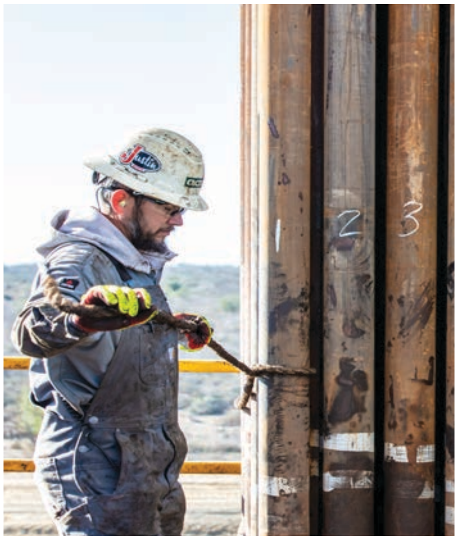
Statistical Review of World Energy

2021 | 70th edition

Reviewing world energy data for 70 years

Contents



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Chief executive officer's introduction

2020 will forever be remembered as the year COVID-19 turned our daily lives upside down.

Above all, this is a human tragedy. At the time of writing, around four million people are estimated to have died due to COVID-19. The true number is almost certainly far higher, and it continues to rise.

The combination of the pandemic and the actions taken to limit its impact led to the largest recession in modern peacetime, with that loss falling disproportionately on those in the world's poorest and least-developed countries. The economic scars from the pandemic will likely persist for years to come. And, of course, the pandemic and resulting economic turmoil spilled over into unparalleled volatility and disruption in global energy markets.

> "Companies that are committed to 'greening' have a hugely significant part to play in achieving the Paris goals."

This year's 70th edition of the bp Statistical Review provides all of us with the objective and timely data needed to help make sense of the most tumultuous events affecting energy markets in any of the past seven decades.

Energy in 2020

Global energy demand is estimated to have fallen by 4.5% in 2020. This is the largest recession since the end of World War II, driven by an unprecedented collapse in oil demand, as the imposition of lockdowns around the world decimated transport-related demand. The drop in oil consumption accounted for around three-quarters of the total decline in energy demand. Natural gas showed greater resilience, helped primarily by continuing strong growth in China.

Despite the disorder of 2020, renewable energy, led by wind and solar energy, continued to grow prolifically. Remarkably, wind and solar capacity increased by a colossal 238 GW last year – 50% larger than any previous expansion. Likewise, the share of wind and solar generation in the global power mix recorded its largest ever increase. The relative immunity of renewable energy to the events of last year is encouraging.

The fall in carbon emissions from energy use was equally striking, with emissions falling by over 6% in 2020 – again, the largest decline since 1945. Although unmatched in modern peacetime, the rate of decline in carbon emissions last year is similar to what the world needs to average each year for the next 30 years to be on track to meet the aims of the Paris Agreement.

Not just green but greening

There are worrying signs that last year's COVID-induced dip in carbon emissions will be short lived as the world economy recovers and lockdowns are lifted. The challenge is to achieve sustained, comparable year-on-year reductions in emissions without massive disruption to our livelihoods and our everyday lives.

Since the Paris Conference of Parties (COP21) in 2015 there has been a huge increase in countries' ambitions to decarbonize. Around 70% of the world's carbon emissions are now covered by net zero targets and pledges. But this rising ambition has yet to be translated into a decisive reduction in emissions. The next big staging post for that challenge will occur later this year in Glasgow, Scotland which will host COP26 – arguably the most important UN climate change conference since the Paris meeting. I hope that, in years to come, we all talk about the Glasgow Agreement with the same importance and reverence as we do the Paris goals.

I sincerely believe that companies like bp with net zero ambitions, coherent plans, and near, medium, and long-term aims – companies that are committed to 'greening' – have a hugely significant part to play in achieving the Paris goals. Yes, the world needs more low carbon companies. But maybe more than anything, it also needs existing energy companies to decarbonize and in so doing use their scale and expertise to help bring about the deep and complex rewiring and replumbing of the global energy system that the world wants and needs to see over the next 30 years.

It will take producers and consumers, as well as companies, governments, and society, all working together to bring about the necessary change.

100th anniversary of the Statistical Review

In 30 years, the Statistical Review will celebrate its 100th anniversary reporting and analyzing energy developments in 2050, a year which has become the focal point for so many net zero ambitions and aims. What events and developments will our successors be able to look back on in 30 years' time? Did the world respond quickly and decisively enough to reduce the impacts of climate change?

We at bp are committed to playing our role. And I hope this year's Statistical Review will be useful to everyone pursuing a similar transition. The Review would not be possible without the continuing co-operation and transparency of governments and statistical agencies around the world who each year contribute their official data, and the bp team who make it so accessible and useful. You have my heartfelt thanks. And as ever, Spencer Dale and the team welcome any feedback you might have.

Bernard Looney
Chief executive officer
July 2021

2020 at a glance

The COVID-19 pandemic had a dramatic impact on energy markets, with both primary energy and carbon emissions falling at their fastest rates since the Second World War. Nevertheless, renewable energy continued to grow, with solar power recording its largest ever increase.

Energy developments

- Primary energy consumption fell by 4.5% in 2020 – the largest decline since 1945.
- The drop in energy consumption was driven mainly by oil, which contributed almost three-quarters of the net decline, although natural gas and coal also saw significant declines.
- Wind, solar and hydroelectricity all grew despite the fall in overall energy demand.
- By country, the US, India and Russia contributed the largest declines in energy consumption. China posted the largest increase (2.1%), one of only a handful of countries where energy demand grew last year.

Carbon emissions

- Carbon emissions from energy use fell by 6.3%, to their lowest level since 2011. As with primary energy, this was the largest decline since the end of World War II.

Oil

- The oil price (Dated Brent) averaged $41.84/bbl in 2020 – the lowest since 2004.
- Oil consumption fell by a record 9.1 million barrels per day (b/d), or 9.3%, to its lowest level since 2011.
- Oil demand fell most in the US (-2.3 million b/d), the EU (-1.5 million b/d) and India (-480,000 b/d). China was virtually the only country where consumption increased (220,000 b/d).
- Global oil production shrank by 6.6 million b/d, with OPEC accounting for two-thirds of the decline. Libya (-920,000 b/d) and Saudi Arabia (-790,000 b/d) saw the largest OPEC declines, while Russia (-1.0 million b/d) and the US (-600,000 b/d) led non-OPEC reductions.
- Refinery utilization fell by a record 8.0 percentage points to 74.1%, the lowest level since 1985.

-4.5% and -6.3%

Decline in global primary energy consumption and carbon emissions, the largest falls since 1945

Natural gas

- Natural gas prices declined to multi-year lows: US Henry Hub averaged $1.99/mmBtu in 2020 – the lowest since 1995, while Asian LNG prices (Japan Korea Marker) registered their lowest level on record ($4.39/mmBtu).
- Natural gas consumption fell by 81 billion cubic metres (bcm), or 2.3%. Nevertheless, the share of gas in primary energy continued to rise, reaching a record high of 24.7%.
- Declines in gas demand were led by Russia (-33 bcm) and the US (-17 bcm), with China (22 bcm) and Iran (10 bcm) contributing the largest increases.
- Inter-regional gas trade reduced by 5.3%, completely accounted for by a 54 bcm (10.9%) drop in pipeline trade.
- LNG supply grew by 4 bcm or 0.6%, well below the 10-year average rate of 6.8% p.a. US LNG supply expanded by 14 bcm (29%), but this was partially offset by declines in most other regions, notably Europe and Africa.

Coal

- Coal consumption fell by 6.2 exajoules (EJ), or 4.2%, led by declines in the US (-2.1 EJ) and India (-1.1 EJ), with OECD coal consumption falling to its lowest level in our data series back to 1965.
- China and Malaysia were notable exceptions, increasing their consumption by 0.5 EJ and 0.2 EJ respectively.
- Global coal production was down 8.3 EJ (5.2%). As with consumption, production growth in China (1.1 EJ) was outweighed by sharp declines in several countries, including the US (-3.6 EJ), Indonesia (-1.3 EJ) and Colombia (-1.0 EJ).

Renewables, hydro and nuclear

- Renewable energy (including biofuels but excluding hydro) rose by 9.7%, slower than the 10-year average (13.4% p.a.) but the increment in energy terms (2.9 EJ) was similar to increases seen in 2017, 2018 and 2019.
- Solar electricity rose by a record 1.3 EJ (20%), however, wind (1.5 EJ) provided the largest contribution to renewables growth.
- Solar capacity expanded by 127 GW, while wind capacity grew 111 GW – almost double its previous highest annual increase.
- China was the largest individual contributor to renewables growth (1.0 EJ), followed by the US (0.4 EJ). Europe, as a region, contributed 0.7 EJ.
- Hydroelectricity grew by 1.0%, again led by China (0.4 EJ), while nuclear energy fell 4.1%, driven mainly by declines in France (-0.4 EJ), the US (-0.2 EJ) and Japan (-0.2 EJ).

Electricity

- Electricity generation fell by 0.9% – more than the decline in 2009 (-0.5%), the only other year in our data series (which starts in 1985) when electricity demand fell.
- The share of renewables in power generation increased from 10.3% to 11.7%, while coal's share fell 1.3 percentage points to 35.1% – a new low in our data series.

Key minerals

- Lithium production fell 4.6% on a drop in Australian output, while Cobalt output rose 2.9% as production in the Democratic Republic of Congo partially recovered from its dip in 2019.
- Rare earth metals production expanded by 23.2%, driven by strong growth in Australia and the US.

Chief economist's analysis

Energy in 2020: the year of COVID

This is the 70th anniversary of the bp *Statistical Review* – something we are incredibly proud of.

Since it was first published in 1952, the *Statistical Review* has provided a constant source of objective, comprehensive – and, most importantly – trusted data to help industry, governments and commentators make sense of developments in global energy markets.

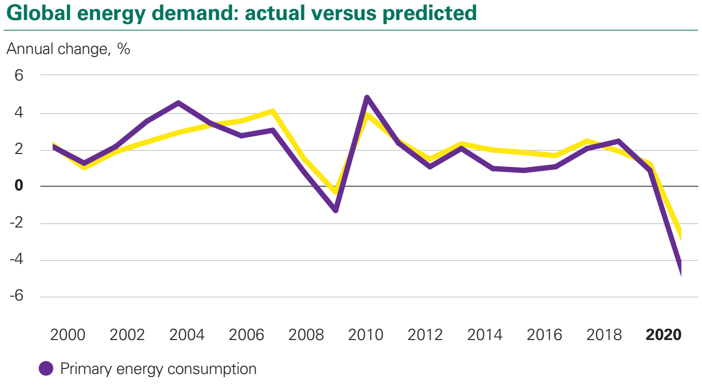
Over those 70 years, the *Statistical Review* has borne witness to some of the most dramatic episodes in the history of the global energy system: the Suez Canal crisis in 1956, the oil embargo of 1973, soon followed by the Iranian revolution in 1979, and more recently, the Fukushima disaster in 2011.

All moments of great turmoil in global energy. But all pale in comparison to the events of last year.

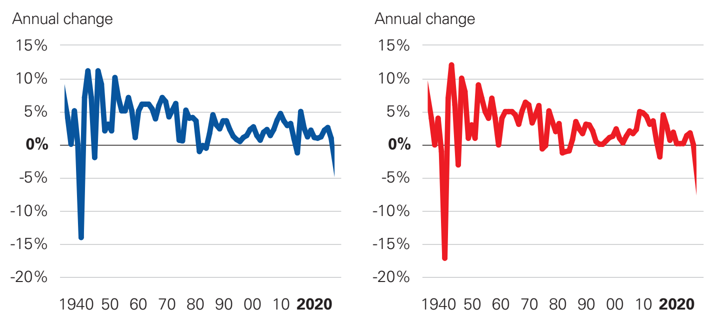
Most importantly, the pandemic that engulfed the world last year is a humanitarian tragedy. As of the beginning of July, close to four million people were reported to have died as a result of COVID-19. The true number is likely to be far higher, and it continues to rise.

The pandemic also led to huge economic loss. Global GDP is estimated to have fallen by over 3.5% last year – the largest peacetime recession since the Great Depression. The IMF estimate that around 100 million people have been pushed into poverty as a result of the virus. And the economic scarring from the pandemic – especially for the world's poorest and least-developed economies – is expected to persist for many years after the virus is brought under control. Long COVID can take many different forms.

Global energy demand: actual versus predicted



Global energy demand and carbon emissions



For the global energy system, the combination of the pandemic, together with efforts to mitigate its impact, led to developments and outturns unmatched in modern peacetime.

For energy, 2020 was a year like no other.

The aim in this analysis is to use the new *Statistical Review* data to try to shed light on those developments, focusing on three key questions.

First, over the past year, we have been bombarded with daily headlines of unprecedented developments and volatility. Standing back from all the noise, what exactly happened last year in the world of energy and how surprising was it?

Second, the global pandemic was the mother of all stress tests. Engineers will tell you that we can learn a lot from how systems behave under extreme pressure. In that spirit, what have we learnt from the response of the global energy system to the COVID-19 crisis?

And finally, this all took place against a backdrop of increasing societal and political demands for an accelerated transition to a net zero energy system. Indeed, Glasgow in Scotland was due to host COP26 last year – arguably the most important UN climate conference since Paris. In the event, the conference had to be delayed until November 2021.

So, as we prepare for Glasgow, what lessons can we draw from the past year – and, more generally, from the developments since Paris – for the challenges and opportunities for this year's COP?

Energy in 2020: what happened and how surprising was it?
Starting first with what actually happened last year and how surprising was it? The headline numbers are dramatic: world energy demand is estimated to have fallen by 4.5% and global carbon emissions from energy use by 6.3%.

These falls are huge by historical standards – the largest falls in both energy demand and carbon emissions since World War II. Indeed, the fall of over 2 Gt of CO_2 means that carbon emissions last year were back to levels last seen in 2011.

It's also striking that the carbon intensity of the energy mix – the average carbon emitted per unit of energy used – fell by 1.8%, also one of the largest ever falls in post-war history.

-2.1 Gt
fall in carbon emissions, taking CO_2 emissions to lowest level since 2011

How should we think about these reductions?

From a historical perspective, the falls in energy demand and carbon emissions are obviously dramatic. But from a forward-looking perspective, the rate of decline in carbon emissions observed last year is similar to what the world needs to average each and every year for the next 30 years to be on track to meet the Paris climate goals.

Put more concretely, if carbon emissions declined at the same average rate as last year for the next 30 years, global carbon emissions would decline by around 85% by 2050. For those of you familiar with bp's latest *Energy Outlook*, that is roughly mid-way between the *Rapid* and *Net Zero* scenarios, which are broadly consistent with maintaining global temperature rises well below 2˚C and below 1.5˚C respectively.

Last year's fall in carbon emissions was obviously driven by a huge loss in economic output and activity. A simple calculation comparing the fall in emissions with the decline in world output equates to an implied carbon price of almost $1400/per tonne. Scarily high. The challenge is to reduce emissions without causing massive disruption and damage to everyday lives and livelihoods.

It's interesting to ask how surprising the falls in energy demand and carbon emissions were last year. Yes: they were the biggest falls seen for 75 years, but they occurred against the backdrop of a global pandemic and the largest economic recession in post-war history. So how surprising were they given everything else that was going on?

The yellow 'predicted' line in the global energy demand chart is based on the same simple framework which we used in the 2019 *Statistical Review* to analyse movements in energy demand.

The framework uses GDP growth, changes in oil prices (as a proxy for energy prices), and the number of unusually hot and cold days to predict the growth of energy demand at a country level and then aggregates to global energy[1]. The neat thing about the framework is that, despite being embarrassingly simple, it can explain most of the broad contours in energy demand over the past 20 years or so.

The key feature of last year's fall in energy demand is that it was surprisingly big. Even after controlling for the collapse in economic activity, the decline in energy demand was close to twice the size of the 'predicted' fall: 4.5% compared with a predicted fall of around 2.5%. The source of this surprise can be better understood by looking at the size of the falls in the different components of energy demand.

Oil demand is estimated to have fallen by an unprecedented 9.3% (9.1 million barrels/day, or Mb/d) in 2020 – far bigger than anything seen in history and far bigger than the falls in the other demand components. Indeed, the fall in oil demand accounts for around three-quarters of the total decline in energy consumption. It's also the key factor accounting for the near-record fall in the carbon intensity of the energy mix.

-9.3%

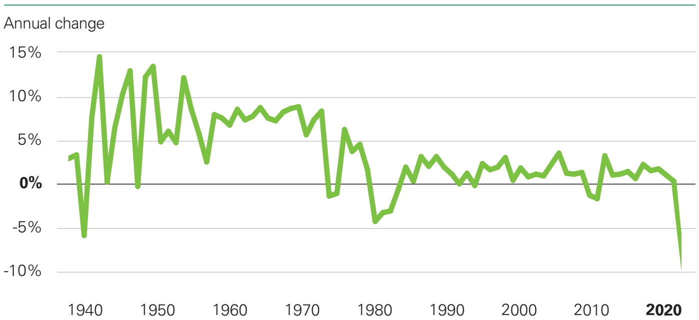
decline in oil consumption, the largest in history

The yellow bars in the energy demand growth chart use a similar modelling approach to derive predicted movements for each of the demand components. As you can see, the fall in oil consumption in 2020 was far bigger than expected based on past relationships. And the extent of that discrepancy was far greater than for any of the other demand components.

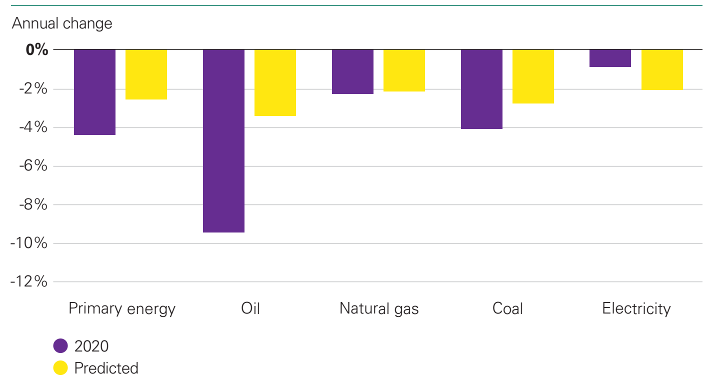
The decline in natural gas was pretty much bang-in-line with the model prediction and electricity consumption actually fell by less than predicted. Indeed, for those of you who like to think in statistical terms, the only statistically significant prediction errors were those for total energy demand and oil demand. And the surprise in total energy demand can be entirely explained by the greater-than-expected fall in oil demand.

Of course, for all of us who experienced extended lockdowns last year, this is hardly surprising. The lockdowns detracted from oil demand in a completely different way to a normal economic downturn, crushing transport-related demand. Mobility metrics fell across the board. Use of jet fuel and kerosene is estimated to have plunged by 40% (3.2 Mb/d) as aviation across much of the world was grounded.

Growth in oil demand

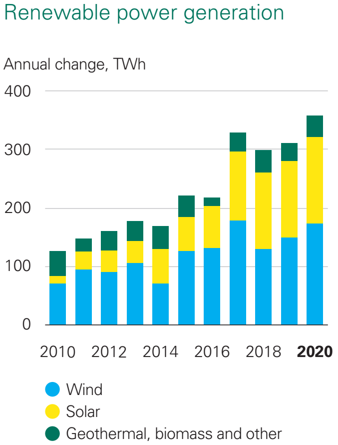


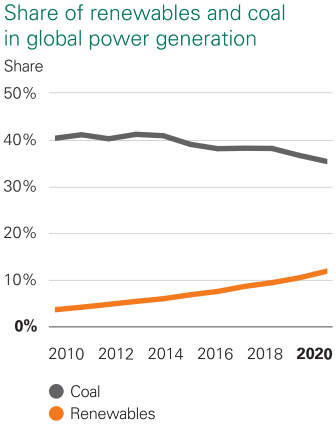
Energy demand growth in 2020



1 The country-level model for China also includes a variable to capture the industrial composition of GDP growth. For more details, see *https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf*

Power generation





Similarly, gasoline demand fell by around 13% (3.1 Mb/d) as road mobility measures crashed. In contrast, products most closely related to the petrochemicals sector (naphtha, ethane and LPG) were broadly flat, supported in part by increasing demand for PPE and other medical- and hygiene-related supplies.

In comparison, natural gas showed far greater resilience. Gas demand is estimated to have fallen by 2.3% (81 bcm) in 2020, a broadly similar decline to that seen in 2009 in the aftermath of the financial crisis. Consumption fell in most regions, with the notable exception of China, where gas demand grew by almost 7%. The relative immunity of natural gas was helped by sharp falls in gas prices, which allowed gas generation to gain share in the US power market and hold its own in the EU.

Electricity consumption is estimated to have experienced the smallest fall across the main components of final energy demand, declining by just 0.9% in 2020. The relative resilience of electricity usage was aided by the nature of the lockdowns, with falling power demand in industry and commercial buildings partially offset by increased domestic use by home-based workers and locked-down families.

The relative resilience of overall power generation disguises a more significant shift in the generation mix. In particular, despite the fall in overall power demand, generation from renewables (wind, solar, bioenergy and geothermal energy, and excluding hydroelectricity) recorded its largest ever increase (358 TWh). This growth was driven by strong increases in both wind (173 TWh) and solar (148 TWh) generation.

Encouragingly, the share of renewables in global generation recorded its fastest ever increase. That continues the strong growth seen in recent years. Over the past five years, renewable generation has accounted for around 60% of the growth in global power generation, with wind and solar power more than doubling.

The growth in renewables last year came largely at the expense of coal-fired generation, which experienced one of its largest declines on record (405 TWh, 4.4%). In addition to falling power demand and increasing deployment of renewables, coal was also hurt by a loss of competitiveness relative to natural gas, especially in the US and EU.

These trends are exactly what the world needs to see as it transitions to net zero: strong growth in renewable generation crowding out coal. That said, the 'more than doubling' in wind and solar generation over the past five years hasn't made even the smallest dent in total coal generation. The level of coal generation in 2020 was essentially unchanged from its level in 2015 as last year's fall simply offset increases from the previous few years. It will take more than just strong growth in renewable energy to remove coal from the global power sector, especially at the pace it needs to happen. There is still a long way to go to squeeze coal out of the power sector.

In the developed world, there needs to be greater progress on energy efficiency. And as we highlighted in the 2020 *Energy Outlook*, for many emerging market economies to make significant inroads into the role of coal while still ensuring improving energy access, they will likely need to see an expansion in natural gas alongside renewable energy over the next 15-20 years.

Finally, in terms of this section, how 'surprising' was last year's fall in carbon emissions? Or put differently, what message should we take from this fall for future carbon trends? Is this the beginning of the much hoped for downward trend in emissions or just a temporary COVID-induced dip?

The two elements combining to produce the near-record decline in carbon emissions – the falls in energy demand and in the carbon intensity of the energy mix – can both be largely traced back to the unprecedented decline in oil demand triggered by the lockdowns. This suggests that as lockdowns around the world are eased and economic activity begins to recover, there is a significant risk that last year's fall in carbon emissions will be reversed. Indeed, the IEA recently estimated that the level of carbon emissions last December was already back above pre-crisis levels.

What can we learn from the COVID-induced stress test?
Moving to the second question for today: what can we learn from the behaviour of the energy system in response to the extreme stress test induced by the pandemic?

The focus here is on the supply response: how did different parts of the energy industry react to the sudden, unexpected fall in demand? As I have already mentioned, it's striking that the relentless expansion of renewable energy was relatively unscathed by the pandemic. Impressive resilience.

I will say more about the good news story that is renewables later. For now, I am going to concentrate on oil and natural gas markets which were affected more severely by the events of last year. Moreover, oil and natural gas markets could become increasingly challenged as the energy transition gathers pace. So, it's interesting to ask whether we can learn anything about their future behaviour from their response to the stresses of last year.

358 TWh

increase in renewable power generation, the largest ever

Oil

Starting first with oil. Over the year as a whole, global oil production is estimated to have fallen by 6.6 Mb/d – again the largest fall in post-war history. To get a sense of the timing and composition of that supply response it is helpful to split the year into three phases.

Phase 1 covers the onset of the global pandemic from December 2019 to April 2020. This is the period in which global oil consumption literally collapsed, with demand reaching a trough in April of more than 20 Mb/d below pre-COVID-19 levels. Off the charts relative to anything seen in history.

The initial supply response was totally underwhelming. In fact, it was counterproductive. The obvious source of supply that could react quickly was OPEC. But as you know, the key OPEC+ meeting in early March ended in disagreement, with supply actually increasing for a period as a brief price war broke out.

Oil inventories accumulated at a record pace, increasing by around 750 million barrels in just four months. That scale of imbalance is unheard of and generated severe logistical issues, in terms of both the availability of storage and the ability of excess supplies to access storage sufficiently quickly.

Prices responded accordingly. Brent reached a low of below $20/bbl in April. And oil markets made frontpage news as US WTI prices turned negative for the first time ever.

The second phase, from April to August, saw a significant supply response. The main supply reaction came from OPEC+, who agreed to cut oil production by 9.7 Mb/d between May and June, later extended to July. US tight oil also responded, with production falling by around 2 Mb/d between March and May.

The responsiveness of tight oil is typically framed in terms of the rapid decline rates in tight oil basins combined with the speed with which

new investment can be halted. But the pace of response seen in the US last spring was far quicker than natural decline, and was largely driven by producing wells being shut-in, due to a combination of logistics and economics.

The falls in US tight oil were compounded by falls in conventional supplies. All told, North American production fell by around 4 Mb/d between March and May – roughly twice that of Russia.

At the same time, demand partially recovered as lockdowns were eased, initially in Asia and increasingly in the US and Europe. This resulted in a convergence of production and consumption levels, with inventories broadly stable at their new elevated level.

The third and final phase, from August through to the end of the year, was one of gradual adjustment. Demand continued to edge up, although second waves of COVID-19 spreading across different regions slowed the pace of recovery. Some of the supply response, from both OPEC+ and US tight oil, was partially unwound. But continuing OPEC+ constraint and compliance meant the market moved into deficit and stocks began to normalize. By the end of the year, around half of the excess stocks accumulated during the first part of the year had been unwound. And prices had recovered to around $50/bbl.

What lessons can we draw from this real-world stress test of global oil markets?

For me, the main lesson was OPEC+ was both able and willing to step in and stabilise oil markets. But whether this means it will always be able to do so, depends on the type of shock affecting oil markets. The nature of OPEC's power to shift supply intertemporally from one period to another means it has the ability to offset temporary, short-lived shocks.

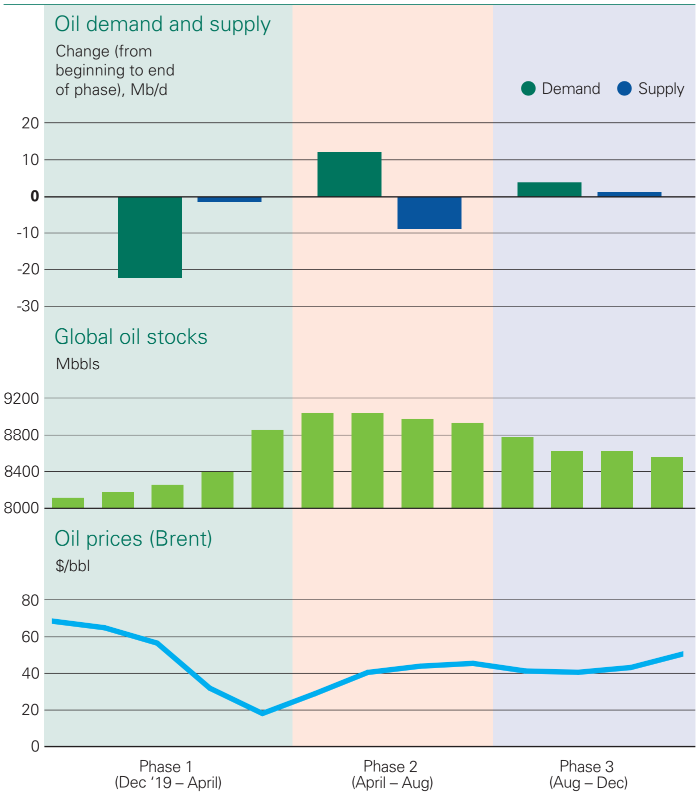
Indeed, in response to an economics exam question of what type of demand shock is OPEC best able to stabilise – a global pandemic followed by a successful vaccine would be close to the perfect answer: relatively short-lived, temporary shocks. Which is what makes the initial failure of OPEC to reach agreement in March 2020 all the more surprising.

In contrast, the ability – and incentive – for OPEC to offset a sustained and growing fall in oil demand as the world transitions to net zero is less clear. In this case, there may be a greater incentive for individual OPEC members to worry more about protecting and growing their market shares and less about stabilizing markets.

-6.6 Mb/d

Fall in global oil production, the largest drop in post-war history

Oil market in 2020



Source: EIA (demand), IEA (supply), S&P Global Platts (prices).

Natural gas
Turning to natural gas markets. I want to focus on the European gas market, both because it's the largest market in which there is active gas-on-gas competition; and because of the key role it plays as the balancing market for liquefied natural gas (LNG) cargoes.

So, what can we learn from its behaviour in response to the stress caused by the pandemic, with European gas imports falling by over 8½% last year? The gas-on-gas competition in Europe takes the form of pipeline imports – predominantly from Russia – competing against LNG imports – largely from the US as the marginal source of LNG.

As LNG imports have increased in recent years it has raised the question of the extent to which Russia and other pipeline gas exporters will compete against LNG to maintain their market share or instead forgo some of that share to avoid driving prices too low. This issue could become more acute in a transition in which Europe moves away from natural gas and competition between different gas supplies intensifies.

Although there is lots of complicating detail, it appears that Russian exporters were prepared to forgo some market share last year. Pipeline imports from Russia as a share of European gas demand fell from 35% in 2019 to 31% in 2020, with much of the reduction happening in the first half of last year. Some of that reduction initially reflected the record storage levels which had been built up towards the end of 2019. But Russian volumes remained low through the second quarter when the impact of the pandemic on European gas demand was at its height.

In contrast, LNG imports were up year-on-year in the first half of 2020 and their share of European demand for the year as a whole was broadly unchanged at 21%. However, as to whether this provides a guide to the future behaviour of Russian pipeline exports is less clear.

The argument here is similar to the point we just discussed in the context of OPEC. In response to a fall in demand that is expected to be relatively short-lived, it may be entirely rational for pipeline exporters to use their flexibility to reduce supply temporarily to help stabilise the market and support prices. But the possible response to a sustained and growing contraction in gas imports as Europe transitions away from fossil fuels could be very different, with a stronger incentive for Russian pipeline exporters to compete to be the last producer standing.

One of the factors affecting the response of pipeline exporters last year was their perception of how low European prices would need to fall to shut-in LNG exports. Which takes us to the second aspect I mentioned, Europe as the balancing market for LNG flows. Until last year, this question of the shut-in price for LNG exports was largely hypothetical – shut-ins had never really occurred at scale. That all changed last year.

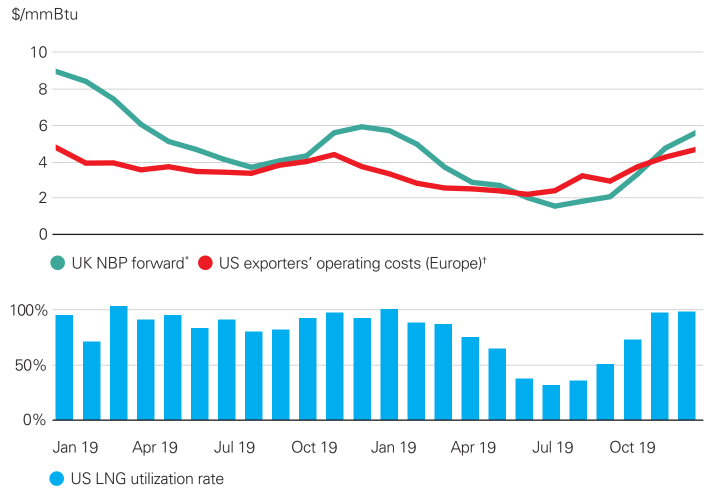
As European LNG forward prices fell below these operating costs, this triggered a significant shut-in of US LNG exports. Average utilization rates of US LNG facilities began to fall in April last year, reaching a low of around 30-35% at the height of the summer. US LNG exports still increased by around 30% in 2020 helped by three new LNG trains coming on stream and several others ramping up. But had it not been for the cancelling of cargoes, the growth in US exports would have been closer to 80%.

Progress since Paris – how is the world doing?
Finally, question three. With the build-up to the Glasgow COP gathering pace, I want to spend a few minutes putting last year's developments into the broader context of progress made since the Paris COP in 2015. The goals agreed at Paris are widely seen as a watershed in terms of achieving global alignment on ambitions for limiting temperature rises and all countries agreeing to make their contribution to achieving those aims.

So almost six years on from Paris, how is the world doing?

One of the biggest changes since 2015 is the marked increase in focus and ambition on getting to net zero. At the time of the Paris convention, no major country had made a formal commitment to achieve net zero.

US LNG: operating costs and utilization rates



* UK NBP represents the average of forward prices 2 months ahead
† US exporters operating costs to Europe = Henry Hub* 1.15 + LNG voyage costs (Platts)

That accolade went to Sweden, which in June 2017 pledged to reach carbon neutrality by 2045.

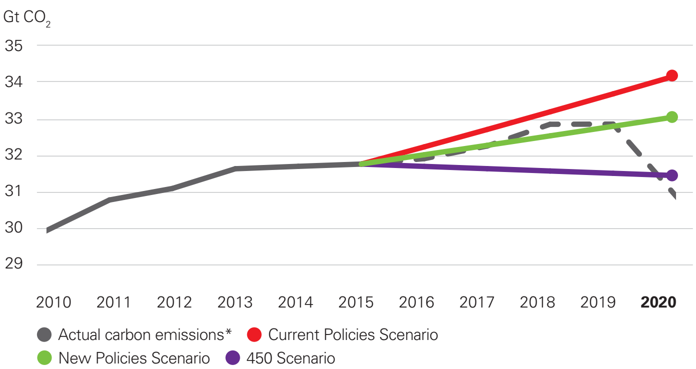
Fast forward to today, and 10 countries together with the European Union have passed net zero targets into law and a further 34 countries have either proposed legislation or outlined formal policy intentions with the same intent. The IEA recently estimated that together these commitments and intentions account for around 70% of global carbon emissions[2]. Although still early days, there are encouraging signs that the collective jolt and huge costs of COVID-19 may have led to renewed determination to prevent an even more damaging global trauma in the form of climate change.

That rising level of ambition is also evident at the corporate level. On last count, the number of companies with stated aims or ambitions to get to net zero had increased more than six-fold since 2019 to more than 3000 companies. This rise in corporate ambition has coincided with growing societal expectations for companies to both increase further their transparency about climate-related risks and demonstrate their strategies and actions are consistent with Paris.

One manifestation of those changing societal expectations is the explosion in ESG-related investments. Inflows into ESG-related funds

2 *https://iea.blob.core.windows.net/assets/20959e2e-7ab8-4f2a-b1c6-4e63387f03a1/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf* (page 33).

IEA's 2015 World Energy Outlook and carbon emissions



*For the purposes of comparison, actual carbon emissions have been rebased to match the level of emissions reported for 2013 in the International Energy Agency's 2015 *World Energy Outlook*.

have increased from less than $30 billion in 2015 to over $330 billion in 2020 – an 11-fold increase in just five years. The world of investing seems to have changed for good – in both senses of the word.

Although these developments are hugely encouraging, they come with two major caveats. First, countries' pledges still don't go far enough. Despite the substantial increase in net zero aims and intentions at national and regional levels, the UN NDC Synthesis Report, published last December, concluded that 'the current levels of climate ambition are not on track to meet our Paris Agreement goals'[3].

Second, there is a mismatch between these ambitions and the outcomes the world needs and wants to see. The Paris agreement was met with huge hope and optimism, but that hasn't yet been reflected in a marked improvement in the actual emissions data.

The IEA's *World Energy Outlook* (WEO) published in November 2015, just prior to the Paris COP, contained three scenarios for carbon emissions based on different assumptions about the future setting of global energy policies: a continuation of current policies (shown in red in the chart); the implementation of declared policy intentions (in green); and a set of policies consistent with limiting global temperature increases to 2˚C (in purple).

Until last year, carbon emissions had continued their unrelenting rise, broadly in line with the policy intentions that had been declared prior to the Paris meeting. Importantly, there was no sign of the decisive shift envisaged by the 'less than 2˚C' purple scenario. The COVID-induced fall in carbon emissions last year put emissions closer to the 2-degree pathway, but as discussed earlier, there is a good chance that much of that dip proves transitory.

Hope and ambition need to be translated into tangible, concrete differences.

Energy access

Although much of the attention of the Paris Agreement is on the response to climate change, the Agreement stipulates that this response should be in 'the context of sustainable development and efforts to eradicate poverty'[4]. The UN Sustainable Development Goals for 2030 (UN SDGs), which were adopted around the same time as the Paris COP, provide a natural benchmark for monitoring progress on this aspect of the Paris Agreement.

There are several strong inter-connections between these goals and the energy system, including on conservation and biodiversity, both on land (SDG 15) and in our oceans (SDG 14). But perhaps the closest to home is SDG 7: 'ensure access to affordable, reliable, sustainable and modern energy for all'. The good news is that there have been significant improvements in energy access over the past six years.

The number of people without access to electricity has fallen from close to 1 billion in 2015, to a little over 750 million by 2019 – around 10% of the world's population, down from 15% in 2015.

Encouraging progress. However, just as with emissions, the progress comes with caveats.

The improvements have been uneven, with three-quarters of the global population without access to electricity situated in sub-Saharan Africa. Moreover, the impact of COVID-19 has reversed some of that progress. The World Bank estimates that the pandemic has made basic electricity services unaffordable for 30 million more people, the first time the number of people without access to electricity has increased for six years. And access to clean cooking facilities – the other focus of SDG 7 – lags far behind with around 2.6 billion people estimated not to have access.

Moreover, the concept of 'energy access' is somewhat nebulous. The UN defines access to electricity in terms of a minimum level of residential consumption. But the level of energy needed to support strong, sustainable economic growth is likely to far exceed that.

Energy is vital for productive uses as well as household consumption. For example, the Energy for Growth Hub propose a Modern Energy Minimum of 1000 kWh per person per year, which they argue is consistent with countries reaching a lower-middle income status[5].

This is around four times greater than the UN definition. Importantly, the Energy for Growth Hub estimates that more than 3.5 billion people – close to half the world's population – are living below the Modern Energy Minimum.

Half the world's population – it makes you think.

Renewables

Arguably, the single most important element of the energy system needed to address both aspects of the Paris Agreement – respond to the threat of climate change and support sustainable growth – is the need for rapid growth in renewable energy. I am pleased to say that the progress on renewable energy over the past five or six years has been a perfect example of that tangible, concrete progress I mentioned.

If we start with what happened last year, focusing on wind and solar energy which is where most of the action is. Despite the huge disruptions associated with the global pandemic and the collapse in GDP, wind and solar capacity increased by a colossal 238 GW in 2020 – 50% larger than at any time in history.

The main driver was China, which accounted for roughly half of the global increase in wind and solar capacity. The expansion in Chinese wind capacity (72 GW) is particularly striking and it's likely that some of the reported increase reflects various changes to Chinese subsidy and accounting practices. But even controlling for that, it seems clear that 2020 was a record year for the build-out of wind and solar capacity.

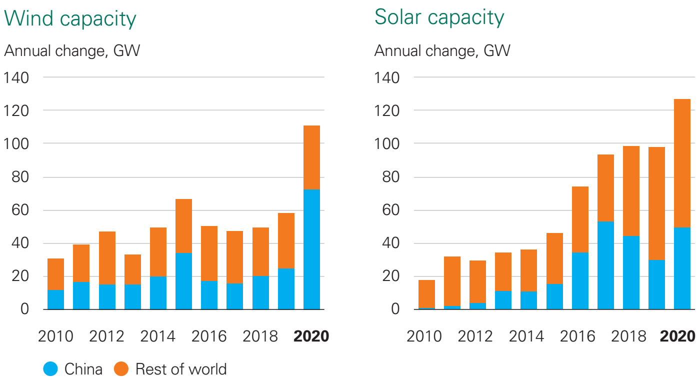
Viewed over a slightly longer period, wind and solar capacity more than doubled between 2015 and 2020, increasing by around 800 GW, which equates to an average annual increase of 18%. To put that in context, in bp's *Rapid* and *Net Zero* scenarios, wind and solar capacity increase at an average annual rate of around 14% and 18% respectively over the next 10 years. So, the current pace of growth is broadly on track with those scenarios.

238 GW

increase in wind and solar capacity, 50% larger than any increase in history

3 Additional targets have been announced since December and the UN will publish an updated report prior to COP 26.
4 *https://unfccc.int/sites/default/files/english_paris_agreement.pdf*
5 *https://www.energyforgrowth.org/projects/modern-energy-minimum/*

Wind and solar power capacity



The challenge is to maintain the recent pace of growth as the overall size of renewable energy expands. In that context, what has underpinned the strong growth over the past five years?

Along with many other forecasters, we materially underestimated the growth of wind and solar power over the past five years. A key factor underpinning this under-estimation is that costs of renewable energy have fallen by far more than projected in bp's 2016 *Energy Outlook*. The costs of onshore wind and solar power have fallen by around 40% and 55% respectively over the past five years[6]. Far more than the 15% and 20% assumed in the 2016 *Outlook*.

Although it's a gross simplification, cost reductions for renewables are often summarised in terms of a 'learning-by-doing' framework. As ever-increasing amounts of renewable capacity are produced and installed, the supply chain learns how to become more and more efficient, driving costs progressively lower. Viewed in this way, renewable costs can fall by more than expected, either because the build-out of renewables is greater – hence allowing for 'more learning' – or because costs fall by more for a given level of build out – 'faster learning'.

Our analysis shows that the biggest factor accounting for the larger-than-expected falls in renewables costs is 'faster learning' – which explains around three-quarters of the error on wind costs and two-thirds for solar costs.

Interestingly, the majority of the 'more learning' contributions for both wind and solar over the past five years stem from China, as renewables have gained share from coal more quickly than expected. This transition has gone hand-in-hand with a massive scaling up of China's renewable manufacturing capacity, which has helped reduce the cost of wind and solar power around the world.

So, an upbeat message on renewables.

But it's important to remember that this pace of progress on renewable energy needs to be matched by the many other dimensions of the energy transition: energy efficiency; the growth of new energy vectors, such as hydrogen, to help decarbonize hard-to-abate sectors; and the build-out of carbon capture, use and storage (CCUS).

Continued rapid growth in renewable energy is necessary to get to net zero, but it's not sufficient.

6 Costs based on LCOE (levelized cost of electricity) averaged across three major demand centres (US, China and Europe).

Acknowledgements
We would like to express our sincere gratitude to the many contacts worldwide who provide the publicly available data for this publication, and to the researchers at the Centre for Energy Economics Research and Policy, Heriot-Watt University who assist in the data compilation.

Conclusion

70th birthdays are important milestones, providing an opportunity to reflect on the events that have shaped your life. There have certainly been many, many changes in global energy markets since the *Statistical Review* was first conceived in 1952.

But as my mother-in-law said to me recently, even at 70 you can still be surprised. And for the *Statistical Review* – like so many of us – 2020 will go down as one of the most surprising and most dramatic years in its life, with the largest declines in energy demand and carbon emissions seen in modern peacetime.

But the importance of the past 70 years pales into insignificance as we consider the challenges facing the energy system over the next 10, 20, 30 years as the world strives to get to net zero.

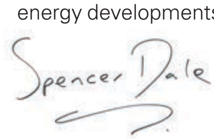
Will 2020 be seen as a turning point when the shock of COVID-19 finally caused the world to take decisive action to mitigate the threat of climate change?

Will the good intentions and increased ambitions of the past few years be translated into a sharp and sustained fall in emissions?

Will renewable energy be able to maintain the rapid rates of growth seen over the past five years?

And how important will the private sector – in the form of green and greening companies, prompted and supported by growing societal expectations – be in the eventual success or otherwise of the energy transition?

If 70th birthdays are important, 100-year anniversaries are really special. What events will the 100-year-old Statistical Review report as it analyses energy developments in 2050?



Spencer Dale
Chief economist
July 2021

In detail
Carbon dioxide emissions now include CO_2 emissions from natural gas flaring. Wind and solar capacity data have been included in the book for the first time.

Additional information – including historical time series for the fuels reported in the review; additional country and regional coverage for fuels consumption; further details on renewable forms of energy – together with the full version of Spencer Dale's presentation is available at *bp.com/statisticalreview*.

① Primary energy

Consumption*

Exajoules	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	13.27	13.78	13.81	14.14	14.19	14.26	14.11	14.24	14.44	14.45	**13.63**	-5.9%	1.0%	2.4%
Mexico	7.31	7.66	7.71	7.74	7.70	7.69	7.79	7.90	7.84	7.55	**6.48**	-14.5%	0.6%	1.2%
US	92.91	92.05	89.62	92.04	92.99	92.09	91.96	92.26	95.64	94.90	**87.79**	-7.7%	0.5%	15.8%
Total North America	113.50	113.49	111.14	113.92	114.88	114.04	113.85	114.40	117.92	116.90	**107.90**	-8.0%	0.6%	19.4%
Argentina	3.23	3.34	3.46	3.59	3.59	3.66	3.63	3.64	3.59	3.38	**3.15**	-7.1%	0.8%	0.6%
Brazil	10.95	11.46	11.67	12.10	12.38	12.20	11.89	12.04	12.12	12.42	**12.01**	-3.6%	2.2%	2.2%
Chile	1.33	1.44	1.48	1.49	1.46	1.50	1.57	1.58	1.64	1.68	**1.61**	-4.9%	2.4%	0.3%
Colombia	1.44	1.48	1.59	1.60	1.68	1.70	1.78	1.82	1.85	1.91	**1.77**	-7.7%	3.4%	0.3%
Ecuador	0.55	0.59	0.62	0.64	0.67	0.67	0.66	0.69	0.73	0.74	**0.65**	-13.6%	4.1%	0.1%
Peru	0.81	0.90	0.93	0.94	0.97	1.02	1.09	1.11	1.17	1.19	**1.00**	-16.1%	5.2%	0.2%
Trinidad & Tobago	0.84	0.83	0.81	0.83	0.82	0.80	0.71	0.75	0.71	0.71	**0.62**	-12.5%	-0.9%	0.1%
Venezuela	3.36	3.44	3.61	3.65	3.47	3.43	2.99	2.93	2.47	1.95	**1.44**	-26.3%	-5.6%	0.3%
Other S. & Cent. America	3.67	3.79	3.84	3.84	3.84	4.01	4.21	4.20	4.29	4.35	**3.95**	-9.3%	1.9%	0.7%
Total S. & Cent. America	26.19	27.27	27.99	28.70	28.89	28.97	28.53	28.75	28.58	28.33	**26.19**	-7.8%	1.3%	4.7%
Austria	1.48	1.38	1.45	1.44	1.38	1.38	1.43	1.46	1.43	1.50	**1.38**	-7.9%	0.5%	0.2%
Belgium	2.76	2.58	2.47	2.54	2.36	2.39	2.58	2.61	2.59	2.67	**2.19**	-18.1%	0.3%	0.4%
Czech Republic	1.84	1.79	1.78	1.75	1.71	1.68	1.65	1.72	1.72	1.70	**1.54**	-9.7%	-0.4%	0.3%
Finland	1.30	1.22	1.18	1.19	1.15	1.14	1.16	1.13	1.16	1.13	**1.10**	-2.8%	-0.6%	0.2%
France	10.65	10.24	10.23	10.33	9.89	9.95	9.79	9.72	9.88	9.67	**8.70**	-10.3%	-0.7%	1.6%
Germany	13.70	13.20	13.37	13.74	13.16	13.40	13.62	13.78	13.44	13.05	**12.11**	-7.5%	-0.1%	2.2%
Greece	1.34	1.31	1.23	1.16	1.09	1.10	1.08	1.13	1.13	1.19	**1.00**	-16.4%	-1.6%	0.2%
Hungary	0.99	0.96	0.90	0.85	0.85	0.90	0.91	0.96	0.97	0.98	**0.97**	-1.5%	0.1%	0.2%
Italy	7.27	7.13	6.92	6.60	6.24	6.42	6.45	6.52	6.57	6.45	**5.86**	-9.3%	-0.9%	1.1%
Netherlands	4.10	3.92	3.79	3.68	3.47	3.52	3.59	3.53	3.53	3.51	**3.37**	-4.2%	-1.0%	0.6%
Norway	1.73	1.75	1.94	1.82	1.87	1.89	1.91	1.92	1.90	1.78	**1.93**	8.2%	-0.1%	0.3%
Poland	4.18	4.20	4.07	4.09	3.93	3.97	4.15	4.31	4.37	4.24	**4.01**	-5.5%	0.8%	0.7%
Portugal	1.08	1.03	0.94	1.03	1.05	1.03	1.10	1.07	1.08	1.03	**0.93**	-9.8%	◆	0.2%
Romania	1.42	1.46	1.40	1.31	1.35	1.36	1.36	1.38	1.41	1.38	**1.33**	-3.5%	-0.3%	0.2%
Spain	6.08	5.97	5.93	5.62	5.51	5.59	5.64	5.72	5.79	5.60	**4.97**	-11.4%	-0.6%	0.9%
Sweden	2.16	2.13	2.26	2.12	2.11	2.17	2.14	2.21	2.16	2.24	**2.20**	-2.2%	1.0%	0.4%
Switzerland	1.23	1.17	1.23	1.26	1.21	1.18	1.11	1.11	1.13	1.18	**1.08**	-8.6%	-0.7%	0.2%
Turkey	4.50	4.81	5.11	5.07	5.23	5.72	6.01	6.37	6.29	6.51	**6.29**	-3.6%	4.3%	1.1%
Ukraine	5.10	5.27	5.17	4.89	4.33	3.59	3.75	3.49	3.62	3.42	**3.31**	-3.3%	-3.3%	0.6%
United Kingdom	8.92	8.43	8.53	8.48	7.99	8.08	7.99	7.96	7.95	7.73	**6.89**	-11.0%	-1.2%	1.2%
Other Europe	6.70	6.55	6.26	6.32	6.11	6.25	6.40	6.52	6.63	6.53	**5.97**	-8.8%	0.1%	1.1%
Total Europe	88.53	86.50	86.18	85.29	82.01	82.72	83.81	84.64	84.74	83.46	**77.15**	-7.8%	-0.2%	13.9%
Azerbaijan	0.47	0.52	0.54	0.55	0.56	0.62	0.61	0.60	0.62	0.65	**0.62**	-4.3%	3.2%	0.1%
Belarus	1.09	1.08	1.17	1.03	1.07	0.97	0.96	0.98	1.07	1.05	**0.98**	-7.0%	0.3%	0.2%
Kazakhstan	2.24	2.53	2.66	2.67	2.73	2.74	2.73	2.94	3.24	3.15	**3.11**	-1.7%	4.2%	0.6%
Russian Federation	27.99	28.92	28.98	28.65	28.72	28.23	28.82	29.00	30.11	29.90	**28.31**	-5.5%	1.1%	5.1%
Turkmenistan	0.90	1.00	1.09	0.97	1.00	1.20	1.19	1.17	1.31	1.43	**1.40**	-1.9%	5.5%	0.3%
Uzbekistan	1.88	1.95	1.93	1.96	2.02	1.93	1.85	1.85	1.92	1.92	**1.87**	-2.8%	0.2%	0.3%
Other CIS	0.67	0.71	0.74	0.71	0.73	0.72	0.73	0.76	0.83	0.80	**0.82**	1.5%	2.1%	0.1%
Total CIS	35.23	36.71	37.10	36.53	36.82	36.41	36.88	37.30	39.08	38.90	**37.12**	-4.8%	1.4%	6.7%
Iran	8.72	9.11	9.21	9.55	9.98	9.93	10.40	10.79	11.42	11.97	**12.03**	0.2%	3.4%	2.2%
Iraq	1.45	1.54	1.63	1.76	1.69	1.68	1.93	1.91	2.00	2.20	**2.06**	-6.3%	4.9%	0.4%
Israel	0.99	1.02	1.06	0.98	0.97	1.02	1.04	1.09	1.09	1.13	**1.05**	-7.4%	1.9%	0.2%
Kuwait	1.41	1.45	1.51	1.55	1.57	1.61	1.62	1.65	1.65	1.67	**1.51**	-9.9%	3.1%	0.3%
Oman	0.87	0.94	1.03	1.15	1.14	1.21	1.21	1.30	1.37	1.39	**1.37**	-1.8%	6.7%	0.2%
Qatar	1.20	1.40	1.60	1.73	1.87	2.13	2.08	2.02	1.78	1.93	**1.71**	-11.3%	6.4%	0.3%
Saudi Arabia	8.74	9.18	9.74	9.78	10.49	10.82	10.96	10.93	10.65	10.68	**10.56**	-1.4%	3.1%	1.9%
United Arab Emirates	3.50	3.67	3.87	4.08	4.04	4.46	4.64	4.65	4.59	4.55	**4.19**	-8.2%	3.2%	0.8%
Other Middle East	2.46	2.32	2.20	2.11	2.08	1.95	1.94	1.96	1.92	1.99	**1.96**	-1.8%	-2.0%	0.4%
Total Middle East	29.33	30.63	31.84	32.68	33.83	34.82	35.82	36.30	36.47	37.51	**36.44**	-3.1%	3.1%	6.5%
Algeria	1.58	1.67	1.83	1.93	2.11	2.22	2.22	2.25	2.42	2.50	**2.30**	-8.4%	4.5%	0.4%
Egypt	3.24	3.30	3.47	3.45	3.44	3.52	3.69	3.80	3.85	3.86	**3.65**	-5.8%	2.3%	0.7%
Morocco	0.70	0.73	0.75	0.77	0.78	0.79	0.80	0.84	0.86	0.94	**0.88**	-7.1%	4.1%	0.2%
South Africa	5.26	5.20	5.12	5.14	5.20	5.09	5.33	5.30	5.10	5.21	**4.90**	-6.1%	◆	0.9%
Other Africa	5.21	5.14	5.48	5.82	6.22	6.47	6.55	6.85	7.27	7.36	**6.86**	-7.0%	4.1%	1.2%
Total Africa	15.99	16.04	16.64	17.10	17.75	18.09	18.59	19.03	19.50	19.87	**18.58**	-6.7%	2.5%	3.3%
Australia	5.33	5.48	5.42	5.49	5.54	5.67	5.70	5.67	5.70	5.88	**5.57**	-5.5%	0.9%	1.0%
Bangladesh	0.90	0.98	1.05	1.08	1.12	1.31	1.33	1.38	1.47	1.64	**1.59**	-3.2%	6.4%	0.3%
China	104.29	112.54	117.05	121.38	124.82	126.53	128.63	132.80	137.58	142.03	**145.46**	2.1%	3.8%	26.1%
China Hong Kong SAR	1.16	1.19	1.14	1.17	1.14	1.18	1.21	1.29	1.30	1.24	**0.93**	-25.3%	1.1%	0.2%
India	22.48	23.80	25.04	26.02	27.79	28.68	29.95	31.14	33.14	33.89	**31.98**	-5.9%	4.7%	5.7%
Indonesia	6.40	6.88	7.32	7.56	7.02	7.09	7.17	7.47	8.07	8.65	**7.63**	-12.0%	4.0%	1.4%
Japan	21.11	20.02	19.89	19.73	19.22	18.92	18.70	18.91	18.80	18.37	**17.03**	-7.5%	-0.8%	3.1%
Malaysia	3.35	3.47	3.73	3.90	3.94	4.00	4.21	4.27	4.33	4.43	**4.11**	-7.4%	3.1%	0.7%
New Zealand	0.83	0.83	0.84	0.84	0.88	0.89	0.89	0.91	0.91	0.93	**0.84**	-9.9%	1.4%	0.2%
Pakistan	2.65	2.65	2.47	2.69	2.77	2.92	3.18	3.37	3.48	3.51	**3.47**	-1.4%	2.9%	0.6%
Philippines	1.22	1.24	1.28	1.38	1.45	1.59	1.73	1.90	1.96	2.02	**1.82**	-9.7%	5.5%	0.3%
Singapore	2.87	2.99	3.00	3.06	3.15	3.35	3.48	3.59	3.61	3.53	**3.42**	-3.4%	2.8%	0.6%
South Korea	10.82	11.33	11.44	11.47	11.57	11.75	12.03	12.27	12.43	12.25	**11.79**	-4.0%	2.1%	2.1%
Sri Lanka	0.24	0.25	0.25	0.25	0.27	0.29	0.31	0.33	0.35	0.36	**0.33**	-8.8%	4.9%	0.1%
Taiwan	4.77	4.73	4.70	4.80	4.90	4.90	4.90	4.93	4.99	4.90	**4.82**	-2.0%	1.0%	0.9%
Thailand	4.39	4.56	4.87	4.95	5.09	5.21	5.32	5.41	5.53	5.51	**5.12**	-7.4%	2.9%	0.9%
Vietnam	1.87	2.13	2.24	2.35	2.57	2.86	3.09	3.31	3.73	4.17	**4.09**	-2.1%	9.7%	0.7%
Other Asia Pacific	1.94	1.93	2.02	1.97	2.13	2.22	2.41	2.46	2.50	3.23	**3.25**	0.1%	6.3%	0.6%
Total Asia Pacific	196.60	206.99	213.73	220.09	225.38	229.36	234.24	241.41	249.85	256.54	**253.25**	-1.6%	3.3%	45.5%
Total World	**505.38**	**517.64**	**524.61**	**534.32**	**539.56**	**544.41**	**551.74**	**561.82**	**576.13**	**581.51**	**556.63**	**-4.5%**	**1.9%**	**100.0%**
of which: OECD	234.19	231.74	229.51	231.63	229.65	230.25	231.16	233.28	236.85	234.48	**217.11**	-7.7%	0.4%	39.0%
Non-OECD	271.19	285.90	295.10	302.69	309.91	314.16	320.58	328.54	339.28	347.04	**339.52**	-2.4%	3.1%	61.0%
European Union	65.07	63.12	62.36	61.82	59.59	60.35	61.03	61.80	61.79	60.74	**55.74**	-8.5%	-0.3%	10.0%

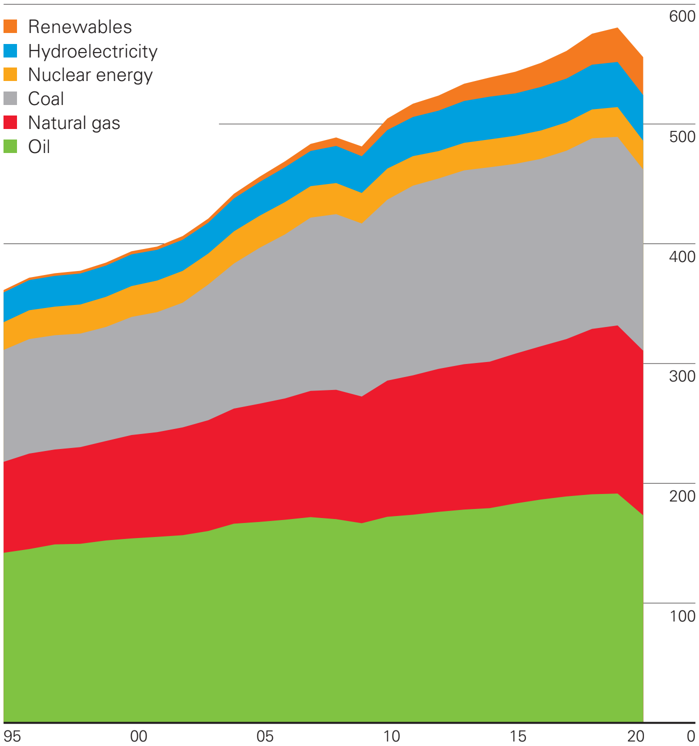
*In this review, primary energy comprises commercially traded fuels, including modern renewables used to generate electricity.
Energy from all sources of non-fossil power generation is accounted for on an input-equivalent basis. See the appendix or *bp.com/statisticalreview* for more details on this methodology.
◆Less than 0.05%.
Note: Growth rates are adjusted for leap years.

Primary energy: Consumption by fuel*

Exajoules	2019 Oil	2019 Natural gas	2019 Coal	2019 Nuclear energy	2019 Hydro-electricity	2019 Renew-ables	2019 Total	2020 Oil	2020 Natural gas	2020 Coal	2020 Nuclear energy	2020 Hydro-electricity	2020 Renew-ables	2020 **Total**
Canada	4.78	4.24	0.63	0.90	3.38	0.51	14.45	4.26	4.05	0.50	0.87	3.42	0.54	**13.63**
Mexico	3.24	3.17	0.54	0.10	0.21	0.30	7.55	2.46	3.11	0.21	0.10	0.24	0.36	**6.48**
US	37.13	30.57	11.34	7.60	2.54	5.71	94.90	32.54	29.95	9.20	7.39	2.56	6.15	**87.79**
Total North America	45.15	37.98	12.52	8.59	6.14	6.52	116.90	39.27	37.11	9.91	8.35	6.22	7.04	**107.90**
Argentina	1.15	1.68	0.03	0.08	0.33	0.12	3.38	1.03	1.58	0.03	0.09	0.27	0.13	**3.15**
Brazil	4.81	1.29	0.65	0.14	3.55	1.99	12.42	4.61	1.16	0.58	0.14	3.52	2.01	**12.01**
Chile	0.76	0.23	0.31	–	0.19	0.18	1.68	0.69	0.22	0.30	–	0.18	0.21	**1.61**
Colombia	0.68	0.48	0.20	–	0.48	0.06	1.91	0.55	0.50	0.27	–	0.39	0.05	**1.77**
Ecuador	0.49	0.02	–	–	0.22	0.01	0.74	0.40	0.02	–	–	0.22	0.01	**0.65**
Peru	0.54	0.30	0.03	–	0.28	0.04	1.19	0.40	0.25	0.02	–	0.27	0.05	**1.00**
Trinidad & Tobago	0.08	0.63	–	–	–	†	0.71	0.08	0.54	–	–	–	†	**0.62**
Venezuela	0.59	0.92	†	–	0.43	†	1.95	0.48	0.68	†	–	0.28	†	**1.44**
Other S. & Cent. America	2.74	0.33	0.23	–	0.76	0.29	4.35	2.37	0.29	0.28	–	0.72	0.29	**3.95**
Total S. & Cent. America	11.84	5.88	1.45	0.22	6.25	2.69	28.33	10.62	5.24	1.48	0.23	5.87	2.75	**26.19**
Austria	0.55	0.32	0.12	–	0.36	0.15	1.50	0.48	0.31	0.09	–	0.36	0.14	**1.38**
Belgium	1.33	0.63	0.13	0.39	†	0.19	2.67	0.93	0.61	0.11	0.31	†	0.23	**2.19**
Czech Republic	0.42	0.30	0.60	0.27	0.02	0.09	1.70	0.37	0.30	0.49	0.27	0.02	0.09	**1.54**
Finland	0.39	0.07	0.15	0.22	0.11	0.19	1.13	0.35	0.07	0.13	0.21	0.14	0.19	**1.10**
France	3.14	1.57	0.27	3.56	0.50	0.63	9.67	2.68	1.46	0.19	3.14	0.54	0.68	**8.70**
Germany	4.66	3.19	2.25	0.67	0.18	2.10	13.05	4.21	3.12	1.84	0.57	0.17	2.21	**12.11**
Greece	0.64	0.19	0.22	–	0.04	0.12	1.19	0.51	0.21	0.11	–	0.03	0.14	**1.00**
Hungary	0.35	0.35	0.08	0.15	†	0.05	0.98	0.33	0.37	0.07	0.14	†	0.06	**0.97**
Italy	2.55	2.55	0.28	–	0.41	0.65	6.45	2.13	2.44	0.21	–	0.41	0.67	**5.86**
Netherlands	1.64	1.33	0.27	0.03	†	0.23	3.51	1.51	1.32	0.18	0.04	†	0.33	**3.37**
Norway	0.39	0.16	0.03	–	1.12	0.07	1.78	0.37	0.16	0.03	–	1.25	0.11	**1.93**
Poland	1.36	0.75	1.86	–	0.02	0.25	4.24	1.28	0.78	1.67	–	0.02	0.27	**4.01**
Portugal	0.50	0.22	0.05	–	0.08	0.18	1.03	0.41	0.22	0.02	–	0.11	0.17	**0.93**
Romania	0.45	0.39	0.21	0.10	0.14	0.10	1.38	0.44	0.41	0.15	0.10	0.13	0.10	**1.33**
Spain	2.70	1.30	0.16	0.52	0.20	0.73	5.60	2.21	1.17	0.07	0.52	0.24	0.77	**4.97**
Sweden	0.59	0.04	0.08	0.59	0.58	0.36	2.24	0.55	0.04	0.07	0.48	0.65	0.41	**2.20**
Switzerland	0.44	0.12	†	0.23	0.34	0.04	1.18	0.37	0.12	†	0.20	0.33	0.05	**1.08**
Turkey	2.01	1.56	1.76	–	0.79	0.39	6.51	1.82	1.67	1.66	–	0.69	0.45	**6.29**
Ukraine	0.48	1.02	1.08	0.74	0.06	0.05	3.42	0.45	1.06	0.98	0.68	0.06	0.09	**3.31**
United Kingdom	3.08	2.78	0.22	0.50	0.05	1.09	7.73	2.39	2.61	0.19	0.45	0.06	1.20	**6.89**
Other Europe	2.59	1.08	1.34	0.34	0.60	0.58	6.53	2.28	1.07	1.10	0.34	0.59	0.60	**5.97**
Total Europe	30.27	19.93	11.13	8.29	5.60	8.24	83.46	26.07	19.48	9.40	7.44	5.82	8.94	**77.15**
Azerbaijan	0.21	0.42	†	–	0.01	†	0.65	0.18	0.43	†	–	0.01	†	**0.62**
Belarus	0.30	0.69	0.06	–	†	†	1.05	0.28	0.64	0.06	–	†	†	**0.98**
Kazakhstan	0.76	0.63	1.66	–	0.09	0.01	3.15	0.75	0.60	1.64	–	0.09	0.03	**3.11**
Russian Federation	6.72	16.00	3.57	1.86	1.73	0.02	29.90	6.39	14.81	3.27	1.92	1.89	0.04	**28.31**
Turkmenistan	0.29	1.14	–	–	†	†	1.43	0.28	1.13	–	–	†	†	**1.40**
Uzbekistan	0.19	1.60	0.08	–	0.06	†	1.92	0.16	1.55	0.10	–	0.06	†	**1.87**
Other CIS	0.18	0.20	0.09	0.02	0.32	†	0.80	0.16	0.22	0.11	0.02	0.31	†	**0.82**
Total CIS	8.64	20.67	5.45	1.88	2.21	0.04	38.90	8.19	19.38	5.17	1.94	2.36	0.08	**37.12**
Iran	3.53	8.04	0.07	0.06	0.26	0.01	11.97	3.31	8.39	0.07	0.06	0.19	0.01	**12.03**
Iraq	1.47	0.70	–	–	0.02	†	2.20	1.29	0.75	–	–	0.02	†	**2.06**
Israel	0.50	0.39	0.21	–	–	0.03	1.13	0.42	0.41	0.17	–	–	0.05	**1.05**
Kuwait	0.83	0.83	0.01	–	–	†	1.67	0.76	0.74	†	–	–	†	**1.51**
Oman	0.48	0.90	0.01	–	–	†	1.39	0.42	0.93	0.01	–	–	†	**1.37**
Qatar	0.60	1.32	–	–	–	†	1.93	0.45	1.26	–	–	–	†	**1.71**
Saudi Arabia	6.67	4.00	†	–	–	0.01	10.68	6.51	4.04	†	–	–	0.01	**10.56**
United Arab Emirates	1.86	2.57	0.08	–	–	0.04	4.55	1.51	2.51	0.11	0.01	–	0.05	**4.19**
Other Middle East	1.09	0.84	0.01	–	0.02	0.03	1.99	1.03	0.86	0.01	–	0.02	0.04	**1.96**
Total Middle East	17.03	19.60	0.40	0.06	0.30	0.12	37.51	15.71	19.88	0.38	0.07	0.23	0.17	**36.44**
Algeria	0.85	1.63	0.02	–	†	0.01	2.50	0.72	1.55	0.02	–	†	0.01	**2.30**
Egypt	1.48	2.12	0.08	–	0.12	0.06	3.86	1.33	2.08	0.03	–	0.12	0.09	**3.65**
Morocco	0.56	0.04	0.28	–	0.01	0.06	0.94	0.50	0.03	0.28	–	0.01	0.06	**0.88**
South Africa	1.17	0.15	3.64	0.12	0.01	0.11	5.21	1.02	0.15	3.48	0.14	†	0.11	**4.90**
Other Africa	4.21	1.66	0.30	–	1.08	0.11	7.36	3.62	1.70	0.30	–	1.13	0.11	**6.86**
Total Africa	8.28	5.59	4.32	0.12	1.22	0.34	19.87	7.19	5.51	4.11	0.14	1.27	0.38	**18.58**
Australia	2.11	1.52	1.75	–	0.13	0.37	5.88	1.83	1.47	1.69	–	0.13	0.45	**5.57**
Bangladesh	0.38	1.11	0.14	–	0.01	†	1.64	0.33	1.10	0.15	–	0.01	†	**1.59**
China	27.94	11.10	81.79	3.11	11.34	6.75	142.03	28.50	11.90	82.27	3.25	11.74	7.79	**145.46**
China Hong Kong SAR	0.87	0.11	0.26	–	–	†	1.24	0.61	0.18	0.14	–	–	†	**0.93**
India	9.99	2.13	18.60	0.40	1.44	1.33	33.89	9.02	2.15	17.54	0.40	1.45	1.43	**31.98**
Indonesia	3.16	1.58	3.41	–	0.15	0.35	8.65	2.34	1.50	3.26	–	0.17	0.37	**7.63**
Japan	7.32	3.89	4.91	0.59	0.66	1.01	18.37	6.49	3.76	4.57	0.38	0.69	1.13	**17.03**
Malaysia	1.59	1.61	0.95	–	0.23	0.04	4.43	1.38	1.37	1.14	–	0.18	0.04	**4.11**
New Zealand	0.36	0.18	0.06	–	0.23	0.10	0.93	0.30	0.16	0.06	–	0.22	0.10	**0.84**
Pakistan	0.90	1.60	0.56	0.08	0.32	0.05	3.51	0.88	1.48	0.62	0.08	0.36	0.04	**3.47**
Philippines	0.91	0.15	0.73	–	0.07	0.15	2.02	0.75	0.14	0.73	–	0.06	0.15	**1.82**
Singapore	3.05	0.45	0.02	–	–	0.01	3.53	2.93	0.45	0.02	–	–	0.01	**3.42**
South Korea	5.16	2.02	3.44	1.30	0.02	0.30	12.25	4.90	2.04	3.03	1.42	0.03	0.36	**11.79**
Sri Lanka	0.25	–	0.06	–	0.04	0.01	0.36	0.21	–	0.07	–	0.04	0.01	**0.33**
Taiwan	1.98	0.84	1.67	0.29	0.05	0.07	4.90	1.89	0.90	1.63	0.28	0.03	0.09	**4.82**
Thailand	2.62	1.83	0.71	–	0.06	0.28	5.51	2.39	1.69	0.73	–	0.04	0.28	**5.12**
Vietnam	1.10	0.35	2.07	–	0.60	0.04	4.17	0.98	0.31	2.10	–	0.61	0.08	**4.09**
Other Asia Pacific	0.96	0.41	1.23	–	0.61	0.01	3.23	0.94	0.42	1.23	–	0.64	0.02	**3.25**
Total Asia Pacific	70.67	30.89	122.37	5.77	15.97	10.87	256.54	66.68	31.02	120.97	5.82	16.41	12.36	**253.25**
Total World	**191.89**	**140.54**	**157.64**	**24.93**	**37.69**	**28.82**	**581.51**	**173.73**	**137.62**	**151.42**	**23.98**	**38.16**	**31.71**	**556.63**
of which: OECD	90.16	64.80	32.30	17.78	12.87	16.56	234.48	78.52	63.28	27.46	16.67	13.14	18.04	**217.11**
Non-OECD	101.73	75.74	125.34	7.15	24.81	12.26	347.04	95.21	74.34	123.96	7.31	25.02	13.67	**339.52**
European Union	23.17	14.08	7.32	6.82	2.83	6.51	60.74	20.03	13.68	5.91	6.11	3.04	6.97	**55.74**

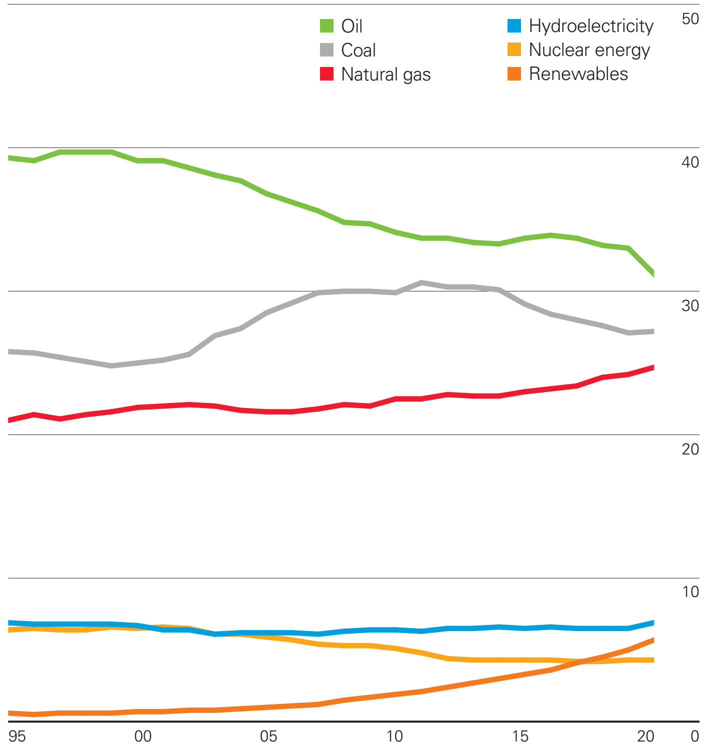
*In this review, primary energy comprises commercially traded fuels, including modern renewables used to generate electricity.
Energy from all sources of non-fossil power generation is accounted for on an input-equivalent basis. See the appendix or *bp.com/statisticalreview* for more details on this methodology.
†Less than 0.005.

