	10.2%	2.5%	30.4%
China Hong Kong SAR	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
India	139.00	133.48	128.55	135.98	139.92	162.29	163.94	160.57	175.09	149.4	**156.5**	4.5%	1.2%	3.5%
Indonesia	15.16	13.74	18.68	18.63	21.64	21.16	24.33	24.70	27.30	24.6	**26.5**	7.4%	5.7%	0.6%
Japan	81.71	85.77	79.43	79.24	81.00	73.92	78.33	79.63	74.87	74.5	**79.4**	6.3%	-0.3%	1.8%
Malaysia	13.39	13.92	20.02	26.85	26.33	26.20	27.30	31.11	32.73	32.4	**34.4**	5.7%	9.9%	0.8%
New Zealand	24.32	24.53	25.94	25.18	26.25	25.60	24.27	24.23	26.28	26.6	**23.8**	-10.7%	-0.2%	0.5%
Pakistan	32.38	32.78	34.58	30.20	29.48	36.14	39.99	37.63	35.10	38.5	**39.0**	1.2%	1.9%	0.9%
Philippines	9.14	8.67	8.11	9.61	9.40	8.04	7.24	9.23	10.13	10.3	**11.1**	7.3%	2.0%	0.2%
Singapore	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
South Korea	2.75	2.15	2.85	2.81	3.36	2.79	3.88	3.05	3.54	3.7	**4.3**	15.4%	4.6%	0.1%
Sri Lanka	4.56	5.98	4.23	4.03	6.41	4.81	4.98	7.23	6.87	5.9	**7.0**	18.3%	4.3%	0.2%
Taiwan	4.32	4.47	6.56	5.45	4.48	5.54	3.02	3.47	5.84	4.0	**4.2**	5.8%	-0.3%	0.1%
Thailand	5.16	3.76	3.54	4.69	7.60	6.31	4.54	4.54	6.60	6.6	**6.4**	-2.9%	2.2%	0.1%
Vietnam	62.16	56.12	63.94	85.94	83.08	66.12	72.87	78.67	95.91	80.6	**88.7**	9.7%	3.6%	2.0%
Other Asia Pacific	54.64	51.04	60.28	63.86	69.88	64.86	74.40	83.89	95.77	95.3	**103.1**	7.9%	6.6%	2.3%
Total Asia Pacific	**1523.43**	**1565.90**	**1628.49**	**1672.06**	**1725.89**	**1791.15**	**1865.90**	**1864.58**	**1911.58**	**1794.2**	**1952.6**	**8.5%**	**2.5%**	**43.8%**
Total World	**3889.07**	**3879.17**	**4015.95**	**4068.42**	**4188.60**	**4242.63**	**4359.13**	**4293.67**	**4334.79**	**4260.8**	**4452.9**	**4.2%**	**1.4%**	**100.0%**
of which: OECD	1444.53	1431.57	1459.12	1455.57	1488.87	1454.88	1495.31	1450.48	1396.10	1391.1	**1439.1**	3.2%	†	32.3%
Non-OECD	2444.54	2447.60	2556.83	2612.84	2699.72	2787.75	2863.82	2843.19	2938.70	2869.6	**3013.9**	4.7%	2.1%	67.7%
European Union	368.83	335.00	344.78	293.23	342.66	317.18	345.87	347.39	274.86	328.8	**368.5**	11.8%	†	8.3%

* Based on gross primary hydroelectric generation and not accounting for cross-border electricity supply.
^ Less than 0.005.
† Less than 0.05%.
Notes: Annual changes and shares of total are calculated using terawatt-hours figures.
Growth rates are adjusted for leap years.

Renewable energy

Combined renewable electricity and biofuels total energy supply (incl hydro)*

Exajoules (input-equivalent)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	1.62	1.67	1.71	1.75	1.73	1.71	1.73	1.73	1.81	1.70	**1.66**	-2.6%	0.3%	3.4%
Mexico	0.41	0.40	0.40	0.40	0.40	0.40	0.43	0.46	0.47	0.42	**0.42**	-1.9%	0.2%	0.9%
US	4.34	4.44	4.80	5.10	5.18	5.26	5.34	5.62	6.04	6.24	**6.65**	6.3%	4.4%	13.6%
Total North America	**6.37**	**6.51**	**6.90**	**7.26**	**7.30**	**7.38**	**7.51**	**7.82**	**8.32**	**8.37**	**8.73**	**4.1%**	**3.2%**	**17.9%**
Argentina	0.19	0.19	0.18	0.20	0.20	0.20	0.18	0.19	0.22	0.25	**0.26**	4.2%	3.5%	0.5%
Brazil	2.58	2.71	2.78	2.81	3.04	3.21	3.20	3.12	3.41	3.64	**3.74**	2.6%	3.8%	7.7%
Chile	0.14	0.16	0.16	0.19	0.22	0.21	0.21	0.21	0.24	0.28	**0.30**	7.5%	7.6%	0.6%
Colombia	0.21	0.21	0.22	0.26	0.26	0.25	0.23	0.27	0.29	0.28	**0.27**	-3.8%	2.6%	0.6%
Ecuador	0.05	0.05	0.06	0.08	0.08	0.10	0.09	0.10	0.09	0.10	**0.09**	-8.7%	6.8%	0.2%
Peru	0.11	0.11	0.11	0.13	0.14	0.14	0.14	0.15	0.14	0.14	**0.16**	12.1%	3.8%	0.3%
Trinidad & Tobago	^	^	^	^	^	^	^	^	^	^	**^**	12.6%	1.3%	†
Venezuela	0.29	0.27	0.23	0.25	0.24	0.23	0.24	0.24	0.25	0.26	**0.26**	†	-1.0%	0.5%
Central America	0.27	0.28	0.29	0.30	0.32	0.32	0.34	0.36	0.36	0.34	**0.35**	1.7%	2.5%	0.7%
Other Caribbean	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	**0.05**	1.7%	4.0%	0.1%
Other South America	0.28	0.29	0.32	0.31	0.31	0.29	0.27	0.25	0.26	0.29	**0.28**	-3.0%	0.1%	0.6%
Total S. & Cent. America	**4.16**	**4.31**	**4.39**	**4.57**	**4.85**	**4.99**	**4.96**	**4.94**	**5.32**	**5.63**	**5.77**	**2.2%**	**3.3%**	**11.8%**
Austria	0.23	0.22	0.24	0.24	0.23	0.25	0.25	0.24	0.23	0.27	**0.30**	11.1%	2.5%	0.6%
Belgium	0.09	0.10	0.11	0.12	0.12	0.13	0.15	0.15	0.15	0.16	**0.15**	-7.2%	4.6%	0.3%
Bulgaria	0.03	0.04	0.03	0.03	0.05	0.05	0.05	0.06	0.06	0.06	**0.06**	7.0%	6.5%	0.1%
Croatia	0.04	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.04	0.05	**0.05**	-8.5%	2.3%	0.1%
Cyprus	^	^	^	^	^	^	^	^	^	0.01	**0.01**	18.4%	12.5%	†
Czech Republic	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	**0.10**	8.9%	2.1%	0.2%
Denmark	0.11	0.11	0.11	0.13	0.13	0.14	0.14	0.17	0.17	0.16	**0.16**	-1.2%	4.2%	0.3%
Estonia	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.02	0.02	**0.02**	13.6%	7.9%	†
Finland	0.20	0.21	0.20	0.21	0.22	0.23	0.23	0.26	0.25	0.26	**0.27**	3.2%	3.0%	0.5%
France	0.50	0.50	0.53	0.51	0.58	0.59	0.60	0.60	0.59	0.68	**0.74**	7.3%	4.0%	1.5%
Germany	1.06	1.16	1.17	1.27	1.30	1.36	1.43	1.34	1.43	1.49	**1.49**	0.2%	3.5%	3.1%
Greece	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.09	0.10	0.10	**0.11**	6.1%	7.7%	0.2%
Hungary	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.06	**0.07**	13.6%	6.8%	0.1%
Iceland	0.24	0.23	0.23	0.24	0.27	0.27	0.26	0.26	0.26	0.27	**0.26**	-1.7%	1.2%	0.5%
Ireland	0.03	0.04	0.04	0.04	0.05	0.06	0.06	0.06	0.06	0.07	**0.07**	4.3%	8.7%	0.2%
Italy	0.81	0.78	0.78	0.76	0.80	0.81	0.81	0.81	0.74	0.78	**0.81**	4.4%	0.1%	1.7%
Latvia	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	**0.02**	-12.3%	2.6%	†
Lithuania	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	**0.03**	25.3%	11.7%	0.1%
Luxembourg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	18.7%	11.0%	†
Netherlands	0.09	0.10	0.10	0.11	0.12	0.15	0.22	0.26	0.29	0.30	**0.31**	3.2%	12.6%	0.6%
North Macedonia	^	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	-13.0%	4.6%	†
Norway	0.50	0.51	0.54	0.55	0.53	0.49	0.56	0.58	0.53	0.56	**0.58**	2.3%	1.3%	1.2%
Poland	0.17	0.18	0.16	0.16	0.16	0.19	0.21	0.21	0.24	0.28	**0.30**	7.6%	5.6%	0.6%
Portugal	0.15	0.13	0.16	0.12	0.15	0.14	0.15	0.16	0.15	0.17	**0.19**	12.2%	2.3%	0.4%
Romania	0.10	0.10	0.11	0.10	0.11	0.11	0.11	0.12	0.11	0.12	**0.11**	-7.3%	1.3%	0.2%
Slovakia	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	**0.04**	4.2%	1.2%	0.1%
Slovenia	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.03	**0.03**	11.0%	1.6%	0.1%
Spain	0.53	0.49	0.52	0.47	0.55	0.52	0.57	0.62	0.60	0.70	**0.74**	6.4%	3.5%	1.5%
Sweden	0.41	0.48	0.44	0.47	0.46	0.50	0.53	0.56	0.58	0.56	**0.52**	-6.4%	2.3%	1.1%
Switzerland	0.16	0.16	0.15	0.15	0.16	0.17	0.17	0.17	0.15	0.18	**0.21**	16.4%	2.8%	0.4%
Türkiye	0.28	0.43	0.50	0.53	0.62	0.80	0.82	0.83	0.92	0.93	**1.02**	8.9%	13.8%	2.1%
Ukraine	0.04	0.03	0.04	0.04	0.05	0.05	0.07	0.09	0.07	0.08	**0.08**	-5.4%	7.2%	0.2%
United Kingdom	0.45	0.55	0.56	0.63	0.71	0.78	0.83	0.79	0.83	0.83	**0.91**	9.2%	7.4%	1.9%
Other Europe	0.12	0.12	0.13	0.11	0.14	0.13	0.12	0.16	0.14	0.17	**0.15**	-8.9%	2.5%	0.3%
Total Europe	**6.63**	**7.00**	**7.17**	**7.34**	**7.89**	**8.28**	**8.76**	**8.95**	**8.99**	**9.54**	**9.95**	**4.0%**	**4.2%**	**20.4%**
Azerbaijan	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	72.3%	9.4%	†
Belarus	^	^	^	^	^	^	0.01	0.01	0.01	0.01	**0.01**	-1.7%	12.5%	†
Kazakhstan	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	**0.06**	24.4%	8.1%	0.1%
Russian Federation	0.64	0.62	0.68	0.69	0.71	0.73	0.80	0.82	0.77	0.79	**0.83**	4.6%	2.5%	1.7%
Turkmenistan	^	^	^	^	^	^	^	^	^	^	**^**	–	4.9%	†
Uzbekistan	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.03	**0.05**	70.4%	7.7%	0.1%
Other CIS	0.11	0.11	0.11	0.12	0.13	0.13	0.12	0.13	0.13	0.13	**0.13**	4.6%	1.6%	0.3%
Total CIS	**0.82**	**0.80**	**0.87**	**0.89**	**0.91**	**0.93**	**1.00**	**1.02**	**0.98**	**1.01**	**1.09**	**7.9%**	**2.9%**	**2.2%**
Iran	0.05	0.05	0.06	0.06	0.04	0.13	0.09	0.06	0.06	0.09	**0.08**	-15.0%	3.6%	0.2%
Iraq	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	**0.01**	†	-4.8%	†
Israel	^	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	**0.05**	18.5%	27.4%	0.1%
Kuwait	^	^	^	^	^	^	^	^	^	^	**^**	-3.0%	57.4%	†
Oman	^	^	^	^	^	^	^	^	0.01	0.01	**0.01**	†	110.4%	†
Qatar	^	^	^	^	^	^	^	^	^	0.01	**0.01**	4.1%	22.6%	†
Saudi Arabia	^	^	^	^	^	^	^	^	0.01	0.02	**0.04**	101.4%	71.5%	0.1%
United Arab Emirates	^	^	^	^	0.01	0.01	0.02	0.02	0.03	0.06	**0.06**	5.5%	35.7%	0.1%
Other Middle East	0.01	^	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	**0.04**	8.0%	15.4%	0.1%
Total Middle East	**0.08**	**0.07**	**0.09**	**0.10**	**0.08**	**0.20**	**0.18**	**0.16**	**0.18**	**0.27**	**0.29**	**7.1%**	**13.3%**	**0.6%**
Algeria	^	^	^	^	^	^	^	^	^	^	**^**	2.4%	9.6%	†
Egypt	0.05	0.06	0.06	0.06	0.06	0.08	0.09	0.09	0.10	0.10	**0.10**	2.0%	6.3%	0.2%
Morocco	0.01	0.02	0.02	0.02	0.03	0.04	0.03	0.04	0.03	0.04	**0.04**	8.8%	12.4%	0.1%
South Africa	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.09	**0.09**	-5.0%	15.5%	0.2%
Eastern Africa	0.36	0.42	0.41	0.43	0.46	0.47	0.48	0.49	0.53	0.55	**0.56**	0.3%	4.3%	1.1%
Middle Africa	0.08	0.08	0.08	0.09	0.10	0.11	0.12	0.13	0.13	0.14	**0.14**	2.2%	6.5%	0.3%
Western Africa	0.07	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.10	0.11	**0.12**	7.4%	6.2%	0.3%
Other Northern Africa	^	^	^	^	^	^	^	^	^	^	**^**	18.3%	5.2%	†
Other Southern Africa	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	14.3%	3.1%	†
Total Africa	**0.61**	**0.68**	**0.69**	**0.74**	**0.81**	**0.86**	**0.89**	**0.95**	**0.99**	**1.05**	**1.07**	**1.5%**	**5.8%**	**2.2%**
Australia	0.15	0.16	0.18	0.17	0.21	0.23	0.26	0.31	0.34	0.37	**0.38**	3.0%	9.5%	0.8%
Bangladesh	^	^	^	0.01	^	^	^	0.01	0.01	0.01	**0.01**	43.8%	9.8%	†
China	5.12	5.51	6.04	6.68	7.42	8.21	8.96	10.14	11.06	11.99	**13.90**	15.6%	10.5%	28.5%
China Hong Kong SAR	^	^	^	^	^	^	^	0.01	0.01	0.01	**0.01**	10.2%	17.6%	†
India	0.88	0.84	0.88	0.95	1.10	1.24	1.29	1.38	1.59	1.63	**1.77**	8.1%	7.2%	3.6%
Indonesia	0.48	0.45	0.56	0.62	0.84	0.93	1.06	1.13	1.27	1.35	**1.48**	9.3%	12.0%	3.0%
Japan	0.73	0.84	0.79	0.84	0.90	0.92	1.01	1.10	1.14	1.21	**1.29**	6.0%	5.8%	2.6%
Malaysia	0.07	0.08	0.10	0.12	0.13	0.14	0.15	0.17	0.19	0.20	**0.21**	6.5%	11.9%	0.4%
New Zealand	0.38	0.40	0.40	0.40	0.40	0.40	0.40	0.41	0.42	0.41	**0.44**	5.8%	1.5%	0.9%
Pakistan	0.12	0.12	0.14	0.13	0.13	0.15	0.16	0.16	0.16	0.17	**0.17**	0.2%	3.5%	0.3%
Philippines	0.42	0.45	0.46	0.44	0.45	0.46	0.45	0.44	0.46	0.48	**0.48**	-0.5%	1.2%	1.0%
Singapore	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	10.2%	5.4%	†
South Korea	0.11	0.13	0.15	0.17	0.22	0.25	0.28	0.33	0.36	0.38	**0.40**	5.2%	13.9%	0.8%
Sri Lanka	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.03	0.03	**0.04**	22.4%	7.9%	0.1%
Taiwan	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.09	0.11	**0.13**	22.0%	11.2%	0.3%
Thailand	0.16	0.17	0.19	0.21	0.26	0.28	0.27	0.28	0.28	0.29	**0.29**	-0.4%	6.1%	0.6%
Vietnam	0.22	0.20	0.23	0.31	0.31	0.26	0.31	0.39	0.47	0.43	**0.47**	7.9%	7.7%	1.0%
Other Asia Pacific	0.21	0.20	0.23	0.24	0.27	0.25	0.28	0.32	0.36	0.36	**0.39**	8.0%	6.3%	0.8%
Total Asia Pacific	**9.13**	**9.64**	**10.44**	**11.39**	**12.73**	**13.83**	**15.00**	**16.67**	**18.26**	**19.43**	**21.86**	**12.2%**	**9.1%**	**44.8%**
Total World	**27.80**	**29.01**	**30.56**	**32.29**	**34.57**	**36.46**	**38.29**	**40.51**	**43.03**	**45.31**	**48.77**	**7.3%**	**5.8%**	**100.0%**
of which: OECD	14.47	15.17	15.72	16.40	17.08	17.65	18.38	19.03	19.80	20.47	**21.43**	4.4%	4.0%	43.9%
Non-OECD	13.32	13.84	14.84	15.89	17.49	18.81	19.91	21.48	23.24	24.83	**27.34**	9.8%	7.5%	56.1%
European Union	4.84	4.96	5.02	5.09	5.40	5.59	5.92	6.07	6.08	6.51	**6.73**	3.1%	3.4%	13.8%

* Based on gross generation and not accounting for cross-border electricity supply.
Energy from non-fossil fuel combustible electricity generation is accounted for on their input heat requirements and non-combustible renewables on the energy content of their gross electrical output.
See the appendix or **https://www.energyinst.org/statistical-review** for more details on this methodology.
^ Less than 0.005.
† Less than 0.05%.
Notes: Annual changes and share of total are calculated using exajoules figures.
Growth rates are adjusted for leap years.

