

Fossil fuel consumption subsidies bounced back strongly in 2018



[Wataru Matsumura, WEO Senior Energy Analyst](#)

[Zakia Adam, WEO Energy Analyst](#)

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New data show an increase in the estimated value of fossil fuel consumption subsidies to more than \$400 billion

Higher average oil prices in 2018 pushed up the value of global fossil fuel consumption subsidies back up toward levels last seen in 2014, underscoring the incomplete nature of the pricing reforms undertaken in recent years, according to new data from the IEA.

The new data for 2018 show a one-third increase in the estimated value of these subsidies, to more than \$400 billion. The estimates for oil, gas and fossil-fuelled electricity have all increased significantly, reflecting the higher price for fuels (which, in the presence of an artificially low end-user price, increases the estimated value of the subsidy). The continued prevalence of these subsidies – more than double the estimated subsidies to renewables – greatly complicates the task of achieving an early peak in global emissions.

The 2018 data sees oil return as the most heavily subsidised energy carrier, expanding its share in the total to more than 40%. In 2016, electricity briefly became the sector with the largest subsidy bill.

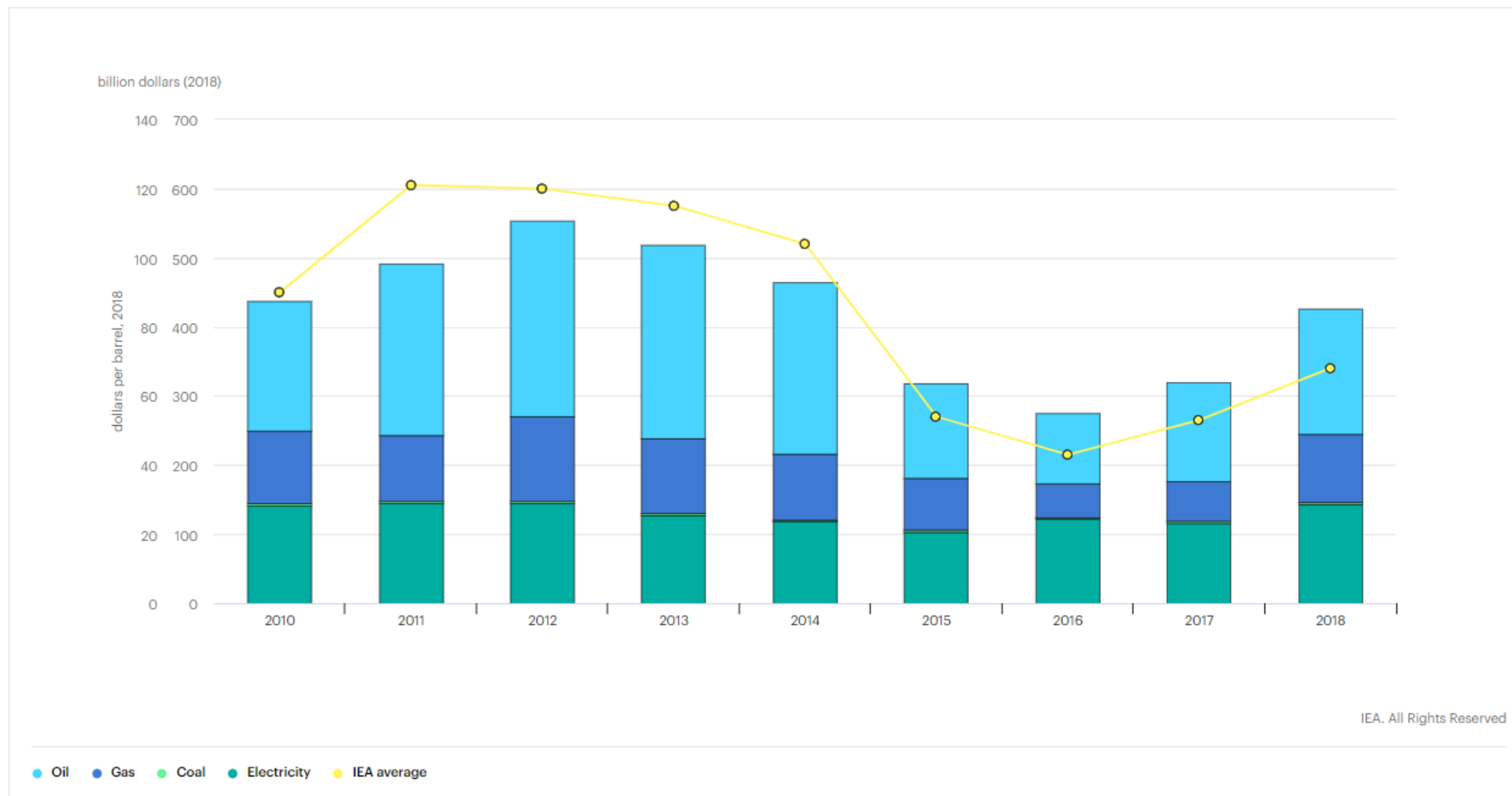
Economic value of global fossil-fuel consumption subsidies by energy source, 2010-2018