World consumption
Exajoules



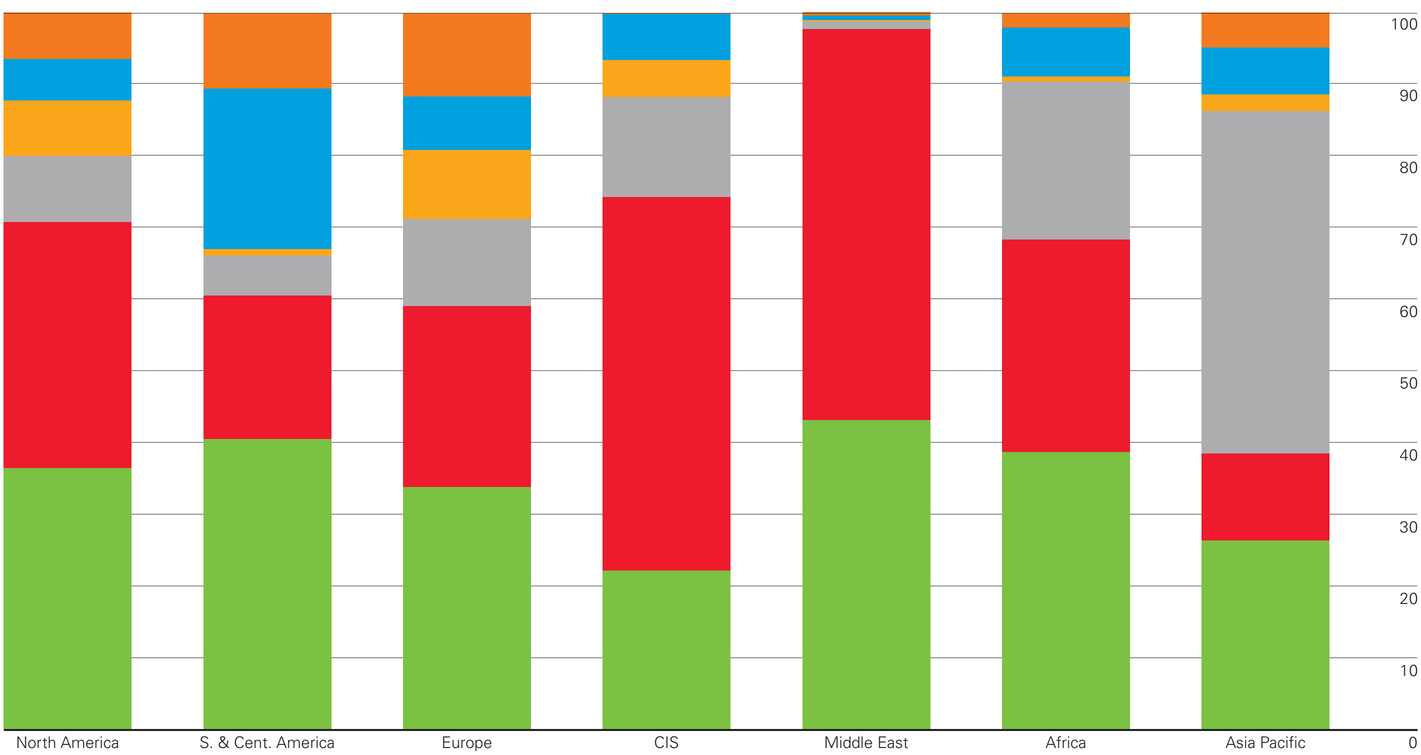
Primary energy consumption decreased by 4.5% last year, the first decline in energy consumption since 2009. The decline was driven largely by oil (-9.7%), which accounted for almost three quarters of the decrease. Consumption for all fuels decreased, apart from renewables (+9.7%) and hydro (+1.0%). Consumption fell across all the regions, with the largest declines in North America (-8.0%) and Europe (-7.8%). The lowest decrease was in Asia-Pacific (-1.6%) due to the growth in China (+2.1%), the only major country where energy consumption increased in 2020. In the other regions, the decline in consumption ranged between -7.8% in South and Central America to -3.1% in the Middle East.

Shares of global primary energy
Percentage



Oil continues to hold the largest share of the energy mix (31.2%). Coal is the second largest fuel in 2020, accounting for 27.2% of total primary energy consumption, a slight increase from 27.1% in the previous year. The share of both natural gas and renewables rose to record highs of 24.7% and 5.7% respectively. Renewables has now overtaken nuclear which makes up only 4.3% of the energy mix. Hydro's share of energy increased by 0.4 percentage points last year to 6.9%, the first increase since 2014.

Regional consumption pattern 2020
Percentage



Oil remains the dominant fuel in Africa, Europe and the Americas, while natural gas dominates in CIS and the Middle East, accounting for more than half of the energy mix in both regions. Coal is the dominant fuel in the Asia Pacific region. In 2020 coal's share of primary energy fell to its lowest level in our data series in North America and Europe to 12% and 9%, respectively.

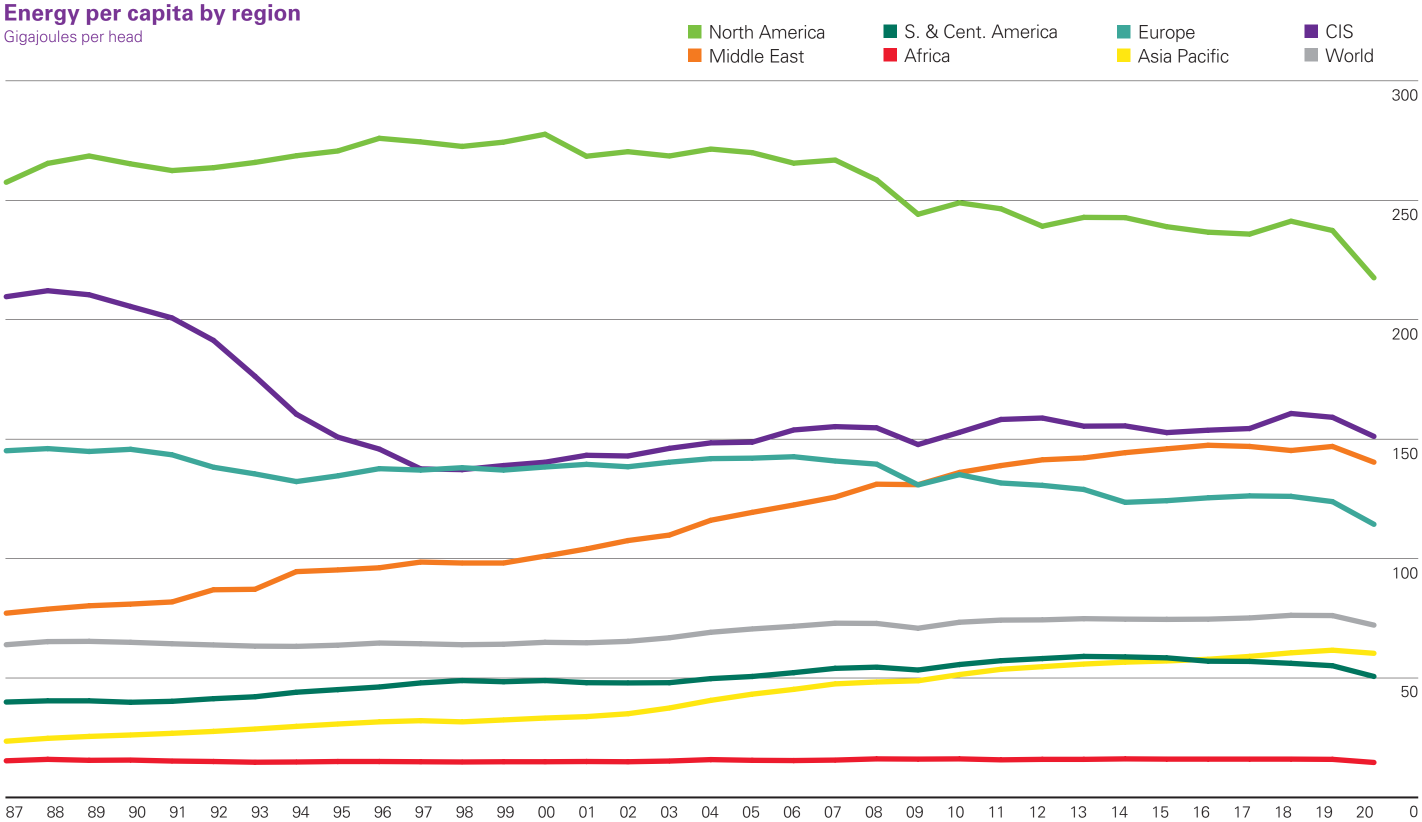
Primary energy: Consumption per capita*

Gigajoules per capita	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	2009-19
Canada	388.8	398.9	395.5	400.7	398.0	395.9	387.7	387.8	389.4	386.3	**361.1**	-6.8%	-0.1%
Mexico	64.1	66.2	65.7	65.1	64.0	63.1	63.1	63.3	62.1	59.2	**50.2**	-15.4%	-0.6%
US	300.7	295.4	285.4	290.9	291.8	287.0	284.7	283.8	292.4	288.4	**265.2**	-8.3%	-0.2%
Total North America	248.2	245.7	238.4	242.1	242.0	238.2	235.9	235.1	240.5	236.6	**216.8**	-8.6%	-0.3%
Argentina	79.1	80.7	82.9	85.2	84.2	84.9	83.5	82.9	80.9	75.5	**69.7**	-8.0%	-0.2%
Brazil	56.0	58.0	58.5	60.2	61.1	59.7	57.7	57.9	57.8	58.9	**56.5**	-4.3%	1.4%
Chile	77.9	83.8	84.9	84.9	82.4	83.2	86.2	85.5	87.8	88.9	**84.1**	-5.7%	1.3%
Colombia	31.8	32.5	34.5	34.4	35.8	35.7	37.1	37.1	37.3	37.9	**34.7**	-8.6%	2.2%
Ecuador	36.8	38.4	39.9	40.6	42.0	41.2	40.3	40.9	42.5	42.8	**36.6**	-14.9%	2.4%
Peru	28.0	30.7	31.4	31.7	32.2	33.3	35.1	35.4	36.7	36.5	**30.2**	-17.3%	4.0%
Trinidad & Tobago	633.9	618.8	605.3	612.4	605.4	584.0	515.4	544.4	513.1	509.5	**445.7**	-12.8%	-1.5%
Venezuela	118.2	119.1	122.8	122.7	115.7	114.1	100.2	99.5	85.6	68.4	**50.7**	-26.0%	-5.8%
Other S. & Cent. America	35.1	35.8	35.8	35.4	35.0	36.1	37.6	37.0	37.5	37.6	**33.8**	-10.3%	0.8%
Total S. & Cent. America	54.9	56.5	57.4	58.3	58.1	57.7	56.3	56.2	55.4	54.4	**49.9**	-8.6%	0.4%
Austria	175.7	163.7	170.7	168.5	160.4	159.5	163.5	166.0	160.8	167.2	**153.6**	-8.4%	-0.2%
Belgium	252.6	234.2	223.0	227.6	210.2	211.9	227.1	228.2	225.3	231.2	**189.0**	-18.4%	-0.3%
Czech Republic	174.3	169.8	168.5	165.0	161.3	158.0	155.6	162.0	161.2	158.9	**143.6**	-9.9%	-0.6%
Finland	242.8	225.8	218.5	218.8	210.1	207.9	210.9	205.7	209.5	203.4	**197.9**	-3.0%	-1.0%
France	169.4	161.9	161.0	161.7	154.1	154.4	151.3	149.8	152.1	148.5	**133.3**	-10.5%	-1.1%
Germany	169.6	163.3	165.1	169.3	161.6	163.8	165.7	166.7	161.6	156.3	**144.6**	-7.8%	-0.4%
Greece	123.1	121.2	114.5	107.8	101.8	103.3	101.7	107.1	107.6	113.9	**96.0**	-16.0%	-1.2%
Hungary	99.8	97.2	90.9	86.5	86.6	91.5	93.8	98.7	99.6	101.2	**100.2**	-1.2%	0.3%
Italy	122.6	119.6	115.6	109.7	103.3	106.0	106.3	107.5	108.4	106.5	**97.0**	-9.2%	-1.1%
Netherlands	245.5	234.4	225.9	218.5	205.7	208.0	211.3	207.5	206.8	205.4	**196.8**	-4.5%	-1.2%
Norway	354.0	354.3	386.3	358.0	363.9	364.4	364.5	362.9	356.2	330.6	**356.0**	7.4%	-1.2%
Poland	109.1	109.8	106.6	107.1	103.3	104.5	109.3	113.7	115.1	111.8	**106.0**	-5.4%	0.9%
Portugal	101.7	97.3	89.3	98.1	100.6	99.2	106.3	103.8	105.8	100.9	**91.5**	-9.6%	0.4%
Romania	69.4	71.7	69.4	64.8	67.5	68.2	68.6	70.4	72.2	71.1	**69.2**	-2.9%	0.4%
Spain	129.5	126.8	126.1	119.7	117.9	119.8	121.0	122.5	124.0	119.7	**106.3**	-11.4%	-0.6%
Sweden	229.8	225.2	236.6	220.3	217.5	222.6	217.3	222.8	216.6	223.4	**217.8**	-2.8%	0.2%
Switzerland	157.4	147.6	153.8	155.9	146.8	142.0	132.3	131.4	132.3	136.9	**124.5**	-9.3%	-1.8%
Turkey	62.2	65.5	68.4	66.7	67.7	72.9	75.3	78.6	76.4	78.0	**74.6**	-4.6%	2.7%
Ukraine	111.3	115.6	113.7	108.0	95.9	79.9	83.9	78.5	81.8	77.7	**75.8**	-2.8%	-2.8%
United Kingdom	140.5	131.6	132.1	130.5	122.1	122.7	120.5	119.3	118.4	114.4	**101.6**	-11.5%	-1.9%
Other Europe	106.7	104.5	100.1	101.3	98.2	100.6	103.3	105.4	107.3	105.8	**96.8**	-8.7%	0.3%
Total Europe	134.4	130.9	129.9	128.2	122.8	123.5	124.7	125.5	125.3	123.1	**113.6**	-8.0%	-0.6%
Azerbaijan	51.9	57.0	58.0	58.8	59.2	64.0	62.6	60.7	61.9	64.5	**61.3**	-5.2%	1.9%
Belarus	115.6	115.1	124.3	109.5	113.1	102.7	102.1	104.0	113.2	111.5	**103.9**	-7.0%	0.2%
Kazakhstan	137.5	153.6	158.7	157.1	157.6	156.1	152.9	162.6	176.8	169.8	**165.4**	-2.8%	2.7%
Russian Federation	195.1	201.2	201.3	198.5	198.5	194.7	198.4	199.3	206.6	204.9	**194.0**	-5.6%	0.9%
Turkmenistan	176.6	192.7	206.4	180.0	183.1	215.3	209.5	203.9	223.4	240.1	**232.7**	-3.3%	3.7%
Uzbekistan	66.0	67.4	65.4	65.4	66.4	62.4	58.7	57.9	59.0	58.2	**56.0**	-4.2%	-1.4%
Other CIS	33.4	35.3	36.2	34.0	34.4	33.7	33.5	34.3	36.9	35.3	**35.4**	0.1%	0.6%
Total CIS	152.1	157.5	158.1	154.7	154.8	152.0	153.0	153.7	160.0	158.4	**150.4**	-5.3%	0.8%
Iran	118.2	122.1	121.9	124.8	128.9	126.5	130.8	133.8	139.6	144.4	**143.2**	-1.1%	2.1%
Iraq	48.8	50.0	51.2	53.1	49.0	47.3	52.8	50.8	52.0	55.9	**51.3**	-8.4%	1.7%
Israel	135.0	135.6	139.3	127.3	123.2	128.0	128.1	131.7	129.9	132.5	**121.0**	-8.9%	0.2%
Kuwait	472.6	458.7	451.1	438.6	425.9	420.9	408.3	406.1	398.4	396.6	**352.9**	-11.3%	-1.0%
Oman	284.9	289.8	293.5	304.9	283.8	283.1	270.2	278.7	283.9	279.5	**268.2**	-4.3%	1.0%
Qatar	646.7	686.1	726.4	740.3	759.6	829.6	783.2	740.8	639.7	679.7	**594.2**	-12.8%	0.9%
Saudi Arabia	318.6	324.9	334.0	325.5	339.4	341.1	337.7	330.2	315.9	311.7	**303.3**	-2.9%	0.5%
United Arab Emirates	409.2	410.7	423.2	443.9	438.2	481.9	495.9	490.6	476.7	466.0	**423.7**	-9.3%	1.0%
Other Middle East	39.6	36.7	34.3	32.5	31.8	29.5	29.0	29.0	28.0	28.6	**27.6**	-3.7%	-3.4%
Total Middle East	135.3	138.2	140.6	141.4	143.6	145.2	146.7	146.2	144.5	146.2	**139.6**	-4.7%	1.2%
Algeria	43.9	45.6	48.9	50.7	54.2	56.0	54.8	54.2	57.2	58.1	**52.4**	-10.1%	2.4%
Egypt	39.2	39.1	40.2	39.0	38.1	38.0	39.1	39.4	39.2	38.5	**35.6**	-7.6%	0.1%
Morocco	21.6	22.4	22.4	22.7	22.7	22.8	22.7	23.5	24.0	25.9	**23.8**	-8.2%	2.8%
South Africa	102.7	99.9	96.9	95.7	95.3	91.9	94.8	92.9	88.2	88.9	**82.7**	-7.3%	-1.5%
Other Africa	6.2	6.0	6.2	6.4	6.7	6.7	6.6	6.8	7.0	6.9	**6.2**	-9.4%	1.3%
Total Africa	15.4	15.0	15.2	15.2	15.4	15.3	15.3	15.3	15.3	15.2	**13.9**	-9.0%	-0.1%
Australia	240.5	243.3	236.5	235.9	234.8	237.0	234.8	230.5	228.8	233.2	**218.4**	-6.6%	-0.6%
Bangladesh	6.1	6.6	6.9	7.1	7.3	8.4	8.4	8.6	9.1	10.1	**9.7**	-4.1%	5.2%
China	76.2	81.8	84.6	87.2	89.2	89.9	91.0	93.5	96.4	99.1	**101.1**	1.7%	3.3%
China Hong Kong SAR	166.0	169.2	161.7	165.1	160.2	163.5	166.5	177.0	176.6	166.9	**123.9**	-25.9%	0.4%
India	18.2	19.0	19.8	20.3	21.4	21.9	22.6	23.3	24.5	24.8	**23.2**	-6.8%	3.5%
Indonesia	26.5	28.1	29.5	30.0	27.5	27.4	27.4	28.2	30.1	32.0	**27.9**	-13.0%	2.7%
Japan	164.2	155.8	154.9	153.7	149.9	147.9	146.4	148.3	147.8	144.8	**134.7**	-7.3%	-0.6%
Malaysia	118.8	121.1	128.3	132.5	131.9	132.0	137.1	137.2	137.3	138.7	**127.1**	-8.6%	1.7%
New Zealand	188.9	187.9	187.1	186.2	192.6	192.3	191.7	193.2	191.1	194.4	**174.3**	-10.6%	0.4%
Pakistan	14.8	14.4	13.2	14.0	14.2	14.6	15.6	16.2	16.4	16.2	**15.7**	-3.4%	0.8%
Philippines	13.0	13.0	13.2	13.9	14.4	15.5	16.7	18.1	18.3	18.6	**16.7**	-10.9%	3.8%
Singapore	559.5	567.1	558.3	561.8	570.5	599.5	615.3	628.8	626.3	607.8	**583.9**	-4.2%	1.2%
South Korea	218.3	227.5	228.5	227.8	228.6	231.2	235.9	240.1	242.9	239.1	**229.9**	-4.1%	1.7%
Sri Lanka	11.7	12.2	12.2	12.3	13.0	13.9	14.7	15.5	16.3	16.8	**15.3**	-9.2%	4.3%
Taiwan	205.5	203.1	201.3	204.7	208.7	208.0	207.6	208.0	210.4	206.2	**202.3**	-2.1%	0.7%
Thailand	65.3	67.5	71.8	72.7	74.3	75.8	77.1	78.2	79.6	79.2	**73.3**	-7.6%	2.5%
Vietnam	21.3	24.0	24.9	25.9	28.1	30.9	33.0	35.0	39.0	43.2	**42.0**	-3.0%	8.6%
Other Asia Pacific	11.6	11.3	11.7	11.3	12.0	12.4	13.3	13.4	13.4	17.1	**17.0**	-1.2%	4.9%
Total Asia Pacific	50.7	52.9	54.0	55.1	55.9	56.4	57.1	58.3	59.8	60.9	**59.6**	-2.3%	2.4%
Total World	**72.6**	**73.5**	**73.6**	**74.1**	**73.9**	**73.8**	**73.9**	**74.4**	**75.5**	**75.4**	**71.4**	**-5.5%**	**0.7%**
of which: OECD	182.1	179.0	176.1	176.6	174.0	173.4	173.1	173.6	175.3	172.7	**159.1**	-8.1%	-0.2%
Non-OECD	47.8	49.7	50.7	51.3	51.8	51.9	52.3	52.9	54.0	54.6	**52.8**	-3.6%	1.8%
European Union	148.1	143.4	141.4	140.0	134.8	136.3	137.7	139.2	139.0	136.5	**125.2**	-8.5%	-0.5%

*In this review, primary energy comprises commercially traded fuels, including modern renewables used to generate electricity.
Energy from all sources of non-fossil power generation is accounted for on an input-equivalent basis. See the appendix or *bp.com/statisticalreview* for more details on this methodology.
Note: Growth rates are adjusted for leap years.

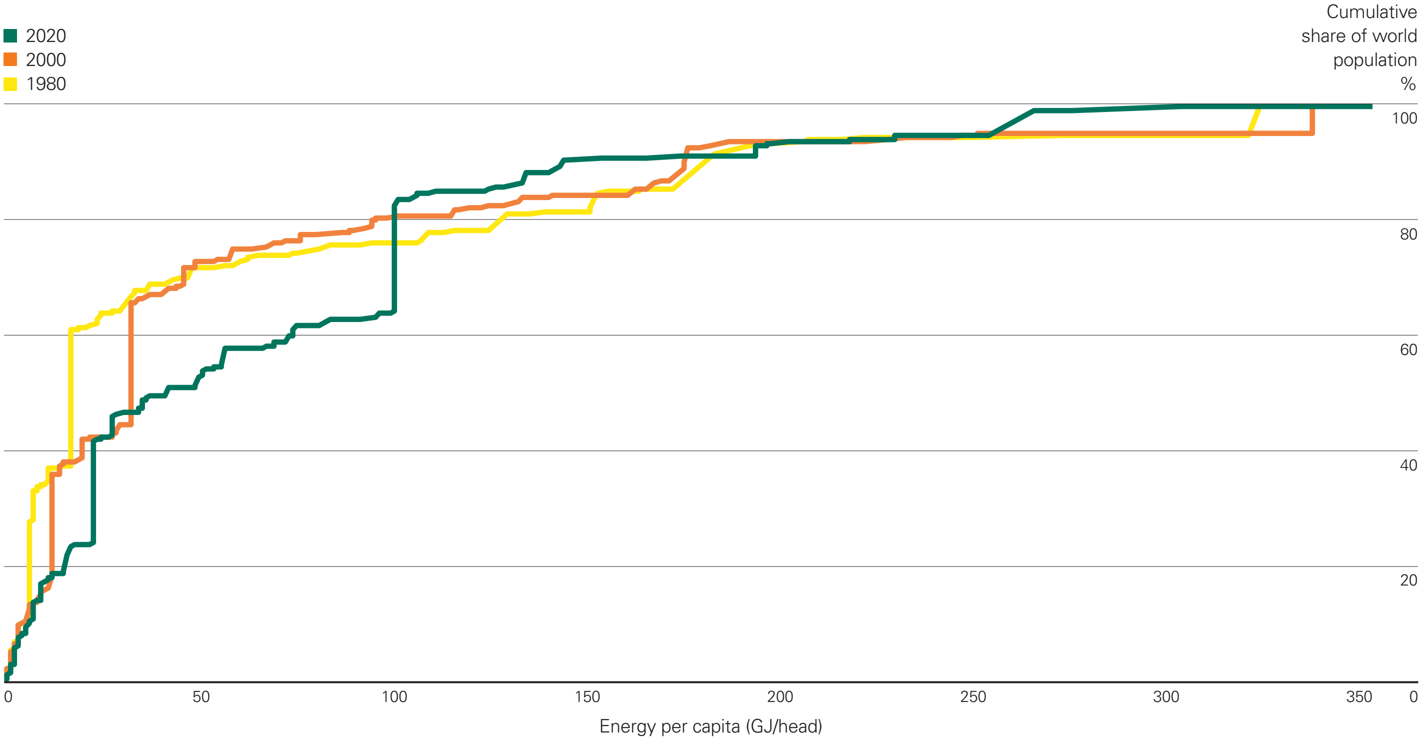
Energy per capita by region

Gigajoules per head



Average global energy consumption per capita decreased by 5.5% in 2020 to 71.4 GJ/head, driven by declines in North America (-8.6%) and Europe (-8%). Energy demand per head fell in all other regions. North America is the region with the highest consumption per capita (217 GJ/head), followed by CIS (150 GJ/head) and the Middle East (140 GJ/head). Africa remains the region with the lowest average consumption (14 GJ/head).

Energy per capita: Distribution across countries



In 2020 63.7% of the global population lived in countries where average energy demand per capita was less than 100 GJ/head, a significant decrease from 81% in 2019, as energy demand per capita in China increased to 101 GJ/head from 99 GJ/head in 2019. The share of the global population consuming less than 75 GJ/head increased from 57% in 2019 to 60.6% last year.

Carbon dioxide emissions

Million tonnes of carbon dioxide	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	550.1	554.7	551.1	564.6	571.8	570.2	553.3	565.9	576.2	578.0	**517.7**	-10.7%	0.8%	1.6%
Mexico	454.8	473.0	476.7	483.2	471.2	475.2	480.4	486.1	477.1	459.8	**373.2**	-19.0%	0.1%	1.2%
US	5495.0	5348.4	5101.5	5268.3	5277.6	5165.6	5060.8	5003.2	5166.0	5029.4	**4457.2**	-11.6%	-0.5%	13.8%
Total North America	6499.9	6376.1	6129.4	6316.1	6320.5	6211.0	6094.5	6055.2	6219.4	6067.1	**5348.1**	-12.1%	-0.4%	16.6%
Argentina	168.8	174.8	183.7	189.4	189.5	192.8	191.5	189.7	187.5	175.8	**164.1**	-6.9%	0.9%	0.5%
Brazil	403.1	427.2	445.7	485.8	508.0	490.7	454.1	460.6	445.5	444.9	**417.5**	-6.4%	2.2%	1.3%
Chile	76.1	87.0	89.4	91.2	88.5	89.0	94.2	92.5	93.1	94.7	**87.7**	-7.6%	2.4%	0.3%
Colombia	73.4	70.5	79.0	82.3	87.3	88.3	92.7	86.7	88.6	94.9	**92.7**	-2.6%	3.4%	0.3%
Ecuador	33.1	33.8	35.2	38.1	40.4	39.6	37.7	36.4	38.8	37.5	**30.7**	-18.4%	2.6%	0.1%
Peru	40.8	45.4	46.4	47.3	48.4	50.8	55.3	54.2	56.9	56.7	**44.6**	-21.6%	4.9%	0.1%
Trinidad & Tobago	26.1	26.0	25.5	26.3	25.4	24.5	22.6	21.8	21.1	21.1	**18.6**	-12.4%	-1.1%	0.1%
Venezuela	180.6	185.6	200.2	203.1	194.5	192.2	169.8	162.4	138.3	112.3	**88.5**	-21.4%	-4.8%	0.3%
Other S. & Cent. America	196.3	203.8	203.1	201.5	203.7	214.0	221.8	218.4	224.0	236.5	**213.3**	-10.1%	2.0%	0.7%
Total S. & Cent. America	1198.5	1254.1	1308.2	1365.0	1385.7	1381.9	1339.7	1322.7	1293.8	1274.5	**1157.7**	-9.4%	1.3%	3.6%
Austria	67.8	64.7	62.2	62.9	58.6	60.7	61.6	64.5	62.2	63.7	**55.3**	-13.5%	♦	0.2%
Belgium	133.5	120.6	116.2	117.4	108.9	115.3	117.0	118.9	125.5	121.7	**88.8**	-27.2%	-0.2%	0.3%
Czech Republic	116.5	113.1	109.3	105.0	102.0	102.8	104.8	102.7	101.7	98.5	**85.1**	-13.8%	-1.4%	0.3%
Finland	63.9	56.6	50.8	51.9	47.6	44.8	47.7	45.0	46.5	43.4	**39.0**	-10.3%	-2.5%	0.1%
France	360.4	333.8	335.3	334.8	301.4	307.4	313.0	317.7	306.7	299.0	**251.1**	-16.2%	-1.7%	0.8%
Germany	783.2	763.7	773.0	797.6	751.2	755.7	770.5	761.0	734.5	681.5	**604.9**	-11.5%	-1.0%	1.9%
Greece	94.6	94.5	88.2	79.2	75.6	73.3	69.9	74.0	72.1	76.7	**58.2**	-24.3%	-2.9%	0.2%
Hungary	48.7	48.7	44.6	42.2	41.3	43.9	45.0	46.9	47.5	47.5	**45.7**	-3.9%	-0.2%	0.1%
Italy	397.1	388.5	371.0	341.5	318.9	334.5	331.3	335.3	335.9	330.3	**287.2**	-13.3%	-1.7%	0.9%
Netherlands	226.5	219.4	212.2	208.3	197.6	206.9	210.0	202.9	198.7	194.1	**175.9**	-9.6%	-1.1%	0.5%
Norway	38.6	38.4	38.1	37.0	36.2	36.3	35.1	34.6	35.1	33.9	**32.0**	-5.8%	-0.9%	0.1%
Poland	323.8	324.0	308.1	310.5	293.4	293.4	306.2	315.6	320.3	301.5	**279.6**	-7.5%	-0.1%	0.9%
Portugal	51.5	51.4	50.7	49.4	49.6	53.1	52.5	57.3	54.3	50.7	**41.3**	-18.8%	-1.2%	0.1%
Romania	78.2	85.1	81.7	69.9	71.2	72.0	69.6	73.0	73.4	71.6	**66.3**	-7.7%	-1.2%	0.2%
Spain	300.1	308.5	306.3	274.8	272.2	288.0	280.7	298.4	291.3	271.0	**220.4**	-18.9%	-1.5%	0.7%
Sweden	56.9	52.0	49.1	48.2	46.1	46.4	46.6	45.7	44.7	47.2	**45.4**	-4.0%	-1.2%	0.1%
Switzerland	42.1	40.1	41.4	43.6	38.7	39.5	38.0	38.8	37.2	38.2	**32.4**	-15.3%	-1.5%	0.1%
Turkey	276.3	298.8	314.4	303.3	335.2	340.7	359.1	397.2	390.9	385.5	**369.5**	-4.4%	3.4%	1.1%
Ukraine	287.9	302.5	299.1	286.1	247.3	195.4	215.8	188.4	199.0	185.6	**177.4**	-4.7%	-3.8%	0.5%
United Kingdom	530.0	495.2	512.5	500.8	458.8	440.5	416.4	404.0	397.8	380.2	**319.4**	-16.2%	-3.0%	1.0%
Other Europe	399.8	400.7	377.0	370.4	352.2	361.9	370.1	378.8	375.7	369.7	**321.9**	-13.2%	-0.5%	1.0%
Total Europe	4677.5	4600.4	4541.3	4434.7	4204.1	4212.4	4260.8	4300.5	4251.0	4091.3	**3596.8**	-12.3%	-1.1%	11.1%
Azerbaijan	27.4	30.7	30.8	31.1	31.7	34.1	33.6	32.4	34.0	35.9	**34.1**	-5.3%	2.2%	0.1%
Belarus	60.2	57.0	58.5	58.2	57.3	53.1	53.5	54.5	59.3	58.6	**54.6**	-7.0%	0.3%	0.2%
Kazakhstan	183.9	208.5	218.4	220.8	223.8	222.2	216.9	232.2	255.3	246.3	**241.0**	-2.4%	3.6%	0.7%
Russian Federation	1526.6	1591.1	1605.0	1581.1	1579.2	1549.5	1567.0	1548.6	1606.0	1595.7	**1482.2**	-7.4%	0.7%	4.6%
Turkmenistan	55.1	60.9	66.6	62.8	64.5	75.2	74.5	73.5	80.6	87.2	**86.2**	-1.4%	5.4%	0.3%
Uzbekistan	104.6	109.6	109.7	113.9	116.7	110.7	105.8	105.0	111.3	110.7	**108.2**	-2.5%	0.4%	0.3%
Other CIS	23.1	24.6	26.6	25.5	27.4	28.6	29.2	29.4	33.2	31.3	**33.1**	5.4%	2.9%	0.1%
Total CIS	1980.9	2082.3	2115.7	2093.5	2100.5	2073.4	2080.4	2075.6	2179.7	2165.6	**2039.5**	-6.1%	1.2%	6.3%
Iran	537.5	549.8	557.2	569.2	583.4	576.9	605.3	616.1	653.7	674.7	**678.2**	0.2%	2.5%	2.1%
Iraq	113.7	123.0	134.6	146.4	143.7	148.1	167.4	165.6	170.9	181.5	**170.0**	-6.6%	5.5%	0.5%
Israel	71.6	72.9	79.0	69.3	66.7	69.8	69.1	71.0	69.8	72.1	**64.5**	-10.8%	0.5%	0.2%
Kuwait	87.8	89.4	92.4	97.7	99.5	100.1	100.5	101.7	101.7	101.5	**91.6**	-10.0%	2.8%	0.3%
Oman	51.6	54.0	60.1	70.3	70.3	73.5	74.6	79.5	81.4	82.9	**80.4**	-3.2%	6.4%	0.2%
Qatar	61.9	69.8	79.9	90.1	97.9	112.3	110.0	106.0	92.7	101.8	**87.7**	-14.2%	5.6%	0.3%
Saudi Arabia	472.0	499.8	525.0	539.5	574.6	592.4	605.3	599.6	581.3	579.6	**570.8**	-1.8%	3.1%	1.8%
United Arab Emirates	215.7	222.6	233.9	249.9	245.7	267.9	278.2	280.3	275.2	272.0	**245.9**	-9.8%	2.8%	0.8%
Other Middle East	153.9	146.8	139.1	134.7	134.3	123.8	121.4	124.2	120.3	124.1	**121.1**	-2.7%	-2.3%	0.4%
Total Middle East	1765.6	1828.1	1901.2	1967.1	2016.1	2064.8	2131.8	2143.9	2146.9	2190.2	**2110.1**	-3.9%	2.7%	6.5%
Algeria	104.4	107.7	115.8	133.3	142.1	148.4	147.2	149.4	156.7	160.9	**148.6**	-7.9%	4.2%	0.5%
Egypt	186.8	188.3	198.6	201.8	207.5	210.9	219.5	222.0	222.9	222.1	**204.3**	-8.2%	2.3%	0.6%
Morocco	49.1	52.9	53.9	54.3	56.5	56.7	57.0	60.0	61.6	67.7	**62.8**	-7.6%	4.1%	0.2%
South Africa	474.9	466.3	462.1	463.3	467.7	455.5	474.4	470.1	451.9	462.4	**434.5**	-6.3%	-0.3%	1.3%
Other Africa	356.4	346.8	368.0	375.0	389.8	402.8	408.1	426.4	449.7	451.4	**403.8**	-10.8%	3.0%	1.3%
Total Africa	1171.6	1162.0	1198.4	1227.8	1263.6	1274.4	1306.2	1327.9	1342.7	1364.5	**1254.0**	-8.4%	1.8%	3.9%
Australia	396.5	400.7	393.1	391.3	396.4	405.4	403.2	400.7	396.6	401.0	**372.3**	-7.4%	-0.1%	1.2%
Bangladesh	50.6	56.5	60.4	62.7	65.4	78.1	79.2	83.1	89.3	100.6	**98.0**	-2.9%	7.4%	0.3%
China	8145.8	8827.2	9004.2	9247.4	9293.2	9279.7	9279.0	9466.4	9652.7	9810.5	**9899.3**	0.6%	2.4%	30.7%
China Hong Kong SAR	88.3	92.0	88.7	91.5	89.7	90.5	92.7	98.9	99.5	94.7	**68.2**	-28.2%	0.9%	0.2%
India	1652.1	1730.0	1844.5	1930.2	2083.8	2151.9	2243.2	2324.7	2449.4	2471.9	**2302.3**	-7.1%	4.5%	7.1%
Indonesia	446.5	488.3	529.0	538.6	487.6	502.6	502.3	526.9	575.3	624.5	**545.4**	-12.9%	4.5%	1.7%
Japan	1197.9	1206.1	1292.1	1279.8	1246.5	1207.1	1190.0	1181.4	1158.4	1117.7	**1027.0**	-8.4%	-0.1%	3.2%
Malaysia	215.3	216.2	229.3	239.5	249.4	253.7	258.3	247.4	255.0	263.0	**256.0**	-2.9%	3.1%	0.8%
New Zealand	34.8	34.7	36.3	35.7	35.8	36.6	35.7	37.8	37.7	39.4	**34.1**	-13.6%	1.2%	0.1%
Pakistan	145.7	144.1	145.7	146.7	153.3	160.9	176.6	190.4	198.3	197.4	**196.0**	-1.0%	3.1%	0.6%
Philippines	80.5	81.3	83.8	92.1	97.7	106.7	116.8	129.1	134.0	140.9	**127.4**	-9.8%	6.5%	0.4%
Singapore	185.3	192.7	192.0	191.7	191.1	202.8	217.1	229.0	225.4	217.2	**211.0**	-3.1%	2.1%	0.7%
South Korea	578.9	604.5	601.3	608.0	602.8	609.4	614.5	631.1	646.4	623.2	**577.8**	-7.5%	1.8%	1.8%
Sri Lanka	13.1	14.8	16.1	14.0	17.3	17.9	20.3	21.7	21.4	23.3	**20.8**	-10.8%	5.8%	0.1%
Taiwan	273.2	278.1	272.0	273.8	281.1	281.4	283.9	292.5	290.5	284.9	**275.9**	-3.4%	1.2%	0.9%
Thailand	248.7	253.5	270.6	274.8	281.6	289.7	296.4	297.1	299.6	294.3	**277.1**	-6.1%	2.2%	0.9%
Vietnam	123.1	136.1	134.0	140.2	156.7	185.5	198.1	199.5	241.0	292.1	**283.9**	-3.1%	10.9%	0.9%
Other Asia Pacific	120.9	112.6	116.8	108.9	120.8	128.5	141.0	143.4	147.2	206.7	**205.2**	-1.0%	6.1%	0.6%
Total Asia Pacific	13997.5	14869.5	15309.8	15667.0	15850.1	15988.3	16148.5	16501.1	16917.6	17203.3	**16778.0**	-2.7%	2.6%	52.0%
Total World	**31291.4**	**32172.5**	**32504.0**	**33071.2**	**33140.7**	**33206.1**	**33361.9**	**33726.9**	**34351.1**	**34356.6**	**32284.1**	**-6.3%**	**1.4%**	**100.0%**
of which: OECD	13046.1	12857.6	12667.9	12767.2	12553.9	12473.1	12377.7	12396.3	12494.8	12140.1	**10778.1**	-11.5%	-0.4%	33.4%
Non-OECD	18245.3	19314.9	19836.1	20303.9	20586.7	20733.1	20984.2	21330.6	21856.3	22216.5	**21506.0**	-3.5%	2.5%	66.6%
European Union	3386.4	3300.3	3218.7	3147.0	2982.4	3045.6	3077.2	3115.3	3070.5	2936.7	**2550.9**	-13.4%	-1.2%	7.9%

♦Less than 0.05%.

Notes: The carbon emissions above reflect only those through consumption of oil, gas and coal for combustion related activities and natural gas flaring, 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.
Separate data for gas flaring and associated carbon emissions are available at *bp.com/statisticalreview*.
Growth rates are adjusted for leap years.

Oil

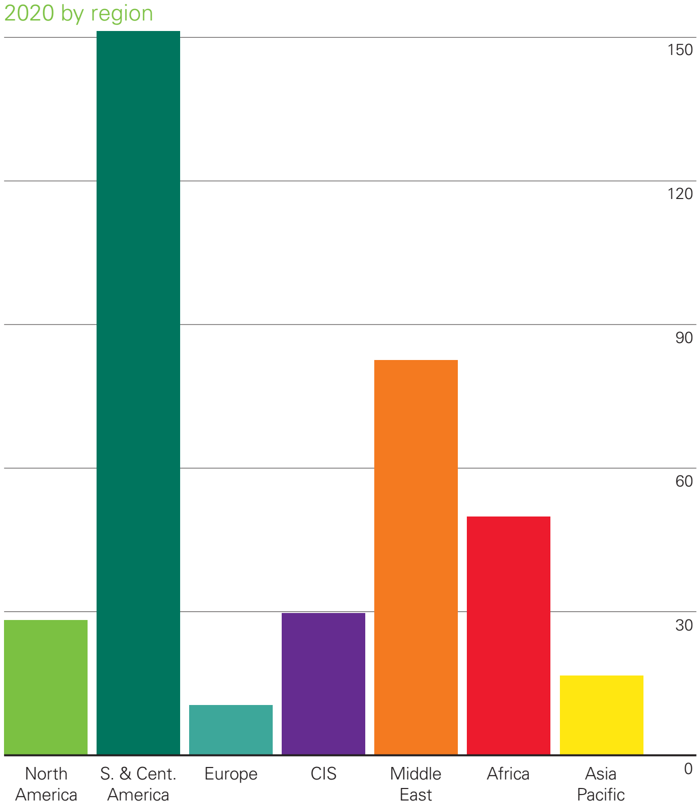
Total proved reserves

	At end 2000 Thousand million barrels	At end 2010 Thousand million barrels	At end 2019 Thousand million barrels	At end 2020 Thousand million barrels	At end 2020 Thousand million tonnes	At end 2020 Share of total	At end 2020 R/P ratio
Canada	181.5	174.8	169.1	**168.1**	**27.1**	9.7%	89.4
Mexico	24.6	10.4	6.1	**6.1**	**0.9**	0.4%	8.7
US	30.4	35.0	68.8	**68.8**	**8.2**	4.0%	11.4
Total North America	236.5	220.3	243.9	**242.9**	**36.1**	14.0%	28.2
Argentina	3.0	2.5	2.5	**2.5**	**0.3**	0.1%	11.3
Brazil	8.5	14.2	12.7	**11.9**	**1.7**	0.7%	10.8
Colombia	2.0	1.9	2.0	**2.0**	**0.3**	0.1%	7.1
Ecuador	2.7	2.1	1.3	**1.3**	**0.2**	0.1%	7.4
Peru	0.9	1.2	0.8	**0.7**	**0.1**	◆	15.5
Trinidad & Tobago	0.9	0.8	0.2	**0.2**	**†**	◆	8.7
Venezuela	76.8	296.5	303.8	**303.8**	**48.0**	17.5%	*
Other S. & Cent. America	1.3	0.8	0.7	**0.8**	**0.1**	◆	10.9
Total S. & Cent. America	96.0	320.1	324.0	**323.4**	**50.8**	18.7%	151.3
Denmark	1.1	0.9	0.4	**0.4**	**0.1**	◆	16.2
Italy	0.6	0.6	0.6	**0.6**	**0.1**	◆	14.7
Norway	11.4	6.8	8.5	**7.9**	**1.0**	0.5%	10.8
Romania	1.2	0.6	0.6	**0.6**	**0.1**	◆	22.7
United Kingdom	4.7	2.8	2.5	**2.5**	**0.3**	0.1%	6.6
Other Europe	2.1	1.9	1.6	**1.6**	**0.2**	0.1%	14.9
Total Europe	21.0	13.6	14.2	**13.6**	**1.8**	0.8%	10.4
Azerbaijan	1.2	7.0	7.0	**7.0**	**1.0**	0.4%	26.7
Kazakhstan	5.4	30.0	30.0	**30.0**	**3.9**	1.7%	45.3
Russian Federation	112.1	105.8	107.8	**107.8**	**14.8**	6.2%	27.6
Turkmenistan	0.5	0.6	0.6	**0.6**	**0.1**	◆	7.6
Uzbekistan	0.6	0.6	0.6	**0.6**	**0.1**	◆	34.7
Other CIS	0.3	0.3	0.3	**0.3**	**†**	◆	17.3
Total CIS	120.1	144.2	146.2	**146.2**	**19.9**	8.4%	29.6
Iran	99.5	151.2	157.8	**157.8**	**21.7**	9.1%	139.8
Iraq	112.5	115.0	145.0	**145.0**	**19.6**	8.4%	96.3
Kuwait	96.5	101.5	101.5	**101.5**	**14.0**	5.9%	103.2
Oman	5.8	5.5	5.4	**5.4**	**0.7**	0.3%	15.4
Qatar	16.9	24.7	25.2	**25.2**	**2.6**	1.5%	38.1
Saudi Arabia	262.8	264.5	297.6	**297.5**	**40.9**	17.2%	73.6
Syria	2.3	2.5	2.5	**2.5**	**0.3**	0.1%	158.8
United Arab Emirates	97.8	97.8	97.8	**97.8**	**13.0**	5.6%	73.1
Yemen	2.4	3.0	3.0	**3.0**	**0.4**	0.2%	86.7
Other Middle East	0.2	0.3	0.2	**0.2**	**†**	◆	2.6
Total Middle East	696.7	765.9	836.0	**835.9**	**113.2**	48.3%	82.6
Algeria	11.3	12.2	12.2	**12.2**	**1.5**	0.7%	25.0
Angola	6.0	9.1	7.8	**7.8**	**1.1**	0.4%	16.1
Chad	0.9	1.5	1.5	**1.5**	**0.2**	0.1%	32.5
Republic of Congo	1.5	2.0	2.9	**2.9**	**0.4**	0.2%	25.7
Egypt	3.6	4.5	3.1	**3.1**	**0.4**	0.2%	14.0
Equatorial Guinea	0.8	1.7	1.1	**1.1**	**0.1**	0.1%	18.7
Gabon	2.4	2.0	2.0	**2.0**	**0.3**	0.1%	26.4
Libya	36.0	47.1	48.4	**48.4**	**6.3**	2.8%	339.2
Nigeria	29.0	37.2	36.9	**36.9**	**5.0**	2.1%	56.1
South Sudan	n/a	n/a	3.5	**3.5**	**0.5**	0.2%	56.4
Sudan	0.3	5.0	1.5	**1.5**	**0.2**	0.1%	47.9
Tunisia	0.4	0.4	0.4	**0.4**	**0.1**	◆	32.7
Other Africa	0.7	2.3	3.7	**3.8**	**0.5**	0.2%	33.2
Total Africa	92.9	124.9	125.0	**125.1**	**16.6**	7.2%	49.8
Australia	4.9	3.8	2.4	**2.4**	**0.3**	0.1%	13.9
Brunei	1.2	1.1	1.1	**1.1**	**0.1**	0.1%	27.3
China	15.2	23.3	26.0	**26.0**	**3.5**	1.5%	18.2
India	5.3	5.8	4.7	**4.5**	**0.6**	0.3%	16.1
Indonesia	5.1	4.2	2.5	**2.4**	**0.3**	0.1%	9.0
Malaysia	2.1	3.6	2.7	**2.7**	**0.4**	0.2%	12.5
Thailand	0.5	0.4	0.3	**0.3**	**†**	◆	1.7
Vietnam	2.0	4.4	4.4	**4.4**	**0.6**	0.3%	58.1
Other Asia Pacific	1.3	1.1	1.4	**1.3**	**0.2**	0.1%	17.4
Total Asia Pacific	37.7	47.8	45.3	**45.2**	**6.1**	2.6%	16.6
Total World	**1300.9**	**1636.9**	**1734.8**	**1732.4**	**244.4**	**100.0%**	**53.5**
of which: OECD	262.7	238.5	261.5	**260.0**	**38.3**	15.0%	25.2
Non-OECD	1038.2	1398.3	1473.3	**1472.4**	**206.1**	85.0%	66.9
OPEC	833.0	1137.7	1214.7	**1214.7**	**171.8**	70.1%	108.3
Non-OPEC	468.0	499.1	520.1	**517.7**	**72.6**	29.9%	24.5
European Union	3.9	3.2	2.4	**2.4**	**0.3**	0.1%	16.8
Canadian oil sands: Total	174.9	169.2	162.4	**161.4**	**26.2**	9.3%	
of which: Under active development	11.7	25.9	19.9	**18.9**	**3.1**	1.1%	
Venezuela: Orinoco Belt	–	220.0	261.8	**261.8**	**42.0**	15.1%	

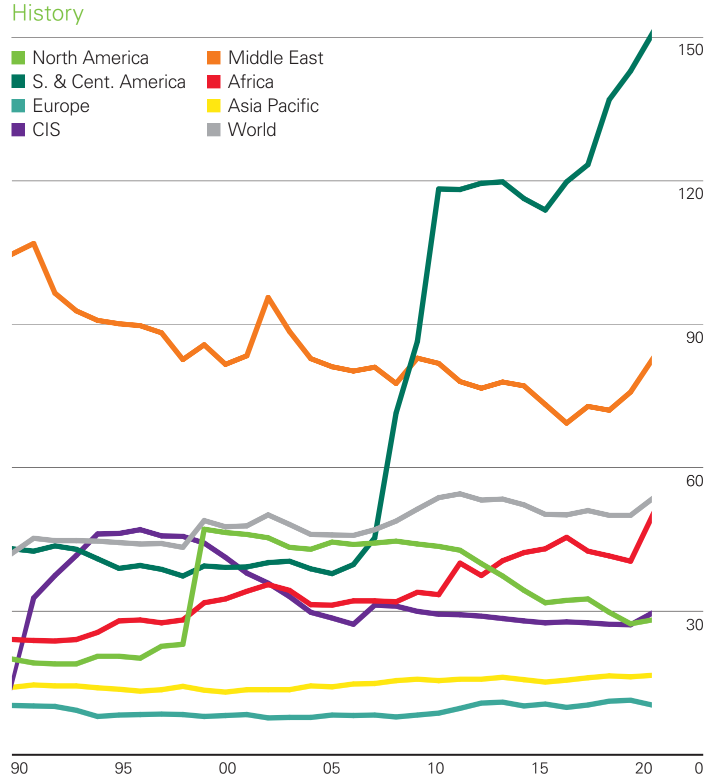
Source of data – the estimates in this table have been compiled using a combination of primary official sources, third-party data from the OPEC Secretariat, World Oil, Oil & Gas Journal and Chinese reserves based on official data and information in the public domain.
†Less than 0.05.
◆Less than 0.05%.
n/a not available.
*More than 500 years.
Notes: Total proved reserves of oil – generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions. The data series for total proved oil reserves 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 bp's view of proved reserves by country.
Reserves-to-production (R/P) ratio – if the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that rate.
Canadian oil sands 'under active development' are an official estimate. Venezuelan Orinoco Belt reserves are based on the OPEC Secretariat and government announcements.
Reserves and R/P ratio for Canada includes Canadian oil sands. Reserves and R/P ratio for Venezuela includes the Orinoco Belt. Saudi Arabia's oil reserves include NGLs from 2017.
Reserves include gas condensate and natural gas liquids (NGLs) as well as crude oil.
Shares of total and R/P ratios are calculated using thousand million barrels figures.

Reserves-to-production (R/P) ratios
Years

2020 by region

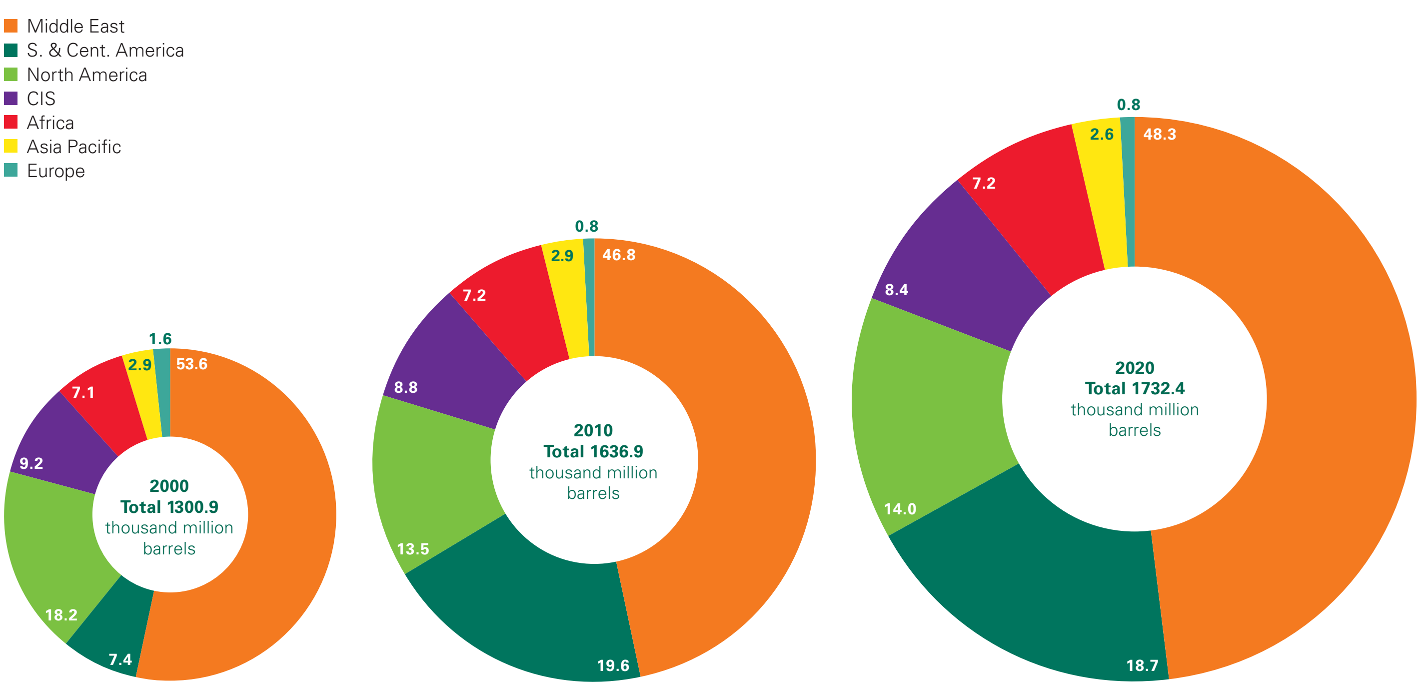


History



Global proved oil reserves were 1732 billion barrels at the end of 2020, down 2 billion barrels versus 2019. The global R/P ratio shows that oil reserves in 2020 accounted for over 50 years of current production. OPEC holds 70.2% of global reserves. The top countries in terms of reserves are Venezuela (17.5% of global reserves), closely followed by Saudi Arabia (17.2%) and Canada (9.7%).

Distribution of proved reserves in 2000, 2010 and 2020
Percentage



Oil: Production in thousands of barrels per day*

Thousand barrels daily	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	3332	3515	3740	4000	4271	4388	4464	4813	5244	5372	**5135**	-4.4%	5.3%	5.8%
Mexico	2959	2940	2911	2875	2784	2587	2456	2224	2068	1918	**1910**	-0.4%	-4.3%	2.2%
US	7559	7883	8929	10100	11804	12789	12361	13154	15334	17072	**16476**	-3.5%	8.9%	18.6%
Total North America	13850	14338	15580	16975	18859	19763	19280	20192	22646	24363	**23521**	-3.5%	6.1%	26.6%
Argentina	712	667	657	644	638	646	610	590	591	620	**600**	-3.2%	-1.6%	0.7%
Brazil	2125	2173	2132	2096	2341	2525	2591	2721	2679	2876	**3026**	5.2%	3.6%	3.4%
Colombia	786	915	944	1010	990	1006	886	854	865	886	**781**	-11.8%	2.8%	0.9%
Ecuador	488	501	505	527	557	543	548	531	517	531	**479**	-9.7%	0.8%	0.5%
Peru	165	159	157	171	175	153	141	136	139	144	**131**	-8.8%	-0.8%	0.1%
Trinidad & Tobago	145	136	117	116	114	109	97	99	87	82	**76**	-7.3%	-5.9%	0.1%
Venezuela	2842	2755	2704	2680	2692	2631	2347	2096	1475	918	**540**	-41.2%	-11.3%	0.6%
Other S. & Cent. America	144	144	147	152	155	146	135	133	128	148	**207**	40.0%	0.9%	0.2%
Total S. & Cent. America	7407	7450	7362	7397	7662	7758	7355	7160	6481	6206	**5841**	-5.9%	-1.7%	6.6%
Denmark	249	225	204	178	167	158	142	138	116	103	**72**	-30.0%	-9.0%	0.1%
Italy	106	110	112	114	120	113	78	86	97	89	**112**	26.4%	-0.7%	0.1%
Norway	2139	2040	1917	1838	1886	1946	1997	1971	1851	1737	**2001**	15.2%	-3.0%	2.3%
Romania	90	89	83	86	84	83	79	76	75	75	**72**	-3.3%	-2.2%	0.1%
United Kingdom	1358	1114	947	865	854	964	1015	1005	1092	1118	**1029**	-8.0%	-2.7%	1.2%
Other Europe	342	336	336	344	339	331	313	303	308	302	**292**	-3.3%	-1.6%	0.3%
Total Europe	4284	3913	3600	3426	3450	3596	3623	3579	3538	3424	**3579**	4.5%	-3.0%	4.0%
Azerbaijan	1037	932	882	888	861	851	838	793	796	775	**716**	-7.6%	-2.8%	0.8%
Kazakhstan	1676	1684	1664	1737	1710	1695	1655	1838	1904	1919	**1811**	-5.6%	1.8%	2.0%
Russian Federation	10379	10533	10656	10807	10927	11087	11342	11374	11562	11679	**10667**	-8.7%	1.4%	12.1%
Turkmenistan	226	234	244	256	263	271	270	271	260	253	**216**	-14.7%	1.4%	0.2%
Uzbekistan	78	77	68	63	61	59	58	61	64	62	**47**	-25.1%	-4.1%	0.1%
Other CIS	36	36	35	35	35	36	36	37	38	39	**39**	1.3%	0.7%	◆
Total CIS	13431	13496	13549	13786	13857	13998	14199	14374	14624	14727	**13496**	-8.4%	1.1%	15.3%
Iran	4421	4452	3810	3609	3714	3853	4578	4854	4608	3399	**3084**	-9.3%	-2.3%	3.5%
Iraq	2469	2773	3079	3099	3239	3986	4423	4538	4632	4779	**4114**	-13.9%	6.9%	4.7%
Kuwait	2564	2918	3173	3134	3106	3069	3150	3009	3050	2976	**2686**	-9.7%	1.7%	3.0%
Oman	865	885	918	942	943	981	1004	971	978	971	**951**	-2.1%	1.8%	1.1%
Qatar	1630	1824	1928	1991	1975	1933	1938	1882	1898	1863	**1809**	-2.9%	2.8%	2.0%
Saudi Arabia	9865	11079	11622	11393	11519	11998	12406	11892	12261	11832	**11039**	-6.7%	2.0%	12.5%
Syria	385	353	171	59	33	27	25	25	24	34	**43**	27.8%	-21.9%	◆
United Arab Emirates	2937	3300	3425	3566	3603	3898	4038	3910	3912	3999	**3657**	-8.6%	3.6%	4.1%
Yemen	306	220	178	197	153	63	43	71	94	95	**95**	-0.1%	-11.1%	0.1%
Other Middle East	192	201	184	208	214	213	214	208	207	214	**188**	-12.5%	1.1%	0.2%
Total Middle East	25634	28007	28487	28199	28498	30021	31818	31359	31665	30162	**27664**	-8.3%	1.9%	31.3%
Algeria	1689	1642	1537	1485	1589	1558	1577	1540	1511	1487	**1332**	-10.4%	-1.8%	1.5%
Angola	1812	1670	1734	1738	1701	1796	1745	1671	1519	1420	**1324**	-6.8%	-2.1%	1.5%
Chad	122	114	101	91	89	111	117	98	116	127	**126**	-0.5%	0.7%	0.1%
Republic of Congo	314	301	280	243	253	234	232	270	330	336	**307**	-8.8%	2.0%	0.3%
Egypt	725	714	715	710	714	726	691	660	674	653	**616**	-5.7%	-1.1%	0.7%
Equatorial Guinea	306	301	320	282	284	260	223	195	176	160	**161**	0.4%	-7.0%	0.2%
Gabon	233	236	221	213	211	214	221	210	193	218	**207**	-5.0%	-1.0%	0.2%
Libya	1799	516	1539	1048	518	437	412	929	1165	1306	**390**	-70.2%	-2.8%	0.4%
Nigeria	2533	2461	2412	2279	2276	2201	1900	1969	2007	2102	**1798**	-14.5%	-0.5%	2.0%
South Sudan	n/a	n/a	31	100	155	148	137	147	144	172	**170**	-1.2%	n/a	0.2%
Sudan	462	291	103	118	120	109	104	95	100	98	**86**	-12.2%	-14.6%	0.1%
Tunisia	83	77	82	76	71	64	60	48	52	42	**36**	-16.2%	-7.4%	◆
Other Africa	149	198	196	225	231	262	255	300	300	331	**314**	-5.0%	6.2%	0.4%
Total Africa	10227	8520	9270	8607	8213	8118	7672	8134	8288	8452	**6865**	-18.8%	-1.6%	7.8%
Australia	550	483	479	407	436	384	359	327	344	458	**470**	2.5%	-1.7%	0.5%
Brunei	172	165	159	135	126	127	121	113	112	121	**110**	-9.3%	-3.2%	0.1%
China	4077	4074	4155	4216	4246	4309	3999	3846	3798	3836	**3901**	1.7%	0.1%	4.4%
India	901	937	926	926	905	893	874	885	869	830	**771**	-7.2%	-0.1%	0.9%
Indonesia	1003	952	917	883	847	838	876	838	808	781	**743**	-4.9%	-2.4%	0.8%
Malaysia	733	659	663	627	649	696	726	718	718	663	**596**	-10.1%	-0.4%	0.7%
Thailand	393	429	471	466	464	481	489	486	472	471	**418**	-11.3%	2.0%	0.5%
Vietnam	312	316	347	346	325	352	317	284	257	236	**207**	-12.4%	-3.6%	0.2%
Other Asia Pacific	318	302	291	274	296	298	281	273	234	231	**210**	-9.0%	-3.5%	0.2%
Total Asia Pacific	8459	8318	8407	8281	8295	8377	8041	7771	7610	7628	**7425**	-2.7%	-0.6%	8.4%
Total World	**83293**	**84042**	**86255**	**86670**	**88834**	**91632**	**91989**	**92568**	**94852**	**94961**	**88391**	-6.9%	**1.5%**	**100.0%**
of which: OECD	19341	19513	20464	21669	23600	24616	24019	24828	27258	28992	**28216**	-2.7%	4.2%	31.9%
Non-OECD	63952	64529	65791	65001	65235	67015	67969	67741	67593	65968	**60175**	-8.8%	0.6%	68.1%
OPEC	33784	34404	35853	34769	34706	36134	37251	37084	36840	34933	**30636**	-12.3%	0.5%	34.7%
Non-OPEC	49509	49638	50402	51901	54129	55498	54738	55484	58012	60028	**57755**	-3.8%	2.2%	65.3%
European Union	626	600	572	560	552	535	471	465	448	415	**394**	-4.9%	-4.4%	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%.
n/a not available.
Note: Annual changes and shares of total are calculated using thousand barrels daily figures.