Renewable energy Renewable power total energy supply (including hydro)*

Exajoules (input-equivalent)*	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	1.54	1.59	1.63	1.67	1.64	1.62	1.65	1.64	1.70	1.58	**1.55**	-2.6%	†	3.5%
Mexico	0.40	0.39	0.39	0.39	0.39	0.39	0.42	0.45	0.46	0.41	**0.41**	-2.0%	0.1%	0.9%
US	3.05	3.09	3.32	3.63	3.72	3.77	3.98	4.12	4.46	4.46	**4.77**	6.7%	4.6%	10.9%
Total North America	**4.99**	**5.07**	**5.35**	**5.69**	**5.75**	**5.78**	**6.05**	**6.22**	**6.62**	**6.45**	**6.72**	**3.8%**	**3.0%**	**15.3%**
Argentina	0.14	0.13	0.12	0.13	0.14	0.14	0.15	0.15	0.17	0.20	**0.21**	1.9%	4.4%	0.5%
Brazil	1.90	1.92	2.05	2.07	2.18	2.26	2.31	2.24	2.54	2.69	**2.77**	2.7%	3.8%	6.3%
Chile	0.14	0.16	0.16	0.19	0.22	0.21	0.21	0.21	0.24	0.28	**0.30**	7.5%	7.6%	0.7%
Colombia	0.18	0.18	0.19	0.23	0.23	0.22	0.20	0.24	0.25	0.24	**0.23**	-4.7%	2.4%	0.5%
Ecuador	^	0.05	0.06	0.08	0.08	0.09	0.09	0.10	0.09	0.10	**0.09**	-8.8%	6.7%	0.2%
Peru	0.10	0.10	0.10	0.11	0.12	0.13	0.12	0.13	0.12	0.12	**0.14**	13.8%	3.9%	0.3%
Trinidad & Tobago	^	^	^	^	^	^	^	^	^	^	**^**	12.6%	1.3%	†
Venezuela	0.29	0.27	0.23	0.25	0.24	0.23	0.24	0.24	0.25	0.26	**0.26**	†	-1.0%	0.6%
Central America	0.27	0.28	0.29	0.30	0.31	0.32	0.34	0.36	0.36	0.34	**0.35**	1.7%	2.5%	0.8%
Other Caribbean	^	^	^	^	^	^	^	^	^	^	**^**	1.8%	5.7%	0.1%
Other South America	0.27	0.28	0.31	0.30	0.30	0.28	0.26	0.24	0.25	0.28	**0.27**	-3.8%	-0.1%	0.6%
Total S. & Cent. America	**3.36**	**3.39**	**3.54**	**3.69**	**3.85**	**3.90**	**3.97**	**3.95**	**4.32**	**4.55**	**4.66**	**2.0%**	**3.3%**	**10.6%**
Austria	0.21	0.21	0.22	0.22	0.22	0.23	0.23	0.22	0.22	0.25	**0.28**	12.2%	2.7%	0.6%
Belgium	0.08	0.09	0.09	0.10	0.10	0.11	0.12	0.12	0.12	0.13	**0.12**	-9.0%	4.2%	0.3%
Bulgaria	^	^	^	^	^	^	^	0.06	0.05	^	**0.05**	7.1%	6.7%	0.1%
Croatia	^	^	^	^	^	^	^	^	^	0.05	**^**	-8.5%	2.6%	0.1%
Cyprus	^	^	^	^	^	^	^	^	^	^	**^**	19.8%	13.1%	†
Czech Republic	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	**0.09**	8.6%	2.4%	0.2%
Denmark	0.10	0.10	0.10	0.12	0.12	0.13	0.13	0.16	0.16	0.15	**0.15**	-0.9%	4.6%	0.3%
Estonia	^	^	^	^	^	^	^	^	^	^	**^**	13.7%	7.7%	0.1%
Finland	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.24	0.23	0.24	**0.24**	2.8%	3.0%	0.6%
France	0.38	0.38	0.41	0.39	0.47	0.47	0.51	0.50	0.47	0.57	**0.61**	8.0%	4.8%	1.4%
Germany	0.94	1.05	1.06	1.15	1.18	1.24	1.28	1.22	1.30	1.36	**1.38**	1.7%	4.0%	3.2%
Greece	^	0.06	0.06	0.05	0.06	0.06	0.07	0.08	0.08	0.09	**0.10**	6.8%	8.1%	0.2%
Hungary	^	^	^	^	^	^	^	^	^	^	**0.05**	19.7%	7.4%	0.1%
Iceland	0.23	0.23	0.23	0.24	0.27	0.27	0.26	0.26	0.26	0.27	**0.26**	-1.7%	1.2%	0.6%
Ireland	^	^	^	^	^	^	0.06	^	0.06	0.06	**0.06**	-0.4%	7.9%	0.1%
Italy	0.76	0.73	0.74	0.72	0.75	0.76	0.76	0.75	0.68	0.72	**0.76**	5.6%	†	1.7%
Latvia	^	^	^	^	^	^	^	^	^	^	**^**	-12.8%	2.9%	†
Lithuania	^	^	^	^	^	^	^	^	^	^	**^**	26.4%	12.6%	0.1%
Luxembourg	^	^	^	^	^	^	^	^	^	^	**^**	28.2%	15.0%	†
Netherlands	0.08	0.09	0.09	0.10	0.10	0.12	0.18	0.23	0.24	0.26	**0.28**	6.1%	13.4%	0.6%
North Macedonia	^	^	^	^	^	^	^	^	^	^	**^**	-13.0%	4.7%	†
Norway	0.50	0.51	0.52	0.53	0.52	0.47	0.55	0.56	0.52	0.55	**0.56**	1.9%	1.1%	1.3%
Poland	0.14	0.15	0.14	0.13	0.13	0.15	0.16	0.17	0.19	0.22	**0.24**	7.2%	5.3%	0.6%
Portugal	0.14	0.12	0.14	0.11	0.14	0.13	0.14	0.15	0.14	0.16	**0.18**	12.3%	2.3%	0.4%
Romania	0.09	0.10	0.10	0.09	0.10	0.09	0.09	0.10	0.09	0.11	**0.09**	-10.5%	0.1%	0.2%
Slovakia	^	^	^	^	^	^	^	^	^	^	**^**	4.5%	1.0%	0.1%
Slovenia	^	^	^	^	^	^	^	^	^	^	**^**	14.9%	1.1%	0.1%
Spain	0.48	0.43	0.46	0.40	0.46	0.43	0.49	0.54	0.52	0.59	**0.67**	12.6%	3.5%	1.5%
Sweden	0.39	0.45	0.41	0.43	0.41	0.45	0.48	0.51	0.52	0.50	**0.51**	1.1%	2.7%	1.2%
Switzerland	0.16	0.16	0.15	0.15	0.15	0.16	0.17	0.16	0.14	0.17	**0.20**	16.2%	2.4%	0.5%
Türkiye	0.27	0.42	0.49	0.53	0.61	0.79	0.82	0.82	0.92	0.93	**1.01**	8.9%	14.0%	2.3%
Ukraine	^	^	^	^	^	^	0.07	0.08	0.07	0.08	**0.08**	-5.5%	7.4%	0.2%
United Kingdom	0.40	0.51	0.52	0.59	0.65	0.71	0.76	0.73	0.75	0.74	**0.81**	10.0%	7.4%	1.9%
Other Europe	0.12	0.12	0.13	0.11	0.14	0.13	0.12	0.16	0.13	0.17	**0.15**	-9.0%	2.5%	0.3%
Total Europe	**6.03**	**6.41**	**6.58**	**6.71**	**7.17**	**7.50**	**7.99**	**8.17**	**8.16**	**8.67**	**9.15**	**5.3%**	**4.3%**	**20.9%**
Azerbaijan	^	^	^	^	^	^	^	^	^	^	**^**	72.3%	9.4%	†
Belarus	^	^	^	^	^	^	^	^	^	^	**^**	-1.7%	19.1%	†
Kazakhstan	^	^	^	^	^	^	^	^	^	0.05	**0.06**	24.4%	8.1%	0.1%
Russian Federation	0.64	0.62	0.68	0.69	0.71	0.72	0.80	0.81	0.76	0.77	**0.80**	4.2%	2.2%	1.8%
Turkmenistan	^	^	^	^	^	^	^	^	^	^	**^**	†	4.9%	†
Uzbekistan	^	^	^	^	^	^	^	^	^	^	**^**	70.4%	7.7%	0.1%
Other CIS	0.11	0.11	0.11	0.12	0.13	0.13	0.12	0.13	0.13	0.13	**0.13**	4.6%	1.6%	0.3%
Total CIS	**0.82**	**0.80**	**0.87**	**0.89**	**0.90**	**0.92**	**0.99**	**1.01**	**0.97**	**0.99**	**1.07**	**7.6%**	**2.7%**	**2.4%**
Iran	0.05	^	0.06	0.06	^	0.13	0.09	0.06	0.06	0.09	**0.08**	-15.0%	3.6%	0.2%
Iraq	^	^	^	^	^	^	^	^	^	^	**^**	†	-4.8%	†
Israel	^	^	^	^	^	^	^	^	^	^	**^**	18.2%	27.6%	0.1%
Kuwait	^	^	^	^	^	^	^	^	^	^	**^**	-3.0%	57.4%	†
Oman	^	^	^	^	^	^	^	^	^	^	**^**	†	110.4%	†
Qatar	^	^	^	^	^	^	^	^	^	^	**^**	4.1%	22.6%	†
Saudi Arabia	^	^	^	^	^	^	^	^	^	^	**^**	101.4%	71.5%	0.1%
United Arab Emirates	^	^	^	^	^	^	^	^	^	0.06	**0.06**	5.5%	35.7%	0.1%
Other Middle East	^	^	^	^	^	^	^	^	^	^	**^**	8.0%	15.4%	0.1%
Total Middle East	**0.08**	**0.07**	**0.09**	**0.10**	**0.08**	**0.20**	**0.18**	**0.16**	**0.18**	**0.26**	**0.28**	**7.0%**	**13.2%**	**0.6%**
Algeria	^	^	^	^	^	^	^	^	^	^	**^**	2.4%	9.6%	†
Egypt	0.05	0.06	0.06	0.06	0.06	0.08	0.09	0.09	0.10	0.10	**0.10**	2.0%	6.3%	0.2%
Morocco	^	^	^	^	^	^	^	^	^	^	**^**	8.8%	12.4%	0.1%
South Africa	^	^	^	0.05	0.05	0.06	0.06	0.08	0.08	0.09	**0.08**	-5.3%	16.2%	0.2%
Eastern Africa	0.36	0.42	0.41	0.43	0.46	0.47	0.48	0.49	0.53	0.55	**0.56**	0.3%	4.3%	1.3%
Middle Africa	0.08	0.08	0.08	0.09	0.10	0.11	0.12	0.13	0.13	0.14	**0.14**	2.2%	6.5%	0.3%
Western Africa	0.07	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.10	0.11	**0.12**	7.4%	6.2%	0.3%
Other Northern Africa	^	^	^	^	^	^	^	^	^	^	**^**	18.3%	5.2%	†
Other Southern Africa	^	^	^	^	^	^	^	^	^	^	**^**	14.3%	3.1%	†
Total Africa	**0.61**	**0.68**	**0.69**	**0.74**	**0.81**	**0.85**	**0.89**	**0.94**	**0.98**	**1.05**	**1.07**	**1.5%**	**5.8%**	**2.4%**
Australia	0.14	0.16	0.18	0.17	0.20	0.22	0.26	0.30	0.34	0.37	**0.38**	3.1%	10.1%	0.9%
Bangladesh	^	^	^	^	^	^	^	^	^	^	**^**	43.8%	9.8%	†
China	4.98	5.42	5.94	6.59	7.30	8.08	8.86	10.03	10.95	11.87	**13.76**	15.6%	10.7%	31.4%
China Hong Kong SAR	^	^	^	^	^	^	^	^	^	^	**^**	6.7%	20.5%	†
India	0.87	0.83	0.85	0.93	1.06	1.19	1.25	1.31	1.49	1.51	**1.60**	5.7%	6.2%	3.6%
Indonesia	0.42	0.42	0.46	0.53	0.72	0.72	0.79	0.83	0.93	0.95	**1.05**	10.3%	9.6%	2.4%
Japan	0.72	0.83	0.78	0.82	0.88	0.91	0.99	1.08	1.12	1.19	**1.27**	6.1%	5.8%	2.9%
Malaysia	0.06	0.06	0.08	0.11	0.11	0.11	0.12	0.13	0.14	0.14	**0.15**	5.2%	10.4%	0.3%
New Zealand	0.38	0.40	0.40	0.40	0.40	0.40	0.40	0.41	0.42	0.41	**0.44**	5.8%	1.5%	1.0%
Pakistan	0.12	0.12	0.14	0.13	0.13	0.15	0.16	0.16	0.16	0.17	**0.17**	0.2%	3.5%	0.4%
Philippines	0.41	0.44	0.44	0.42	0.43	0.43	0.44	0.42	0.44	0.45	**0.45**	-0.8%	1.0%	1.0%
Singapore	^	^	^	^	^	^	^	^	^	^	**^**	10.2%	5.4%	†
South Korea	0.09	0.11	0.12	0.15	0.19	0.22	0.25	0.30	0.33	0.35	**0.37**	4.8%	14.8%	0.8%
Sri Lanka	^	^	^	^	^	^	^	^	^	^	**^**	22.4%	7.9%	0.1%
Taiwan	^	^	0.05	0.05	0.05	0.06	0.06	0.07	0.09	0.11	**0.13**	22.0%	11.4%	0.3%
Thailand	0.10	0.10	0.12	0.14	0.18	0.19	0.18	0.19	0.18	0.21	**0.21**	-0.2%	7.8%	0.5%
Vietnam	0.22	0.20	0.23	0.31	0.31	0.26	0.31	0.39	0.47	0.43	**0.47**	7.9%	7.7%	1.1%
Other Asia Pacific	0.21	0.20	0.23	0.24	0.27	0.25	0.28	0.32	0.36	0.36	**0.39**	8.0%	6.3%	0.9%
Total Asia Pacific	**8.80**	**9.36**	**10.06**	**11.03**	**12.27**	**13.24**	**14.38**	**16.00**	**17.50**	**18.57**	**20.89**	**12.2%**	**9.0%**	**47.7%**
Total World	**24.68**	**25.77**	**27.18**	**28.84**	**30.83**	**32.40**	**34.45**	**36.45**	**38.74**	**40.56**	**43.84**	**7.8%**	**5.9%**	**100.0%**
of which: OECD	12.44	13.08	13.52	14.14	14.74	15.22	16.11	16.60	17.22	17.62	**18.55**	5.0%	4.1%	42.3%
Non-OECD	12.24	12.69	13.66	14.70	16.09	17.18	18.34	19.85	21.52	22.94	**25.30**	10.0%	7.5%	57.7%
European Union	4.30	4.42	4.49	4.53	4.77	4.93	5.25	5.38	5.36	5.76	**6.07**	5.0%	3.5%	13.8%

* Based on gross generation and not accounting for cross-border electricity supply.
Energy from non-fossil fuel combustible electricity generation is accounted for on their input heat requirements and non-combustible renewables on the energy content of their gross electrical output.
See the appendix or **https://www.energyinst.org/statistical-review** for more details on this methodology.
^ Less than 0.005.
† Less than 0.05%.
Notes: Annual changes and share of total are calculated using exajoules figures.
Growth rates are adjusted for leap years.