Last updated 3 Dec 2019

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There can be good reasons for governments to make energy more affordable

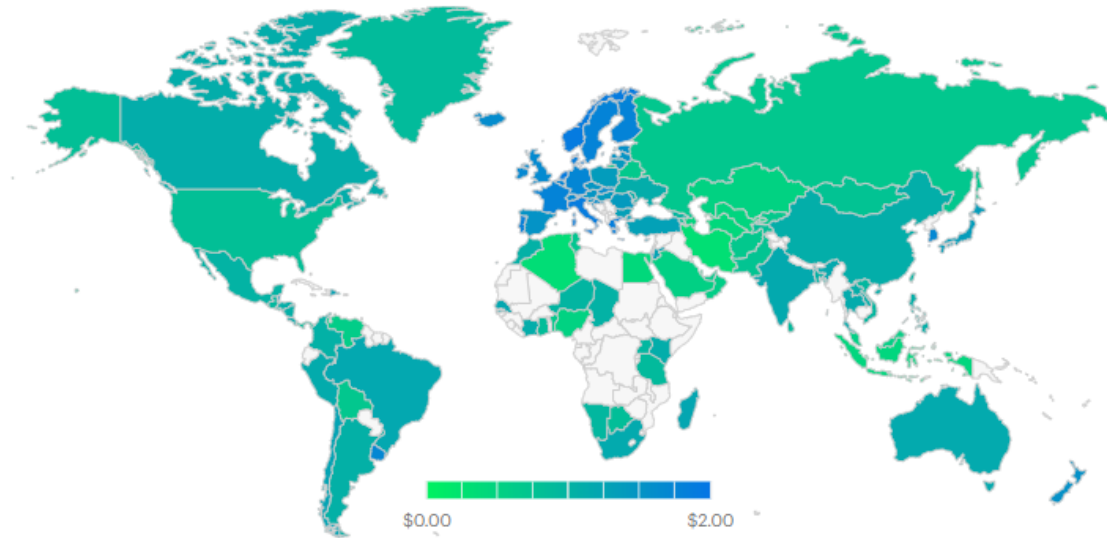
Fossil fuel consumption subsidies are in place across a range of countries. These subsidies lower the price of fossil fuels, or of fossil-fuel based electricity, to end-consumers, often as a way of pursuing social policy objectives.

There can be good reasons for governments to make energy more affordable, particularly for the poorest and most vulnerable groups. But many subsidies are poorly targeted, disproportionately benefiting wealthier segments of the population that use much more of the subsidised fuel. Such untargeted subsidy policies encourage wasteful consumption, pushing up emissions and straining government budgets.

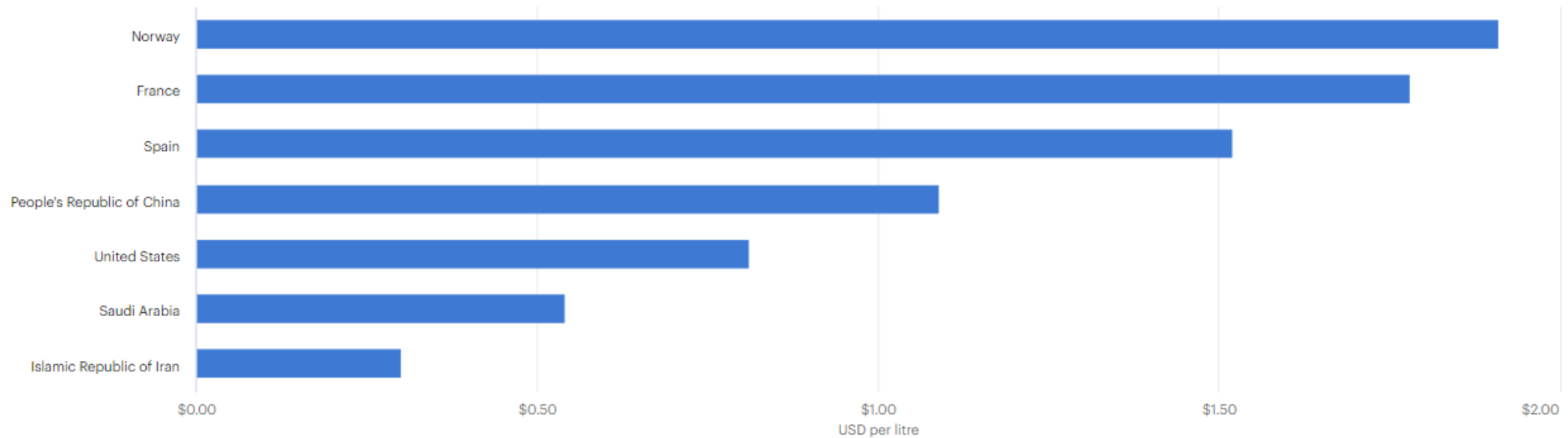
Recent years have seen multiple examples of pricing reforms, underpinned by lower oil prices that created a political opportunity among oil-importing countries and a fiscal necessity among exporters. Reforms typically focused on gasoline and diesel pricing, and in some cases also on LPG, natural gas and electricity tariffs. IEA price data (shown below for gasoline) show clearly the wide range of end-user prices across countries – the lowest prices found among countries that subsidise consumption.