Oil: Production in million tonnes*

												Growth rate per annum		Share
Million tonnes	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	2020	2009-19	2020
Canada	160.6	170.1	182.9	195.4	209.8	216.1	218.8	236.6	257.7	263.5	**252.2**	-4.5%	5.6%	6.1%
Mexico	145.6	144.5	143.9	141.8	137.1	127.5	121.4	109.5	102.3	94.9	**95.1**	-0.1%	-4.3%	2.3%
US	333.1	346.1	395.1	448.5	524.5	567.4	542.9	574.9	670.2	747.8	**712.7**	-5.0%	8.8%	17.1%
Total North America	639.4	660.7	721.9	785.8	871.4	911.0	883.1	921.0	1030.3	1106.2	**1060.0**	-4.4%	5.9%	25.4%
Argentina	33.3	31.2	30.8	30.2	29.8	30.0	28.6	27.2	27.5	28.8	**27.6**	-4.4%	-1.6%	0.7%
Brazil	111.3	113.8	111.9	109.7	122.5	132.2	136.2	142.3	140.2	150.8	**159.2**	5.3%	3.6%	3.8%
Colombia	41.4	48.2	49.9	53.2	52.2	53.0	46.8	45.0	45.6	46.7	**41.3**	-11.8%	2.8%	1.0%
Ecuador	26.1	26.8	27.1	28.2	29.8	29.1	29.5	28.5	27.7	28.5	**25.8**	-9.7%	0.9%	0.6%
Peru	7.3	7.0	6.9	7.3	7.5	6.5	5.8	5.7	5.9	6.1	**5.4**	-11.9%	-1.2%	0.1%
Trinidad & Tobago	6.2	5.9	5.2	5.1	5.1	4.8	4.3	4.4	3.9	3.7	**3.4**	-6.4%	-6.0%	0.1%
Venezuela	145.8	141.5	139.3	137.8	138.5	135.4	121.0	107.6	75.6	46.6	**27.4**	-41.4%	-11.4%	0.7%
Other S. & Cent. America	7.3	7.3	7.4	7.6	7.8	7.3	6.8	6.7	6.4	7.2	**10.2**	40.9%	0.5%	0.2%
Total S. & Cent. America	378.7	381.7	378.6	379.1	393.1	398.4	379.1	367.4	332.9	318.3	**300.3**	-5.9%	-1.7%	7.2%
Denmark	12.2	10.9	10.0	8.7	8.1	7.7	6.9	6.7	5.6	5.0	**3.5**	-30.0%	-9.0%	0.1%
Italy	5.1	5.3	5.4	5.5	5.8	5.5	3.8	4.1	4.7	4.3	**5.4**	26.4%	-0.7%	0.1%
Norway	98.6	93.4	87.0	82.9	85.0	87.6	90.3	88.9	83.3	78.5	**92.0**	16.8%	-3.2%	2.2%
Romania	4.3	4.2	4.0	4.1	4.1	4.0	3.8	3.6	3.6	3.6	**3.5**	-3.3%	-2.3%	0.1%
United Kingdom	63.0	52.0	44.6	40.6	39.9	45.3	47.4	46.6	50.9	51.8	**48.1**	-7.4%	-2.7%	1.2%
Other Europe	16.9	16.7	16.7	17.1	16.9	16.5	15.6	15.0	15.2	15.0	**14.6**	-3.1%	-1.6%	0.3%
Total Europe	200.0	182.5	167.7	159.0	159.8	166.6	167.9	165.0	163.3	158.2	**167.1**	5.3%	-3.1%	4.0%
Azerbaijan	51.3	46.1	43.7	43.8	42.5	42.0	41.4	39.1	39.2	38.0	**35.1**	-7.9%	-2.9%	0.8%
Kazakhstan	79.7	80.1	79.3	82.3	81.1	80.2	78.6	87.0	90.5	91.0	**86.1**	-5.7%	1.8%	2.1%
Russian Federation	512.3	519.5	526.7	532.2	537.4	544.6	558.5	558.5	567.9	573.4	**524.4**	-8.8%	1.4%	12.6%
Turkmenistan	11.1	11.5	12.0	12.5	12.9	13.2	13.2	13.1	12.6	12.2	**10.3**	-15.4%	1.2%	0.2%
Uzbekistan	3.6	3.6	3.2	2.9	2.8	2.7	2.6	2.8	2.9	2.8	**2.1**	-24.2%	-4.5%	0.1%
Other CIS	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	**2.0**	1.3%	0.7%	◆
Total CIS	659.9	662.5	666.7	675.5	678.4	684.5	696.1	702.4	714.9	719.4	**660.1**	-8.5%	1.1%	15.8%
Iran	212.0	212.5	180.5	169.7	174.0	180.2	216.1	231.4	218.7	157.8	**142.7**	-9.8%	-2.7%	3.4%
Iraq	120.8	135.8	151.3	151.9	158.8	195.6	217.6	222.4	227.0	234.2	**202.0**	-14.0%	6.9%	4.9%
Kuwait	123.4	140.9	154.0	151.4	150.2	148.2	152.7	145.0	146.8	143.4	**130.1**	-9.5%	1.7%	3.1%
Oman	42.2	43.2	45.0	46.1	46.2	48.0	49.3	47.6	47.8	47.3	**46.1**	-2.8%	1.8%	1.1%
Qatar	70.9	77.7	82.2	84.2	83.5	81.2	81.6	79.1	79.5	77.7	**75.9**	-2.6%	2.2%	1.8%
Saudi Arabia	463.3	522.7	549.2	538.4	543.8	568.0	586.7	559.3	576.8	556.6	**519.6**	-6.9%	1.9%	12.5%
Syria	18.5	16.9	8.1	2.7	1.5	1.2	1.1	1.1	1.1	1.5	**2.0**	29.7%	-22.5%	◆
United Arab Emirates	135.2	150.5	156.2	162.8	163.4	176.1	182.4	176.2	176.7	180.5	**165.6**	-8.5%	3.4%	4.0%
Yemen	14.3	10.2	8.1	9.0	6.9	2.6	1.6	3.0	4.1	4.1	**4.1**	-0.1%	-11.8%	0.1%
Other Middle East	9.4	9.9	9.0	10.3	10.5	10.5	10.6	10.2	10.2	10.4	**9.1**	-12.8%	1.0%	0.2%
Total Middle East	1210.1	1320.4	1343.7	1326.5	1338.9	1411.8	1499.8	1475.2	1488.6	1413.5	**1297.3**	-8.5%	1.8%	31.1%
Algeria	73.8	71.7	67.2	64.8	68.8	67.2	68.4	66.6	65.3	64.3	**57.6**	-10.7%	-1.8%	1.4%
Angola	88.9	82.0	85.3	85.2	83.3	88.2	85.8	81.6	74.1	69.1	**64.5**	-6.8%	-2.2%	1.5%
Chad	6.4	6.0	5.3	4.8	4.7	5.8	6.1	5.2	6.1	6.7	**6.6**	-0.5%	0.7%	0.2%
Republic of Congo	16.0	15.3	14.2	12.3	12.9	11.9	11.9	13.8	16.9	17.2	**15.8**	-8.8%	2.0%	0.4%
Egypt	35.0	34.6	34.7	34.4	35.1	35.4	33.8	32.2	32.8	31.8	**30.0**	-5.9%	-1.0%	0.7%
Equatorial Guinea	14.5	14.2	15.2	13.2	13.3	12.1	10.3	9.0	8.1	7.4	**7.5**	1.0%	-7.2%	0.2%
Gabon	11.6	11.8	11.1	10.7	10.5	10.7	11.0	10.5	9.7	10.9	**10.4**	-5.0%	-1.0%	0.2%
Libya	84.6	24.3	72.6	49.4	24.4	20.5	19.3	43.8	54.9	61.5	**18.3**	-70.3%	-2.8%	0.4%
Nigeria	122.1	118.4	116.4	109.5	109.3	105.7	91.3	94.5	96.4	101.1	**86.9**	-14.3%	-0.6%	2.1%
South Sudan	n/a	n/a	1.5	4.9	7.7	7.3	6.8	7.3	7.1	8.4	**8.4**	-1.2%	n/a	0.2%
Sudan	22.8	14.3	5.1	5.8	5.9	5.4	5.1	4.7	4.9	4.8	**4.2**	-12.2%	-14.6%	0.1%
Tunisia	3.9	3.6	3.8	3.5	3.3	2.9	2.8	2.2	2.4	2.0	**1.7**	-16.5%	-7.3%	◆
Other Africa	7.4	9.8	9.8	11.2	11.4	13.0	12.7	14.8	14.8	16.3	**15.5**	-4.9%	6.0%	0.4%
Total Africa	487.0	406.0	442.2	409.5	390.5	386.1	365.4	386.1	393.5	401.6	**327.3**	-18.7%	-1.6%	7.9%
Australia	24.6	21.5	21.4	17.8	19.1	17.0	15.5	14.1	14.7	19.3	**19.7**	1.8%	-2.2%	0.5%
Brunei	8.4	8.1	7.8	6.6	6.2	6.2	5.9	5.5	5.4	5.9	**5.4**	-9.1%	-3.3%	0.1%
China	203.0	202.9	207.5	210.0	211.4	214.6	199.7	191.5	189.1	191.0	**194.8**	1.7%	0.1%	4.7%
India	41.3	42.9	42.5	42.5	41.6	41.2	40.2	40.4	39.5	37.6	**35.1**	-6.8%	-0.1%	0.8%
Indonesia	48.6	46.3	44.6	42.7	41.0	40.6	42.8	41.0	39.5	38.2	**36.4**	-4.9%	-2.3%	0.9%
Malaysia	33.1	29.7	30.1	28.7	29.8	32.2	33.3	32.9	32.7	30.2	**27.2**	-10.1%	-0.5%	0.7%
Thailand	15.2	15.8	17.3	17.1	16.9	17.6	18.1	17.6	16.9	16.8	**15.0**	-10.7%	1.2%	0.4%
Vietnam	15.3	15.4	17.0	16.9	15.9	17.2	15.5	13.9	12.4	11.4	**10.0**	-12.6%	-3.7%	0.2%
Other Asia Pacific	14.0	13.2	12.8	12.1	13.3	13.4	12.6	12.2	10.5	10.3	**9.5**	-8.5%	-3.4%	0.2%
Total Asia Pacific	403.5	395.8	400.9	394.4	395.1	399.8	383.6	368.9	360.7	360.8	**353.1**	-2.4%	-0.7%	8.5%
Total World	**3978.6**	**4009.6**	**4121.6**	**4129.8**	**4227.2**	**4358.1**	**4375.1**	**4385.9**	**4484.2**	**4478.0**	**4165.1**	**-7.2%**	**1.4%**	**100.0%**
of which: OECD	898.9	906.1	953.9	1008.3	1095.6	1140.9	1107.0	1138.9	1247.3	1323.6	**1281.4**	-3.5%	4.0%	30.8%
Non-OECD	3079.6	3103.5	3167.8	3121.4	3131.5	3217.2	3268.1	3247.0	3236.9	3154.4	**2883.8**	-8.8%	0.5%	69.2%
OPEC	1612.1	1641.7	1712.6	1657.0	1651.2	1719.8	1774.7	1761.6	1747.1	1650.7	**1448.4**	-12.5%	0.4%	34.8%
Non-OPEC	2366.5	2367.9	2409.1	2472.8	2575.9	2638.2	2600.4	2624.2	2737.1	2827.3	**2716.7**	-4.2%	2.0%	65.2%
European Union	30.5	29.2	28.0	27.4	27.0	26.1	23.0	22.7	21.9	20.2	**19.3**	-4.9%	-4.4%	0.5%

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%.
n/a not available.
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*

												Growth rate per annum		Share
Thousand barrels daily	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	2020	2009-19	2020
Canada	2849	3021	3250	3486	3758	3863	3868	4216	4596	4690	**4469**	-4.7%	5.7%	5.8%
Mexico	2577	2553	2548	2522	2429	2267	2154	1948	1833	1701	**1705**	0.3%	-4.2%	2.2%
US	5484	5667	6521	7494	8789	9446	8852	9371	10964	12248	**11315**	-7.6%	8.6%	14.8%
Total North America	10911	11241	12319	13502	14976	15576	14873	15536	17394	18639	**17489**	-6.2%	5.7%	22.8%
Argentina	589	553	549	540	532	532	511	480	489	509	**480**	-5.6%	-1.7%	0.6%
Brazil	2055	2105	2061	2024	2255	2437	2510	2622	2587	2788	**2940**	5.5%	3.6%	3.8%
Colombia	786	915	944	1010	990	1006	886	854	865	886	**781**	-11.8%	2.8%	1.0%
Ecuador	486	500	504	526	557	543	548	531	517	531	**479**	-9.7%	0.9%	0.6%
Peru	123	117	112	118	121	104	91	88	92	95	**77**	-18.9%	-2.0%	0.1%
Trinidad & Tobago	98	92	82	81	81	79	71	72	63	59	**57**	-3.8%	-5.8%	0.1%
Venezuela	2695	2623	2580	2564	2578	2514	2242	1992	1386	839	**488**	-41.8%	-11.6%	0.6%
Other S. & Cent. America	125	126	131	135	140	133	122	118	114	109	**171**	57.3%	-1.0%	0.2%
Total S. & Cent. America	6957	7031	6963	6998	7255	7347	6982	6757	6114	5815	**5475**	-5.9%	-1.7%	7.1%
Denmark	249	225	204	178	167	158	142	138	116	103	**72**	-30.0%	-9.0%	0.1%
Italy	106	110	112	114	120	113	78	86	97	89	**112**	26.4%	-0.7%	0.1%
Norway	1871	1758	1612	1532	1562	1608	1647	1620	1516	1437	**1713**	19.2%	-3.5%	2.2%
Romania	86	84	79	83	82	80	76	73	72	71	**68**	-3.3%	-2.4%	0.1%
United Kingdom	1234	1028	885	810	791	903	933	913	1002	1019	**947**	-7.1%	-2.6%	1.2%
Other Europe	319	316	317	327	324	317	297	284	289	286	**277**	-3.0%	-1.5%	0.4%
Total Europe	3865	3521	3209	3045	3045	3180	3173	3114	3092	3005	**3190**	6.2%	-3.2%	4.2%
Azerbaijan	1023	919	872	877	849	840	826	781	783	762	**702**	-7.8%	-2.8%	0.9%
Kazakhstan	1676	1684	1662	1720	1701	1672	1637	1813	1900	1903	**1796**	-5.6%	1.7%	2.3%
Russian Federation	10150	10287	10395	10528	10479	10617	10863	10898	11083	11186	**10192**	-8.9%	1.2%	13.3%
Turkmenistan	216	224	231	239	246	254	250	248	236	228	**189**	-16.9%	0.8%	0.2%
Uzbekistan	78	77	68	63	61	59	58	61	64	62	**47**	-25.1%	-4.1%	0.1%
Other CIS	36	36	35	35	35	36	36	37	38	39	**39**	1.3%	0.7%	0.1%
Total CIS	13179	13226	13263	13463	13371	13478	13671	13838	14104	14180	**12965**	-8.6%	1.0%	16.9%
Iran	4068	4048	3398	3192	3273	3392	4090	4490	4240	3020	**2730**	-9.6%	-2.8%	3.6%
Iraq	2424	2728	3037	3058	3198	3945	4375	4473	4568	4712	**4049**	-14.1%	7.0%	5.3%
Kuwait	2307	2645	2890	2847	2830	2782	2860	2704	2737	2678	**2438**	-9.0%	1.6%	3.2%
Oman	865	885	918	942	943	981	1004	971	978	971	**951**	-2.1%	1.8%	1.2%
Qatar	1307	1399	1491	1520	1508	1463	1465	1432	1427	1387	**1359**	-2.0%	1.9%	1.8%
Saudi Arabia	8423	9566	9987	9875	9941	10420	10688	10175	10533	10145	**9430**	-7.0%	1.9%	12.3%
Syria	350	319	146	45	23	19	17	17	16	25	**33**	34.0%	-23.6%	♦
United Arab Emirates	2603	2853	2946	3084	3063	3284	3384	3279	3308	3360	**3087**	-8.1%	3.0%	4.0%
Yemen	284	197	154	173	128	38	16	44	67	67	**67**	–	-13.5%	0.1%
Other Middle East	182	191	173	199	204	203	204	198	196	196	**169**	-13.5%	0.7%	0.2%
Total Middle East	22813	24831	25140	24933	25112	26527	28104	27783	28069	26559	**24314**	-8.5%	1.7%	31.7%
Algeria	1461	1416	1320	1275	1329	1290	1316	1287	1259	1239	**1098**	-11.4%	-2.0%	1.4%
Angola	1793	1656	1714	1716	1672	1780	1722	1632	1479	1373	**1277**	-7.0%	-2.3%	1.7%
Chad	122	114	101	91	89	111	117	98	116	127	**126**	-0.5%	0.7%	0.2%
Republic of Congo	307	292	268	234	245	227	225	263	323	329	**300**	-8.9%	2.0%	0.4%
Egypt	663	649	649	643	667	662	631	603	617	597	**560**	-6.2%	-1.1%	0.7%
Equatorial Guinea	286	280	299	261	266	242	204	174	157	144	**146**	1.4%	-7.4%	0.2%
Gabon	233	236	221	213	211	214	221	210	193	218	**207**	-5.0%	-1.0%	0.3%
Libya	1748	508	1499	1025	510	422	397	909	1144	1279	**374**	-70.7%	-2.7%	0.5%
Nigeria	2455	2373	2330	2193	2188	2119	1822	1890	1922	2014	**1734**	-13.9%	-0.6%	2.3%
South Sudan	n/a	n/a	31	100	155	148	137	147	144	172	**170**	-1.2%	n/a	0.2%
Sudan	462	291	103	118	120	109	104	95	100	98	**86**	-12.2%	-14.6%	0.1%
Tunisia	79	70	70	64	59	54	51	43	43	40	**33**	-17.3%	-7.1%	♦
Other Africa	149	198	196	225	231	262	255	300	299	330	**313**	-5.0%	6.2%	0.4%
Total Africa	9759	8083	8802	8158	7742	7639	7199	7651	7797	7959	**6424**	-19.3%	-1.7%	8.4%
Australia	473	411	405	335	353	322	290	263	284	361	**356**	-1.4%	-2.4%	0.5%
Brunei	159	153	146	122	114	115	109	101	100	110	**100**	-8.3%	-3.4%	0.1%
China	4077	4074	4155	4216	4246	4309	3999	3846	3798	3836	**3901**	1.7%	0.1%	5.1%
India	762	793	786	789	778	771	744	744	719	677	**636**	-6.0%	-0.2%	0.8%
Indonesia	945	902	859	825	789	786	831	801	772	745	**708**	-5.0%	-2.4%	0.9%
Malaysia	653	583	598	588	610	662	667	660	653	604	**541**	-10.5%	-0.9%	0.7%
Thailand	242	224	239	241	233	248	258	240	228	228	**202**	-11.5%	-0.4%	0.3%
Vietnam	304	308	339	337	315	342	308	275	243	225	**195**	-13.0%	-3.8%	0.3%
Other Asia Pacific	270	256	246	237	261	265	250	241	208	205	**189**	-7.9%	-3.1%	0.2%
Total Asia Pacific	7885	7705	7773	7690	7699	7820	7455	7171	7004	6991	**6828**	-2.3%	-0.8%	8.9%
Total World	**75368**	**75638**	**77469**	**77790**	**79201**	**81567**	**81457**	**81851**	**83574**	**83148**	**76685**	**-7.8%**	**1.2%**	**100.0%**
of which: OECD	15902	15951	16736	17741	19227	19951	19097	19645	21504	22759	**21687**	-4.7%	3.7%	28.3%
Non-OECD	59467	59687	60734	60049	59974	61616	62360	62205	62070	60389	**54999**	-8.9%	0.4%	71.7%
OPEC	30804	31226	32489	31537	31305	32631	33545	33479	33249	31349	**27359**	-12.7%	0.3%	35.7%
Non-OPEC	44565	44412	44980	46253	47896	48936	47912	48372	50325	51799	**49326**	-4.8%	1.7%	64.3%
European Union	606	581	556	546	540	523	457	451	436	403	**385**	-4.6%	-4.3%	0.5%

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%.
n/a not available.
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	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	483.0	493.4	489.9	514.4	513.0	525.2	595.4	596.8	647.4	682.0	**666.3**	-2.3%	3.2%	5.7%
Mexico	382.3	387.7	363.2	352.6	355.4	319.7	302.3	275.9	235.1	217.4	**204.5**	-5.9%	-5.4%	1.7%
US	2074.1	2216.1	2408.1	2605.8	3014.6	3342.3	3509.2	3783.0	4369.5	4824.3	**5161.2**	7.0%	9.7%	44.1%
Total North America	2939.4	3097.2	3261.3	3472.9	3883.0	4187.2	4406.9	4655.7	5252.0	5723.8	**6032.0**	5.4%	7.5%	51.5%
Argentina	122.5	113.8	107.3	104.4	105.5	113.9	99.1	110.4	101.8	111.8	**120.0**	7.4%	-1.2%	1.0%
Brazil	70.4	67.7	70.4	72.1	86.8	87.5	81.4	99.2	92.3	88.5	**85.6**	-3.2%	2.5%	0.7%
Colombia	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Ecuador	2.0	1.0	1.0	1.0	–	–	–	–	–	–	**–**	n/a	-100.0%	–
Peru	42.4	41.9	45.5	53.7	53.8	49.3	49.8	48.4	47.0	48.6	**54.0**	11.1%	2.4%	0.5%
Trinidad & Tobago	47.2	44.0	35.2	34.4	32.9	30.1	25.2	26.9	23.8	23.4	**19.6**	-16.0%	-6.0%	0.2%
Venezuela	146.8	131.8	123.9	116.0	114.0	117.0	105.0	104.0	88.4	79.6	**51.7**	-35.0%	-6.7%	0.4%
Other S. & Cent. America	19.2	18.9	16.1	16.6	14.4	12.9	12.5	14.6	13.9	38.7	**35.3**	-8.8%	9.9%	0.3%
Total S. & Cent. America	450.6	419.1	399.3	398.4	407.4	410.8	373.0	403.5	367.3	390.5	**366.3**	-6.2%	-1.5%	3.1%
Denmark	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Italy	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Norway	268.0	281.1	305.9	305.3	324.0	337.9	349.0	351.5	335.3	299.4	**288.1**	-3.8%	0.2%	2.5%
Romania	3.8	4.7	3.9	2.8	2.8	3.2	3.7	3.1	2.9	4.0	**3.9**	-3.4%	1.3%	◆
United Kingdom	124.6	85.9	61.8	55.0	62.4	60.3	81.5	92.0	89.6	98.8	**82.0**	-17.0%	-3.5%	0.7%
Other Europe	22.7	20.1	18.7	17.0	15.2	14.4	16.3	18.6	18.7	16.6	**15.3**	-8.2%	-4.2%	0.1%
Total Europe	419.0	391.7	390.3	380.1	404.4	415.8	450.5	465.1	446.5	418.9	**389.3**	-7.1%	-1.0%	3.3%
Azerbaijan	13.5	13.3	10.4	11.4	12.2	10.8	11.1	11.3	12.3	13.2	**14.2**	7.6%	0.6%	0.1%
Kazakhstan	0.1	0.1	1.7	16.6	9.0	22.8	17.7	25.0	3.9	15.5	**14.5**	-6.8%	45.1%	0.1%
Russian Federation	228.3	246.8	260.4	278.5	448.1	470.2	479.2	475.5	479.1	492.7	**474.9**	-3.6%	8.2%	4.1%
Turkmenistan	10.5	10.5	13.6	16.8	16.8	16.8	20.0	23.2	23.9	25.5	**26.8**	5.1%	9.3%	0.2%
Uzbekistan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Other CIS	–	–	–	–	–	–	–	–	–	–	**–**	n/a	n/a	–
Total CIS	252.3	270.6	286.2	323.3	486.1	520.7	528.0	535.0	519.2	546.9	**530.4**	-3.0%	8.2%	4.5%
Iran	352.2	404.1	412.0	417.6	441.2	460.5	488.0	364.0	368.0	379.0	**354.0**	-6.6%	3.5%	3.0%
Iraq	44.8	45.1	41.5	41.5	40.3	40.7	47.6	64.5	64.4	67.7	**64.3**	-5.0%	5.2%	0.5%
Kuwait	257.4	272.6	282.9	287.0	276.0	287.8	289.7	305.0	313.1	298.4	**248.0**	-16.9%	2.9%	2.1%
Oman	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Qatar	322.8	425.8	436.7	471.1	466.2	469.8	473.3	450.2	470.8	476.1	**450.3**	-5.4%	6.1%	3.8%
Saudi Arabia	1441.8	1513.0	1635.0	1518.1	1577.4	1577.7	1717.8	1717.0	1728.3	1687.3	**1609.0**	-4.6%	2.7%	13.7%
Syria	35.0	33.8	25.0	14.2	10.0	8.0	8.0	8.0	8.0	9.0	**10.0**	11.1%	-12.7%	0.1%
United Arab Emirates	333.8	446.8	479.1	482.5	539.5	613.8	653.6	630.5	604.3	638.9	**569.3**	-10.9%	7.9%	4.9%
Yemen	22.6	23.2	23.8	24.5	25.1	25.7	26.3	27.0	27.6	27.6	**27.6**	-0.3%	2.3%	0.2%
Other Middle East	10.3	10.8	10.5	9.6	10.2	10.0	10.1	9.6	11.0	18.6	**18.1**	-2.6%	6.6%	0.2%
Total Middle East	2820.7	3175.3	3346.5	3266.0	3385.8	3494.0	3714.6	3575.8	3595.6	3602.7	**3350.6**	-7.0%	3.9%	28.6%
Algeria	228.4	225.1	216.4	210.1	260.2	267.8	261.2	253.6	251.7	247.4	**233.6**	-5.6%	-0.4%	2.0%
Angola	19.2	14.0	19.9	22.3	29.7	16.1	23.2	39.0	40.3	46.7	**46.6**	-0.3%	8.9%	0.4%
Chad	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Republic of Congo	7.0	8.8	11.5	9.0	8.0	7.0	7.0	7.0	7.0	7.0	**6.7**	-3.6%	–	0.1%
Egypt	61.3	65.2	65.9	66.7	47.0	64.2	60.0	57.3	57.6	56.1	**55.9**	-0.3%	-1.5%	0.5%
Equatorial Guinea	19.7	20.7	20.2	20.7	18.8	17.4	19.4	21.2	19.1	16.7	**15.2**	-8.7%	-2.9%	0.1%
Gabon	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Libya	50.5	8.5	40.0	22.4	7.5	15.0	15.0	20.0	21.2	27.1	**15.3**	-43.7%	-6.2%	0.1%
Nigeria	78.2	88.0	81.6	85.6	88.2	82.3	78.2	79.7	84.8	88.0	**63.6**	-27.7%	1.9%	0.5%
South Sudan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Sudan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
Tunisia	4.2	6.6	12.5	12.2	11.8	10.0	8.7	4.8	8.6	2.8	**2.8**	-0.3%	-10.9%	◆
Other Africa	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.5	0.8	**0.8**	2.1%	n/a	◆
Total Africa	468.5	436.8	468.0	449.1	471.3	479.9	472.8	482.7	490.8	492.6	**440.5**	-10.6%	-0.3%	3.8%
Australia	77.1	71.3	73.2	72.2	82.5	62.0	69.3	64.0	60.1	97.7	**114.3**	17.0%	1.5%	1.0%
Brunei	12.7	12.8	12.9	13.1	12.1	11.4	11.8	12.6	12.0	11.7	**9.6**	-18.5%	-1.5%	0.1%
China	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**n/a**	n/a	n/a	n/a
India	139.6	143.7	139.6	136.4	127.5	122.3	129.5	140.9	150.4	153.8	**134.9**	-12.3%	0.4%	1.2%
Indonesia	58.1	50.2	58.0	58.0	58.3	51.9	44.7	36.9	36.4	36.2	**34.7**	-4.1%	-2.2%	0.3%
Malaysia	79.3	76.3	65.1	38.8	38.8	34.7	59.3	57.7	64.9	58.2	**54.7**	-6.0%	7.1%	0.5%
Thailand	151.6	204.9	232.1	224.9	231.0	232.7	231.0	246.5	243.6	242.5	**215.7**	-11.0%	5.1%	1.8%
Vietnam	7.7	7.8	8.2	9.5	9.6	9.2	9.9	9.3	13.4	11.8	**11.7**	-0.7%	3.7%	0.1%
Other Asia Pacific	48.2	46.1	45.0	37.6	35.6	32.7	30.7	32.0	25.9	25.6	**21.1**	-17.6%	-6.6%	0.2%
Total Asia Pacific	574.2	613.0	634.1	590.6	595.5	556.9	586.1	599.9	606.6	637.5	**596.8**	-6.4%	1.9%	5.1%
Total World	**7924.8**	**8403.7**	**8785.6**	**8880.2**	**9633.5**	**10065.2**	**10531.9**	**10717.7**	**11277.8**	**11812.9**	**11705.9**	**-0.9%**	**4.7%**	**100.0%**
of which: OECD	3439.2	3562.0	3727.8	3927.9	4372.6	4665.8	4922.5	5182.0	5754.2	6233.9	**6529.8**	4.7%	6.5%	55.8%
Non-OECD	4485.6	4841.7	5057.8	4952.3	5260.8	5399.4	5609.4	5535.7	5523.6	5579.0	**5176.1**	-7.2%	3.1%	44.2%
OPEC	2979.8	3178.6	3364.0	3232.7	3400.8	3503.2	3705.9	3605.6	3590.7	3583.9	**3277.3**	-8.6%	2.8%	28.0%
Non-OPEC	4944.9	5225.1	5421.7	5647.5	6232.6	6562.0	6826.0	7112.2	7687.1	8229.0	**8428.5**	2.4%	5.7%	72.0%
European Union	19.8	18.4	16.6	14.1	12.6	12.6	13.6	13.7	12.1	11.1	**9.7**	-13.3%	-6.5%	0.1%

*Includes ethane, LPG and naphtha separated from the production of natural gas. Excludes condensates.
†Less than 0.05.
◆Less than 0.05%.
n/a not available.
Note: Annual changes and shares of total are calculated using thousand barrels daily figures.

Source: Includes data from FGE Iran Service, ICIS.

Oil: Total liquids consumption in thousands of barrels per day*

Thousand barrels daily	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	2414	2445	2482	2477	2478	2498	2507	2486	2566	2605	**2342**	-10.1%	1.2%	2.6%
Mexico	2043	2068	2086	2038	1965	1945	1956	1890	1842	1705	**1319**	-22.6%	-1.7%	1.4%
US	19178	18896	18482	18967	19100	19532	19692	19952	20512	20543	**18120**	-11.8%	0.9%	19.9%
Total North America	23634	23408	23050	23481	23544	23975	24155	24327	24920	24852	**21781**	-12.4%	0.7%	23.9%
Argentina	597	629	669	713	709	727	711	711	680	603	**525**	-12.9%	0.9%	0.6%
Brazil	2714	2832	2884	3100	3214	3138	2957	3030	3026	3142	**3019**	-3.9%	2.3%	3.3%
Chile	343	371	376	362	353	355	377	364	379	379	**347**	-8.6%	-0.1%	0.4%
Colombia	266	275	296	294	310	330	337	332	344	358	**294**	-17.9%	3.6%	0.3%
Ecuador	220	226	233	247	260	254	240	237	255	249	**203**	-18.6%	2.7%	0.2%
Peru	196	216	220	231	229	244	260	270	278	285	**219**	-22.9%	4.6%	0.2%
Trinidad & Tobago	45	42	40	45	41	45	47	44	41	39	**38**	-2.6%	-1.2%	◆
Venezuela	739	721	785	835	746	697	537	493	410	296	**242**	-18.3%	-8.3%	0.3%
Other S. & Cent. America	1175	1204	1193	1172	1177	1242	1287	1293	1310	1331	**1151**	-13.5%	1.3%	1.3%
Total S. & Cent. America	6294	6517	6695	7000	7039	7034	6755	6773	6723	6682	**6038**	-9.6%	1.1%	6.6%
Austria	273	256	256	263	255	256	261	263	267	277	**240**	-13.3%	0.6%	0.3%
Belgium	671	632	611	633	629	646	654	664	703	662	**490**	-26.0%	0.3%	0.5%
Czech Republic	194	199	196	188	199	191	179	213	214	218	**191**	-12.4%	0.7%	0.2%
Finland	210	204	197	212	206	206	210	208	209	206	**188**	-8.7%	0.2%	0.2%
France	1760	1721	1669	1657	1610	1611	1596	1607	1605	1599	**1370**	-14.4%	-1.3%	1.5%
Germany	2441	2365	2352	2404	2344	2336	2374	2443	2325	2339	**2127**	-9.1%	-0.3%	2.3%
Greece	369	352	307	285	284	297	297	301	298	308	**249**	-19.2%	-2.7%	0.3%
Hungary	146	142	133	132	147	157	157	168	180	182	**171**	-6.0%	1.6%	0.2%
Italy	1538	1495	1401	1289	1220	1293	1284	1304	1331	1277	**1079**	-15.5%	-2.0%	1.2%
Netherlands	964	972	926	900	866	837	854	830	858	826	**771**	-6.7%	-1.3%	0.8%
Norway	229	225	218	229	218	223	217	223	231	223	**217**	-2.5%	0.1%	0.2%
Poland	593	591	570	537	538	558	605	662	685	702	**660**	-6.1%	2.2%	0.7%
Portugal	272	256	231	241	247	246	248	246	245	253	**208**	-17.8%	-0.8%	0.2%
Romania	184	191	191	174	187	191	202	213	219	230	**225**	-2.2%	1.7%	0.2%
Spain	1430	1370	1285	1191	1188	1233	1278	1291	1325	1325	**1078**	-18.7%	-0.8%	1.2%
Sweden	329	310	309	307	305	303	319	321	305	325	**290**	-10.6%	◆	0.3%
Switzerland	242	234	238	249	224	227	216	222	215	220	**183**	-17.0%	-1.6%	0.2%
Turkey	694	673	704	756	774	917	976	1025	993	1000	**906**	-9.4%	3.5%	1.0%
Ukraine	284	283	287	267	245	214	226	234	241	247	**234**	-5.0%	-2.0%	0.3%
United Kingdom	1622	1589	1532	1517	1522	1563	1612	1619	1602	1572	**1230**	-21.7%	-0.5%	1.4%
Other Europe	1215	1188	1138	1121	1118	1165	1209	1256	1269	1268	**1114**	-12.1%	0.3%	1.2%
Total Europe	15659	15248	14751	14552	14328	14670	14975	15312	15321	15258	**13221**	-13.4%	-0.3%	14.5%
Azerbaijan	72	89	92	101	99	100	98	99	104	104	**92**	-11.8%	3.7%	0.1%
Belarus	150	172	211	144	164	139	137	137	151	144	**132**	-8.5%	-2.3%	0.1%
Kazakhstan	206	270	288	297	304	364	344	385	409	387	**379**	-2.0%	6.8%	0.4%
Russian Federation	2878	3074	3119	3163	3300	3197	3266	3273	3323	3398	**3243**	-4.6%	2.0%	3.6%
Turkmenistan	118	125	129	137	143	145	143	144	145	149	**142**	-4.8%	3.4%	0.2%
Uzbekistan	92	80	77	88	80	80	84	87	95	98	**86**	-12.6%	0.1%	0.1%
Other CIS	63	65	75	78	76	78	86	82	96	91	**79**	-12.3%	3.6%	0.1%
Total CIS	3579	3874	3992	4009	4166	4103	4158	4207	4323	4371	**4154**	-5.0%	2.3%	4.6%
Iran	1685	1715	1763	1876	1764	1582	1585	1644	1717	1841	**1715**	-6.8%	0.4%	1.9%
Iraq	569	628	665	715	680	686	757	723	704	716	**628**	-12.4%	3.0%	0.7%
Israel	241	255	295	223	214	227	231	255	250	254	**213**	-16.1%	0.9%	0.2%
Kuwait	480	467	467	477	488	467	449	470	468	446	**411**	-7.8%	0.5%	0.5%
Oman	135	146	157	178	185	184	187	224	232	240	**209**	-12.7%	7.3%	0.2%
Qatar	186	244	260	302	312	357	371	337	348	375	**296**	-21.0%	8.3%	0.3%
Saudi Arabia	3124	3285	3451	3444	3760	3879	3865	3799	3617	3635	**3544**	-2.5%	2.6%	3.9%
United Arab Emirates	653	723	767	849	858	949	1034	1017	1015	969	**798**	-17.7%	4.9%	0.9%
Other Middle East	723	714	677	625	625	544	523	531	529	535	**507**	-5.3%	-3.7%	0.6%
Total Middle East	7796	8176	8503	8690	8885	8873	9002	9000	8879	9011	**8321**	-7.7%	1.9%	9.1%
Algeria	329	349	370	387	401	425	412	408	416	430	**366**	-14.9%	2.8%	0.4%
Egypt	749	707	733	743	795	820	840	786	731	734	**659**	-10.2%	0.3%	0.7%
Morocco	258	275	277	282	272	268	275	290	286	292	**261**	-10.5%	2.2%	0.3%
South Africa	526	533	543	554	546	602	577	577	576	569	**492**	-13.5%	1.2%	0.5%
Other Africa	1606	1520	1632	1727	1737	1764	1803	1896	2037	2075	**1783**	-14.1%	3.1%	2.0%
Total Africa	3467	3384	3555	3693	3750	3879	3907	3957	4047	4100	**3561**	-13.1%	2.2%	3.9%
Australia	898	940	968	1000	1003	992	994	1035	1045	1036	**895**	-13.6%	1.6%	1.0%
Bangladesh	81	104	110	108	120	127	138	156	178	176	**154**	-12.2%	9.3%	0.2%
China	9442	9795	10235	10744	11207	12138	12572	13204	13661	14103	**14314**	1.5%	5.5%	15.7%
China Hong Kong SAR	359	361	344	352	336	368	380	428	435	409	**285**	-30.2%	2.1%	0.3%
India	3339	3510	3708	3751	3871	4188	4593	4767	5032	5214	**4738**	-9.1%	4.8%	5.2%
Indonesia	1450	1587	1677	1677	1676	1570	1562	1657	1716	1739	**1346**	-22.6%	2.5%	1.5%
Japan	4429	4419	4683	4503	4288	4124	4000	3967	3839	3704	**3282**	-11.4%	-1.7%	3.6%
Malaysia	688	725	760	807	809	759	847	809	811	851	**737**	-13.5%	2.3%	0.8%
New Zealand	148	153	150	152	155	161	165	175	176	179	**148**	-17.1%	1.9%	0.2%
Pakistan	411	414	402	442	458	505	566	589	498	446	**437**	-1.9%	0.7%	0.5%
Philippines	313	298	309	326	347	397	427	459	464	474	**391**	-17.6%	4.7%	0.4%
Singapore	1157	1208	1202	1217	1259	1329	1372	1406	1431	1401	**1332**	-4.9%	2.9%	1.5%
South Korea	2319	2339	2404	2414	2408	2513	2706	2747	2735	2719	**2575**	-5.3%	1.8%	2.8%
Sri Lanka	87	92	95	82	92	90	105	114	114	123	**104**	-15.6%	3.5%	0.1%
Taiwan	1077	995	988	1024	1053	1078	1083	1068	1075	1022	**974**	-4.7%	-0.1%	1.1%
Thailand	1123	1186	1249	1300	1310	1356	1392	1439	1453	1464	**1329**	-9.2%	3.1%	1.5%
Vietnam	332	361	371	380	391	437	466	492	525	557	**491**	-11.9%	6.2%	0.5%
Other Asia Pacific	310	320	331	349	374	424	426	438	464	479	**472**	-1.6%	6.1%	0.5%
Total Asia Pacific	27963	28807	29986	30629	31157	32557	33795	34948	35652	36094	**34003**	-5.8%	3.3%	37.3%
Total World	**88392**	**89414**	**90532**	**92055**	**92868**	**95091**	**96746**	**98525**	**99865**	**100369**	**91078**	**-9.3%**	**1.6%**	**100.0%**
of which: OECD	46916	46386	45975	46037	45658	46408	46947	47477	47964	47668	**41761**	-12.4%	0.3%	45.9%
Non-OECD	41476	43028	44557	46018	47210	48683	49799	51048	51901	52701	**49318**	-6.4%	3.1%	54.1%
European Union	12282	11935	11483	11243	11057	11228	11407	11656	11710	11666	**10149**	-13.0%	-0.5%	11.1%

*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%.
Note: 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	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	2386	2400	2424	2419	2419	2442	2452	2423	2501	2537	**2282**	-10.0%	1.1%	2.6%
Mexico	2040	2065	2083	2034	1960	1939	1950	1883	1836	1698	**1312**	-22.7%	-1.7%	1.5%
US	18322	17997	17586	18011	18131	18524	18622	18878	19447	19475	**17178**	-11.8%	0.8%	19.4%
Total North America	22747	22462	22093	22465	22510	22906	23025	23184	23784	23710	**20772**	-12.4%	0.6%	23.5%
Argentina	585	612	647	688	678	694	675	670	640	563	**503**	-10.7%	0.2%	0.6%
Brazil	2271	2432	2509	2655	2725	2558	2433	2481	2392	2438	**2323**	-4.8%	1.6%	2.6%
Chile	343	371	376	362	353	355	377	364	379	379	**347**	-8.6%	-0.1%	0.4%
Colombia	252	259	279	277	292	312	320	313	322	337	**275**	-18.5%	3.4%	0.3%
Ecuador	220	226	233	247	260	254	239	236	255	249	**202**	-18.7%	2.7%	0.2%
Peru	191	211	212	222	221	235	251	259	268	275	**210**	-23.8%	4.4%	0.2%
Trinidad & Tobago	45	42	40	45	41	45	47	44	41	39	**38**	-2.6%	-1.2%	◆
Venezuela	739	721	785	835	746	697	537	493	410	296	**242**	-18.3%	-8.3%	0.3%
Other S. & Cent. America	1162	1190	1179	1158	1162	1227	1271	1277	1293	1314	**1137**	-13.5%	1.3%	1.3%
Total S. & Cent. America	5809	6065	6260	6491	6478	6377	6151	6136	6000	5889	**5274**	-10.4%	0.6%	6.0%
Austria	261	244	244	252	242	241	249	252	255	265	**230**	-13.3%	0.7%	0.3%
Belgium	663	624	602	624	620	640	644	653	692	650	**476**	-26.8%	0.2%	0.5%
Czech Republic	189	191	189	181	192	184	172	205	207	209	**182**	-13.1%	0.5%	0.2%
Finland	206	199	192	207	196	195	206	199	201	196	**178**	-9.1%	-0.1%	0.2%
France	1703	1666	1609	1596	1544	1544	1529	1540	1538	1528	**1305**	-14.6%	-1.4%	1.5%
Germany	2373	2294	2276	2336	2273	2269	2307	2374	2255	2270	**2045**	-9.9%	-0.3%	2.3%
Greece	366	350	305	282	281	294	293	298	294	304	**244**	-19.7%	-2.8%	0.3%
Hungary	142	138	129	129	142	153	152	164	175	177	**164**	-7.3%	1.6%	0.2%
Italy	1508	1465	1367	1261	1196	1264	1255	1274	1300	1259	**1054**	-16.2%	-2.0%	1.2%
Netherlands	957	962	916	889	856	826	843	818	843	807	**746**	-7.5%	-1.5%	0.8%
Norway	227	222	215	226	216	219	210	211	222	212	**206**	-2.5%	-0.4%	0.2%
Poland	577	574	552	520	521	542	594	646	663	679	**637**	-6.1%	2.1%	0.7%
Portugal	265	249	225	235	241	238	242	240	239	247	**202**	-18.0%	-0.9%	0.2%
Romania	181	186	186	170	184	186	195	206	212	221	**216**	-2.2%	1.4%	0.2%
Spain	1396	1330	1237	1169	1165	1209	1252	1260	1286	1287	**1050**	-18.4%	-1.1%	1.2%
Sweden	315	295	292	291	285	279	289	287	273	291	**260**	-10.7%	-0.8%	0.3%
Switzerland	242	234	238	249	224	226	214	219	212	216	**179**	-17.3%	-1.8%	0.2%
Turkey	694	672	702	748	771	915	973	1022	989	996	**903**	-9.3%	3.5%	1.0%
Ukraine	284	283	287	265	244	212	225	233	240	244	**232**	-4.9%	-2.1%	0.3%
United Kingdom	1593	1561	1508	1490	1491	1538	1587	1594	1569	1531	**1192**	-22.2%	-0.6%	1.3%
Other Europe	1204	1175	1121	1103	1099	1144	1188	1234	1243	1239	**1085**	-12.4%	0.1%	1.2%
Total Europe	15344	14914	14393	14223	13980	14319	14619	14929	14908	14826	**12788**	-13.8%	-0.4%	14.5%
Azerbaijan	72	89	92	101	99	100	98	99	104	104	**92**	-11.8%	3.7%	0.1%
Belarus	149	172	210	143	163	139	136	137	151	144	**132**	-8.5%	-2.3%	0.1%
Kazakhstan	206	270	288	297	304	364	344	385	409	387	**379**	-2.0%	6.8%	0.4%
Russian Federation	2878	3074	3119	3163	3300	3197	3265	3271	3320	3393	**3238**	-4.6%	2.0%	3.7%
Turkmenistan	118	125	129	137	143	145	143	144	145	149	**142**	-4.8%	3.4%	0.2%
Uzbekistan	92	80	77	88	80	80	84	87	95	98	**86**	-12.6%	0.1%	0.1%
Other CIS	63	65	75	78	76	78	86	82	96	91	**79**	-12.3%	3.6%	0.1%
Total CIS	3578	3873	3991	4008	4165	4102	4156	4205	4320	4367	**4149**	-5.0%	2.2%	4.7%
Iran	1685	1715	1763	1876	1764	1582	1585	1644	1717	1841	**1715**	-6.8%	0.4%	1.9%
Iraq	569	628	665	715	680	686	757	723	704	716	**628**	-12.4%	3.0%	0.7%
Israel	241	254	295	223	214	226	230	255	250	254	**213**	-16.1%	0.9%	0.2%
Kuwait	480	467	467	477	488	467	449	470	468	446	**411**	-7.8%	0.5%	0.5%
Oman	135	146	157	178	185	184	187	224	232	240	**209**	-12.7%	7.3%	0.2%
Qatar	186	244	260	302	312	357	371	337	348	375	**296**	-21.0%	8.3%	0.3%
Saudi Arabia	3124	3285	3451	3444	3760	3879	3865	3799	3617	3635	**3544**	-2.5%	2.6%	4.0%
United Arab Emirates	653	723	767	849	858	949	1034	1017	1015	969	**798**	-17.7%	4.9%	0.9%
Other Middle East	723	714	677	625	625	544	523	531	529	535	**507**	-5.3%	-3.7%	0.6%
Total Middle East	7796	8176	8502	8690	8885	8873	9002	9000	8879	9011	**8321**	-7.7%	2.0%	9.4%
Algeria	329	349	370	387	401	425	412	408	416	430	**366**	-14.9%	2.8%	0.4%
Egypt	749	707	733	743	795	820	840	786	731	734	**659**	-10.2%	0.3%	0.7%
Morocco	258	275	277	282	272	268	275	290	286	292	**261**	-10.5%	2.2%	0.3%
South Africa	525	532	542	552	544	601	576	576	574	567	**490**	-13.5%	1.2%	0.6%
Other Africa	1605	1519	1632	1727	1737	1764	1803	1896	2037	2075	**1783**	-14.1%	3.1%	2.0%
Total Africa	3467	3383	3553	3691	3749	3877	3906	3956	4045	4098	**3559**	-13.1%	2.2%	4.0%
Australia	892	933	961	992	994	985	988	1030	1041	1031	**890**	-13.7%	1.6%	1.0%
Bangladesh	81	104	110	108	120	127	138	156	178	176	**154**	-12.2%	9.3%	0.2%
China	9390	9739	10170	10668	11120	12066	12499	13137	13576	14005	**14225**	1.6%	5.4%	16.1%
China Hong Kong SAR	359	360	344	352	336	367	380	428	435	408	**285**	-30.2%	2.1%	0.3%
India	3308	3475	3674	3717	3832	4147	4544	4724	4974	5148	**4669**	-9.3%	4.8%	5.3%
Indonesia	1443	1579	1663	1657	1642	1552	1508	1610	1649	1626	**1230**	-24.4%	1.9%	1.4%
Japan	4424	4412	4676	4496	4279	4113	3988	3953	3824	3689	**3268**	-11.4%	-1.7%	3.7%
Malaysia	688	724	757	803	802	751	838	801	801	841	**728**	-13.5%	2.2%	0.8%
New Zealand	148	152	150	152	155	161	165	175	175	178	**148**	-17.1%	1.9%	0.2%
Pakistan	411	414	402	442	458	505	566	589	498	446	**437**	-1.9%	0.7%	0.5%
Philippines	307	292	301	316	336	384	413	445	450	459	**378**	-17.7%	4.5%	0.4%
Singapore	1157	1208	1202	1217	1259	1329	1372	1406	1431	1401	**1332**	-4.9%	2.9%	1.5%
South Korea	2312	2331	2396	2402	2398	2503	2696	2738	2720	2703	**2560**	-5.3%	1.8%	2.9%
Sri Lanka	87	92	95	82	92	90	105	114	114	123	**104**	-15.6%	3.5%	0.1%
Taiwan	1076	994	986	1022	1052	1077	1083	1067	1074	1022	**973**	-4.7%	-0.1%	1.1%
Thailand	1104	1167	1225	1266	1270	1313	1347	1390	1400	1405	**1271**	-9.5%	2.9%	1.4%
Vietnam	332	361	371	380	391	437	466	492	525	557	**491**	-11.9%	6.2%	0.6%
Other Asia Pacific	310	320	331	349	374	424	426	438	464	479	**472**	-1.6%	6.1%	0.5%
Total Asia Pacific	27828	28658	29815	30421	30911	32332	33523	34690	35330	35698	**33615**	-5.8%	3.2%	38.0%
Total World	**86568**	**87530**	**88607**	**89988**	**90677**	**92787**	**94381**	**96099**	**97265**	**97598**	**88477**	**-9.3%**	**1.5%**	**100.0%**
of which: OECD	45684	45074	44628	44656	44239	44950	45426	45916	46372	46056	**40282**	-12.5%	0.2%	45.5%
Non-OECD	40884	42456	43979	45333	46438	47836	48954	50184	50892	51542	**48195**	-6.5%	3.0%	54.5%
European Union	11998	11632	11154	10954	10748	10911	11090	11318	11348	11298	**9774**	-13.5%	-0.7%	11.0%

*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.
◆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.

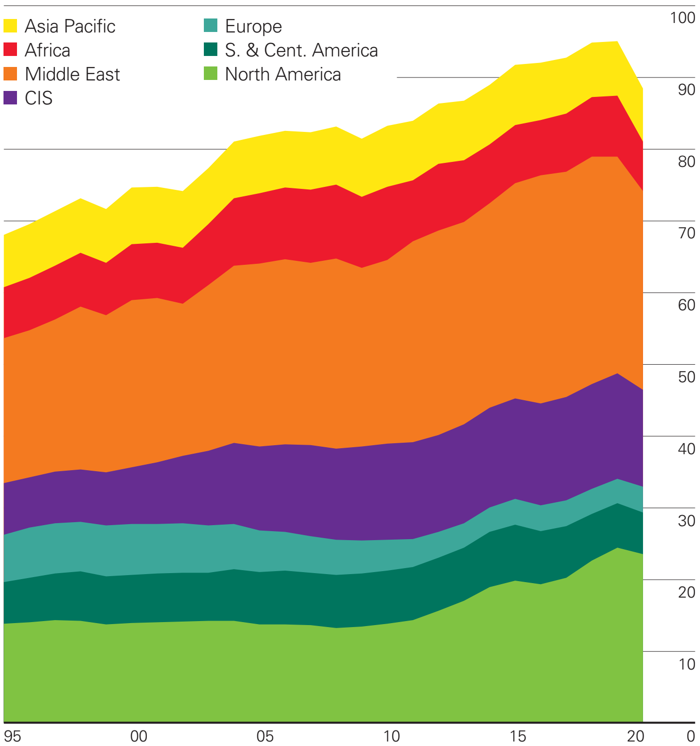
Oil: Consumption in exajoules*

Exajoules	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	4.57	4.58	4.64	4.61	4.61	4.62	4.61	4.57	4.73	4.78	**4.26**	-11.1%	0.9%	2.5%
Mexico	3.91	3.97	4.04	3.93	3.75	3.70	3.73	3.59	3.51	3.24	**2.46**	-24.0%	-1.8%	1.4%
US	35.61	34.91	34.11	34.70	34.94	35.66	35.92	36.28	37.14	37.13	**32.54**	-12.6%	0.6%	18.7%
Total North America	44.08	43.46	42.78	43.24	43.30	43.99	44.27	44.44	45.38	45.15	**39.27**	-13.3%	0.4%	22.6%
Argentina	1.18	1.22	1.30	1.38	1.37	1.39	1.35	1.34	1.27	1.15	**1.03**	-10.1%	0.5%	0.6%
Brazil	4.54	4.83	4.98	5.26	5.43	5.09	4.83	4.90	4.72	4.81	**4.61**	-4.5%	1.5%	2.7%
Chile	0.69	0.76	0.76	0.73	0.71	0.72	0.76	0.73	0.76	0.76	**0.69**	-9.1%	-0.3%	0.4%
Colombia	0.51	0.52	0.57	0.56	0.59	0.63	0.65	0.63	0.65	0.68	**0.55**	-19.0%	3.5%	0.3%
Ecuador	0.45	0.46	0.47	0.50	0.53	0.51	0.48	0.47	0.51	0.49	**0.40**	-19.8%	2.5%	0.2%
Peru	0.38	0.42	0.42	0.44	0.43	0.46	0.49	0.51	0.52	0.54	**0.40**	-24.9%	4.1%	0.2%
Trinidad & Tobago	0.10	0.09	0.09	0.10	0.09	0.09	0.10	0.09	0.09	0.08	**0.08**	-3.2%	-1.2%	◆
Venezuela	1.51	1.46	1.59	1.71	1.52	1.42	1.08	1.00	0.82	0.59	**0.48**	-18.6%	-8.4%	0.3%
Other S. & Cent. America	2.45	2.51	2.50	2.43	2.44	2.57	2.67	2.66	2.69	2.74	**2.37**	-13.7%	1.1%	1.4%
Total S. & Cent. America	11.80	12.27	12.67	13.12	13.11	12.90	12.42	12.33	12.04	11.84	**10.62**	-10.6%	0.5%	6.1%
Austria	0.55	0.51	0.51	0.53	0.50	0.50	0.52	0.53	0.53	0.55	**0.48**	-13.4%	0.5%	0.3%
Belgium	1.38	1.29	1.24	1.28	1.26	1.30	1.32	1.34	1.42	1.33	**0.93**	-30.2%	◆	0.5%
Czech Republic	0.38	0.39	0.38	0.37	0.39	0.38	0.35	0.42	0.42	0.42	**0.37**	-12.6%	0.4%	0.2%
Finland	0.42	0.41	0.39	0.41	0.39	0.39	0.41	0.40	0.40	0.39	**0.35**	-9.4%	-0.4%	0.2%
France	3.53	3.45	3.34	3.29	3.19	3.19	3.17	3.18	3.17	3.14	**2.68**	-15.1%	-1.5%	1.5%
Germany	4.89	4.73	4.70	4.80	4.67	4.67	4.76	4.87	4.63	4.66	**4.21**	-9.9%	-0.3%	2.4%
Greece	0.77	0.74	0.64	0.59	0.59	0.61	0.61	0.63	0.62	0.64	**0.51**	-20.0%	-2.9%	0.3%
Hungary	0.28	0.28	0.26	0.26	0.28	0.30	0.30	0.33	0.35	0.35	**0.33**	-7.4%	1.5%	0.2%
Italy	3.07	2.98	2.78	2.54	2.42	2.56	2.54	2.57	2.63	2.55	**2.13**	-16.6%	-2.1%	1.2%
Netherlands	1.94	1.97	1.87	1.77	1.69	1.65	1.71	1.64	1.68	1.64	**1.51**	-8.0%	-1.5%	0.9%
Norway	0.44	0.43	0.42	0.44	0.41	0.42	0.40	0.40	0.41	0.39	**0.37**	-4.9%	-0.9%	0.2%
Poland	1.16	1.16	1.11	1.04	1.04	1.09	1.20	1.30	1.33	1.36	**1.28**	-5.8%	2.1%	0.7%
Portugal	0.54	0.51	0.46	0.48	0.49	0.48	0.49	0.49	0.49	0.50	**0.41**	-18.4%	-1.0%	0.2%
Romania	0.37	0.38	0.38	0.35	0.38	0.38	0.40	0.42	0.43	0.45	**0.44**	-1.9%	1.4%	0.3%
Spain	2.94	2.81	2.62	2.47	2.46	2.54	2.63	2.64	2.69	2.70	**2.21**	-18.4%	-1.1%	1.3%
Sweden	0.66	0.61	0.60	0.59	0.58	0.57	0.59	0.58	0.55	0.59	**0.55**	-8.1%	-1.0%	0.3%
Switzerland	0.50	0.48	0.49	0.51	0.46	0.47	0.44	0.45	0.43	0.44	**0.37**	-17.1%	-1.8%	0.2%
Turkey	1.37	1.34	1.41	1.51	1.55	1.85	1.98	2.07	2.00	2.01	**1.82**	-9.4%	3.6%	1.0%
Ukraine	0.57	0.57	0.58	0.53	0.48	0.43	0.45	0.46	0.47	0.48	**0.45**	-5.2%	-2.4%	0.3%
United Kingdom	3.20	3.14	3.05	3.00	3.00	3.08	3.18	3.19	3.15	3.08	**2.39**	-22.8%	-0.5%	1.4%
Other Europe	2.53	2.47	2.36	2.31	2.30	2.40	2.49	2.58	2.60	2.59	**2.28**	-12.5%	0.1%	1.3%
Total Europe	31.50	30.64	29.62	29.07	28.53	29.25	29.93	30.47	30.41	30.27	**26.07**	-14.1%	-0.5%	15.0%
Azerbaijan	0.14	0.17	0.18	0.20	0.20	0.20	0.20	0.20	0.21	0.21	**0.18**	-12.6%	3.7%	0.1%
Belarus	0.31	0.36	0.44	0.30	0.34	0.29	0.29	0.29	0.32	0.30	**0.28**	-8.5%	-2.5%	0.2%
Kazakhstan	0.42	0.55	0.59	0.60	0.62	0.73	0.69	0.77	0.81	0.76	**0.75**	-1.6%	6.5%	0.4%
Russian Federation	5.77	6.16	6.26	6.30	6.60	6.34	6.48	6.46	6.56	6.72	**6.39**	-5.1%	1.9%	3.7%
Turkmenistan	0.24	0.25	0.26	0.27	0.28	0.28	0.28	0.28	0.28	0.29	**0.28**	-5.3%	3.0%	0.2%
Uzbekistan	0.19	0.16	0.15	0.17	0.15	0.15	0.16	0.16	0.18	0.19	**0.16**	-13.6%	-0.5%	0.1%
Other CIS	0.13	0.13	0.15	0.15	0.15	0.15	0.17	0.16	0.19	0.18	**0.16**	-12.9%	3.2%	0.1%
Total CIS	7.20	7.79	8.04	7.99	8.34	8.16	8.26	8.32	8.55	8.64	**8.19**	-5.5%	2.1%	4.7%
Iran	3.37	3.43	3.54	3.77	3.50	3.09	3.07	3.13	3.27	3.53	**3.31**	-6.5%	-0.2%	1.9%
Iraq	1.16	1.28	1.36	1.46	1.39	1.40	1.55	1.48	1.45	1.47	**1.29**	-12.5%	3.0%	0.7%
Israel	0.48	0.51	0.60	0.44	0.42	0.45	0.46	0.50	0.49	0.50	**0.42**	-16.1%	0.7%	0.2%
Kuwait	0.91	0.88	0.88	0.90	0.92	0.88	0.84	0.88	0.88	0.83	**0.76**	-8.6%	0.3%	0.4%
Oman	0.28	0.29	0.32	0.36	0.37	0.38	0.39	0.46	0.47	0.48	**0.42**	-13.0%	7.2%	0.2%
Qatar	0.29	0.36	0.38	0.46	0.48	0.57	0.60	0.54	0.55	0.60	**0.45**	-25.4%	8.5%	0.3%
Saudi Arabia	5.74	6.03	6.34	6.36	6.98	7.24	7.16	6.99	6.60	6.67	**6.51**	-2.6%	2.5%	3.7%
United Arab Emirates	1.34	1.44	1.51	1.68	1.67	1.82	1.97	1.95	1.94	1.86	**1.51**	-18.9%	4.1%	0.9%
Other Middle East	1.49	1.47	1.39	1.28	1.28	1.11	1.07	1.09	1.08	1.09	**1.03**	-5.4%	-3.8%	0.6%
Total Middle East	15.05	15.69	16.32	16.71	17.02	16.92	17.11	17.01	16.73	17.03	**15.71**	-8.0%	1.6%	9.0%
Algeria	0.65	0.69	0.74	0.77	0.80	0.85	0.83	0.81	0.83	0.85	**0.72**	-15.3%	2.8%	0.4%
Egypt	1.52	1.43	1.49	1.51	1.63	1.68	1.72	1.60	1.47	1.48	**1.33**	-10.4%	0.2%	0.8%
Morocco	0.52	0.55	0.56	0.56	0.53	0.52	0.54	0.57	0.55	0.56	**0.50**	-11.4%	1.9%	0.3%
South Africa	1.08	1.10	1.13	1.15	1.13	1.25	1.20	1.19	1.19	1.17	**1.02**	-13.7%	1.2%	0.6%
Other Africa	3.30	3.11	3.35	3.54	3.56	3.61	3.69	3.86	4.14	4.21	**3.62**	-14.3%	2.9%	2.1%
Total Africa	7.08	6.88	7.26	7.53	7.65	7.91	7.97	8.03	8.18	8.28	**7.19**	-13.4%	2.1%	4.1%
Australia	1.79	1.88	1.94	2.00	2.01	1.99	2.00	2.09	2.13	2.11	**1.83**	-13.5%	1.8%	1.1%
Bangladesh	0.17	0.22	0.23	0.23	0.26	0.27	0.30	0.33	0.38	0.38	**0.33**	-12.2%	9.5%	0.2%
China	18.99	19.68	20.63	21.54	22.39	24.24	25.06	26.20	27.06	27.94	**28.50**	1.7%	5.3%	16.4%
China Hong Kong SAR	0.77	0.77	0.74	0.75	0.72	0.78	0.81	0.92	0.93	0.87	**0.61**	-29.8%	2.1%	0.4%
India	6.60	6.91	7.33	7.38	7.59	8.20	8.99	9.26	9.68	9.99	**9.02**	-9.9%	4.5%	5.2%
Indonesia	2.90	3.16	3.33	3.29	3.25	3.05	2.96	3.15	3.22	3.16	**2.34**	-26.2%	1.5%	1.3%
Japan	8.78	8.78	9.37	8.95	8.50	8.16	7.94	7.82	7.58	7.32	**6.49**	-11.5%	-1.7%	3.7%
Malaysia	1.29	1.38	1.45	1.54	1.54	1.43	1.60	1.51	1.52	1.59	**1.38**	-13.9%	2.2%	0.8%
New Zealand	0.30	0.31	0.31	0.31	0.32	0.33	0.34	0.36	0.36	0.36	**0.30**	-17.3%	1.9%	0.2%
Pakistan	0.88	0.88	0.86	0.94	0.97	1.06	1.18	1.22	1.02	0.90	**0.88**	-2.5%	0.2%	0.5%
Philippines	0.62	0.59	0.61	0.64	0.68	0.77	0.83	0.89	0.89	0.91	**0.75**	-18.2%	4.3%	0.4%
Singapore	2.57	2.68	2.67	2.69	2.76	2.91	3.02	3.10	3.14	3.05	**2.93**	-4.0%	2.7%	1.7%
South Korea	4.48	4.51	4.65	4.64	4.62	4.84	5.22	5.27	5.22	5.16	**4.90**	-5.3%	1.7%	2.8%
Sri Lanka	0.18	0.19	0.20	0.17	0.19	0.18	0.21	0.23	0.23	0.25	**0.21**	-16.2%	3.1%	0.1%
Taiwan	2.12	1.96	1.94	1.99	2.06	2.11	2.12	2.09	2.09	1.98	**1.89**	-5.0%	-0.2%	1.1%
Thailand	2.07	2.16	2.26	2.34	2.35	2.44	2.54	2.60	2.61	2.62	**2.39**	-9.3%	2.7%	1.4%
Vietnam	0.67	0.73	0.74	0.76	0.78	0.87	0.93	0.97	1.04	1.10	**0.98**	-11.7%	6.0%	0.6%
Other Asia Pacific	0.64	0.66	0.68	0.71	0.76	0.86	0.86	0.88	0.94	0.96	**0.94**	-2.4%	5.8%	0.5%
Total Asia Pacific	55.81	57.46	59.94	60.88	61.72	64.50	66.91	68.91	70.03	70.67	**66.68**	-5.9%	3.0%	38.4%
Total World	**172.53**	**174.19**	**176.64**	**178.54**	**179.65**	**183.63**	**186.87**	**189.50**	**191.33**	**191.89**	**173.73**	**-9.7%**	**1.4%**	**100.0%**
of which: OECD	90.50	89.26	88.53	88.02	87.07	88.43	89.53	90.20	90.86	90.16	**78.52**	-13.1%	◆	45.2%
Non-OECD	82.02	84.93	88.10	90.52	92.58	95.20	97.34	99.30	100.46	101.73	**95.21**	-6.7%	2.8%	54.8%
European Union	24.78	24.02	23.05	22.47	22.02	22.38	22.81	23.20	23.25	23.17	**20.03**	-13.8%	-0.8%	11.5%

*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.
◆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 consumption data expressed in million tonnes is available at *bp.com/statisticalreview.*

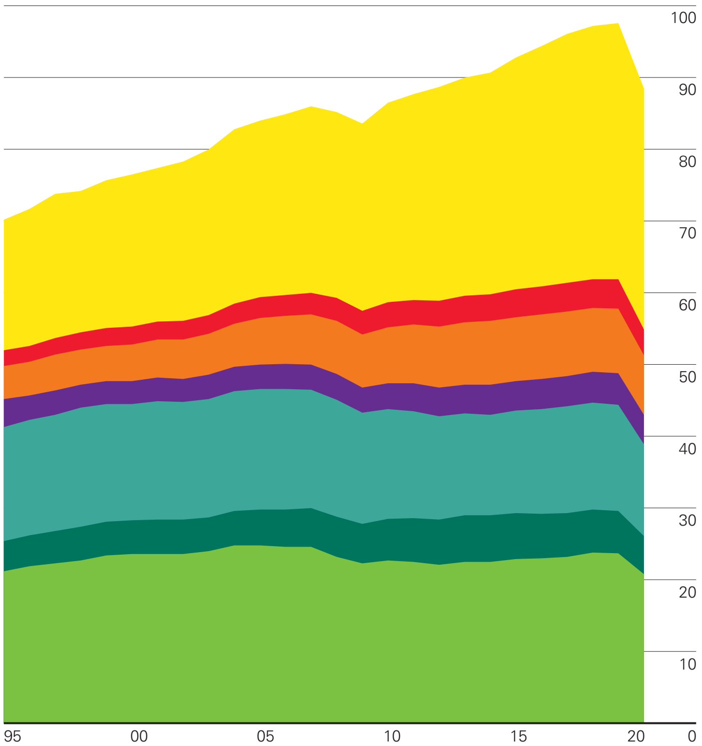
Oil: Production by region

Million barrels daily



Oil: Consumption by region

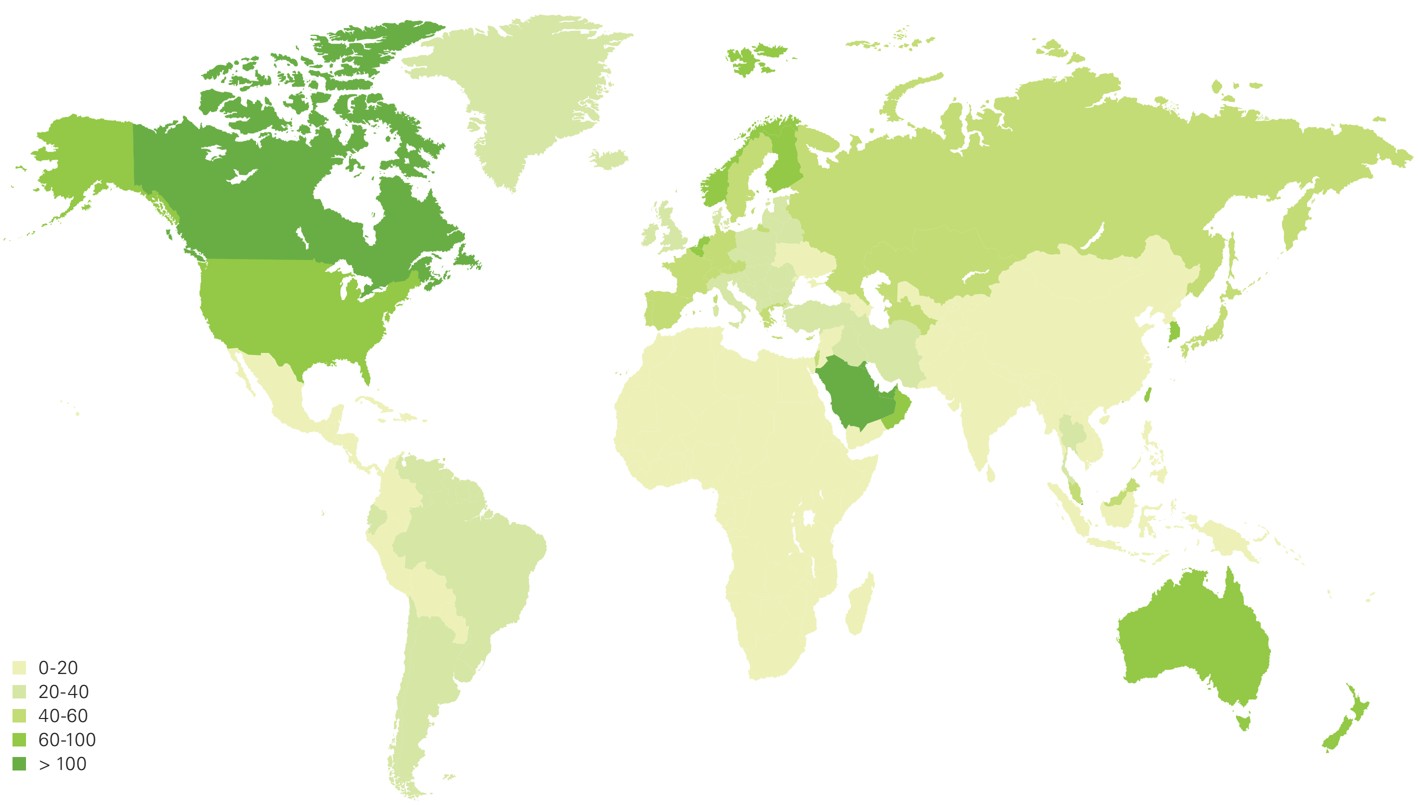
Million barrels daily



World oil production fell for the first time since 2009 by 6.6 million b/d in 2020 driven by both OPEC (-4.3 million b/d) and non-OPEC (-2.3 million b/d). Country wise, Russia (-1 million b/d), Libya (-920,000 b/d) and Saudi Arabia (-790,000 b/d). Production only increased in a few countries, mainly Norway (260,000 b/d) and Brazil (150,000 b/d). Oil consumption also dropped for the first time since 2009 by a massive 9.1 million b/d. The decline was in both the OECD (-5.8 million b/d) and the non-OECD (-3.3 million b/d). The US (-2.3 million b/d), the European Union (-1.5 million b/d) and India (-480,000 b/d) reported the largest declines. China was one of the few countries where demand increased in 2020 (220,000 b/d).

Oil: Consumption per capita 2020

GJ per capita



Oil: Regional consumption – by product group

Thousand barrels daily	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
North America														
Ethane and LPG	3022	3098	3116	3293	3230	3314	3380	3410	3744	3809	**3874**	1.7%	2.8%	18.6%
Naphtha	379	366	332	379	350	337	329	285	291	263	**228**	-13.4%	-1.4%	1.1%
Gasoline	9696	9432	9356	9492	9566	9801	9967	9945	9949	9899	**8456**	-14.6%	0.1%	40.7%
Jet/kerosene	1618	1604	1582	1631	1676	1767	1842	1920	1964	2000	**1199**	-40.0%	2.4%	5.8%
Diesel/gasoil	4940	5010	4790	4814	5032	4986	4794	4880	5144	5035	**4554**	-9.6%	0.7%	21.9%
Fuel oil	803	727	657	580	451	423	472	517	472	396	**304**	-23.1%	-7.1%	1.5%
Others	2289	2226	2259	2276	2206	2277	2240	2227	2219	2309	**2158**	-6.6%	0.2%	10.4%
Total North America	22747	22462	22093	22465	22510	22906	23025	23184	23784	23710	**20772**	-12.4%	0.6%	100.0%
of which: US														
Ethane and LPG	2162	2212	2239	2441	2384	2446	2468	2527	2875	2935	**2984**	1.7%	3.7%	17.4%
Naphtha	256	254	236	270	231	223	219	228	233	207	**185**	-10.8%	-1.7%	1.1%
Gasoline	8168	7926	7858	7993	8056	8280	8394	8393	8400	8372	**7222**	-13.7%	0.1%	42.0%
Jet/kerosene	1452	1438	1403	1440	1479	1555	1623	1687	1712	1750	**1086**	-38.0%	2.2%	6.3%
Diesel/gasoil	3995	4022	3816	3838	4060	4005	3845	3925	4133	4094	**3756**	-8.3%	0.7%	21.9%
Fuel oil	532	459	367	317	256	258	325	341	317	275	**217**	-21.1%	-5.9%	1.3%
Others	1756	1685	1666	1711	1665	1757	1749	1776	1777	1841	**1729**	-6.1%	0.7%	10.1%
Total US	18322	17997	17586	18011	18131	18524	18622	18878	19447	19475	**17178**	-11.8%	0.8%	100.0%
S. & Cent. America														
Ethane and LPG	640	675	712	715	707	695	711	716	715	674	**667**	-1.0%	0.4%	12.7%
Naphtha	187	184	185	161	156	168	154	171	150	179	**156**	-13.1%	-0.2%	3.0%
Gasoline	1258	1382	1450	1504	1526	1488	1516	1525	1443	1377	**1153**	-16.3%	1.6%	21.9%
Jet/kerosene	270	284	297	303	322	326	330	331	346	352	**190**	-46.0%	3.6%	3.6%
Diesel/gasoil	2029	2120	2219	2326	2317	2289	2213	2204	2217	2220	**2104**	-5.2%	1.8%	39.9%
Fuel oil	709	688	698	677	689	684	624	561	525	518	**477**	-8.0%	-3.4%	9.0%
Others	716	732	699	805	761	727	604	628	604	568	**527**	-7.2%	-1.8%	10.0%
Total S. & Cent. America	5809	6065	6260	6491	6478	6377	6151	6136	6000	5889	**5274**	-10.4%	0.6%	100.0%
of which: Brazil														
Ethane and LPG	267	290	300	316	307	296	299	305	304	305	**302**	-1.1%	1.7%	13.0%
Naphtha	173	168	169	147	142	155	145	163	142	171	**149**	-13.0%	0.2%	6.4%
Gasoline	393	468	514	549	575	522	541	556	483	481	**449**	-6.5%	3.9%	19.4%
Jet/kerosene	108	120	126	125	129	127	116	115	124	120	**61**	-49.3%	2.5%	2.6%
Diesel/gasoil	849	901	961	1009	1034	986	933	944	959	987	**988**	◆	3.0%	42.5%
Fuel oil	152	126	126	139	161	149	112	110	90	91	**94**	3.8%	-6.5%	4.1%
Others	329	359	315	371	376	323	287	287	290	282	**279**	-1.1%	-1.1%	12.0%
Total Brazil	2271	2432	2509	2655	2725	2558	2433	2481	2392	2438	**2323**	-4.8%	1.6%	100.0%
Europe														
Ethane and LPG	1021	1010	1003	1123	1147	1160	1207	1241	1260	1208	**1131**	-6.4%	1.6%	8.8%
Naphtha	1119	996	963	947	906	881	897	921	837	782	**812**	3.8%	-2.9%	6.3%
Gasoline	2301	2201	2084	2015	1983	1932	1935	1939	2008	2037	**1768**	-13.2%	-1.8%	13.8%
Jet/kerosene	1249	1253	1226	1247	1278	1347	1391	1474	1542	1571	**737**	-53.1%	2.3%	5.8%
Diesel/gasoil	6381	6256	6137	6200	6105	6396	6496	6642	6597	6620	**6077**	-8.2%	0.5%	47.5%
Fuel oil	1325	1277	1158	1033	959	914	953	967	979	941	**661**	-29.7%	-4.3%	5.2%
Others	1947	1921	1823	1658	1601	1689	1740	1745	1686	1667	**1602**	-3.9%	-1.7%	12.5%
Total Europe	15344	14914	14393	14223	13980	14319	14619	14929	14908	14826	**12788**	-13.8%	-0.4%	100.0%
of which: European Union														
Ethane and LPG	667	662	677	786	796	781	798	822	838	799	**720**	-9.9%	1.9%	7.4%
Naphtha	1045	931	896	884	848	808	817	835	762	700	**742**	5.9%	-3.3%	7.6%
Gasoline	1673	1602	1516	1470	1466	1441	1449	1463	1543	1573	**1377**	-12.5%	-1.2%	14.1%
Jet/kerosene	825	836	817	817	824	858	898	961	1012	1036	**463**	-55.3%	2.4%	4.7%
Diesel/gasoil	5087	4947	4782	4810	4713	4913	4973	5068	5036	5077	**4673**	-7.9%	0.1%	47.8%
Fuel oil	1148	1106	1003	885	820	784	822	825	852	824	**568**	-31.0%	-3.9%	5.8%
Others	1553	1547	1463	1302	1280	1327	1334	1344	1305	1287	**1230**	-4.5%	-2.1%	12.6%
Total European Union	11998	11632	11154	10954	10748	10911	11090	11318	11348	11298	**9774**	-13.5%	-0.7%	100.0%
CIS														
Ethane and LPG	387	442	468	421	418	439	456	476	488	523	**564**	8.0%	2.8%	13.6%
Naphtha	193	191	176	119	115	125	126	138	156	151	**151**	0.2%	-1.7%	3.6%
Gasoline	971	984	1031	1075	1087	1069	1063	1056	1067	1052	**971**	-7.8%	1.3%	23.4%
Jet/kerosene	280	312	317	313	291	271	350	391	362	345	**293**	-15.0%	2.7%	7.1%
Diesel/gasoil	870	970	985	1096	1137	1150	1060	1111	1166	1191	**1126**	-5.4%	4.2%	27.2%
Fuel oil	332	354	352	398	467	380	401	340	357	376	**323**	-14.1%	1.0%	7.8%
Others	545	620	661	586	649	668	700	694	724	729	**720**	-1.3%	2.0%	17.4%
Total CIS	3578	3873	3991	4008	4165	4102	4156	4205	4320	4367	**4149**	-5.0%	2.2%	100.0%
Middle East														
Ethane and LPG	1578	1736	1844	1806	1892	1923	2050	2106	2141	2076	**2047**	-1.4%	4.8%	24.6%
Naphtha	258	291	300	275	333	335	335	342	306	365	**368**	0.9%	3.5%	4.4%
Gasoline	1379	1416	1495	1587	1613	1639	1678	1785	1823	1852	**1521**	-17.9%	3.3%	18.3%
Jet/kerosene	437	428	442	504	488	575	601	573	558	588	**282**	-52.1%	2.8%	3.4%
Diesel/gasoil	1852	1971	2046	2121	2057	1900	1798	1704	1677	1773	**1732**	-2.3%	-0.4%	20.8%
Fuel oil	1918	1947	2010	2036	2123	2064	2038	2043	1964	1925	**1996**	3.7%	0.6%	24.0%
Others	374	386	365	361	379	437	502	447	411	432	**376**	-12.9%	0.2%	4.5%
Total Middle East	7796	8176	8502	8690	8885	8873	9002	9000	8879	9011	**8321**	-7.7%	2.0%	100.0%
Africa														
Ethane and LPG	363	373	381	387	388	386	396	414	430	439	**432**	-1.6%	2.3%	12.1%
Naphtha	27	7	3	4	6	5	6	7	7	7	**6**	-10.3%	-13.7%	0.2%
Gasoline	810	810	866	880	898	975	1043	1080	1182	1204	**999**	-17.1%	4.5%	28.1%
Jet/kerosene	320	304	308	319	301	261	254	261	263	262	**161**	-38.6%	-1.2%	4.5%
Diesel/gasoil	1312	1323	1380	1480	1539	1634	1605	1636	1643	1679	**1522**	-9.3%	3.2%	42.8%
Fuel oil	442	379	429	428	427	418	410	379	338	321	**275**	-14.6%	-2.8%	7.7%
Others	192	187	186	194	192	198	192	179	183	186	**165**	-11.2%	-1.0%	4.6%
Total Africa	3467	3383	3553	3691	3749	3877	3906	3956	4045	4098	**3559**	-13.1%	2.2%	100.0%

◆Less than 0.05%.
Table continues on next page.

Oil: Regional consumption – by product group (continued)

Thousand barrels daily	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Asia Pacific														
Ethane and LPG	2757	2872	2958	3058	3228	3369	3745	4012	4222	4291	**4240**	-1.2%	5.0%	12.6%
Naphtha	3504	3523	3690	3823	3975	4228	4287	4460	4494	4531	**4534**	0.1%	3.5%	13.5%
Gasoline	4619	4796	5075	5456	5579	6107	6343	6550	6766	6991	**6458**	-7.6%	4.9%	19.2%
Jet/kerosene	2208	2216	2248	2319	2361	2441	2584	2720	2831	2835	**1925**	-32.1%	3.3%	5.7%
Diesel/gasoil	7767	8115	8524	8617	8646	8843	8847	9068	9223	9283	**8650**	-6.8%	2.4%	25.7%
Fuel oil	3053	3105	3225	2968	2801	2812	2866	2737	2574	2328	**2358**	1.3%	-2.6%	7.0%
Others	3919	4030	4094	4179	4322	4532	4851	5144	5220	5439	**5451**	0.2%	4.6%	16.2%
Total Asia Pacific	27828	28658	29815	30421	30911	32332	33523	34690	35330	35698	**33615**	-5.8%	3.2%	100.0%
of which: China														
Ethane and LPG	677	691	689	771	884	1028	1207	1351	1408	1403	**1458**	3.9%	8.2%	10.2%
Naphtha	778	811	868	914	1032	1115	1188	1277	1338	1444	**1569**	8.7%	9.2%	11.0%
Gasoline	1591	1738	1863	2143	2236	2601	2707	2813	2983	3111	**2942**	-5.4%	8.2%	20.7%
Jet/kerosene	437	459	495	546	588	654	731	821	903	956	**795**	-16.9%	10.2%	5.6%
Diesel/gasoil	3005	3196	3453	3503	3506	3540	3420	3427	3435	3430	**3501**	2.1%	2.2%	24.6%
Fuel oil	666	588	560	564	584	622	593	555	556	563	**644**	14.5%	-1.6%	4.5%
Others	2235	2257	2243	2227	2290	2505	2653	2895	2953	3098	**3316**	7.0%	5.6%	23.3%
Total China	9390	9739	10170	10668	11120	12066	12499	13137	13576	14005	**14225**	1.6%	5.4%	100.0%
of which: India														
Ethane and LPG	490	534	548	558	613	661	750	858	971	1047	**1056**	0.9%	8.6%	22.6%
Naphtha	231	243	262	250	240	285	288	238	238	225	**250**	11.2%	-1.3%	5.4%
Gasoline	288	302	321	353	382	441	490	539	575	621	**553**	-11.0%	9.1%	11.8%
Jet/kerosene	301	300	279	274	276	280	274	249	254	235	**132**	-44.0%	-2.4%	2.8%
Diesel/gasoil	1216	1299	1404	1408	1416	1491	1571	1627	1701	1728	**1477**	-14.5%	4.3%	31.6%
Fuel oil	199	178	147	117	107	113	136	122	120	114	**110**	-3.3%	-6.5%	2.4%
Others	583	618	713	756	798	875	1035	1092	1115	1178	**1092**	-7.3%	7.0%	23.4%
Total India	3308	3475	3674	3717	3832	4147	4544	4724	4974	5148	**4669**	-9.3%	4.8%	100.0%
of which: Japan														
Ethane and LPG	492	496	536	508	492	443	419	424	402	352	**324**	-7.8%	-3.5%	9.9%
Naphtha	677	632	614	666	637	680	642	675	621	632	**574**	-9.2%	♦	17.6%
Gasoline	1001	974	975	945	915	905	896	881	865	842	**774**	-8.1%	-1.6%	23.7%
Jet/kerosene	550	527	539	528	516	495	504	514	499	486	**367**	-24.4%	-1.1%	11.2%
Diesel/gasoil	841	816	821	817	803	786	786	782	782	771	**722**	-6.4%	-0.8%	22.1%
Fuel oil	442	577	824	646	532	433	371	284	269	210	**190**	-9.5%	-7.3%	5.8%
Others	422	391	367	387	384	373	370	393	388	397	**317**	-20.1%	-0.7%	9.7%
Total Japan	4424	4412	4676	4496	4279	4113	3988	3953	3824	3689	**3268**	-11.4%	-1.7%	100.0%
World														
Ethane and LPG	9769	10207	10483	10803	11009	11287	11945	12374	12998	13020	**12955**	-0.5%	3.5%	14.6%
Naphtha	5666	5558	5649	5708	5841	6079	6133	6324	6240	6278	**6255**	-0.4%	1.9%	7.1%
Gasoline	21034	21022	21358	22009	22251	23011	23545	23881	24237	24412	**21325**	-12.6%	1.6%	24.1%
Jet/kerosene	6384	6401	6420	6636	6717	6988	7352	7670	7865	7953	**4787**	-39.8%	2.6%	5.4%
Diesel/gasoil	25150	25764	26081	26655	26832	27198	26813	27243	27669	27801	**25765**	-7.3%	1.5%	29.1%
Fuel oil	8583	8477	8529	8118	7917	7695	7764	7544	7209	6805	**6393**	-6.0%	-2.4%	7.2%
Others	9982	10102	10087	10060	10109	10528	10828	11063	11046	11330	**10998**	-2.9%	1.7%	12.4%
Total World	**86568**	**87530**	**88607**	**89988**	**90677**	**92787**	**94381**	**96099**	**97265**	**97598**	**88477**	**-9.3%**	**1.5%**	**100.0%**
OECD														
Ethane and LPG	4924	4968	5008	5265	5190	5222	5356	5408	5741	5731	**5686**	-0.8%	1.8%	14.1%
Naphtha	3099	2986	2987	3057	3000	3042	3047	3145	2991	2884	**2726**	-5.5%	♦	6.8%
Gasoline	13500	13111	12943	13011	13044	13267	13454	13428	13487	13459	**11615**	-13.7%	-0.2%	28.8%
Jet/kerosene	3777	3744	3716	3781	3851	4006	4160	4340	4453	4510	**2565**	-43.1%	2.0%	6.4%
Diesel/gasoil	12855	12838	12566	12665	12790	13067	12993	13244	13473	13379	**12250**	-8.4%	0.7%	30.4%
Fuel oil	2789	2769	2848	2449	2097	1932	1986	1903	1850	1637	**1282**	-21.7%	-5.7%	3.2%
Others	4741	4658	4561	4428	4267	4415	4430	4448	4378	4457	**4159**	-6.7%	-0.7%	10.3%
Total OECD	45684	45074	44628	44656	44239	44950	45426	45916	46372	46056	**40282**	-12.5%	0.2%	100.0%
Non-OECD														
Ethane and LPG	4845	5239	5475	5537	5819	6065	6589	6966	7258	7289	**7269**	-0.3%	5.1%	15.1%
Naphtha	2567	2571	2662	2651	2842	3037	3086	3179	3249	3394	**3529**	4.0%	3.8%	7.3%
Gasoline	7534	7911	8415	8999	9208	9744	10091	10453	10751	10954	**9710**	-11.4%	4.5%	20.1%
Jet/kerosene	2607	2656	2705	2854	2866	2982	3192	3330	3412	3443	**2222**	-35.5%	3.5%	4.6%
Diesel/gasoil	12296	12926	13515	13990	14042	14131	13819	14000	14196	14422	**13515**	-6.3%	2.2%	28.0%
Fuel oil	5794	5709	5681	5670	5820	5763	5778	5641	5359	5167	**5111**	-1.1%	-1.0%	10.6%
Others	5241	5444	5526	5632	5842	6113	6398	6615	6668	6873	**6839**	-0.5%	3.5%	14.2%
Total Non-OECD	40884	42456	43979	45333	46438	47836	48954	50184	50892	51542	**48195**	-6.5%	3.0%	100.0%

♦Less than 0.05%.
Notes: 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.
Gasoline and naphtha belong to the category 'Light Distillates'.
Diesel/gasoil and jet/kerosene make up 'Middle Distillates'.
Annual changes and shares of total are calculated using thousand barrels daily figures.