Renewable energy

Solar – Installed photovoltaic (PV) power and concentrated solar power (CSP)*

Megawatts	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	2108	2877	3058	3419	3719	4007	4379	5261	5439	5884	**6105**	3.8%	11.2%	0.3%
Mexico	174	295	606	1072	2770	6247	7158	8927	9356	10910	**11992**	9.9%	52.7%	0.6%
US	18112	24237	35434	43770	51987	61587	76441	95391	114361	139205	**177470**	27.5%	25.6%	9.5%
Total North America	**20394**	**27409**	**39098**	**48261**	**58476**	**71841**	**87978**	**109579**	**129155**	**155999**	**195568**	**25.4%**	**25.4%**	**10.5%**
Argentina	14	14	14	14	196	446	768	1077	1113	1405	**1741**	23.9%	62.3%	0.1%
Brazil	24	49	136	1210	2465	4706	8482	14511	25399	37940	**53113**	40.0%	116.0%	2.8%
Chile	221	576	1125	1724	2298	2720	3288	4712	6902	8885	**11054**	24.4%	47.9%	0.6%
Honduras	5	396	412	455	515	518	525	529	529	529	**554**	4.7%	59.6%	†
The Dominican Republic	15	24	71	95	191	335	386	584	735	1077	**1423**	32.1%	57.9%	0.1%
Other S. & Cent. America	479	863	1044	1661	1986	2460	2800	3473	4049	4973	**5946**	19.6%	28.6%	0.3%
Total S. & Cent. America	**758**	**1922**	**2802**	**5158**	**7651**	**11184**	**16248**	**24885**	**38726**	**54810**	**73830**	**34.7%**	**58.1%**	**4.0%**
Austria	790	940	1100	1272	1457	1703	2037	2771	3757	6331	**8481**	34.0%	26.8%	0.5%
Belgium	2977	3108	3291	3600	3963	4523	5453	5934	6781	8352	**9752**	16.8%	12.6%	0.5%
Bulgaria	1029	1028	1030	1031	1033	1044	1100	1275	1737	2908	**3908**	34.4%	14.3%	0.2%
Czech Republic	2067	2075	2068	2062	2068	2085	2124	2177	2404	3251	**4159**	27.9%	7.2%	0.2%
Denmark	607	782	851	906	998	1080	1304	1704	3070	3529	**3945**	11.8%	20.6%	0.2%
France	5861	6820	7319	8100	9032	10013	11133	13446	14722	17399	**21528**	23.7%	13.9%	1.2%
Germany	37398	38601	39908	41404	44035	47487	51785	57463	61188	74882	**89943**	20.1%	9.2%	4.8%
Greece	2596	2604	2604	2552	2591	2754	3174	4073	5104	6689	**9269**	38.6%	13.6%	0.5%
Hungary	89	172	235	344	728	1400	2131	2968	4235	5910	**7699**	30.3%	56.2%	0.4%
Italy	18441	18742	19116	19504	19916	20625	21359	22286	24560	29356	**36013**	22.7%	6.9%	1.9%
Lithuania	67	67	68	75	89	130	244	422	738	1324	**2567**	93.9%	44.1%	0.1%
Netherlands	1007	1526	2135	2911	4608	7228	11110	14823	17356	21275	**24048**	13.0%	37.3%	1.3%
Poland	26	103	178	277	536	1495	3795	7091	11063	16428	**20199**	23.0%	94.4%	1.1%
Portugal	417	452	533	619	717	970	1191	1817	2817	4040	**5808**	43.8%	30.1%	0.3%
Romania	1293	1326	1372	1374	1386	1398	1383	1394	1809	2988	**4688**	56.9%	13.7%	0.3%
Slovakia	533	533	533	528	471	590	535	537	549	593	**867**	46.2%	5.0%	†
Slovenia	224	239	232	247	247	278	370	461	626	1031	**1309**	27.0%	19.3%	0.1%
Spain	7032	7041	7044	7053	7101	11146	12475	16056	26238	31920	**38587**	20.9%	18.6%	2.1%
Sweden	60	104	153	244	428	714	1107	1606	2388	3993	**4963**	24.3%	55.5%	0.3%
Switzerland	1043	1360	1617	1860	2117	2425	2875	3515	4528	6094	**7794**	27.9%	22.3%	0.4%
Türkiye	41	250	834	3422	5064	5996	6668	7817	9426	11293	**19883**	76.1%	85.6%	1.1%
Ukraine	819	841	955	1200	2003	5936	7331	8062	8062	8062	**5500**	-31.8%	21.0%	0.3%
United Kingdom	5528	9601	11914	12751	13060	13345	13870	14261	14981	16275	**17603**	8.2%	12.3%	0.9%
Other Europe	330	403	497	641	826	1207	1719	2428	3748	6763	**9613**	42.1%	40.1%	0.5%
Total Europe	**90275**	**98717**	**105585**	**113977**	**124472**	**145572**	**166274**	**194387**	**231889**	**290686**	**358128**	**23.2%**	**14.8%**	**19.2%**
Russian Federation	306	363	433	538	828	1425	1774	1988	2148	2193	**2554**	16.5%	23.6%	0.1%
Kazakhstan	5	57	57	59	209	542	912	1038	1146	1306	**1196**	-8.4%	72.8%	0.1%
Other CIS	8	12	75	114	210	212	250	361	763	1431	**3318**	131.9%	83.8%	0.2%
Total CIS	**319**	**432**	**566**	**711**	**1247**	**2178**	**2935**	**3387**	**4057**	**4930**	**7069**	**43.4%**	**36.3%**	**0.4%**
Israel	656	796	906	1006	1346	2138	2652	3591	4632	5516	**5605**	1.6%	23.9%	0.3%
Jordan	^	57	311	418	760	971	1541	1811	1966	1990	**2077**	4.4%	148.0%	0.1%
Saudi Arabia	24	24	24	34	84	109	409	439	440	2585	**4340**	67.9%	68.0%	0.2%
United Arab Emirates	130	132	135	353	600	1935	2333	3002	3596	5942	**6011**	1.2%	46.7%	0.3%
Other Middle East	72	145	245	438	744	923	1172	1417	3579	3819	**5015**	31.3%	52.8%	0.3%
Total Middle East	**883**	**1154**	**1621**	**2250**	**3535**	**6076**	**8107**	**10261**	**14213**	**19852**	**23050**	**16.1%**	**38.6%**	**1.2%**
Algeria	28	62	262	355	367	367	367	367	451	462	**462**	0.0%	32.2%	†
Egypt	35	36	59	180	764	1647	1643	1663	1725	1856	**2590**	39.5%	53.8%	0.1%
Morocco	40	200	202	204	734	734	774	854	854	934	**934**	0.0%	37.2%	0.1%
South Africa	1164	1353	2176	3451	4805	4908	5994	6316	6326	6165	**6671**	8.2%	19.1%	0.4%
Tunisia	17	28	38	47	64	80	95	95	197	506	**773**	52.8%	46.4%	†
Other Africa	335	436	565	786	1189	1543	1771	2276	3062	3593	**3948**	9.9%	28.0%	0.2%
Total Africa	**1618**	**2114**	**3301**	**5023**	**7922**	**9279**	**10644**	**11570**	**12614**	**13516**	**15378**	**13.8%**	**25.3%**	**0.8%**
Australia	4137	5035	5880	7242	11128	15453	19772	24396	28887	33282	**38472**	15.6%	25.0%	2.1%
China	28399	43549	77819	130832	175262	204971	253864	306973	393032	609921	**887930**	45.6%	41.1%	47.6%
India	3776	5697	9982	18257	27485	35250	39705	49950	63390	72859	**97384**	33.7%	38.4%	5.2%
Japan	23339	34150	42040	49500	56162	63192	71868	78413	85066	89077	**91610**	2.8%	14.7%	4.9%
Malaysia	171	222	287	331	481	829	1483	1787	2131	2146	**2306**	7.5%	29.7%	0.1%
Pakistan	165	265	589	655	680	756	855	1078	1244	1243	**1395**	12.3%	23.8%	0.1%
Philippines	34	182	799	924	937	1009	1089	1413	1667	1802	**2971**	64.8%	56.4%	0.2%
South Korea	2438	3467	4338	5633	7701	10847	14756	17905	20525	23493	**26645**	13.4%	27.0%	1.4%
Taiwan	636	884	1245	1768	2738	4150	5817	7700	9724	12418	**14281**	15.0%	36.5%	0.8%
Thailand	1304	1425	2452	2703	2968	2988	2985	3066	3186	3300	**3384**	†	10.0%	0.2%
Viet Nam	5	5	5	8	105	4994	16661	16661	16698	18588	**18667**	0.4%	126.3%	1.0%
Other Asia Pacific	408	607	757	1080	1339	2081	2597	3418	4319	5626	**7421**	31.9%	33.7%	0.4%
Total Asia Pacific	**64812**	**95489**	**146193**	**218933**	**286986**	**346522**	**431453**	**512760**	**629869**	**873756**	**1192468**	**36.5%**	**33.8%**	**63.9%**
Total World	**179060**	**227236**	**299167**	**394312**	**490289**	**592654**	**723638**	**866830**	**1060522**	**1413548**	**1865490**	**32.0%**	**26.4%**	**100.0%**

Source: IRENA (2025), Renewable Capacity Statistics 2025, The International Renewable Energy Agency, Abu Dhabi.

* End of year.

† Less than 0.05%.

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Renewable energy Wind – Installed wind turbine capacity*

Megawatts	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	9694	11214	11973	12250	12816	13220	13532	13722	15081	16989	**18376**	8.2%	6.6%	1.6%
Mexico	2569	3271	4051	4180	4180	6541	6995	7469	7634	7318	**7318**	–	11.0%	0.6%
US	64430	72767	81502	87831	94666	103836	118664	133019	141674	148020	**153152**	3.5%	9.0%	13.5%
Total North America	**76693**	**87252**	**97527**	**104261**	**111662**	**123597**	**139191**	**154210**	**164389**	**172327**	**178846**	**3.8%**	**8.8%**	**15.8%**
Argentina	188	188	188	228	751	1609	2624	3292	3310	3706	**4320**	16.6%	36.8%	0.4%
Brazil	5030	7682	10322	12451	14514	15457	17217	21002	24196	29113	**32959**	13.2%	20.7%	2.9%
Chile	736	910	1039	1312	1614	1705	2526	3203	3926	4623	**4807**	4.0%	20.6%	0.4%
Costa Rica	196	278	319	378	408	411	394	390	390	408	**402**	-1.3%	7.4%	†
Uruguay	481	857	1212	1518	1518	1524	1524	1524	1524	1524	**1524**	–	12.2%	0.1%
Other S. & Cent. America	969	1303	1526	1593	1821	2038	2105	2233	2496	3029	**3233**	6.7%	12.8%	0.3%
Total S. & Cent. America	**7601**	**11219**	**14606**	**17479**	**20627**	**22744**	**26389**	**31645**	**35842**	**42403**	**47246**	**11.4%**	**20.0%**	**4.2%**
Austria	2110	2489	2730	2887	3133	3224	3226	3422	3633	3896	**4035**	3.6%	6.7%	0.4%
Belgium	1933	2181	2334	2779	3305	3864	4673	4948	5303	5454	**5599**	2.7%	11.2%	0.5%
Bulgaria	699	699	699	698	699	703	703	704	704	704	**704**	–	0.1%	0.1%
Denmark	4886	5077	5245	5489	6123	6111	6259	7004	7084	7277	**7621**	4.7%	4.5%	0.7%
Finland	627	1005	1565	2044	2041	2284	2586	3257	5677	6946	**8360**	20.4%	29.6%	0.7%
France	9201	10298	11567	13499	14900	16427	17535	18551	20835	23132	**24592**	6.3%	10.3%	2.2%
Germany	38614	44580	49435	55580	58721	60742	62201	63711	66202	69486	**72823**	4.8%	6.5%	6.4%
Greece	1978	2091	2370	2624	2877	3589	4119	4649	4702	5232	**5357**	2.4%	10.5%	0.5%
Ireland	2283	2451	2802	3319	3674	4126	4307	4339	4536	4739	**4942**	4.3%	8.0%	0.4%
Italy	8683	9137	9384	9737	10230	10679	10871	11254	11821	12307	**12992**	5.6%	4.1%	1.1%
Netherlands	2865	3391	4257	4202	4393	4484	6648	7646	8700	10734	**11679**	8.8%	15.1%	1.0%
Norway	859	867	883	1207	1710	2914	4030	5049	5062	5064	**5152**	1.7%	19.6%	0.5%
Poland	3836	4886	5747	5759	5766	5838	6298	6967	8150	9343	**10059**	7.7%	10.1%	0.9%
Portugal	4857	4937	5124	5124	5172	5223	5122	5427	5538	5538	**5583**	0.8%	1.4%	0.5%
Romania	3244	3130	3025	3030	3032	3038	3013	3015	3015	3027	**3096**	2.3%	-0.5%	0.3%
Spain	22925	22943	22990	23124	23405	25590	26819	27908	30114	30868	**31811**	3.1%	3.3%	2.8%
Sweden	5088	5819	6435	6611	7300	8681	9976	12116	14279	16224	**17239**	6.3%	13.0%	1.5%
Türkiye	3630	4503	5751	6516	7005	7591	8832	10607	11396	11806	**12973**	9.9%	13.6%	1.1%
Ukraine	514	514	526	553	621	1258	1402	1761	1761	1901	**1921**	1.1%	14.1%	0.2%
United Kingdom	13074	14305	16126	19585	21606	23887	24458	25748	28761	30163	**30902**	2.5%	9.0%	2.7%
Other Europe	1912	2193	2442	2700	3007	3358	3560	3938	4355	5242	**6244**	19.1%	12.6%	0.6%
Total Europe	**133819**	**147495**	**161436**	**177068**	**188721**	**203610**	**216638**	**232022**	**251629**	**269085**	**283685**	**5.4%**	**7.8%**	**25.0%**
Russian Federation	99	103	106	141	196	197	1041	2050	2280	2532	**2567**	1.4%	38.5%	0.2%
Other CIS	14	33	81	103	162	182	182	181	188	192	**689**	258.8%	47.3%	†
Total CIS	**113**	**136**	**186**	**244**	**358**	**379**	**1222**	**2231**	**2468**	**2725**	**3256**	**19.5%**	**39.9%**	**0.3%**
Iran	149	153	191	259	282	305	308	310	342	365	**376**	3.1%	9.7%	†
Jordan	1	118	184	198	295	384	529	632	632	631	**631**	–	84.2%	0.1%
Other Middle East	14	14	34	37	47	97	97	97	608	914	**914**	–	51.5%	0.1%
Total Middle East	**165**	**286**	**409**	**494**	**623**	**785**	**934**	**1039**	**1582**	**1910**	**1921**	**0.6%**	**27.9%**	**0.2%**
Egypt	555	755	755	755	1130	1132	1380	1640	1643	1890	**2199**	16.3%	14.8%	0.2%
Morocco	797	797	902	1022	1225	1225	1435	1471	1558	1858	**2128**	14.5%	10.3%	0.2%
South Africa	569	1079	1473	2094	2094	2094	2516	2495	3163	3442	**3442**	–	19.7%	0.3%
Tunisia	233	240	240	240	245	245	245	245	245	245	**245**	–	0.5%	†
Other Africa	245	449	461	467	777	832	938	1058	1136	1219	**1219**	†	17.4%	0.1%
Total Africa	**2399**	**3320**	**3831**	**4578**	**5471**	**5528**	**6514**	**6909**	**7745**	**8654**	**9233**	**6.7%**	**14.4%**	**0.8%**
Australia	3797	4318	4683	5407	6409	7881	10207	10555	11966	12908	**15288**	18.4%	14.9%	1.3%
China	96819	131048	148517	164374	184665	209582	281993	328973	365964	441895	**521746**	18.1%	18.3%	46.0%
India	22465	25088	28700	32848	35288	37505	38559	40067	41930	44736	**48163**	7.7%	7.9%	4.2%
Japan	2753	2809	3205	3483	3498	3952	4120	4262	4483	5343	**5832**	9.2%	7.8%	0.5%
New Zealand	682	689	690	690	690	690	690	913	994	1059	**1263**	19.3%	6.4%	0.1%
Pakistan	206	308	591	789	1186	1236	1236	1335	1845	1845	**1845**	0.0%	24.5%	0.2%
Philippines	337	427	427	427	427	443	443	443	443	443	**443**	0.0%	2.8%	†
South Korea	645	853	1035	1143	1303	1494	1645	1709	1946	2205	**2301**	4.4%	13.6%	0.2%
Taiwan	637	647	682	692	713	845	937	1094	1581	2677	**3890**	45.3%	19.8%	0.3%
Thailand	225	234	507	628	1103	1507	1507	1545	1545	1544	**1544**	0.0%	21.3%	0.1%
Other Asia Pacific	336	450	501	611	847	1160	1556	5427	6818	7984	**8254**	3.4%	37.7%	0.7%
Total Asia Pacific	**128901**	**166870**	**189538**	**211093**	**236129**	**266295**	**342893**	**396325**	**439516**	**522640**	**610570**	**16.8%**	**16.8%**	**53.8%**
Total World	**349691**	**416579**	**467533**	**515218**	**563590**	**622938**	**733780**	**824380**	**903171**	**1019743**	**1134758**	**11.3%**	**12.5%**	**100.0%**

Source: IRENA (2025), Renewable Energy Statistics 2025, The International Renewable Energy Agency, Abu Dhabi.
* End of year.
† Less than 0.05%.
Note: Capacity figures in this table include both onshore and offshore wind and are on an AC basis.

Renewable energy Solar – Installed capacity by type*

	2023			2024		
Megawatts	Solar PV	CSP	**Total**	Solar PV	CSP	**Total**
Canada	5884	–	**5884**	6105	–	**6105**
Mexico	10893	17	**10910**	11975	17	**11992**
US	137725	1480	**139205**	175990	1480	**177470**
Total North America	**154502**	**1497**	**155999**	**194071**	**1497**	**195568**
Argentina	1405	–	**1405**	1741	–	**1741**
Brazil	37940	–	**37940**	53113	–	**53113**
Chile	8777	108	**8885**	10940	114	**11054**
Honduras	529	–	**529**	554	–	**554**
The Dominican Republic	1077	–	**1077**	1423	–	**1423**
Other S. & Cent. America	4973	–	**4973**	5946	–	**5946**
Total S. & Cent. America	**54701**	**108**	**54810**	**73716**	**114**	**73830**
Austria	6331	–	**6331**	8481	–	**8481**
Belgium	8352	–	**8352**	9752	–	**9752**
Bulgaria	2908	–	**2908**	3908	–	**3908**
Czech Republic	3251	–	**3251**	4159	–	**4159**
Denmark	3529	–	**3529**	3945	–	**3945**
France	17399	–	**17399**	21528	–	**21528**
Germany	74882	–	**74882**	89943	–	**89943**
Greece	6689	–	**6689**	9269	–	**9269**
Hungary	5910	–	**5910**	7699	–	**7699**
Italy	29351	5	**29356**	36008	5	**36013**
Lithuania	1324	–	**1324**	2567	–	**2567**
Netherlands	21275	–	**21275**	24048	–	**24048**
Poland	16428	–	**16428**	20199	–	**20199**
Portugal	4040	–	**4040**	5808	–	**5808**
Romania	2988	^	**2988**	4688	^	**4688**
Slovakia	593	–	**593**	867	–	**867**
Slovenia	1031	–	**1031**	1309	–	**1309**
Spain	29616	2304	**31920**	36285	2302	**38587**
Sweden	3993	–	**3993**	4963	–	**4963**
Switzerland	6094	–	**6094**	7794	–	**7794**
Türkiye	11292	1	**11293**	19882	1	**19883**
Ukraine	8062	–	**8062**	5500	–	**5500**
United Kingdom	16275	–	**16275**	17603	–	**17603**
Other Europe	6763	–	**6763**	9613	–	**9613**
Total Europe	**288376**	**2310**	**290686**	**355820**	**2308**	**358128**
Russian Federation	2193	–	**2193**	2554	–	**2554**
Kazakhstan	1306	–	**1306**	1196	–	**1196**
Other CIS	1431	–	**1431**	3318	–	**3318**
Total CIS	**4930**	**–**	**4930**	**7069**	**–**	**7069**
Israel	5274	242	**5516**	5363	242	**5605**
Jordan	1990	–	**1990**	2077	–	**2077**
Saudi Arabia	2535	50	**2585**	4290	50	**4340**
United Arab Emirates	5342	600	**5942**	5411	600	**6011**
Other Middle East	3767	52	**3819**	4964	52	**5015**
Total Middle East	**18909**	**944**	**19852**	**22106**	**944**	**23050**
Algeria	437	25	**462**	437	25	**462**
Egypt	1836	20	**1856**	2570	20	**2590**
Morocco	394	540	**934**	394	540	**934**
South Africa	5665	500	**6165**	6171	500	**6671**
Tunisia	506	–	**506**	773	–	**773**
Other Africa	3593	–	**3593**	3948	–	**3948**
Total Africa	**12431**	**1085**	**13516**	**14293**	**1085**	**15378**
Australia	33279	3	**33282**	38469	3	**38472**
China	609351	570	**609921**	887360	570	**887930**
India	72517	343	**72859**	97042	343	**97384**
Japan	89077	–	**89077**	91610	–	**91610**
Malaysia	2146	–	**2146**	2306	–	**2306**
Pakistan	1243	–	**1243**	1395	–	**1395**
Philippines	1802	–	**1802**	2971	–	**2971**
South Korea	23493	–	**23493**	26645	–	**26645**
Taiwan	12418	–	**12418**	14281	–	**14281**
Thailand	3295	5	**3300**	3379	5	**3384**
Vietnam	18588	–	**18588**	18667	–	**18667**
Other Asia Pacific	5626	–	**5626**	7421	–	**7421**
Total Asia Pacific	**872835**	**921**	**873756**	**1191547**	**921**	**1192468**
Total World	**1406684**	**6864**	**1413548**	**1858622**	**6868**	**1865490**

Source: IRENA (2025), Renewable Capacity Statistics 2025, The International Renewable Energy Agency, Abu Dhabi.
* End of year.
^ Less than 0.05.
Note: Capacity figures in these tables are for both onshore and offshore wind and are on an AC basis.