Gasoline prices in USD per litre

Click any country to add or remove it from the bar graph below.



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All prices are for mid-grade gasoline in 2018 unless otherwise specified. This map is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

The nature of pricing reforms undertaken in recent years differ depending on the sector and on national circumstances, but fall into three broad categories:

- Complete price liberalisation, typically for the main transport fuels, as for example in India, Mexico, Thailand and Tunisia.
- Introduction of a mechanism for regular, automatic adjustment of prices in line with international prices. China has such a system for oil prices, and similar mechanisms were also introduced in Indonesia, Malaysia, Jordan, Cote d'Ivoire and Oman.
- A schedule of reforms to regulated prices, often with a view to aligning them with cost-recovery or market-based prices. This was the most common type of reform in the Middle East and North Africa, where prices for oil products, natural gas, water and/or electricity were raised in Saudi Arabia, Kuwait, Qatar, Bahrain and the United Arab Emirates. There were also increases in regulated electricity prices elsewhere, as for example in Indonesia.

These price reforms were often accompanied by the introduction of more targeted programmes of support for vulnerable groups. They also brought significant financial savings to the governments concerned, allowing these resources to be deployed to other development or policy priorities.

However, in 2018 the oil price trended higher for much of the year before falling back in the last quarter. This became a major source of strain in countries where consumers were newly exposed to rising retail prices, particularly where national currencies were losing value against the US dollar at the same time.

The rise in retail prices created broader pressure to revisit some of the pricing reforms.

- Some countries with fully liberalised prices sought ways to dampen the effects on consumers, for example via reductions in other taxes and duties (as in India) or via implicit price interventions through state-owned oil and gas companies.
- Upward fuel price adjustments were postponed in some countries that had committed to follow international price movements but retained some administrative discretion over the level and timing of any changes. This was the case in Indonesia, Malaysia and Jordan.
- In fully regulated price environments, the reform schedule was in some cases pushed back or watered down.

Shielding consumers from short-term changes in international fossil fuel prices comes at a fiscal and environmental cost. It also diminishes the potential for higher prices to curb demand and bring the market into balance.