Spot crude prices

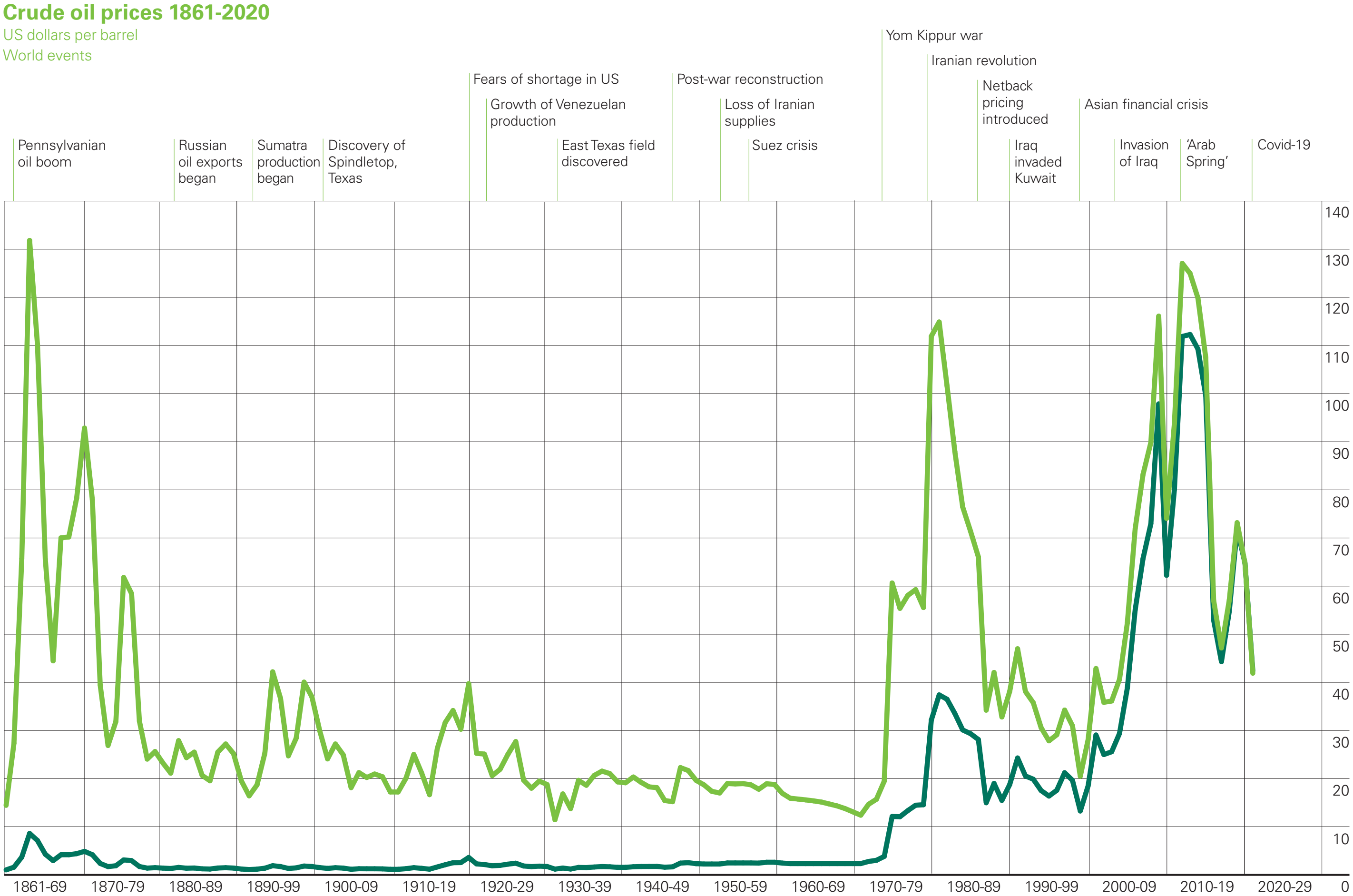
US dollars per barrel	Dubai $/bbl*	Brent $/bbl†	Nigerian Forcados $/bbl	West Texas Intermediate $/bbl‡
1985	27.53	27.56	27.75	27.98
1986	13.10	14.43	14.46	15.05
1987	16.95	18.44	18.39	19.19
1988	13.18	14.92	15.00	15.98
1989	15.59	18.23	18.30	19.67
1990	20.21	23.73	23.85	24.46
1991	16.70	20.00	20.11	21.53
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

*1973-1985 Arabian Light, 1986-2020 Dubai dated.
†1976-1983 Forties, 1984-2020 Brent dated.
‡1976-1983 Posted WTI prices, 1984-2020 Spot WTI (Cushing) prices.

Source: S&P Global Platts, © 2020, S&P Global Inc.

Crude oil prices 1861-2020

US dollars per barrel
World events

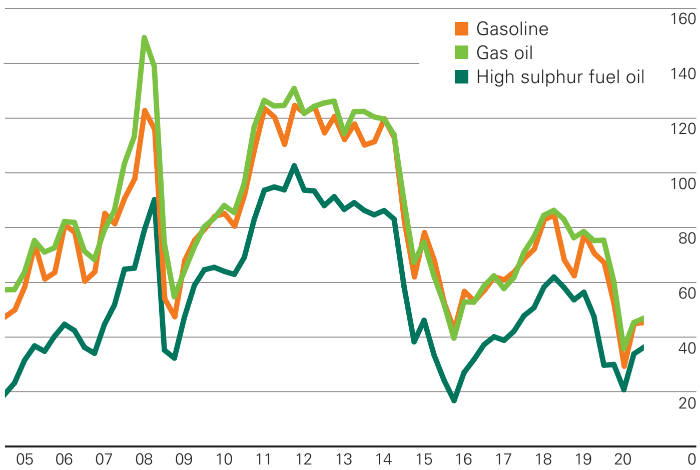


■ $ 2020 (deflated using the Consumer Price Index for the US)
■ $ money of the day

1861-1944 US average.
1945-1983 Arabian Light posted at Ras Tanura.
1984-2020 Brent dated.

Oil product prices (Rotterdam)

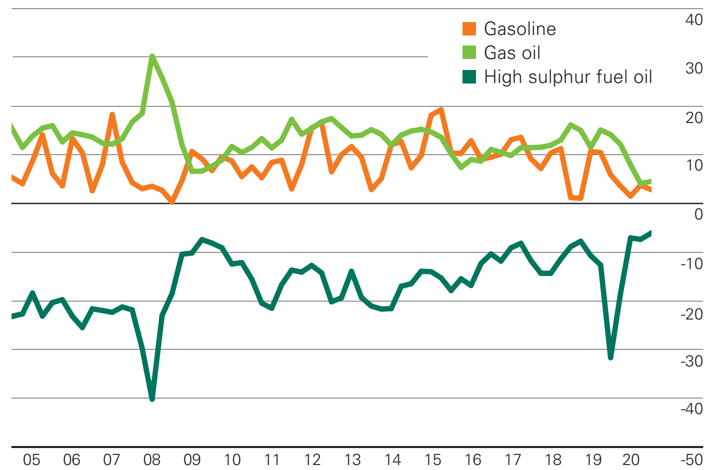
US dollars per barrel



Source: S&P Global Platts, © 2021, S&P Global Inc.

Product differentials to crude (Rotterdam products minus Dated Brent)

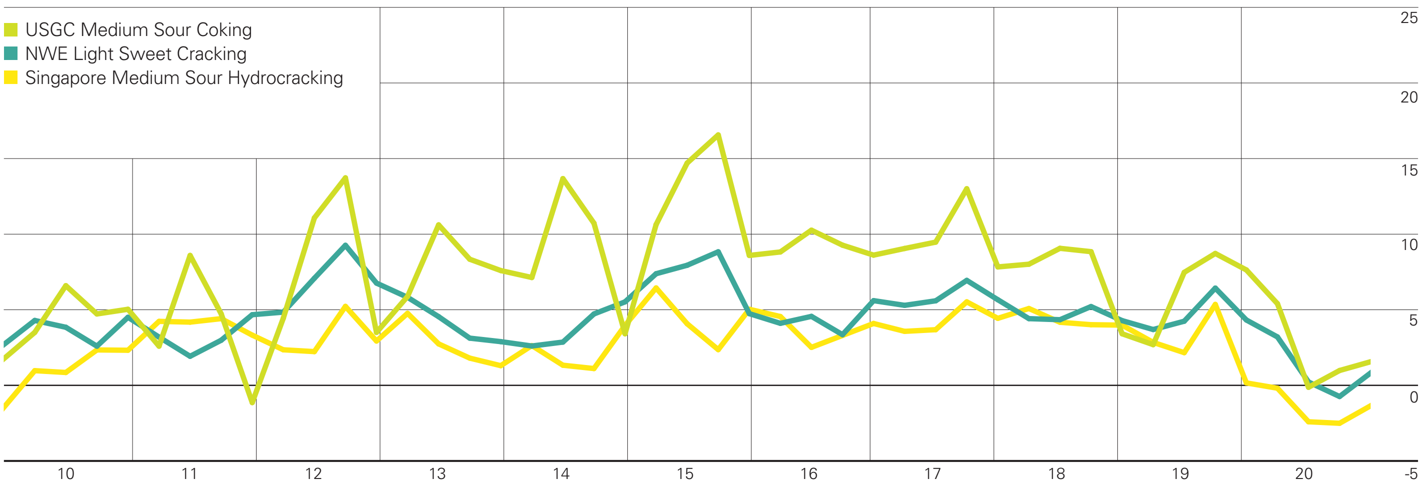
US dollars per barrel



Source: S&P Global Platts, © 2021, S&P Global Inc.

Regional refining margins

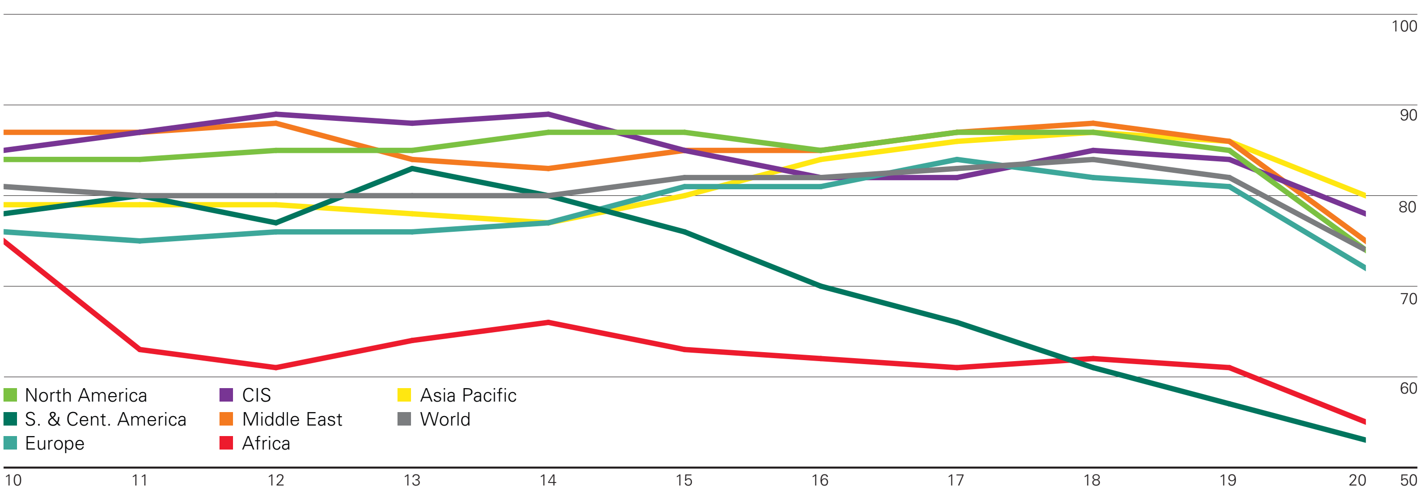
US dollars per barrel



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

Refinery utilization

Percentage (based on average annual capacity)



Global refinery throughput dropped by 7.4 million b/d (-9.0%) in 2020 reflecting the weakness in demand for oil products. This is the largest fall in crude runs on record, surpassing the previous record -5.4% fall in 1981. Reduced runs were seen in all regions and were greatest in North America (-2.6 million b/d, -13.6%), and Europe (-1.5 million b/d, -11.8%). Refining capacity rose by just 0.2 million b/d, with additions in Asia being offset by closures in the US and Europe. As a result, global refinery utilization also fell dramatically by 8.0 percentage points to 74.1%, the largest annual decline on record. Utilization in South and Central America and Africa fell to new all-time lows of 53.3% and 54.6% respectively.

Oil: Refinery throughput

Thousand barrels daily*	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	1770	1681	1753	1719	1615	1640	1594	1757	1653	1822	**1585**	-13.0%	0.5%	2.1%
Mexico	1184	1166	1199	1223	1155	1064	933	767	612	592	**591**	-0.2%	-6.7%	0.8%
US	14724	14806	14999	15312	15848	16188	16187	16590	16969	16563	**14212**	-14.2%	1.5%	18.8%
Total North America	17678	17653	17951	18254	18618	18892	18714	19114	19234	18977	**16387**	-13.6%	1.0%	21.7%
Argentina	531	516	530	527	526	536	511	500	470	476	**417**	-12.4%	-1.1%	0.6%
Brazil	1787	1813	1889	2035	2085	1972	1812	1741	1733	1751	**1769**	1.0%	-0.2%	2.3%
Chile	159	173	164	174	174	165	163	172	172	186	**177**	-4.8%	-0.3%	0.2%
Colombia	300	306	305	284	247	244	339	355	383	384	**330**	-14.1%	2.4%	0.4%
Curacao	64	164	165	170	189	178	156	84	29	4	**–**	-100.0%	-31.4%	–
Ecuador	137	156	152	141	125	121	150	156	159	142	**116**	-18.1%	-0.9%	0.2%
Peru	201	193	190	186	188	188	194	213	209	192	**105**	-45.2%	-0.3%	0.1%
Trinidad & Tobago	126	137	107	132	105	125	148	131	99	–	**–**	n/a	-100.0%	–
Venezuela	969	991	936	952	920	863	654	544	306	135	**123**	-8.9%	-17.8%	0.2%
Other S. & Cent. America	700	704	326	286	277	275	231	201	249	241	**250**	3.4%	-11.2%	0.3%
Total S. & Cent. America	4974	5153	4764	4887	4836	4667	4359	4097	3808	3512	**3288**	-6.4%	-3.9%	4.4%
Austria	158	168	170	174	173	179	164	162	180	183	**161**	-12.1%	0.8%	0.2%
Belgium	668	598	634	555	645	644	640	685	663	693	**544**	-21.5%	1.0%	0.7%
Bulgaria	110	102	118	113	104	121	125	136	118	137	**98**	-28.4%	0.9%	0.1%
Czech Republic	159	143	145	134	151	145	109	158	151	158	**122**	-22.9%	0.6%	0.2%
Denmark	146	137	153	144	139	147	140	151	152	154	**142**	-7.3%	-0.2%	0.2%
Finland	211	225	215	227	225	197	226	226	233	240	**219**	-8.6%	0.9%	0.3%
France	1314	1313	1138	1117	1096	1152	1122	1149	1085	978	**662**	-32.3%	-3.9%	0.9%
Germany	1915	1876	1901	1857	1833	1875	1887	1870	1775	1763	**1701**	-3.5%	-1.4%	2.3%
Greece	393	331	410	399	416	436	464	483	489	462	**445**	-3.7%	3.0%	0.6%
Hungary	128	132	122	120	131	130	133	131	141	137	**135**	-1.6%	0.7%	0.2%
Italy	1673	1570	1475	1259	1198	1347	1293	1399	1346	1355	**1115**	-17.7%	-1.7%	1.5%
Lithuania	190	189	181	192	160	170	187	197	195	191	**167**	-12.6%	0.9%	0.2%
Netherlands	1156	1115	1110	1065	1090	1157	1172	1180	1192	1217	**1134**	-6.8%	1.0%	1.5%
Norway	259	289	287	292	274	293	230	281	305	265	**235**	-11.3%	-0.5%	0.3%
Poland	458	482	505	488	486	532	517	508	540	546	**513**	-6.1%	3.0%	0.7%
Portugal	227	206	221	239	217	278	279	284	252	223	**214**	-4.4%	0.7%	0.3%
Romania	217	194	182	189	194	208	228	225	232	244	**206**	-15.5%	-0.1%	0.3%
Slovakia	110	120	108	116	105	119	115	112	109	103	**112**	8.8%	-1.1%	0.1%
Spain	1060	1051	1186	1168	1185	1306	1302	1326	1363	1318	**1105**	-16.2%	2.2%	1.5%
Sweden	406	374	417	332	380	401	395	392	406	337	**349**	3.6%	-1.6%	0.5%
Turkey	392	394	398	421	406	526	531	542	472	675	**654**	-3.1%	6.1%	0.9%
Ukraine	249	206	108	85	69	64	64	77	59	64	**68**	5.9%	-12.9%	0.1%
United Kingdom	1395	1433	1348	1197	1125	1118	1071	1073	1041	1044	**886**	-15.1%	-3.2%	1.2%
Other Europe	184	158	132	136	128	141	148	165	166	123	**112**	-8.7%	-4.7%	0.1%
Total Europe	13327	12953	12793	12173	12082	12810	12666	13032	12787	12715	**11211**	-11.8%	-0.5%	14.8%
Azerbaijan	124	127	124	132	135	130	120	118	122	124	**118**	-5.4%	0.3%	0.2%
Belarus	330	411	434	425	448	462	372	364	366	359	**313**	-12.7%	-1.9%	0.4%
Kazakhstan	257	326	331	341	361	342	339	355	374	392	**367**	-6.4%	5.2%	0.5%
Russian Federation	5018	5185	5438	5636	5926	5773	5715	5703	5864	5824	**5498**	-5.6%	2.0%	7.3%
Turkmenistan	170	164	156	146	136	127	118	125	117	122	**118**	-3.4%	-2.1%	0.2%
Uzbekistan	73	69	62	61	50	57	57	58	70	60	**57**	-4.9%	-3.7%	0.1%
Other CIS	3	3	2	2	4	7	8	9	11	7	**4**	-43.9%	10.8%	◆
Total CIS	5975	6286	6548	6742	7060	6899	6730	6732	6923	6889	**6475**	-6.0%	1.7%	8.6%
Bahrain	265	259	263	264	257	266	258	262	260	264	**222**	-16.1%	0.3%	0.3%
Iran	1830	1874	1933	2000	1941	1868	1875	1961	2027	2236	**2182**	-2.4%	2.0%	2.9%
Iraq	520	543	579	598	487	409	440	527	596	611	**536**	-12.3%	3.9%	0.7%
Israel	217	218	220	221	226	232	213	223	238	242	**193**	-20.2%	0.9%	0.3%
Kuwait	892	852	916	873	879	905	841	686	679	663	**539**	-18.6%	-2.7%	0.7%
Oman	167	201	193	187	180	190	178	232	304	257	**238**	-7.1%	2.4%	0.3%
Qatar	294	278	292	270	261	253	280	379	397	396	**366**	-7.6%	9.6%	0.5%
Saudi Arabia	1922	1884	1953	1876	2201	2447	2753	2802	2770	2649	**2326**	-12.2%	3.2%	3.1%
United Arab Emirates	571	635	638	650	643	1098	1078	1119	1096	1037	**871**	-16.0%	7.7%	1.2%
Other Middle East	381	349	268	238	230	181	144	161	153	165	**166**	0.6%	-8.1%	0.2%
Total Middle East	7059	7092	7254	7177	7306	7847	8059	8351	8519	8519	**7639**	-10.3%	2.3%	10.1%
Algeria	548	520	478	492	615	591	584	573	601	569	**557**	-2.2%	1.8%	0.7%
Egypt	580	523	534	514	530	530	509	508	519	562	**602**	7.1%	-0.6%	0.8%
Morocco	110	103	111	111	104	53	–	–	–	–	**–**	n/a	-100.0%	–
Nigeria	96	108	92	97	64	22	62	81	44	7	**0**	-95.6%	-17.1%	◆
South Africa	400	393	413	422	440	453	474	447	455	453	**338**	-25.4%	1.3%	0.4%
Other Africa	701	512	586	594	444	455	459	429	446	447	**328**	-26.5%	-4.3%	0.4%
Total Africa	2434	2160	2214	2230	2197	2103	2087	2038	2065	2039	**1826**	-10.5%	-1.2%	2.4%
Australia	606	627	600	588	538	427	433	419	474	465	**388**	-16.5%	-2.1%	0.5%
China	8408	8686	9199	9599	10165	10824	11304	11844	12574	13433	**13857**	3.2%	6.1%	18.4%
India	3899	4085	4302	4462	4475	4561	4930	5010	5154	5119	**4493**	-12.2%	3.5%	6.0%
Indonesia	853	880	820	822	848	836	885	885	916	918	**826**	-10.0%	0.2%	1.1%
Japan	3619	3410	3400	3453	3289	3258	3280	3214	3059	3046	**2492**	-18.2%	-1.7%	3.3%
Malaysia	470	516	575	557	552	514	574	570	566	586	**491**	-16.2%	0.6%	0.6%
New Zealand	100	108	109	105	101	109	107	108	103	110	**76**	-30.9%	1.4%	0.1%
Pakistan	190	193	192	223	232	257	242	261	275	243	**210**	-13.8%	1.5%	0.3%
Philippines	181	190	170	158	168	212	216	211	237	180	**106**	-41.1%	2.0%	0.1%
Singapore	979	1035	1020	936	839	901	929	994	974	930	**798**	-14.2%	1.0%	1.1%
South Korea	2390	2533	2582	2484	2516	2784	2928	3061	3031	2922	**2679**	-8.3%	2.4%	3.5%
Taiwan	876	809	897	847	850	838	861	848	889	890	**726**	-18.5%	-0.7%	1.0%
Thailand	963	934	986	1056	1005	1107	1056	1093	1131	1025	**1005**	-2.0%	0.9%	1.3%
Vietnam	121	137	126	148	129	155	155	141	221	276	**276**	-0.1%	25.7%	0.4%
Other Asia Pacific	96	100	89	98	95	87	103	100	98	130	**241**	84.8%	3.0%	0.3%
Total Asia Pacific	23775	24267	25090	25563	25826	26896	28026	28788	29727	30303	**28685**	-5.3%	3.1%	38.0%
Total World	**75223**	**75564**	**76614**	**77027**	**77925**	**80113**	**80641**	**82152**	**83063**	**82954**	**75512**	**-9.0%**	**1.3%**	**100.0%**
of which: OECD	37635	37321	37583	37212	37297	38387	38279	39096	38905	38478	**33449**	-13.1%	0.4%	44.3%
Non-OECD	37588	38244	39031	39815	40628	41727	42362	43056	44158	44476	**42063**	-5.4%	2.1%	55.7%
European Union	10841	10452	10513	10005	10029	10670	10627	10907	10755	10542	**9240**	-12.4%	-0.3%	12.2%

*Atmospheric distillation capacity on a calendar-day basis.
◆Less than 0.05%.
n/a not available.

Source: includes data from ICIS.

Oil: Refining capacity

Thousand barrels daily*	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	1913	2005	2015	1929	1929	1931	1934	1970	1939	2054	**2065**	0.5%	0.4%	2.0%
Mexico	1463	1606	1606	1606	1522	1522	1522	1546	1558	1558	**1558**	–	0.6%	1.5%
US	17736	17367	17823	17925	17967	18317	18617	18598	18808	18974	**18143**	-4.4%	0.8%	17.8%
Total North America	21112	20977	21443	21460	21418	21770	22073	22113	22305	22586	**21766**	-3.6%	0.7%	21.4%
Argentina	625	625	657	657	657	657	657	657	580	580	**580**	–	-0.7%	0.6%
Brazil	1992	2014	2004	2097	2238	2281	2289	2285	2285	2290	**2290**	–	1.4%	2.2%
Chile	242	250	254	254	258	258	258	258	258	258	**258**	–	0.6%	0.3%
Colombia	350	336	336	336	336	421	421	421	421	421	**421**	–	1.9%	0.4%
Curacao	320	320	320	320	320	320	320	320	320	320	**320**	–	–	0.3%
Ecuador	175	175	175	175	175	175	175	175	175	175	**175**	–	–	0.2%
Peru	252	252	252	253	253	253	253	253	253	253	**253**	–	◆	0.2%
Trinidad & Tobago	165	165	165	165	165	165	165	165	165	165	**165**	–	–	0.2%
Venezuela	1303	1303	1303	1303	1303	1303	1303	1303	1303	1303	**1303**	–	–	1.3%
Other S. & Cent. America	934	1046	420	380	395	403	403	403	403	403	**403**	–	-8.1%	0.4%
Total S. & Cent. America	6358	6486	5886	5940	6100	6236	6244	6240	6163	6168	**6168**	–	-0.3%	6.1%
Austria	201	193	193	193	193	193	193	193	193	193	**193**	–	-0.4%	0.2%
Belgium	787	788	753	776	776	776	776	776	776	776	**776**	–	-0.1%	0.8%
Bulgaria	195	195	195	195	195	195	195	195	195	195	**195**	–	0.8%	0.2%
Czech Republic	193	193	175	175	175	175	175	175	175	175	**175**	–	-1.0%	0.2%
Denmark	189	181	181	181	180	180	180	181	181	181	**181**	–	-0.4%	0.2%
Finland	261	261	261	261	261	261	261	261	261	261	**261**	–	–	0.3%
France	1702	1610	1513	1375	1375	1375	1245	1245	1245	1245	**1245**	–	-3.9%	1.2%
Germany	2091	2077	2097	2061	2077	2049	2051	2069	2085	2085	**2085**	–	-1.2%	2.0%
Greece	490	495	498	498	498	528	528	528	528	528	**528**	–	2.2%	0.5%
Hungary	165	165	165	165	165	165	165	165	165	165	**165**	–	–	0.2%
Italy	2396	2276	2098	1861	1900	1900	1900	1900	1900	1900	**1900**	–	-2.3%	1.9%
Lithuania	241	241	241	241	241	241	241	241	241	241	**241**	–	–	0.2%
Netherlands	1274	1276	1279	1279	1279	1298	1298	1299	1299	1291	**1229**	-4.9%	0.1%	1.2%
Norway	316	329	342	342	342	342	342	342	342	342	**342**	–	0.8%	0.3%
Poland	560	580	582	582	582	581	581	568	581	581	**581**	–	1.7%	0.6%
Portugal	306	306	330	330	330	330	330	330	330	330	**330**	–	0.7%	0.3%
Romania	247	229	214	235	228	239	256	247	254	252	**252**	–	-1.2%	0.2%
Slovakia	122	122	122	122	122	122	122	122	122	122	**122**	–	–	0.1%
Spain	1421	1542	1546	1546	1546	1562	1562	1562	1564	1586	**1586**	–	1.5%	1.6%
Sweden	454	454	454	454	454	454	454	454	454	454	**454**	–	–	0.4%
Turkey	613	596	596	596	596	596	596	596	818	822	**822**	–	3.0%	0.8%
Ukraine	686	700	314	-	258	250	250	250	250	250	**250**	–	-10.3%	0.2%
United Kingdom	1757	1787	1526	1498	1337	1337	1227	1227	1227	1227	**1251**	2.0%	-3.5%	1.2%
Other Europe	490	432	460	410	410	410	410	393	355	355	**311**	-12.5%	-3.2%	0.3%
Total Europe	17374	17244	16315	15591	15735	15703	15482	15460	15683	15700	**15617**	-0.5%	-1.2%	15.3%
Azerbaijan	325	325	325	325	325	325	325	205	120	120	**120**	–	-9.5%	0.1%
Belarus	460	460	460	460	460	460	460	490	520	520	**520**	–	1.2%	0.5%
Kazakhstan	330	330	330	350	350	350	350	360	390	400	**400**	–	1.9%	0.4%
Russian Federation	5527	5673	5767	6229	6366	6472	6543	6545	6551	6676	**6736**	0.9%	2.2%	6.6%
Turkmenistan	251	251	251	251	251	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	14	13	16	18	35	44	45	48	48	51	**61**	19.3%	12.2%	0.1%
Total CIS	7139	7284	7381	7865	8019	8154	8226	8151	8132	8270	**8340**	0.8%	1.7%	8.2%
Bahrain	260	260	260	260	260	260	260	260	260	260	**260**	–	–	0.3%
Iran	1950	1950	2042	2075	2075	2075	2075	2220	2330	2495	**2475**	-0.8%	2.5%	2.4%
Iraq	914	935	971	917	791	763	779	779	849	919	**919**	–	0.7%	0.9%
Israel	280	292	292	294	301	301	301	301	301	301	**301**	–	0.9%	0.3%
Kuwait	936	936	936	936	936	936	936	736	736	736	**800**	8.7%	-2.4%	0.8%
Oman	222	222	222	222	222	222	222	304	304	304	**304**	–	3.2%	0.3%
Qatar	283	283	283	283	283	283	429	429	429	429	**429**	–	4.2%	0.4%
Saudi Arabia	2109	2107	2107	2507	2899	2899	2901	2826	2835	2905	**2905**	–	3.3%	2.8%
United Arab Emirates	702	707	712	712	728	1149	1149	1229	1229	1307	**1331**	1.8%	6.4%	1.3%
Other Middle East	496	496	496	496	496	496	496	496	496	496	**496**	–	–	0.5%
Total Middle East	8152	8188	8321	8702	8991	9384	9548	9580	9769	10152	**10220**	0.7%	2.3%	10.0%
Algeria	554	652	652	647	651	651	651	657	657	657	**657**	–	1.7%	0.6%
Egypt	810	810	810	810	810	810	810	810	795	795	**795**	–	-0.2%	0.8%
Morocco	131	131	201	201	201	201	201	201	201	201	**200**	-0.4%	4.4%	0.2%
Nigeria	321	446	446	446	449	449	449	449	454	460	**460**	–	7.7%	0.5%
South Africa	520	520	520	520	520	520	520	520	520	520	**520**	–	–	0.5%
Other Africa	973	1014	1014	724	726	726	726	706	711	711	**711**	–	-3.1%	0.7%
Total Africa	3309	3573	3643	3347	3357	3357	3357	3343	3338	3344	**3343**	◆	0.4%	3.3%
Australia	740	742	663	662	536	443	452	454	454	455	**456**	0.1%	-4.7%	0.4%
China	12323	13015	13681	14503	15253	15024	14895	15231	15655	16199	**16691**	3.0%	3.6%	16.4%
India	3703	3795	4279	4319	4319	4307	4620	4699	4972	4994	**5018**	0.5%	3.4%	4.9%
Indonesia	1099	1099	1099	1099	1099	1111	1111	1111	1094	1111	**1127**	1.4%	0.1%	1.1%
Japan	4291	4274	4254	4123	3749	3721	3600	3343	3343	3343	**3285**	-1.7%	-3.2%	3.2%
Malaysia	582	601	606	612	612	612	618	625	625	625	**955**	52.8%	0.9%	0.9%
New Zealand	136	136	136	136	136	136	136	136	136	136	**136**	–	–	0.1%
Pakistan	279	279	275	390	390	389	389	401	401	401	**411**	2.5%	3.8%	0.4%
Philippines	264	261	261	270	271	271	271	271	271	271	**180**	-33.6%	0.1%	0.2%
Singapore	1427	1427	1422	1414	1514	1514	1514	1514	1514	1514	**1514**	–	0.6%	1.5%
South Korea	2774	2864	2878	2878	3123	3128	3259	3298	3346	3393	**3572**	5.3%	2.1%	3.5%
Taiwan	1197	1197	1197	1197	1197	988	988	1083	1083	1083	**1131**	4.4%	-1.0%	1.1%
Thailand	1230	1230	1230	1237	1252	1252	1235	1235	1235	1235	**1245**	0.8%	◆	1.2%
Vietnam	162	159	159	159	159	159	163	167	367	367	**367**	–	8.5%	0.4%
Other Asia Pacific	183	184	184	190	197	197	197	197	197	357	**358**	0.1%	6.9%	0.4%
Total Asia Pacific	30427	31302	32363	33231	33849	33294	33490	33808	34735	35527	**36492**	2.7%	1.8%	35.8%
Total World	**93871**	**95054**	**95353**	**96136**	**97470**	**97898**	**98420**	**98696**	**100125**	**101748**	**101947**	**0.2%**	**0.9%**	**100.0%**
of which: OECD	45680	45560	45388	44893	44501	44787	44869	44700	45193	45541	**44804**	-1.6%	-0.1%	43.9%
Non-OECD	48191	49494	49965	51243	52969	53111	53550	53995	54933	56207	**57143**	1.7%	1.8%	56.1%
European Union	13544	13432	13143	12777	12824	12871	12761	12757	12758	12770	**12663**	-0.8%	-0.8%	12.4%

*Atmospheric distillation capacity at year end on a calendar-day basis.
◆Less than 0.05%.

Source: includes data from ICIS.

Oil: Trade movements

Thousand barrels daily	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Imports														
US	11689	11338	10587	9859	9241	9451	10056	10148	9943	9142	**7863**	-14.0%	-2.2%	12.1%
Europe	12407	12489	12721	12920	12957	13993	14354	14700	14151	14866	**12611**	-15.2%	1.5%	19.4%
China	5886	6295	6675	6978	7398	8333	9214	10241	11028	11826	**12865**	8.8%	8.8%	19.8%
India	3749	3823	4168	4370	4155	4380	4945	4920	5196	5394	**5030**	-6.7%	4.4%	7.7%
Japan	4567	4494	4743	4637	4383	4332	4180	4142	3940	3780	**3310**	-12.4%	-1.2%	5.1%
Rest of World	17048	17634	17812	20012	21193	22026	23776	25663	25853	25397	**23381**	-7.9%	4.0%	35.9%
Total World	**55346**	**56072**	**56706**	**58776**	**59328**	**62515**	**66526**	**69814**	**70111**	**70404**	**65061**	**-7.6%**	**2.6%**	**100.0%**
Exports														
Canada	2599	2798	3056	3296	3536	3836	3890	4241	4500	4689	**4427**	-5.6%	6.4%	6.8%
Mexico	1539	1487	1366	1347	1293	1323	1380	1290	1316	1272	**1252**	-1.6%	-1.3%	1.9%
US	2154	2495	2682	3563	4033	4521	5078	5888	7041	8095	**8117**	0.3%	15.3%	12.5%
S. & Cent. America	3568	3755	3830	3790	3939	4107	4147	3958	3739	3463	**3455**	-0.2%	-0.8%	5.3%
Europe	1966	2139	2181	2545	2467	2926	3082	3392	3375	3148	**2742**	-12.9%	4.3%	4.2%
Russia	7397	7448	7457	7948	7792	8313	8814	8992	8117	8380	**7433**	-11.3%	1.4%	11.4%
Other CIS	2039	2180	1962	2166	2092	2100	2096	2201	2023	2135	**2073**	-2.9%	1.4%	3.2%
Saudi Arabia	7595	8120	8468	8365	7911	7968	8606	8404	8581	8474	**8027**	-5.3%	1.5%	12.3%
Middle East (ex Saudi Arabia)	11976	12188	11742	12242	12699	13537	15321	16255	16154	14921	**13915**	-6.7%	2.4%	21.4%
North Africa	2878	1951	2602	2127	1743	1701	1727	2226	2422	2551	**1550**	-39.2%	-1.4%	2.4%
West Africa	4755	4759	4724	4590	4849	4880	4401	4531	4557	4730	**4244**	-10.3%	0.4%	6.5%
Asia Pacific (ex Japan)	6226	6088	6299	6307	6450	6780	7356	7811	7731	7992	**7399**	-7.4%	3.6%	11.4%
Rest of World	653	663	338	491	524	525	625	625	555	555	**428**	-22.8%	-8.4%	0.7%
Total World	**55346**	**56072**	**56706**	**58776**	**59328**	**62515**	**66526**	**69814**	**70111**	**70404**	**65061**	**-7.6%**	**2.6%**	**100.0%**

Notes: Unless otherwise stated, this table shows inter-regional trade based on the regional classification in the table 'Oil trade in 2019 and 2020'.
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.

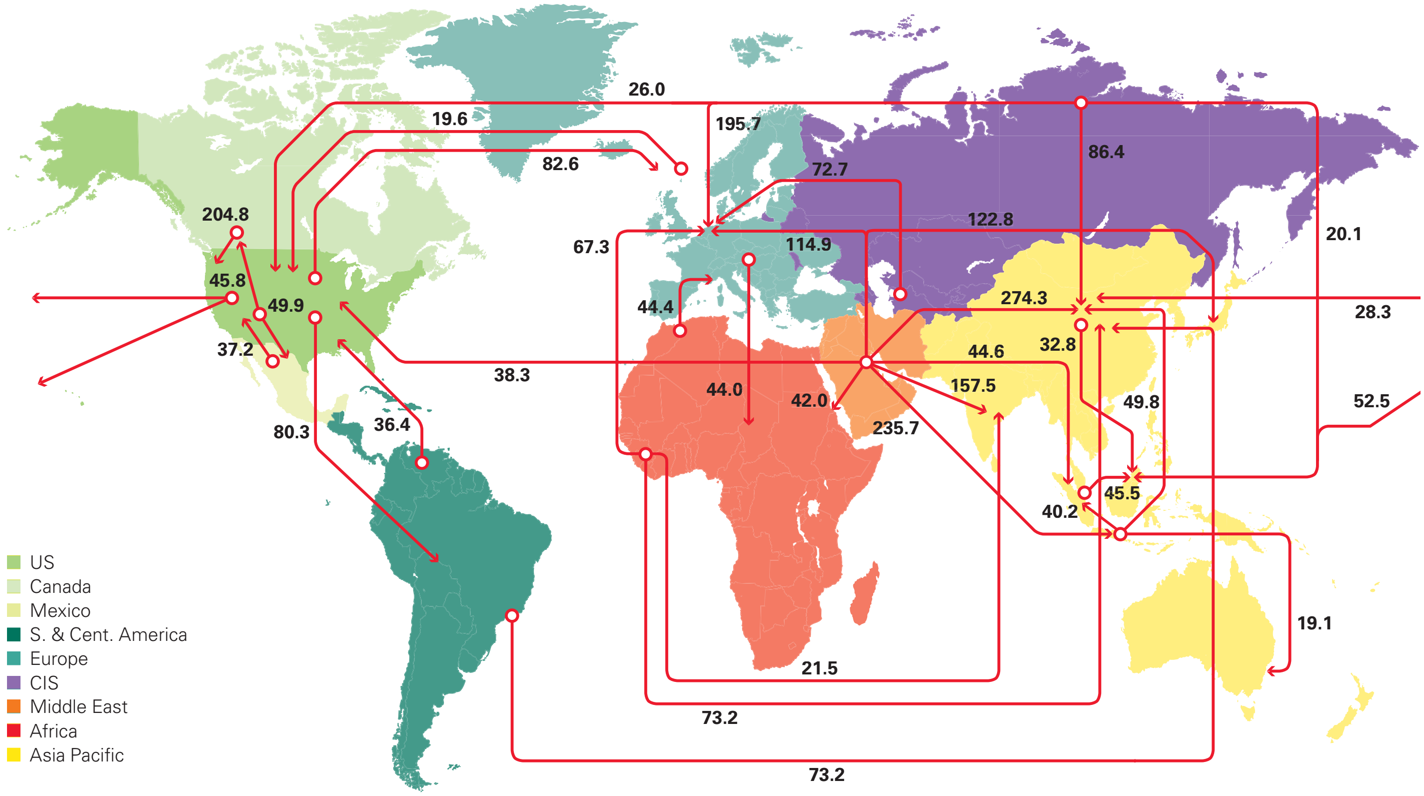
Oil: Inter-area movements 2020

Crude (million tonnes) From	To: Canada	Mexico	US	S. & Cent. America	Europe	Russia	Other CIS	Middle East	Africa	Australasia	China	India	Japan	Singapore	Other Asia Pacific	**Total**
Canada	–	–	179.7	0.5	4.7	–	–	†	†	†	3.2	1.0	–	†	0.3	**189.3**
Mexico	–	–	32.8	0.1	8.4	–	–	0.1	–	–	0.4	8.0	0.1	–	7.0	**56.8**
US	21.3	–	–	8.5	57.9	†	0.1	1.9	0.2	3.3	19.8	10.7	2.0	2.7	26.9	**155.3**
S. & Cent. America	0.4	†	30.3	–	12.3	†	–	1.2	0.6	–	72.0	16.0	2.2	5.3	5.2	**145.7**
Europe	0.9	–	2.1	0.7	–	†	0.1	0.5	0.4	†	18.8	1.6	–	0.1	2.9	**28.2**
Russia	–	–	3.7	0.4	138.2	–	14.8	0.1	0.1	0.7	83.4	2.6	5.1	0.2	10.6	**260.0**
Other CIS	†	–	0.9	0.1	66.0	†	–	7.1	0.9	0.2	6.3	3.6	0.9	0.3	6.9	**93.2**
Iraq	–	–	8.9	0.3	44.9	†	†	1.0	1.4	–	60.1	47.3	0.5	1.0	13.6	**178.9**
Kuwait	–	–	1.0	–	2.5	–	–	†	3.6	–	27.5	9.9	11.3	3.2	37.5	**96.5**
Saudi Arabia	3.7	–	24.9	2.9	41.9	–	0.1	10.6	8.4	0.2	84.9	37.6	49.6	4.8	79.5	**349.1**
UAE	–	–	0.3	†	0.4	†	–	†	1.1	3.9	31.2	22.2	38.3	10.9	34.6	**142.7**
Other Middle East	–	–	–	†	1.0	–	†	5.7	0.1	0.2	53.1	12.9	11.5	7.9	15.3	**107.7**
North Africa	–	–	0.9	1.0	31.8	–	0.1	0.9	†	2.0	3.4	4.5	0.5	1.1	4.7	**51.0**
West Africa	1.6	–	7.1	3.3	65.4	†	†	4.3	8.1	1.2	71.8	21.4	0.2	3.1	16.0	**203.7**
East & S. Africa	†	–	0.4	†	0.3	†	–	†	†	–	2.1	0.6	0.1	†	0.3	**3.8**
Australasia	†	–	–	†	†	–	–	0.2	†	–	1.4	0.1	0.3	1.8	5.6	**9.4**
China	†	–	–	†	†	–	†	†	†	–	–	0.1	0.1	0.2	0.7	**1.1**
India	–	–	–	†	†	–	–	†	†	†	–	–	–	†	†	**0.1**
Japan	–	–	–	†	–	–	–	–	†	†	–	–	–	–	†	**†**
Singapore	–	–	–	†	–	–	–	†	†	0.2	–	†	–	–	1.5	**1.7**
Other Asia Pacific	†	–	0.8	†	†	–	–	0.4	0.5	6.8	17.8	4.0	1.0	3.4	–	**34.6**
Total imports	**27.9**	**†**	**293.7**	**17.8**	**475.9**	**†**	**15.2**	**34.0**	**25.5**	**18.7**	**557.2**	**203.9**	**123.5**	**46.1**	**269.0**	**2108.6**
Product (million tonnes)																
From																
Canada	–	1.0	25.1	0.9	0.7	0.1	†	†	†	†	1.1	†	1.2	0.2	0.3	**30.5**
Mexico	†	–	4.5	0.2	0.1	–	†	†	0.2	†	†	†	0.2	0.3	0.1	**5.5**
US	24.4	49.9	–	71.8	24.6	†	†	2.1	6.2	1.5	8.6	9.6	12.1	3.7	25.6	**240.2**
S. & Cent. America	0.1	0.6	6.1	–	3.2	†	†	0.4	3.0	†	1.3	0.1	0.7	6.1	4.2	**25.7**
Europe	3.2	1.8	17.4	7.2	–	0.1	1.0	13.2	43.6	0.5	2.1	1.1	0.5	4.9	7.8	**104.4**
Russia	0.2	–	22.3	1.2	57.5	–	1.0	2.9	3.0	†	3.0	1.3	1.1	3.9	9.5	**106.8**
Other CIS	†	†	0.5	0.1	6.7	0.3	–	0.1	0.4	†	0.4	0.1	†	†	1.3	**9.9**
Iraq	–	–	†	†	†	†	†	0.5	†	–	0.3	4.0	0.1	5.3	3.6	**13.7**
Kuwait	–	–	0.4	†	1.7	–	†	4.1	2.1	†	1.4	2.4	1.8	1.1	8.0	**23.0**
Saudi Arabia	†	–	1.1	0.2	12.4	†	†	5.6	9.2	†	3.3	6.8	1.1	2.7	7.1	**49.7**
UAE	†	–	0.7	0.7	4.1	†	†	5.5	11.1	0.4	5.3	7.6	3.5	5.1	23.4	**67.4**
Other Middle East	0.1	†	1.1	0.5	5.9	†	0.1	10.3	5.0	†	7.2	6.9	5.2	2.7	13.4	**58.4**
North Africa	†	†	1.7	0.8	12.6	†	†	0.8	0.5	†	2.3	0.3	0.8	1.8	3.8	**25.4**
West Africa	†	†	0.8	0.9	2.0	†	†	†	0.6	†	1.4	0.1	†	0.6	1.5	**7.9**
East & S. Africa	†	†	†	0.2	0.2	†	†	1.4	0.5	†	†	†	†	0.1	0.2	**2.7**
Australasia	†	†	–	0.1	1.2	†	†	†	†	–	1.1	†	1.5	1.4	0.6	**5.9**
China	0.2	0.9	0.2	4.7	3.4	†	0.1	1.6	3.9	4.1	–	0.7	0.8	12.6	32.1	**65.2**
India	0.2	–	3.8	2.8	6.1	†	†	11.9	10.7	1.3	0.7	–	1.3	5.9	11.1	**55.9**
Japan	†	0.1	1.1	0.2	0.3	†	†	†	0.1	4.1	1.8	0.1	–	1.8	4.5	**14.2**
Singapore	0.1	†	1.2	0.9	0.9	†	†	2.2	3.4	8.1	8.6	1.6	0.4	–	44.0	**71.5**
Other Asia Pacific	0.2	0.1	7.0	1.1	4.1	0.2	0.2	1.6	5.4	12.3	32.0	2.8	7.8	36.8	–	**111.5**
Total imports	**28.7**	**54.4**	**95.0**	**94.5**	**147.7**	**0.7**	**2.4**	**64.2**	**108.9**	**32.3**	**81.9**	**45.4**	**40.1**	**97.1**	**201.9**	**1095.2**

†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.

Major trade movements 2020

Trade flows worldwide (million tonnes)



Oil trade in 2019 and 2020

	2019				2020			
Million tonnes	Crude imports	Product imports	Crude exports	Product exports	Crude imports	Product imports	Crude exports	Product exports
Canada	34.8	32.8	197.7	34.4	27.9	28.7	189.3	30.5
Mexico	†	60.3	58.2	5.0	†	54.4	56.8	5.5
US	338.7	111.9	142.5	250.3	293.7	95.0	155.3	240.2
S. & Cent. America	21.1	109.4	146.8	24.6	17.8	94.5	145.7	25.7
Europe	556.0	177.0	28.1	123.6	475.9	147.7	28.2	104.4
Russia	†	0.6	289.0	123.3	†	0.7	260.0	106.8
Other CIS	18.5	1.7	93.9	12.0	15.2	2.4	93.2	9.9
Iraq	†	7.2	204.4	13.4	†	3.2	178.9	13.7
Kuwait	†	0.7	99.9	24.1	†	0.8	96.5	23.0
Saudi Arabia	0.1	10.0	366.0	53.7	0.1	13.6	349.1	49.7
United Arab Emirates	8.8	33.3	135.4	77.4	11.6	30.2	142.7	67.4
Other Middle East	26.0	18.8	120.5	60.7	22.3	16.4	107.7	58.4
North Africa	5.8	32.0	97.8	28.1	8.7	32.1	51.0	25.4
West Africa	0.4	36.1	226.8	8.4	0.5	38.1	203.7	7.9
East & S. Africa	19.6	41.6	5.5	2.6	16.3	38.6	3.8	2.7
Australasia	22.9	32.2	11.7	5.6	18.7	32.3	9.4	5.9
China	507.3	78.4	0.4	72.5	557.2	81.9	1.1	65.2
India	221.8	44.9	0.1	66.2	203.9	45.4	0.1	55.9
Japan	146.9	39.7	†	18.7	123.5	40.1	†	14.2
Singapore	49.6	112.4	1.9	76.9	46.1	97.1	1.7	71.5
Other Asia Pacific	287.3	210.4	39.0	110.1	269.0	201.9	34.6	111.5
Total World	**2265.6**	**1191.5**	**2265.6**	**1191.5**	**2108.6**	**1095.2**	**2108.6**	**1095.2**

Thousand barrels daily								
Canada	699	686	3971	719	558	598	3791	636
Mexico	‡	1261	1169	104	‡	1134	1138	114
US	6802	2340	2862	5233	5883	1981	3110	5007
S. & Cent. America	424	2287	2949	514	357	1969	2918	537
Europe	11167	3699	564	2583	9532	3079	564	2177
Russia	‡	13	5803	2577	‡	16	5207	2226
Other CIS	372	36	1885	250	304	50	1866	207
Iraq	‡	150	4105	280	‡	68	3583	285
Kuwait	‡	16	2005	503	‡	16	1933	479
Saudi Arabia	1	208	7351	1123	2	283	6991	1035
United Arab Emirates	177	696	2719	1618	233	629	2857	1405
Other Middle East	522	393	2421	1270	446	343	2156	1217
North Africa	116	669	1963	587	173	670	1021	529
West Africa	9	754	4555	175	11	795	4079	165
East & S. Africa	393	870	110	53	327	805	77	56
Australasia	459	672	234	117	374	673	187	122
China	10187	1639	9	1516	11158	1707	22	1360
India	4455	940	1	1384	4084	946	1	1165
Japan	2950	830	‡	391	2474	836	‡	295
Singapore	997	2350	39	1608	924	2025	33	1490
Other Asia Pacific	5769	4399	782	2302	5387	4210	693	2325
Total World	**45497**	**24907**	**45497**	**24907**	**42229**	**22832**	**42229**	**22832**

†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.

Natural gas

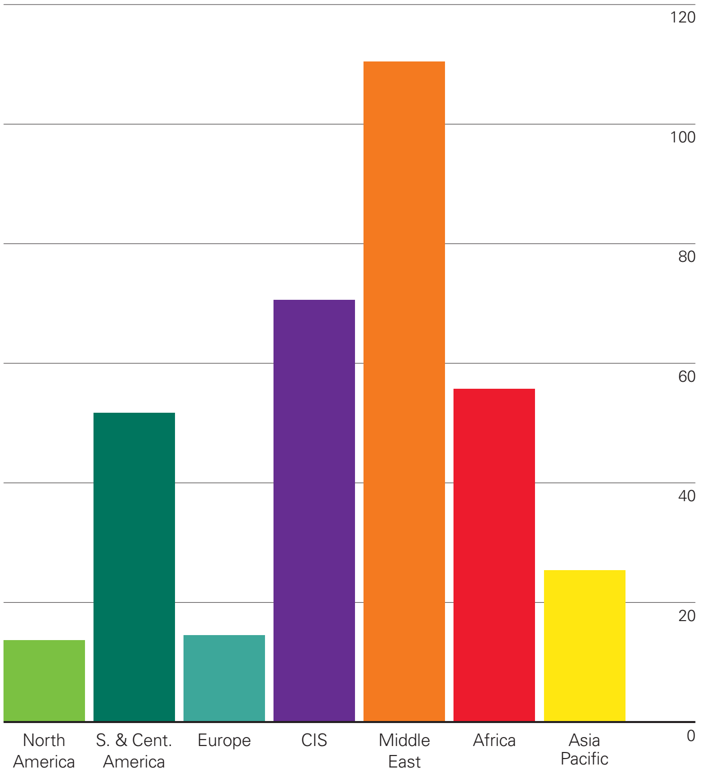
Total proved reserves

	At end 2000 Trillion cubic metres	At end 2010 Trillion cubic metres	At end 2019 Trillion cubic metres	At end 2020 Trillion cubic metres	At end 2020 Trillion cubic feet	At end 2020 Share of total	At end 2020 R/P ratio
Canada	1.6	1.9	2.0	**2.4**	**83.1**	1.3%	14.2
Mexico	0.8	0.4	0.2	**0.2**	**6.3**	0.1%	5.9
US	4.8	8.3	12.6	**12.6**	**445.6**	6.7%	13.8
Total North America	7.3	10.5	14.8	**15.2**	**535.0**	8.1%	13.7
Argentina	0.8	0.3	0.4	**0.4**	**13.6**	0.2%	10.1
Bolivia	0.2	0.3	0.2	**0.2**	**7.5**	0.1%	14.8
Brazil	0.2	0.4	0.4	**0.3**	**12.3**	0.2%	14.6
Colombia	0.1	0.1	0.1	**0.1**	**3.0**	◆	6.5
Peru	0.2	0.3	0.3	**0.3**	**9.2**	0.1%	21.6
Trinidad & Tobago	0.5	0.4	0.3	**0.3**	**10.2**	0.2%	9.8
Venezuela	4.6	6.1	6.3	**6.3**	**221.1**	3.3%	333.9
Other S. & Cent. America	0.1	0.1	0.1	**0.1**	**1.9**	◆	19.7
Total S. & Cent. America	6.8	8.1	7.9	**7.9**	**278.9**	4.2%	51.7
Denmark	0.1	0.1	†	**†**	**1.0**	◆	20.3
Germany	0.2	0.1	†	**†**	**0.7**	◆	4.4
Italy	0.2	0.1	†	**†**	**1.5**	◆	10.9
Netherlands	1.6	1.2	0.1	**0.1**	**4.6**	0.1%	6.5
Norway	1.2	2.0	1.5	**1.4**	**50.5**	0.8%	12.8
Poland	0.1	0.1	0.1	**0.1**	**2.6**	◆	18.4
Romania	0.2	0.1	0.1	**0.1**	**2.8**	◆	9.1
Ukraine	0.8	0.7	1.1	**1.1**	**38.5**	0.6%	57.5
United Kingdom	0.7	0.3	0.2	**0.2**	**6.6**	0.1%	4.7
Other Europe	0.2	0.1	0.1	**0.1**	**3.2**	◆	14.3
Total Europe	5.4	4.7	3.3	**3.2**	**111.9**	1.7%	14.5
Azerbaijan	1.0	1.0	2.5	**2.5**	**88.4**	1.3%	96.9
Kazakhstan	1.7	1.7	2.3	**2.3**	**79.7**	1.2%	71.2
Russian Federation	33.2	34.1	37.6	**37.4**	**1320.5**	19.9%	58.6
Turkmenistan	1.8	13.6	13.6	**13.6**	**480.3**	7.2%	230.7
Uzbekistan	0.9	0.9	0.8	**0.8**	**29.9**	0.4%	18.0
Other CIS	†	†	†	**†**	**0.1**	◆	9.1
Total CIS	38.6	51.3	56.8	**56.6**	**1998.9**	30.1%	70.5
Bahrain	0.3	0.2	0.1	**0.1**	**2.3**	◆	3.9
Iran	25.4	32.3	32.1	**32.1**	**1133.6**	17.1%	128.0
Iraq	3.0	3.0	3.5	**3.5**	**124.6**	1.9%	336.3
Israel	†	0.2	0.6	**0.6**	**20.8**	0.3%	39.7
Kuwait	1.5	1.7	1.7	**1.7**	**59.9**	0.9%	113.2
Oman	0.8	0.5	0.7	**0.7**	**23.5**	0.4%	18.0
Qatar	14.9	25.9	24.7	**24.7**	**871.1**	13.1%	144.0
Saudi Arabia	6.0	7.5	6.0	**6.0**	**212.6**	3.2%	53.7
Syria	0.2	0.3	0.3	**0.3**	**9.5**	0.1%	89.6
United Arab Emirates	5.8	5.9	5.9	**5.9**	**209.7**	3.2%	107.1
Yemen	0.3	0.3	0.3	**0.3**	**9.4**	0.1%	2618.8
Other Middle East	†	†	†	**†**	**0.2**	◆	24.7
Total Middle East	58.3	77.8	75.8	**75.8**	**2677.1**	40.3%	110.4
Algeria	4.4	4.3	4.3	**2.3**	**80.5**	1.2%	28.0
Egypt	1.4	2.1	2.1	**2.1**	**75.5**	1.1%	36.6
Libya	1.2	1.4	1.4	**1.4**	**50.5**	0.8%	107.4
Nigeria	3.9	4.9	5.5	**5.5**	**193.3**	2.9%	110.7
Other Africa	1.0	1.2	1.6	**1.6**	**55.4**	0.8%	54.8
Total Africa	11.9	14.0	14.9	**12.9**	**455.2**	6.9%	55.7
Australia	1.7	2.9	2.4	**2.4**	**84.4**	1.3%	16.8
Bangladesh	0.3	0.3	0.1	**0.1**	**3.9**	0.1%	4.5
Brunei	0.4	0.3	0.2	**0.2**	**7.9**	0.1%	17.6
China	1.4	2.7	8.4	**8.4**	**296.6**	4.5%	43.3
India	0.7	1.1	1.3	**1.3**	**46.6**	0.7%	55.6
Indonesia	2.7	3.0	1.4	**1.3**	**44.2**	0.7%	19.8
Malaysia	1.1	1.0	0.9	**0.9**	**32.1**	0.5%	12.4
Myanmar	0.3	0.2	0.4	**0.4**	**15.3**	0.2%	24.4
Pakistan	0.5	0.6	0.4	**0.4**	**13.6**	0.2%	12.6
Papua New Guinea	†	0.1	0.2	**0.2**	**5.8**	0.1%	13.7
Thailand	0.4	0.3	0.1	**0.1**	**5.1**	0.1%	4.4
Vietnam	0.2	0.6	0.6	**0.6**	**22.8**	0.3%	74.1
Other Asia Pacific	0.2	0.3	0.2	**0.2**	**6.7**	0.1%	11.5
Total Asia Pacific	9.8	13.5	16.8	**16.6**	**584.8**	8.8%	25.4
Total World	**138.0**	**179.9**	**190.3**	**188.1**	**6641.8**	**100.0%**	**48.8**
of which: OECD	13.6	17.6	20.0	**20.3**	**716.2**	10.8%	13.7
Non-OECD	124.4	162.4	170.3	**167.8**	**5925.6**	89.2%	70.6
European Union	2.5	1.6	0.4	**0.4**	**15.6**	0.2%	9.2

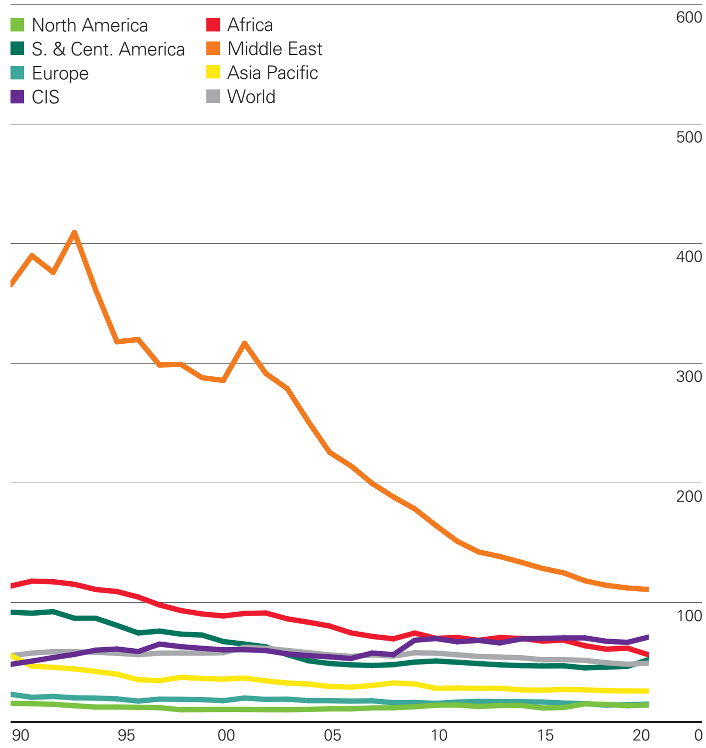
Source of data – the estimates in this table have been compiled using a combination of primary official sources and third-party data from Cedigaz and the OPEC Secretariat.
As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) and have been standardized using a gross calorific value (GCV) of 40 MJ/m^3.
†Less than 0.05.
◆Less than 0.05%.
Notes: Total proved reserves of natural gas – 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 total proved natural gas does not necessarily meet the definitions, guidelines and practices used for determining proved reserves at a company level, for instance as published by the US Securities and Exchange Commission, nor does it necessarily represent bp's view of proved reserves by country.
Reserves-to-production (R/P) ratio – if the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that rate.

Reserves-to-production (R/P) ratios
Years

2020 by region

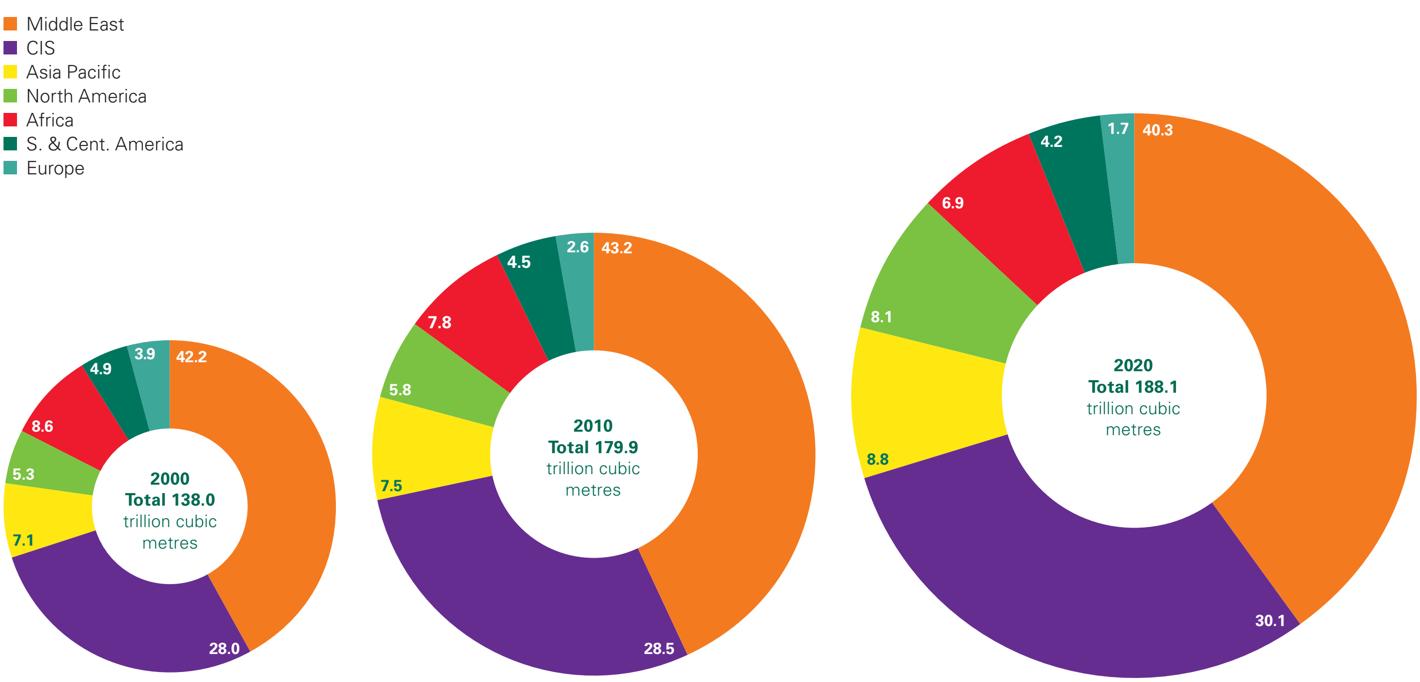


History



World proved gas reserves decreased by 2.2 Tcm to 188.1 Tcm in 2020. A revision to Algeria (-2.1 Tcm) provided the largest decrease, partially offset by a 0.4 Tcm increase in Canadian reserves. Russia (37 Tcm), Iran (32 Tcm) and Qatar (25 Tcm) are the countries with the largest reserves. The current global R/P ratio shows that gas reserves in 2020 accounted for 48.8 years of current production. The Middle East (110.4 years) and CIS (70.5 years) are the regions with the highest R/P ratio.

Distribution of proved reserves in 2000, 2010 and 2020
Percentage



Natural gas: Production in billion cubic metres*

Billion cubic metres	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	149.6	151.1	150.3	151.9	159.0	160.8	172.0	173.9	176.8	169.0	**165.2**	-2.5%	0.9%	4.3%
Mexico	51.2	52.1	50.9	52.5	51.3	47.9	43.7	38.3	35.2	31.3	**30.1**	-4.2%	-5.1%	0.8%
US	575.2	617.4	649.1	655.7	704.7	740.3	727.4	746.2	840.9	930.0	**914.6**	-1.9%	5.2%	23.7%
Total North America	775.9	820.5	850.3	860.1	915.0	949.0	943.0	958.3	1052.9	1130.3	**1109.9**	-2.1%	4.0%	28.8%
Argentina	39.0	37.7	36.7	34.6	34.5	35.5	37.3	37.1	39.4	41.6	**38.3**	-8.2%	0.3%	1.0%
Bolivia	13.7	15.0	17.1	19.6	20.3	19.6	18.8	18.2	17.0	15.0	**14.4**	-3.9%	2.3%	0.4%
Brazil	15.0	17.2	19.8	21.9	23.3	23.8	24.1	27.2	25.2	25.7	**23.9**	-7.3%	7.7%	0.6%
Colombia	10.8	10.5	11.5	13.2	12.3	11.6	12.0	12.3	12.9	13.2	**13.3**	0.2%	2.7%	0.3%
Peru	7.3	11.5	12.0	12.4	13.1	12.7	14.0	13.0	12.8	13.5	**12.1**	-10.7%	14.2%	0.3%
Trinidad & Tobago	40.3	38.7	38.5	38.7	38.1	36.0	31.3	31.9	34.0	34.6	**29.5**	-15.0%	-1.1%	0.8%
Venezuela	30.5	30.2	31.9	30.6	31.8	36.1	37.2	38.6	31.6	25.6	**18.8**	-26.9%	-2.2%	0.5%
Other S. & Cent. America	3.8	3.2	3.0	2.7	2.6	2.9	3.1	3.1	3.0	3.2	**2.7**	-16.3%	-1.7%	0.1%
Total S. & Cent. America	160.4	164.1	170.6	173.8	176.0	178.0	177.9	181.4	175.9	172.3	**152.9**	-11.5%	1.2%	4.0%
Denmark	8.5	6.9	6.0	5.0	4.8	4.8	4.7	5.1	4.3	3.2	**1.4**	-57.0%	-9.6%	◆
Germany	11.1	10.5	9.5	8.6	8.1	7.5	6.9	6.4	5.5	5.3	**4.5**	-15.9%	-8.3%	0.1%
Italy	8.0	8.0	8.2	7.4	6.8	6.4	5.5	5.3	5.2	4.6	**3.9**	-16.4%	-4.9%	0.1%
Netherlands	75.3	69.5	68.4	72.4	60.4	45.9	44.3	37.9	32.3	27.8	**20.0**	-28.5%	-8.2%	0.5%
Norway	106.2	100.5	113.9	107.9	107.5	116.1	115.9	123.7	121.3	114.3	**111.5**	-2.7%	1.0%	2.9%
Poland	4.3	4.5	4.5	4.4	4.3	4.3	4.1	4.0	4.0	4.0	**3.9**	-1.7%	-0.7%	0.1%
Romania	10.0	10.1	10.1	10.0	10.2	10.2	9.1	10.0	10.0	9.6	**8.7**	-9.8%	-0.8%	0.2%
Ukraine	19.4	19.5	19.4	20.2	20.2	18.8	19.0	19.4	19.7	19.4	**19.0**	-2.5%	-0.5%	0.5%
United Kingdom	57.9	46.1	39.2	37.0	37.4	40.7	41.7	41.9	40.7	39.5	**39.5**	-0.4%	-4.3%	1.0%
Other Europe	9.3	9.2	8.4	7.2	6.3	6.1	8.7	9.0	8.4	7.4	**6.3**	-15.0%	-2.2%	0.2%
Total Europe	310.1	284.8	287.5	280.0	266.1	260.8	259.9	262.7	251.4	235.2	**218.6**	-7.3%	-2.5%	5.7%
Azerbaijan	16.3	16.0	16.8	17.4	18.4	18.8	18.3	17.8	19.0	24.3	**25.8**	6.0%	4.3%	0.7%
Kazakhstan	27.8	29.3	29.7	31.1	31.7	31.9	32.1	34.5	34.1	34.0	**31.7**	-7.2%	2.5%	0.8%
Russian Federation	598.4	616.8	601.9	614.5	591.2	584.4	589.3	635.6	669.1	679.0	**638.5**	-6.2%	2.4%	16.6%
Turkmenistan	40.1	56.3	59.0	59.0	63.5	65.9	63.2	58.7	61.5	63.2	**59.0**	-6.9%	6.6%	1.5%
Uzbekistan	57.1	56.6	56.5	55.9	56.3	53.6	53.1	53.4	57.2	57.3	**47.1**	-18.1%	-0.2%	1.2%
Other CIS	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	**0.3**	-0.5%	0.3%	◆
Total CIS	740.0	775.4	764.2	778.3	761.4	754.9	756.3	800.2	841.3	858.2	**802.4**	-6.8%	2.5%	20.8%
Bahrain	12.4	12.6	13.1	14.0	14.7	14.6	14.4	14.5	14.6	16.3	**16.4**	0.8%	3.0%	0.4%
Iran	143.9	151.0	156.9	157.5	175.5	183.5	199.3	213.8	232.0	241.4	**250.8**	3.6%	5.9%	6.5%
Iraq	7.1	6.3	6.3	7.1	7.5	7.3	9.9	10.1	10.6	11.0	**10.5**	-4.6%	4.8%	0.3%
Kuwait	11.1	12.9	14.7	15.5	14.3	16.1	16.4	16.2	16.9	17.9	**15.0**	-16.7%	5.1%	0.4%
Oman	25.7	27.1	28.3	30.8	29.3	30.7	31.5	32.3	36.3	36.7	**36.9**	0.4%	4.4%	1.0%
Qatar	123.1	150.4	162.5	167.9	169.4	175.8	174.5	170.5	169.1	172.1	**171.3**	-0.7%	6.4%	4.4%
Saudi Arabia	83.3	87.6	94.4	95.0	97.3	99.2	105.3	109.3	112.1	111.2	**112.1**	0.6%	4.1%	2.9%
Syria	8.4	7.4	6.1	5.0	4.6	4.1	3.5	3.5	3.5	3.3	**3.0**	-10.1%	-5.9%	0.1%
United Arab Emirates	50.0	51.0	52.9	53.2	52.9	58.6	59.5	59.5	58.0	58.0	**55.4**	-4.7%	2.0%	1.4%
Yemen	6.3	9.4	7.6	10.4	9.8	2.9	0.5	0.3	0.1	0.1	**0.1**	1.0%	-18.6%	◆
Other Middle East	3.3	4.2	2.5	6.3	7.3	8.1	9.0	9.5	10.1	10.2	**15.0**	46.3%	14.1%	0.4%
Total Middle East	474.6	520.0	545.5	562.6	582.6	600.8	624.1	639.5	663.3	678.2	**686.6**	1.0%	5.1%	17.8%
Algeria	77.4	79.6	78.4	79.3	80.2	81.4	91.4	93.0	93.8	87.0	**81.5**	-6.6%	1.3%	2.1%
Egypt	59.0	59.1	58.6	54.0	47.0	42.6	40.3	48.8	58.6	64.9	**58.5**	-10.2%	0.7%	1.5%
Libya	16.0	7.5	11.6	12.2	15.7	14.7	14.8	13.6	13.2	14.5	**13.3**	-8.5%	-0.4%	0.3%
Nigeria	30.9	36.4	39.2	33.1	40.0	47.6	42.6	47.2	48.3	49.3	**49.4**	◆	7.8%	1.3%
Other Africa	18.2	18.0	18.9	20.5	20.7	21.7	22.8	26.9	27.6	28.1	**28.6**	1.6%	5.7%	0.7%
Total Africa	201.5	200.6	206.7	199.1	203.5	208.0	211.9	229.5	241.4	243.8	**231.3**	-5.4%	2.5%	6.0%
Australia	52.6	54.2	58.0	60.3	64.9	74.1	94.0	110.1	126.0	143.1	**142.5**	-0.7%	11.9%	3.7%
Bangladesh	19.3	19.6	21.3	22.0	23.0	25.9	26.5	26.6	26.6	25.3	**24.7**	-2.5%	3.0%	0.6%
Brunei	12.0	12.5	12.3	11.9	12.7	13.3	12.9	12.9	12.6	13.0	**12.6**	-2.9%	1.6%	0.3%
China	96.5	106.2	111.5	121.8	131.2	135.7	137.9	149.2	161.4	177.6	**194.0**	9.0%	7.5%	5.0%
India	47.4	42.9	37.3	31.1	29.4	28.1	26.6	27.7	27.5	26.9	**23.8**	-11.9%	-2.9%	0.6%
Indonesia	87.0	82.7	78.3	77.6	76.4	76.2	75.1	72.7	72.8	67.6	**63.2**	-6.8%	-1.4%	1.6%
Malaysia	65.1	67.0	69.3	72.6	72.2	76.8	76.7	78.5	77.2	79.3	**73.2**	-7.9%	1.8%	1.9%
Myanmar	12.2	12.6	12.5	12.9	16.5	19.2	18.3	17.8	17.0	18.5	**17.7**	-4.6%	5.0%	0.5%
Pakistan	35.3	35.3	36.6	35.6	35.0	35.0	34.7	34.7	34.2	32.7	**30.6**	-6.6%	-0.6%	0.8%
Thailand	33.7	33.8	38.4	38.9	39.1	37.5	37.3	35.9	34.7	35.8	**32.7**	-8.8%	2.0%	0.8%
Vietnam	9.1	8.2	9.0	9.4	9.9	10.3	10.2	9.5	9.7	9.9	**8.7**	-11.8%	2.5%	0.2%
Other Asia Pacific	17.9	17.7	17.7	18.2	23.0	27.9	28.9	29.1	27.0	28.7	**28.4**	-1.5%	4.5%	0.7%
Total Asia Pacific	488.1	492.6	502.1	512.2	533.3	560.0	579.0	604.6	626.6	658.2	**652.1**	-1.2%	4.0%	16.9%
Total World	**3150.8**	**3258.0**	**3326.8**	**3366.1**	**3437.9**	**3511.7**	**3552.1**	**3676.2**	**3852.9**	**3976.2**	**3853.7**	**-3.3%**	**3.1%**	**100.0%**
of which: OECD	1130.9	1151.0	1187.0	1196.4	1242.1	1281.0	1296.7	1331.1	1430.9	1510.8	**1478.5**	-2.4%	3.2%	38.4%
Non-OECD	2019.9	2107.0	2139.8	2169.6	2195.8	2230.6	2255.4	2345.1	2422.0	2465.4	**2375.2**	-3.9%	3.0%	61.6%
European Union	125.6	117.5	113.9	113.9	99.9	84.3	82.3	76.8	68.8	61.1	**47.8**	-21.9%	-6.3%	1.2%

*Excludes gas flared or recycled. Includes natural gas produced for gas-to-liquids transformation.
◆Less than 0.05%.
n/a not available.
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 standardized 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.
Natural gas production data expressed in billion cubic feet per day is available at *bp.com/statisticalreview*.