Renewable energy Wind – Installed capacity by type*

	2023			2024		
Megawatts	Onshore	Offshore	**Total**	Onshore	Offshore	**Total**
Canada	16989	–	**16989**	18376	–	**18376**
Mexico	7318	–	**7318**	7318	–	**7318**
US	147979	41	**148020**	152981	171	**153152**
Total North America	**172286**	**41**	**172327**	**178675**	**171**	**178846**
Argentina	3706	–	**3706**	4320	–	**4320**
Brazil	29113	–	**29113**	32959	–	**32959**
Chile	4623	–	**4623**	4807	–	**4807**
Costa Rica	408	–	**408**	402	–	**402**
Uruguay	1524	–	**1524**	1524	–	**1524**
Other S. & Cent. America	3029	–	**3029**	3233	–	**3233**
Total S. & Cent. America	**42403**	**–**	**42403**	**47246**	**–**	**47246**
Austria	3896	–	**3896**	4035	–	**4035**
Belgium	3192	2262	**5454**	3337	2262	**5599**
Bulgaria	704	–	**704**	704	–	**704**
Denmark	4808	2469	**7277**	4808	2813	**7621**
Finland	6914	32	**6946**	8328	32	**8360**
France	21645	1487	**23132**	23105	1487	**24592**
Germany	61013	8473	**69486**	63608	9215	**72823**
Greece	5232	–	**5232**	5357	–	**5357**
Ireland	4714	25	**4739**	4917	25	**4942**
Italy	12276	31	**12307**	12961	31	**12992**
Netherlands	6757	3978	**10734**	6932	4748	**11679**
Norway	5062	2	**5064**	5062	90	**5152**
Poland	9343	–	**9343**	10059	–	**10059**
Portugal	5513	25	**5538**	5558	25	**5583**
Romania	3027	–	**3027**	3096	–	**3096**
Spain	30863	5	**30868**	31806	5	**31811**
Sweden	16031	193	**16224**	17046	193	**17239**
Türkiye	11806	–	**11806**	12973	–	**12973**
Ukraine	1901	–	**1901**	1921	–	**1921**
United Kingdom	15418	14745	**30163**	16157	14745	**30902**
Other Europe	5242	–	**5242**	6244	–	**6244**
Total Europe	**235358**	**33726**	**269085**	**248015**	**35670**	**283685**
Russian Federation	2532	–	**2532**	2567	–	**2567**
Other CIS	192	–	**192**	689	–	**689**
Total CIS	**2725**	**–**	**2725**	**3256**	**–**	**3256**
Iran	365	–	**365**	376	–	**376**
Jordan	631	–	**631**	631	–	**631**
Other Middle East	914	–	**914**	914	–	**914**
Total Middle East	**1910**	**–**	**1910**	**1921**	**–**	**1921**
Egypt	1890	–	**1890**	2199	–	**2199**
Morocco	1858	–	**1858**	2128	–	**2128**
South Africa	3442	–	**3442**	3442	–	**3442**
Tunisia	245	–	**245**	245	–	**245**
Other Africa	1219	–	**1219**	1219	–	**1219**
Total Africa	**8654**	**–**	**8654**	**9233**	**–**	**9233**
Australia	12908	–	**12908**	15288	–	**15288**
China	404605	37290	**441895**	482646	39100	**521746**
India	44736	–	**44736**	48163	–	**48163**
Japan	5153	190	**5343**	5542	290	**5832**
New Zealand	1059	–	**1059**	1263	–	**1263**
Pakistan	1845	–	**1845**	1845	–	**1845**
Philippines	443	–	**443**	443	–	**443**
South Korea	2069	136	**2205**	2165	136	**2301**
Taiwan	914	1763	**2677**	927	2963	**3890**
Thailand	1544	–	**1544**	1544	–	**1544**
Other Asia Pacific	6881	1104	**7984**	7151	1104	**8254**
Total Asia Pacific	**482157**	**40483**	**522640**	**566977**	**43592**	**610570**
Total World	**945492**	**74251**	**1019743**	**1055324**	**79434**	**1134758**

Source: IRENA (2025), Renewable Capacity Statistics 2025, The International Renewable Energy Agency, Abu Dhabi.
* End of year.
Note: Capacity figures in these tables are for both onshore and offshore wind and are on an AC basis.

Renewable energy Generation by source*

Terawatt-hours	2023 Wind	2023 Solar	2023 Hydro	2023 Other renewables‡	2023 Total	2024 Wind	2024 Solar	2024 Hydro	2024 Other renewables‡	2024 Total	2024 Growth rate Wind	2024 Growth rate Solar	2024 Growth rate Hydro	2024 Growth rate Other renewables‡	2024 Growth rate Total
Canada	40.5	8.4	360.7	9.8	**419.4**	46.8	9.4	343.2	9.8	**409.3**	15.3%	11.8%	-5.1%	†	**-2.7%**
Mexico	20.7	23.3	20.6	6.6	**71.3**	19.8	25.7	23.5	6.0	**75.0**	-4.8%	9.9%	13.9%	-9.9%	**5.0%**
US	425.4	241.4	241.4	66.9	**975.1**	458.0	306.2	238.7	65.7	**1068.7**	7.4%	26.5%	-1.4%	-2.1%	**9.3%**
Total North America	**486.6**	**273.1**	**622.8**	**83.3**	**1465.8**	**524.6**	**341.4**	**605.5**	**81.5**	**1553.0**	**7.5%**	**24.7%**	**-3.0%**	**-2.5%**	**5.7%**
Argentina	14.5	3.3	31.5	2.4	**51.7**	16.2	4.0	29.7	2.6	**52.4**	11.4%	20.6%	-6.1%	9.3%	**1.2%**
Brazil	95.8	50.6	426.0	57.8	**630.2**	108.5	71.3	413.2	58.2	**651.3**	12.9%	40.5%	-3.3%	0.6%	**3.1%**
Chile	9.4	18.4	23.4	7.5	**58.7**	10.5	20.7	26.5	7.6	**65.3**	11.6%	11.7%	12.9%	1.0%	**10.8%**
Colombia	0.2	1.2	59.8	1.8	**63.0**	0.1	3.3	54.5	1.9	**59.8**	-27.1%	174.6%	-9.2%	5.3%	**-5.3%**
Ecuador	0.2	^	25.3	0.4	**26.0**	0.2	^	22.6	0.5	**23.4**	6.9%	-6.0%	-11.0%	39.0%	**-10.2%**
Peru	2.4	1.1	29.1	0.5	**33.0**	3.9	1.4	32.0	0.5	**37.9**	65.8%	31.6%	9.8%	-2.0%	**14.3%**
Trinidad & Tobago	^	^	–	–	**^**	^	^	–	–	**^**	–	12.6%	–	–	**12.6%**
Venezuela	^	^	72.6	–	**72.7**	^	^	72.8	–	**72.9**	†	41.5%	0.0%	–	**0.0%**
Central America	4.3	3.5	25.4	9.9	**43.2**	3.5	3.9	28.6	9.8	**45.8**	-17.7%	9.4%	12.5%	-1.9%	**5.9%**
Other Caribbean	2.1	3.0	1.6	1.2	**7.9**	2.0	3.7	1.9	1.0	**8.6**	-3.6%	22.7%	19.3%	-16.7%	**9.2%**
Other South America	5.2	1.0	60.3	3.8	**70.4**	5.2	1.0	53.8	5.1	**65.1**	-0.3%	2.0%	-11.1%	32.3%	**-7.7%**
Total S. & Cent. America	**134.1**	**82.2**	**755.2**	**85.3**	**1056.7**	**150.3**	**109.3**	**735.7**	**87.2**	**1082.5**	**11.8%**	**32.6%**	**-2.8%**	**2.0%**	**2.2%**
Austria	8.0	6.4	40.7	4.6	**59.7**	9.2	9.4	44.8	4.6	**68.1**	14.3%	47.0%	9.8%	1.7%	**13.8%**
Belgium	15.4	7.8	0.4	3.8	**27.5**	13.2	8.6	0.5	3.2	**25.5**	-15.0%	9.5%	29.7%	-15.0%	**-7.4%**
Bulgaria	1.6	3.5	3.1	1.9	**10.1**	1.4	5.4	2.9	1.7	**11.4**	-13.3%	53.6%	-6.8%	-8.4%	**13.0%**
Croatia	2.6	0.4	8.2	1.1	**12.2**	2.7	0.8	6.8	1.0	**11.3**	3.3%	97.4%	-17.3%	-5.4%	**-8.0%**
Cyprus	0.2	0.8	–	0.1	**1.1**	0.2	1.1	–	0.1	**1.3**	-3.1%	29.2%	–	1.4%	**21.7%**
Czech Republic	0.7	2.9	2.4	5.2	**11.1**	0.7	3.6	2.7	5.5	**12.5**	0.2%	23.8%	12.1%	5.7%	**11.4%**
Denmark	19.4	3.4	^	6.4	**29.2**	20.6	3.9	^	5.8	**30.3**	5.7%	15.5%	-0.9%	-10.2%	**3.3%**
Estonia	0.7	0.7	^	1.4	**2.8**	1.0	1.1	^	1.4	**3.6**	52.9%	55.8%	31.6%	-0.1%	**27.5%**
Finland	15.0	0.7	15.2	11.3	**42.3**	20.7	1.3	14.3	10.3	**46.5**	36.9%	78.3%	-6.1%	-9.8%	**9.7%**
France	51.4	21.3	55.7	9.5	**137.9**	47.1	23.2	70.9	9.6	**150.8**	-8.5%	8.5%	26.9%	0.8%	**9.1%**
Germany	141.8	63.9	19.9	49.6	**275.1**	138.9	74.1	22.2	48.8	**284.0**	-2.3%	15.7%	11.3%	-1.8%	**3.0%**
Greece	11.0	8.9	3.8	0.7	**24.4**	11.9	10.2	3.2	0.7	**26.1**	8.1%	14.0%	-15.9%	10.6%	**6.6%**
Hungary	0.6	6.9	0.2	1.6	**9.4**	0.7	9.0	0.2	1.7	**11.6**	1.6%	29.2%	3.9%	10.1%	**23.5%**
Iceland	^	^	14.2	6.0	**20.2**	^	^	13.6	6.0	**19.6**	70.2%	-11.4%	-4.8%	-0.9%	**-3.6%**
Ireland	11.9	0.6	0.9	0.8	**14.3**	11.6	1.1	0.8	0.8	**14.3**	-2.3%	73.1%	-18.7%	-3.5%	**-0.1%**
Italy	23.6	30.7	40.5	21.7	**116.6**	22.3	36.2	55.2	19.6	**133.3**	-5.8%	17.6%	35.9%	-10.2%	**14.0%**
Latvia	0.3	0.2	3.8	0.7	**5.0**	0.3	0.4	3.2	0.5	**4.4**	2.3%	68.1%	-15.8%	-18.9%	**-11.2%**
Lithuania	2.5	0.7	0.5	0.8	**4.4**	3.5	1.4	0.4	0.7	**6.1**	38.0%	100.6%	-3.7%	-2.5%	**36.5%**
Luxembourg	0.5	0.3	0.1	0.4	**1.2**	0.5	0.5	0.1	0.5	**1.6**	-4.7%	62.6%	22.0%	34.2%	**24.6%**
Netherlands	29.5	19.6	0.1	7.6	**56.8**	33.4	21.6	0.1	7.2	**62.3**	12.7%	10.3%	22.2%	-5.9%	**9.4%**
North Macedonia	0.2	0.4	1.6	0.1	**2.2**	0.2	0.3	1.4	0.1	**1.9**	5.0%	-12.5%	-16.0%	-3.8%	**-13.6%**
Norway	14.0	0.4	136.7	0.2	**151.3**	14.5	0.6	139.6	0.1	**154.8**	3.7%	54.4%	1.8%	-47.3%	**2.0%**
Poland	24.2	11.1	2.4	8.2	**45.9**	25.9	14.8	2.2	8.0	**50.9**	6.7%	33.3%	-9.8%	-2.4%	**10.6%**
Portugal	13.1	5.2	12.0	4.0	**34.4**	14.5	7.1	14.8	3.9	**40.2**	9.7%	37.2%	22.8%	-3.9%	**16.8%**
Romania	7.5	2.2	18.1	0.4	**28.4**	6.4	4.6	13.8	0.5	**25.2**	-16.0%	105.6%	-24.1%	11.6%	**-11.2%**
Slovakia	^	0.6	4.7	1.4	**6.7**	^	0.7	4.9	1.5	**7.1**	–	14.5%	5.0%	2.7%	**5.3%**
Slovenia	^	1.0	5.0	0.3	**6.3**	^	1.8	5.3	0.3	**7.4**	3.5%	85.8%	5.7%	-10.6%	**17.4%**
Spain	64.3	48.6	25.0	5.9	**143.7**	62.6	56.5	34.4	5.9	**159.4**	-2.9%	15.9%	37.4%	1.1%	**10.6%**
Sweden	34.1	3.1	66.1	11.7	**115.0**	40.5	4.1	64.6	10.4	**119.6**	18.6%	33.4%	-2.5%	-11.7%	**3.8%**
Switzerland	0.2	4.6	37.0	2.0	**43.8**	0.2	5.9	44.9	1.6	**52.6**	0.9%	27.3%	21.2%	-21.7%	**19.8%**
Türkiye	34.1	22.1	64.0	20.0	**140.2**	36.6	30.4	74.9	20.3	**162.2**	7.1%	37.1%	16.7%	1.6%	**15.4%**
Ukraine	0.9	5.7	12.7	1.0	**20.4**	0.3	6.1	12.8	0.8	**19.8**	-73.1%	5.8%	–	-28.0%	**-3.2%**
United Kingdom	82.3	13.9	5.5	34.1	**135.8**	84.1	14.8	5.8	40.1	**144.7**	1.8%	6.2%	3.8%	17.3%	**6.2%**
Other Europe	2.3	0.8	42.0	0.3	**45.5**	2.6	1.6	36.6	0.4	**41.3**	11.2%	90.3%	-13.0%	22.2%	**-9.6%**
Total Europe	**614.1**	**299.5**	**642.6**	**224.6**	**1780.8**	**628.0**	**362.2**	**698.0**	**223.5**	**1911.7**	**2.0%**	**20.6%**	**8.3%**	**-0.8%**	**7.1%**
Azerbaijan	0.1	0.1	1.8	0.1	**2.0**	0.1	0.5	2.9	0.1	**3.6**	-8.4%	579.3%	64.8%	4.0%	**80.0%**
Belarus	0.2	0.2	0.3	0.5	**1.1**	0.2	0.1	0.3	0.5	**1.1**	0.0%	-2.8%	-10.6%	0.0%	**-3.2%**
Kazakhstan	3.8	1.9	8.8	^	**14.5**	4.9	1.9	11.3	^	**18.0**	29.6%	-0.3%	27.5%	-66.4%	**24.4%**
Russian Federation	4.7	2.6	200.9	0.8	**209.1**	4.6	2.9	210.5	0.8	**218.9**	-4.1%	10.7%	4.5%	-2.8%	**4.4%**
Turkmenistan	–	^	^	–	**^**	–	^	^	–	**^**	–	–	†	–	**†**
Uzbekistan	^	0.6	7.0	–	**7.6**	0.5	4.3	8.2	–	**13.0**	7084.9%	590.8%	16.9%	–	**70.4%**
Other CIS	0.2	0.9	34.6	^	**35.7**	0.2	1.1	36.1	^	**37.4**	12.8%	28.8%	3.9%	33.2%	**4.6%**
Total CIS	**9.0**	**6.2**	**253.4**	**1.5**	**270.0**	**10.4**	**10.9**	**269.2**	**1.5**	**292.1**	**16.3%**	**74.8%**	**6.0%**	**-1.2%**	**7.9%**
Iran	1.2	0.7	22.8	^	**24.7**	1.2	0.9	18.9	^	**21.1**	3.1%	31.4%	-17.5%	53.5%	**-15.1%**
Iraq	–	0.4	1.4	–	**1.8**	–	0.4	1.4	–	**1.8**	–	–	†	–	**†**
Israel	0.4	8.2	^	0.1	**8.7**	0.4	10.1	^	0.1	**10.7**	–	23.2%	-0.1%	–	**21.8%**
Kuwait	^	0.1	–	–	**0.2**	^	0.1	–	–	**0.2**	†	-6.7%	–	–	**-5.3%**
Oman	0.1	1.9	–	–	**2.0**	0.1	1.9	–	–	**2.0**	–	†	–	–	**–**
Qatar	–	1.9	–	0.1	**2.0**	–	2.0	–	0.1	**2.1**	–	5.0%	–	†	**4.6%**
Saudi Arabia	1.6	3.1	–	–	**4.7**	1.6	8.2	–	–	**9.8**	–	162.6%	–	–	**107.8%**
United Arab Emirates	0.1	14.4	–	0.2	**14.7**	0.2	15.2	–	0.2	**15.6**	231.8%	5.3%	–	†	**6.2%**
Other Middle East	1.6	7.3	1.3	^	**10.3**	1.7	7.9	1.5	^	**11.1**	–	8.7%	14.6%	–	**8.1%**
Total Middle East	**5.1**	**38.0**	**25.5**	**0.5**	**69.1**	**5.2**	**46.8**	**21.8**	**0.5**	**74.4**	**3.5%**	**22.8%**	**-14.9%**	**2.4%**	**7.3%**
Algeria	^	0.7	^	–	**0.7**	^	0.7	0.1	–	**0.8**	–	†	76.0%	–	**3.0%**
Egypt	6.0	4.9	15.1	–	**26.0**	6.1	6.1	14.4	–	**26.6**	2.2%	22.6%	-4.8%	–	**2.0%**
Morocco	6.5	2.1	0.2	–	**8.8**	7.5	2.1	0.1	–	**9.8**	14.5%	†	-13.3%	–	**10.5%**
South Africa	11.6	6.4	2.0	0.5	**20.5**	11.1	6.6	1.1	0.5	**19.3**	-4.6%	2.8%	-45.2%	†	**-6.1%**
Eastern Africa	2.9	2.0	81.5	8.4	**94.9**	3.0	2.0	82.4	9.5	**97.0**	1.0%	4.1%	0.8%	12.5%	**1.9%**
Middle Africa	^	0.3	38.4	0.1	**38.8**	^	0.4	39.3	0.1	**39.8**	–	12.5%	2.1%	†	**2.2%**
Western Africa	1.0	1.5	27.9	0.4	**30.8**	1.0	1.8	30.0	0.4	**33.2**	0.1%	17.8%	7.4%	†	**7.6%**
Other Northern Africa	0.3	0.5	^	–	**0.9**	0.3	0.7	^	–	**1.0**	-0.6%	29.9%	73.4%	–	**18.3%**
Other Southern Africa	–	0.5	2.1	0.3	**2.9**	–	0.5	2.7	0.3	**3.5**	–	-0.1%	27.9%	-6.4%	**19.1%**
Total Africa	**28.4**	**19.0**	**167.1**	**9.7**	**224.2**	**29.1**	**20.9**	**170.1**	**10.8**	**230.8**	**2.0%**	**9.7%**	**1.5%**	**10.6%**	**2.7%**
Australia	31.9	45.0	15.1	3.1	**95.1**	32.7	50.2	12.8	3.0	**98.8**	2.4%	11.3%	-15.0%	-4.7%	**3.6%**
Bangladesh	^	0.9	0.7	^	**1.6**	0.1	1.3	1.0	^	**2.4**	484.5%	36.7%	45.0%	†	**44.5%**
China	885.9	584.2	1226.0	198.2	**2894.2**	997.0	839.0	1354.3	208.5	**3398.8**	12.2%	43.2%	10.2%	4.9%	**17.1%**
China Hong Kong SAR	^	0.3	–	0.2	**0.5**	^	0.3	–	0.2	**0.5**	–	–	–	11.1%	**3.7%**
India	82.1	116.1	149.4	23.0	**370.7**	81.5	136.8	156.5	22.2	**397.1**	-1.0%	17.4%	4.5%	-3.6%	**6.8%**
Indonesia	0.5	0.7	24.6	39.4	**65.2**	0.5	0.9	26.5	44.5	**72.3**	–	29.4%	7.4%	12.5%	**10.7%**
Japan	10.0	96.4	74.5	42.0	**222.9**	11.5	96.7	79.4	45.4	**233.1**	15.6%	0.1%	6.3%	7.8%	**4.3%**
Malaysia	–	3.3	32.4	1.5	**37.2**	–	3.5	34.4	1.5	**39.4**	–	7.2%	5.7%	†	**5.6%**
New Zealand	3.2	0.4	26.6	8.9	**39.1**	4.0	0.6	23.8	9.8	**38.2**	21.9%	61.6%	-10.7%	9.9%	**-2.6%**
Pakistan	4.4	1.3	38.5	0.7	**44.9**	3.5	1.7	39.0	0.8	**44.9**	-20.9%	28.0%	1.2%	8.9%	**-0.1%**
Philippines	1.3	2.6	10.3	12.1	**26.4**	1.3	3.8	11.1	12.1	**28.3**	-2.7%	48.2%	7.3%	-0.9%	**7.0%**
Singapore	–	0.9	–	0.8	**1.8**	–	1.3	–	0.8	**2.1**	–	36.4%	–	0.5%	**19.4%**
South Korea	3.4	33.2	3.7	18.7	**59.1**	3.4	32.7	4.3	20.3	**60.7**	-1.1%	-1.8%	15.4%	8.4%	**2.5%**
Sri Lanka	0.8	1.7	5.9	0.1	**8.5**	0.8	2.6	7.0	0.1	**10.4**	–	51.4%	18.3%	–	**23.0%**
Taiwan	6.2	12.9	4.0	2.0	**25.1**	10.3	14.9	4.2	2.1	**31.5**	65.1%	15.1%	5.8%	2.9%	**25.1%**
Thailand	3.7	5.1	6.6	14.3	**29.8**	3.4	5.4	6.4	14.4	**29.6**	-9.8%	5.4%	-2.9%	0.4%	**-0.7%**
Vietnam	11.6	25.7	80.6	0.9	**118.8**	12.7	25.9	88.7	1.0	**128.4**	9.7%	0.4%	9.7%	18.6%	**7.8%**
Other Asia Pacific	0.6	2.3	95.3	0.7	**98.9**	0.6	2.7	103.1	0.7	**107.2**	4.4%	19.6%	7.9%	3.4%	**8.1%**
Total Asia Pacific	**1045.6**	**933.0**	**1794.2**	**366.7**	**4139.4**	**1163.4**	**1220.3**	**1952.6**	**387.4**	**4723.7**	**11.0%**	**30.4%**	**8.5%**	**5.4%**	**13.8%**
Total World	**2322.7**	**1650.9**	**4260.8**	**771.6**	**9006.0**	**2511.0**	**2111.7**	**4452.9**	**792.4**	**9868.1**	**7.8%**	**27.6%**	**4.2%**	**2.4%**	**9.3%**
of which: OECD	1145.2	761.5	1391.1	386.9	**3684.7**	1202.9	898.1	1439.1	390.3	**3930.3**	4.7%	17.6%	3.2%	0.6%	**6.4%**
Non-OECD	1177.5	889.4	2869.6	384.8	**5321.3**	1308.2	1213.6	3013.9	402.1	**5937.8**	10.8%	36.1%	4.7%	4.2%	**11.3%**
European Union	480.1	251.9	328.8	160.9	**1221.7**	489.6	302.9	368.5	154.2	**1315.1**	1.7%	19.9%	11.8%	-4.4%	**7.4%**