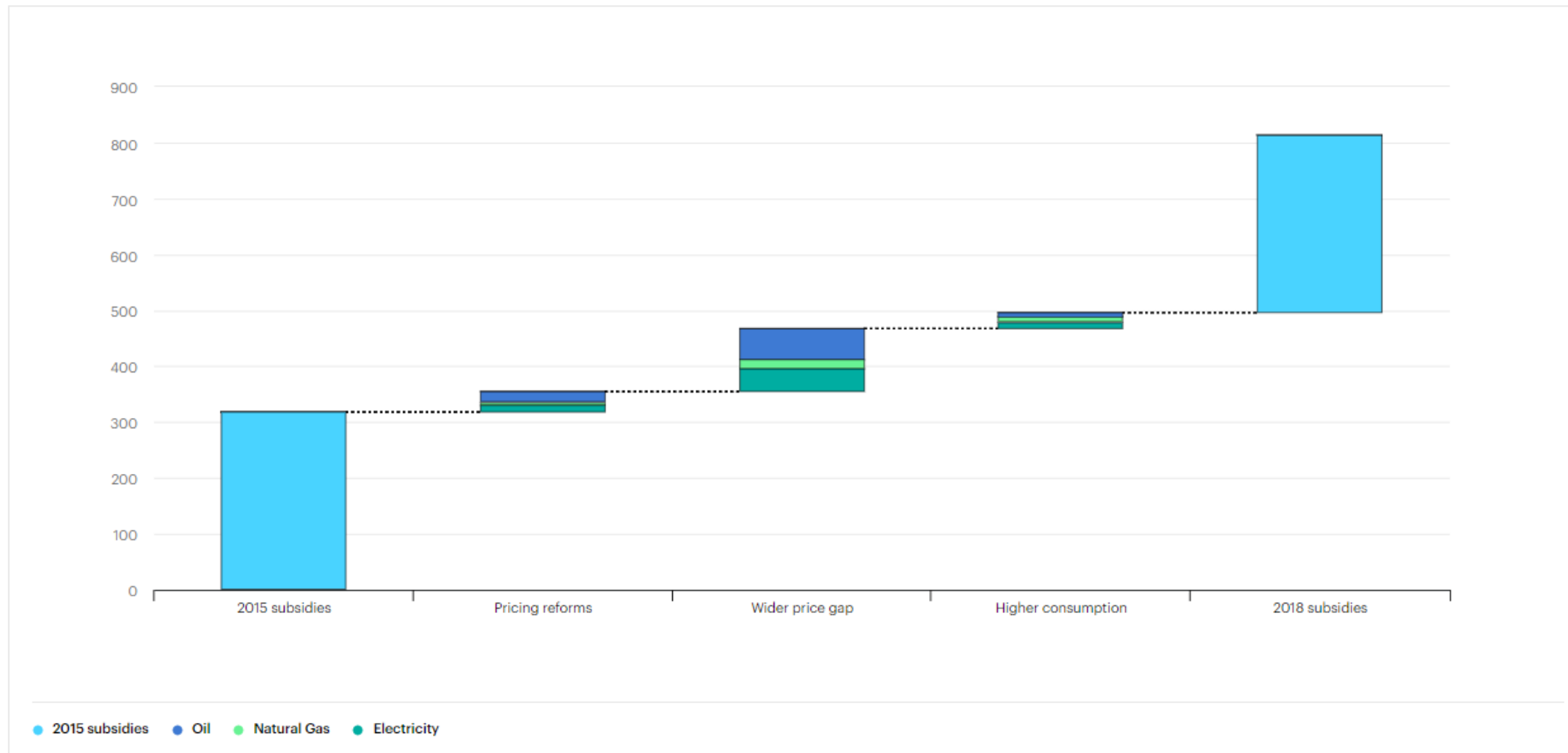
Contributing factors to the change in the value of fossil-fuel subsidies, 2015-2018



Last updated 6 Mar 2020

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The different reform pathways since 2015 can be separated out into the various components of the change in subsidy values. Pricing reforms over the last three years brought substantial dividends, estimated at 36 billion dollars in total. This represents either a direct easing of the strain on public finances (via reduced public expenditures on subsidies) or additional revenue accruing to resource-rich countries (by reclaiming more of the value that was previously being foregone because of under-pricing).

Notable reductions in oil-related consumption subsidies over this period were observed in many countries in the Middle East, including Saudi Arabia, the UAE, Qatar and Bahrain, as well as in Colombia and Pakistan. Ukraine saw the largest fall in subsidies for natural gas. Subsidies to fossil fuel-based electricity consumption were substantially lower over this period in Russia, Argentina, Indonesia, Pakistan, Turkmenistan and in parts of the Middle East.

However, these falls were outweighed by two other factors: a widening gap between prevailing prices and market-based pricing in many countries (exacerbated in some cases by depreciation of the domestic currencies against the dollar); and increased consumption of subsidised energy.

The largest increases in consumption subsidies for oil products were in Indonesia, Iran, Egypt and Venezuela. In the latter case, a collapsing currency meant that gasoline and diesel sales (where available) were essentially free in dollar terms. Iran also saw the largest increase in natural gas subsidies, and – together with Venezuela, Mexico, Egypt and China – was among those seeing the most significant increase in subsidies to fossil fuel-based electricity.

Phasing out fossil fuel consumption subsidies remains a pillar of sound energy policy

Committing political capital to subsidy reform remains tough, especially if international prices are volatile. But phasing out fossil fuel consumption subsidies remains a pillar of sound energy policy. Especially when part of a broader suite of supportive policy measures, pricing reform is pivotal for a more robust, secure and sustainable energy sector over the long term.

Industries and households are more likely to opt for energy-efficient equipment, vehicles and appliances. Investors in a range of energy technologies, especially clean technologies, see a better case to commit their capital. That is why the IEA continues to be a strong supporter of efforts to phase out inefficient fossil fuel consumption subsidies.

End-user price data are from [IEA World Energy Prices Database, 2019](#). Read more about energy subsidies and IEA methodology on our [energy subsidies topic page](#).