Source: includes data from Cedigaz, FGE MENAgas service.

Natural gas: Production in exajoules*

Exajoules	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	5.39	5.44	5.41	5.47	5.72	5.79	6.19	6.26	6.36	6.08	**5.95**	-2.5%	0.9%	4.3%
Mexico	1.84	1.88	1.83	1.89	1.85	1.73	1.57	1.38	1.27	1.13	**1.08**	-4.2%	-5.1%	0.8%
US	20.71	22.22	23.37	23.60	25.37	26.65	26.18	26.86	30.27	33.48	**32.93**	-1.9%	5.2%	23.7%
Total North America	27.93	29.54	30.61	30.96	32.94	34.16	33.95	34.50	37.90	40.69	**39.96**	-2.1%	4.0%	28.8%
Argentina	1.40	1.36	1.32	1.24	1.24	1.28	1.34	1.34	1.42	1.50	**1.38**	-8.2%	0.3%	1.0%
Bolivia	0.49	0.54	0.62	0.70	0.73	0.70	0.68	0.66	0.61	0.54	**0.52**	-3.9%	2.3%	0.4%
Brazil	0.54	0.62	0.71	0.79	0.84	0.86	0.87	0.98	0.91	0.93	**0.86**	-7.3%	7.7%	0.6%
Colombia	0.39	0.38	0.41	0.48	0.44	0.42	0.43	0.44	0.46	0.47	**0.48**	0.2%	2.7%	0.3%
Peru	0.26	0.41	0.43	0.45	0.47	0.46	0.50	0.47	0.46	0.49	**0.44**	-10.7%	14.2%	0.3%
Trinidad & Tobago	1.45	1.39	1.39	1.39	1.37	1.29	1.13	1.15	1.22	1.24	**1.06**	-15.0%	-1.1%	0.8%
Venezuela	1.10	1.09	1.15	1.10	1.14	1.30	1.34	1.39	1.14	0.92	**0.68**	-26.9%	-2.2%	0.5%
Other S. & Cent. America	0.14	0.11	0.11	0.10	0.09	0.10	0.11	0.11	0.11	0.11	**0.10**	-16.3%	-1.7%	0.1%
Total S. & Cent. America	5.78	5.91	6.14	6.26	6.34	6.41	6.40	6.53	6.33	6.20	**5.50**	-11.5%	1.2%	4.0%
Denmark	0.31	0.25	0.22	0.18	0.17	0.17	0.17	0.18	0.15	0.12	**0.05**	-57.0%	-9.6%	◆
Germany	0.40	0.38	0.34	0.31	0.29	0.27	0.25	0.23	0.20	0.19	**0.16**	-15.9%	-8.3%	0.1%
Italy	0.29	0.29	0.30	0.27	0.25	0.23	0.20	0.19	0.19	0.17	**0.14**	-16.4%	-4.9%	0.1%
Netherlands	2.71	2.50	2.46	2.61	2.17	1.65	1.59	1.37	1.16	1.00	**0.72**	-28.5%	-8.2%	0.5%
Norway	3.82	3.62	4.10	3.89	3.87	4.18	4.17	4.45	4.37	4.11	**4.01**	-2.7%	1.0%	2.9%
Poland	0.15	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14	**0.14**	-1.7%	-0.7%	0.1%
Romania	0.36	0.36	0.36	0.36	0.37	0.37	0.33	0.36	0.36	0.35	**0.31**	-9.8%	-0.8%	0.2%
Ukraine	0.70	0.70	0.70	0.73	0.73	0.68	0.68	0.70	0.71	0.70	**0.68**	-2.5%	-0.5%	0.5%
United Kingdom	2.08	1.66	1.41	1.33	1.35	1.46	1.50	1.51	1.47	1.42	**1.42**	-0.4%	-4.3%	1.0%
Other Europe	0.34	0.33	0.30	0.26	0.23	0.22	0.31	0.32	0.30	0.27	**0.23**	-15.0%	-2.2%	0.2%
Total Europe	11.16	10.25	10.35	10.08	9.58	9.39	9.36	9.46	9.05	8.47	**7.87**	-7.3%	-2.5%	5.7%
Azerbaijan	0.59	0.57	0.61	0.63	0.66	0.68	0.66	0.64	0.69	0.88	**0.93**	6.0%	4.3%	0.7%
Kazakhstan	1.00	1.06	1.07	1.12	1.14	1.15	1.16	1.24	1.23	1.23	**1.14**	-7.2%	2.5%	0.8%
Russian Federation	21.54	22.21	21.67	22.12	21.28	21.04	21.21	22.88	24.09	24.45	**22.99**	-6.2%	2.4%	16.6%
Turkmenistan	1.44	2.03	2.12	2.12	2.29	2.37	2.28	2.11	2.21	2.27	**2.12**	-6.9%	6.6%	1.5%
Uzbekistan	2.06	2.04	2.03	2.01	2.03	1.93	1.91	1.92	2.06	2.06	**1.69**	-18.1%	-0.2%	1.2%
Other CIS	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	-0.5%	0.3%	◆
Total CIS	26.64	27.91	27.51	28.02	27.41	27.18	27.23	28.81	30.29	30.89	**28.89**	-6.8%	2.5%	20.8%
Bahrain	0.45	0.45	0.47	0.50	0.53	0.53	0.52	0.52	0.53	0.59	**0.59**	0.8%	3.0%	0.4%
Iran	5.18	5.44	5.65	5.67	6.32	6.61	7.18	7.70	8.35	8.69	**9.03**	3.6%	5.9%	6.5%
Iraq	0.26	0.23	0.23	0.25	0.27	0.26	0.36	0.36	0.38	0.39	**0.38**	-4.6%	4.8%	0.3%
Kuwait	0.40	0.46	0.53	0.56	0.51	0.58	0.59	0.58	0.61	0.65	**0.54**	-16.7%	5.1%	0.4%
Oman	0.93	0.98	1.02	1.11	1.06	1.11	1.13	1.16	1.31	1.32	**1.33**	0.4%	4.4%	1.0%
Qatar	4.43	5.41	5.85	6.04	6.10	6.33	6.28	6.14	6.09	6.20	**6.17**	-0.7%	6.4%	4.4%
Saudi Arabia	3.00	3.16	3.40	3.42	3.50	3.57	3.79	3.93	4.04	4.00	**4.04**	0.6%	4.1%	2.9%
Syria	0.30	0.27	0.22	0.18	0.17	0.15	0.13	0.13	0.12	0.12	**0.11**	-10.1%	-5.9%	0.1%
United Arab Emirates	1.80	1.84	1.91	1.92	1.90	2.11	2.14	2.14	2.09	2.09	**2.00**	-4.7%	2.0%	1.4%
Yemen	0.23	0.34	0.27	0.37	0.35	0.10	0.02	0.01	†	†	**†**	1.0%	-18.6%	◆
Other Middle East	0.12	0.15	0.09	0.23	0.26	0.29	0.33	0.34	0.36	0.37	**0.54**	46.3%	14.1%	0.4%
Total Middle East	17.09	18.72	19.64	20.25	20.97	21.63	22.47	23.02	23.88	24.42	**24.72**	1.0%	5.1%	17.8%
Algeria	2.79	2.87	2.82	2.86	2.89	2.93	3.29	3.35	3.38	3.13	**2.93**	-6.6%	1.3%	2.1%
Egypt	2.12	2.13	2.11	1.94	1.69	1.53	1.45	1.76	2.11	2.34	**2.10**	-10.2%	0.7%	1.5%
Libya	0.58	0.27	0.42	0.44	0.57	0.53	0.53	0.49	0.47	0.52	**0.48**	-8.5%	-0.4%	0.3%
Nigeria	1.11	1.31	1.41	1.19	1.44	1.71	1.53	1.70	1.74	1.77	**1.78**	◆	7.8%	1.3%
Other Africa	0.66	0.65	0.68	0.74	0.74	0.78	0.82	0.97	0.99	1.01	**1.03**	1.6%	5.7%	0.7%
Total Africa	7.26	7.22	7.44	7.17	7.33	7.49	7.63	8.26	8.69	8.78	**8.33**	-5.4%	2.5%	6.0%
Australia	1.89	1.95	2.09	2.17	2.34	2.67	3.38	3.96	4.54	5.15	**5.13**	-0.7%	11.9%	3.7%
Bangladesh	0.69	0.70	0.77	0.79	0.83	0.93	0.95	0.96	0.96	0.91	**0.89**	-2.5%	3.0%	0.6%
Brunei	0.43	0.45	0.44	0.43	0.46	0.48	0.47	0.46	0.45	0.47	**0.46**	-2.9%	1.6%	0.3%
China	3.48	3.82	4.01	4.39	4.72	4.88	4.97	5.37	5.81	6.39	**6.98**	9.0%	7.5%	5.0%
India	1.71	1.55	1.34	1.12	1.06	1.01	0.96	1.00	0.99	0.97	**0.86**	-11.9%	-2.9%	0.6%
Indonesia	3.13	2.98	2.82	2.79	2.75	2.74	2.70	2.62	2.62	2.43	**2.27**	-6.8%	-1.4%	1.6%
Malaysia	2.34	2.41	2.49	2.61	2.60	2.77	2.76	2.82	2.78	2.85	**2.64**	-7.9%	1.8%	1.9%
Myanmar	0.44	0.45	0.45	0.46	0.60	0.69	0.66	0.64	0.61	0.67	**0.64**	-4.6%	5.0%	0.5%
Pakistan	1.27	1.27	1.32	1.28	1.26	1.26	1.25	1.25	1.23	1.18	**1.10**	-6.6%	-0.6%	0.8%
Thailand	1.21	1.22	1.38	1.40	1.41	1.35	1.34	1.29	1.25	1.29	**1.18**	-8.8%	2.0%	0.8%
Vietnam	0.33	0.29	0.32	0.34	0.35	0.37	0.37	0.34	0.35	0.35	**0.31**	-11.8%	2.5%	0.2%
Other Asia Pacific	0.64	0.64	0.64	0.66	0.83	1.01	1.04	1.05	0.97	1.03	**1.02**	-1.5%	4.5%	0.7%
Total Asia Pacific	17.57	17.73	18.08	18.44	19.20	20.16	20.85	21.77	22.56	23.70	**23.47**	-1.2%	4.0%	16.9%
Total World	**113.43**	**117.29**	**119.77**	**121.18**	**123.76**	**126.42**	**127.87**	**132.34**	**138.70**	**143.14**	**138.73**	**-3.3%**	**3.1%**	**100.0%**
of which: OECD	40.71	41.44	42.73	43.07	44.72	46.12	46.68	47.92	51.51	54.39	**53.22**	-2.4%	3.2%	38.4%
Non-OECD	72.72	75.85	77.03	78.11	79.05	80.30	81.19	84.42	87.19	88.76	**85.51**	-3.9%	3.0%	61.6%
European Union	4.52	4.23	4.10	4.10	3.60	3.03	2.96	2.76	2.48	2.20	**1.72**	-21.9%	-6.3%	1.2%

*Excludes gas flared or recycled. Includes natural gas produced for gas-to-liquids transformation.
◆Less than 0.05%.
n/a not available.
Note: Annual changes and shares of total are calculated using exajoules figures.

Source: includes data from Cedigaz, FGE MENAgas service.

Natural gas: Consumption in billion cubic metres*

Billion cubic metres	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	92.0	101.1	99.8	105.9	110.4	110.5	106.4	110.3	116.4	117.8	**112.6**	-4.7%	2.7%	2.9%
Mexico	66.0	70.8	73.7	77.8	78.8	80.8	83.0	86.0	87.6	88.0	**86.3**	-2.2%	3.0%	2.3%
US	648.2	658.2	688.1	707.0	722.3	743.6	749.1	740.0	821.7	849.2	**832.0**	-2.3%	3.2%	21.8%
Total North America	806.3	830.1	861.6	890.8	911.5	934.8	938.6	936.3	1025.7	1055.1	**1030.9**	-2.6%	3.2%	27.0%
Argentina	42.1	43.8	45.7	46.0	46.2	46.7	48.2	48.3	48.7	46.6	**43.9**	-5.9%	1.1%	1.1%
Brazil	27.6	27.5	32.6	38.4	40.7	42.9	37.1	37.6	35.9	35.7	**32.1**	-10.4%	5.6%	0.8%
Chile	5.7	5.8	5.3	5.3	4.4	4.8	5.9	5.6	5.6	6.5	**6.1**	-6.3%	8.8%	0.2%
Colombia	8.7	8.5	9.5	10.5	11.4	11.2	12.1	12.4	13.2	13.4	**13.9**	3.3%	4.8%	0.4%
Ecuador	0.6	0.6	0.7	0.9	0.9	0.8	0.9	0.8	0.7	0.6	**0.5**	-13.9%	0.7%	♦
Peru	5.4	6.3	6.9	6.7	7.4	7.6	8.5	7.5	8.0	8.2	**7.1**	-14.4%	9.4%	0.2%
Trinidad & Tobago	20.7	20.5	20.2	20.4	20.5	19.6	16.9	18.3	17.4	17.5	**15.1**	-13.7%	-0.9%	0.4%
Venezuela	31.3	33.3	34.6	32.3	34.0	37.0	37.2	38.6	31.6	25.6	**18.8**	-26.9%	-2.9%	0.5%
Other S. & Cent. America	5.1	5.8	6.3	6.9	7.2	7.1	7.3	7.2	8.0	9.2	**8.1**	-11.9%	6.4%	0.2%
Total S. & Cent. America	147.3	152.1	161.8	167.3	172.6	177.8	174.2	176.3	169.2	163.3	**145.6**	-11.1%	1.9%	3.8%
Austria	9.6	9.0	8.6	8.2	7.5	8.0	8.3	9.1	8.7	8.9	**8.5**	-4.5%	0.1%	0.2%
Belgium	19.4	16.5	16.7	16.5	14.5	15.8	16.2	16.4	16.9	17.4	**17.0**	-2.5%	-0.1%	0.4%
Czech Republic	9.4	7.9	8.0	8.1	7.2	7.5	8.2	8.4	8.0	8.3	**8.5**	1.4%	0.5%	0.2%
Finland	4.1	3.6	3.2	3.0	2.7	2.3	2.0	1.8	2.1	2.0	**2.0**	-4.1%	-5.9%	0.1%
France	49.6	43.0	44.4	45.1	37.9	40.8	44.5	44.8	42.8	43.7	**40.7**	-7.1%	-0.2%	1.1%
Germany	88.1	80.9	81.1	85.0	73.9	77.0	84.9	87.7	85.9	88.7	**86.5**	-2.7%	0.5%	2.3%
Greece	3.7	4.6	4.2	3.7	2.8	3.1	4.0	4.8	4.7	5.2	**5.7**	9.7%	4.3%	0.1%
Hungary	11.4	10.9	9.7	9.1	8.1	8.7	9.3	9.9	9.6	9.8	**10.2**	3.1%	-0.8%	0.3%
Italy	79.1	74.2	71.4	66.7	59.0	64.3	67.5	71.6	69.2	70.8	**67.7**	-4.7%	-0.5%	1.8%
Netherlands	46.8	40.9	39.3	39.1	34.5	34.1	35.2	36.1	35.4	37.0	**36.6**	-1.5%	-1.1%	1.0%
Norway	4.1	4.0	4.0	4.0	4.3	4.5	4.4	4.6	4.4	4.6	**4.4**	-3.2%	1.0%	0.1%
Poland	16.2	16.5	17.4	17.4	17.0	17.1	18.3	19.2	19.9	20.9	**21.6**	2.9%	3.3%	0.6%
Portugal	5.2	5.3	4.6	4.3	4.1	4.8	5.1	6.3	5.8	6.1	**6.0**	-2.6%	2.5%	0.2%
Romania	12.5	12.9	12.5	11.4	10.9	10.4	10.5	11.3	11.6	10.7	**11.3**	5.1%	-1.4%	0.3%
Spain	36.2	33.6	33.2	30.3	27.5	28.5	29.1	31.7	31.5	36.0	**32.4**	-10.1%	-0.1%	0.8%
Sweden	1.5	1.2	1.1	1.0	0.8	0.9	1.0	1.0	1.0	1.0	**1.1**	3.4%	-1.2%	♦
Switzerland	3.5	3.1	3.4	3.6	3.1	3.3	3.5	3.5	3.3	3.4	**3.2**	-5.4%	0.8%	0.1%
Turkey	35.8	41.8	43.3	44.0	46.6	46.0	44.5	51.6	47.2	43.4	**46.4**	6.6%	2.5%	1.2%
Ukraine	54.6	56.1	51.8	47.7	40.3	32.0	31.4	30.2	30.6	28.3	**29.3**	3.4%	-5.3%	0.8%
United Kingdom	98.5	81.9	76.9	76.3	70.1	72.0	80.7	78.5	79.5	77.3	**72.5**	-6.5%	-1.6%	1.9%
Other Europe	33.5	32.3	30.8	29.8	27.2	28.1	28.9	30.3	30.1	30.0	**29.6**	-1.3%	0.1%	0.8%
Total Europe	622.9	580.4	565.7	554.4	500.0	509.2	537.4	558.8	548.3	553.5	**541.1**	-2.5%	-0.4%	14.2%
Azerbaijan	8.1	8.9	9.4	9.4	9.9	11.1	10.9	10.6	10.8	11.8	**11.9**	0.6%	3.2%	0.3%
Belarus	20.7	19.2	19.4	19.3	19.1	17.9	17.8	18.2	19.3	19.2	**17.9**	-7.0%	1.2%	0.5%
Kazakhstan	9.5	10.6	11.4	12.0	13.4	13.6	14.2	15.1	17.4	17.4	**16.6**	-4.8%	7.1%	0.4%
Russian Federation	423.9	435.6	428.6	424.9	422.2	408.7	420.6	431.1	454.5	444.3	**411.4**	-7.7%	1.1%	10.8%
Turkmenistan	18.3	20.7	22.9	19.3	20.0	25.4	25.1	24.8	28.4	31.5	**31.3**	-1.0%	6.3%	0.8%
Uzbekistan	44.0	47.4	46.2	46.2	48.5	46.3	43.3	43.1	44.4	44.4	**43.0**	-3.4%	0.1%	1.1%
Other CIS	5.2	5.5	5.7	4.8	5.3	5.2	5.1	5.1	5.9	5.6	**6.1**	9.7%	0.4%	0.2%
Total CIS	529.8	548.0	543.7	535.7	538.4	528.2	537.1	547.9	580.6	574.2	**538.2**	-6.5%	1.4%	14.1%
Iran	144.4	153.2	152.5	153.8	173.4	184.0	196.3	205.0	219.6	223.4	**233.1**	4.0%	5.2%	6.1%
Iraq	7.1	6.3	6.3	7.1	7.5	7.3	9.9	11.4	14.6	19.5	**20.8**	6.4%	11.0%	0.5%
Israel	5.1	4.7	2.4	6.6	7.2	8.1	9.2	9.9	10.5	10.8	**11.3**	4.6%	10.4%	0.3%
Kuwait	14.0	15.9	17.5	17.8	17.9	20.3	21.1	21.0	21.2	23.0	**20.6**	-10.7%	6.9%	0.5%
Oman	16.4	18.1	19.7	21.7	21.3	23.0	22.9	23.4	25.0	25.0	**25.9**	3.4%	6.3%	0.7%
Qatar	25.4	28.7	33.6	35.3	38.4	43.3	41.2	41.2	34.1	36.7	**35.0**	-4.9%	5.6%	0.9%
Saudi Arabia	83.3	87.6	94.4	95.0	97.3	99.2	105.3	109.3	112.1	111.2	**112.1**	0.6%	4.1%	2.9%
United Arab Emirates	59.3	61.6	63.9	64.7	63.4	71.5	71.9	72.4	71.2	71.5	**69.6**	-2.9%	2.2%	1.8%
Other Middle East	25.6	22.1	20.6	21.3	20.9	22.5	23.1	23.2	22.0	23.4	**23.9**	1.8%	0.4%	0.6%
Total Middle East	380.5	398.2	411.0	423.4	447.4	479.2	500.9	516.7	530.3	544.5	**552.3**	1.2%	4.6%	14.4%
Algeria	25.3	26.8	29.9	32.1	36.1	37.9	38.6	39.5	43.4	45.1	**43.1**	-4.8%	5.6%	1.1%
Egypt	43.4	47.8	50.6	49.5	46.2	46.0	49.4	55.9	59.6	58.9	**57.8**	-2.2%	3.7%	1.5%
Morocco	0.7	0.9	1.2	1.1	1.1	1.1	1.1	1.1	1.0	1.0	**0.8**	-23.0%	4.2%	♦
South Africa	4.1	4.3	4.4	4.1	4.3	4.3	3.7	4.0	4.4	4.2	**4.1**	-4.8%	2.5%	0.1%
Other Africa	24.6	26.4	28.7	30.2	36.4	43.1	44.3	44.4	45.6	46.0	**47.3**	2.4%	7.2%	1.2%
Total Africa	98.1	106.1	114.7	117.0	124.1	132.5	137.1	145.0	154.0	155.3	**153.0**	-1.8%	5.1%	4.0%
Australia	31.7	32.8	33.0	34.7	37.2	38.8	37.9	37.1	35.8	42.1	**40.9**	-3.1%	3.7%	1.1%
Bangladesh	19.3	19.6	21.3	22.0	23.0	25.9	26.5	26.6	27.4	30.9	**30.4**	-1.9%	5.1%	0.8%
China	108.9	135.2	150.9	171.9	188.4	194.7	209.4	241.3	283.9	308.4	**330.6**	6.9%	13.1%	8.6%
China Hong Kong SAR	3.6	2.9	2.6	2.5	2.4	3.0	3.1	3.1	3.0	3.1	**4.9**	58.2%	0.7%	0.1%
India	59.0	60.3	55.7	49.0	48.5	47.8	50.8	53.7	58.1	59.3	**59.6**	0.3%	1.9%	1.6%
Indonesia	44.0	42.7	43.0	44.5	44.0	45.8	44.6	43.2	44.5	43.9	**41.5**	-5.7%	0.4%	1.1%
Japan	99.9	112.0	123.2	123.5	124.8	118.7	116.4	117.0	115.7	108.1	**104.4**	-3.7%	1.6%	2.7%
Malaysia	38.0	38.3	42.0	44.6	44.7	46.8	45.0	45.0	44.7	44.7	**38.2**	-14.9%	1.1%	1.0%
New Zealand	4.4	4.0	4.5	4.7	5.2	4.9	4.8	5.0	4.5	4.9	**4.6**	-7.2%	2.0%	0.1%
Pakistan	35.3	35.3	36.6	35.6	35.0	36.5	38.7	40.7	43.6	44.5	**41.2**	-7.5%	2.5%	1.1%
Philippines	3.5	3.8	3.6	3.4	3.5	3.3	3.8	3.8	4.1	4.2	**3.8**	-9.1%	1.2%	0.1%
Singapore	8.3	8.3	8.9	10.0	10.4	11.6	11.9	12.3	12.3	12.5	**12.6**	0.1%	3.2%	0.3%
South Korea	45.0	48.4	52.5	55.0	50.0	45.6	47.6	49.8	57.8	56.0	**56.6**	0.8%	4.7%	1.5%
Sri Lanka	–	–	–	–	–	–	–	–	–	–	**–**	n/a	n/a	n/a
Taiwan	15.5	17.0	17.9	17.9	18.9	20.2	21.0	23.2	23.7	23.3	**24.9**	6.7%	6.4%	0.7%
Thailand	43.2	44.3	48.6	48.9	49.9	51.0	50.6	50.1	50.0	50.9	**46.9**	-8.3%	2.9%	1.2%
Vietnam	9.1	8.2	9.0	9.4	9.9	10.3	10.2	9.5	9.7	9.9	**8.7**	-11.8%	2.5%	0.2%
Other Asia Pacific	6.8	7.5	8.5	8.6	10.3	11.5	11.0	11.1	10.9	11.4	**11.7**	2.4%	7.6%	0.3%
Total Asia Pacific	575.6	620.7	662.0	686.1	706.0	716.4	733.3	772.6	829.7	858.1	**861.6**	0.1%	5.2%	22.5%
Total World	**3160.5**	**3235.7**	**3320.5**	**3374.6**	**3400.1**	**3478.2**	**3558.6**	**3653.7**	**3837.9**	**3903.9**	**3822.8**	**-2.3%**	**2.9%**	**100.0%**
of which: OECD	1553.3	1547.5	1583.6	1616.6	1591.2	1623.7	1657.6	1678.7	1763.9	1800.0	**1757.7**	-2.6%	2.1%	46.0%
Non-OECD	1607.1	1688.2	1736.9	1758.1	1808.9	1854.5	1901.0	1975.0	2074.0	2104.0	**2065.1**	-2.1%	3.6%	54.0%
European Union	422.8	389.0	382.2	374.5	331.4	346.7	368.2	385.2	378.1	391.2	**379.9**	-3.1%	-0.1%	9.9%

Source: includes data from Cedigaz, FGE MENAgas 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%.
n/a not available.
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 standardized 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 data expressed in billion cubic feet per day is available at *bp.com/statisticalreview*.

Natural gas: Consumption in exajoules*

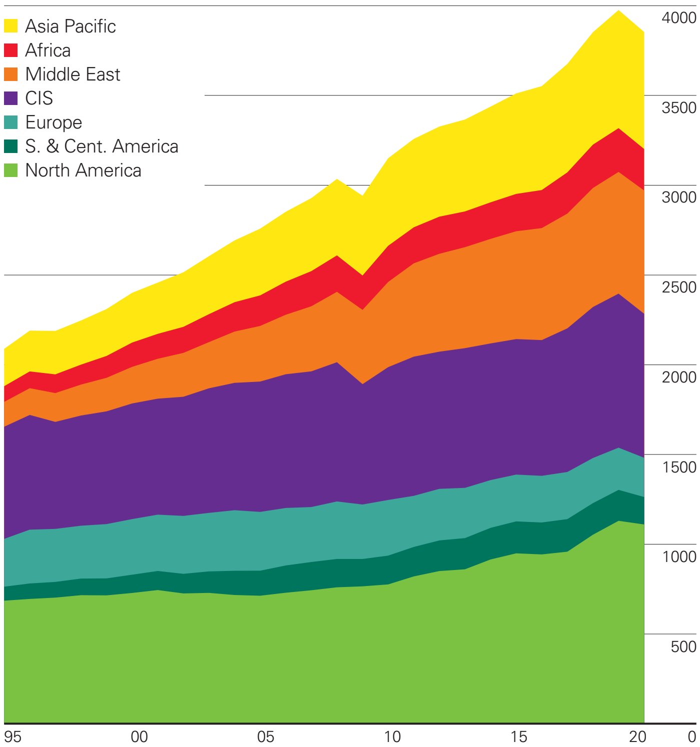
Exajoules	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	3.31	3.64	3.59	3.81	3.97	3.98	3.83	3.97	4.19	4.24	**4.05**	-4.7%	2.7%	2.9%
Mexico	2.38	2.55	2.65	2.80	2.84	2.91	2.99	3.10	3.15	3.17	**3.11**	-2.2%	3.0%	2.3%
US	23.33	23.70	24.77	25.45	26.00	26.77	26.97	26.64	29.58	30.57	**29.95**	-2.3%	3.2%	21.8%
Total North America	29.03	29.89	31.02	32.07	32.81	33.65	33.79	33.71	36.93	37.98	**37.11**	-2.6%	3.2%	27.0%
Argentina	1.52	1.58	1.64	1.66	1.66	1.68	1.74	1.74	1.75	1.68	**1.58**	-5.9%	1.1%	1.1%
Brazil	0.99	0.99	1.17	1.38	1.46	1.55	1.34	1.35	1.29	1.29	**1.16**	-10.4%	5.6%	0.8%
Chile	0.21	0.21	0.19	0.19	0.16	0.17	0.21	0.20	0.20	0.23	**0.22**	-6.3%	8.8%	0.2%
Colombia	0.31	0.31	0.34	0.38	0.41	0.40	0.44	0.45	0.48	0.48	**0.50**	3.3%	4.8%	0.4%
Ecuador	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	**0.02**	-13.9%	0.7%	♦
Peru	0.20	0.23	0.25	0.24	0.27	0.28	0.31	0.27	0.29	0.30	**0.25**	-14.4%	9.4%	0.2%
Trinidad & Tobago	0.75	0.74	0.73	0.73	0.74	0.71	0.61	0.66	0.63	0.63	**0.54**	-13.7%	-0.9%	0.4%
Venezuela	1.13	1.20	1.25	1.16	1.22	1.33	1.34	1.39	1.14	0.92	**0.68**	-26.9%	-2.9%	0.5%
Other S. & Cent. America	0.18	0.21	0.23	0.25	0.26	0.26	0.26	0.26	0.29	0.33	**0.29**	-11.9%	6.4%	0.2%
Total S. & Cent. America	5.30	5.48	5.82	6.02	6.21	6.40	6.27	6.35	6.09	5.88	**5.24**	-11.1%	1.9%	3.8%
Austria	0.35	0.33	0.31	0.30	0.27	0.29	0.30	0.33	0.31	0.32	**0.31**	-4.5%	0.1%	0.2%
Belgium	0.70	0.59	0.60	0.60	0.52	0.57	0.58	0.59	0.61	0.63	**0.61**	-2.5%	-0.1%	0.4%
Czech Republic	0.34	0.29	0.29	0.29	0.26	0.27	0.29	0.30	0.29	0.30	**0.30**	1.4%	0.5%	0.2%
Finland	0.15	0.13	0.12	0.11	0.10	0.08	0.07	0.07	0.08	0.07	**0.07**	-4.1%	-5.9%	0.1%
France	1.78	1.55	1.60	1.63	1.36	1.47	1.60	1.61	1.54	1.57	**1.46**	-7.1%	-0.2%	1.1%
Germany	3.17	2.91	2.92	3.06	2.66	2.77	3.06	3.16	3.09	3.19	**3.12**	-2.7%	0.5%	2.3%
Greece	0.13	0.17	0.15	0.13	0.10	0.11	0.14	0.17	0.17	0.19	**0.21**	9.7%	4.3%	0.1%
Hungary	0.41	0.39	0.35	0.33	0.29	0.31	0.34	0.36	0.35	0.35	**0.37**	3.1%	-0.8%	0.3%
Italy	2.85	2.67	2.57	2.40	2.12	2.32	2.43	2.58	2.49	2.55	**2.44**	-4.7%	-0.5%	1.8%
Netherlands	1.68	1.47	1.41	1.41	1.24	1.23	1.27	1.30	1.28	1.33	**1.32**	-1.5%	-1.1%	1.0%
Norway	0.15	0.15	0.14	0.14	0.15	0.16	0.16	0.17	0.16	0.16	**0.16**	-3.2%	1.0%	0.1%
Poland	0.58	0.59	0.63	0.63	0.61	0.62	0.66	0.69	0.72	0.75	**0.78**	2.9%	3.3%	0.6%
Portugal	0.19	0.19	0.16	0.16	0.15	0.17	0.18	0.23	0.21	0.22	**0.22**	-2.6%	2.5%	0.2%
Romania	0.45	0.46	0.45	0.41	0.39	0.37	0.38	0.41	0.42	0.39	**0.41**	5.1%	-1.4%	0.3%
Spain	1.30	1.21	1.20	1.09	0.99	1.03	1.05	1.14	1.13	1.30	**1.17**	-10.1%	-0.1%	0.8%
Sweden	0.06	0.04	0.04	0.04	0.03	0.03	0.04	0.03	0.04	0.04	**0.04**	3.4%	-1.2%	♦
Switzerland	0.13	0.11	0.12	0.13	0.11	0.12	0.13	0.13	0.12	0.12	**0.12**	-5.4%	0.8%	0.1%
Turkey	1.29	1.51	1.56	1.58	1.68	1.65	1.60	1.86	1.70	1.56	**1.67**	6.6%	2.5%	1.2%
Ukraine	1.96	2.02	1.87	1.72	1.45	1.15	1.13	1.09	1.10	1.02	**1.06**	3.4%	-5.3%	0.8%
United Kingdom	3.55	2.95	2.77	2.75	2.52	2.59	2.90	2.83	2.86	2.78	**2.61**	-6.5%	-1.6%	1.9%
Other Europe	1.21	1.16	1.11	1.07	0.98	1.01	1.04	1.09	1.08	1.08	**1.07**	-1.3%	0.1%	0.8%
Total Europe	22.43	20.90	20.37	19.96	18.00	18.33	19.35	20.12	19.74	19.93	**19.48**	-2.5%	-0.4%	14.2%
Azerbaijan	0.29	0.32	0.34	0.34	0.35	0.40	0.39	0.38	0.39	0.42	**0.43**	0.6%	3.2%	0.3%
Belarus	0.75	0.69	0.70	0.69	0.69	0.64	0.64	0.66	0.70	0.69	**0.64**	-7.0%	1.2%	0.5%
Kazakhstan	0.34	0.38	0.41	0.43	0.48	0.49	0.51	0.54	0.63	0.63	**0.60**	-4.8%	7.1%	0.4%
Russian Federation	15.26	15.68	15.43	15.30	15.20	14.71	15.14	15.52	16.36	16.00	**14.81**	-7.7%	1.1%	10.8%
Turkmenistan	0.66	0.75	0.83	0.70	0.72	0.91	0.90	0.89	1.02	1.14	**1.13**	-1.0%	6.3%	0.8%
Uzbekistan	1.59	1.70	1.66	1.66	1.75	1.67	1.56	1.55	1.60	1.60	**1.55**	-3.4%	0.1%	1.1%
Other CIS	0.19	0.20	0.21	0.17	0.19	0.19	0.19	0.18	0.21	0.20	**0.22**	9.7%	0.4%	0.2%
Total CIS	19.07	19.73	19.57	19.29	19.38	19.02	19.34	19.73	20.90	20.67	**19.38**	-6.5%	1.4%	14.1%
Iran	5.20	5.51	5.49	5.54	6.24	6.62	7.07	7.38	7.91	8.04	**8.39**	4.0%	5.2%	6.1%
Iraq	0.26	0.23	0.23	0.25	0.27	0.26	0.36	0.41	0.53	0.70	**0.75**	6.4%	11.0%	0.5%
Israel	0.18	0.17	0.09	0.24	0.26	0.29	0.33	0.36	0.38	0.39	**0.41**	4.6%	10.4%	0.3%
Kuwait	0.50	0.57	0.63	0.64	0.64	0.73	0.76	0.76	0.76	0.83	**0.74**	-10.7%	6.9%	0.5%
Oman	0.59	0.65	0.71	0.78	0.77	0.83	0.82	0.84	0.90	0.90	**0.93**	3.4%	6.3%	0.7%
Qatar	0.91	1.03	1.21	1.27	1.38	1.56	1.48	1.48	1.23	1.32	**1.26**	-4.9%	5.6%	0.9%
Saudi Arabia	3.00	3.16	3.40	3.42	3.50	3.57	3.79	3.93	4.04	4.00	**4.04**	0.6%	4.1%	2.9%
United Arab Emirates	2.13	2.22	2.30	2.33	2.28	2.57	2.59	2.61	2.56	2.57	**2.51**	-2.9%	2.2%	1.8%
Other Middle East	0.92	0.79	0.74	0.77	0.75	0.81	0.83	0.84	0.79	0.84	**0.86**	1.8%	0.4%	0.6%
Total Middle East	13.70	14.34	14.80	15.24	16.11	17.25	18.03	18.60	19.09	19.60	**19.88**	1.2%	4.6%	14.4%
Algeria	0.91	0.96	1.08	1.16	1.30	1.37	1.39	1.42	1.56	1.63	**1.55**	-4.8%	5.6%	1.1%
Egypt	1.56	1.72	1.82	1.78	1.66	1.66	1.78	2.01	2.15	2.12	**2.08**	-2.2%	3.7%	1.5%
Morocco	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	**0.03**	-23.0%	4.2%	♦
South Africa	0.15	0.15	0.16	0.15	0.15	0.16	0.13	0.14	0.16	0.15	**0.15**	-4.8%	2.5%	0.1%
Other Africa	0.88	0.95	1.03	1.09	1.31	1.55	1.60	1.60	1.64	1.66	**1.70**	2.4%	7.2%	1.2%
Total Africa	3.53	3.82	4.13	4.21	4.47	4.77	4.94	5.22	5.54	5.59	**5.51**	-1.8%	5.1%	4.0%
Australia	1.14	1.18	1.19	1.25	1.34	1.40	1.36	1.34	1.29	1.52	**1.47**	-3.1%	3.7%	1.1%
Bangladesh	0.69	0.70	0.77	0.79	0.83	0.93	0.95	0.96	0.99	1.11	**1.10**	-1.9%	5.1%	0.8%
China	3.92	4.87	5.43	6.19	6.78	7.01	7.54	8.69	10.22	11.10	**11.90**	6.9%	13.1%	8.6%
China Hong Kong SAR	0.13	0.10	0.09	0.09	0.09	0.11	0.11	0.11	0.11	0.11	**0.18**	58.2%	0.7%	0.1%
India	2.12	2.17	2.01	1.76	1.75	1.72	1.83	1.93	2.09	2.13	**2.15**	0.3%	1.9%	1.6%
Indonesia	1.59	1.54	1.55	1.60	1.59	1.65	1.61	1.56	1.60	1.58	**1.50**	-5.7%	0.4%	1.1%
Japan	3.60	4.03	4.44	4.45	4.49	4.27	4.19	4.21	4.17	3.89	**3.76**	-3.7%	1.6%	2.7%
Malaysia	1.37	1.38	1.51	1.60	1.61	1.69	1.62	1.62	1.61	1.61	**1.37**	-14.9%	1.1%	1.0%
New Zealand	0.16	0.14	0.16	0.17	0.19	0.18	0.17	0.18	0.16	0.18	**0.16**	-7.2%	2.0%	0.1%
Pakistan	1.27	1.27	1.32	1.28	1.26	1.32	1.39	1.47	1.57	1.60	**1.48**	-7.5%	2.5%	1.1%
Philippines	0.13	0.14	0.13	0.12	0.13	0.12	0.14	0.14	0.15	0.15	**0.14**	-9.1%	1.2%	0.1%
Singapore	0.30	0.30	0.32	0.36	0.37	0.42	0.43	0.44	0.44	0.45	**0.45**	0.1%	3.2%	0.3%
South Korea	1.62	1.74	1.89	1.98	1.80	1.64	1.72	1.79	2.08	2.02	**2.04**	0.8%	4.7%	1.5%
Sri Lanka	–	–	–	–	–	–	–	–	–	–	**–**	n/a	n/a	n/a
Taiwan	0.56	0.61	0.64	0.65	0.68	0.73	0.75	0.84	0.85	0.84	**0.90**	6.7%	6.4%	0.7%
Thailand	1.56	1.60	1.75	1.76	1.80	1.83	1.82	1.80	1.80	1.83	**1.69**	-8.3%	2.9%	1.2%
Vietnam	0.33	0.29	0.32	0.34	0.35	0.37	0.37	0.34	0.35	0.35	**0.31**	-11.8%	2.5%	0.2%
Other Asia Pacific	0.24	0.27	0.31	0.31	0.37	0.41	0.40	0.40	0.39	0.41	**0.42**	2.4%	7.6%	0.3%
Total Asia Pacific	20.72	22.35	23.83	24.70	25.42	25.79	26.40	27.81	29.87	30.89	**31.02**	0.1%	5.2%	22.5%
Total World	**113.78**	**116.49**	**119.54**	**121.49**	**122.40**	**125.22**	**128.11**	**131.53**	**138.16**	**140.54**	**137.62**	**-2.3%**	**2.9%**	**100.0%**
of which: OECD	55.92	55.71	57.01	58.20	57.28	58.45	59.67	60.43	63.50	64.80	**63.28**	-2.6%	2.1%	46.0%
Non-OECD	57.86	60.77	62.53	63.29	65.12	66.76	68.44	71.10	74.67	75.74	**74.34**	-2.1%	3.6%	54.0%
European Union	15.22	14.01	13.76	13.48	11.93	12.48	13.25	13.87	13.61	14.08	**13.68**	-3.1%	-0.1%	9.9%

Source: includes data from Cedigaz, FGE MENAgas 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%.
n/a not available.
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.

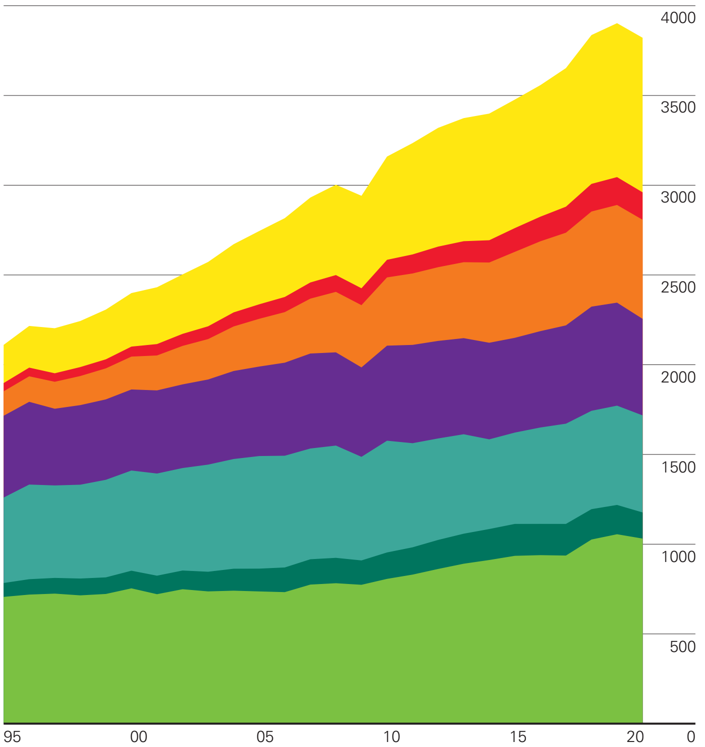
Natural gas: Production by region

Billion cubic metres



Natural gas: Consumption by region

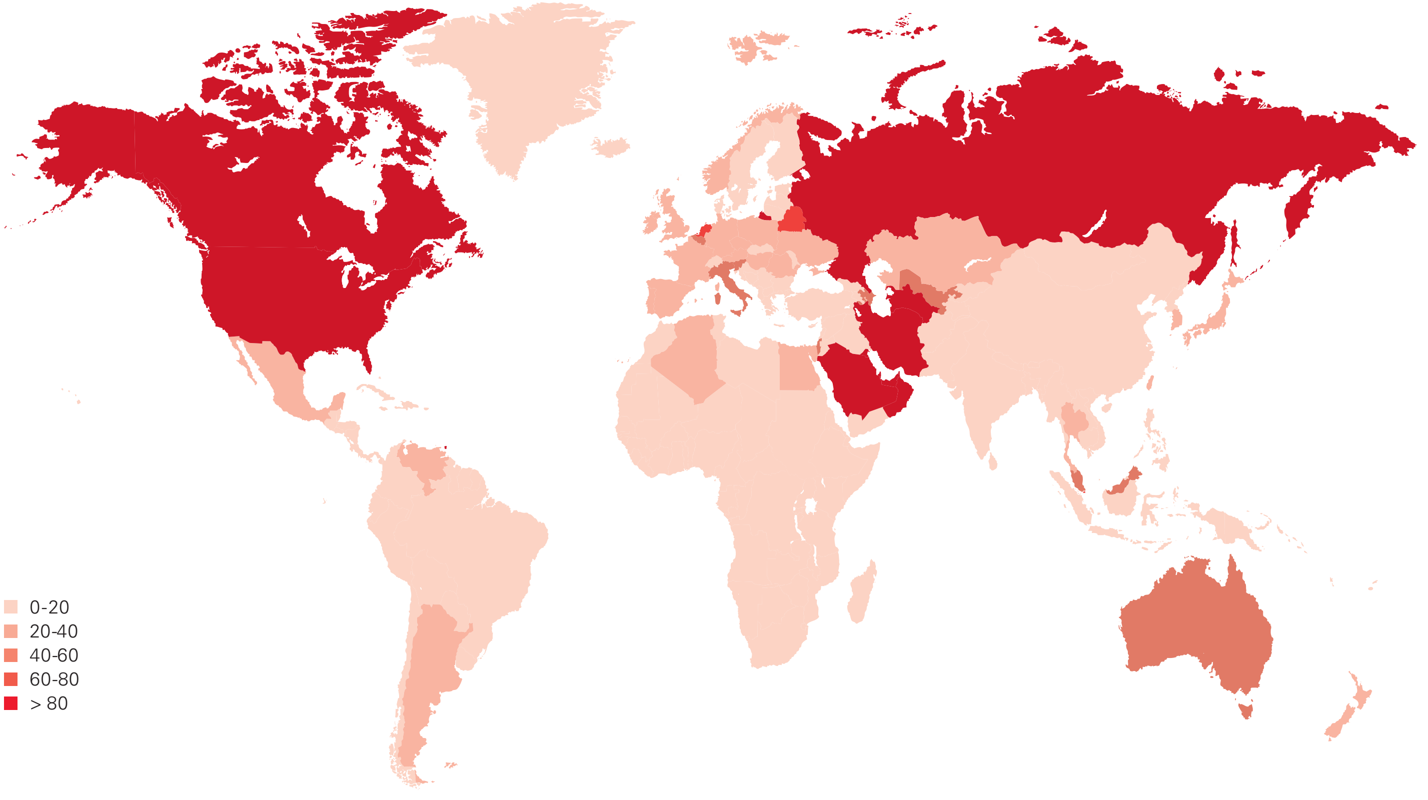
Billion cubic metres



Natural gas consumption decreased by 2.3% or 81 billion cubic metres (bcm), similar to the fall seen in 2009 during the financial crisis. Gas consumption fell in most regions, with a notable exception in China where demand grew by 6.9%. In contrast, gas demand dropped in North America and Europe by 2.6% and 2.5% respectively. Gas production fell by 123 bcm (-3.3%), with the largest drops seen in Russia (-41 bcm) and the US (-15 bcm).

Natural gas: Consumption per capita 2020

GJ per capita



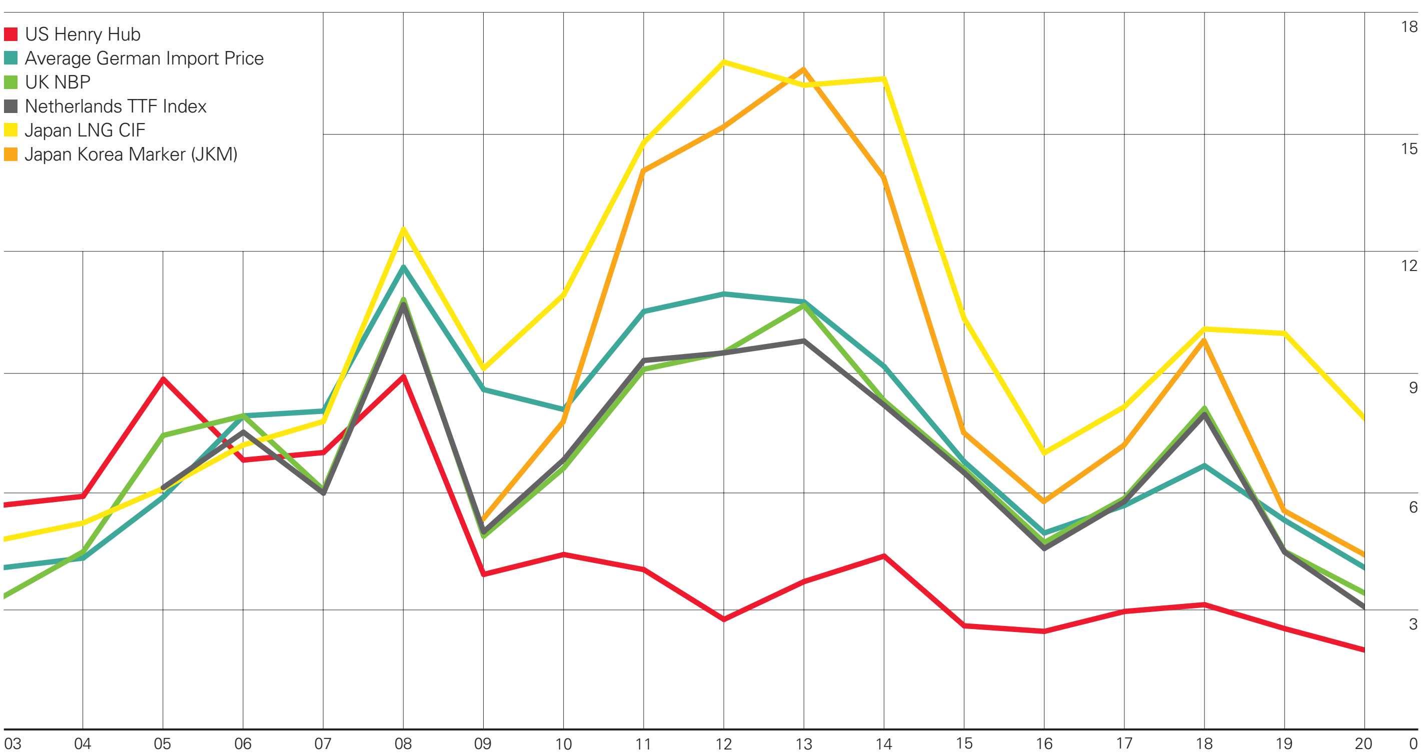
Prices

US dollars per million Btu	LNG Japan CIF[1]	LNG Japan Korea Marker (JKM)[2]	Natural gas Average German Import Price[3]	Natural gas UK (Heren NBP Index)[4]	Natural gas Netherlands TTF (DA Heren Index)[4]	Natural gas US Henry Hub[5]	Natural gas Canada (Alberta)[5]	Crude oil OECD countries CIF[6]
1990	3.64	–	2.78	–	–	1.64	1.05	3.82
1991	3.99	–	3.23	–	–	1.49	0.89	3.33
1992	3.62	–	2.70	–	–	1.77	0.98	3.19
1993	3.52	–	2.51	–	–	2.12	1.69	2.82
1994	3.18	–	2.35	–	–	1.92	1.45	2.70
1995	3.46	–	2.43	–	–	1.69	0.89	2.96
1996	3.66	–	2.50	1.87	–	2.76	1.12	3.54
1997	3.91	–	2.66	1.96	–	2.53	1.36	3.29
1998	3.05	–	2.33	1.86	–	2.08	1.42	2.16
1999	3.14	–	1.86	1.58	–	2.27	2.00	2.98
2000	4.72	–	2.91	2.71	–	4.23	3.75	4.83
2001	4.64	–	3.67	3.17	–	4.07	3.61	4.08
2002	4.27	–	3.21	2.37	–	3.33	2.57	4.17
2003	4.77	–	4.06	3.33	–	5.63	4.83	4.89
2004	5.18	–	4.30	4.46	–	5.85	5.03	6.27
2005	6.05	–	5.83	7.38	6.07	8.79	7.25	8.74
2006	7.14	–	7.87	7.87	7.46	6.76	5.83	10.66
2007	7.73	–	7.99	6.01	5.93	6.95	6.17	11.95
2008	12.55	–	11.60	10.79	10.66	8.85	7.99	16.76
2009	9.06	5.28	8.53	4.85	4.96	3.89	3.38	10.41
2010	10.91	7.72	8.03	6.56	6.77	4.39	3.69	13.47
2011	14.73	14.02	10.49	9.04	9.26	4.01	3.47	18.55
2012	16.75	15.12	10.93	9.46	9.45	2.76	2.27	18.82
2013	16.17	16.56	10.73	10.64	9.75	3.71	2.93	18.25
2014	16.33	13.86	9.11	8.25	8.14	4.35	3.87	16.80
2015	10.31	7.45	6.72	6.53	6.44	2.60	2.01	8.77
2016	6.94	5.72	4.93	4.69	4.54	2.46	1.55	7.04
2017	8.10	7.13	5.62	5.80	5.72	2.96	1.58	8.97
2018	10.05	9.76	6.66	8.06	7.90	3.12	1.18	11.68
2019	9.94	5.49	5.03	4.47	4.45	2.51	1.27	10.82
2020	7.81	4.39	4.06	3.42	3.07	1.99	1.58	7.19

[1]Source: EDMC Energy Trend.
[2]Source: S&P Global Platts ©2020, S&P Global Inc.
[3]Source: 1986-1990 German Federal Statistical Office, 1991-2020 German Federal Office of Economics and Export Control (BAFA).
[4]Source: ICIS Heren Energy Ltd.
[5]Source: Energy Intelligence Group, *Natural Gas Week*.
[6]Source: ©OECD/IEA 2020, Oil, Gas, Coal and Electricity, Quarterly Statistics *www.iea.org/statistics*.

Note: CIF = cost+insurance+freight (average prices).

Prices
$/mmBtu



Natural gas: Inter-regional trade

Billion cubic metres	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	2009-19	Share 2020
US														
Pipeline imports	90.2	85.0	80.8	75.9	71.8	71.6	79.5	80.5	76.6	73.3	**68.2**	-7.2%	-2.0%	7.3%
LNG imports	12.1	9.9	4.9	2.7	1.7	2.5	2.4	2.2	2.1	1.5	**1.3**	-12.3%	-19.3%	0.1%
Total imports	102.3	94.9	85.6	78.6	73.5	74.1	82.0	82.7	78.8	74.7	**69.5**	-7.3%	-3.1%	7.4%
Pipeline exports	29.2	39.1	45.3	42.5	40.4	47.2	58.7	65.7	67.8	75.4	**76.1**	0.6%	10.3%	8.1%
LNG exports*	1.5	1.8	0.8	0.2	0.4	0.7	4.0	17.1	28.6	47.4	**61.4**	29.2%	50.1%	6.5%
Total exports	30.7	40.9	46.1	42.7	40.8	47.9	62.7	82.8	96.3	122.8	**137.5**	11.6%	15.5%	14.6%
Other North America														
Pipeline imports	29.2	39.1	45.3	42.5	40.4	47.2	58.7	65.7	67.8	75.4	**76.1**	0.6%	10.3%	8.1%
LNG imports	8.1	7.0	6.5	8.8	9.8	7.4	5.9	7.0	7.5	7.1	**3.4**	-53.0%	4.1%	0.4%
Total imports	37.3	46.1	51.7	51.3	50.2	54.7	64.5	72.7	75.3	82.6	**79.5**	-4.0%	9.6%	8.5%
Pipeline exports	90.2	85.0	80.8	75.9	71.8	71.6	79.5	80.5	76.6	73.3	**68.2**	-7.2%	-2.0%	7.3%
LNG exports*	–	0.1	–	–	†	†	†	†	0.1	†	**†**	-54.0%	n/a	◆
Total exports	90.2	85.1	80.8	75.9	71.9	71.6	79.6	80.6	76.7	73.3	**68.2**	-7.2%	-2.0%	7.3%
Brazil														
Pipeline imports	9.3	9.3	9.5	11.0	11.4	11.2	9.8	8.4	7.6	6.4	**6.2**	-3.9%	-1.8%	0.7%
LNG imports	2.8	0.7	3.5	5.2	7.1	6.8	2.6	1.7	2.9	3.2	**3.3**	3.4%	22.6%	0.4%
Total imports	12.1	9.9	13.0	16.3	18.5	18.0	12.4	10.1	10.5	9.7	**9.5**	-1.4%	1.8%	1.0%
LNG exports*	–	–	0.5	0.1	0.2	†	0.6	0.2	0.1	–	**–**	n/a	n/a	–
Total exports	–	–	0.5	0.1	0.2	†	0.6	0.2	0.1	–	**–**	n/a	n/a	–
Other S. & Cent. America														
LNG imports	6.4	9.3	11.1	12.9	12.5	12.1	12.6	11.7	11.6	9.9	**10.5**	6.1%	12.4%	1.1%
Total imports	6.4	9.3	11.1	12.9	12.5	12.1	12.6	11.7	11.6	9.9	**10.5**	6.1%	12.4%	1.1%
Pipeline exports	9.3	9.3	9.5	11.0	11.4	11.2	9.8	8.4	7.6	6.4	**6.2**	-3.9%	-1.8%	0.7%
LNG exports*	21.4	23.4	23.4	24.1	23.3	21.4	19.9	19.1	21.4	22.5	**19.9**	-11.7%	1.4%	2.1%
Total exports	30.7	32.7	32.9	35.1	34.7	32.6	29.7	27.5	29.0	28.9	**26.1**	-9.9%	0.6%	2.8%
Europe														
Pipeline imports	224.8	234.4	228.5	234.1	209.4	214.9	230.6	247.2	247.3	237.0	**211.3**	-11.1%	0.8%	22.5%
LNG imports	89.1	89.2	68.2	51.8	52.1	56.0	56.4	64.7	71.3	119.1	**114.8**	-3.8%	5.4%	12.2%
Total imports	313.9	323.6	296.7	285.8	261.4	270.9	287.0	311.9	318.6	356.0	**326.1**	-8.6%	2.1%	34.7%
LNG exports*	5.1	6.1	8.1	9.0	13.0	11.0	10.6	7.9	11.7	8.8	**5.6**	-35.9%	10.1%	0.6%
Total exports	5.1	6.1	8.1	9.0	13.0	11.0	10.6	7.9	11.7	8.8	**5.6**	-35.9%	10.1%	0.6%
Russia														
Pipeline imports	33.4	41.2	39.7	32.9	33.1	26.5	24.3	28.6	24.6	30.6	**11.0**	-64.2%	-2.3%	1.2%
Total imports	33.4	41.2	39.7	32.9	33.1	26.5	24.3	28.6	24.6	30.6	**11.0**	-64.2%	-2.3%	1.2%
Pipeline exports	194.0	210.6	201.5	210.7	189.6	194.2	202.0	219.7	222.4	221.0	**197.7**	-10.8%	1.5%	21.0%
LNG exports	13.5	14.3	14.3	14.5	13.6	14.6	14.6	15.4	24.9	39.1	**40.4**	3.1%	19.0%	4.3%
Total exports	207.5	224.9	215.8	225.2	203.2	208.8	216.7	235.2	247.3	260.1	**238.1**	-8.7%	2.8%	25.3%
Other CIS														
Pipeline imports	26.5	25.4	25.2	24.0	26.3	25.4	26.3	28.8	30.4	29.8	**26.7**	-10.6%	2.8%	2.8%
Total imports	26.5	25.4	25.2	24.0	26.3	25.4	26.3	28.8	30.4	29.8	**26.7**	-10.6%	2.8%	2.8%
Pipeline exports	51.1	71.8	69.7	69.5	75.4	72.6	72.8	78.0	80.8	85.5	**61.8**	-27.8%	5.2%	6.6%
Total exports	51.1	71.8	69.7	69.5	75.4	72.6	72.8	78.0	80.8	85.5	**61.8**	-27.8%	5.2%	6.6%
Middle East														
Pipeline imports	13.4	13.0	5.3	6.3	7.6	9.6	7.3	4.6	2.1	1.8	**1.1**	-38.4%	-16.3%	0.1%
LNG imports	3.0	4.4	4.2	4.3	5.3	9.8	13.7	13.0	9.4	9.4	**9.2**	-3.1%	26.0%	1.0%
Total imports	16.4	17.4	9.4	10.6	12.9	19.4	21.1	17.7	11.5	11.2	**10.3**	-8.8%	-0.4%	1.1%
Pipeline exports	8.2	9.1	9.0	8.9	9.3	8.1	8.0	11.0	8.8	8.0	**7.7**	-4.0%	3.9%	0.8%
LNG exports	103.8	128.7	130.3	135.2	132.2	125.4	126.0	122.3	125.9	127.5	**126.9**	-0.8%	5.9%	13.5%
Total exports	112.0	137.9	139.3	144.2	141.5	133.5	133.9	133.2	134.8	135.6	**134.6**	-1.0%	5.8%	14.3%
Africa														
Pipeline imports	–	–	–	–	–	–	–	–	–	–	**2.1**	n/a	n/a	0.220%
LNG imports	–	–	–	–	–	3.9	10.7	8.3	3.2	–	**–**	n/a	n/a	–
Total imports	–	–	–	–	–	3.9	10.7	8.3	3.2	–	**2.1**	n/a	n/a	0.2%
Pipeline exports	48.2	36.1	39.3	34.4	29.4	30.1	38.7	37.2	37.5	28.0	**26.1**	-6.9%	-4.3%	2.8%
LNG exports	58.8	56.4	54.2	47.0	49.5	48.5	46.2	55.7	53.6	61.2	**56.4**	-8.1%	0.9%	6.0%
Total exports	106.9	92.4	93.5	81.4	78.8	78.6	84.9	92.9	91.1	89.2	**82.5**	-7.7%	-1.1%	8.8%
China														
Pipeline imports	3.4	13.6	20.8	26.4	30.3	32.4	36.8	39.9	47.9	47.7	**45.1**	-5.8%	n/a	4.8%
LNG imports	13.0	16.9	20.1	25.1	27.3	27.0	36.8	52.9	73.5	84.7	**94.0**	10.6%	26.6%	10.0%
Total imports	16.4	30.5	40.8	51.5	57.5	59.4	73.5	92.8	121.3	132.5	**139.1**	4.7%	32.4%	14.8%
LNG exports*	–	–	–	–	–	–	–	–	–	0.1	**–**	-100.0%	n/a	–
Total exports	–	–	–	–	–	–	–	–	–	0.1	**–**	-100.0%	n/a	–
India														
LNG imports	11.5	17.4	18.4	18.0	19.1	20.0	24.3	26.1	30.6	32.4	**35.8**	10.2%	9.6%	3.8%
Total imports	11.5	17.4	18.4	18.0	19.1	20.0	24.3	26.1	30.6	32.4	**35.8**	10.2%	9.6%	3.8%
LNG exports*	–	–	–	–	–	0.4	0.1	0.1	–	0.1	**–**	-100.0%	n/a	–
Total exports	–	–	–	–	–	0.4	0.1	0.1	–	0.1	**–**	-100.0%	n/a	–
OECD Asia														
Pipeline imports	5.2	5.3	5.0	5.9	5.2	5.8	5.5	4.9	4.9	4.3	**4.4**	1.7%	-3.1%	0.5%
LNG imports	141.4	156.3	169.6	175.7	173.6	161.6	159.9	165.4	173.2	161.1	**157.3**	-2.6%	2.6%	16.7%
Total imports	146.5	161.6	174.6	181.6	178.8	167.4	165.3	170.2	178.1	165.5	**161.7**	-2.5%	2.4%	17.2%
LNG exports*	25.8	26.0	28.3	30.6	32.2	40.1	60.5	76.8	91.9	104.7	**106.3**	1.3%	15.3%	11.3%
Total exports	25.8	26.0	28.3	30.6	32.2	40.1	60.5	76.8	91.9	104.7	**106.3**	1.3%	15.3%	11.3%
Other Asia														
LNG imports	15.0	17.3	18.5	22.4	25.2	29.8	33.0	40.2	45.5	55.3	**58.3**	5.1%	16.2%	6.2%
Total imports	15.0	17.3	18.5	22.4	25.2	29.8	33.0	40.2	45.5	55.3	**58.3**	5.1%	16.2%	6.2%
Pipeline exports	5.2	5.3	5.0	6.1	8.1	9.5	9.2	8.1	7.8	8.7	**8.3**	-4.9%	3.9%	0.9%
LNG exports*	72.5	71.5	65.0	66.2	69.3	75.0	75.8	78.5	72.4	72.4	**71.0**	-2.2%	0.9%	7.6%
Total exports	77.6	76.8	70.0	72.3	77.5	84.5	85.0	86.6	80.2	81.1	**79.3**	-2.5%	1.2%	8.4%
World														
Inter-regional pipeline trade	435.3	466.3	460.0	459.0	435.4	444.6	478.7	508.7	509.3	506.3	**452.2**	-10.9%	1.8%	48.1%
LNG trade	302.4	328.3	324.9	326.8	333.6	337.1	358.3	393.3	430.6	483.8	**487.9**	0.6%	6.8%	51.9%
Total trade	**737.7**	**794.6**	**784.9**	**785.9**	**769.1**	**781.7**	**836.9**	**902.0**	**939.9**	**990.1**	**940.1**	**-5.3%**	**4.0%**	**100.0%**

*LNG exports include re-exports.
Pipeline trade excludes intra-regional trade.
†Less than 0.05.
◆Less than 0.05%.
n/a not available.
Notes: As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) and have been standardized using a gross calorific value (GCV) of 40 MJ/m³.
Growth rates are adjusted for leap years.

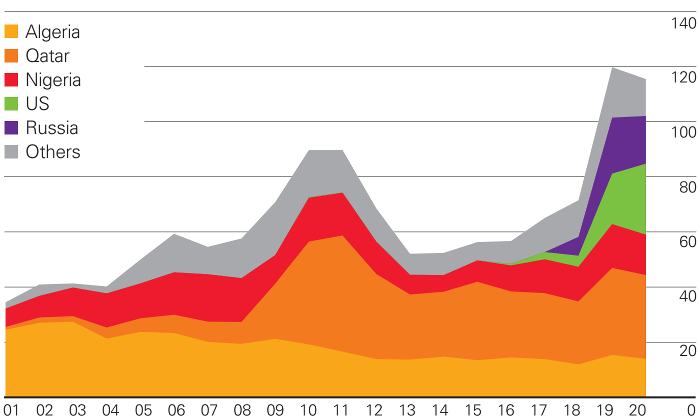
Natural gas: LNG imports

Billion cubic metres	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	2.0	3.2	1.6	1.0	0.5	0.6	0.3	0.4	0.6	0.5	**0.8**	56.1%	-6.1%	0.2%
Mexico	6.1	3.8	4.9	7.8	9.3	6.8	5.6	6.6	6.9	6.6	**2.5**	-62.0%	5.8%	0.5%
US	12.1	9.9	4.9	2.7	1.7	2.5	2.4	2.2	2.1	1.5	**1.3**	-12.3%	-19.3%	0.3%
Total North America	20.2	16.8	11.4	11.4	11.5	10.0	8.3	9.2	9.6	8.6	**4.6**	-46.0%	-6.8%	1.0%
Argentina	1.9	3.7	4.7	6.3	6.2	5.6	5.1	4.6	3.6	1.8	**1.8**	0.7%	5.7%	0.4%
Brazil	2.8	0.7	3.5	5.2	7.1	6.8	2.6	1.7	2.9	3.2	**3.3**	3.4%	22.6%	0.7%
Chile	3.1	3.7	4.0	3.8	3.5	3.7	4.5	4.4	4.3	3.3	**3.7**	9.6%	17.3%	0.8%
Other S. & Cent. America	1.4	1.9	2.4	2.8	2.8	2.8	3.0	2.8	3.7	4.8	**5.1**	5.5%	13.3%	1.0%
Total S. & Cent. America	9.2	9.9	14.6	18.1	19.6	18.9	15.2	13.5	14.5	13.1	**13.9**	5.4%	14.2%	2.8%
Belgium	6.5	6.3	4.1	3.1	2.9	3.6	2.4	1.3	3.3	7.2	**5.1**	-29.8%	0.5%	1.0%
France	14.7	14.4	9.8	8.3	6.9	6.4	9.1	10.9	12.7	23.0	**19.6**	-15.1%	5.6%	4.0%
Italy	9.3	9.1	7.1	5.8	4.5	5.9	5.9	8.2	8.2	13.5	**12.1**	-10.7%	16.1%	2.5%
Spain	28.2	23.9	21.4	15.7	16.2	13.7	13.8	16.6	15.0	21.9	**20.9**	-5.1%	-2.2%	4.3%
Turkey	7.8	5.9	7.6	5.9	7.1	7.5	7.6	10.9	11.4	12.9	**14.8**	14.9%	8.0%	3.0%
United Kingdom	18.8	24.7	13.9	9.2	11.2	13.7	10.7	6.6	7.2	17.1	**18.6**	8.2%	5.4%	3.8%
Other EU	3.9	4.9	4.4	3.7	3.3	5.2	6.9	10.2	13.4	23.4	**23.7**	1.1%	20.2%	4.9%
Rest of Europe	†	–	†	–	†	–	–	0.1	–	–	**0.1**	n/a	n/a	◆
Total Europe	89.1	89.2	68.2	51.8	52.1	56.0	56.4	64.7	71.3	119.1	**114.8**	-3.8%	5.4%	23.5%
Egypt	–	–	–	–	–	3.9	10.7	8.3	3.2	–	**–**	n/a	n/a	–
Kuwait	2.8	3.0	2.8	2.3	3.6	4.3	4.7	4.8	4.3	5.1	**5.7**	10.6%	18.6%	1.2%
United Arab Emirates	0.2	1.4	1.4	1.6	1.6	2.9	4.2	3.0	1.0	1.6	**1.6**	-4.3%	n/a	0.3%
Other Middle East & Africa	–	–	–	0.5	0.1	2.7	4.8	5.3	4.0	2.7	**1.9**	-28.3%	n/a	0.4%
Total Middle East & Africa	3.0	4.4	4.2	4.3	5.3	13.7	24.5	21.4	12.5	9.4	**9.2**	-3.1%	26.0%	1.9%
China	13.0	16.9	20.1	25.1	27.3	27.0	36.8	52.9	73.5	84.7	**94.0**	10.6%	26.6%	19.3%
India	11.5	17.4	18.4	18.0	19.1	20.0	24.3	26.1	30.6	32.4	**35.8**	10.2%	9.6%	7.3%
Japan	96.4	108.6	119.8	120.4	121.8	115.9	113.6	113.9	113.0	105.5	**102.0**	-3.6%	1.7%	20.9%
Malaysia	–	–	–	2.0	2.2	2.2	1.5	2.0	1.8	3.3	**3.6**	9.3%	n/a	0.7%
Pakistan	–	–	–	–	–	1.5	4.0	6.1	9.4	11.8	**10.6**	-10.0%	n/a	2.2%
Singapore	–	–	–	1.3	2.6	3.0	3.2	4.1	4.5	5.0	**5.7**	15.3%	n/a	1.2%
South Korea	45.0	47.7	49.7	55.3	51.8	45.8	46.3	51.4	60.2	55.6	**55.3**	-0.9%	4.6%	11.3%
Taiwan	15.0	16.3	17.1	17.2	18.6	19.6	20.4	22.7	22.9	22.8	**24.7**	8.0%	6.3%	5.1%
Thailand	–	1.1	1.4	2.0	1.9	3.6	3.9	5.2	6.0	6.7	**7.5**	11.4%	n/a	1.5%
Other Asia Pacific	–	–	0.1	–	–	–	–	–	0.8	5.7	**6.1**	6.4%	n/a	1.3%
Total Asia Pacific	180.9	207.9	226.6	241.2	245.2	238.5	253.9	284.6	322.7	333.6	**345.4**	3.3%	7.8%	70.8%
Total LNG imports	**302.4**	**328.3**	**324.9**	**326.8**	**333.6**	**337.1**	**358.3**	**393.3**	**430.6**	**483.8**	**487.9**	**0.6%**	**6.8%**	**100.0%**

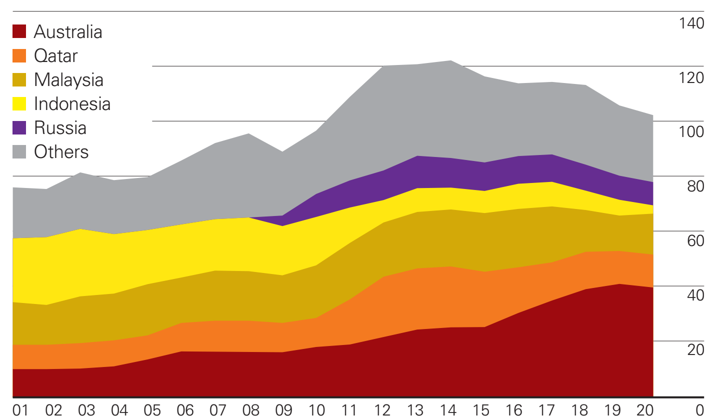
Gross LNG trade
†Less than 0.05.
◆Less than 0.05%.
n/a not available.
Note: Growth rates are adjusted for leap years.