* Based on gross generation and not accounting for cross-border electricity supply.
‡ Includes electricity generated from: geothermal, biomass and other sources of renewable energy (not already itemised).
^ Less than 0.05.
† Less than 0.05%.
A more extensive time series of renewables by source is available at **https://www.energyinst.org/statistical-review**.
Notes: Annual changes and share of total are calculated using terawatt-hours.
Growth rates are adjusted for leap years.

Renewable energy Biofuels production*

Thousand barrels of oil equivalent per day	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	22	22	23	22	21	23	22	22	22	24	**33**	39.1%	4.2%	1.4%
Mexico	–	–	0	0	0	0	0	1	1	1	**1**	†	–	†
US	597	614	655	678	701	693	632	685	729	803	**856**	6.7%	3.7%	37.4%
Total North America	**618**	**637**	**679**	**701**	**723**	**717**	**655**	**708**	**751**	**827**	**890**	**7.6%**	**3.7%**	**38.9%**
Argentina	49	38	53	58	51	46	27	38	43	25	**31**	23.9%	-4.6%	1.3%
Brazil	329	353	331	334	401	429	411	404	409	473	**510**	7.9%	4.5%	22.3%
Colombia	13	13	13	12	14	13	12	15	15	15	**17**	11.5%	3.0%	0.7%
Other S. & Cent. America	7	7	8	7	8	10	9	11	10	11	**12**	15.1%	6.0%	0.5%
Total S. & Cent. America	**398**	**410**	**404**	**411**	**475**	**498**	**459**	**468**	**477**	**524**	**570**	**8.9%**	**3.7%**	**24.9%**
Austria	7	8	7	7	7	7	7	7	8	8	**8**	–	0.9%	0.3%
Belgium	11	7	7	8	8	8	9	8	8	9	**10**	2.5%	-1.2%	0.4%
Finland	7	11	4	4	11	7	9	12	12	10	**11**	8.1%	4.6%	0.5%
France	47	49	45	44	50	47	43	36	34	33	**29**	-12.3%	-4.6%	1.3%
Germany	64	59	60	61	63	66	63	66	67	69	**66**	-4.1%	0.3%	2.9%
Italy	10	10	10	12	13	15	17	21	20	20	**20**	0.7%	7.5%	0.9%
Netherlands	33	32	28	37	35	38	37	39	37	41	**39**	-3.8%	1.6%	1.7%
Poland	14	15	17	17	17	18	18	19	20	20	**20**	0.8%	3.8%	0.9%
Portugal	6	6	6	6	6	7	6	5	6	6	**5**	-13.8%	-1.3%	0.2%
Spain	19	21	22	35	40	39	33	31	31	28	**29**	2.4%	4.2%	1.3%
Sweden	4	4	4	3	7	8	8	9	9	10	**17**	62.1%	14.6%	0.7%
United Kingdom	7	6	10	14	13	11	12	12	13	15	**14**	-7.6%	6.7%	0.6%
Other Europe	26	28	30	32	35	40	39	40	41	43	**45**	4.9%	5.6%	2.0%
Total Europe	**255**	**256**	**250**	**281**	**305**	**310**	**301**	**305**	**304**	**312**	**312**	**†**	**2.0%**	**13.6%**
Total CIS	**0**	**0**	**0**	**0**	**0**	**0**	**–**	**^**	**0**	**–**	**–**	**–**	**-100.0%**	**–**
Total Middle East	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**	**2**	**19.4%**	**19.0%**	**0.1%**
Total Africa	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**0.2%**	**-2.5%**	**0.1%**
Australia	5	4	2	2	2	3	2	2	2	2	**2**	5.4%	-7.1%	0.1%
China	47	40	39	31	44	53	56	58	72	81	**106**	30.3%	8.4%	4.6%
India	5	10	12	11	19	21	23	31	44	55	**70**	25.9%	30.4%	3.1%
Indonesia	59	24	54	50	91	124	126	151	174	194	**205**	5.7%	13.3%	8.9%
South Korea	7	8	8	8	13	13	13	11	13	13	**14**	9.3%	6.9%	0.6%
Thailand	34	36	33	36	40	44	44	39	36	40	**39**	-1.0%	1.5%	1.7%
Other Asia Pacific	33	37	33	31	35	53	45	48	52	66	**77**	17.2%	9.0%	3.4%
Total Asia Pacific	**189**	**159**	**180**	**170**	**243**	**311**	**310**	**341**	**394**	**451**	**514**	**13.8%**	**10.5%**	**22.4%**
Total World	**1463**	**1465**	**1516**	**1564**	**1748**	**1838**	**1727**	**1825**	**1929**	**2118**	**2290**	**8.1%**	**4.6%**	**100.0%**
of which: OECD	895	914	948	998	1053	1048	976	1034	1076	1159	**1224**	5.6%	3.2%	53.5%
Non-OECD	569	551	568	566	695	790	751	790	853	958	**1066**	11.2%	6.5%	46.5%
European Union	246	248	237	262	288	293	286	289	287	293	**294**	0.4%	1.8%	12.8%

Biofuels production by fuel type

Thousand barrels of oil equivalent per day	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	2024	2014–24	2024
Biogasoline														
Canada & Mexico	17	16	17	17	17	18	16	16	17	17	**17**	2.0%	0.4%	1.4%
US	516	534	554	575	580	569	501	542	554	562	**583**	3.8%	1.2%	48.5%
Brazil	278	294	275	270	322	341	315	303	317	361	**376**	3.9%	3.0%	31.2%
Other S. & Cent. America	16	18	19	20	22	22	18	22	22	23	**26**	13.4%	4.7%	2.1%
Europe	51	52	52	55	56	55	52	57	59	61	**61**	0.3%	1.8%	5.1%
CIS	^	^	^	^	^	–	–	^	0	–	**–**	–	-100.0%	–
Middle East	0	0	0	–	–	–	–	–	–	–	**–**	–	-100.0%	–
Africa	2	2	2	2	1	2	2	2	2	2	**2**	0.2%	-2.4%	0.2%
Asia Pacific	53	57	52	58	69	80	76	82	98	117	**138**	18.3%	10.1%	11.5%
Total World	**934**	**974**	**971**	**997**	**1067**	**1087**	**980**	**1024**	**1068**	**1142**	**1203**	**5.3%**	**2.6%**	**100.0%**
of which: OECD	591	608	628	652	661	647	575	620	634	644	**668**	3.7%	1.2%	55.6%
Non-OECD	343	365	343	345	407	439	405	404	434	498	**534**	7.3%	4.5%	44.4%
European Union	45	48	46	48	50	50	48	52	54	54	**54**	0.9%	1.8%	4.5%
Biodiesel														
Canada & Mexico	5	6	7	6	5	5	7	6	5	7	**16**	119.9%	12.3%	1.5%
US	80	80	101	104	121	124	131	144	175	240	**273**	13.4%	13.0%	25.1%
Brazil	51	58	56	64	79	88	95	100	93	112	**135**	20.6%	10.3%	12.4%
Other S. & Cent. America	53	40	54	57	52	47	30	43	45	28	**34**	22.3%	-4.2%	3.2%
Europe	204	204	199	225	249	255	249	249	245	251	**251**	†	2.1%	23.1%
CIS	0	0	0	0	0	0	–	–	–	–	**–**	–	-100.0%	–
Middle East	^	0	0	0	0	0	0	1	1	2	**2**	19.4%	47.8%	0.2%
Africa	^	0	0	^	^	^	^	^	^	^	**^**	†	-22.4%	†
Asia Pacific	136	102	128	112	174	231	235	258	296	335	**376**	12.2%	10.7%	34.6%
Total World	**529**	**491**	**545**	**567**	**681**	**751**	**747**	**801**	**860**	**975**	**1087**	**11.4%**	**7.5%**	**100.0%**
of which: OECD	304	306	320	347	392	401	402	414	441	515	**556**	7.9%	6.2%	51.1%
Non-OECD	225	186	225	221	289	351	346	387	419	460	**531**	15.4%	9.0%	48.9%
European Union	201	200	191	214	238	243	238	237	233	239	**240**	0.3%	1.8%	22.1%

Source: Includes data from S&P Global Commodity Insights; US Energy Information Administration.
* Includes biogasoline (such as ethanol) and biodiesel (which includes sustainable aviation fuels). Volumes have been adjusted for energy content.
^ Less than 0.5.
† Less than 0.05%.
Note: Annual changes and shares of total are calculated using thousand barrels a day oil equivalent figures.

Renewable energy Biofuels consumption*

Thousand barrels of oil equivalent per day	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	36	34	32	38	39	40	37	39	49	54	**53**	-2.4%	4.0%	2.4%
Mexico	3	3	3	4	4	4	5	4	4	5	**5**	0.2%	4.4%	0.2%
US	581	608	658	661	652	670	608	670	705	798	**842**	5.5%	3.8%	38.6%
Total North America	**620**	**645**	**693**	**703**	**695**	**715**	**650**	**714**	**759**	**857**	**899**	**4.9%**	**3.8%**	**41.2%**
Argentina	22	24	26	30	28	29	16	17	23	21	**24**	14.3%	0.5%	1.1%
Brazil	305	357	324	332	385	426	396	393	390	424	**434**	2.3%	3.6%	19.9%
Colombia	13	13	13	12	15	16	13	15	16	18	**18**	1.9%	3.6%	0.8%
Other S. & Cent. America	15	17	18	19	18	19	18	19	19	19	**20**	5.5%	2.8%	0.9%
Total S. & Cent. America	**356**	**411**	**380**	**393**	**447**	**489**	**442**	**444**	**447**	**481**	**495**	**2.9%**	**3.4%**	**22.7%**
Austria	8	9	9	9	8	8	7	8	7	9	**8**	-2.6%	0.2%	0.4%
Belgium	8	5	8	9	9	9	12	13	14	14	**14**	-0.1%	6.1%	0.6%
Finland	8	8	3	7	6	7	7	12	10	10	**11**	6.8%	2.9%	0.5%
France	52	53	53	54	53	55	40	46	50	53	**55**	3.9%	0.4%	2.5%
Germany	53	50	50	51	53	52	63	56	56	58	**49**	-15.4%	-0.7%	2.3%
Italy	20	22	19	20	23	24	24	26	26	25	**22**	-11.6%	0.9%	1.0%
Netherlands	7	6	5	6	10	13	15	15	19	18	**15**	-16.0%	8.0%	0.7%
Poland	13	12	8	11	17	18	19	20	21	24	**26**	9.5%	7.3%	1.2%
Portugal	5	7	5	5	5	5	5	6	6	6	**7**	10.7%	3.1%	0.3%
Spain	23	24	27	31	41	40	36	36	35	46	**33**	-29.1%	3.5%	1.5%
Sweden	12	14	18	17	20	20	21	23	28	25	**7**	-73.0%	-5.6%	0.3%
United Kingdom	22	17	18	17	25	33	31	27	37	43	**45**	3.6%	7.4%	2.0%
Other Europe	37	38	42	50	51	61	63	63	61	61	**66**	7.8%	6.0%	3.0%
Total Europe	**268**	**264**	**265**	**285**	**322**	**346**	**342**	**351**	**370**	**392**	**357**	**-8.9%**	**2.9%**	**16.4%**
Total CIS	**^**	**^**	**1**	**2**	**2**	**3**	**3**	**5**	**6**	**8**	**10**	**23.5%**	**35.5%**	**0.4%**
Total Middle East	**^**	**^**	**^**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**22.7%**	**24.8%**	**0.1%**
Total Africa	**1**	**1**	**1**	**1**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**0.8%**	**5.3%**	**0.1%**
Australia	5	4	2	2	3	2	2	2	2	2	**2**	-2.6%	-8.6%	0.1%
China	60	44	45	42	54	58	44	46	47	51	**60**	17.2%	†	2.7%
India	5	6	12	9	17	21	20	32	45	55	**77**	38.3%	31.8%	3.5%
Indonesia	27	13	44	38	55	94	123	137	154	181	**181**	-0.3%	20.8%	8.3%
South Korea	7	8	10	11	13	13	13	13	13	13	**14**	9.5%	6.8%	0.7%
Thailand	28	30	31	34	37	42	42	38	34	37	**37**	-0.9%	2.7%	1.7%
Other Asia Pacific	18	22	24	25	27	31	33	34	43	46	**48**	6.0%	10.2%	2.2%
Total Asia Pacific	**150**	**127**	**168**	**160**	**206**	**261**	**277**	**302**	**338**	**385**	**418**	**8.6%**	**10.8%**	**19.2%**
Total World	**1396**	**1448**	**1509**	**1544**	**1674**	**1817**	**1717**	**1818**	**1923**	**2126**	**2183**	**2.7%**	**4.6%**	**100.0%**
of which: OECD	912	933	982	1012	1047	1087	1015	1090	1156	1279	**1287**	0.6%	3.5%	58.9%
Non-OECD	484	515	526	532	628	730	702	728	767	848	**896**	5.7%	6.4%	41.1%
European Union	240	240	237	253	284	297	298	310	320	335	**297**	-11.4%	2.1%	13.6%

Biofuels consumption by fuel type

Thousand barrels of oil equivalent per day	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	2024	2014–24	2024
Biogasoline														
Canada & Mexico	30	30	30	32	34	34	30	32	38	42	**43**	2.2%	3.6%	3.8%
US	485	503	516	522	520	525	456	503	506	513	**513**	†	0.6%	45.4%
Brazil	255	299	268	269	305	339	301	292	296	312	**299**	-4.2%	1.6%	26.4%
Other S. & Cent. America	20	23	25	26	28	29	24	26	27	29	**30**	3.2%	4.1%	2.7%
Europe	52	53	51	53	57	61	57	66	75	84	**88**	4.4%	5.5%	7.8%
CIS	–	–	^	1	1	2	2	3	4	5	**6**	20.7%	–	0.5%
Middle East	^	^	^	^	^	^	^	^	^	0	**0**	1.2%	-6.1%	†
Africa	1	1	1	1	2	2	2	2	2	2	**2**	0.8%	5.3%	0.2%
Asia Pacific	54	61	70	65	80	91	84	96	109	122	**149**	22.3%	10.7%	13.2%
Total World	**898**	**970**	**961**	**970**	**1027**	**1083**	**956**	**1021**	**1058**	**1111**	**1131**	**1.8%**	**2.3%**	**100.0%**
of which: OECD	577	596	608	619	624	633	555	611	629	652	**656**	0.7%	1.3%	58.0%
Non-OECD	321	373	353	351	403	451	401	409	429	459	**475**	3.5%	4.0%	42.0%
European Union	42	43	41	43	46	50	47	53	59	65	**67**	1.8%	4.7%	5.9%
Biodiesel														
Canada & Mexico	8	7	6	9	10	10	11	12	16	17	**14**	-13.4%	5.6%	1.4%
US	96	105	141	138	132	145	152	167	199	285	**329**	15.4%	13.1%	31.2%
Brazil	50	59	56	63	80	88	95	101	94	112	**135**	20.7%	10.3%	12.8%
Other S. & Cent. America	30	31	32	34	34	34	23	25	30	28	**31**	12.1%	0.4%	3.0%
Europe	217	211	214	232	265	285	286	285	295	308	**269**	-12.5%	2.2%	25.6%
CIS	^	^	1	1	1	1	1	2	2	3	**4**	28.6%	22.7%	0.3%
Middle East	–	–	^	^	1	1	1	1	1	1	**1**	24.3%	–	0.1%
Africa	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Asia Pacific	96	66	98	96	126	170	193	206	228	263	**269**	2.2%	10.9%	25.6%
Total World	**498**	**479**	**547**	**574**	**648**	**734**	**761**	**798**	**865**	**1016**	**1052**	**3.6%**	**7.8%**	**100.0%**
of which: OECD	335	337	374	393	423	454	460	478	526	627	**631**	0.6%	6.5%	60.0%
Non-OECD	163	142	173	181	225	280	301	319	339	389	**421**	8.4%	10.0%	40.0%
European Union	198	197	196	210	238	247	251	258	261	270	**230**	-14.6%	1.5%	21.9%

* Includes biogasoline (such as ethanol) and biodiesel (which includes sustainable aviation fuels). Volumes have been adjusted for energy content.
^ Less than 0.5.
† Less than 0.05%.