Source: includes GIIGNL, IHS Markit.

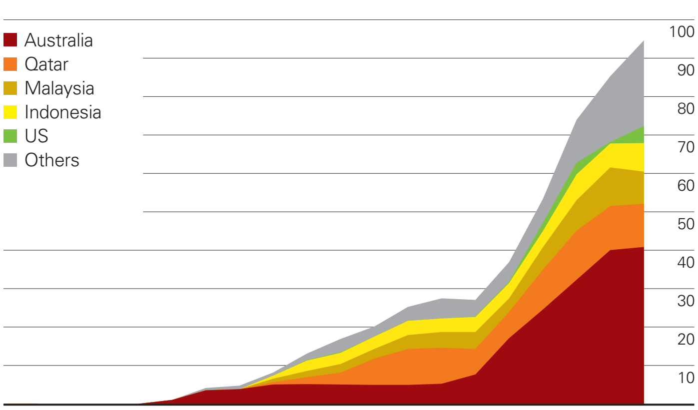
LNG imports by source: Europe
Billion cubic metres



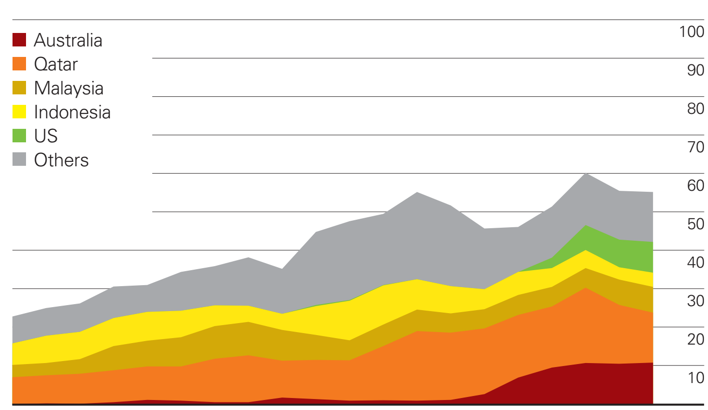
LNG imports by source: Japan
Billion cubic metres



LNG imports by source: China
Billion cubic metres



LNG imports by source: South Korea
Billion cubic metres



Natural gas: LNG exports

Billion cubic metres	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
US	1.5	1.8	0.8	0.2	0.4	0.7	4.0	17.1	28.6	47.4	**61.4**	29.2%	50.1%	12.6%
Peru	1.9	5.2	5.1	5.7	5.7	5.0	5.5	5.5	4.8	5.3	**5.0**	-4.9%	n/a	1.0%
Trinidad & Tobago	19.6	18.2	18.3	18.4	17.6	16.4	14.3	13.5	16.6	17.1	**14.3**	-16.3%	-1.3%	2.9%
Other Americas*	–	0.1	0.5	0.1	0.2	†	0.6	0.3	0.1	0.1	**0.5**	392.3%	n/a	0.1%
Total Americas	22.9	25.2	24.7	24.3	23.9	22.1	24.5	36.5	50.1	69.9	**81.3**	16.0%	13.2%	16.7%
Russia	13.5	14.3	14.3	14.5	13.6	14.6	14.6	15.4	24.9	39.1	**40.4**	3.1%	19.0%	8.3%
Norway	4.6	4.4	4.6	3.8	4.6	5.6	6.1	5.4	6.8	6.9	**4.3**	-37.8%	8.2%	0.9%
Other Europe*	0.5	1.7	3.6	5.2	8.4	5.4	4.5	2.5	5.0	1.9	**1.3**	-29.3%	22.7%	0.3%
Total Europe & CIS	18.6	20.4	22.4	23.5	26.6	25.6	25.3	23.4	36.7	47.9	**46.0**	-4.1%	16.7%	9.4%
Oman	11.7	11.0	11.1	11.5	10.6	10.2	11.0	11.4	13.6	14.1	**13.2**	-6.3%	1.7%	2.7%
Qatar	77.8	100.7	104.0	105.8	103.6	105.6	107.3	103.6	104.9	105.8	**106.1**	◆	7.4%	21.7%
United Arab Emirates	8.7	8.3	8.1	7.9	8.6	7.6	7.7	7.3	7.4	7.7	**7.6**	-1.0%	-0.2%	1.6%
Yemen	5.5	8.8	7.1	9.9	9.4	1.9	–	–	–	–	**–**	n/a	-100.0%	–
Total Middle East	103.8	128.7	130.3	135.2	132.2	125.4	126.0	122.3	125.9	127.5	**126.9**	-0.8%	5.9%	26.0%
Algeria	19.5	16.7	14.9	15.0	17.4	16.6	15.5	16.4	13.1	16.6	**15.0**	-10.3%	-2.5%	3.1%
Angola	–	–	–	0.4	0.4	–	0.9	5.0	5.2	5.8	**6.1**	5.4%	n/a	1.2%
Egypt	10.0	9.0	6.9	3.9	0.4	–	0.8	1.2	2.0	4.5	**1.8**	-60.4%	-10.0%	0.4%
Nigeria	24.1	25.7	27.9	22.5	26.1	26.9	24.6	28.2	27.9	28.8	**28.4**	-1.5%	6.0%	5.8%
Other Africa	5.3	5.0	4.6	5.2	5.0	5.0	4.4	4.9	5.5	5.5	**5.1**	-7.5%	0.2%	1.0%
Total Africa	58.8	56.4	54.2	47.0	49.5	48.5	46.2	55.7	53.6	61.2	**56.4**	-8.1%	0.9%	11.6%
Australia	25.8	26.0	28.3	30.5	32.0	39.9	60.4	76.6	91.8	104.7	**106.2**	1.2%	15.3%	21.8%
Brunei	9.0	9.6	9.2	9.5	8.6	8.7	8.6	9.1	8.5	8.8	**8.4**	-4.2%	-0.3%	1.7%
Indonesia	32.4	28.7	24.4	23.1	21.7	21.6	22.4	21.7	20.8	16.5	**16.8**	1.6%	-4.8%	3.4%
Malaysia	31.0	33.2	31.4	33.6	34.0	34.3	33.6	36.1	33.0	35.2	**32.8**	-6.9%	1.5%	6.7%
Papua New Guinea	–	–	–	–	5.0	10.1	10.9	11.1	9.5	11.6	**11.5**	-0.9%	n/a	2.4%
Other Asia Pacific*	–	–	–	0.1	0.2	0.8	0.5	0.8	0.6	0.5	**1.4**	163.9%	n/a	0.3%
Total Asia Pacific	98.3	97.5	93.3	96.8	101.5	115.5	136.4	155.4	164.3	177.2	**177.3**	-0.3%	6.8%	36.3%
Total LNG exports	**302.4**	**328.3**	**324.9**	**326.8**	**333.6**	**337.1**	**358.3**	**393.3**	**430.6**	**483.8**	**487.9**	**0.6%**	**6.8%**	**100.0%**

Gross LNG trade.
*Largely consists of re-exports.
◆Less than 0.05%.
†Less than 0.05.
n/a not available.
Note: Growth rates are adjusted for leap years.

Source: includes GIIGNL, IHS Markit.

Natural gas: Trade movements 2020 as LNG*

Billion cubic metres

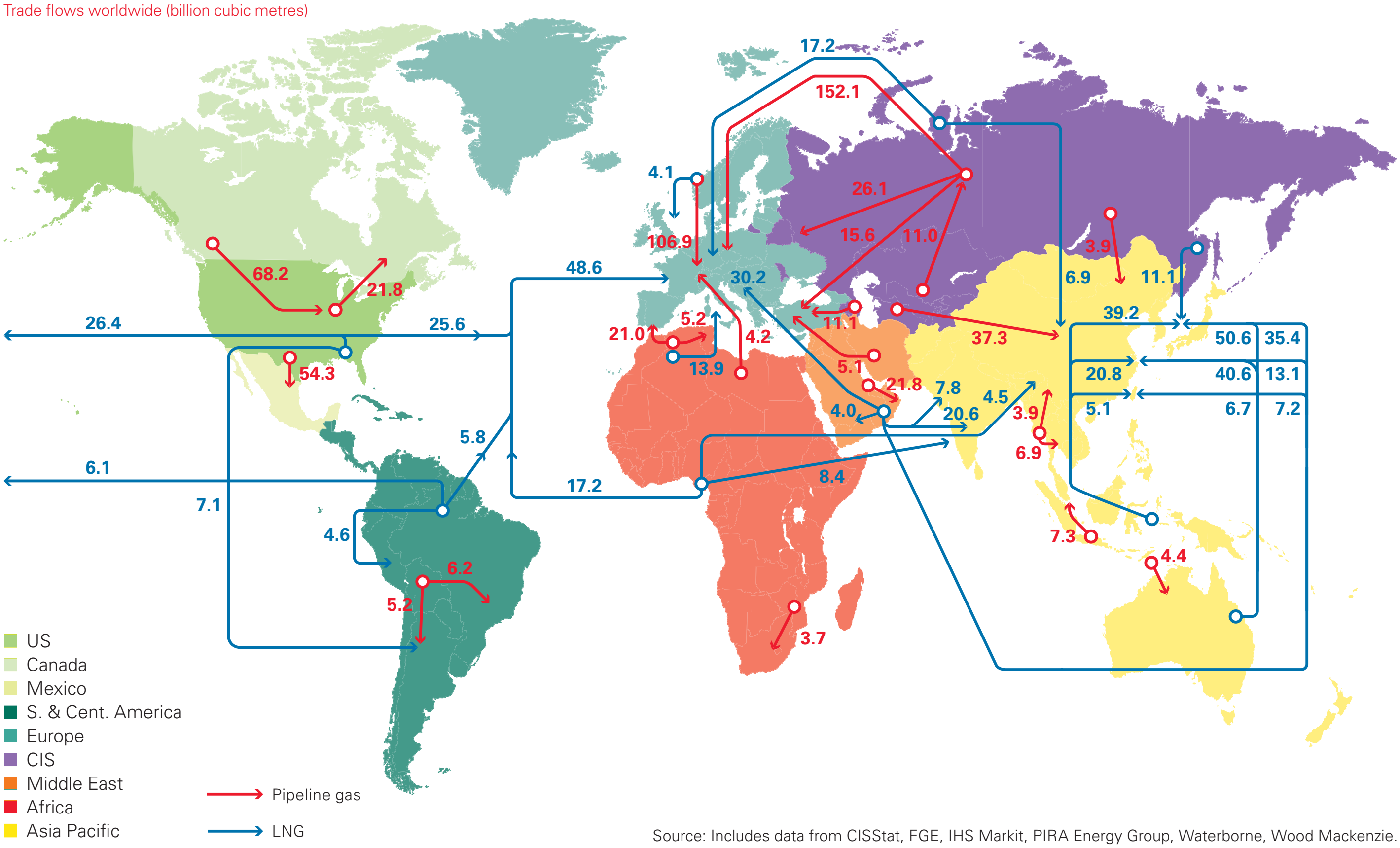
To \ From	US	Peru	Trinidad & Tobago	Other Americas*	Norway	Other Europe*	Russian Federation	Oman	Qatar	United Arab Emirates	Yemen	Algeria	Angola	Egypt	Nigeria	Other Africa	Australia	Brunei	Indonesia	Malaysia	Papua New Guinea	Other Asia Pacific*	**Total imports**
Canada	–	–	0.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**0.8**
Mexico	0.9	0.1	0.6	–	–	0.1	–	–	–	–	–	–	–	–	0.2	0.1	0.1	–	0.3	–	–	–	**2.5**
US	–	–	1.0	†	0.1	–	–	–	–	–	–	–	–	–	0.2	–	–	–	–	–	–	–	**1.3**
North America	0.9	0.1	2.5	†	0.1	0.1	–	–	–	–	–	–	–	–	0.4	0.1	0.1	–	0.3	–	–	–	**4.6**
Argentina	0.5	–	0.3	–	–	–	0.1	–	0.9	–	–	–	–	–	–	–	–	–	–	–	–	–	**1.8**
Brazil	2.8	–	0.4	0.1	–	–	–	–	–	–	–	–	0.1	–	†	–	–	–	–	–	–	–	**3.3**
Chile	2.1	–	0.7	–	–	–	–	–	–	–	–	–	–	–	–	0.7	0.1	–	–	–	–	–	**3.7**
Other S. & Cent. America	1.8	–	2.8	0.3	0.1	†	–	–	–	–	–	0.1	–	–	–	–	–	–	–	–	–	–	**5.1**
S. & Cent. America	7.1	–	4.2	0.4	0.1	†	0.1	–	0.9	–	–	0.1	0.1	–	†	0.7	0.1	–	–	–	–	–	**13.9**
Belgium	1.3	–	–	–	†	–	0.9	–	2.8	–	–	–	0.1	–	–	–	–	–	–	–	–	–	**5.1**
France	2.6	0.1	0.5	–	0.8	–	5.0	–	1.9	–	–	4.3	0.2	–	4.2	–	–	–	–	–	–	–	**19.6**
Italy	2.1	–	0.1	–	–	†	–	–	6.8	–	–	2.8	–	–	0.2	0.1	–	–	–	–	–	–	**12.1**
Spain	5.4	0.2	2.2	0.2	0.5	0.1	3.4	–	3.1	–	–	0.5	0.4	0.1	4.0	1.0	–	–	–	–	–	–	**20.9**
Turkey	2.8	–	0.6	–	0.1	–	0.2	–	3.1	–	–	5.7	0.1	0.1	1.8	0.3	–	–	–	–	–	–	**14.8**
United Kingdom	4.7	–	1.0	–	0.4	–	2.9	–	9.0	–	–	†	–	0.2	0.3	–	–	–	–	–	–	–	**18.6**
Other EU	6.7	0.1	0.9	–	2.3	0.2	4.7	–	3.5	–	–	0.7	0.4	0.1	4.0	0.2	–	–	–	–	–	–	**23.7**
Rest of Europe	–	–	–	–	–	–	0.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**0.1**
Europe	25.6	0.4	5.2	0.2	4.1	0.3	17.2	–	30.2	–	–	13.9	1.1	0.4	14.6	1.6	–	–	–	–	–	–	**114.8**
Egypt	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**–**
Kuwait	0.5	–	–	–	–	0.2	–	0.2	3.1	–	–	0.1	0.4	0.1	1.0	0.2	–	–	–	–	–	–	**5.7**
United Arab Emirates	0.3	–	0.2	–	–	–	0.3	0.3	–	–	–	–	0.2	–	0.3	–	–	–	–	–	–	–	**1.6**
Other Middle East & Africa	0.6	–	0.7	–	–	–	0.3	–	0.1	–	–	–	–	–	0.2	–	–	–	–	–	–	–	**1.9**
Middle East & Africa	1.3	–	0.9	–	–	0.2	0.6	0.5	3.2	–	–	0.1	0.5	0.1	1.5	0.2	–	–	–	–	–	–	**9.2**
China	4.4	1.5	0.3	†	–	0.6	6.9	1.4	11.2	0.4	–	0.2	0.5	0.2	3.3	0.7	40.6	1.0	7.4	8.3	4.1	1.1	**94.0**
India	3.3	–	0.7	–	–	0.2	0.7	1.8	14.1	4.8	–	0.3	3.1	0.2	4.0	1.3	1.4	0.1	–	–	–	–	**35.8**
Japan	6.4	0.9	–	–	–	–	8.4	3.3	11.9	1.4	–	–	–	0.1	1.9	–	39.7	5.4	3.0	14.8	4.7	0.2	**102.0**
Malaysia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.1	–	2.6	1.0	–	–	–	–	**3.6**
Pakistan	1.0	–	–	–	–	–	0.2	0.2	7.1	0.5	–	0.4	0.1	0.4	0.6	–	–	–	0.1	0.1	–	–	**10.6**
Singapore	0.8	–	0.1	–	–	–	0.1	0.2	0.5	–	–	–	0.3	0.1	–	0.1	3.2	0.1	0.4	–	–	–	**5.7**
South Korea	8.0	2.2	0.1	–	–	–	2.8	5.4	13.0	0.3	–	–	0.5	0.1	0.5	0.3	10.9	0.4	3.7	6.7	0.4	0.1	**55.3**
Taiwan	1.5	–	0.2	–	–	–	3.3	0.1	6.9	0.3	–	–	–	0.2	0.5	–	6.7	0.3	1.6	1.0	2.2	–	**24.7**
Thailand	0.7	–	0.2	–	–	–	–	0.2	3.0	–	–	–	–	0.1	0.3	0.1	1.1	0.2	0.3	1.3	0.1	–	**7.5**
Other Asia Pacific	0.4	–	–	–	–	–	0.1	–	4.1	–	–	0.1	–	–	0.8	0.1	–	–	–	0.6	–	0.1	**6.1**
Asia Pacific	26.4	4.6	1.5	†	–	0.7	22.5	12.7	71.8	7.6	–	0.9	4.4	1.3	11.9	2.5	106.0	8.4	16.4	32.8	11.5	1.4	**345.4**
Total exports	**61.4**	**5.0**	**14.3**	**0.5**	**4.3**	**1.3**	**40.4**	**13.2**	**106.1**	**7.6**	**–**	**15.0**	**6.1**	**1.8**	**28.4**	**5.1**	**106.2**	**8.4**	**16.8**	**32.8**	**11.5**	**1.4**	**487.9**

*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 standardized using a gross calorific value (GCV) of 40 MJ/m^3.

Source: includes GIIGNL, IHS Markit.

Major trade movements 2020

Trade flows worldwide (billion cubic metres)



Source: Includes data from CISStat, FGE, IHS Markit, PIRA Energy Group, Waterborne, Wood Mackenzie.

Natural gas: Trade movements 2020 by pipeline

Billion cubic metres	From																						
To	Canada	Mexico	US	Bolivia	Other S. & Cent. America	Netherlands	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	–	–	21.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**21.8**
Mexico	–	–	54.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**54.3**
US	68.2	†	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**68.2**
North America	68.2	†	76.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**144.3**
Argentina	–	–	–	5.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**5.2**
Brazil	–	–	–	6.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**6.2**
Other S. & Cent. America	–	–	–	–	1.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**1.1**
S. & Cent. America	–	–	–	11.4	1.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**12.5**
Belgium	–	–	–	–	–	8.4	7.5	1.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**17.6**
France	–	–	–	–	–	3.8	17.6	1.7	–	–	2.6	–	–	–	–	–	–	–	–	–	–	–	**25.8**
Germany	–	–	–	–	–	13.0	31.2	1.6	–	–	56.3	–	–	–	–	–	–	–	–	–	–	–	**102.0**
Italy	–	–	–	–	–	1.6	5.4	8.4	†	–	19.7	–	–	–	–	–	11.5	4.2	–	–	–	–	**50.8**
Netherlands	–	–	–	–	–	–	20.0	7.2	–	–	11.2	–	–	–	–	–	–	–	–	–	–	–	**38.4**
Spain	–	–	–	–	–	–	1.2	2.1	–	–	–	–	–	–	–	–	9.1	–	–	–	–	–	**12.3**
Turkey	–	–	–	–	–	–	–	–	11.1	–	15.6	–	–	5.1	–	–	–	–	–	–	–	–	**31.8**
Ukraine	–	–	–	–	–	–	–	14.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**14.7**
United Kingdom	–	–	–	–	–	1.0	23.7	0.3	–	–	4.7	–	–	–	–	–	–	–	–	–	–	–	**29.7**
Other EU	–	–	–	–	–	–	0.3	56.7	†	–	55.2	–	–	–	–	–	0.4	–	–	–	–	–	**112.6**
Rest of Europe	–	–	–	–	–	0.3	–	6.3	2.2	–	2.5	–	–	–	–	–	–	–	–	–	–	–	**11.3**
Europe	–	–	–	–	–	28.1	106.9	100.7	13.4	–	167.7	–	–	5.1	–	–	21.0	4.2	–	–	–	–	**447.1**
Belarus	–	–	–	–	–	–	–	–	–	–	17.6	–	–	–	–	–	–	–	–	–	–	–	**17.6**
Kazakhstan	–	–	–	–	–	–	–	–	–	–	3.2	0.1	0.7	–	–	–	–	–	–	–	–	–	**4.1**
Russian Federation	–	–	–	–	–	–	–	–	–	7.1	–	3.8	0.1	–	–	–	–	–	–	–	–	–	**11.0**
Other CIS	–	–	–	–	–	–	–	–	–	0.1	5.3	0.5	0.5	0.5	–	–	–	–	–	–	–	–	**6.8**
CIS	–	–	–	–	–	–	–	–	–	7.2	26.1	4.3	1.3	0.5	–	–	–	–	–	–	–	–	**39.5**
United Arab Emirates	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20.2	–	–	–	–	–	–	–	**20.2**
Other Middle East	–	–	–	–	–	–	–	–	0.2	–	–	–	–	10.3	1.6	2.1	–	–	0.9	–	–	–	**15.1**
Middle East	–	–	–	–	–	–	–	–	0.2	–	–	–	–	10.3	21.8	2.1	–	–	0.9	–	–	–	**35.3**
South Africa	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3.7	–	–	–	**3.7**
Other Africa	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2.1	5.2	–	1.0	–	–	–	**8.2**
Africa	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2.1	5.2	–	4.7	–	–	–	**11.9**
Australia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4.4	**4.4**
China	–	–	–	–	–	–	–	–	–	6.8	3.9	27.2	3.3	–	–	–	–	–	–	–	3.9	–	**45.1**
Malaysia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.4	–	–	**0.4**
Singapore	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	7.0	–	1.4	**8.4**
Thailand	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6.9	–	**6.9**
Asia Pacific	–	–	–	–	–	–	–	–	–	6.8	3.9	27.2	3.3	–	–	–	–	–	–	7.3	10.8	5.9	**65.2**
Total exports	**68.2**	**†**	**76.1**	**11.4**	**1.1**	**28.1**	**106.9**	**100.7**	**13.6**	**14.0**	**197.7**	**31.6**	**4.6**	**16.0**	**21.8**	**4.1**	**26.1**	**4.2**	**5.6**	**7.3**	**10.8**	**5.9**	**755.8**

†Less than 0.05.

Source: includes data from FGE MENAgas service, IHS Markit.

Note: As far as possible, the data above represents standard cubic metres (measured at 15°C and 1013 mbar) and has been standardized using a gross calorific value (GCV) of 40 MJ/m³.

Coal

Total proved reserves at end 2020

Million tonnes	Anthracite and bituminous	Sub-bituminous and lignite	**Total**	Share of Total	R/P ratio
Canada	4346	2236	**6582**	0.6%	166
Mexico	1160	51	**1211**	0.1%	185
US	218938	30003	**248941**	23.2%	*
Total North America	224444	32290	**256734**	23.9%	484
Brazil	1547	5049	**6596**	0.6%	*
Colombia	4554	–	**4554**	0.4%	90
Venezuela	731	–	**731**	0.1%	*
Other S. & Cent. America	1784	24	**1808**	0.2%	*
Total S. & Cent. America	8616	5073	**13689**	1.3%	240
Bulgaria	192	2174	**2366**	0.2%	192
Czech Republic	1081	2514	**3595**	0.3%	113
Germany	–	35900	**35900**	3.3%	334
Greece	–	2876	**2876**	0.3%	205
Hungary	276	2633	**2909**	0.3%	475
Poland	22530	5865	**28395**	2.6%	282
Romania	11	280	**291**	◆	19
Serbia	402	7112	**7514**	0.7%	189
Spain	868	319	**1187**	0.1%	282
Turkey	550	10975	**11525**	1.1%	168
Ukraine	32039	2336	**34375**	3.2%	*
United Kingdom	26	–	**26**	◆	16
Other Europe	1109	5172	**6281**	0.6%	189
Total Europe	59084	78156	**137240**	12.8%	299
Kazakhstan	25605	–	**25605**	2.4%	226
Russian Federation	71719	90447	**162166**	15.1%	407
Uzbekistan	1375	–	**1375**	0.1%	333
Other CIS	1509	–	**1509**	0.1%	336
Total CIS	100208	90447	**190655**	17.8%	367
South Africa	9893	–	**9893**	0.9%	40
Zimbabwe	502	–	**502**	◆	153
Other Africa	4376	66	**4442**	0.4%	280
Middle East	1203	–	**1203**	0.1%	*
Total Middle East & Africa	15974	66	**16040**	1.5%	60
Australia	73719	76508	**150227**	14.0%	315
China	135069	8128	**143197**	13.3%	37
India	105979	5073	**111052**	10.3%	147
Indonesia	23141	11728	**34869**	3.2%	62
Japan	340	10	**350**	◆	453
Mongolia	1170	1350	**2520**	0.2%	58
New Zealand	825	6750	**7575**	0.7%	*
Pakistan	207	2857	**3064**	0.3%	396
South Korea	326	–	**326**	◆	320
Thailand	–	1063	**1063**	0.1%	80
Vietnam	3116	244	**3360**	0.3%	69
Other Asia Pacific	1421	726	**2147**	0.2%	33
Total Asia Pacific	345313	114437	**459750**	42.8%	78
Total World	**753639**	**320469**	**1074108**	**100.0%**	**139**
of which: OECD	331303	177130	**508433**	47.3%	363
Non-OECD	422336	143339	**565675**	52.7%	90
European Union	25539	53051	**78590**	7.3%	266

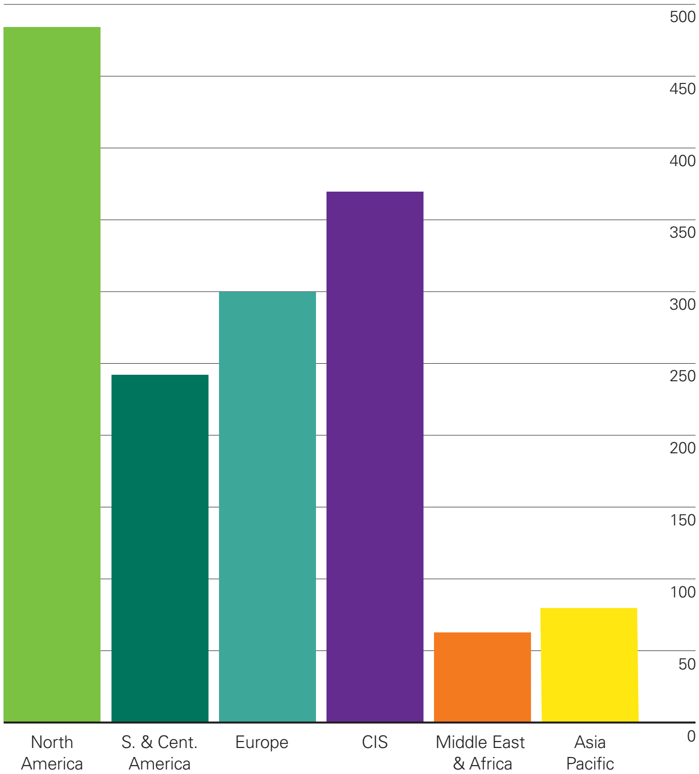
*More than 500 years.
◆Less than 0.05%.

Source: Federal Institute for Geosciences and Natural Resources (BGR) Energy Study 2021.

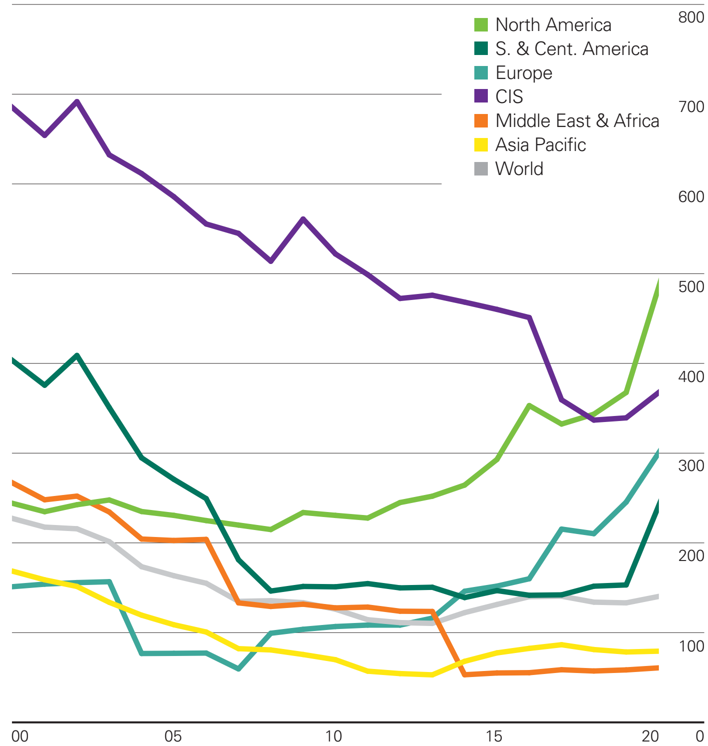
Notes: Total proved reserves of coal – generally taken to be those quantities that geological and engineering information indicates with reasonable certainty can be recovered in the future from known reservoirs under existing economic and operating conditions. The data series for total proved coal reserves 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 bp's view of proved reserves by country.
Reserves-to-production (R/P) ratio – if the reserves remaining at the end of any year are divided by the production in that year, the result is the length of time that those remaining reserves would last if production were to continue at that rate.
Reserves-to-production (R/P) ratios are calculated excluding other solid fuels in reserves and production.
Shares of total and R/P ratios are calculated using million tonnes figures.

Reserves-to-production (R/P) ratios
Years

2020 by region

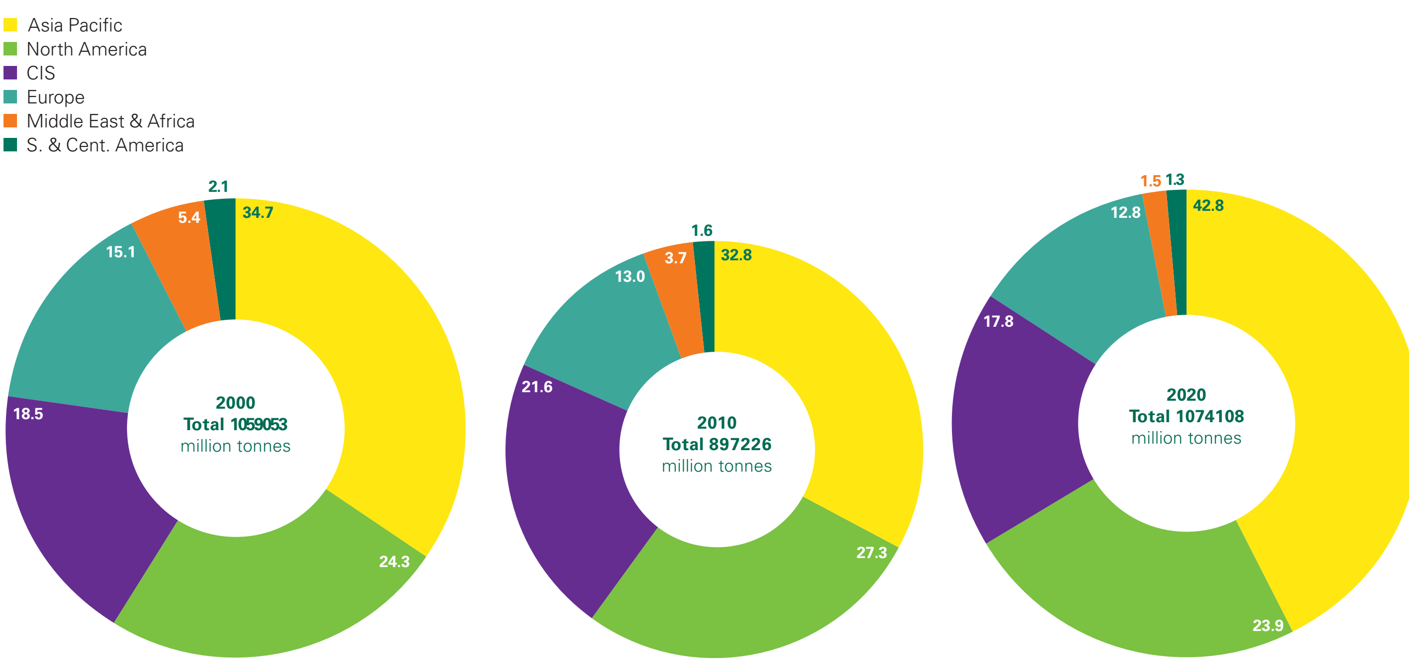


History



World coal reserves in 2020 stood at 1074 billion tonnes and are heavily concentrated in just a few countries: US (23%), Russia (15%), Australia (14%) and China (13%). Most of the reserves are anthracite and bituminous (70%). The current global R/P ratio shows that coal reserves in 2020 accounted for 139 years of current production with North America (484 years) and CIS (367 years) the regions with the highest ratios.

Distribution of proved reserves in 2000, 2010 and 2020
Percentage



Coal: Production*

Exajoules	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	1.48	1.48	1.49	1.53	1.51	1.36	1.37	1.33	1.22	1.14	**0.89**	-22.0%	-2.0%	0.6%
Mexico	0.31	0.39	0.31	0.30	0.30	0.29	0.25	0.31	0.28	0.23	**0.15**	-33.1%	-1.0%	0.1%
US	22.09	22.27	20.72	20.05	20.33	17.99	14.70	15.66	15.40	14.29	**10.71**	-25.2%	-4.1%	6.7%
Total North America	23.88	24.15	22.53	21.87	22.15	19.64	16.33	17.30	16.90	15.66	**11.76**	-25.1%	-3.9%	7.4%
Brazil	0.11	0.11	0.12	0.15	0.15	0.12	0.11	0.09	0.10	0.09	**0.09**	3.9%	-3.4%	0.1%
Colombia	2.14	2.47	2.56	2.46	2.55	2.46	2.60	2.60	2.42	2.43	**1.46**	-40.2%	1.5%	0.9%
Venezuela	0.08	0.08	0.06	0.04	0.02	0.02	0.01	0.01	†	0.01	**0.02**	181.9%	-22.8%	◆
Other S. & Cent. America	0.01	0.02	0.02	0.07	0.12	0.10	0.08	0.05	0.05	0.03	**0.03**	-10.5%	7.4%	◆
Total S. & Cent. America	2.35	2.68	2.76	2.72	2.85	2.70	2.81	2.76	2.57	2.56	**1.60**	-37.6%	0.9%	1.0%
Bulgaria	0.21	0.26	0.23	0.20	0.21	0.25	0.21	0.24	0.22	0.20	**0.16**	-20.6%	0.6%	0.1%
Czech Republic	0.87	0.88	0.85	0.74	0.71	0.71	0.67	0.64	0.62	0.56	**0.43**	-24.3%	-4.3%	0.3%
Germany	1.92	1.96	2.00	1.89	1.85	1.79	1.66	1.65	1.58	1.19	**0.98**	-17.9%	-4.8%	0.6%
Greece	0.31	0.31	0.34	0.28	0.27	0.24	0.17	0.19	0.18	0.21	**0.11**	-49.0%	-4.6%	0.1%
Hungary	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.05	0.05	0.04	**0.04**	-10.8%	-4.4%	◆
Poland	2.32	2.33	2.42	2.39	2.26	2.22	2.18	2.08	1.98	1.87	**1.68**	-10.1%	-2.3%	1.1%
Romania	0.25	0.28	0.27	0.19	0.19	0.20	0.18	0.19	0.17	0.16	**0.11**	-30.9%	-5.0%	0.1%
Serbia	0.30	0.33	0.31	0.32	0.24	0.30	0.30	0.30	0.28	0.29	**0.29**	1.7%	-0.7%	0.2%
Spain	0.14	0.11	0.10	0.07	0.07	0.05	0.03	0.05	0.03	0.07	**0.08**	14.3%	-8.4%	◆
Turkey	0.73	0.75	0.71	0.65	0.68	0.54	0.65	0.63	0.69	0.73	**0.60**	-18.1%	◆	0.4%
Ukraine	1.35	1.52	1.64	1.60	1.09	0.72	0.76	0.57	0.59	0.58	**0.54**	-8.0%	-8.0%	0.3%
United Kingdom	0.48	0.48	0.44	0.33	0.31	0.23	0.12	0.09	0.07	0.06	**0.05**	-23.0%	-18.0%	◆
Other Europe	0.66	0.66	0.59	0.69	0.66	0.60	0.56	0.57	0.82	0.51	**0.46**	-8.6%	-2.4%	0.3%
Total Europe	9.60	9.94	9.96	9.44	8.60	7.90	7.56	7.25	7.28	6.48	**5.53**	-14.8%	-4.0%	3.5%
Kazakhstan	1.99	2.08	2.16	2.15	2.05	1.93	1.85	2.02	2.13	2.07	**2.04**	-1.7%	1.3%	1.3%
Russian Federation	6.32	6.60	7.05	7.25	7.39	7.80	8.12	8.62	9.23	9.23	**8.37**	-9.6%	4.5%	5.2%
Uzbekistan	0.04	0.05	0.04	0.05	0.05	0.04	0.05	0.05	0.05	0.05	**0.05**	1.8%	1.2%	◆
Other CIS	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.09	0.12	0.12	**0.12**	-2.3%	12.8%	0.1%
Total CIS	8.39	8.77	9.31	9.51	9.56	9.84	10.10	10.78	11.52	11.47	**10.58**	-8.0%	3.9%	6.6%
Total Middle East	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	**0.05**	-0.3%	3.8%	◆
South Africa	6.03	6.00	6.14	6.08	6.20	5.96	6.01	5.97	6.01	6.21	**5.97**	-4.1%	0.6%	3.7%
Zimbabwe	0.07	0.07	0.04	0.08	0.16	0.12	0.07	0.08	0.09	0.07	**0.09**	24.5%	4.7%	0.1%
Other Africa	0.04	0.05	0.18	0.21	0.24	0.25	0.33	0.61	0.76	0.55	**0.41**	-25.8%	34.3%	0.3%
Total Africa	6.15	6.11	6.36	6.38	6.59	6.33	6.42	6.66	6.87	6.84	**6.47**	-5.6%	1.4%	4.1%
Australia	10.49	10.26	11.13	11.97	12.81	12.80	12.83	12.50	13.09	13.21	**12.42**	-6.2%	2.7%	7.8%
China	69.72	77.53	78.44	79.32	78.05	76.59	70.82	73.17	76.87	79.76	**80.91**	1.2%	2.2%	50.7%
India	10.57	10.49	10.68	10.71	11.28	11.77	11.89	11.99	12.80	12.60	**12.68**	0.4%	2.0%	7.9%
Indonesia	6.79	8.72	9.52	11.71	11.30	11.39	11.25	11.38	13.76	15.20	**13.88**	-9.0%	9.2%	8.7%
Japan	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	**0.02**	1.5%	-4.5%	◆
Mongolia	0.48	0.63	0.59	0.64	0.47	0.46	0.67	0.94	1.04	1.09	**0.82**	-24.8%	14.7%	0.5%
New Zealand	0.14	0.13	0.13	0.12	0.10	0.09	0.07	0.07	0.08	0.08	**0.07**	-8.6%	-3.7%	◆
Pakistan	0.06	0.06	0.06	0.06	0.06	0.06	0.08	0.08	0.08	0.13	**0.15**	14.0%	6.8%	0.1%
South Korea	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	**0.02**	-6.3%	-7.9%	◆
Thailand	0.21	0.25	0.20	0.20	0.19	0.16	0.18	0.17	0.16	0.15	**0.14**	-7.3%	-2.8%	0.1%
Vietnam	1.05	1.09	0.99	0.96	0.96	0.98	0.91	0.90	0.99	1.09	**1.14**	4.5%	0.5%	0.7%
Other Asia Pacific	0.87	0.93	0.96	0.98	0.99	1.06	1.33	1.14	1.06	1.48	**1.37**	-7.5%	6.2%	0.9%
Total Asia Pacific	100.45	110.16	112.76	116.72	116.30	115.40	110.09	112.41	119.99	124.81	**123.62**	-1.2%	2.9%	77.5%
Total World	**150.84**	**161.85**	**163.71**	**166.66**	**166.07**	**161.85**	**153.33**	**157.20**	**165.17**	**167.86**	**159.61**	**-5.2%**	**1.6%**	**100.0%**
of which: OECD	43.99	44.39	43.70	43.43	44.42	41.31	37.81	38.28	38.18	36.42	**29.93**	-18.0%	-1.7%	18.8%
Non-OECD	106.85	117.46	120.00	123.23	121.65	120.54	115.52	118.92	127.00	131.44	**129.67**	-1.6%	2.8%	81.2%
European Union	6.45	6.57	6.59	6.24	5.99	5.83	5.44	5.39	5.20	4.56	**3.79**	-17.1%	-3.6%	2.4%

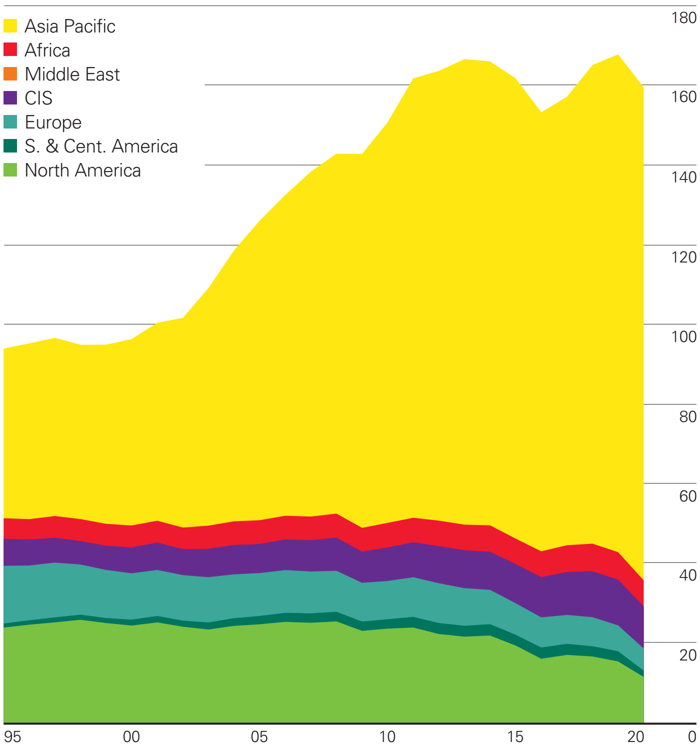
*Commercial solid fuels only, i.e. bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels. Includes coal produced for coal-to-liquids and coal-to-gas transformations.
†Less than 0.005.
◆Less than 0.05%.
Note: Growth rates are adjusted for leap years.
Coal production data expressed in million tonnes is available at *bp.com/statisticalreview.*

Coal: Consumption*

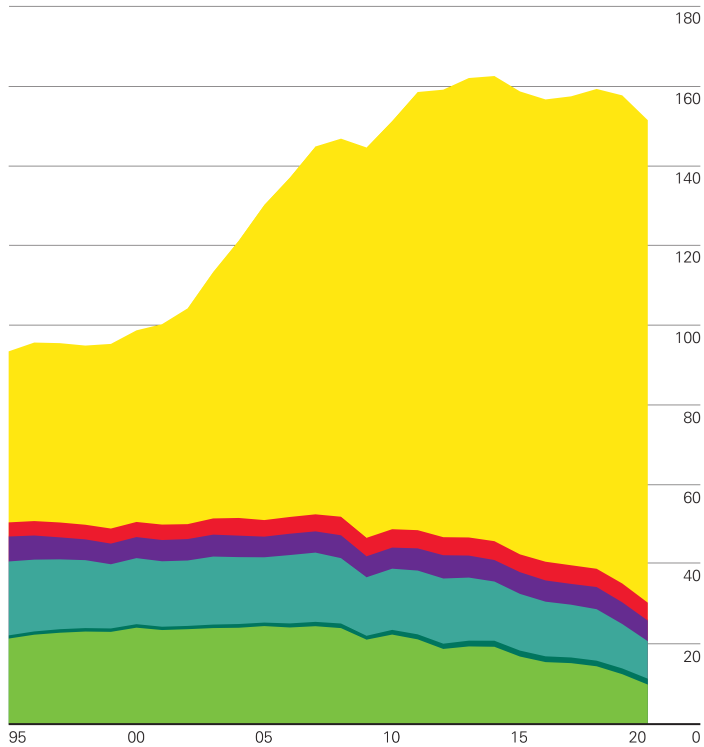
Exajoules	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	1.03	0.93	0.89	0.86	0.82	0.82	0.77	0.78	0.65	0.63	**0.50**	-22.2%	-4.5%	0.3%
Mexico	0.53	0.62	0.54	0.53	0.53	0.53	0.52	0.64	0.57	0.54	**0.21**	-61.5%	2.3%	0.1%
US	20.88	19.70	17.42	18.08	18.04	15.58	14.26	13.87	13.28	11.34	**9.20**	-19.1%	-5.4%	6.1%
Total North America	22.45	21.25	18.85	19.48	19.39	16.94	15.55	15.29	14.50	12.52	**9.91**	-21.1%	-5.1%	6.5%
Argentina	0.05	0.05	0.05	0.05	0.06	0.06	0.04	0.05	0.05	0.03	**0.03**	8.8%	-1.7%	◆
Brazil	0.61	0.65	0.64	0.69	0.73	0.74	0.67	0.70	0.69	0.65	**0.58**	-10.9%	3.4%	0.4%
Chile	0.19	0.24	0.28	0.32	0.32	0.31	0.31	0.32	0.31	0.31	**0.30**	-4.4%	6.5%	0.2%
Colombia	0.20	0.16	0.20	0.21	0.22	0.21	0.23	0.17	0.16	0.20	**0.27**	31.4%	1.8%	0.2%
Ecuador	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Peru	0.03	0.03	0.04	0.04	0.04	0.03	0.04	0.04	0.05	0.03	**0.02**	-26.8%	-0.9%	◆
Trinidad & Tobago	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Venezuela	0.01	0.01	0.01	0.01	0.01	0.01	0.01	†	†	†	**†**	-35.1%	-21.9%	◆
Other S. & Cent. America	0.10	0.11	0.11	0.13	0.14	0.15	0.16	0.13	0.15	0.23	**0.28**	21.6%	9.5%	0.2%
Total S. & Cent. America	1.18	1.26	1.32	1.45	1.52	1.50	1.45	1.42	1.41	1.45	**1.48**	1.5%	4.1%	1.0%
Austria	0.14	0.15	0.13	0.14	0.13	0.14	0.13	0.13	0.12	0.12	**0.09**	-21.8%	-0.1%	0.1%
Belgium	0.16	0.15	0.14	0.15	0.14	0.14	0.13	0.13	0.13	0.13	**0.11**	-17.6%	0.5%	0.1%
Czech Republic	0.79	0.77	0.74	0.71	0.69	0.68	0.69	0.65	0.65	0.60	**0.49**	-19.0%	-2.3%	0.3%
Finland	0.28	0.23	0.19	0.21	0.19	0.16	0.18	0.17	0.18	0.15	**0.13**	-10.4%	-4.1%	0.1%
France	0.48	0.41	0.46	0.48	0.36	0.36	0.35	0.38	0.34	0.27	**0.19**	-27.9%	-5.1%	0.1%
Germany	3.23	3.28	3.37	3.47	3.33	3.29	3.20	3.01	2.90	2.25	**1.84**	-18.2%	-2.9%	1.2%
Greece	0.33	0.33	0.34	0.29	0.28	0.24	0.18	0.20	0.19	0.22	**0.11**	-47.3%	-4.7%	0.1%
Hungary	0.11	0.11	0.11	0.10	0.09	0.10	0.09	0.09	0.09	0.08	**0.07**	-6.7%	-3.3%	◆
Italy	0.57	0.64	0.66	0.57	0.55	0.52	0.46	0.40	0.37	0.28	**0.21**	-26.1%	-6.0%	0.1%
Netherlands	0.32	0.31	0.34	0.34	0.38	0.46	0.43	0.39	0.35	0.27	**0.18**	-33.4%	-1.5%	0.1%
Norway	0.03	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	**0.03**	-0.3%	3.4%	◆
Poland	2.31	2.30	2.14	2.23	2.07	2.04	2.07	2.08	2.09	1.86	**1.67**	-10.4%	-1.5%	1.1%
Portugal	0.07	0.09	0.12	0.11	0.11	0.14	0.12	0.14	0.11	0.05	**0.02**	-53.8%	-7.9%	◆
Romania	0.29	0.34	0.32	0.25	0.24	0.25	0.22	0.23	0.21	0.21	**0.15**	-27.0%	-4.1%	0.1%
Spain	0.29	0.54	0.65	0.48	0.49	0.57	0.44	0.56	0.46	0.16	**0.07**	-53.7%	-8.8%	◆
Sweden	0.12	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	**0.07**	-9.3%	-0.2%	◆
Switzerland	0.01	0.01	0.01	0.01	0.01	0.01	†	†	†	†	**†**	-0.3%	-4.7%	◆
Turkey	1.32	1.42	1.53	1.32	1.51	1.45	1.61	1.65	1.71	1.76	**1.66**	-5.8%	3.1%	1.1%
Ukraine	1.60	1.74	1.79	1.73	1.49	1.14	1.36	1.08	1.17	1.08	**0.98**	-8.9%	-3.3%	0.6%
United Kingdom	1.29	1.32	1.63	1.55	1.25	0.97	0.46	0.38	0.32	0.22	**0.19**	-11.3%	-16.0%	0.1%
Other Europe	1.60	1.71	1.55	1.55	1.42	1.44	1.44	1.43	1.39	1.34	**1.10**	-18.0%	-1.4%	0.7%
Total Europe	15.34	15.99	16.34	15.81	14.84	14.21	13.70	13.23	12.90	11.13	**9.40**	-15.8%	-2.7%	6.2%
Azerbaijan	†	†	†	†	†	†	†	†	†	†	**†**	-0.3%	-16.4%	◆
Belarus	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.04	0.05	0.06	**0.06**	-0.7%	8.0%	◆
Kazakhstan	1.40	1.52	1.58	1.57	1.55	1.43	1.42	1.52	1.70	1.66	**1.64**	-1.8%	2.5%	1.1%
Russian Federation	3.79	3.94	4.12	3.79	3.67	3.86	3.74	3.51	3.63	3.57	**3.27**	-8.5%	-0.8%	2.2%
Turkmenistan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Uzbekistan	0.03	0.04	0.05	0.07	0.07	0.05	0.06	0.06	0.09	0.08	**0.10**	32.4%	6.6%	0.1%
Other CIS	0.04	0.05	0.05	0.06	0.07	0.08	0.08	0.09	0.09	0.09	**0.11**	27.9%	7.8%	0.1%
Total CIS	5.29	5.57	5.84	5.52	5.39	5.45	5.33	5.22	5.56	5.45	**5.17**	-5.2%	0.3%	3.4%
Iran	0.05	0.06	0.05	0.06	0.07	0.07	0.06	0.07	0.07	0.07	**0.07**	-0.3%	2.7%	◆
Iraq	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Israel	0.32	0.33	0.37	0.30	0.28	0.27	0.23	0.21	0.20	0.21	**0.17**	-19.8%	-4.3%	0.1%
Kuwait	†	†	–	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**†**	-82.3%	–	◆
Oman	†	†	†	†	†	†	†	†	†	0.01	**0.01**	90.7%	61.6%	◆
Qatar	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Saudi Arabia	†	†	†	†	0.01	0.01	†	†	†	†	**†**	-0.3%	16.4%	◆
United Arab Emirates	0.03	0.02	0.06	0.07	0.08	0.07	0.08	0.09	0.08	0.08	**0.11**	30.6%	21.9%	0.1%
Other Middle East	0.01	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.01	**0.01**	0.4%	6.1%	◆
Total Middle East	0.42	0.43	0.50	0.47	0.47	0.44	0.41	0.40	0.38	0.40	**0.38**	-3.9%	-0.1%	0.3%
Algeria	0.01	0.01	0.01	0.01	0.01	0.01	†	0.01	0.02	0.02	**0.02**	-0.3%	-1.6%	◆
Egypt	0.02	0.02	0.02	0.02	0.02	0.03	0.05	0.05	0.09	0.08	**0.03**	-62.1%	12.3%	◆
Morocco	0.12	0.12	0.13	0.13	0.17	0.19	0.18	0.19	0.22	0.28	**0.28**	0.1%	9.4%	0.2%
South Africa	3.89	3.79	3.70	3.70	3.75	3.52	3.78	3.72	3.53	3.64	**3.48**	-4.6%	-0.8%	2.3%
Other Africa	0.15	0.18	0.17	0.22	0.32	0.28	0.26	0.31	0.35	0.30	**0.30**	-0.4%	7.8%	0.2%
Total Africa	4.19	4.13	4.02	4.07	4.26	4.02	4.28	4.27	4.20	4.32	**4.11**	-5.1%	0.2%	2.7%
Australia	2.19	2.13	2.00	1.89	1.88	1.95	1.94	1.88	1.83	1.75	**1.69**	-4.0%	-2.9%	1.1%
Bangladesh	0.03	0.05	0.04	0.05	0.03	0.09	0.07	0.08	0.09	0.14	**0.15**	11.1%	11.0%	0.1%
China	73.22	79.71	80.71	82.44	82.49	80.94	80.21	80.59	81.11	81.79	**82.27**	0.3%	1.5%	54.3%
China Hong Kong SAR	0.26	0.31	0.31	0.33	0.34	0.28	0.28	0.26	0.26	0.26	**0.14**	-46.9%	-1.5%	0.1%
India	12.16	12.75	13.82	14.79	16.23	16.55	16.84	17.44	18.59	18.60	**17.54**	-6.0%	4.7%	11.6%
Indonesia	1.65	1.96	2.22	2.39	1.89	2.14	2.23	2.39	2.84	3.41	**3.26**	-4.9%	9.4%	2.2%
Japan	4.87	4.62	4.88	5.07	4.99	5.03	5.02	5.10	4.99	4.91	**4.57**	-7.0%	1.4%	3.0%
Malaysia	0.62	0.62	0.66	0.63	0.64	0.73	0.78	0.87	0.93	0.95	**1.14**	18.7%	7.9%	0.8%
New Zealand	0.06	0.06	0.07	0.06	0.06	0.06	0.05	0.05	0.06	0.06	**0.06**	-4.8%	-0.5%	◆
Pakistan	0.19	0.17	0.17	0.13	0.20	0.19	0.22	0.30	0.50	0.56	**0.62**	11.0%	10.5%	0.4%
Philippines	0.29	0.32	0.34	0.42	0.45	0.49	0.55	0.65	0.68	0.73	**0.73**	-0.9%	11.2%	0.5%
Singapore	†	†	†	0.01	0.02	0.02	0.02	0.04	0.02	0.02	**0.02**	2.3%	60.6%	◆
South Korea	3.23	3.50	3.38	3.41	3.53	3.58	3.41	3.61	3.63	3.44	**3.03**	-12.2%	1.8%	2.0%
Sri Lanka	†	0.01	0.02	0.02	0.04	0.05	0.05	0.06	0.05	0.06	**0.07**	7.0%	38.1%	◆
Taiwan	1.63	1.69	1.65	1.68	1.70	1.65	1.64	1.70	1.70	1.67	**1.63**	-2.5%	1.0%	1.1%
Thailand	0.65	0.66	0.69	0.68	0.75	0.73	0.75	0.75	0.80	0.71	**0.73**	1.6%	1.3%	0.5%
Vietnam	0.61	0.73	0.67	0.72	0.87	1.10	1.19	1.19	1.58	2.07	**2.10**	1.4%	16.0%	1.4%
Other Asia Pacific	0.67	0.56	0.58	0.45	0.51	0.49	0.62	0.62	0.63	1.23	**1.23**	-0.6%	6.0%	0.8%
Total Asia Pacific	102.34	109.85	112.20	115.19	116.62	116.07	115.90	117.57	120.30	122.37	**120.97**	-1.4%	2.3%	79.9%
Total World	**151.21**	**158.47**	**159.08**	**161.97**	**162.50**	**158.64**	**156.61**	**157.40**	**159.26**	**157.64**	**151.42**	**-4.2%**	**0.9%**	**100.0%**
of which: OECD	45.99	45.12	43.29	43.63	42.94	40.24	37.96	37.65	36.33	32.30	**27.46**	-15.2%	-2.9%	18.1%
Non-OECD	105.22	113.36	115.79	118.34	119.56	118.40	118.65	119.75	122.93	125.34	**123.96**	-1.4%	2.2%	81.9%
European Union	10.44	10.75	10.70	10.50	10.00	9.99	9.58	9.44	9.03	7.32	**5.91**	-19.4%	-3.0%	3.9%

*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 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.
Growth rates are adjusted for leap years.

Coal: Production by region
Exajoules

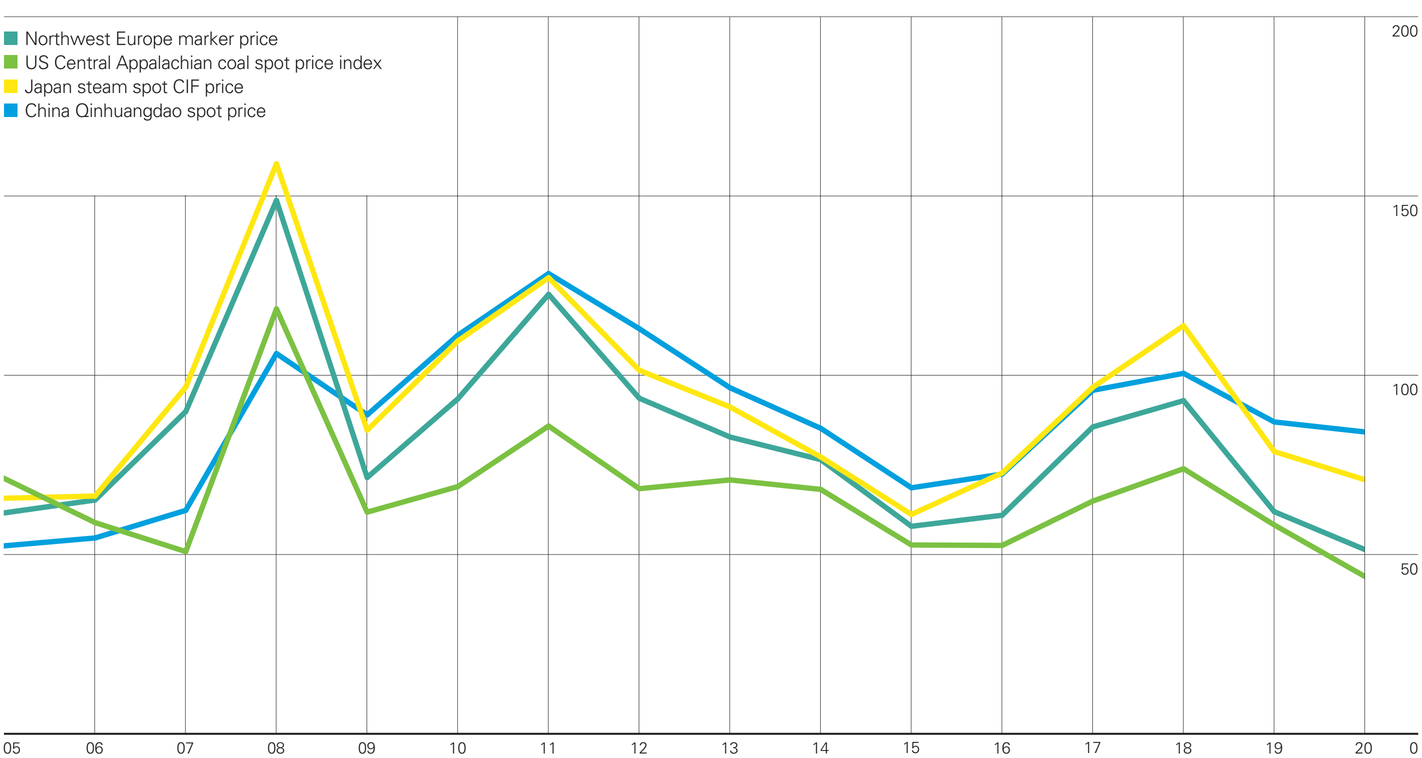


Coal: Consumption by region
Exajoules



World coal consumption fell by 4.2%, its fourth decline in six years. In the non-OECD, the only notable increases in consumption were in China (0.3%) and Malaysia (18.7%), while significant consumption declines were recorded for India (-6.0%) and Indonesia (-4.9%). OECD demand fell sharply, led by the US (-19.1%) and South Korea (-12.2%), to the lowest level in our data series (which goes back to 1965). Global coal production declined by -5.2%, with China providing the only significant increase (1.2%). The largest declines in production also came from the US (-25.2%) and Indonesia (-9.0%).

Coal prices
US dollars per tonne



Coal: Prices

US dollars per tonne	Northwest Europe marker price†	US Central Appalachian coal spot price index‡	Japan steam spot CIF price†	China Qinhuangdao spot price†
2000	35.99	29.90	–	27.52
2001	39.03	50.15	37.69	31.78
2002	31.65	33.20	31.47	33.19
2003	43.60	38.52	39.61	31.74
2004	72.13	64.90	74.22	42.76
2005	60.54	70.12	64.62	51.34
2006	64.11	57.82	65.22	53.53
2007	88.79	49.73	95.59	61.23
2008	147.67	117.42	157.88	104.97
2009	70.39	60.73	83.59	87.86
2010	92.35	67.87	108.47	110.08
2011	121.48	84.75	126.13	127.27
2012	92.50	67.28	100.30	111.89
2013	81.69	69.72	90.07	95.42
2014	75.38	67.08	76.13	84.12
2015	56.79	51.57	60.10	67.53
2016	59.87	51.45	71.66	71.35
2017	84.51	63.83	95.57	94.72
2018	91.83	72.84	112.73	99.45
2019	60.86	57.16	77.63	85.89
2020	50.28	42.77	69.77	83.10

†Source: IHS Markit Northwest Europe prices for 2000 are the average of the monthly marker, 2001-2020 the average of weekly prices. IHS Markit Japan prices basis = 6,000 kilocalories per kilogram NAR CIF. Chinese prices are the average monthly price for 2000-2005, weekly prices 2006-2020, 5,500 kilocalories per kilogram NAR, including cost and freight (CFR).
‡Source: S&P Global Platts ©2020, S&P Global Inc. Prices are for Central Appalachian 12,500 Btu, 1.2 SO_2 coal, FOB. Prices for 1999-2000 are by coal price publication date, 2001-2005 by coal price assessment date. 2006-2020 weekly CAPP 12,500 Btu, 1.6 SO_2 coal, FOB.
Note: CIF = cost+insurance+freight (average prices); FOB = free on board.

Coal: Trade movements

Exajoules	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Imports														
Canada	0.36	0.24	0.23	0.22	0.26	0.22	0.19	0.22	0.23	0.21	**0.18**	-14.7%	-5.3%	0.6%
Mexico	0.22	0.21	0.22	0.20	0.22	0.23	0.21	0.34	0.34	0.24	**0.03**	-87.1%	3.1%	0.1%
US	0.51	0.36	0.27	0.24	0.28	0.28	0.25	0.19	0.15	0.17	**0.14**	-15.3%	-11.5%	0.4%
S. & Cent. America	0.85	0.99	0.88	1.06	1.06	1.00	1.06	1.21	1.19	1.12	**1.04**	-7.4%	5.3%	3.3%
Europe	4.82	5.63	6.09	5.85	6.09	6.03	5.40	5.86	6.44	5.12	**3.90**	-24.0%	0.2%	12.3%
CIS	0.37	0.59	0.53	0.56	0.56	0.53	0.48	0.56	0.61	0.65	**0.58**	-11.0%	2.3%	1.8%
Middle East	0.35	0.43	0.49	0.44	0.49	0.38	0.34	0.36	0.37	0.34	**0.31**	-9.3%	-1.7%	1.0%
Africa	0.32	0.34	0.31	0.81	0.37	0.44	0.50	0.59	0.80	0.64	**0.49**	-23.0%	9.2%	1.6%
China	4.45	5.20	6.71	7.63	6.62	4.69	5.65	5.87	6.13	6.40	**6.61**	3.1%	6.9%	20.8%
India	2.00	2.37	3.09	3.66	4.65	4.92	6.46	5.25	5.68	4.70	**4.22**	-10.4%	10.1%	13.3%
Japan	4.84	4.61	4.87	5.06	5.00	5.05	5.01	5.06	5.01	4.90	**4.56**	-7.2%	1.5%	14.3%
South Korea	3.11	3.38	3.30	3.32	3.43	3.54	3.53	3.89	3.92	3.73	**3.26**	-12.8%	3.3%	10.3%
Other Asia Pacific	3.18	3.29	3.65	3.61	2.73	3.96	4.60	5.05	5.55	5.57	**6.45**	15.6%	7.1%	20.3%
Total World	**25.39**	**27.64**	**30.61**	**32.65**	**31.76**	**31.27**	**33.69**	**34.45**	**36.42**	**33.78**	**31.78**	**-6.2%**	**4.0%**	**100.0%**
Exports														
Canada	0.92	1.03	0.99	1.13	1.00	0.86	0.78	0.94	1.04	1.02	**0.97**	-5.9%	3.5%	3.0%
US	2.02	2.50	3.02	2.88	2.38	1.89	1.52	2.38	2.88	2.19	**1.62**	-26.4%	4.2%	5.1%
Colombia	1.78	2.02	2.25	2.05	2.27	2.19	2.33	2.48	2.43	2.08	**1.66**	-20.5%	2.5%	5.2%
Europe	0.12	0.16	0.20	0.68	0.13	0.10	0.13	0.19	0.25	0.24	**0.22**	-10.0%	0.3%	0.7%
Russia	2.50	2.86	3.23	3.55	3.78	4.11	4.47	5.09	5.78	5.79	**5.66**	-2.4%	9.0%	17.8%
Other CIS	0.35	0.58	0.50	0.51	0.51	0.48	0.45	0.47	0.51	0.52	**0.52**	-0.1%	0.4%	1.6%
South Africa	1.98	2.04	2.22	2.10	2.18	2.30	2.16	2.71	3.03	1.62	**1.64**	0.9%	-1.7%	5.2%
Other Africa	0.11	0.04	0.13	0.11	0.18	0.26	2.02	0.62	0.22	0.27	**0.15**	-43.3%	25.4%	0.5%
Australia	7.46	7.04	7.96	9.19	9.12	9.95	9.87	9.70	9.77	9.63	**9.25**	-4.3%	3.3%	29.1%
China	0.59	0.44	0.28	0.28	0.36	0.45	0.51	0.42	0.42	0.34	**0.18**	-47.7%	-5.3%	0.6%
Indonesia	6.20	7.18	8.16	8.57	8.42	7.48	7.73	8.08	8.56	8.49	**8.51**	◆	5.3%	26.8%
Mongolia	0.48	0.58	0.63	0.49	0.53	0.41	0.73	0.95	0.99	1.04	**0.79**	-24.3%	19.8%	2.5%
Other Asia Pacific	0.76	1.01	0.90	0.92	0.77	0.65	0.77	0.30	0.39	0.30	**0.25**	-17.0%	-9.6%	0.8%
Rest of World	0.13	0.16	0.15	0.19	0.14	0.14	0.22	0.12	0.15	0.25	**0.37**	49.6%	5.0%	1.2%
Total World	**25.39**	**27.64**	**30.61**	**32.65**	**31.76**	**31.27**	**33.69**	**34.45**	**36.42**	**33.78**	**31.78**	**-6.2%**	**4.0%**	**100.0%**

◆Less than 0.05%.
Note: 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.

Coal: Inter-area movements 2020

Exajoules	To													
From	Canada	Mexico	US	S. & Cent. America	Europe	CIS	Middle East	Africa	China	India	Japan	South Korea	Other Asia Pacific	**Total**
Canada	–	–	0.01	0.04	0.10	†	–	†	0.14	0.06	0.23	0.31	0.07	**0.97**
US	0.13	0.02	–	0.26	0.60	†	†	0.07	0.03	0.14	0.25	0.10	0.02	**1.62**
Colombia	0.03	0.01	0.09	0.46	0.67	†	0.11	0.01	0.05	0.07	0.02	0.13	0.02	**1.66**
Europe	†	†	†	0.01	–	0.07	†	0.02	0.01	0.08	†	†	0.01	**0.22**
Russia	0.01	†	0.01	0.09	1.96	0.10	0.09	0.23	1.00	0.16	0.58	0.71	0.73	**5.66**
Other CIS	–	–	–	–	0.10	0.41	†	†	0.01	–	†	–	†	**0.52**
South Africa	–	–	0.01	0.01	0.08	–	0.07	0.12	†	0.62	†	0.04	0.69	**1.64**
Other Africa	–	–	†	0.01	0.02	–	†	0.02	†	0.07	†	0.02	†	**0.15**
Australia	–	–	–	0.15	0.33	†	0.01	0.02	2.10	0.87	2.73	1.24	1.79	**9.25**
China	†	†	†	0.01	†	†	†	†	–	0.01	0.03	0.04	0.08	**0.18**
Indonesia	–	–	0.01	–	0.01	–	0.01	†	2.34	2.04	0.69	0.64	2.78	**8.51**
Mongolia	–	–	–	–	†	–	–	–	0.79	–	–	†	–	**0.79**
Other Asia Pacific	†	†	†	†	0.01	†	0.01	†	0.15	0.12	0.02	0.01	0.26	**0.58**
Rest of World	†	†	†	†	0.02	†	–	†	†	0.02	†	†	†	**0.04**
Total imports	**0.18**	**0.03**	**0.14**	**1.04**	**3.90**	**0.58**	**0.31**	**0.49**	**6.61**	**4.22**	**4.56**	**3.26**	**6.45**	**31.78**

†Less than 0.005.
Note: 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.

Nuclear energy

Consumption*

Exajoules (input-equivalent)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	0.85	0.87	0.87	0.95	0.98	0.92	0.91	0.91	0.90	0.90	**0.87**	-3.6%	0.6%	3.6%
Mexico	0.06	0.09	0.08	0.11	0.09	0.11	0.10	0.10	0.09	0.10	**0.10**	-0.8%	0.3%	0.4%
US	7.97	7.76	7.51	7.66	7.69	7.64	7.68	7.63	7.60	7.60	**7.39**	-3.0%	-0.4%	30.8%
Total North America	8.87	8.72	8.46	8.71	8.75	8.67	8.69	8.63	8.58	8.59	**8.35**	-3.1%	-0.3%	34.8%
Argentina	0.07	0.06	0.06	0.06	0.05	0.06	0.08	0.05	0.06	0.08	**0.09**	25.5%	-0.3%	0.4%
Brazil	0.14	0.15	0.15	0.14	0.14	0.13	0.14	0.14	0.14	0.14	**0.14**	-5.8%	1.6%	0.6%
Chile	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Colombia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Ecuador	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Peru	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Trinidad & Tobago	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Venezuela	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other S. & Cent. America	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total S. & Cent. America	0.20	0.21	0.21	0.20	0.19	0.20	0.22	0.20	0.20	0.22	**0.23**	5.0%	0.9%	1.0%
Austria	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Belgium	0.45	0.45	0.37	0.39	0.31	0.24	0.39	0.38	0.26	0.39	**0.31**	-21.6%	-1.4%	1.3%
Czech Republic	0.26	0.26	0.28	0.28	0.28	0.24	0.22	0.26	0.27	0.27	**0.27**	-1.3%	0.5%	1.1%
Finland	0.22	0.22	0.22	0.22	0.22	0.21	0.21	0.20	0.21	0.22	**0.21**	-3.1%	-0.4%	0.9%
France	4.02	4.13	3.94	3.91	4.00	3.98	3.65	3.59	3.69	3.56	**3.14**	-11.9%	-0.8%	13.1%
Germany	1.32	1.01	0.92	0.90	0.89	0.84	0.77	0.69	0.68	0.67	**0.57**	-14.8%	-6.2%	2.4%
Greece	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Hungary	0.15	0.15	0.15	0.14	0.14	0.14	0.15	0.14	0.14	0.15	**0.14**	-2.1%	◆	0.6%
Italy	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Netherlands	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.03	0.03	0.03	**0.04**	3.8%	-1.4%	0.2%
Norway	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Poland	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Portugal	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Romania	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	**0.10**	1.0%	-1.0%	0.4%
Spain	0.58	0.54	0.57	0.52	0.53	0.52	0.53	0.52	0.50	0.52	**0.52**	-0.8%	0.4%	2.2%
Sweden	0.54	0.56	0.59	0.61	0.59	0.51	0.57	0.59	0.61	0.59	**0.48**	-19.1%	1.8%	2.0%
Switzerland	0.25	0.25	0.24	0.24	0.25	0.21	0.19	0.18	0.22	0.23	**0.20**	-9.6%	-1.4%	0.9%
Turkey	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Ukraine	0.84	0.84	0.84	0.77	0.81	0.80	0.73	0.77	0.76	0.74	**0.68**	-8.8%	-0.6%	2.8%
United Kingdom	0.58	0.64	0.65	0.65	0.58	0.64	0.65	0.63	0.58	0.50	**0.45**	-11.1%	-2.6%	1.9%
Other Europe	0.33	0.35	0.34	0.32	0.35	0.33	0.33	0.33	0.33	0.34	**0.34**	0.6%	-2.5%	1.4%
Total Europe	9.69	9.55	9.26	9.09	9.09	8.82	8.53	8.43	8.38	8.29	**7.44**	-10.5%	-1.3%	31.0%
Azerbaijan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Belarus	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Kazakhstan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Russian Federation	1.60	1.61	1.65	1.59	1.66	1.78	1.78	1.83	1.83	1.86	**1.92**	2.7%	1.9%	8.0%
Turkmenistan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Uzbekistan	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other CIS	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	**0.02**	-5.1%	-1.8%	0.1%
Total CIS	1.62	1.64	1.67	1.61	1.68	1.81	1.80	1.85	1.85	1.88	**1.94**	2.6%	1.8%	8.1%
Iran	–	†	0.01	0.04	0.04	0.03	0.06	0.06	0.06	0.06	**0.06**	-1.9%	–	0.2%
Iraq	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Israel	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Kuwait	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Oman	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Qatar	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
United Arab Emirates	–	–	–	–	–	–	–	–	–	–	**0.01**	–	–	0.1%
Other Middle East	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total Middle East	–	^	0.01	0.04	0.04	0.03	0.06	0.06	0.06	0.06	**0.07**	23.2%	n/a	0.3%
Algeria	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Egypt	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Morocco	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
South Africa	0.13	0.12	0.12	0.13	0.13	0.11	0.14	0.13	0.10	0.12	**0.14**	13.7%	◆	0.6%
Other Africa	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total Africa	0.13	0.12	0.12	0.13	0.13	0.11	0.14	0.13	0.10	0.12	**0.14**	13.7%	◆	0.6%
Australia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Bangladesh	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
China	0.70	0.81	0.91	1.03	1.22	1.56	1.93	2.23	2.64	3.11	**3.25**	4.3%	16.7%	13.6%
China Hong Kong SAR	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
India	0.22	0.30	0.31	0.31	0.32	0.35	0.34	0.34	0.35	0.40	**0.40**	-1.8%	9.7%	1.7%
Indonesia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Japan	2.74	1.52	0.17	0.13	–	0.04	0.16	0.26	0.44	0.59	**0.38**	-34.9%	-13.8%	1.6%
Malaysia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
New Zealand	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Pakistan	0.02	0.04	0.03	0.04	0.04	0.04	0.05	0.07	0.08	0.08	**0.08**	1.1%	13.0%	0.3%
Philippines	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Singapore	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
South Korea	1.39	1.44	1.39	1.28	1.43	1.50	1.47	1.34	1.19	1.30	**1.42**	9.1%	-0.7%	5.9%
Sri Lanka	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Taiwan	0.39	0.39	0.37	0.38	0.39	0.33	0.29	0.20	0.25	0.29	**0.28**	-3.4%	-3.0%	1.2%
Thailand	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Vietnam	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other Asia Pacific	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Total Asia Pacific	5.47	4.51	3.18	3.17	3.40	3.82	4.23	4.44	4.95	5.77	**5.82**	0.6%	1.0%	24.3%
Total World	**25.99**	**24.75**	**22.91**	**22.95**	**23.28**	**23.46**	**23.66**	**23.74**	**24.13**	**24.93**	**23.98**	**-4.1%**	**-0.2%**	**100.0%**
of which: OECD	21.61	20.14	18.19	18.21	18.22	17.98	17.86	17.64	17.59	17.78	**16.67**	-6.5%	-1.8%	69.5%
Non-OECD	4.38	4.61	4.72	4.74	5.07	5.47	5.80	6.10	6.54	7.15	**7.31**	2.0%	5.6%	30.5%
European Union	8.02	7.82	7.53	7.43	7.45	7.17	6.95	6.84	6.82	6.82	**6.11**	-10.7%	-1.3%	25.5%

*Based on gross generation and not accounting for cross-border electricity supply. 'Input-equivalent' energy is the amount of fuel that would be required by thermal power stations to generate the reported electricity output. Details on thermal efficiency assumptions are available in the appendices and definitions page and at *bp.com/statisticalreview*.

†Less than 0.005.

◆Less than 0.05%.

Notes: Growth rates are adjusted for leap years.

Nuclear data expressed in terawatt-hours is available at *bp.com/statisticalreview*.

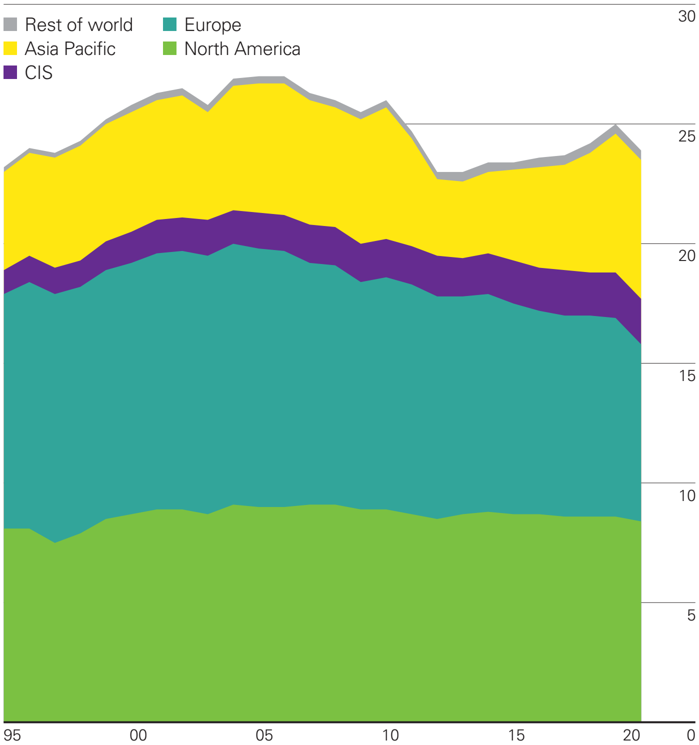
Hydroelectricity

Consumption*

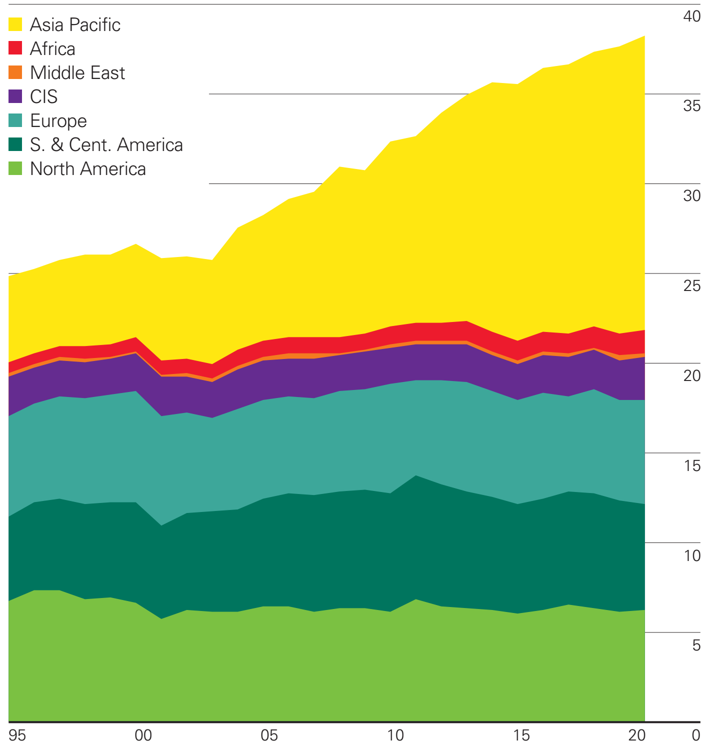
Exajoules (input-equivalent)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	2009-19	Share 2020
Canada	3.30	3.51	3.53	3.61	3.50	3.48	3.49	3.55	3.45	3.38	**3.42**	0.7%	-0.3%	9.0%
Mexico	0.35	0.34	0.30	0.26	0.36	0.28	0.28	0.29	0.29	0.21	**0.24**	12.9%	-1.8%	0.6%
US	2.41	2.95	2.54	2.46	2.34	2.24	2.39	2.67	2.59	2.54	**2.56**	0.5%	-0.1%	6.7%
Total North America	6.06	6.79	6.36	6.33	6.20	6.01	6.16	6.51	6.33	6.14	**6.22**	1.0%	-0.3%	16.3%
Argentina	0.38	0.37	0.34	0.38	0.37	0.38	0.35	0.37	0.37	0.33	**0.27**	-18.1%	-1.5%	0.7%
Brazil	3.79	4.00	3.85	3.60	3.42	3.28	3.45	3.34	3.48	3.55	**3.52**	-0.9%	-0.4%	9.2%
Chile	0.20	0.19	0.19	0.18	0.21	0.22	0.18	0.19	0.21	0.19	**0.18**	-4.3%	-2.2%	0.5%
Colombia	0.38	0.45	0.44	0.41	0.41	0.41	0.42	0.52	0.51	0.48	**0.39**	-19.3%	2.3%	1.0%
Ecuador	0.08	0.10	0.11	0.10	0.10	0.12	0.14	0.18	0.19	0.22	**0.22**	-0.2%	9.7%	0.6%
Peru	0.19	0.20	0.20	0.21	0.20	0.22	0.22	0.26	0.28	0.28	**0.27**	-3.7%	4.1%	0.7%
Trinidad & Tobago	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Venezuela	0.72	0.78	0.76	0.77	0.72	0.67	0.56	0.53	0.51	0.43	**0.28**	-35.4%	-6.1%	0.7%
Other S. & Cent. America	0.84	0.85	0.88	0.90	0.84	0.83	0.90	0.91	0.89	0.76	**0.72**	-5.3%	-0.5%	1.9%
Total S. & Cent. America	6.58	6.94	6.77	6.54	6.29	6.12	6.21	6.30	6.43	6.25	**5.87**	-6.4%	-0.5%	15.4%
Austria	0.36	0.32	0.41	0.39	0.38	0.34	0.36	0.34	0.34	0.36	**0.36**	0.6%	-0.7%	1.0%
Belgium	†	†	†	†	†	†	†	†	†	†	**†**	-7.2%	-1.4%	♦
Czech Republic	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.01	0.02	**0.02**	6.0%	-2.5%	♦
Finland	0.12	0.12	0.16	0.12	0.12	0.15	0.14	0.13	0.12	0.11	**0.14**	26.7%	-0.8%	0.4%
France	0.59	0.42	0.55	0.65	0.58	0.50	0.54	0.44	0.57	0.50	**0.54**	8.7%	-0.7%	1.4%
Germany	0.20	0.16	0.20	0.21	0.18	0.17	0.19	0.18	0.16	0.18	**0.17**	-8.3%	♦	0.4%
Greece	0.07	0.04	0.04	0.06	0.04	0.06	0.05	0.04	0.05	0.04	**0.03**	-14.1%	-3.5%	0.1%
Hungary	†	†	†	†	†	†	†	†	†	†	**†**	10.7%	-1.0%	♦
Italy	0.48	0.43	0.39	0.49	0.54	0.40	0.37	0.31	0.44	0.41	**0.41**	0.1%	-1.2%	1.1%
Netherlands	†	†	†	†	†	†	†	†	†	†	**†**	-37.9%	-3.2%	♦
Norway	1.10	1.12	1.31	1.18	1.24	1.25	1.29	1.28	1.24	1.12	**1.25**	11.9%	-0.6%	3.3%
Poland	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	**0.02**	7.5%	-2.5%	–
Portugal	0.15	0.11	0.05	0.13	0.14	0.08	0.14	0.05	0.11	0.08	**0.11**	40.2%	♦	0.3%
Romania	0.19	0.14	0.11	0.14	0.17	0.15	0.16	0.13	0.16	0.14	**0.13**	-3.8%	-0.5%	0.4%
Spain	0.39	0.29	0.19	0.34	0.36	0.26	0.33	0.16	0.31	0.20	**0.24**	21.5%	-2.1%	0.6%
Sweden	0.62	0.63	0.73	0.57	0.58	0.69	0.56	0.58	0.56	0.58	**0.65**	11.8%	-0.6%	1.7%
Switzerland	0.34	0.30	0.36	0.35	0.35	0.35	0.31	0.31	0.31	0.34	**0.33**	-0.5%	-0.1%	0.9%
Turkey	0.49	0.49	0.54	0.55	0.37	0.61	0.61	0.52	0.54	0.79	**0.69**	-12.7%	8.8%	1.8%
Ukraine	0.12	0.10	0.10	0.13	0.08	0.05	0.07	0.08	0.09	0.06	**0.06**	-4.2%	-6.4%	0.1%
United Kingdom	0.03	0.05	0.05	0.04	0.05	0.06	0.05	0.05	0.05	0.05	**0.06**	8.5%	0.7%	0.2%
Other Europe	0.79	0.56	0.58	0.71	0.68	0.65	0.67	0.59	0.71	0.60	**0.59**	-3.6%	-0.9%	1.5%
Total Europe	6.10	5.31	5.80	6.10	5.90	5.79	5.89	5.26	5.79	5.60	**5.82**	3.7%	♦	15.3%
Azerbaijan	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.01	**0.01**	-32.2%	-4.4%	♦
Belarus	†	†	†	†	†	†	†	†	†	†	**†**	♦	22.1%	♦
Kazakhstan	0.08	0.07	0.07	0.07	0.08	0.08	0.11	0.10	0.09	0.09	**0.09**	-2.6%	3.2%	0.2%
Russian Federation	1.56	1.52	1.52	1.67	1.59	1.53	1.67	1.67	1.71	1.73	**1.89**	8.6%	0.5%	4.9%
Turkmenistan	†	†	†	†	†	†	†	†	†	†	**†**	-0.6%	-0.6%	♦
Uzbekistan	0.08	0.05	0.06	0.06	0.06	0.05	0.07	0.08	0.05	0.06	**0.06**	4.4%	-0.6%	0.2%
Other CIS	0.29	0.31	0.31	0.30	0.29	0.28	0.28	0.31	0.32	0.32	**0.31**	-2.3%	1.7%	0.8%
Total CIS	2.04	1.98	1.98	2.11	2.03	1.96	2.14	2.17	2.19	2.21	**2.36**	6.2%	0.7%	6.2%
Iran	0.10	0.10	0.12	0.13	0.13	0.12	0.14	0.16	0.10	0.26	**0.19**	-27.4%	15.1%	0.5%
Iraq	0.03	0.03	0.04	0.04	0.03	0.02	0.03	0.02	0.02	0.02	**0.02**	-1.3%	-1.9%	0.1%
Israel	†	†	†	†	†	†	–	–	–	–	**–**	–	-100.0%	–
Kuwait	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Oman	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Qatar	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Saudi Arabia	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
United Arab Emirates	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
Other Middle East	0.03	0.04	0.04	0.04	0.02	0.01	0.01	0.01	0.01	0.02	**0.02**	3.1%	-4.3%	♦
Total Middle East	0.16	0.17	0.20	0.22	0.18	0.15	0.18	0.19	0.13	0.30	**0.23**	-23.8%	10.0%	0.6%
Algeria	†	†	†	†	†	†	†	†	†	†	**†**	-67.3%	-8.3%	♦
Egypt	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.12	**0.12**	-1.2%	-1.0%	0.3%
Morocco	0.03	0.02	0.02	0.03	0.02	0.02	0.01	0.01	0.02	0.01	**0.01**	-9.7%	-7.4%	♦
South Africa	0.01	0.03	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	**†**	-49.1%	-4.5%	♦
Other Africa	0.84	0.86	0.88	0.93	0.98	0.95	0.92	0.99	1.05	1.08	**1.13**	4.4%	3.5%	3.0%
Total Africa	1.01	1.03	1.03	1.08	1.13	1.09	1.06	1.13	1.19	1.22	**1.27**	3.2%	2.6%	3.3%
Australia	0.13	0.18	0.16	0.18	0.13	0.13	0.16	0.12	0.16	0.13	**0.13**	2.3%	0.5%	0.3%
Bangladesh	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	-15.4%	6.4%	♦
China	6.68	6.42	8.00	8.38	9.71	10.15	10.44	10.49	10.73	11.34	**11.74**	3.2%	6.9%	30.8%
China Hong Kong SAR	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
India	1.02	1.23	1.07	1.22	1.27	1.21	1.16	1.22	1.25	1.44	**1.45**	0.4%	3.7%	3.8%
Indonesia	0.16	0.12	0.12	0.16	0.14	0.13	0.17	0.17	0.15	0.15	**0.17**	16.8%	3.2%	0.5%
Japan	0.83	0.77	0.71	0.73	0.75	0.78	0.72	0.71	0.73	0.66	**0.69**	4.6%	-0.1%	1.8%
Malaysia	0.06	0.08	0.09	0.11	0.12	0.13	0.18	0.24	0.24	0.23	**0.18**	-21.7%	13.4%	0.5%
New Zealand	0.23	0.23	0.21	0.21	0.22	0.22	0.23	0.22	0.24	0.23	**0.22**	-5.9%	♦	0.6%
Pakistan	0.28	0.29	0.10	0.29	0.30	0.30	0.31	0.27	0.26	0.32	**0.36**	10.3%	1.8%	0.9%
Philippines	0.07	0.09	0.10	0.09	0.08	0.08	0.07	0.09	0.08	0.07	**0.06**	-11.0%	-2.5%	0.2%
Singapore	–	–	–	–	–	–	–	–	–	–	**–**	–	–	–
South Korea	0.03	0.04	0.04	0.04	0.03	0.02	0.03	0.03	0.03	0.02	**0.03**	38.2%	-0.7%	0.1%
Sri Lanka	0.05	0.04	0.03	0.06	0.04	0.05	0.04	0.04	0.06	0.04	**0.04**	2.1%	1.6%	0.1%
Taiwan	0.04	0.04	0.05	0.05	0.04	0.04	0.06	0.05	0.04	0.05	**0.03**	-45.8%	3.4%	0.1%
Thailand	0.05	0.07	0.08	0.05	0.05	0.03	0.03	0.04	0.07	0.06	**0.04**	-28.5%	-1.6%	0.1%
Vietnam	0.27	0.38	0.49	0.53	0.57	0.52	0.60	0.80	0.76	0.60	**0.61**	1.2%	7.9%	1.6%
Other Asia Pacific	0.38	0.44	0.44	0.49	0.49	0.45	0.53	0.55	0.53	0.61	**0.64**	3.7%	6.7%	1.7%
Total Asia Pacific	10.30	10.43	11.70	12.60	13.94	14.26	14.74	15.04	15.32	15.97	**16.41**	2.5%	5.7%	43.0%
Total World	**32.25**	**32.66**	**33.84**	**34.99**	**35.68**	**35.38**	**36.38**	**36.60**	**37.37**	**37.69**	**38.16**	**1.0%**	**2.1%**	**100.0%**
of which: OECD	13.13	13.40	13.37	13.45	13.17	12.95	13.12	13.01	13.25	12.87	**13.14**	1.8%	♦	34.4%
Non-OECD	19.12	19.26	20.48	21.54	22.50	22.43	23.26	23.59	24.12	24.81	**25.02**	0.6%	3.3%	65.6%
European Union	3.50	2.87	3.07	3.38	3.38	3.04	3.10	2.62	3.07	2.83	**3.04**	7.2%	-1.0%	8.0%

*Based on gross generation and not accounting for cross-border electricity supply. 'Input-equivalent' energy is the amount of fuel that would be required by thermal power stations to generate the reported electricity output. Details on thermal efficiency assumptions are available in the appendices and definitions page and at *bp.com/statisticalreview*.
†Less than 0.005.
♦Less than 0.05%.
Notes: Growth rates are adjusted for leap years.
Hydroelectricity data expressed in terawatt-hours is available at *bp.com/statisticalreview*.

Nuclear energy consumption by region
Exajoules

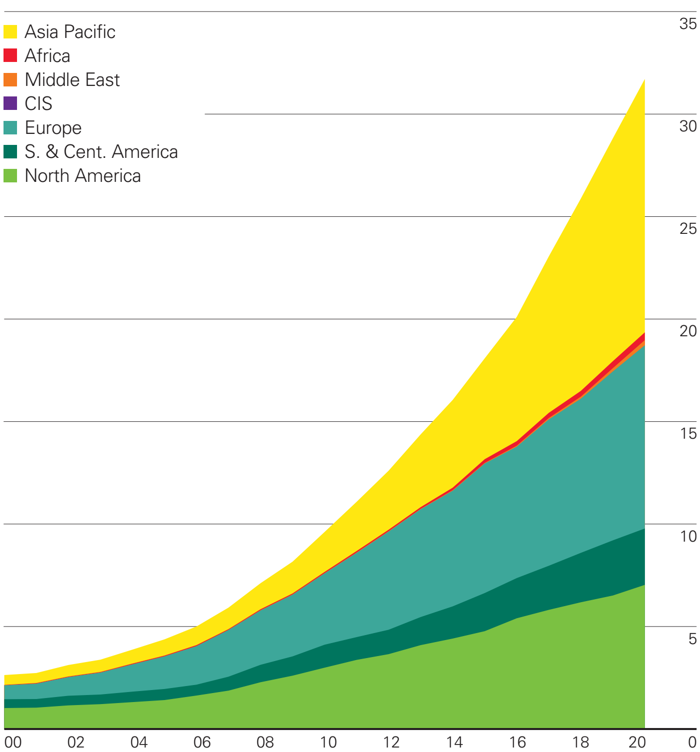


Hydroelectricity consumption by region
Exajoules

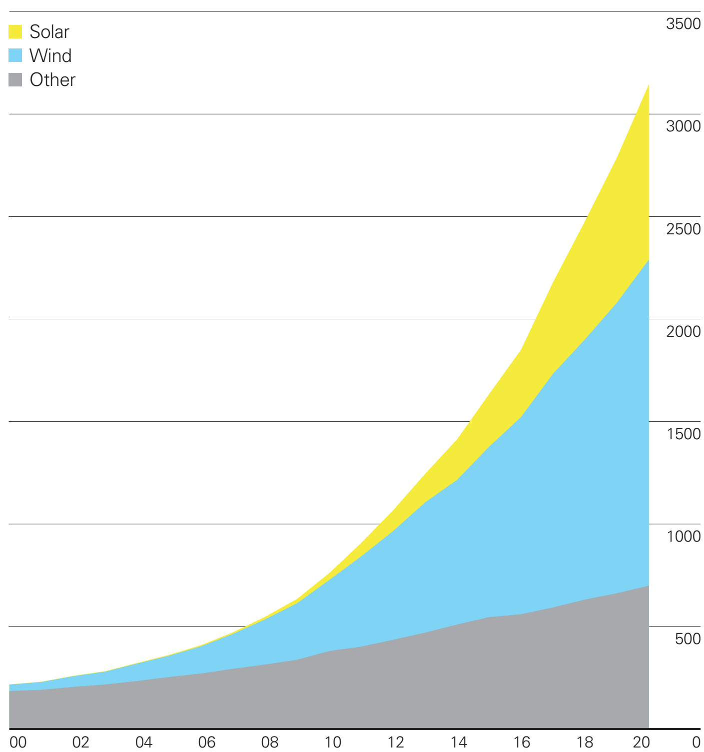


Nuclear consumption fell by 4.1% (on an input-equivalent basis), its sharpest decline since the Fukushima-related decline in 2011 and 2012. COVID-19 and the associated economic shock drove power generation lower, and nuclear generation fell the most in France (-0.4 EJ) and the US (-0.2 EJ).
Hydroelectric consumption rose by 1%, below the 10-year average of 2.1%. Growth was led by China (0.4 EJ) and Russia (0.2 EJ), while hydro consumption fell across the South & Central America region.

Renewables consumption by region
Exajoules



Renewables generation by source
Terawatt-hours



Renewable energy consumption (including biofuels but excluding hydro) grew by 2.9 EJ. The annual growth rate of 9.7% was below the historical 10-year average but the absolute increase in energy terms was roughly in-line with the last 4 years and the largest for any fuel in 2020. By country, China was by far the largest contributor to renewables growth (1.0 EJ), followed by the US (0.4 EJ), then Japan, the United Kingdom, India and Germany (all 0.1 EJ).
Wind provided the largest contribution to the growth of renewables electricity generation (173 TWh) followed closely by solar (148 TWh). The share of solar in the power generation mix has continually increased over the last 10 years and solar now comprises 27% of renewable generation, albeit just 3.2% of total power generation.

Renewable energy

Renewables consumption*

Exajoules (input-equivalent)	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	0.22	0.26	0.29	0.30	0.31	0.44	0.49	0.46	0.51	0.51	**0.54**	4.1%	11.0%	1.7%
Mexico	0.09	0.09	0.10	0.11	0.13	0.16	0.17	0.19	0.24	0.30	**0.36**	19.9%	13.8%	1.1%
US	2.70	3.03	3.27	3.70	3.98	4.19	4.74	5.17	5.44	5.71	**6.15**	7.4%	9.3%	19.4%
Total North America	3.00	3.38	3.66	4.10	4.42	4.78	5.41	5.82	6.19	6.52	**7.04**	7.7%	9.6%	22.2%
Argentina	0.04	0.05	0.07	0.07	0.08	0.08	0.08	0.09	0.08	0.12	**0.13**	10.0%	22.0%	0.4%
Brazil	0.89	0.85	0.87	1.02	1.19	1.41	1.46	1.59	1.80	1.99	**2.01**	0.7%	10.0%	6.3%
Chile	0.04	0.04	0.06	0.07	0.06	0.08	0.11	0.13	0.16	0.18	**0.21**	12.9%	18.9%	0.7%
Colombia	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	**0.05**	-6.6%	9.0%	0.2%
Ecuador	†	†	†	†	†	0.01	0.01	0.01	0.01	0.01	**0.01**	9.4%	13.2%	◆
Peru	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	**0.05**	7.0%	14.4%	0.1%
Trinidad & Tobago	†	†	†	†	†	†	†	†	†	†	**†**	-0.6%	-15.1%	◆
Venezuela	†	†	†	†	†	†	†	†	†	†	**†**	-0.6%	–	◆
Other S. & Cent. America	0.10	0.11	0.12	0.14	0.16	0.20	0.23	0.24	0.27	0.29	**0.29**	0.3%	12.8%	0.9%
Total S. & Cent. America	1.12	1.11	1.19	1.37	1.57	1.86	1.96	2.15	2.41	2.69	**2.75**	1.9%	11.1%	8.7%
Austria	0.08	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.13	0.15	**0.14**	-4.0%	6.0%	0.4%
Belgium	0.07	0.09	0.11	0.12	0.13	0.14	0.14	0.16	0.17	0.19	**0.23**	21.7%	13.5%	0.7%
Czech Republic	0.04	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.09	**0.09**	1.1%	11.3%	0.3%
Finland	0.11	0.12	0.12	0.13	0.14	0.14	0.14	0.17	0.18	0.19	**0.19**	0.2%	7.7%	0.6%
France	0.24	0.28	0.34	0.37	0.41	0.46	0.47	0.52	0.56	0.63	**0.68**	7.5%	11.1%	2.1%
Germany	0.90	1.11	1.25	1.30	1.43	1.66	1.64	1.88	1.97	2.10	**2.21**	4.7%	9.7%	7.0%
Greece	0.03	0.04	0.06	0.08	0.08	0.09	0.09	0.10	0.10	0.12	**0.14**	18.6%	14.6%	0.4%
Hungary	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	**0.06**	17.5%	4.1%	0.2%
Italy	0.30	0.40	0.53	0.60	0.61	0.63	0.65	0.67	0.64	0.65	**0.67**	2.6%	10.7%	2.1%
Netherlands	0.11	0.13	0.13	0.13	0.12	0.14	0.15	0.18	0.19	0.23	**0.33**	39.1%	7.1%	1.0%
Norway	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.05	0.05	0.07	**0.11**	52.0%	16.9%	0.4%
Poland	0.10	0.13	0.17	0.17	0.19	0.22	0.21	0.22	0.21	0.25	**0.27**	6.0%	11.4%	0.8%
Portugal	0.13	0.13	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.18	**0.17**	-3.8%	5.5%	0.5%
Romania	0.01	0.02	0.03	0.05	0.07	0.09	0.09	0.10	0.09	0.10	**0.10**	0.7%	30.4%	0.3%
Spain	0.57	0.59	0.70	0.72	0.69	0.67	0.66	0.68	0.69	0.73	**0.77**	4.8%	4.7%	2.4%
Sweden	0.17	0.19	0.21	0.22	0.24	0.29	0.30	0.33	0.32	0.36	**0.41**	14.0%	9.6%	1.3%
Switzerland	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04	**0.05**	10.0%	13.6%	0.2%
Turkey	0.04	0.05	0.07	0.11	0.12	0.15	0.21	0.27	0.34	0.39	**0.45**	13.4%	34.1%	1.4%
Ukraine	†	†	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.05	**0.09**	75.9%	40.3%	0.3%
United Kingdom	0.26	0.32	0.37	0.49	0.59	0.74	0.74	0.88	0.99	1.09	**1.20**	9.9%	16.8%	3.8%
Other Europe	0.24	0.29	0.33	0.36	0.39	0.43	0.43	0.49	0.51	0.58	**0.60**	3.6%	11.1%	1.9%
Total Europe	3.48	4.11	4.79	5.26	5.64	6.32	6.41	7.14	7.52	8.24	**8.94**	8.2%	10.6%	28.2%
Azerbaijan	†	–	–	†	†	†	†	†	†	†	**†**	-3.5%	60.2%	◆
Belarus	†	†	†	†	†	†	†	†	†	†	**†**	4.2%	12.2%	◆
Kazakhstan	–	†	†	†	†	†	†	†	†	0.01	**0.03**	234.3%	–	0.1%
Russian Federation	0.01	0.01	†	†	0.01	0.01	0.01	0.01	0.02	0.02	**0.04**	71.3%	16.6%	0.1%
Turkmenistan	†	†	†	†	†	†	†	†	†	†	**†**	-0.6%	–	◆
Uzbekistan	–	–	–	–	–	–	†	†	†	†	**†**	-0.6%	–	◆
Other CIS	†	†	†	†	†	†	†	†	†	†	**†**	-2.5%	41.7%	◆
Total CIS	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	**0.08**	96.9%	20.5%	0.2%
Iran	†	†	†	†	†	†	†	†	0.01	0.01	**0.01**	3.4%	14.5%	◆
Iraq	–	–	–	†	†	†	†	†	†	†	**†**	-0.6%	–	◆
Israel	†	†	†	0.01	0.01	0.01	0.02	0.02	0.02	0.03	**0.05**	70.1%	39.4%	0.2%
Kuwait	–	–	–	†	†	†	†	†	†	†	**†**	-0.6%	–	◆
Oman	–	–	–	†	†	†	†	†	†	†	**†**	1136.7%	–	◆
Qatar	–	†	†	†	†	†	†	†	†	†	**†**	-0.6%	–	◆
Saudi Arabia	†	†	†	†	†	†	†	†	†	0.01	**0.01**	-0.6%	109.2%	◆
United Arab Emirates	†	†	†	†	†	†	†	0.01	0.01	0.04	**0.05**	32.3%	90.2%	0.2%
Other Middle East	†	†	†	†	†	†	0.01	0.01	0.02	0.03	**0.04**	22.7%	71.8%	0.1%
Total Middle East	†	0.01	0.01	0.01	0.02	0.02	0.03	0.05	0.07	0.12	**0.17**	34.2%	43.0%	0.5%
Algeria	†	†	†	†	†	†	†	†	0.01	0.01	**0.01**	-3.3%	–	◆
Egypt	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.03	0.06	**0.09**	48.8%	19.4%	0.3%
Morocco	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.06	**0.06**	10.3%	31.2%	0.2%
South Africa	†	0.01	0.01	0.01	0.03	0.06	0.07	0.10	0.11	0.11	**0.11**	4.1%	34.1%	0.4%
Other Africa	0.04	0.04	0.04	0.05	0.06	0.08	0.08	0.09	0.10	0.11	**0.11**	-2.3%	13.6%	0.3%
Total Africa	0.06	0.07	0.07	0.08	0.12	0.18	0.22	0.25	0.28	0.34	**0.38**	10.4%	21.0%	1.2%
Australia	0.09	0.11	0.13	0.16	0.18	0.21	0.23	0.24	0.29	0.37	**0.45**	19.9%	17.2%	1.4%
Bangladesh	†	†	†	†	†	†	†	†	†	†	**†**	17.1%	26.9%	◆
China	0.77	1.05	1.36	1.81	2.23	2.64	3.44	4.61	5.81	6.75	**7.79**	15.1%	28.9%	24.6%
China Hong Kong SAR	†	†	†	†	†	†	†	†	†	†	**†**	44.5%	56.1%	◆
India	0.36	0.44	0.50	0.56	0.63	0.65	0.79	0.95	1.18	1.33	**1.43**	7.6%	16.2%	4.5%
Indonesia	0.10	0.10	0.11	0.12	0.16	0.13	0.20	0.21	0.26	0.35	**0.37**	6.3%	13.7%	1.2%
Japan	0.29	0.30	0.33	0.39	0.49	0.64	0.67	0.80	0.90	1.01	**1.13**	11.9%	14.8%	3.6%
Malaysia	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	**0.04**	5.4%	12.3%	0.1%
New Zealand	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.10	**0.10**	0.3%	4.1%	0.3%
Pakistan	†	†	†	†	0.01	0.01	0.02	0.04	0.05	0.05	**0.04**	-7.0%	98.6%	0.1%
Philippines	0.10	0.10	0.11	0.11	0.11	0.13	0.14	0.14	0.15	0.15	**0.15**	-0.5%	3.3%	0.5%
Singapore	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	**0.01**	1.4%	5.5%	◆
South Korea	0.06	0.08	0.09	0.12	0.15	0.18	0.19	0.24	0.27	0.30	**0.36**	18.5%	27.0%	1.1%
Sri Lanka	†	†	†	†	†	†	†	0.01	0.01	0.01	**0.01**	42.1%	36.5%	◆
Taiwan	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.07	**0.09**	29.4%	10.5%	0.3%
Thailand	0.06	0.07	0.09	0.12	0.15	0.16	0.18	0.21	0.24	0.28	**0.28**	-3.3%	18.7%	0.9%
Vietnam	†	†	†	†	†	†	†	†	†	0.04	**0.08**	128.1%	48.7%	0.3%
Other Asia Pacific	†	†	†	†	†	0.01	0.01	0.01	0.01	0.01	**0.02**	12.4%	26.8%	◆
Total Asia Pacific	1.95	2.40	2.88	3.55	4.28	4.92	6.06	7.63	9.38	10.87	**12.36**	13.4%	21.5%	39.0%
Total World	**9.63**	**11.08**	**12.60**	**14.38**	**16.04**	**18.10**	**20.11**	**23.06**	**25.88**	**28.82**	**31.71**	**9.7%**	**13.4%**	**100.0%**
of which: OECD	7.04	8.11	9.12	10.12	10.96	12.20	13.01	14.35	15.31	16.56	**18.04**	8.6%	10.5%	56.9%
Non-OECD	2.59	2.97	3.48	4.26	5.08	5.90	7.10	8.70	10.57	12.26	**13.67**	11.2%	19.4%	43.1%
European Union	3.11	3.65	4.25	4.55	4.81	5.30	5.33	5.84	6.00	6.51	**6.97**	6.7%	9.3%	22.0%

*Includes renewable power (apart from hydro, which is reported separately) and biofuels.
Consumption of renewable power is based on gross generation and not accounting for cross-border electricity supply. "Input-equivalent" energy is the amount of fuel that would be required by thermal power stations to generate the reported electricity output. Details on thermal efficiency assumptions are available in the appendices and definitions page and at *bp.com/statisticalreview*.
†Less than 0.005.
◆Less than 0.05%.
Notes: Annual changes and share of total are calculated using exajoules figures and incorporate adjustments for assumed changes in thermal efficiency.
Growth rates are adjusted for leap years.
Other renewables data expressed in terawatt-hours is available at *bp.com/statisticalreview*.

Renewables: Renewable power generation*

Terawatt-hours	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	19.3	21.0	23.1	23.7	24.7	39.8	46.3	41.6	47.5	47.1	**51.2**	8.4%	11.6%	1.6%
Mexico	8.7	9.1	10.5	11.6	13.8	16.6	18.1	19.9	25.9	32.3	**39.2**	20.9%	14.7%	1.2%
US	173.7	201.9	228.3	266.2	296.8	315.8	367.4	417.7	451.6	483.7	**551.7**	13.8%	12.4%	17.5%
Total North America	201.7	231.9	261.9	301.5	335.3	372.2	431.9	479.3	525.0	563.1	**642.1**	13.7%	12.5%	20.4%
Argentina	2.0	2.2	2.8	2.9	2.9	3.0	2.5	3.0	2.0	6.4	**11.2**	74.5%	13.8%	0.4%
Brazil	34.1	35.3	40.8	47.6	59.3	71.6	84.9	96.1	106.3	117.6	**120.3**	2.1%	17.2%	3.8%
Chile	3.7	4.7	6.4	7.4	6.9	9.0	11.7	15.0	17.9	20.7	**23.6**	13.4%	19.6%	0.7%
Colombia	1.1	1.4	1.5	1.4	1.8	1.9	2.0	2.0	2.2	2.6	**2.6**	0.1%	9.5%	0.1%
Ecuador	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.5	0.5	0.7	**0.7**	4.0%	12.4%	◆
Peru	0.7	0.7	0.7	1.2	1.7	1.7	1.9	1.8	2.7	2.9	**3.3**	10.8%	20.4%	0.1%
Trinidad & Tobago	†	†	†	†	†	†	†	†	†	†	**†**	-0.3%	-14.6%	◆
Venezuela	†	†	†	†	†	†	†	†	†	†	**†**	-0.3%	–	◆
Other S. & Cent. America	9.0	9.4	11.5	13.0	15.4	19.4	22.7	24.1	27.8	30.3	**31.1**	2.1%	14.3%	1.0%
Total S. & Cent. America	50.9	54.0	64.1	73.8	88.6	107.1	126.4	142.6	159.4	181.4	**192.9**	6.1%	16.6%	6.1%
Austria	6.6	6.6	7.4	8.4	9.0	10.3	11.0	12.8	12.4	13.9	**13.6**	-2.3%	8.3%	0.4%
Belgium	6.2	8.2	10.1	11.3	12.0	14.2	14.0	15.6	16.8	19.2	**23.5**	22.0%	14.2%	0.7%
Czech Republic	3.1	5.2	6.0	6.5	7.3	7.6	7.4	7.7	7.8	8.0	**8.0**	-0.2%	13.6%	0.3%
Finland	11.3	11.7	11.6	12.7	12.8	13.7	14.5	16.7	18.8	19.4	**19.5**	0.3%	8.0%	0.6%
France	15.5	19.6	25.5	28.6	31.5	37.5	39.1	44.0	49.5	57.1	**64.3**	12.2%	16.3%	2.0%
Germany	84.2	106.4	121.3	129.3	142.9	169.8	169.1	196.2	206.8	222.7	**232.4**	4.1%	11.3%	7.4%
Greece	3.1	4.1	5.7	8.0	7.7	8.8	9.4	9.8	10.4	12.1	**14.6**	20.0%	15.7%	0.5%
Hungary	2.8	2.5	2.4	2.6	2.8	3.0	3.0	3.3	3.5	4.5	**5.1**	14.5%	5.3%	0.2%
Italy	25.8	37.1	50.3	59.2	62.1	63.4	65.6	67.7	65.6	69.5	**70.3**	0.8%	13.2%	2.2%
Netherlands	11.1	12.3	12.4	12.1	11.6	13.6	14.6	17.4	18.8	22.7	**32.0**	40.9%	7.8%	1.0%
Norway	1.2	1.6	1.9	2.3	2.5	2.8	2.4	3.1	4.1	5.9	**10.3**	74.3%	17.1%	0.3%
Poland	8.0	10.8	14.8	14.6	17.7	20.7	20.7	21.6	19.6	23.5	**25.6**	8.7%	14.1%	0.8%
Portugal	12.2	12.6	13.8	15.7	16.0	15.7	16.5	16.7	17.0	18.6	**18.1**	-2.9%	6.4%	0.6%
Romania	0.4	1.6	2.9	5.2	6.5	9.6	8.9	9.8	8.5	9.1	**9.2**	1.7%	84.3%	0.3%
Spain	54.6	55.6	66.4	74.2	71.1	68.9	68.2	69.5	69.8	73.8	**80.5**	8.8%	4.5%	2.6%
Sweden	15.7	17.6	19.4	21.3	22.0	27.1	27.1	29.9	28.9	33.5	**40.1**	19.3%	9.2%	1.3%
Switzerland	1.4	1.6	1.9	2.2	2.6	2.8	3.2	3.7	3.9	4.2	**4.7**	12.8%	12.4%	0.2%
Turkey	3.9	5.8	7.4	9.8	12.0	16.5	23.0	29.0	37.8	43.3	**49.8**	14.7%	34.8%	1.6%
Ukraine	0.2	0.3	0.8	1.3	1.7	1.7	1.6	1.9	2.6	5.3	**9.7**	83.4%	40.0%	0.3%
United Kingdom	22.6	29.5	35.9	48.5	58.6	77.1	77.6	93.0	104.6	114.6	**127.8**	11.2%	19.1%	4.1%
Other Europe	23.6	28.8	32.0	35.3	39.3	42.9	43.2	50.4	52.4	59.0	**61.7**	4.3%	11.4%	2.0%
Total Europe	313.6	379.5	449.9	509.2	549.7	627.5	640.2	719.7	759.9	840.0	**921.0**	9.4%	12.0%	29.3%
Azerbaijan	†	–	–	0.1	0.1	0.1	0.1	0.1	0.2	0.2	**0.2**	-3.1%	61.1%	◆
Belarus	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.5	**0.5**	4.7%	22.3%	◆
Kazakhstan	–	†	†	†	†	0.2	0.4	0.4	0.5	1.1	**3.7**	235.6%	–	0.1%
Russian Federation	0.5	0.6	0.5	0.5	0.8	1.0	1.1	1.2	1.4	1.8	**3.5**	92.4%	13.8%	0.1%
Turkmenistan	†	†	†	†	†	†	†	†	†	†	**†**	-0.3%	–	◆
Uzbekistan	–	–	–	–	–	–	†	†	†	†	**†**	-0.3%	–	◆
Other CIS	†	†	†	†	†	†	†	†	0.1	0.1	**0.1**	-2.2%	42.5%	◆
Total CIS	0.6	0.7	0.6	0.7	1.0	1.4	1.8	2.1	2.5	3.8	**8.1**	113.0%	20.9%	0.3%
Iran	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.8	0.9	**1.0**	3.8%	15.2%	◆
Iraq	–	–	–	†	0.1	0.1	0.1	0.1	0.4	0.4	**0.4**	-0.3%	–	◆
Israel	0.1	0.3	0.5	0.5	0.9	1.3	1.8	1.8	2.0	3.3	**5.7**	71.5%	46.0%	0.2%
Kuwait	–	–	–	†	†	†	†	0.1	0.1	0.2	**0.2**	-0.3%	–	◆
Oman	–	–	–	†	†	†	†	†	†	†	**0.2**	1141.3%	–	◆
Qatar	–	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	**0.1**	-0.3%	–	◆
Saudi Arabia	†	†	†	†	†	†	†	0.1	0.2	1.0	**1.0**	-0.3%	110.5%	◆
United Arab Emirates	†	†	†	0.1	0.3	0.3	0.3	0.8	1.3	4.2	**5.6**	32.8%	91.3%	0.2%
Other Middle East	†	†	†	†	0.1	0.3	1.1	1.7	2.7	3.6	**4.5**	23.1%	72.8%	0.1%
Total Middle East	0.4	0.7	0.9	1.1	1.8	2.4	3.8	5.0	7.7	13.8	**18.6**	34.8%	45.4%	0.6%
Algeria	†	†	†	†	0.1	0.1	0.3	0.5	0.6	0.6	**0.6**	-3.0%	–	◆
Egypt	1.4	1.7	1.8	1.6	1.2	1.9	2.6	2.7	3.5	6.5	**9.7**	49.3%	20.1%	0.3%
Morocco	0.7	0.7	0.7	1.2	1.9	2.5	3.4	3.5	4.8	6.3	**7.0**	10.7%	32.0%	0.2%
South Africa	0.5	0.5	0.5	0.8	2.6	6.2	7.9	10.6	11.4	12.0	**12.6**	4.6%	37.4%	0.4%
Other Africa	3.8	3.9	4.5	5.2	6.7	8.9	9.4	9.7	10.8	12.6	**12.4**	-1.9%	14.3%	0.4%
Total Africa	6.3	6.9	7.6	8.8	12.5	19.7	23.6	27.0	31.2	38.0	**42.3**	10.9%	21.9%	1.3%
Australia	8.4	11.1	13.2	16.4	18.3	21.7	24.1	25.7	32.2	41.2	**49.9**	20.6%	18.6%	1.6%
Bangladesh	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	**0.4**	17.5%	27.6%	◆
China	75.0	104.3	136.8	183.8	229.5	279.1	369.5	502.0	636.4	742.0	**863.1**	16.0%	31.3%	27.4%
China Hong Kong SAR	†	†	†	†	†	0.1	0.1	0.1	0.1	0.1	**0.1**	60.5%	52.7%	◆
India	33.9	41.9	49.5	55.9	63.0	65.1	79.8	99.1	123.9	139.2	**151.2**	8.3%	17.4%	4.8%
Indonesia	9.4	9.5	9.6	9.5	10.2	10.3	11.0	13.1	14.5	14.9	**16.8**	12.8%	4.8%	0.5%
Japan	29.7	31.0	34.2	41.2	52.2	68.2	72.3	87.5	98.7	111.2	**125.6**	12.7%	15.3%	4.0%
Malaysia	1.3	1.5	1.5	1.2	0.9	1.0	1.1	1.1	2.0	2.6	**3.1**	19.4%	6.6%	0.1%
New Zealand	8.1	8.8	9.0	9.2	10.2	11.0	11.0	10.7	10.7	11.0	**11.1**	0.7%	4.8%	0.4%
Pakistan	†	†	0.1	0.3	0.6	1.0	2.3	4.2	5.4	5.4	**5.0**	-6.7%	99.8%	0.2%
Philippines	10.0	10.1	10.5	9.9	10.7	12.3	13.9	13.6	13.9	14.0	**14.4**	2.6%	3.0%	0.5%
Singapore	0.6	0.6	0.6	0.7	0.8	0.9	0.9	0.9	0.9	1.0	**1.0**	1.8%	6.1%	◆
South Korea	4.5	7.6	8.6	10.2	14.7	17.3	18.9	24.1	27.2	30.5	**37.0**	21.0%	32.8%	1.2%
Sri Lanka	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.7	0.7	0.8	**1.1**	42.6%	37.3%	◆
Taiwan	2.9	3.4	3.4	3.8	3.9	4.3	4.5	5.2	6.4	7.9	**10.3**	30.4%	12.0%	0.3%
Thailand	3.4	4.1	5.2	7.2	9.0	10.0	12.5	14.9	17.9	21.4	**20.5**	-4.5%	25.0%	0.7%
Vietnam	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4	0.5	4.1	**9.5**	128.9%	49.5%	0.3%
Other Asia Pacific	0.2	0.2	0.2	0.3	0.4	0.6	0.7	0.9	1.2	1.5	**1.7**	12.8%	27.6%	0.1%
Total Asia Pacific	187.6	234.5	282.9	350.4	425.2	504.0	623.6	804.3	992.9	1149.2	**1322.0**	14.7%	22.9%	42.0%
Total World	**761.2**	**908.2**	**1067.9**	**1245.5**	**1414.0**	**1634.4**	**1851.3**	**2180.2**	**2478.6**	**2789.2**	**3147.0**	**12.5%**	**15.9%**	**100.0%**
of which: OECD	569.3	672.8	778.7	886.7	977.4	1113.9	1197.9	1347.8	1456.6	1599.3	**1788.6**	11.5%	12.5%	56.8%
Non-OECD	191.9	235.4	289.2	358.8	436.6	520.5	653.4	832.4	1022.0	1189.9	**1358.4**	13.8%	23.5%	43.2%
European Union	279.7	336.0	396.7	439.7	466.8	521.3	527.0	583.2	599.9	658.5	**710.4**	7.6%	10.6%	22.6%

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

Renewable energy: Generation by source*

Terawatt-hours	Wind	Solar	Other renewables‡	2019 Total	Wind	Solar	Other renewables‡	2020 Total	2020 Growth rate Wind	Solar	Other renewables‡	Total
Canada	32.7	4.2	10.3	47.1	36.1	4.4	10.7	**51.2**	10.2%	4.6%	3.9%	**8.4%**
Mexico	16.7	7.4	8.2	32.3	19.7	11.9	7.6	**39.2**	17.5%	60.7%	-7.9%	**20.9%**
US	298.9	108.0	76.8	483.7	340.9	134.0	76.8	**551.7**	13.8%	23.7%	-0.3%	**13.8%**
Total North America	348.3	119.6	95.3	563.1	396.7	150.3	95.1	**642.1**	13.6%	25.3%	-0.5%	**13.7%**
Argentina	5.0	0.8	0.6	6.4	9.5	1.3	0.4	**11.2**	89.0%	67.6%	-33.7%	**74.5%**
Brazil	56.0	6.7	54.9	117.6	57.0	8.0	55.4	**120.3**	1.6%	19.3%	0.5%	**2.1%**
Chile	4.9	6.3	9.5	20.7	5.6	7.6	10.3	**23.6**	14.6%	20.5%	8.0%	**13.4%**
Colombia	0.1	0.1	2.4	2.6	†	0.2	2.4	**2.6**	-54.3%	36.3%	-0.5%	**0.1%**
Ecuador	0.1	0.2	0.5	0.7	0.1	0.2	0.5	**0.7**	-0.3%	-0.3%	6.3%	**4.0%**
Peru	1.7	0.8	0.5	2.9	1.8	0.8	0.7	**3.3**	8.7%	1.7%	30.6%	**10.8%**
Trinidad & Tobago	–	†	–	†	–	†	–	**†**	–	-0.3%	–	**-0.3%**
Venezuela	–	†	–	†	–	†	–	**†**	–	-0.3%	–	**-0.3%**
Other S. & Cent. America	11.1	4.3	15.0	30.3	11.4	4.7	15.0	**31.1**	2.5%	10.5%	-0.5%	**2.1%**
Total S. & Cent. America	78.8	19.1	83.5	181.4	85.4	22.8	84.7	**192.9**	8.2%	19.0%	1.1%	**6.1%**
Austria	7.5	1.7	4.7	13.9	6.8	1.6	5.3	**13.6**	-9.4%	-6.8%	10.4%	**-2.3%**
Belgium	9.7	4.2	5.2	19.2	13.0	5.1	5.3	**23.5**	33.6%	20.6%	1.5%	**22.0%**
Czech Republic	0.7	2.3	5.0	8.0	0.7	2.2	5.1	**8.0**	-0.4%	-2.6%	0.9%	**-0.2%**
Finland	6.1	0.1	13.2	19.4	8.1	0.3	11.2	**19.5**	31.9%	73.7%	-15.1%	**0.3%**
France	34.6	11.7	10.7	57.1	40.6	13.1	10.6	**64.3**	17.0%	11.0%	-1.7%	**12.2%**
Germany	125.9	46.4	50.4	222.7	131.0	50.6	50.8	**232.4**	3.7%	8.8%	0.5%	**4.1%**
Greece	7.3	4.4	0.4	12.1	9.3	4.9	0.4	**14.6**	27.7%	9.7%	-7.5%	**20.0%**
Hungary	0.7	1.5	2.2	4.5	0.6	2.4	2.1	**5.1**	-12.0%	58.0%	-5.8%	**14.5%**
Italy	20.2	23.7	25.6	69.5	18.7	26.0	25.7	**70.3**	-7.7%	9.3%	-0.2%	**0.8%**
Netherlands	11.5	5.3	5.8	22.7	15.3	8.1	8.7	**32.0**	32.3%	50.6%	48.9%	**40.9%**
Norway	5.5	0.1	0.3	5.9	9.9	0.1	0.3	**10.3**	78.5%	26.1%	2.4%	**74.3%**
Poland	15.1	0.7	7.7	23.5	15.7	2.0	7.9	**25.6**	3.8%	179.3%	2.5%	**8.7%**
Portugal	13.7	1.3	3.6	18.6	12.4	1.7	4.0	**18.1**	-9.8%	25.9%	12.5%	**-2.9%**
Romania	6.8	1.8	0.5	9.1	7.0	1.7	0.6	**9.2**	2.4%	-4.5%	13.8%	**1.7%**
Spain	53.1	15.1	5.6	73.8	53.2	20.8	6.5	**80.5**	◆	37.3%	14.9%	**8.8%**
Sweden	19.8	0.7	13.0	33.5	28.1	1.1	11.0	**40.1**	41.1%	58.9%	-15.9%	**19.3%**
Switzerland	0.1	2.2	1.9	4.2	0.2	2.6	1.9	**4.7**	15.7%	20.1%	4.0%	**12.8%**
Turkey	21.7	9.2	12.4	43.3	24.8	10.8	14.2	**49.8**	13.6%	16.8%	14.9%	**14.7%**
Ukraine	2.0	2.9	0.3	5.3	3.2	6.2	0.4	**9.7**	56.6%	110.3%	8.4%	**83.4%**
United Kingdom	64.3	12.9	37.3	114.6	75.6	12.8	39.4	**127.8**	17.2%	-1.2%	5.3%	**11.2%**
Other Europe	1.7	0.3	0.2	2.2	1.7	0.4	0.3	**2.4**	4.4%	22.1%	23.6%	**8.7%**
Total Europe	460.0	152.8	227.2	840.0	510.1	178.9	232.0	**921.0**	10.6%	16.8%	1.9%	**9.4%**
Azerbaijan	0.1	†	0.1	0.2	0.1	†	0.1	**0.2**	-10.0%	6.5%	◆	**-3.1%**
Belarus	0.2	0.2	0.1	0.5	0.2	0.2	0.1	**0.5**	10.5%	1.3%	1.6%	**4.7%**
Kazakhstan	0.7	0.4	†	1.1	1.1	2.6	†	**3.7**	60.1%	555.6%	5.7%	**235.6%**
Russian Federation	0.3	1.0	0.5	1.8	1.1	1.9	0.5	**3.5**	260.5%	88.5%	-1.8%	**92.4%**
Turkmenistan	–	†	–	†	–	†	–	**†**	–	-0.3%	–	**-0.3%**
Uzbekistan	–	†	–	†	–	†	–	**†**	–	-0.3%	–	**-0.3%**
Other CIS	†	0.1	†	0.1	†	0.1	†	**0.1**	-0.6%	-4.0%	-0.3%	**-2.2%**
Total CIS	1.3	1.7	0.8	3.8	2.6	4.8	0.8	**8.1**	93.4%	180.0%	-0.9%	**113.0%**
Iran	0.6	0.3	†	0.9	0.6	0.3	†	**1.0**	0.1%	12.5%	-0.3%	**3.8%**
Iraq	–	0.4	–	0.4	–	0.4	–	**0.4**	–	-0.3%	–	**-0.3%**
Israel	†	3.1	0.2	3.3	†	5.5	0.2	**5.7**	-0.3%	75.8%	-0.3%	**71.5%**
Kuwait	†	0.2	–	0.2	†	0.2	–	**0.2**	-0.3%	-0.3%	–	**-0.3%**
Oman	–	†	–	†	–	0.2	–	**0.2**	–	1141.3%	–	**1141.3%**
Qatar	–	†	0.1	0.1	–	†	0.1	**0.1**	–	-0.3%	-0.3%	**-0.3%**
Saudi Arabia	–	1.0	–	1.0	–	1.0	–	**1.0**	–	-0.3%	–	**-0.3%**
United Arab Emirates	–	4.2	†	4.2	–	5.6	†	**5.6**	–	32.8%	-0.3%	**32.8%**
Other Middle East	0.9	2.7	†	3.6	1.3	3.2	†	**4.5**	38.5%	18.1%	-0.3%	**23.1%**
Total Middle East	1.6	11.9	0.3	13.8	1.9	16.4	0.3	**18.6**	22.4%	37.4%	-0.3%	**34.8%**
Algeria	†	0.6	–	0.6	†	0.6	–	**0.6**	-20.2%	-2.7%	–	**-3.0%**
Egypt	4.6	1.9	–	6.5	6.8	2.9	–	**9.7**	48.5%	51.3%	–	**49.3%**
Morocco	4.7	1.6	–	6.3	5.4	1.6	–	**7.0**	14.4%	-0.3%	–	**10.7%**
South Africa	6.7	4.9	0.4	12.0	7.0	5.2	0.4	**12.6**	4.4%	5.3%	-0.3%	**4.6%**
Other Africa	2.9	1.9	7.8	12.6	2.6	2.1	7.6	**12.4**	-10.2%	12.9%	-2.3%	**-1.9%**
Total Africa	18.9	10.9	8.2	38.0	21.8	12.4	8.1	**42.3**	15.2%	13.5%	-2.2%	**10.9%**
Australia	19.5	18.3	3.5	41.2	22.6	23.8	3.4	**49.9**	15.8%	30.0%	-1.9%	**20.6%**
Bangladesh	†	0.3	†	0.4	†	0.4	†	**0.4**	-0.3%	17.9%	5.2%	**17.5%**
China	405.3	224.0	112.7	742.0	466.5	261.1	135.5	**863.1**	14.8%	16.2%	19.9%	**16.0%**
China Hong Kong SAR	†	†	0.1	0.1	†	†	0.1	**0.1**	21.7%	5.6%	61.7%	**60.5%**
India	63.3	46.3	29.7	139.2	60.4	58.7	32.1	**151.2**	-4.8%	26.5%	7.9%	**8.3%**
Indonesia	0.5	0.1	14.3	14.9	0.5	0.5	15.9	**16.8**	-2.2%	773.0%	10.4%	**12.8%**
Japan	6.7	72.3	32.2	111.2	7.8	82.9	34.9	**125.6**	15.1%	14.4%	8.1%	**12.7%**
Malaysia	–	0.7	1.9	2.6	–	1.2	1.9	**3.1**	–	68.8%	0.7%	**19.4%**
New Zealand	2.3	0.1	8.6	11.0	2.3	0.2	8.6	**11.1**	1.8%	24.2%	–	**0.7%**
Pakistan	3.1	1.6	0.6	5.4	2.7	1.7	0.6	**5.0**	-13.5%	3.1%	2.3%	**-6.7%**
Philippines	1.0	1.2	11.7	14.0	1.0	1.4	12.0	**14.4**	-1.7%	9.9%	2.2%	**2.6%**
Singapore	–	0.2	0.8	1.0	–	0.3	0.7	**1.0**	–	51.2%	-10.9%	**1.8%**
South Korea	2.7	13.0	14.9	30.5	3.1	16.6	17.3	**37.0**	16.9%	27.1%	16.4%	**21.0%**
Sri Lanka	0.3	0.4	0.1	0.8	0.6	0.4	0.1	**1.1**	95.6%	6.9%	-0.3%	**42.6%**
Taiwan	1.9	4.0	2.0	7.9	2.3	6.1	1.9	**10.3**	20.7%	51.2%	-2.2%	**30.4%**
Thailand	2.2	4.6	14.6	21.4	2.2	4.6	13.7	**20.5**	-0.3%	-0.3%	-6.4%	**-4.5%**
Vietnam	†	4.1	†	4.1	†	9.5	†	**9.5**	60.7%	129.0%	-7.0%	**128.9%**
Other Asia Pacific	0.5	0.8	0.3	1.5	0.5	1.1	0.2	**1.7**	-0.3%	27.4%	-10.9%	**12.8%**
Total Asia Pacific	509.4	392.0	247.8	1149.2	572.6	470.3	279.1	**1322.0**	12.1%	19.6%	12.3%	**14.7%**
Total World	**1418.2**	**707.9**	**663.1**	**2789.2**	**1591.2**	**855.7**	**700.1**	**3147.0**	**11.9%**	**20.5%**	**5.3%**	**12.5%**
of which: OECD	830.8	378.8	389.8	1599.3	932.9	455.7	400.0	**1788.6**	12.0%	20.0%	2.3%	**11.5%**
Non-OECD	587.3	329.2	273.4	1189.9	658.3	400.0	300.1	**1358.4**	11.8%	21.2%	9.5%	**13.8%**
European Union	364.5	125.2	168.8	658.5	394.7	146.1	169.6	**710.4**	8.0%	16.4%	0.2%	**7.6%**

*Based on gross output.
‡Includes electricity generated from: geothermal, biomass and other sources of renewable energy (not already itemized).
†Less than 0.05.
◆Less than 0.05%.
A more extensive time series of renewables by source is available at *bp.com/statisticalreview.*
Note: Growth rates are adjusted for leap years.

Renewable energy: Solar capacity

Installed photovoltaic (PV) power* Gigawatts	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	2009-19	Share 2020
Canada	0.2	0.5	0.8	1.2	1.8	2.5	2.7	2.9	3.1	3.3	**3.3**	0.2%	42.6%	0.5%
Mexico	†	†	0.1	0.1	0.1	0.2	0.4	0.7	2.5	4.4	**5.6**	26.9%	67.8%	0.8%
US	2.0	5.2	8.1	11.8	16.0	21.7	33.0	41.4	51.4	58.9	**73.8**	24.9%	47.8%	10.4%
Total North America	2.3	5.7	9.0	13.1	17.9	24.4	36.0	44.9	57.1	66.7	**82.8**	23.8%	48.2%	11.7%
Argentina	–	†	†	†	†	†	†	†	0.2	0.4	**0.8**	72.4%	n/a	0.1%
Brazil	†	†	†	†	†	†	0.1	1.3	2.5	4.6	**7.9**	70.3%	n/a	1.1%
Chile	–	–	†	†	0.2	0.6	1.1	1.8	2.1	2.6	**3.1**	21.2%	n/a	0.4%
Honduras	†	†	†	†	†	0.4	0.4	0.5	0.5	0.5	**0.5**	-0.3%	64.7%	0.1%
Other S. & Cent. America	0.1	0.2	0.3	0.4	0.6	0.8	1.0	1.7	2.1	2.6	**2.8**	5.9%	46.3%	0.4%
Total S. & Cent. America	0.1	0.2	0.3	0.5	0.8	1.8	2.7	5.2	7.5	10.8	**15.1**	39.6%	67.4%	2.1%
Austria	0.1	0.2	0.3	0.6	0.8	0.9	1.1	1.3	1.5	1.7	**2.2**	30.1%	42.6%	0.3%
Belgium	1.0	2.0	2.6	2.9	3.0	3.1	3.3	3.6	4.0	4.6	**5.6**	21.4%	28.2%	0.8%
Bulgaria	†	0.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	**1.1**	2.1%	87.0%	0.2%
Czech Republic	1.7	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	**2.1**	-1.0%	16.2%	0.3%
Denmark	†	†	0.4	0.6	0.6	0.8	0.9	0.9	1.0	1.1	**1.3**	20.0%	71.2%	0.2%
France	1.0	3.0	4.4	5.3	6.0	7.1	7.7	8.6	9.7	10.8	**11.7**	8.3%	44.2%	1.7%
Germany	18.0	25.9	34.1	36.7	37.9	39.2	40.7	42.3	45.2	49.0	**53.8**	9.4%	16.6%	7.6%
Greece	0.2	0.6	1.5	2.6	2.6	2.6	2.6	2.6	2.7	2.8	**3.2**	14.3%	51.0%	0.5%
Hungary	†	†	†	†	0.1	0.2	0.2	0.3	0.7	1.4	**2.0**	39.1%	106.4%	0.3%
Italy	3.6	13.1	16.8	18.2	18.6	18.9	19.3	19.7	20.1	20.9	**21.6**	3.2%	32.4%	3.1%
Netherlands	0.1	0.1	0.3	0.7	1.0	1.5	2.1	2.9	4.6	7.2	**10.2**	41.9%	59.1%	1.4%
Poland	–	–	†	†	†	0.1	0.2	0.3	0.6	1.5	**3.9**	155.0%	n/a	0.6%
Portugal	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.9	**1.0**	13.5%	22.9%	0.1%
Romania	†	†	†	0.8	1.3	1.3	1.4	1.4	1.4	1.4	**1.4**	-1.1%	159.7%	0.2%
Slovakia	–	†	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	**0.6**	0.2%	n/a	0.1%
Spain	3.9	4.3	4.6	4.7	4.7	4.7	4.7	4.7	4.8	9.0	**11.8**	31.0%	10.1%	1.7%
Sweden	†	†	†	†	0.1	0.1	0.2	0.2	0.4	0.7	**1.4**	97.9%	54.9%	0.2%
Switzerland	0.1	0.2	0.4	0.8	1.1	1.4	1.7	1.9	2.2	2.6	**3.2**	22.8%	41.8%	0.5%
Turkey	†	†	†	†	†	0.2	0.8	3.4	5.1	6.0	**6.7**	10.9%	104.4%	0.9%
Ukraine	†	0.2	0.4	0.7	0.8	0.8	1.0	1.2	2.0	5.9	**7.3**	23.2%	n/a	1.0%
United Kingdom	0.1	1.0	1.8	2.9	5.5	9.6	11.9	12.8	13.1	13.3	**13.6**	1.3%	86.0%	1.9%
Other Europe	0.1	0.6	0.3	0.5	0.6	0.7	0.9	1.1	1.3	1.7	**2.1**	25.8%	41.5%	0.3%
Total Europe	30.1	53.6	71.7	81.9	88.8	97.5	104.7	113.5	124.4	146.3	**167.8**	14.4%	24.1%	23.7%
Russian Federation	–	–	†	†	†	0.1	0.1	0.2	0.5	1.1	**1.4**	33.9%	n/a	0.2%
Other CIS	†	†	†	†	0.1	0.1	0.2	0.2	0.5	1.2	**1.8**	50.5%	97.7%	0.3%
Total CIS	†	†	†	†	0.1	0.2	0.2	0.4	1.0	2.3	**3.2**	42.7%	110.6%	0.5%
Israel	0.1	0.2	0.2	0.4	0.7	0.8	0.9	1.0	1.1	1.2	**1.2**	-0.3%	47.4%	0.2%
Jordan	–	–	†	†	†	†	0.3	0.4	0.8	1.1	**1.4**	23.1%	n/a	0.2%
United Arab Emirates	†	†	†	†	†	†	†	0.3	0.5	1.8	**2.4**	33.8%	68.3%	0.3%
Other Middle East	†	†	†	0.1	0.1	0.2	0.3	0.5	1.0	1.4	**1.5**	11.1%	68.0%	0.2%
Total Middle East	0.1	0.2	0.3	0.5	0.8	1.0	1.5	2.1	3.3	5.5	**6.5**	18.6%	62.7%	0.9%
Algeria	–	–	–	–	†	†	0.2	0.4	0.4	0.4	**0.4**	-0.3%	n/a	0.1%
Egypt	†	†	†	†	†	†	†	0.2	0.7	1.6	**1.7**	1.7%	104.2%	0.2%
Morocco	†	†	†	†	†	†	†	†	0.2	0.2	**0.2**	-0.3%	31.3%	0.0%
South Africa	†	†	†	0.3	1.1	1.3	2.0	3.1	4.4	4.4	**5.5**	24.3%	n/a	0.8%
Other Africa	0.2	0.2	0.2	0.4	0.5	0.6	0.7	1.0	1.3	1.6	**1.7**	6.7%	33.1%	0.2%
Total Africa	0.2	0.3	0.3	0.7	1.6	1.9	3.0	4.7	7.1	8.3	**9.5**	14.5%	54.5%	1.3%
Australia	1.1	2.5	3.8	4.6	5.4	6.1	6.9	7.6	8.9	13.6	**17.6**	29.6%	44.7%	2.5%
China	1.0	3.1	6.7	17.7	28.4	43.5	77.8	130.8	175.0	204.6	**253.8**	23.7%	85.9%	35.9%
India	0.1	0.6	1.0	1.4	3.4	5.4	9.7	17.9	27.1	34.9	**39.0**	11.5%	97.1%	5.5%
Japan	3.6	4.9	6.4	12.1	19.3	28.6	38.4	44.2	55.5	61.5	**67.0**	8.6%	37.2%	9.5%
Malaysia	†	†	†	0.1	0.2	0.2	0.3	0.4	0.5	0.9	**1.5**	68.8%	109.6%	0.2%
Pakistan	†	†	†	0.1	0.2	0.3	0.6	0.7	0.7	0.7	**0.7**	3.1%	69.2%	0.1%
Philippines	†	†	†	†	†	0.2	0.8	0.9	0.9	1.0	**1.0**	7.4%	99.0%	0.1%
South Korea	0.7	0.7	1.0	1.6	2.5	3.6	4.5	5.8	7.1	10.5	**14.6**	38.4%	35.0%	2.1%
Taiwan	†	0.1	0.2	0.4	0.6	0.8	1.2	1.8	2.7	4.1	**5.8**	39.8%	83.7%	0.8%
Thailand	†	0.1	0.4	0.8	1.3	1.4	2.4	2.7	3.0	3.0	**3.0**	-0.3%	55.1%	0.4%
Vietnam	†	†	†	†	†	†	†	†	0.1	4.9	**16.5**	236.0%	106.3%	2.3%
Other Asia Pacific	0.8	0.1	0.2	0.2	0.3	0.4	0.6	0.8	0.9	1.4	**2.0**	44.5%	16.5%	0.3%
Total Asia Pacific	7.3	12.1	19.8	39.1	61.6	90.6	143.2	213.6	282.5	341.0	**422.6**	23.6%	54.9%	59.7%
Total World	**40.1**	**72.0**	**101.4**	**135.7**	**171.6**	**217.5**	**291.3**	**384.5**	**482.9**	**580.8**	**707.5**	**21.5%**	**38.3%**	**100.0%**

Source: IRENA (2021), Renewable capacity statistics 2021 International Renewable Energy Agency (IRENA), Abu Dhabi.

*End of year.
†Less than 0.05.
Notes: Capacity figures in this table are on an AC basis.
Growth rates are adjusted for leap years.

Renewable energy: Wind capacity

Installed wind turbine capacity* Gigawatts	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	4.0	5.3	6.2	7.8	9.7	11.2	12.0	12.4	12.8	13.4	**13.6**	0.9%	15.1%	1.9%
Mexico	0.5	0.6	1.8	2.1	2.6	3.3	4.1	4.2	4.9	6.6	**8.1**	23.0%	31.5%	1.1%
US	39.1	45.7	59.1	60.0	64.2	72.6	81.3	87.6	94.4	103.6	**117.7**	13.4%	11.7%	16.1%
Total North America	43.6	51.5	67.1	69.9	76.5	87.1	97.3	104.2	112.1	123.6	**139.4**	12.5%	12.5%	19.0%
Argentina	†	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.8	1.6	**2.6**	62.6%	50.1%	0.4%
Brazil	0.9	1.4	1.9	2.2	4.9	7.6	10.1	12.3	14.8	15.4	**17.2**	11.1%	38.3%	2.3%
Chile	0.2	0.2	0.2	0.3	0.7	0.9	1.0	1.3	1.5	1.6	**2.1**	32.3%	25.8%	0.3%
Costa Rica	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.4	**0.4**	-4.4%	13.1%	0.1%
Uruguay	†	†	0.1	0.1	0.5	0.9	1.2	1.5	1.5	1.5	**1.5**	-0.3%	47.7%	0.2%
Other S. & Cent. America	0.2	0.4	0.6	0.7	1.0	1.4	1.6	1.6	1.8	2.1	**2.5**	23.6%	28.8%	0.3%
Total S. & Cent. America	1.5	2.2	3.1	3.6	7.5	11.2	14.5	17.3	20.8	22.6	**26.4**	16.4%	35.2%	3.6%
Austria	1.0	1.1	1.3	1.7	2.1	2.5	2.7	2.9	3.1	3.2	**3.2**	-0.3%	12.4%	0.4%
Belgium	0.9	1.1	1.4	1.8	1.9	2.2	2.4	2.8	3.3	3.9	**4.7**	21.1%	20.3%	0.6%
Bulgaria	0.5	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	**0.7**	-0.3%	7.8%	0.1%
Denmark	3.8	4.0	4.2	4.8	4.9	5.1	5.2	5.5	6.1	6.1	**6.2**	1.9%	5.8%	0.9%
Finland	0.2	0.2	0.3	0.4	0.6	1.0	1.6	2.0	2.0	2.3	**2.5**	8.1%	31.6%	0.3%
France	5.9	6.8	7.6	8.2	9.2	10.3	11.6	13.5	14.9	16.4	**17.4**	5.5%	13.6%	2.4%
Germany	26.9	28.7	31.0	33.5	38.6	44.6	49.4	55.6	58.7	60.7	**62.2**	2.1%	9.0%	8.5%
Greece	1.3	1.6	1.8	1.8	2.0	2.1	2.4	2.6	2.9	3.6	**4.1**	14.3%	11.9%	0.6%
Ireland	1.4	1.6	1.7	2.0	2.3	2.5	2.8	3.3	3.7	4.2	**4.3**	3.1%	12.8%	0.6%
Italy	5.8	6.9	8.1	8.5	8.7	9.1	9.4	9.7	10.2	10.7	**10.8**	1.2%	8.1%	1.5%
Netherlands	2.2	2.3	2.4	2.7	2.9	3.4	4.3	4.2	4.4	4.5	**6.6**	46.8%	7.3%	0.9%
Norway	0.4	0.5	0.7	0.8	0.9	0.9	0.9	1.2	1.7	2.9	**4.0**	36.1%	21.3%	0.5%
Poland	1.1	1.8	2.6	3.4	3.8	4.9	5.7	5.8	5.8	5.8	**6.3**	7.1%	23.5%	0.9%
Portugal	3.8	4.3	4.4	4.6	4.9	4.9	5.1	5.1	5.2	5.2	**5.2**	0.0%	4.6%	0.7%
Romania	0.4	1.0	1.8	2.8	3.2	3.1	3.0	3.0	3.0	3.0	**3.0**	-0.8%	70.1%	0.4%
Spain	20.7	21.5	22.8	23.0	22.9	22.9	23.0	23.1	23.4	25.6	**27.1**	5.6%	2.9%	3.7%
Sweden	2.0	2.8	3.6	4.2	5.1	5.8	6.4	6.6	7.3	8.7	**9.7**	11.3%	19.4%	1.3%
Turkey	1.3	1.7	2.3	2.8	3.6	4.5	5.8	6.5	7.0	7.6	**8.8**	16.0%	25.4%	1.2%
Ukraine	0.1	0.1	0.2	0.4	0.5	0.5	0.5	0.6	0.6	1.3	**1.4**	11.2%	30.8%	0.2%
United Kingdom	5.4	6.6	9.0	11.3	13.1	14.3	16.1	19.6	21.8	24.1	**24.7**	2.1%	18.5%	3.4%
Other Europe	1.0	1.3	1.6	1.7	1.9	2.2	2.5	2.8	3.1	3.4	**3.7**	5.6%	16.3%	0.5%
Total Europe	86.2	96.4	109.4	121.0	133.8	147.5	161.5	177.1	189.0	203.9	**216.6**	5.9%	10.3%	29.5%
Russian Federation	†	†	†	†	†	†	†	†	0.1	0.1	**0.9**	824.8%	26.1%	0.1%
Other CIS	†	†	†	†	0.1	0.1	0.1	0.2	0.2	0.4	**0.6**	53.4%	55.3%	0.1%
Total CIS	†	†	†	†	0.1	0.1	0.1	0.2	0.3	0.5	**1.5**	218.3%	41.7%	0.2%
Iran	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	**0.3**	0.0%	12.6%	0.0%
Jordan	†	†	†	†	†	0.1	0.2	0.2	0.3	0.4	**0.5**	38.8%	74.7%	0.1%
Other Middle East	†	†	†	†	†	†	†	†	†	0.1	**0.1**	-0.1%	29.5%	0.0%
Total Middle East	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.8	**0.9**	18.7%	22.5%	0.1%
Egypt	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.8	1.1	1.4	**1.4**	-0.3%	12.2%	0.2%
Morocco	0.2	0.3	0.3	0.5	0.8	0.8	0.9	1.0	1.2	1.2	**1.4**	14.4%	18.7%	0.2%
South Africa	†	†	†	0.3	0.6	1.1	1.5	2.1	2.1	2.1	**2.6**	25.5%	73.6%	0.4%
Tunisia	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	**0.2**	-0.3%	16.5%	0.0%
Other Africa	†	0.1	0.1	0.2	0.2	0.5	0.5	0.5	0.8	0.8	**0.8**	-0.3%	62.1%	0.1%
Total Africa	0.8	1.0	1.1	1.7	2.4	3.3	3.8	4.6	5.5	5.8	**6.5**	12.2%	23.1%	0.9%
Australia	1.9	2.1	2.6	3.2	3.8	4.2	4.3	4.8	5.7	7.1	**9.5**	32.2%	15.4%	1.3%
China	29.6	46.4	61.6	76.7	96.8	131.0	148.5	164.4	184.7	209.5	**282.0**	34.2%	28.1%	38.5%
India	13.2	16.2	17.3	18.4	22.5	25.1	28.7	32.8	35.3	37.5	**38.6**	2.5%	13.1%	5.3%
Japan	2.3	2.4	2.6	2.6	2.8	2.8	3.2	3.5	3.7	3.8	**4.2**	10.8%	6.6%	0.6%
New Zealand	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	**0.8**	13.5%	3.3%	0.1%
Pakistan	†	†	0.1	0.1	0.2	0.3	0.6	0.8	1.2	1.2	**1.2**	-0.3%	70.4%	0.2%
Philippines	†	†	†	†	0.3	0.4	0.4	0.4	0.4	0.4	**0.4**	-0.3%	29.7%	0.1%
South Korea	0.4	0.4	0.5	0.6	0.6	0.8	1.1	1.2	1.4	1.5	**1.6**	7.9%	15.7%	0.2%
Taiwan	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	**0.8**	-0.3%	8.5%	0.1%
Thailand	†	†	0.1	0.2	0.2	0.2	0.5	0.6	1.1	1.5	**1.5**	-0.3%	76.6%	0.2%
Other Asia Pacific	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.7	0.9	**1.2**	32.4%	30.1%	0.2%
Total Asia Pacific	48.5	68.7	86.0	103.4	128.8	166.7	189.2	210.5	235.6	265.1	**341.9**	28.6%	23.0%	46.6%
Total World	**180.9**	**220.1**	**267.1**	**300.3**	**349.7**	**416.2**	**466.9**	**514.4**	**563.8**	**622.2**	**733.3**	**17.5%**	**15.3%**	**100.0%**

Source: IRENA (2021), Renewable capacity statistics 2021 International Renewable Energy Agency (IRENA), Abu Dhabi.