Nuclear energy Generation*

Terawatt-hours	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024
Canada	106.5	101.1	100.7	100.6	100.0	100.5	97.5	92.0	86.6	88.4	**85.5**	-3.6%	-2.2%	3.0%
Mexico	9.7	11.6	10.6	10.9	13.6	11.2	11.2	11.9	10.8	12.4	**12.3**	-0.9%	2.4%	0.4%
US	839.1	839.1	848.1	847.3	849.6	852.0	831.5	820.7	812.1	815.7	**823.1**	0.6%	-0.2%	29.2%
Total North America	**955.3**	**951.8**	**959.4**	**958.8**	**963.1**	**963.7**	**940.1**	**924.6**	**909.6**	**916.5**	**920.9**	**0.2%**	**-0.4%**	**32.7%**
Argentina	5.5	7.0	8.3	6.1	6.9	8.4	10.0	10.2	7.5	9.0	**10.4**	16.3%	6.6%	0.4%
Brazil	15.4	14.7	15.9	15.7	15.7	16.1	14.1	14.7	14.6	14.5	**15.8**	8.5%	0.3%	0.6%
Chile	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Colombia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Ecuador	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Peru	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Trinidad & Tobago	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Venezuela	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Central America	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other Caribbean	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other South America	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total S. & Cent. America	**20.9**	**21.8**	**24.1**	**21.8**	**22.5**	**24.6**	**24.1**	**24.9**	**22.0**	**23.5**	**26.2**	**11.5%**	**2.3%**	**0.9%**
Austria	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Belgium	33.7	26.1	43.5	42.2	28.6	43.5	34.4	50.3	43.9	32.9	**31.2**	-5.5%	-0.8%	1.1%
Bulgaria	15.9	15.4	15.8	15.5	16.1	16.6	16.6	16.5	16.5	16.2	**15.8**	-2.8%	-0.1%	0.6%
Croatia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Cyprus	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Czech Republic	30.3	26.8	24.1	28.3	29.9	30.2	30.0	30.7	31.0	30.4	**29.7**	-2.6%	-0.2%	1.1%
Denmark	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Estonia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Finland	23.6	23.2	23.2	22.5	22.8	23.9	23.3	23.6	25.3	34.3	**32.6**	-5.2%	3.3%	1.2%
France	436.5	437.4	403.2	398.4	412.9	399.0	353.8	379.4	294.7	338.2	**380.5**	12.2%	-1.4%	13.5%
Germany	97.1	91.8	84.6	76.3	76.0	75.1	64.4	69.1	34.7	7.2	**–**	-100.0%	-100.0%	–
Greece	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Hungary	15.6	15.8	16.1	16.1	15.7	16.3	16.1	16.0	15.8	15.9	**16.0**	0.3%	0.2%	0.6%
Iceland	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Ireland	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Italy	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Latvia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Lithuania	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Luxembourg	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Netherlands	4.1	4.1	4.0	3.4	3.5	3.9	4.1	3.8	4.2	4.0	**3.6**	-10.5%	-1.3%	0.1%
North Macedonia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Norway	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Poland	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Portugal	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Romania	11.7	11.6	11.3	11.5	11.4	11.3	11.5	11.3	11.1	11.2	**10.9**	-2.8%	-0.7%	0.4%
Slovakia	15.5	15.1	14.8	15.1	14.8	15.3	15.4	15.7	15.9	18.3	**18.2**	-0.7%	1.6%	0.6%
Slovenia	6.4	5.6	5.7	6.3	5.8	5.8	6.4	5.7	5.6	5.6	**5.8**	3.9%	-0.9%	0.2%
Spain	57.3	57.3	58.6	58.1	55.8	58.3	58.3	56.6	58.6	56.9	**54.6**	-4.2%	-0.5%	1.9%
Sweden	64.9	56.3	63.1	65.7	68.5	66.1	49.2	53.0	51.9	48.5	**50.6**	4.1%	-2.5%	1.8%
Switzerland	27.8	23.3	21.3	20.5	24.4	25.3	23.0	18.5	23.1	23.3	**23.0**	-1.8%	-1.9%	0.8%
Türkiye	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Ukraine	88.4	87.6	81.0	85.6	84.4	83.0	76.2	86.2	62.2	52.1	**53.0**	1.4%	-5.0%	1.9%
United Kingdom	63.7	70.3	71.7	70.3	65.1	56.2	50.2	46.1	47.4	40.6	**40.6**	-0.3%	-4.4%	1.4%
Other Europe	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total Europe	**992.4**	**968.0**	**941.9**	**935.9**	**935.8**	**929.7**	**832.9**	**882.5**	**742.0**	**735.6**	**766.1**	**3.9%**	**-2.6%**	**27.2%**
Azerbaijan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Belarus	–	–	–	–	–	–	0.3	5.8	4.7	11.7	**15.7**	33.4%	–	0.6%
Kazakhstan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Russian Federation	180.8	195.5	196.6	203.1	204.6	209.0	215.9	222.4	223.7	217.4	**215.7**	-1.0%	1.8%	7.7%
Turkmenistan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Uzbekistan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other CIS	2.5	2.8	2.4	2.6	2.1	2.2	2.8	2.0	2.8	2.7	**2.8**	4.2%	1.4%	0.1%
Total CIS	**183.2**	**198.3**	**199.0**	**205.8**	**206.7**	**211.2**	**219.0**	**230.2**	**231.2**	**231.8**	**234.2**	**0.8%**	**2.5%**	**8.3%**
Iran	4.1	3.5	6.5	7.0	6.9	6.4	6.3	3.5	6.6	6.6	**7.3**	10.4%	6.1%	0.3%
Iraq	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Israel	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Kuwait	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Oman	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Qatar	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
United Arab Emirates	–	–	–	–	–	–	1.6	10.5	20.1	34.4	**40.6**	17.6%	–	1.4%
Other Middle East	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total Middle East	**4.1**	**3.5**	**6.5**	**7.0**	**6.9**	**6.4**	**8.0**	**14.1**	**26.7**	**41.1**	**48.0**	**16.5%**	**28.0%**	**1.7%**
Algeria	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Egypt	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Morocco	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
South Africa	13.8	12.2	15.0	14.2	11.6	13.3	9.9	12.4	10.1	8.1	**7.8**	-4.0%	-5.5%	0.3%
Eastern Africa	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Middle Africa	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Western Africa	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other Northern Africa	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other Southern Africa	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total Africa	**13.8**	**12.2**	**15.0**	**14.2**	**11.6**	**13.3**	**9.9**	**12.4**	**10.1**	**8.1**	**7.8**	**-4.0%**	**-5.5%**	**0.3%**
Australia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Bangladesh	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
China	133.2	171.4	213.2	248.1	295.0	348.7	366.2	407.5	417.8	434.7	**450.9**	3.4%	13.0%	16.0%
China Hong Kong SAR	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
India	34.7	38.3	37.9	37.4	39.1	45.2	44.6	43.9	46.2	48.2	**54.7**	13.2%	4.7%	1.9%
Indonesia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Japan	–	4.5	17.7	29.1	49.1	65.6	43.0	61.2	51.8	77.5	**84.9**	9.3%	–	3.0%
Malaysia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
New Zealand	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Pakistan	4.7	4.3	5.3	8.1	9.2	9.2	9.5	15.7	22.2	22.4	**22.8**	1.6%	17.2%	0.8%
Philippines	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Singapore	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
South Korea	156.4	164.8	162.0	148.4	133.5	145.9	160.2	158.0	176.1	180.5	**188.8**	4.3%	1.9%	6.7%
Sri Lanka	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Taiwan	42.4	36.5	31.7	22.4	27.7	32.3	31.4	27.8	23.8	17.8	**12.2**	-31.8%	-11.7%	0.4%
Thailand	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Vietnam	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other Asia Pacific	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total Asia Pacific	**371.4**	**419.7**	**467.7**	**493.6**	**553.6**	**646.9**	**655.0**	**714.1**	**737.8**	**781.1**	**814.2**	**4.0%**	**8.2%**	**28.9%**
Total World	**2541.1**	**2575.3**	**2613.7**	**2637.0**	**2700.2**	**2795.8**	**2689.0**	**2802.8**	**2679.4**	**2737.6**	**2817.5**	**2.6%**	**1.0%**	**100.0%**
of which: OECD	1988.3	1974.5	1973.0	1959.6	1969.7	1994.1	1872.0	1912.4	1789.7	1830.6	**1881.0**	2.5%	-0.6%	66.8%
Non-OECD	552.9	600.9	640.7	677.4	730.5	801.6	817.0	890.4	889.7	907.0	**936.4**	3.0%	5.4%	49.8%
European Union	812.5	786.8	767.9	759.5	761.9	765.3	683.5	731.7	609.3	619.6	**649.5**	4.5%	-2.2%	69.4%

* Based on gross generation and not accounting for cross-border electricity supply.
Notes: Annual changes and share of total are calculated using terawatt-hours figures.
Growth rates are adjusted for leap years.

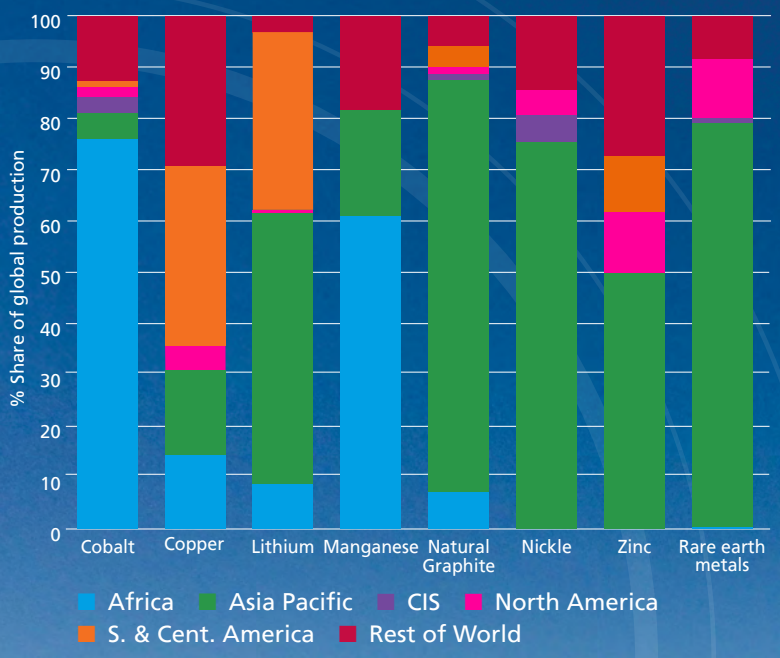
Key minerals

Across minerals key to the energy transition, cobalt saw the largest growth in production in 2024 at 33%. This was largely driven by the 44% increase in cobalt production in the Democratic Republic of Congo, which now has a 74% share of global cobalt production. Lithium saw the second largest increase at 16%, and, despite a 4% reduction in lithium production in 2024, Australia remains the leading producer with a 36% share of global production. South and Central America was responsible for 70% of global lithium production growth in 2024, with Argentina and Brazil roughly doubling their production in a single year. Chile also recorded an 18% growth in production and remains the second-largest lithium producer with a 23% share of global output.

Production across all minerals in Africa increased on average by 4% in 2024, and the region now accounts for 27% of global mineral production. In particular, the region is dominating the Manganese market, with South Africa and Gabon collectively responsible for over 57% of global production in 2024.

China maintained its dominance in the critical minerals industry, notably accounting for 71% of global rare earth metals production and 74% of global natural graphite production. Collectively, China and Australia are home to over 32% of total known global reserves of the key minerals needed for the energy transition. Apart from natural graphite, all minerals' reserves to production (R/P) ratios fell in 2024, reflective of the increasing demand for minerals in the energy transition.

In 2024, the Asia Pacific and Africa regions produced 57% of the key metals and materials needed by the global energy system.



On average, key mineral prices fell globally by 16% in 2024

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Key minerals Production and reserves

Cobalt production and reserves

Mine production

Thousand tonnes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024	Reserves at end of 2024	Reserves Share 2024	Reserves R/P ratio
Australia	6.2	6.0	5.5	5.8	4.9	5.7	5.6	5.3	5.8	5.2	**3.6**	-31.0%	-5.3%	1.3%	1700	15.6%	472
Canada	3.9	4.3	4.2	3.7	3.5	3.3	4.5	4.4	3.1	4.2	**4.5**	6.6%	1.4%	1.7%	220	2.0%	49
China	2.8	2.6	2.3	2.5	2.0	2.5	2.2	2.2	1.8	1.8	**1.8**	–	-4.6%	0.6%	140	1.3%	80
DR Congo	76.5	84.4	69.0	90.3	109.4	78.0	86.6	93.1	115.4	139.8	**200.8**	43.6%	10.1%	74.1%	6000	55.2%	30
Cuba	3.7	4.0	3.9	3.9	3.5	3.8	3.8	4.0	3.8	3.2	**3.6**	11.5%	-0.2%	1.3%	500	4.6%	139
Madagascar	3.4	4.0	3.8	3.1	2.9	2.9	0.8	2.0	3.3	3.5	**2.6**	-25.7%	-2.6%	1.0%	100	0.9%	38
Morocco	2.2	2.3	2.7	2.5	1.8	2.4	2.4	1.8	1.7	1.7	**1.7**	–	-2.4%	0.6%	13	0.1%	8
New Caledonia	4.0	3.6	3.2	2.8	2.1	1.7	2.2	1.5	1.8	1.8	**1.8**	–	-7.9%	0.7%	54	0.5%	31
Papua New Guinea	2.1	2.5	2.2	3.3	3.3	2.9	2.9	3.0	3.0	3.1	**2.8**	-8.8%	2.8%	1.0%	62	0.6%	22
Philippines	4.6	4.3	4.0	4.6	4.8	5.1	4.9	4.3	4.7	4.5	**4.1**	-7.8%	-1.1%	1.5%	260	2.4%	63
Russian Federation	6.3	6.2	5.5	5.9	6.1	6.3	9.7	8.0	9.2	8.7	**8.7**	–	3.3%	3.2%	250	2.3%	29
South Africa	3.0	2.9	2.3	2.3	2.3	2.1	1.8	1.2	1.0	0.4	**0.6**	47.2%	-15.5%	0.2%	36	0.3%	66
Zambia	4.6	3.0	5.0	2.6	1.6	0.4	0.3	0.2	0.3	0.3	**0.3**	–	-25.1%	0.1%	270	2.5%	1071
Rest of World	7.5	7.1	4.8	4.0	2.8	3.0	3.7	6.5	13.7	25.3	**34.1**	35.0%	16.4%	12.6%	1268	11.7%	37
Total World	**130.7**	**137.2**	**118.4**	**137.3**	**150.9**	**120.0**	**131.5**	**137.5**	**168.3**	**203.4**	**270.8**	**33.2%**	**7.6%**	**100.0%**	**10873.3**	**100.0%**	**40**

Sources: includes data from US Geological Survey, British Geological Survey ©UKRI and World Mining Data. **Note:** Rest of World is the sum of only recorded reserves.

Lithium production and reserves

Mine production

Thousand tonnes of Lithium content	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024	Reserves at end of 2024	Reserves Share 2024	Reserves R/P ratio
Argentina	3.2	3.6	5.8	5.7	6.4	6.3	5.9	6.0	6.4	8.6	**18.0**	108.6%	18.9%	7.4%	4000	14.2%	222
Australia	12.4	11.9	14.0	21.3	57.0	45.0	39.7	55.3	74.7	91.7	**88.0**	-4.0%	21.7%	36.0%	7000	24.9%	80
Brazil	0.2	0.1	0.2	0.3	1.0	2.2	1.4	1.7	2.6	5.3	**10.0**	90.1%	51.2%	4.1%	390	1.4%	39
Chile	10.8	9.8	13.6	14.2	17.0	19.2	21.6	28.2	48.8	48.1	**56.9**	18.4%	18.0%	23.3%	9300	33.1%	163
China	2.3	2.0	2.3	6.8	7.1	10.8	13.3	14.0	22.6	35.7	**41.0**	14.8%	33.4%	16.8%	3000	10.7%	73
Portugal	0.3	0.3	0.4	0.8	1.2	0.9	0.3	0.9	0.4	0.4	**0.4**	–	3.8%	0.2%	60	0.2%	158
US	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.6	0.6	**0.9**	49.7%	0.2%	0.4%	1800	6.4%	1955
Zimbabwe	0.9	0.9	1.0	0.8	1.6	1.2	0.4	0.7	1.0	14.9	**22.0**	47.7%	37.7%	9.0%	480	1.7%	22
Rest of World	^	–	^	0.1	3.0	0.4	0.1	0.1	0.7	6.1	**7.4**	20.9%	80.4%	3.0%	2078	7.4%	280
Total World	**31.0**	**29.5**	**38.2**	**50.9**	**95.1**	**86.9**	**83.7**	**107.9**	**157.8**	**211.4**	**244.6**	**15.7%**	**23.0%**	**100.0%**	**28108**	**100.0%**	**115**

Sources: includes data from US Geological Survey, British Geological Survey ©UKRI and World Mining Data.
^ less than 0.05. **Note:** Rest of World is the sum of only recorded reserves.

Natural Graphite production and reserves

Mine production

Thousand tonnes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024	Reserves at end of 2024	Reserves Share 2024	Reserves R/P ratio
Brazil[1]	87.0	75.1	61.7	79.8	95.0	96.0	95.0	95.0	96.0	66.3	**68.0**	2.6%	-2.4%	3.9%	74000	19.4%	1088
Canada	30.0	30.0	21.0	14.0	11.0	11.0	7.6	12.0	13.0	5.5	**20.0**	265.6%	-4.0%	1.2%	5900	1.5%	295
China	780.0	725.0	625.0	625.0	693.0	700.0	762.0	820.0	1210.0	1210.0	**1270.0**	5.0%	5.0%	73.5%	81000	21.2%	64
India[2]	116.7	134.6	149.0	46.0	44.2	30.8	29.1	35.5	85.9	129.8	**116.4**	-10.4%	†	6.7%	8600	2.3%	74
Madagascar	5.3	8.1	9.2	13.3	48.1	53.4	48.5	91.1	116.7	60.7	**89.0**	46.6%	32.6%	5.1%	27000	7.1%	303
Mexico	9.2	6.5	3.8	1.7	4.1	1.6	1.5	1.8	2.0	1.3	**1.0**	-22.4%	-19.8%	0.1%	3100	0.8%	3082
Mozambique	–	–	–	0.3	104.0	153.0	12.0	72.0	163.0	94.0	**35.0**	-62.8%	–	2.0%	25000	6.5%	714
Norway	8.3	9.2	9.6	9.6	12.0	9.8	5.5	6.3	10.4	6.5	**7.0**	8.0%	-1.6%	0.4%	600	0.2%	86
Russian Federation	17.6	15.9	19.4	19.5	11.9	17.5	12.9	15.3	14.3	15.0	**20.0**	33.3%	1.3%	1.2%	25625	6.7%	1281
Sri Lanka	4.0	4.2	4.0	3.5	4.0	4.0	4.0	3.0	2.6	3.0	**3.3**	10.0%	-1.9%	0.2%	1500	0.4%	455
Türkiye	3.9	–	–	–	16.8	10.0	15.2	28.3	27.7	28.0	**26.4**	-5.7%	21.2%	1.5%	69000	18.1%	2617
Ukraine	8.0	7.9	6.1	13.9	12.2	1.5	4.1	3.2	1.0	1.7	**1.2**	-28.1%	-17.3%	0.1%	13749	3.6%	11458
Rest of World	57.8	56.5	59.0	59.4	56.6	51.1	53.5	53.9	50.9	60.0	**71.1**	18.5%	2.1%	4.1%	47000	12.3%	661
Total World	**1127.8**	**1073.0**	**967.9**	**886.0**	**1112.9**	**1139.7**	**1051.0**	**1237.4**	**1793.5**	**1681.7**	**1728.3**	**2.8%**	**4.4%**	**100%**	**382074**	**100%**	**221**

Sources: includes data from US Geological Survey, British Geological Survey ©UKRI and World Mining Data.
† less than 0.05%. [1]Including beneficiated and directly shipped material. [2]Run of the mine. **Note:** Rest of World is the sum of only recorded reserves.

Rare Earth metals production and reserves

Mine production

Thousand tonnes[1]	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024	Reserves at end of 2024	Reserves Share 2024	Reserves R/P ratio
Australia	6.2	11.9	13.9	17.3	18.6	17.6	21.1	22.5	16.0	16.0	**13.0**	-18.8%	7.7%	3.4%	5700	6.3%	438
Brazil	–	0.9	2.7	1.7	1.2	0.7	0.6	0.5	0.1	0.1	**^**	-85.7%	–	†	21000	23.1%	1050000
China	105.0	105.0	105.0	105.0	120.0	132.0	140.0	168.0	210.0	255.0	**270.0**	5.9%	9.9%	71.1%	44000	48.3%	163
India	1.7	1.0	1.1	1.4	2.1	2.5	2.5	2.6	2.9	2.9	**2.9**	–	5.5%	0.8%	6900	7.6%	2379
Madagascar	–	–	–	–	2.0	4.0	2.8	3.9	2.6	2.6	**2.0**	-23.1%	–	0.5%	160	0.2%	80
Russian Federation	2.1	2.3	3.1	2.5	2.6	2.6	2.6	2.6	2.6	2.5	**2.5**	–	1.6%	0.7%	3800	4.2%	1520
Thailand	1.9	0.8	1.6	1.3	1.0	1.9	3.6	8.2	7.1	3.6	**13.0**	261.1%	21.2%	3.4%	5	0.0%	0
US	5.4	5.9	–	–	18.0	28.0	39.0	42.0	42.0	41.6	**45.0**	8.2%	23.6%	11.8%	1900	2.1%	42
Rest of World	0.2	0.9	4.8	15.4	25.5	26.6	32.1	35.6	13.5	43.6	**31.4**	-27.9%	62.8%	8.3%	7610	8.4%	242
Total World	**122.6**	**128.6**	**132.2**	**144.6**	**191.0**	**215.9**	**244.3**	**286.0**	**296.8**	**368.0**	**379.9**	**3.2%**	**12.0%**	**100%**	**91074**	**100%**	**240**

Sources: includes data from US Geological Survey, British Geological Survey ©UKRI and World Mining Data.
^ less than 0.05. † less than 0.05%. [1]Thousand tonnes of rare earth oxide equivalent. **Note:** Rest of World is the sum of only recorded reserves.

Copper production and reserves

Mine production

Thousand tonnes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024	Reserves at end of 2024	Reserves Share 2024	Reserves R/P ratio
Australia	1000	971.0	970.0	860.0	950.0	934.0	885.0	900.0	819.0	778.0	**800.0**	2.8%	-2.2%	3.5%	100000	10.3%	125
Chile	5800	5760.0	5500.0	5500.0	5800.0	5790.0	5730.0	5600.0	5330.0	5250.0	**5300.0**	1.0%	-0.9%	23.4%	190000	19.5%	36
China	1620	1710.0	1740.0	1710.0	1600.0	1680.0	1720.0	1800.0	1940.0	1820.0	**1800.0**	-1.1%	1.1%	8.0%	41000	4.2%	23
Democratic Republic of Congo	1100	1020.0	910.0	1090.0	1200.0	1290.0	1600.0	1800.0	2350.0	2930.0	**3300.0**	12.6%	11.6%	14.6%	80000	8.2%	24
Indonesia	400	474.0	548.0	622.0	780.0	642.5	505.0	810.0	941.0	907.0	**1100.0**	21.3%	10.6%	4.9%	21000	2.2%	19
Peru	1400	1700.0	2300.0	2450.0	2400.0	2460.0	2150.0	2200.0	2450.0	2760.0	**2600.0**	-5.8%	6.4%	11.5%	100000	10.3%	38
United States	1370	1380.0	1410.0	1260.0	1200.0	1260.0	1200.0	1200.0	1230.0	1130.0	**1100.0**	-2.7%	-2.2%	4.9%	47000	4.8%	43
Rest of World	6035	7793.1	7826.1	8277.5	8400.3	6947.0	6766.0	6670.0	6843.0	6956.0	**6610.0**	-5.0%	0.9%	29.2%	396300	40.6%	60
Total World	**18725.0**	**20808.1**	**21204.1**	**21769.5**	**22330.3**	**21003.5**	**20556.0**	**20980.0**	**21903.0**	**22531.0**	**22610.0**	**0.4%**	**1.9%**	**100.0%**	**975300**	**100.0%**	**43**

Sources: includes data from US Geological Survey and Kearney Energy Transition Institute. **Note:** Rest of World is the sum of only recorded reserves.

Key minerals Production and reserves

Manganese production and reserves

Mine production

Thousand tonnes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024	Reserves at end of 2024	Reserves Share	Reserves R/P ratio
Australia	3050.0	2450.0	2240.0	2820.0	3480.0	3180.0	3260.0	3300.0	3040.0	2860.0	**2800.0**	-2.1%	-0.9%	13.3%	500000	26.8%	179
China	3000.0	3000.0	2330.0	1700.0	1200.0	1330.0	991.0	990.0	743.0	767.0	**770.0**	0.4%	-12.7%	3.7%	280000	15.0%	364
Gabon	1860.0	2020.0	1620.0	2190.0	2330.0	2510.0	4340.0	4600.0	4670.0	4490.0	**4600.0**	2.4%	9.5%	21.9%	61000	3.3%	13
Ghana	418.0	416.0	553.0	810.0	1360.0	1550.0	940.0	940.0	844.0	818.0	**820.0**	0.2%	7.0%	3.9%	13000	0.7%	16
India	945.0	900.0	745.0	734.0	961.0	801.0	453.0	480.0	721.0	744.0	**800.0**	7.5%	-1.7%	3.8%	34000	1.8%	43
South Africa	5200.0	5900.0	5300.0	5400.0	5800.0	5800.0	7200.0	7200.0	7300.0	7300.0	**7400.0**	1.4%	3.6%	35.2%	560000	30.0%	76
Rest of World	4052.0	3699.3	3775.5	4583.8	3924.0	4428.0	2902.0	2580.0	2791.0	3777.0	**3860.0**	2.2%	-0.5%	18.3%	420000	22.5%	109
Total World	**18525.0**	**18385.3**	**16563.5**	**18237.8**	**19055.0**	**19599.0**	**20086.0**	**20090.0**	**20109.0**	**20756.0**	**21050.0**	**1.4%**	**1.3%**	**100.0%**	**1868000**	**100.0%**	**89**

Sources: includes data from US Geological Survey and Kearney Energy Transition Institute. **Note:** Rest of World is the sum of only recorded reserves.

Nickel production and reserves

Mine production

Thousand tonnes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024	Reserves at end of 2024	Reserves Share	Reserves R/P ratio
Australia	245.0	234.0	204.0	190.0	170.0	180.0	160.0	151.0	155.0	149.0	**110.0**	-26.2%	-7.7%	2.9%	24000	16.5%	218
Canada	235.0	240.0	236.0	210.0	176.0	180.0	130.0	134.0	143.0	159.0	**190.0**	19.5%	-2.1%	5.0%	2200	1.5%	12
China	100.0	102.0	98.0	98.0	110.0	110.0	120.0	109.0	114.0	117.0	**120.0**	2.6%	1.8%	3.1%	4400	3.0%	37
Indonesia	177.0	170.0	199.0	400.0	606.0	800.0	1000.0	1040.0	1580.0	2030.0	**2200.0**	8.4%	28.7%	57.5%	55000	37.9%	25
New Caledonia	178.0	190.0	207.0	210.0	216.0	220.0	190.0	186.0	200.0	231.0	**110.0**	-52.4%	-4.7%	2.9%	7100	4.9%	65
Philippines	523.0	530.0	347.0	230.0	345.0	420.0	370.0	387.0	345.0	413.0	**330.0**	-20.1%	-4.5%	8.6%	4800	3.3%	15
Russian Federation	239.0	240.0	222.0	180.0	272.0	270.0	250.0	205.0	222.0	210.0	**210.0**	0.0%	-1.3%	5.5%	8300	5.7%	40
Rest of World	764.2	844.2	595.0	590.6	698.2	692.8	734.5	753.2	746.8	677.3	**552.9**	-18.4%	-3.2%	14.5%	39240	27.1%	71
Total World	**2461.2**	**2550.2**	**2108.0**	**2108.6**	**2593.2**	**2872.8**	**2954.5**	**2965.2**	**3505.8**	**3986.3**	**3822.9**	**-4.1%**	**4.5%**	**100.0%**	**145040**	**100.0%**	**38**

Sources: includes data from US Geological Survey and Kearney Energy Transition Institute. **Note:** Rest of World is the sum of only recorded reserves.

Zinc production and reserves

Mine production

Thousand tonnes	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	**2024**	Growth rate per annum 2024	Growth rate per annum 2014–24	Share 2024	Reserves at end of 2024	Reserves Share	Reserves R/P ratio
Australia	1560.0	1600.0	965.0	842.0	1110.0	1330.0	1310.0	1320.0	1240.0	1090.0	**1100.0**	0.9%	-3.4%	9.2%	64000	27.3%	58
China	4930.0	4300.0	4800.0	4400.0	4170.0	4210.0	4060.0	4140.0	4040.0	4060.0	**4000.0**	-1.5%	-2.1%	33.4%	46000	19.6%	12
India	706.0	821.0	682.0	833.0	750.0	720.0	720.0	777.0	840.0	854.0	**860.0**	0.7%	2.0%	7.2%	9800	4.2%	11
Mexico	660.0	680.0	670.0	674.0	691.0	677.0	638.0	724.0	744.0	584.0	**700.0**	19.9%	0.6%	5.9%	14000	6.0%	20
Peru	1320.0	1420.0	1330.0	1470.0	1470.0	1400.0	1330.0	1530.0	1370.0	1470.0	**1300.0**	-11.6%	-0.2%	10.9%	20000	8.5%	15
US	832.0	825.0	805.0	774.0	824.0	753.0	718.0	704.0	761.0	767.0	**750.0**	-2.2%	-1.0%	6.3%	9200	3.9%	12
Rest of World	3290.0	3149.0	3299.0	3538.0	3445.0	3615.0	3255.0	3478.0	3542.0	3238.0	**3250.0**	0.4%	-0.1%	27.2%	71400	30.5%	22
Total World	**13298.0**	**12795.0**	**12551.0**	**12531.0**	**12460.0**	**12705.0**	**12031.0**	**12673.0**	**12537.0**	**12063.0**	**11960.0**	**-0.9%**	**-1.1%**	**100.0%**	**234400**	**100.0%**	**20**

Sources: includes data from US Geological Survey and Kearney Energy Transition Institute. **Note:** Rest of World is the sum of only recorded reserves.

Key minerals Prices

Minerals, materials, and battery prices

	USD$1000/te						USD$/KWh					
Year	Cobalt[1]	Lithium carbonate[2]	Nickel Sulphate[3]	Pet Needle Coke[4]	Natural Graphite[5]	Copper[6]	Zinc[7]	Tin[8]	Aluminium[9]	Silicon[10]	Lithium Iron Phosphate Cells[11]	Lithium Nickel Manganese Cobalt Oxide Cells[12]
2000	33.42	4.47	–	–	–	1.81	56	255	5	55	–	–
2001	23.26	1.49	–	–	–	1.58	44	211	4	51	–	–
2002	15.23	1.59	–	–	–	1.56	39	195	4	53	–	–
2003	23.37	1.55	–	–	–	1.78	41	232	4	61	–	–
2004	52.76	1.72	–	–	–	2.86	52	409	7	82	–	–
2005	35.19	1.46	–	–	–	3.68	67	361	6	76	–	–
2006	37.96	2.32	–	–	–	6.73	159	419	5	79	–	–
2007	67.35	3.53	–	–	–	7.13	154	679	3	113	–	–
2008	86.00	4.44	–	–	–	6.96	89	865	4	162	–	–
2009	39.38	5.94	–	–	0.91	5.16	78	642	5	116	–	–
2010	45.97	5.19	–	–	1.08	7.54	102	954	6	140	–	–
2011	39.66	5.10	–	–	1.35	8.82	106	1216	8	158	–	–
2012	31.02	5.42	–	–	1.43	7.96	96	990	10	127	–	–
2013	27.07	5.70	–	–	0.99	7.33	96	1041	11	122	–	–
2014	30.79	5.72	–	–	0.92	6.86	107	1023	20	140	–	–
2015	28.46	6.55	–	–	0.69	5.51	96	756	13	127	–	–
2016	25.47	12.02	–	–	0.58	4.87	101	839	8	91	–	–
2017	55.79	17.04	–	–	0.65	6.17	139	937	9	117	–	–
2018	81.17	13.04	–	–	0.78	6.53	141	936	19	134	–	–
2019	35.91	10.29	17.47	–	0.67	6.01	124	868	18	106	–	–
2020	33.95	6.49	16.63	–	0.53	6.17	111	799	12	97	–	–
2021	52.93	15.17	24.42	1.02	0.56	9.32	146	1580	26	220	0.07	0.10
2022	67.06	59.43	27.11	1.38	0.76	8.83	190	1546	30	362	0.10	0.14
2023	35.44	40.30	20.39	0.89	0.65	8.49	151	1256	23	180	0.09	0.10
2024	27.24	12.39	17.57	0.70	0.48	9.14	144	1420	19	170	0.07	0.07

[1] 2000-2012 spot grade for cathodes, source US Geological Survey. 2013-2017 source London Metal Exchange. Data from 2018 onwards: min purity 99.8%, Cobalt metal EXW Europe, min. 99.8% purity, source Benchmark Mineral Intelligence.
[2] 2000-2008 unit value, data series 140, source US Geological Survey. Data from 2009 onwards: Lithium carbonate global weighted average, min 99% purity, source Benchmark Mineral Intelligence.
[3] Nickel sulphate CIF Asia, min 22% (100% Nickel contained basis), source Benchmark Mineral Intelligence.
[4] Pre-calcined pet needle coke DDP China, sulphur <0.5%, source Benchmark Mineral Intelligence.
[5] Flake graphite FOB China, -194 mesh, source Benchmark Mineral Intelligence.
[6] Copper, grade A cathode, LME spot price, CIF European ports, source International Monetary Fund (IMF).
[7] SHG delivered US Midwest Mavg, source S&P Global Commodity Insights, ©2025 by S&P Global Inc.
[8] In warehouse US MAvg, source S&P Global Commodity Insights, ©2025 by S&P Global Inc.
[9] P1020 Transaction Premium delivered US Midwest Mavg, source S&P Global Commodity Insights, ©2025 by S&P Global Inc.
[10] 553 grade delivered US Midwest MAvg, source S&P Global Commodity Insights, ©2025 by S&P Global Inc.
[11] Global weighted LFP cell, source Benchmark Mineral Intelligence.
[12] Global weighted NCM cell, source Benchmark Mineral Intelligence.

Methodology

The Statistical Review provides a globally consistent data time series. Here we outline the main definitions, conversion factors, and calculations used to produce the report.

Total energy supply

In 2025, the EI switched to using the Physical Energy Content method to calculate Total Energy Supply (TES). The report had previously used a fossil-fuel equivalent method to calculate Primary Energy Consumption. TES is a measure of the total amount of energy that a country needs to supply to meet its final end-use demand. It reflects the energy that is either produced domestically or imported, minus what is exported or stored. Some energy sources are consumed directly while others may be converted into fuels or electricity for final consumption with transmission, distribution, and efficiency losses occurring throughout the system.

The change represents a significant shift in how the contributions of some fuels, particularly non-combustible forms of renewable energy, are measured. The approach is now consistent with the United Nations' International Recommendations for Energy Statistics (IRES) for calculating national energy balances. By tying non-combustible renewables closer to a marketable commodity (electricity generation) rather than the previous arbitrary measure that included conversion losses that did not exist, it better reflects today's global energy system as it continues to transition away from fossil fuels. The primary energy consumption measure, calculated using the old fossil fuel equivalent approach, will continue to be made available online.

Instead of comparing renewable energy to fossil fuels, under the new approach, non-combustible renewable energy such as wind, solar photovoltaic, hydro, ocean, wave etc. become "energy products" in the statistical sense at the point of generation of electricity and their "primary energy equivalent" measured as the gross amount of electricity generated. The kinetic energy of the wind or the water does not enter the statistical "energy balance", although remains "energy" in a scientific sense. Consequently, for these sources of energy, an efficiency assumption of 100% is assumed with kilowatt-hours (kWh) converted to British Thermal Units (BTU) using a standard heat conversion factor for electricity of 3,412 BTU per kWh.

In the case of non-fossil fuel generation such as nuclear, geothermal, and concentrating solar, where the primary energy input is heat, the heat, which is a marketable commodity, is treated as the first point of entry. As it can be difficult to obtain measurements of the heat flow to the turbines, the heat input is estimated based on an efficiency of 33% for nuclear and concentrating solar, and 10% for geothermal. For electricity generation involving the combustion of biomass, an efficiency factor of 33% is used.

The table below summarises the assumptions and treatment of fuels:

Efficiency factors used to calculate Total Energy Supply

Energy Source	Efficiency
Biomass	33%
Concentrating Solar	33%
Geothermal	10%
Hydro	100%
Nuclear	33%
Ocean	100%
Solar PV	100%
Tidal	100%
Wave	100%
Wind	100%

Note: 1 kWh = 3,412 BTU per kWh

The treatment of fossil fuels remains precisely the same as under the previous methodology and their primary energy consumption continues to be reported in net terms. The gross calorific value to net calorific value adjustment is fuel specific. Fuels used as inputs for conversion technologies (gas-to-liquids, coal-to-liquids and coal-to-gas) are counted as production for the source fuel and the outputs are counted as consumption for the converted fuel.

Oil

Oil reserves

Total proved reserves of oil are 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 geological conditions. The data series for proved oil reserves in this year's review does not necessarily meet the definitions, guidelines and practices used for determining proved reserves at company level, for instance as published by the US Securities and Exchange Commission nor does it necessarily represent the EI's view of proved reserves by country. Rather the data series has been compiled using a combination of primary official sources and third-party data.