*End of year.
†Less than 0.05.
Notes: Capacity figures in this table are on an AC basis.
Growth rates are adjusted for leap years.

Renewables: Biofuels production*

Thousand barrels of oil equivalent per day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	2009-19	Share 2020
Canada	15	18	17	18	22	21	22	22	22	24	**21**	-10.2%	5.4%	1.3%
Mexico	–	–	–	–	–	–	–	–	–	–	**–**	n/a	n/a	–
US	499	556	531	555	588	605	642	664	684	665	**602**	-9.6%	4.6%	35.9%
Total North America	514	574	548	574	609	625	664	686	707	689	**623**	-9.6%	4.7%	37.2%
Argentina	32	42	43	38	49	38	53	58	51	46	**27**	-40.3%	9.1%	1.6%
Brazil	292	251	257	299	315	338	317	320	384	411	**395**	-4.0%	4.5%	23.5%
Colombia	8	11	12	12	13	13	13	12	14	13	**12**	-9.0%	8.2%	0.7%
Other S. & Cent. America	4	5	5	6	7	8	10	10	11	13	**12**	-3.1%	13.7%	0.7%
Total S. & Cent. America	336	309	316	356	384	396	392	399	461	482	**446**	-7.5%	5.1%	26.6%
Austria	7	7	7	7	6	7	8	7	7	7	**7**	3.2%	0.3%	0.4%
Belgium	7	8	8	8	11	7	7	8	8	8	**8**	-0.7%	12.8%	0.5%
Finland	6	4	5	6	7	8	2	6	5	6	**7**	14.7%	3.9%	0.4%
France	43	42	49	46	47	49	45	44	51	47	**43**	-8.0%	0.7%	2.6%
Germany	59	58	54	58	64	59	60	61	63	66	**65**	-0.6%	3.3%	3.9%
Italy	15	11	6	9	10	10	10	12	13	15	**16**	7.7%	0.4%	0.9%
Netherlands	7	12	24	28	33	36	28	37	36	38	**37**	-1.7%	23.7%	2.2%
Poland	8	8	12	13	14	15	17	17	17	18	**19**	3.4%	9.2%	1.1%
Portugal	5	6	5	5	6	6	6	6	6	7	**6**	-15.6%	4.6%	0.3%
Spain	19	16	11	14	19	21	22	35	40	39	**32**	-19.0%	8.7%	1.9%
Sweden	4	4	4	4	4	4	4	3	7	8	**7**	-9.9%	8.9%	0.4%
United Kingdom	5	3	6	9	7	6	10	14	13	11	**10**	-5.7%	10.6%	0.6%
Other Europe	20	22	26	28	28	31	33	35	39	39	**36**	-6.4%	7.1%	2.2%
Total Europe	204	201	217	234	256	260	252	286	304	309	**295**	-4.6%	5.6%	17.6%
Total CIS	1	†	1	†	†	†	†	†	†	†	**†**	◆	-3.7%	◆
Total Middle East	†	†	†	†	†	†	†	†	†	†	**†**	–	2.7%	◆
Total Africa	2	2	2	2	2	3	3	2	3	3	**3**	–	-6.0%	0.2%
Australia	3	4	4	5	5	4	2	2	2	3	**3**	-4.5%	-4.3%	0.2%
China	29	36	38	42	47	40	39	47	45	55	**63**	16.0%	6.4%	3.8%
India	3	5	5	5	5	10	12	11	18	21	**20**	-8.1%	26.2%	1.2%
Indonesia	4	27	33	41	59	24	54	50	91	124	**126**	2.1%	46.0%	7.5%
South Korea	6	5	7	7	7	8	8	8	13	13	**12**	-4.9%	12.2%	0.7%
Thailand	16	17	24	30	34	36	31	37	40	45	**44**	-3.6%	14.2%	2.6%
Other Asia Pacific	8	16	21	28	35	36	34	32	37	45	**41**	-8.3%	18.3%	2.5%
Total Asia Pacific	68	109	132	158	191	159	180	188	246	306	**310**	1.1%	17.1%	18.5%
Total World	**1125**	**1195**	**1215**	**1325**	**1443**	**1444**	**1491**	**1562**	**1721**	**1790**	**1677**	**-6.3%**	**6.2%**	**100.0%**
of which: OECD	735	792	785	828	886	906	935	988	1035	1020	**938**	-8.0%	4.9%	56.0%
Non-OECD	391	404	430	497	557	537	557	574	686	770	**738**	-4.1%	8.3%	44.0%
European Union	198	195	210	223	247	252	239	267	287	293	**279**	-4.7%	5.4%	16.7%

Biofuels production by fuel type

Thousand barrels of oil equivalent per day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	2009-19	Share 2020
Biogasoline														
Canada & Mexico	13	16	16	16	17	16	16	16	17	18	**16**	-12.2%	4.0%	1.7%
US	480	502	475	479	516	534	554	575	580	569	**501**	-12.0%	3.7%	52.2%
Brazil	257	212	217	256	264	280	261	256	305	324	**300**	-7.4%	3.0%	31.2%
Other S. & Cent. America	7	9	10	14	17	19	21	23	24	24	**21**	-10.6%	13.9%	2.2%
Europe	36	40	46	52	51	56	52	56	57	54	**49**	-7.7%	5.9%	5.1%
CIS	–	–	–	†	†	†	†	†	†	†	**†**	-0.3%	n/a	◆
Middle East	†	†	†	†	†	†	†	†	†	†	**†**	–	2.7%	◆
Africa	2	2	2	2	2	3	3	2	3	3	**3**	–	-6.0%	0.3%
Asia Pacific	31	39	40	47	53	57	51	58	65	76	**70**	-7.7%	10.0%	7.3%
Total World	**825**	**820**	**807**	**866**	**920**	**965**	**959**	**987**	**1052**	**1067**	**960**	**-10.0%**	**4.0%**	**100.0%**
of which: OECD	534	564	543	553	590	613	628	652	660	647	**572**	-11.6%	3.8%	59.5%
Non-OECD	292	256	264	313	330	353	331	336	391	420	**389**	-7.5%	4.4%	40.5%
European Union	33	40	44	46	45	52	47	48	51	50	**47**	-6.4%	5.5%	4.9%
Biodiesel‡														
Canada & Mexico	2	2	1	2	5	4	6	6	6	5	**5**	-3.1%	12.5%	0.7%
US	19	54	55	76	71	70	87	89	104	96	**101**	4.6%	12.8%	14.1%
Brazil	35	39	40	43	50	58	56	63	79	87	**95**	8.7%	13.9%	13.2%
Other S. & Cent. America	37	48	49	43	53	40	54	57	52	48	**30**	-36.8%	8.0%	4.2%
Europe	168	160	171	183	205	203	200	230	248	255	**245**	-4.0%	5.5%	34.2%
CIS	1	†	1	†	†	†	†	†	†	†	**†**	–	-3.8%	◆
Middle East	–	–	–	–	–	–	–	–	–	–	**–**	n/a	n/a	–
Africa	–	–	†	†	†	†	†	–	–	–	**–**	n/a	n/a	–
Asia Pacific	37	71	91	111	138	102	129	129	181	230	**240**	4.0%	21.1%	33.5%
Total World	**300**	**375**	**409**	**459**	**523**	**478**	**532**	**575**	**670**	**723**	**716**	**-0.9%**	**10.8%**	**100.0%**
of which: OECD	201	227	242	274	296	294	307	337	375	373	**367**	-1.7%	7.2%	51.2%
Non-OECD	99	148	167	184	227	185	225	238	295	349	**349**	◆	16.8%	48.8%
European Union	165	156	166	177	201	199	192	219	236	243	**233**	-4.3%	5.3%	32.5%

Source: includes data from IHS Markit; US Energy Information Administration (March 2021).

*Total biofuels includes biogasoline (such as ethanol), biodiesel and biojet. Volumes have been adjusted for energy content.
‡Biodiesel production includes biojet which is currently <1kboed globally but more than doubled relative to 2019.
†Less than 0.5.
◆Less than 0.05%.
n/a not available.
Annual changes and shares of total are calculated using thousand barrels a day oil equivalent figures.

Renewables: Biofuels consumption*

Thousand barrels of oil equivalent per day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	17	27	35	35	36	34	32	38	39	42	**36**	-13.2%	11.2%	2.2%
Mexico	2	2	2	2	3	3	3	4	4	4	**4**	0.4%	7.5%	0.2%
US	478	515	513	556	564	586	632	633	626	626	**558**	-10.9%	4.2%	33.2%
Total North America	497	543	551	593	603	623	668	675	669	671	**598**	-11.0%	4.5%	35.6%
Argentina	10	14	17	19	22	24	26	30	28	29	**16**	-46.5%	n/a	0.9%
Brazil	257	235	222	261	288	341	310	326	378	420	**418**	-0.4%	5.7%	24.9%
Colombia	10	12	12	12	13	13	13	14	15	16	**14**	-10.9%	9.0%	0.8%
Other S. & Cent. America	11	12	14	15	15	16	17	18	17	17	**16**	-8.2%	7.1%	0.9%
Total S. & Cent. America	287	272	265	307	338	395	365	387	439	482	**464**	-3.8%	6.5%	27.6%
Austria	10	10	10	8	10	12	10	9	9	9	**8**	-11.5%	-0.4%	0.5%
Belgium	7	7	6	6	8	5	8	9	9	9	**11**	23.6%	13.5%	0.6%
Finland	2	3	3	4	8	8	3	7	6	7	**7**	3.8%	11.9%	0.4%
France	44	44	48	49	52	53	53	54	53	55	**49**	-10.3%	2.1%	2.9%
Germany	51	53	56	50	53	50	50	51	53	52	**63**	21.8%	0.2%	3.8%
Italy	26	25	28	24	20	25	25	25	26	15	**21**	41.2%	-3.1%	1.3%
Netherlands	4	7	7	7	7	8	8	9	11	14	**18**	31.3%	7.2%	1.1%
Poland	12	13	14	14	13	12	8	11	17	18	**17**	-5.7%	4.7%	1.0%
Portugal	6	6	5	5	5	7	5	5	5	5	**5**	-11.7%	2.3%	0.3%
Spain	27	32	39	17	18	18	21	24	31	31	**23**	-28.1%	18.5%	1.3%
Sweden	9	10	12	12	16	19	25	28	27	27	**25**	-9.6%	17.8%	1.5%
United Kingdom	21	20	17	19	22	17	18	17	24	31	**29**	-4.4%	5.2%	1.8%
Other Europe	22	26	31	38	36	37	43	50	52	61	**61**	0.8%	12.2%	3.7%
Total Europe	241	255	276	253	269	271	276	298	323	336	**339**	1.0%	5.2%	20.2%
Total CIS	1	1	1	†	†	†	1	2	2	3	**3**	12.6%	21.9%	0.2%
Total Middle East	†	†	†	†	†	†	†	†	†	†	**†**	-26.4%	-4.4%	◆
Total Africa	†	1	1	1	1	1	1	1	1	1	**1**	-0.9%	8.9%	0.1%
Australia	4	4	4	5	6	4	4	3	3	3	**3**	2.4%	-0.1%	0.2%
China	32	35	41	50	59	44	44	42	54	61	**56**	-8.1%	6.7%	3.3%
India	18	20	19	19	22	23	28	25	33	38	**39**	3.2%	10.3%	2.3%
Indonesia	5	7	11	17	28	15	46	39	56	96	**98**	2.5%	39.4%	5.8%
South Korea	7	6	7	10	9	8	8	8	13	13	**13**	-0.9%	10.7%	0.8%
Thailand	14	14	18	24	28	30	31	34	37	42	**42**	-0.2%	12.2%	2.5%
Other Asia Pacific	8	10	13	16	19	22	24	25	26	27	**24**	-10.9%	17.8%	1.4%
Total Asia Pacific	86	96	114	142	171	147	184	176	223	279	**274**	-1.6%	14.0%	16.3%
Total World	**1112**	**1168**	**1206**	**1297**	**1382**	**1438**	**1495**	**1538**	**1658**	**1772**	**1679**	**-5.2%**	**6.2%**	**100.0%**
of which: OECD	758	820	848	871	898	920	967	996	1021	1033	**961**	-6.9%	4.8%	57.2%
Non-OECD	354	348	359	425	484	518	528	542	636	739	**718**	-2.8%	8.7%	42.8%
European Union	217	233	255	224	241	248	248	265	285	287	**294**	2.2%	4.7%	17.5%

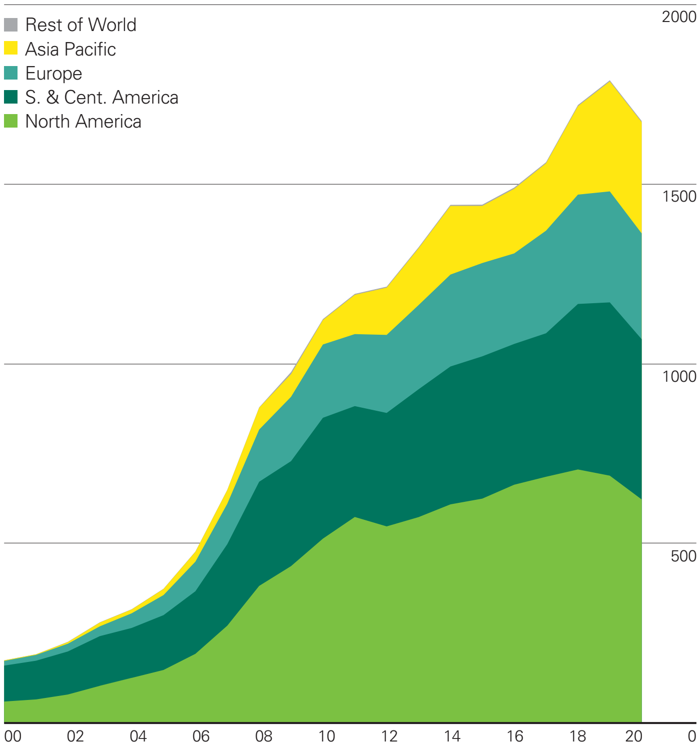
Biofuels consumption by fuel type

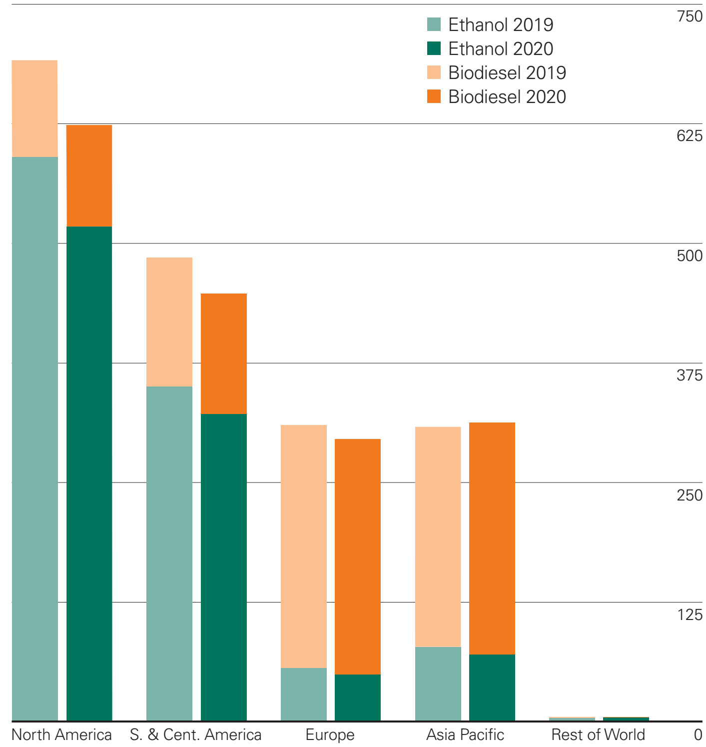
Thousand barrels of oil equivalent per day	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Biogasoline														
US	464	465	463	477	485	503	516	522	520	525	**454**	-13.4%	2.8%	45.6%
Canada & Mexico	15	22	28	28	30	30	30	32	33	34	**31**	-10.5%	8.5%	3.1%
Brazil	222	197	181	218	238	283	254	263	300	333	**324**	-2.7%	4.3%	32.5%
Other S. & Cent. America	12	13	15	18	20	22	24	26	27	27	**23**	-14.4%	10.2%	2.3%
Europe	53	55	56	52	52	53	52	54	56	61	**58**	-5.9%	3.6%	5.8%
CIS	–	–	–	–	–	–	†	1	1	2	**2**	9.9%	n/a	0.2%
Middle East	†	†	†	†	†	†	†	†	†	†	**0**	-26.4%	-4.4%	◆
Africa	†	1	1	1	1	1	1	1	1	1	**1**	-0.9%	8.9%	0.1%
Asia Pacific	52	57	60	66	73	82	88	82	97	110	**105**	-5.0%	9.0%	10.5%
Total World	**819**	**810**	**804**	**861**	**900**	**974**	**965**	**981**	**1036**	**1093**	**997**	**-8.8%**	**4.1%**	**100.0%**
of which: OECD	541	552	556	567	579	598	610	620	623	632	**555**	-12.2%	3.2%	55.6%
Non-OECD	278	258	248	294	322	377	355	361	413	461	**442**	-4.1%	5.6%	44.4%
European Union	47	49	48	43	43	43	42	44	46	50	**49**	-3.2%	2.4%	4.9%
Biodiesel														
US	15	49	50	80	79	83	116	111	106	101	**104**	2.5%	18.9%	15.2%
Canada & Mexico	3	7	9	8	8	7	6	9	10	11	**9**	-17.2%	28.0%	1.3%
Brazil	35	38	40	43	50	58	56	63	79	87	**95**	8.6%	14.2%	13.9%
Other S. & Cent. America	18	24	28	28	30	31	31	35	34	35	**22**	-36.3%	21.1%	3.3%
Europe	187	200	221	201	217	219	224	244	267	274	**281**	2.6%	5.6%	41.2%
CIS	1	1	1	†	†	†	1	1	1	1	**1**	16.6%	11.4%	0.2%
Middle East	–	–	–	–	–	–	–	–	–	–	**–**	n/a	n/a	–
Africa	–	–	–	–	–	–	–	–	–	–	**–**	n/a	n/a	–
Asia Pacific	34	40	54	75	97	66	97	93	126	169	**170**	0.6%	19.3%	24.9%
Total World	**294**	**358**	**402**	**436**	**482**	**464**	**530**	**556**	**622**	**678**	**682**	**0.5%**	**11.1%**	**100.0%**
of which: OECD	218	269	292	304	319	322	358	376	399	401	**406**	1.4%	8.1%	59.5%
Non-OECD	76	90	110	131	163	142	173	180	223	278	**276**	-0.6%	18.1%	40.5%
European Union	169	184	207	181	198	204	206	221	239	237	**245**	3.4%	5.2%	35.9%

*Includes biogasoline (such as ethanol) and biodiesel. Volumes have been adjusted for energy content.
†Less than 0.5.
◆Less than 0.05%.
n/a not available.
Annual changes and shares of total are calculated using thousand barrels of oil equivalent per day figures.

World biofuels production

Thousand barrels of oil equivalent per day

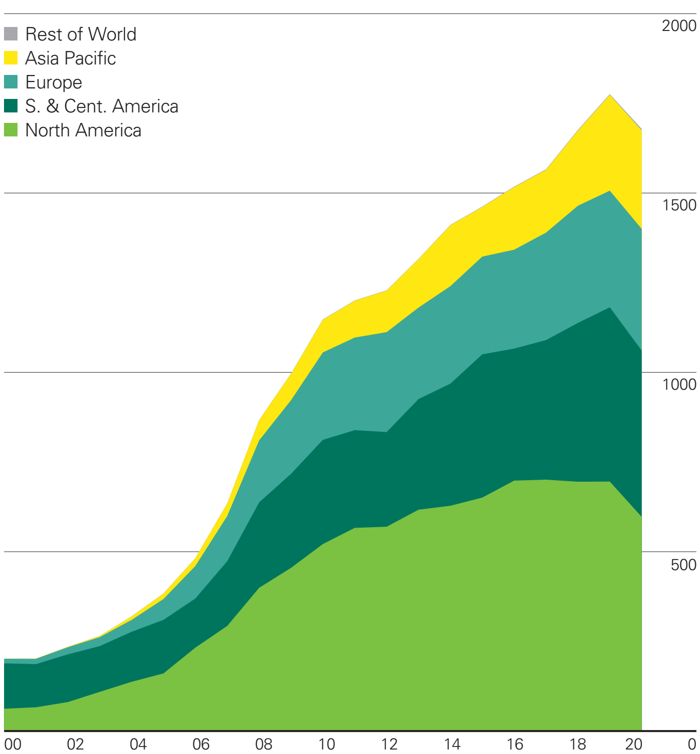


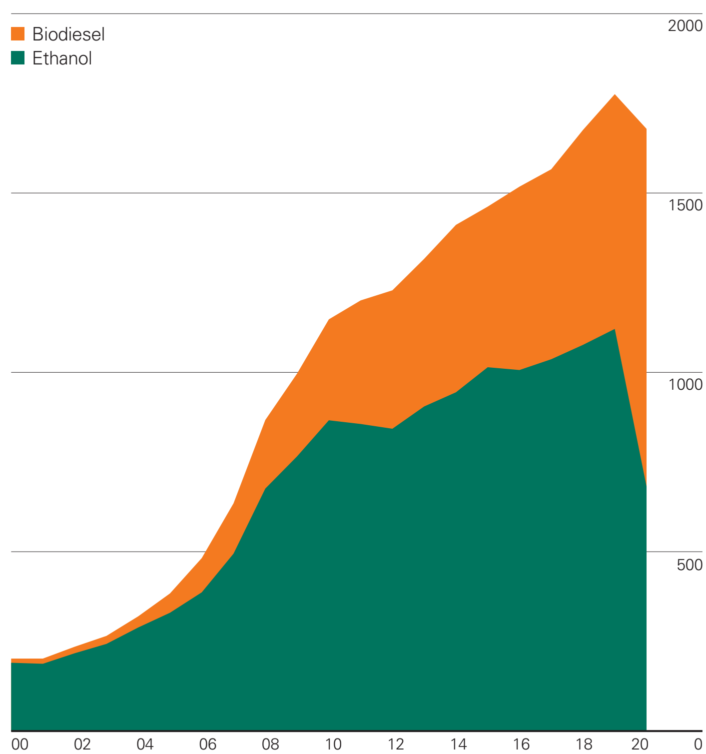


Biofuels production fell 6% globally in 2020 (113,000 barrels of oil equivalent per day or boe/d) in contrast to the 6% average growth for the 10 years prior. Moderate growth in Asia (4,000 boe/d) was more than compensated by a decline in the US (64,000 boe/d), Argentina (19,000 boe/d) and Brazil (16,000 boe/d). Asia's production was resilient due to an increase in biodiesel whereas ethanol production decreased in all major regions by 7 to 12% (107,000 boe/d globally). Biodiesel is the dominant fuel produced in Europe and Asia Pacific (making up 83% and 77% of biofuels respectively in 2020), while ethanol is the main fuel in North America (83% of total) and South and Central America (72%).

World biofuels consumption

Thousand barrels of oil equivalent per day





Biofuels consumption fell by 5% (92,000 boe/d). As with production, the decline was largest in the US (68,000 boe/d), most of which was ethanol, but also in Argentina (13,000 boe/d), due to reduced biodiesel consumption. European biofuel consumption grew 1% in 2020 (3,000 boe/d). At the global level, ethanol made up 59% of biofuels in 2019, but the share of biodiesel has risen continually. For example, biodiesel's share was 26% in 2010 but rose to 41% last year.

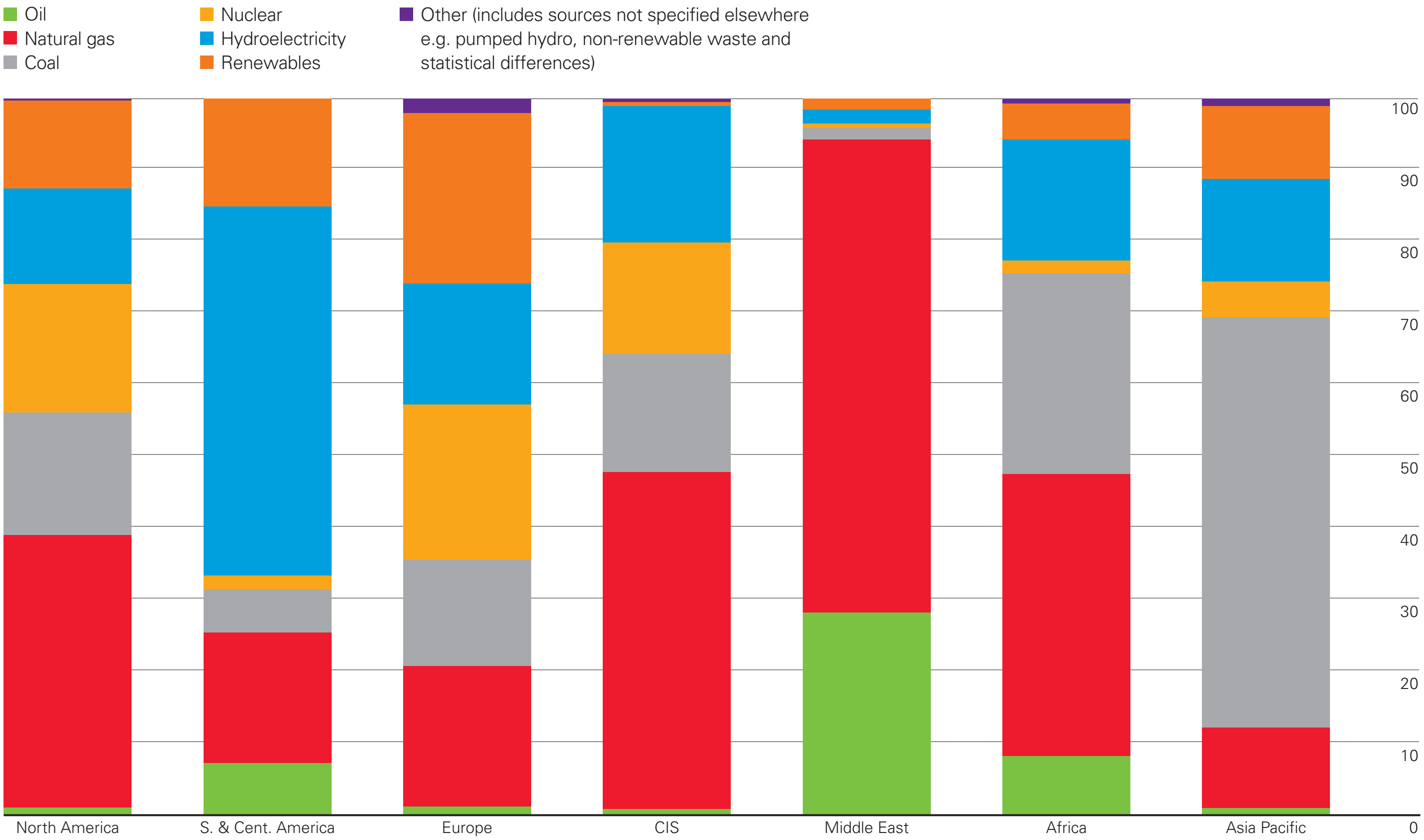
Electricity

Electricity generation*

Terawatt-hours	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Canada	607.0	638.3	636.5	655.7	647.6	659.3	663.7	660.1	655.8	648.7	**643.9**	-1.0%	0.6%	2.4%
Mexico	275.6	292.1	296.4	297.1	303.3	310.3	319.4	325.1	335.1	322.6	**313.2**	-3.2%	1.9%	1.2%
US	4394.3	4363.4	4310.6	4330.3	4363.3	4348.7	4347.9	4302.5	4461.6	4411.2	**4286.6**	-3.1%	0.5%	16.0%
Total North America	5276.8	5293.8	5243.5	5283.1	5314.2	5318.4	5331.1	5287.7	5452.5	5382.4	**5243.6**	-2.8%	0.6%	19.5%
Argentina	126.0	129.5	136.0	139.4	138.6	145.4	147.2	145.6	146.8	139.5	**142.5**	1.9%	1.3%	0.5%
Brazil	515.8	531.8	552.5	570.8	590.5	581.2	578.9	589.3	601.4	626.3	**620.1**	-1.3%	3.0%	2.3%
Chile	61.3	65.2	69.7	73.0	71.6	74.5	77.7	78.6	82.3	83.6	**84.3**	0.5%	3.4%	0.3%
Colombia	64.7	66.2	67.7	69.8	72.7	75.0	74.4	75.1	78.3	80.0	**75.0**	-6.5%	2.4%	0.3%
Ecuador	19.5	20.5	22.8	23.3	24.3	26.0	27.3	28.0	29.7	32.9	**32.0**	-2.7%	6.0%	0.1%
Peru	35.9	38.8	41.0	43.3	45.5	48.3	51.7	52.7	54.9	57.0	**52.7**	-7.7%	5.6%	0.2%
Trinidad & Tobago	8.5	8.8	9.1	9.5	9.9	10.3	10.0	9.9	9.2	9.7	**9.0**	-7.0%	2.2%	◆
Venezuela	116.7	122.9	127.9	130.0	128.3	123.8	113.8	109.4	105.1	89.8	**58.4**	-35.1%	-3.2%	0.2%
Other S. & Cent. America	192.1	197.5	204.6	208.4	205.7	212.1	224.5	218.1	223.2	220.3	**208.7**	-5.5%	1.6%	0.8%
Total S. & Cent. America	1140.5	1181.1	1231.4	1267.6	1287.3	1296.6	1305.6	1306.8	1330.9	1339.0	**1282.8**	-4.5%	2.1%	4.8%
Austria	71.1	65.9	72.4	68.0	65.1	64.9	68.3	71.3	68.6	74.2	**71.7**	-3.6%	0.7%	0.3%
Belgium	95.2	90.2	82.9	83.5	72.6	69.8	85.8	86.8	75.1	93.7	**90.4**	-3.8%	0.3%	0.3%
Czech Republic	85.9	87.6	87.6	87.1	86.0	83.9	83.3	87.0	88.0	87.0	**81.4**	-6.6%	0.6%	0.3%
Finland	81.1	73.7	70.5	71.4	68.2	69.2	69.2	67.9	70.6	69.0	**68.8**	-0.6%	-0.5%	0.3%
France	569.3	565.0	565.2	575.5	564.9	571.8	556.2	554.0	574.0	562.8	**524.9**	-7.0%	0.5%	2.0%
Germany	633.1	613.1	630.1	638.7	627.8	647.6	649.7	652.9	642.9	609.4	**571.9**	-6.4%	0.2%	2.1%
Greece	57.4	59.4	61.0	57.2	50.5	51.9	54.4	55.3	53.3	45.5	**42.6**	-6.6%	-3.0%	0.2%
Hungary	37.4	36.0	34.6	30.3	29.4	30.4	31.9	32.9	32.0	34.2	**34.6**	1.1%	-0.5%	0.1%
Italy	302.1	302.6	299.3	289.8	279.8	283.0	289.8	295.8	289.7	293.9	**282.7**	-4.0%	◆	1.1%
Netherlands	118.1	113.0	102.5	100.9	103.4	110.1	115.2	117.3	114.1	121.1	**122.4**	0.8%	0.6%	0.5%
Norway	123.6	127.6	147.7	134.0	142.0	144.5	149.0	149.4	147.1	134.9	**154.5**	14.2%	0.2%	0.6%
Poland	157.7	163.5	162.1	164.6	159.1	164.9	166.6	170.5	170.0	164.0	**157.8**	-4.0%	0.8%	0.6%
Portugal	54.1	52.5	46.6	51.7	52.8	52.4	60.3	59.4	59.6	53.2	**54.1**	1.5%	0.6%	0.2%
Romania	61.0	62.2	59.0	58.9	63.3	66.3	65.1	64.3	64.8	59.5	**56.2**	-5.7%	0.3%	0.2%
Spain	300.4	291.8	297.6	285.3	278.8	281.0	274.6	275.6	274.5	267.5	**255.8**	-4.7%	-1.0%	1.0%
Sweden	148.3	151.2	166.3	153.2	153.7	162.1	156.1	164.3	163.4	168.4	**169.2**	0.2%	2.1%	0.6%
Switzerland	68.0	64.8	70.0	70.4	72.0	66.3	61.9	61.8	67.6	72.1	**70.4**	-2.5%	0.5%	0.3%
Turkey	211.2	229.4	239.5	240.2	252.0	261.8	274.4	297.3	304.8	303.9	**305.4**	0.2%	4.5%	1.1%
Ukraine	188.8	194.9	198.9	194.4	182.8	163.7	164.6	156.0	159.9	154.1	**149.0**	-3.6%	-1.2%	0.6%
United Kingdom	382.1	368.0	363.9	358.3	338.1	338.9	339.2	338.2	332.8	324.8	**312.8**	-4.0%	-1.5%	1.2%
Other Europe	320.0	307.1	295.4	309.2	297.2	298.2	305.9	303.2	312.8	299.0	**294.7**	-1.7%	-0.2%	1.1%
Total Europe	4065.8	4019.4	4053.1	4022.2	3939.2	3982.7	4021.4	4061.3	4065.5	3992.1	**3871.3**	-3.3%	0.2%	14.4%
Azerbaijan	18.7	20.3	23.0	23.4	24.7	24.7	25.0	24.3	25.2	26.1	**22.8**	-12.7%	3.3%	0.1%
Belarus	34.9	32.2	30.8	31.5	34.7	34.2	33.6	34.5	38.9	40.5	**38.7**	-4.6%	2.9%	0.1%
Kazakhstan	82.6	86.6	90.6	92.6	94.6	91.6	94.6	103.1	107.3	106.5	**109.2**	2.2%	3.1%	0.4%
Russian Federation	1038.0	1054.9	1069.3	1059.1	1064.2	1067.5	1091.0	1091.2	1109.2	1118.1	**1085.4**	-3.2%	1.2%	4.0%
Turkmenistan	16.7	17.2	17.8	18.9	20.1	21.5	22.6	22.8	24.2	25.4	**26.6**	4.4%	4.7%	0.1%
Uzbekistan	51.9	52.8	53.0	54.9	55.4	57.3	59.1	60.8	62.9	63.1	**65.0**	2.7%	2.3%	0.2%
Other CIS	41.1	44.6	46.0	43.3	44.1	44.0	43.5	46.3	48.6	49.2	**49.4**	0.3%	2.3%	0.2%
Total CIS	1284.0	1308.5	1330.4	1323.7	1337.9	1340.9	1369.3	1383.0	1416.4	1428.8	**1397.1**	-2.5%	1.5%	5.2%
Iran	235.7	235.6	248.8	258.9	273.5	279.5	286.1	305.2	314.4	318.7	**331.6**	3.8%	3.7%	1.2%
Iraq	41.7	42.2	47.8	62.1	71.2	75.3	86.3	93.6	100.2	131.9	**131.3**	-0.7%	12.3%	0.5%
Israel	58.5	59.3	63.0	61.4	61.3	64.3	67.4	67.7	69.3	72.3	**74.3**	2.4%	2.7%	0.3%
Kuwait	57.1	57.5	62.7	61.0	65.1	68.3	70.1	72.9	74.2	75.2	**74.9**	-0.7%	3.5%	0.3%
Oman	19.8	21.9	25.0	26.2	29.1	32.8	34.2	36.1	37.7	38.3	**38.9**	1.1%	7.6%	0.1%
Qatar	28.1	30.7	34.8	34.7	38.7	41.5	42.3	45.6	47.9	49.9	**50.5**	1.1%	7.5%	0.2%
Saudi Arabia	240.1	250.1	272.1	284.5	312.3	338.8	345.5	349.5	344.0	343.7	**340.9**	-1.1%	4.7%	1.3%
United Arab Emirates	93.9	99.1	106.2	110.0	116.5	127.4	129.6	134.6	136.0	138.5	**138.4**	-0.3%	4.9%	0.5%
Other Middle East	98.7	93.4	88.3	83.7	83.5	81.8	82.1	85.4	83.7	85.2	**84.4**	-1.2%	-0.6%	0.3%
Total Middle East	873.7	889.7	948.6	982.4	1051.4	1109.7	1143.7	1190.5	1207.4	1253.6	**1265.2**	0.6%	4.5%	4.7%
Algeria	45.7	53.1	57.4	59.9	64.2	68.8	71.0	76.0	76.7	81.5	**78.8**	-3.6%	6.6%	0.3%
Egypt	144.4	149.6	162.8	165.1	171.2	181.8	188.2	193.2	199.4	200.6	**198.6**	-1.2%	4.1%	0.7%
Morocco	23.7	25.4	27.7	28.1	29.3	30.3	30.7	31.6	34.4	40.1	**38.2**	-5.2%	6.4%	0.1%
South Africa	259.6	262.5	257.9	256.1	254.8	250.1	252.7	255.1	256.3	252.6	**239.5**	-5.5%	0.1%	0.9%
Other Africa	198.8	198.9	215.3	234.8	248.4	257.3	253.9	268.9	280.3	288.6	**288.9**	-0.2%	4.9%	1.1%
Total Africa	672.3	689.4	721.1	744.0	767.9	788.4	796.5	824.8	847.2	863.4	**843.9**	-2.5%	3.2%	3.1%
Australia	251.0	256.3	250.7	249.6	247.6	254.0	258.2	259.0	262.6	265.9	**265.2**	-0.5%	0.6%	1.0%
Bangladesh	40.8	44.2	48.7	54.4	57.4	61.8	70.0	73.4	81.1	89.7	**89.1**	-0.9%	9.2%	0.3%
China	4207.2	4713.0	4987.6	5431.6	5794.5	5814.6	6133.2	6604.4	7166.1	7503.4	**7779.1**	3.4%	7.3%	29.0%
China Hong Kong SAR	38.3	39.1	38.8	39.1	39.8	38.0	38.2	37.0	36.5	36.9	**35.2**	-4.8%	-0.5%	0.1%
India	937.5	1034.0	1091.8	1146.1	1262.2	1317.3	1401.7	1471.3	1579.2	1603.7	**1560.9**	-2.9%	6.2%	5.8%
Indonesia	169.8	183.4	200.3	216.2	228.6	234.0	247.9	254.7	267.1	278.9	**275.2**	-1.6%	5.9%	1.0%
Japan	1156.0	1104.2	1106.9	1087.8	1062.7	1030.1	1035.1	1042.1	1053.2	1030.3	**1004.8**	-2.7%	-0.8%	3.7%
Malaysia	125.0	127.1	134.1	141.0	147.5	150.1	156.7	160.6	170.6	171.5	**159.6**	-7.2%	4.0%	0.6%
New Zealand	44.9	44.4	44.2	43.3	43.7	44.4	43.8	43.2	44.4	44.8	**44.2**	-1.7%	0.3%	0.2%
Pakistan	99.4	100.6	99.5	101.0	106.3	110.5	116.0	127.7	138.3	138.6	**137.8**	-0.9%	3.4%	0.5%
Philippines	67.7	69.2	72.9	75.3	77.3	82.4	90.8	94.4	99.8	106.0	**101.8**	-4.3%	5.5%	0.4%
Singapore	45.4	46.0	46.9	48.0	49.3	50.3	51.6	52.2	52.9	54.1	**53.1**	-2.2%	2.6%	0.2%
South Korea	495.0	518.2	531.2	537.2	540.4	547.8	561.0	576.4	592.9	585.3	**574.0**	-2.2%	2.6%	2.1%
Sri Lanka	10.8	11.6	11.9	12.0	12.9	13.2	14.4	15.0	16.2	16.8	**16.9**	◆	5.3%	0.1%
Taiwan	247.1	252.2	250.4	252.3	260.0	258.1	264.1	270.3	275.5	274.1	**279.8**	1.8%	1.8%	1.0%
Thailand	157.6	153.3	169.0	168.6	173.8	177.8	179.8	176.7	177.6	186.5	**176.4**	-5.7%	2.5%	0.7%
Vietnam	91.7	101.5	115.1	124.5	141.3	157.9	175.7	191.6	209.2	227.5	**234.5**	2.8%	10.9%	0.9%
Other Asia Pacific	72.5	76.8	78.2	84.5	88.6	91.4	109.3	119.7	116.0	127.5	**131.8**	3.1%	6.9%	0.5%
Total Asia Pacific	8257.7	8875.1	9278.1	9812.3	10333.7	10433.9	10947.6	11569.8	12339.3	12741.6	**12919.3**	1.1%	5.4%	48.2%
Total World	**21570.7**	**22257.0**	**22806.3**	**23435.2**	**24031.7**	**24270.5**	**24915.2**	**25623.9**	**26659.1**	**27001.0**	**26823.2**	**-0.9%**	**2.9%**	**100.0%**
of which: OECD	11062.8	11014.3	11023.7	11015.6	10956.6	11005.0	11082.8	11119.5	11312.8	11168.4	**10880.8**	-2.8%	0.5%	40.6%
Non-OECD	10507.9	11242.7	11782.6	12419.7	13075.2	13265.5	13832.4	14504.4	15346.4	15832.5	**15942.4**	0.4%	5.1%	59.4%
European Union	2982.6	2931.3	2932.3	2912.9	2851.1	2899.1	2920.1	2952.4	2937.5	2892.5	**2770.6**	-4.5%	0.2%	10.3%

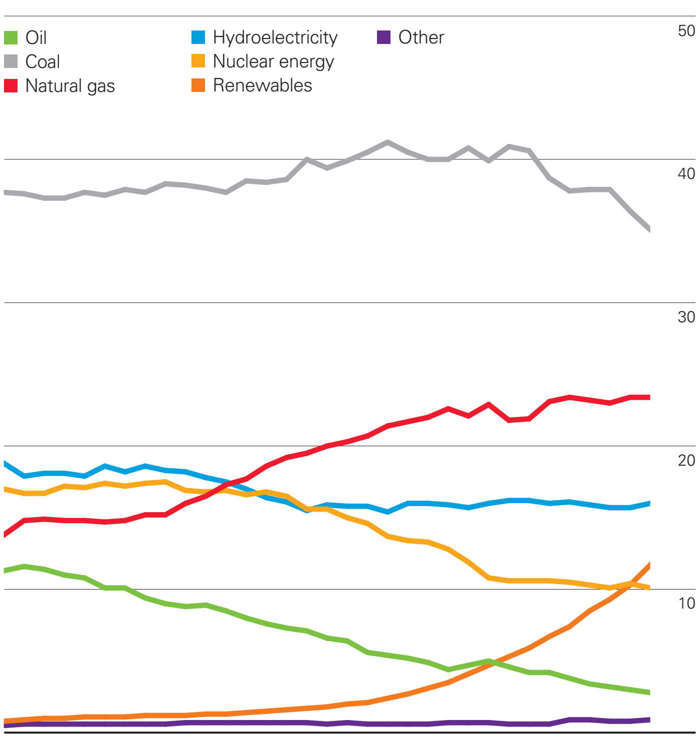
*Based on gross output.
◆Less than 0.05%.
Note: Growth rates are adjusted for leap years.

Regional electricity generation by fuel 2020
Percentage

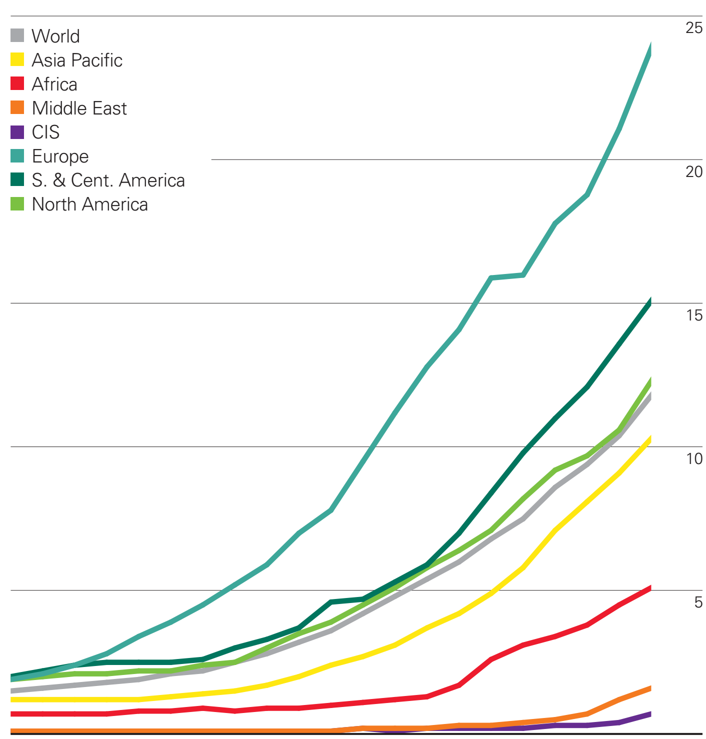


Natural gas is the dominant fuel used for power generation in North America, CIS, the Middle East and Africa. More than half of the power in South and Central America is hydroelectricity, while in Asia, coal comprises 57% of the generation mix – a far higher share than any other region. In Europe, renewables (including biopower) are the largest source of power generation with 23.8% for the first time, overtaking nuclear on 21.6%. Generation in Europe is spread fairly evenly between renewables, nuclear, gas (19.6%) and hydro (16.9%).

Share of global electricity generation by fuel
Percentage



Renewables share of power generation by region
Percentage



At a global level, coal is the dominant fuel for power generation, however its share fell 1.3 percentage points to 35.1% in 2020, the lowest level in our data series. The share of renewables rose to record levels last year (11.7%), with the combined share of renewables and gas-fired power (35.1%) equalling coal for the first time. Europe's share of renewables in power generation reached 23.8%, surpassing nuclear energy and making Europe the first region where renewables are the dominant source of power generation.

Electricity generation by fuel*

	2019								2020							
Terawatt-hours	Oil	Natural Gas	Coal	Nuclear energy	Hydro electric	Renew-ables	Other‡	Total	Oil	Natural Gas	Coal	Nuclear energy	Hydro electric	Renew-ables	Other‡	**Total**
Canada	3.2	69.5	47.9	100.5	379.7	47.1	0.7	648.7	3.3	70.9	35.6	97.5	384.7	51.2	0.7	**643.9**
Mexico	34.8	187.7	32.7	11.4	23.6	32.3	–	322.6	33.7	183.1	18.9	11.4	26.8	39.2	–	**313.2**
US	19.7	1705.2	1051.1	852.0	285.5	483.7	14.0	4411.2	18.8	1738.4	844.1	831.5	288.7	551.7	13.4	**4286.6**
Total North America	57.8	1962.4	1131.7	963.9	688.7	563.1	14.7	5382.4	55.8	1992.4	898.6	940.4	700.2	642.1	14.1	**5243.6**
Argentina	3.0	82.9	1.1	8.4	37.1	6.4	0.5	139.5	7.4	79.8	2.5	10.7	30.5	11.2	0.4	**142.5**
Brazil	9.9	60.4	24.5	16.1	397.9	117.6	–	626.3	7.5	56.3	22.9	15.3	396.8	120.3	1.0	**620.1**
Other S. & C. America	98.5	103.2	48.8	–	265.9	57.4	†	573.2	78.6	97.4	51.1	–	233.1	61.3	†	**520.2**
Total S. & C. America	111.4	246.6	74.4	24.6	700.9	181.4	†	1339.0	93.5	233.5	76.4	26.0	660.5	192.9	0.1	**1282.8**
Germany	4.8	90.0	171.4	75.1	20.2	222.7	25.2	609.4	4.3	91.9	134.8	64.4	18.6	232.4	25.5	**571.9**
Italy	11.8	141.7	21.3	–	46.4	69.5	3.2	293.9	9.7	136.2	16.7	–	46.7	70.3	3.1	**282.7**
Netherlands	1.4	70.4	17.4	3.9	0.1	22.7	5.2	121.1	1.3	72.1	8.8	4.1	†	32.0	4.0	**122.4**
Poland	1.8	14.8	121.0	–	2.0	23.5	1.0	164.0	1.4	16.7	111.0	–	2.1	25.6	1.1	**157.8**
Spain	12.3	83.2	14.1	58.3	22.5	73.8	3.3	267.5	10.7	68.7	5.6	58.2	27.5	80.5	4.6	**255.8**
Turkey	0.3	57.3	112.9	–	88.8	43.3	1.2	303.9	0.1	70.0	106.1	–	78.1	49.8	1.3	**305.4**
Ukraine	0.7	10.2	47.4	83.0	6.5	5.3	1.0	154.1	0.7	13.9	41.2	76.2	6.3	9.7	1.0	**149.0**
United Kingdom	1.1	131.9	6.9	56.2	5.9	114.6	8.1	324.8	0.9	114.1	5.4	50.3	6.5	127.8	7.7	**312.8**
Other Europe	19.4	174.7	177.0	653.5	435.6	264.5	28.7	1753.5	17.2	175.4	145.2	584.3	469.5	292.8	29.1	**1713.5**
Total Europe	53.6	774.2	689.5	930.0	627.9	840.0	76.9	3992.1	46.3	759.1	574.8	837.4	655.3	921.0	77.4	**3871.3**
Kazakhstan	–	21.3	74.1	–	10.0	1.1	–	106.5	–	21.3	73.0	–	9.8	3.7	1.4	**109.2**
Russian Federation	12.0	519.2	176.8	209.0	194.4	1.8	4.9	1118.1	10.7	485.5	152.3	215.9	212.4	3.5	4.9	**1085.4**
Other CIS	0.8	151.8	4.0	2.2	44.1	0.9	0.4	204.2	0.8	151.1	4.2	2.1	43.4	0.9	0.1	**202.5**
Total CIS	12.8	692.3	254.9	211.2	248.5	3.8	5.3	1428.8	11.6	657.9	229.4	218.0	265.6	8.1	6.4	**1397.1**
Iran	82.5	199.2	0.7	6.4	29.0	0.9	–	318.7	82.1	220.4	0.7	6.3	21.2	1.0	–	**331.6**
Saudi Arabia	136.6	206.0	–	–	–	1.0	–	343.7	132.8	207.0	–	–	–	1.0	–	**340.9**
United Arab Emirates	†	134.3	–	–	–	4.2	†	138.5	†	131.2	–	1.6	–	5.6	–	**138.4**
Other Middle East	144.8	274.2	21.9	–	4.2	7.6	†	452.8	142.6	277.4	19.0	–	4.3	11.0	–	**454.3**
Total Middle East	363.9	813.7	22.6	6.4	33.2	13.8	†	1253.6	357.5	836.1	19.7	8.0	25.4	18.6	–	**1265.2**
Egypt	27.4	153.5	–	–	13.2	6.5	–	200.6	25.8	150.0	–	–	13.1	9.7	–	**198.6**
South Africa	1.3	1.9	218.2	13.6	1.0	12.0	4.6	252.6	1.4	1.9	202.4	15.6	0.5	12.6	5.1	**239.5**
Other Africa	47.2	182.2	37.5	–	123.0	19.5	0.8	410.2	42.4	180.3	33.6	–	128.9	20.0	0.6	**405.8**
Total Africa	75.9	337.5	255.7	13.6	137.2	38.0	5.4	863.4	69.6	332.2	236.0	15.6	142.6	42.3	5.7	**843.9**
Australia	4.7	55.7	149.8	–	14.1	41.2	0.3	265.9	4.5	53.1	142.9	–	14.5	49.9	0.3	**265.2**
China	10.8	232.5	4849.7	348.7	1272.5	742.0	47.2	7503.4	11.4	247.0	4917.7	366.2	1322.0	863.1	51.6	**7779.1**
India	5.1	67.5	1184.5	45.2	162.0	139.2	0.2	1603.7	4.9	70.8	1125.2	44.6	163.6	151.2	0.6	**1560.9**
Indonesia	10.6	62.3	174.5	–	16.5	14.9	0.1	278.9	6.8	51.3	180.9	–	19.5	16.8	†	**275.2**
Japan	53.5	363.7	307.2	65.6	73.6	111.2	55.5	1030.3	41.6	353.5	298.8	43.0	77.5	125.6	64.8	**1004.8**
Malaysia	1.1	66.8	75.3	–	25.8	2.6	–	171.5	0.9	45.6	89.6	–	20.3	3.1	–	**159.6**
South Korea	8.1	154.0	239.6	145.9	2.8	30.5	4.3	585.3	7.0	153.3	208.5	160.2	3.9	37.0	4.1	**574.0**
Taiwan	5.7	91.2	126.4	32.3	5.5	7.9	5.0	274.1	4.2	99.9	126.0	31.4	3.0	10.3	4.9	**279.8**
Thailand	1.1	121.8	35.8	–	6.3	21.4	†	186.5	0.7	113.9	36.8	–	4.5	20.5	†	**176.4**
Vietnam	1.4	42.5	110.8	–	67.7	4.1	0.9	227.5	1.2	35.1	118.6	–	69.0	9.5	1.2	**234.5**
Other Asia Pacific	43.1	239.2	143.7	9.2	144.5	34.1	0.8	614.5	40.5	233.5	141.4	9.3	149.3	34.9	0.8	**609.7**
Total Asia Pacific	145.1	1497.1	7397.4	646.9	1791.5	1149.2	114.3	12741.6	123.8	1456.9	7386.4	654.8	1847.2	1322.0	128.3	**12919.3**
Total World	**820.5**	**6323.8**	**9826.2**	**2796.6**	**4227.9**	**2789.2**	**216.7**	**27001.0**	**758.0**	**6268.1**	**9421.4**	**2700.1**	**4296.8**	**3147.0**	**231.8**	**26823.2**
of which: OECD	172.3	3358.6	2450.2	1994.6	1444.2	1599.3	149.1	11168.4	150.4	3360.0	2067.8	1876.7	1479.7	1788.6	157.6	**10880.8**
Non-OECD	648.2	2965.2	7376.0	802.0	2783.7	1189.9	67.6	15832.5	607.6	2908.1	7353.6	823.4	2817.1	1358.4	74.3	**15942.4**
EU	49.2	566.7	475.1	765.5	317.1	658.5	60.3	2892.5	42.7	552.9	373.4	687.9	342.0	710.4	61.2	**2770.6**

*Based on gross output.
‡Includes sources not specified elsewhere e.g. pumped hydro, non-renewable waste and statistical discrepancies (which can be positive or negative).
†Less than 0.05.

Key minerals for the energy transition

Cobalt production

Mine production

Thousand tonnes	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Australia	3.9	3.9	5.9	6.4	6.2	6.0	5.5	5.8	4.9	5.7	**5.7**	-1.0%	2.1%	4.4%
Canada	4.6	6.8	3.7	4.0	3.9	4.3	4.2	3.7	3.5	3.3	**3.2**	-4.3%	-1.6%	2.5%
China	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.1	2.5	**2.3**	-8.3%	3.1%	1.8%
Cuba	4.8	5.1	4.7	4.0	3.7	4.3	5.1	5.0	4.5	4.7	**4.7**	-0.5%	0.2%	3.7%
Democratic Republic of Congo	84.0	99.5	86.4	76.6	76.5	84.4	69.0	90.3	109.4	78.0	**85.9**	9.8%	3.3%	67.3%
Madagascar	0.2	0.5	0.6	2.4	3.4	4.0	3.8	3.4	2.8	2.9	**0.7**	-75.8%	n/a	0.5%
Morocco	3.1	2.2	2.0	2.0	2.2	2.3	2.7	2.5	2.1	2.3	**1.9**	-17.6%	-1.3%	1.5%
New Caledonia	2.9	3.1	2.7	3.2	4.0	3.7	3.4	2.8	1.7	1.2	**0.7**	-45.2%	-4.7%	0.5%
Papua New Guinea	–	n/a	0.5	1.0	2.1	2.5	2.2	3.3	3.3	2.9	**2.8**	-4.0%	n/a	2.2%
Philippines	2.1	2.0	2.7	2.8	4.6	4.3	4.1	4.6	4.4	4.6	**4.5**	-3.7%	12.7%	3.5%
Russian Federation	6.2	6.1	6.3	6.3	6.3	6.2	5.5	5.9	6.1	6.3	**6.3**	–[1]	0.3%	4.9%
South Africa	1.8	1.6	2.5	3.0	3.0	2.9	2.3	2.3	2.3	2.1	**1.8**	-14.5%	13.2%	1.4%
Zambia	8.6	7.7	5.4	5.9	4.6	3.0	5.0	2.6	1.6	4.3	**4.3**	–[1]	-3.2%	3.3%
Rest of World	5.8	8.3	9.9	11.4	7.5	7.1	4.8	4.0	2.8	3.0	**3.1**	3.1%	-2.6%	2.4%
Total World	**129.5**	**148.2**	**134.7**	**130.5**	**129.4**	**136.5**	**119.1**	**137.8**	**152.6**	**123.8**	**127.7**	**2.9%**	**2.8%**	**100.0%**

[1]Zero (not leap year adjusted).
n/a not available.
Note: Other growth rates are adjusted for leap years.

Source: includes data from US Geological Survey, British Geological Survey © UKRI and World Mining Data.

Lithium production

Mine production

Thousand tonnes of lithium content	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Argentina	3.0	3.0	2.7	2.5	3.2	3.6	5.8	5.7	6.4	6.3	**6.2**	-1.9%	11.0%	7.2%
Australia	8.5	11.7	12.7	10.1	12.4	11.9	14.0	21.3	57.0	45.0	**40.0**	-11.4%	23.4%	46.4%
Brazil	0.2	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.3	2.4	**1.9**	-21.0%	31.1%	2.2%
Chile	10.4	13.6	13.9	11.7	12.0	10.9	15.2	15.8	18.8	22.1	**20.6**	-7.0%	14.0%	23.9%
China	4.0	4.1	4.5	4.7	2.3	2.0	2.3	6.8	7.1	10.8	**14.0**	29.3%	11.1%	16.2%
Portugal	0.8	0.8	0.6	0.6	0.3	0.2	0.4	0.8	0.8	0.9	**0.9**	–[1]	n/a	1.0%
US	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	**0.9**	–[1]	-5.0%	1.0%
Zimbabwe	0.5	0.5	1.1	1.0	0.9	0.9	1.0	0.8	1.6	1.2	**1.2**	–[1]	11.6%	1.4%
Rest of World	n/a	n/a	–	–	–	–	0.2	1.1	2.3	0.5	**0.5**	–[1]	5.6%	0.6%
Total World	**28.2**	**35.0**	**36.6**	**31.9**	**32.2**	**30.7**	**40.0**	**53.3**	**95.2**	**90.2**	**86.3**	**-4.6%**	**16.3%**	**100.0%**

[1]Zero (not leap year adjusted).
n/a not available.
Note: Other growth rates are adjusted for leap years.

Source: includes data from US Geological Survey, British Geological Survey © UKRI and World Mining Data.

Natural graphite production

Mine production

Thousand tonnes	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Brazil[1]	92.4	105.2	88.1	91.9	87.0	75.1	85.0	85.0	95.0	96.0	**95.0**	-1.3%	4.9%	10.5%
Canada	20.0	25.0	24.0	20.0	30.0	30.0	30.0	40.0	40.0	11.0	**10.0**	-9.3%	-3.1%	1.1%
China	700.0	800.0	820.0	750.0	780.0	780.0	780.0	625.0	630.0	700.0	**650.0**	-7.4%	4.5%	71.7%
India[2]	115.7	153.3	134.7	146.4	116.7	134.6	122.4	35.0	35.0	35.0	**34.0**	-3.1%	-11.9%	3.7%
Madagascar	3.8	3.6	2.9	4.3	5.3	8.1	9.2	13.3	48.1	53.6	**29.0**	-45.9%	31.6%	3.2%
Mexico	6.6	7.3	7.5	7.0	9.2	6.5	3.8	1.7	4.1	1.6	**1.6**	–[3]	-11.0%	0.2%
Mozambique	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.3	104.0	153.0	**12.0**	-92.2%	n/a	1.3%
Norway	6.3	7.8	7.0	6.2	8.3	9.2	9.6	9.6	12.0	16.0	**15.0**	-6.5%	13.4%	1.7%
Russian Federation	7.7	20.7	14.3	20.2	17.6	15.9	19.4	19.5	11.9	17.5	**17.5**	–[3]	2.3%	1.9%
Sri Lanka	3.4	3.4	4.2	3.1	4.0	4.2	4.0	3.5	4.0	4.0	**3.5**	-12.7%	2.3%	0.4%
Turkey	–	5.3	31.5	28.7	3.9	–	–	–	16.8	10.0	**10.0**	–[3]	15.3%	1.1%
Ukraine	2.8	0.6	4.6	6.9	13.8	14.5	14.6	14.9	15.0	15.0	**15.0**	–[3]	13.3%	1.7%
Rest of World	22.4	19.2	17.2	20.7	31.9	20.6	18.0	14.9	17.7	15.5	**14.0**	-9.9%	-11.7%	1.5%
Total World	**981.1**	**1151.3**	**1156.1**	**1105.5**	**1107.7**	**1098.7**	**1096.1**	**862.7**	**1033.5**	**1128.2**	**906.7**	**-19.9%**	**◆**	**100.0%**

[1]Including beneficiated and directly shipped material.
[2]Run of the mine.
[3]Zero (not leap year adjusted).
◆Less than 0.05%.
n/a not available.
Note: Other growth rates are adjusted for leap years.

Source: includes data from US Geological Survey, British Geological Survey © UKRI and World Mining Data.

Rare earth metals production

Mine production

Thousand tonnes[1]	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	**2020**	Growth rate per annum 2020	Growth rate per annum 2009-19	Share 2020
Australia	–	2.2	3.2	1.3	6.2	11.9	13.9	17.3	18.6	17.6	**41.4**	134.6%	n/a	15.5%
Brazil	0.1	0.1	1.6	0.3	-	0.9	2.2	1.7	1.1	0.7	**1.0**	40.5%	15.4%	0.4%
China	89.2	93.8	93.8	93.8	105.0	105.0	105.0	105.0	120.0	132.0	**140.0**	5.8%	0.2%	52.3%
India	n/a	n/a	n/a	0.3	1.7	1.0	1.5	1.5	2.9	3.0	**3.0**	–[2]	68.8%	1.1%
Madagascar	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2.0	4.0	**8.0**	99.5%	n/a	3.0%
Russian Federation	1.5	1.4	2.1	1.4	2.1	2.3	3.1	2.5	2.6	2.6	**2.6**	–[2]	3.2%	1.0%
Thailand	5.6	3.1	0.1	0.1	1.9	0.8	1.6	1.3	1.0	1.9	**2.0**	5.0%	-7.2%	0.7%
US	–	–	3.0	5.5	5.4	5.9	–	–	18.0	28.0	**38.0**	35.3%	n/a	14.2%
Rest of World	0.6	0.6	0.3	0.3	0.2	0.6	2.1	0.6	21.0	26.6	**31.6**	18.5%	114.3%	11.8%
Total World	**97.0**	**101.3**	**104.2**	**103.0**	**122.6**	**128.3**	**129.4**	**129.8**	**187.2**	**216.4**	**267.7**	**23.3%**	**4.8%**	**100.0%**

[1]Thousand tonnes of rare earth oxide equivalent.
[2]Zero (not leap year adjusted).
n/a not available.
Note: Other growth rates are adjusted for leap years.

Source: includes data from US Geological Survey, British Geological Survey © UKRI and World Mining Data.

Reserves of key minerals

Cobalt reserves

Thousand tonnes	At end of 2020	Share	R/P ratio
Australia	1400	20.3%	247
Canada	220	3.2%	69
China	80	1.2%	35
Cuba	500	7.2%	107
Democratic Republic of Congo	3600	52.2%	42
Madagascar	100	1.4%	143
Morocco	14	0.2%	7
New Caledonia	64	0.9%	94
Papua New Guinea	51	0.7%	18
Philippines	260	3.8%	58
Russian Federation	250	3.6%	40
South Africa	40	0.6%	22
Zambia	270	3.9%	63
Rest of World*	53	0.8%	17
Total World	**6902**	**100.0%**	**54**

Natural graphite reserves

Thousand tonnes	At end of 2020	Share	R/P ratio
Brazil	70000	20.0%	737
Canada	n/a	n/a	n/a
China	73000	20.9%	112
India	8000	2.3%	235
Madagascar	26000	7.4%	895
Mexico	3100	0.9%	1948
Mozambique	25000	7.2%	2083
Norway	600	0.2%	40
Russian Federation	25703	7.4%	1469
Sri Lanka	1500	0.4%	428.6
Turkey	90000	25.8%	9009.0
Ukraine	n/a	n/a	n/a
Rest of World*	26600	7.6%	1893
Total World	**349503**	**100.0%**	**385**

Lithium reserves

Thousand tonnes	At end of 2020	Share	R/P ratio
Argentina	1900	10.0%	306
Australia	4700	24.8%	118
Brazil	95	0.5%	50
Chile	9200	48.5%	446
China	1500	7.9%	107
Portugal	60	0.3%	67
US	750	4.0%	833
Zimbabwe	220	1.2%	183
Rest of World*	530	2.8%	994
Total World	**18955**	**100%**	**220**

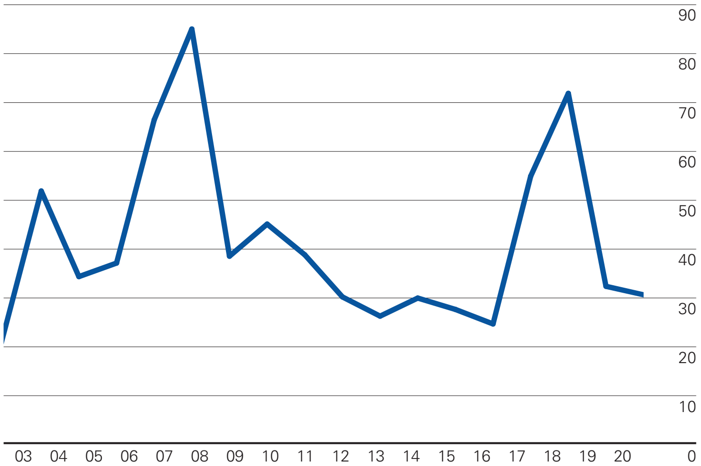
Rare earth metals reserves

Thousand tonnes	At end of 2020	Share	R/P ratio
Australia	4100	3.3%	99
Brazil	21000	16.9%	21000
China	44000	35.4%	314
India	6900	5.6%	2300
Madagascar	n/a	n/a	n/a
Russian Federation	20602	16.6%	7924
Thailand	n/a	n/a	n/a
US	1500	1.2%	39
Rest of World*	26040	21.0%	824
Total World	**124142**	**100.0%**	**464**

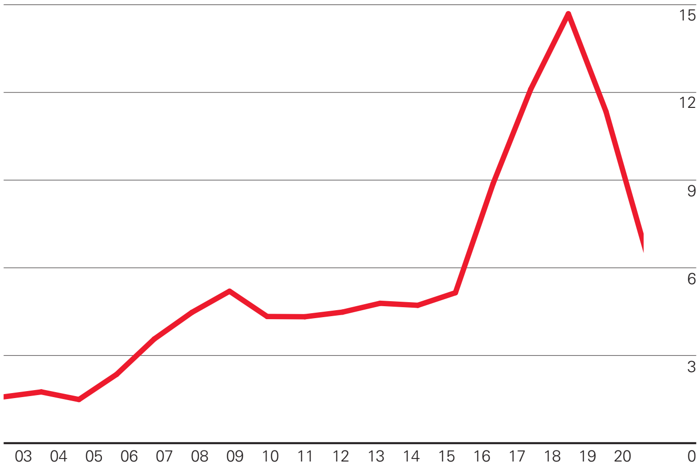
*Rest of World is the sum of only recorded reserves.
n/a not available.

Source (for all tables): includes data from US Geological Survey.

Cobalt prices
Thousands of US dollars per tonne*



Lithium carbonate prices
Thousands of US dollars per tonne†



*2000-2012 spot grade for cathodes, source US Geological Survey. Data from 2013 onwards: min purity 99.8%, source London Metal Exchange.
†2000-2008 unit value, data series 140, source US Geological Survey. Data from 2009 onwards: FOB South America, source Benchmark Mineral Intelligence.

Appendices

Approximate conversion factors

Crude oil*

From	To				
	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 per day	–	–	–	–	49.8

*Based on worldwide average gravity.

Products

	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

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

From	To						
	billion cubic metres NG	billion cubic feet NG	petajoules NG	million toe	million tonnes LNG	trillion Btu	million boe
	Multiply by						
1 billion m³ NG	1.000	35.315	36.000	0.860	0.735	34.121	5.883
1 billion ft³ 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	= 2204.62lb = 1.1023 short tons
1 kilolitre	= 6.2898 barrels = 1 cubic metre
1 kilocalorie (kcal)	= 4.1868kJ = 3.968Btu
1 kilojoule (kJ)	= 1,000 joules = 0.239 kcal = 0.948 Btu
1 petajoule (Pj)	= 1 quadrillion joules (1 x 10^{15})
1 exajoule (EJ)	= 1 quintillion joules (1 x 10^{18})
1 British thermal unit (Btu)	= 0.252kcal = 1.055kJ
1 tonne of oil equivalent (toe)	= 39.683 million Btu = 41.868 million kJ
1 barrel of oil equivalent (boe)	= 5.8 million Btu = 6.119 million kJ
1 kilowatt-hour (kWh)	= 860kcal = 3600kJ = 3412Btu

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 tonnes of oil equivalent
1 tonne of biodiesel = 0.88 tonnes of oil equivalent

Methodology

Methodology for converting non-fossil electricity generation to primary energy

Primary energy consumption numbers for non-fossil based electricity (nuclear, hydro, wind, solar, geothermal, biomass in power and other renewables sources) are calculated on an 'input-equivalent' basis – i.e. based on the equivalent amount of fossil fuel input required to generate that amount of electricity in a standard thermal power plant.

The thermal efficiency assumption for the standard power plant is time varying, based on a simplified representation of measured average efficiency levels:

1965-2000: assumed constant efficiency of 36%

2000-2017: a linear increase from 36% to 40% based on observed data

2018 onwards: the annual rate of efficiency improvement is based on the simplified assumption that efficiency will increase linearly to 45% by 2050.

The table below quantifies these assumptions:

Thermal equivalent efficiency factors used to convert non-fossil electricity to primary energy

Year(s)	Efficiency factor	Year(s)	Efficiency factor
1965-2000	36%	2011	38.6%
2001	36.2%	2012	38.8%
2002	36.5%	2013	39.1%
2003	36.7%	2014	39.3%
2004	36.9%	2015	39.5%
2005	37.2%	2016	39.8%
2006	37.4%	2017	40.0%
2007	37.6%	2018	40.2%
2008	37.9%	2019	40.4%
2009	38.1%	2020	40.5%
2010	38.4%		

For more details on the change in methodology please go to 'about the review' at *bp.com/statisticalreview*.

Primary energy consumption is 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.

Percentages
Calculated before rounding of actuals.

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

Tonnes
Metric equivalent of tons.

Definitions

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South & Central America
Caribbean (including Puerto Rico and US Virgin Islands), Bermuda, Central and South America.

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

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

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

West Africa
Territories on the west coast of Africa from Mauritania to Angola, including Cape Verde, Chad.

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Territories on the east coast of Africa from Sudan to Republic of South Africa. Also Botswana, Madagascar, Malawi, Namibia, Uganda, Zambia, Zimbabwe.

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†Mainland China.
*Special Administrative Region.

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Australia, New Zealand.

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