Oil reserves include field condensate and natural gas liquids as well as crude oil. This inclusive approach helps to develop consistency with the oil production numbers published in the Review, which also include these categories of oil. The reserves and R/P ratio for Canada includes Canadian oil sands and the reserves and R/P ratio for Venezuela includes the Orinoco Belt. Liquid hydrocarbon fuels from non-hydrocarbon sources, such as ethanol from corn or sugar or synthetic oil derived from natural gas (so-called GTL or gas-to-liquids), are not included in either the reserves or production series.

R/P ratios represent the length of time that those remaining reserves would last if production were to continue at the previous year's rate. They are calculated by dividing remaining reserves at the end of the year by the production in that year.

Reserves-to-production (R/P) ratios are available by country and feature in the table of oil reserves. There is a time series of crude oil reserves from 1980, which can be found in the Excel workbook. Data are measured in thousand million barrels.

Please note that these reserves tables have not been updated this year.

Oil production

Oil production data includes crude oil, shale oil, oil sands, condensates (lease condensate or gas condensates that require further refining) and NGLs (natural gas liquids – ethane, LPG and naphtha separated from the production of natural gas). It excludes liquid fuels from other sources such as biofuels and synthetic derivatives of coal and natural gas. It also excludes liquid fuel adjustment factors such as refinery processing gain and oil shales/kerogen extracted in solid form.

The split of crude/condensate and natural gas liquids figures are available. The crude condensate table includes crude oil, shale/tight oil, oil sands, lease condensate or gas condensates that require further refining. It excludes liquid fuels from other sources such as biomass and synthetic derivatives of coal and natural gas. The NGL's table includes ethane, LPG and naphtha separated from the production of natural gas and excludes condensates. World oil production tables are available in both thousand barrels daily and million tonnes.

Liquids, oil and oil product consumption

Oil consumption as defined in previous Statistical Reviews (i.e. including biofuels) has been renamed 'liquids' consumption and a table is still included on this original basis. In addition, greater granularity has been included on the product split of both oil products and biofuels (breaking out ethane & LPG and naphtha in oil products and the ethanol/biodiesel split of biofuels). Total liquids consumption comprises inland demand plus international aviation and marine bunkers and refinery fuel and loss. Consumption of biogasoline (such as ethanol), biodiesel and derivatives of coal and natural gas are also included.

Oil consumption figures include inland demand plus international aviation and marine bunkers and refinery fuel and loss. Consumption of biogasoline (such as ethanol), biodiesel and derivatives of coal and natural gas are excluded. Derivatives of coal and natural gas are included.

Oil product consumption – Gasoline includes motor and aviation gasoline, gasolines and light distillate feedstock (LDF). Diesel/gasoil includes marine gasoil. 'Fuel oil' includes marine bunkers and crude oil used directly for fuel. 'Others' consists of refinery gas, solvents, petroleum coke, lubricants, bitumen, wax, other refined products and refinery fuel and loss. Data are supplied in both exajoules and thousand barrels daily figures.

Oil prices

The key crudes quoted are Brent, West Texas Intermediate (WTI), Nigerian Focados and Dubai in US$ per barrel. The spot crude price history from 1972 and annual crude price history from 1861 are available in the historical data Excel workbook.

Refining

The refinery capacity data presented in this Review represents the sum of reported atmospheric crude distillation and condensate splitting capacity. Capacity should comprise the amount of input that a distillation facility can process under usual operating conditions, taking into account scheduled downtime. Figures are in thousand barrels daily at year end per calendar day. Refinery throughputs are based on the quantity of crude and condensate processed in atmospheric distillation units and condensate splitters. Figures are in thousands of barrels per day.

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 optimised 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.

Oil trade movements

The tables exclude the intra-area movements of oil (for example, crude oil and products moving between countries within Europe). They do not include biofuels. Bunkers fuel is not included as exports. Crude imports and exports include condensates. Saudi Arabian exports from 1980 are also available in the oil trade movements table in the Excel workbook. The split of crude oil

and products are detailed. Data in the tables are in million tonnes and thousand barrels per day.

Natural gas

Natural gas reserves

Total proved reserves of natural gas are 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. The data series for proved natural gas reserves in this year's Review does not necessarily meet the definitions, guidelines and practices used for determining proved reserves at company level, for instance as published by the US Securities and Exchange Commission nor does it necessarily represent the EI's view of proved reserves by country. Rather, the data series has been compiled using a combination of primary official sources and third-party data.

Although every effort is made to come up with a consistent series for reserves based on a common definition, different countries use different methodologies, and the data have varying levels of reliability. R/P ratios represent the length of time that those remaining reserves would last if production were to continue at the previous year's rate. They are calculated by dividing remaining reserves at the end of the year by the production in that year.

As far as possible, the data represents standard cubic metres (measured at 15°C and 1013 mbar) and have been standardised using a gross calorific value (GCV) of 40 MJ/m^3. There is a time series of natural gas reserves, which can be found in the Excel workbook. Data are measured in billion cubic metres.

Please note that these reserves tables have not been updated this year.

Natural gas production

Gas production comprises marketed production and excludes gas flared or recycled gas. It includes natural gas produced for gas-to-liquids transformation. As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) as they are derived directly from tonnes of oil equivalent using an average conversion factor and have been standardised using a gross calorific value (GCV) of 40 MJ/m^3 – they do not necessarily equate with gas volumes expressed in specific national terms.

Natural gas production is provided in three different units of measurement to accommodate regional customary usage. World natural gas production PDF tables are in both billion cubic metres and exajoules. Data in the Excel workbook are also in billion cubic feet per day (bcf/d).

Natural gas consumption

Natural gas consumption excludes natural gas converted to liquid fuels but includes derivatives of coal as well as natural gas consumed in gas-to-liquids transformation. As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar); as they are derived directly from tonnes of oil equivalent using an average conversion factor and have been standardised using a gross calorific value (GCV) of 40 MJ/m^3 – they do not necessarily equate with gas volumes expressed in specific national terms. The difference between these world consumption figures, and the world production statistics is due to variations in stocks at storage facilities and liquefaction plants, together with unavoidable disparities in the definition, measurement, or conversion of gas supply and demand data.

Consumption data in the PDF data table is in billion cubic meters (bcm) and exajoules, data in billion cubic feet per day (bcf/d) can be found in the Excel workbook.

Natural gas prices

Annual prices are given for benchmark natural gas hubs together with contracted pipeline and LNG imports. The benchmark hub prices incorporate US (Henry Hub), Netherlands TTF index, Zeebrugge, and the UK (NBP). Contract prices are represented by LNG imports into Japan, South Korea, and China (mainland). The prices for LNG and European border are calculated as CIF prices, where CIF = cost + insurance + freight (average freight prices) in US dollars per million British thermal units (Btu).

Natural gas trade movements

Trade flows are on a contractual basis and may not correspond to physical gas flows in all cases. The data illustrates the flow of pipeline natural gas and LNG between sources of production and the regions of consumption. LNG trade. As far as possible, the data represents standard cubic metres (measured at 15°C and 1013 mbar) and has been standardised using a gross calorific value (GCV) of 40 MJ/m^3.

Coal

Coal reserves

Total proved reserves of coal are generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known deposits under existing economic and operating conditions.

Total proved coal reserves are shown for anthracite and bituminous (including brown coal) and sub-bituminous and lignite. Reserves-to-production (R/P) ratios represent the length of time that those remaining reserves would last if production were to continue at the previous year's rate. They are calculated by dividing remaining reserves at the end of the year by the production in that year. The R/P ratios are calculated excluding other solid fuels in reserves and production. R/P ratios are available by country and feature in the table of coal reserves. R/P ratios for the region and the world are depicted in the chart above and the Energy charting tool.

Coal reserve data is in million tonnes. Please note that these reserves tables have not been updated this year.

Coal production

Coal production includes data for commercial solid fuels only. Included in the hard coal category are bituminous and anthracite (hard coal). The sub-bituminous coal includes lignite and brown coal. Other commercial solid fuels are also included. The data includes coal produced for coal-to-liquids and coal-to-gas transformations. In the coal production PDF table, the units are in exajoules. The data can also be downloaded from the Excel workbook in million tonnes.

Coal consumption

Coal consumption includes data for solid fuels only. Included in the hard coal category are bituminous and anthracite. The sub-bituminous coal includes lignite and brown coal. Other commercial solid fuels are also included. The figures exclude coal converted to liquid or gaseous fuels, but includes coal consumed in transformation processes. Differences between world consumption figures and the world production statistics are accounted for by stock changes, and unavoidable disparities in the definition, measurement or conversion of coal supply and demand data.

Coal prices

Annual prices quoted include the Northwest Europe marker price, Japan steam spot CIF price, South China spot price, and the US Central Appalachian coal spot price index. Coal prices except for the US North Appalachian price are calculated as CIF prices, where CIF = cost + insurance + freight (average freight prices). The US Central Appalachian price is FOB = free on board. All prices are quoted in US dollars per tonne.

Coal trade movements

Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels. Intra-area movements (for example, between countries in Europe, Other CIS, Other Africa, Other Asia Pacific) are excluded.

Nuclear energy

The data are based on gross generation and not accounting for cross-border electricity supply. Total energy supply is energy content of the primary heat input required by nuclear power stations to generate the reported electricity output. Details on thermal efficiency assumptions are available online. Data for the units are in exajoules in the PDF. The data are available in the Excel workbook in terawatt–hours (TWh).

Hydroelectricity

The data are based on gross generation and not accounting for cross-border electricity supply. Total energy supply is the physical energy content of the gross electrical output of a hydroelectric plant. Details on efficiency assumptions are available online. In the hydroelectricity consumption PDF table, the units are in exajoules. The data are available in the Excel workbook in terawatt-hours (TWh).

Renewable energy

The data are based on gross generation and not accounting for cross-border electricity supply. For non-combustible renewables, total energy supply is the physical energy content of their gross electrical output. Details on efficiency assumptions are available online. For renewables such as geothermal power and concentrating solar, total energy supply is energy content of the primary heat input they require to generate the reported electricity output. Details on thermal efficiency assumptions are available online. Data for the units are in exajoules in the PDF. The data are available in the Excel workbook in terawatt–hours (TWh).

Biofuels production and consumption

The data includes biogasoline (such as ethanol) and biodiesel. Volumes have been adjusted for energy content. The biofuels PDF tables are in thousand barrels of oil equivalent per day figures. The data are available in additional units in the Excel workbook.

Methodology Continued

Electricity

Electricity generation is based on gross electrical output.

Carbon

Carbon emissions from consuming fossil fuels are estimated by applying the Default CO_2 Emission Factors for Combustion to the consumption of each energy product type (coal, natural gas, and various oil products) from the list of IPCC emission factors. Biofuels are considered as not emitting CO_2, consistent with the practice of the IEA. The method accounts for fuel consumption used for non-combustion purposes, such as the use of oil products and natural gas in the petrochemicals industry or of oil to produce bitumen for road construction.

Estimates of the share of non-combusted fossil fuels taken from the IEA's energy balances are subtracted from the total consumption of fossil fuels before applying the relevant emission factors.

Carbon emissions from flared natural gas are calculated using data series on volumes of gas flared from two sources: Cedigaz up to 2012, and the Payne Institute for Public Policy, Colorado School of Mines, from 2013 to 2023. Payne Institute's data include flaring from upstream and downstream oil and gas, while Cedigaz includes flaring from upstream only.

Volumes of gas flared have been standardised using a Gross Calorific Value (GCV) of 40 MJ/m^3. The IPCC Default CO_2 Emission Factor for Combustion for natural gas (56,100 kg CO_2 per TJ) is used and perfect combustion has been assumed. These emissions represent around 1% of total CO_2 emissions.

Data for methane emissions associated with the production, transportation and distribution of fossil fuels for 1990-2020 are sourced, where available, from the IEA (all rights reserved). For countries not covered by the IEA, additional data has been sourced from Kayrros. For a select number of fossil fuel producing countries where methane emission data is not currently available through either provider, an estimate of historical methane emissions has been derived using regional average methane intensity of production. There is a wide range of uncertainty with respect to both current estimates of methane emissions and the global warming potential of methane emissions. To ensure alignment with financial and government reporting standards, the methane to CO_2e factor is a 100-year Global Warming Potential (GWP) of 25, recommended by the IPCC in AR4.

Carbon emissions from industrial processes refer only to non-energy CO_2 emissions from cement production.

Minerals

Total proved reserves of minerals are generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known resources under existing economic and geological conditions. The data series for mineral reserves in this year's review does not necessarily meet the definitions, guidelines and practices used for determining proved reserves at company level nor does it necessarily represent the EI's view of proved reserves by country. Rather the data series has been compiled using a combination of primary official sources and third-party data.

Using S&P Global Commodity Insights and S&P Global Platts data

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Revisions and corrections

Each year revisions are made to historical data when updated or where more reliable data sources have since become available. Corrections are also made when errors are identified in data. In this Statistical Review corrections have been made to the emissions, biofuels, historic oil prices and oil refinery throughput tables.

Appendices Approximate conversion factors

Crude oil*

From	To convert				
	tonnes (metric)	kilolitres	barrels	US gallons	tonnes per year
	Multiply by				
Tonnes (metric)	1	1.165	7.33	307.86	–
Kilolitres	0.8581	1	6.2898	264.17	–
Barrels	0.1364	0.159	1	42	–
US gallons	0.00325	0.0038	0.0238	1	–
Barrels/day	–	–	–	–	49.8

*Based on worldwide average gravity.

Oil products

From	To convert					
	barrels to tonnes	tonnes to barrels	kilolitres to tonnes	tonnes to kilolitres	tonnes to gigajoules	tonnes to barrels oil equivalent
	Multiply by					
Ethane	0.059	16.850	0.373	2.679	49.400	8.073
Liquefied petroleum gas (LPG)	0.086	11.600	0.541	1.849	46.150	7.542
Gasoline	0.120	8.350	0.753	1.328	44.750	7.313
Kerosene	0.127	7.880	0.798	1.253	43.920	7.177
Gas oil/diesel	0.134	7.460	0.843	1.186	43.380	7.089
Residual fuel oil	0.157	6.350	0.991	1.010	41.570	6.793
Product basket	0.124	8.058	0.781	1.281	43.076	7.039

*Based on worldwide average gravity.

Natural gas (NG) and liquefied natural gas (LNG)

From	To convert						
	billion cubic metres NG	billion cubic feet NG	petajoules NG	million toe	million tonnes LNG	tonnes to gigajoules	tonnes to barrels oil equivalent
	Multiply by						
1 billion m^3 NG	1.000	35.315	36.000	0.860	0.735	34.121	5.883
1 billion ft^3 NG	0.028	1.000	1.019	0.024	0.021	0.966	0.167
1 petajoule NG	0.028	0.981	1.000	0.024	0.021	0.952	0.164
1 million toe	1.163	41.071	41.868	1.000	0.855	39.683	6.842
1 million tonnes LNG	1.360	48.028	48.747	1.169	1.000	46.405	8.001
1 trillion Btu	0.029	1.035	1.050	0.025	0.022	1.000	0.172
1 million boe	0.170	6.003	6.093	0.146	0.125	5.800	1.000

Units

1 metric tonne	= 2204.62 lb = 1.1023 short tons
1 kilolitre	= 6.2898 barrels
1 kilolitre	= 1 cubic metre
1 kilocalorie (kcal)	= 4.1868 kJ = 3.968 Btu
1 kilojoule (kJ)	= 1,000 joules = 0.239 kcal = 0.948 Btu
1 petajoule (PJ)	= 1 quadrillion joules (1 x 1015)
1 exajoule (EJ)	= 1 quintillion joules (1 x 1018)
1 British thermal unit (Btu)	= 0.252 kcal = 1.055 kJ
1 barrel of oil equivalent (boe)	= 5.8 million Btu = 6.119 million kJ
1 kilowatt-hour (kWh)	= 860 kcal = 3600 kJ = 3412 Btu

Calorific equivalents

One exajoule equals approximately:

Heat units	239 trillion kilocalories 948 trillion Btu
Solid fuels	40 million tonnes of hard coal 95 million tonnes of lignite and sub-bituminous coal
Gaseous fuels	See Natural gas and LNG table
Electricity	278 terawatt-hours

All fuel energy content is net or lower heating value (i.e., net of heat of vaporisation of water generated from combustion).

1 barrel of ethanol = 0.58 barrels of oil equivalent
1 barrel of biodiesel = 0.86 barrels of oil equivalent
1 tonne of ethanol = 0.68 tonne of oil equivalent
1 tonne of biodiesel = 0.88 tonne of oil equivalent

Other terms

Tonnes: Metric equivalent of tons.

Percentages

Calculated before rounding of actuals.

Rounding differences

Because of rounding, some totals may not agree exactly with the sum of their component parts.

Definitions

Regional definitions
Country groupings are made purely for statistical purposes and are not intended to imply any judgment about political or economic standings.

North America
US (excluding US territories), Canada, and Mexico.

Caribbean
Atlantic islands between the US Gulf Coast and South America, including Puerto Rico, US Virgin Islands, and Bermuda.

Central America
Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

South and Central America
Caribbean, Central America, and South America.

Europe
European members of the OECD plus Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Cyprus, Georgia, Gibraltar, Latvia, Lithuania, Malta, Montenegro, North Macedonia, Romania, Serbia, and Ukraine.

Commonwealth of Independent States (CIS)
Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Tajikistan, Turkmenistan, and Uzbekistan.

Middle East
Arabian Peninsula, Iran, Iraq, Israel, Jordan, Lebanon, and Syria.

Northern Africa
Territories on the north coast of Africa from Egypt to Western Sahara.

Eastern Africa
Territories on the east coast of Africa from Sudan to Mozambique. Also, Madagascar, Malawi, Uganda, Zambia, and Zimbabwe.

Middle Africa
Angola, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Republic of Congo, Equatorial Guinea, Gabon, and Sao Tome & Principe.

Western Africa
Territories on the west coast of Africa from Mauritania to Nigeria, including Burkina Faso, Cape Verde, Mali, and Niger.

Southern Africa
Botswana, Eswatini, Lesotho, Namibia, and South Africa.

Asia Pacific
Brunei, Cambodia, China†, China Hong Kong SAR*, China Macau SAR*, Indonesia, Japan, Laos, Malaysia, Mongolia, North Korea, Philippines, Singapore, South Asia (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka), Myanmar, South Korea, Taiwan, Thailand, Vietnam, Australia, New Zealand, Papua New Guinea, and Oceania.
† Mainland China
* Special Administrative Region

Australasia
Australia and New Zealand.

OECD members (Organization for Economic Co-operation and Development).

Europe: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye, and UK.

Other member countries: Australia, Canada, Chile, Colombia, Costa Rica, Israel, Japan, Mexico, New Zealand, South Korea, and US.

OPEC members (Organization of the Petroleum Exporting Countries)

Middle East: Iran, Iraq, Kuwait, Saudi Arabia, and United Arab Emirates.

North Africa: Algeria and Libya.

West Africa: Equatorial Guinea, Gabon, Nigeria, and Republic of Congo.

South America: Venezuela.

European Union members
Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Republic of Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden.

Non-OECD (Organization for Economic Co-operation and Development). All countries that are not members of the OECD.

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