Newsletter of the International Energy Agency
Click here to view in your browser

the energy mix

Note to our readers: The IEA's COVID-19 hub

The coronavirus (COVID-19) pandemic has created an unprecedented global health and economic emergency. The IEA is committed to providing rigorous data, analysis, and recommendations to help governments and industry make smart decisions as they deal with the immediate crisis while aiming to move towards more affordable, secure and sustainable energy systems in the longer term. Learn more about our work examining what the pandemic means for electricity security, oil markets, renewables, clean energy transitions and much more on our ***COVID-19 analysis hub****.*

The global oil industry is experiencing a shock like no other in its history

The oil world has seen many shocks over the years, but none has hit the industry with quite the ferocity we are witnessing today. As markets, companies and entire economies reel from the effects of the global crisis caused by the coronavirus pandemic, oil prices have crumbled. The impacts will be felt throughout oil's global supply chains and ripple into other parts of the energy sector.

This is an unprecedented moment for those engaged in the business of supplying oil and those who rely on the associated revenue. In our **most recent article**, we look at key aspects of this crisis, including the potential impacts on production, investment, supply chains, and other parts of the energy sector.

The IEA is concerned about the current oil market situation and the negative implications for the stability of the global economy. To find a way forward, Dr Fatih Birol, the IEA's Executive Director, has been discussing the situation in recent days with energy ministers from the United States, Canada, Saudi Arabia, Brazil, Iraq and India as well as senior officials from other key countries. In this context, the IEA is calling for a constructive dialogue among all relevant producer and consumer countries to take place at a meeting of the G20, for which Saudi Arabia currently holds the Presidency.

Stimulus packages at the heart of next World Energy Outlook special report

Once the health crisis is resolved, governments will turn to economic stimulus packages to reinvigorate their economies. The decisions they make could shape key infrastructure for decades to come. The IEA is working closely with governments around the world to make sure we can support and inform their efforts at this critical time.

The IEA is producing a special World Energy Outlook report that will examine near-term and actionable measures that could be a part of post-pandemic economic recovery plans. With a strong focus on job creation and growth impact, these measures would be based on rigorous analysis of proven policies and case studies. They could form an “operational toolbox” for policy makers looking to build more advanced and sustainable energy systems within their economic recovery efforts. The report will be published this Spring.

To discuss these issues, Dr Birol held a video meeting on 31 March with Frans Timmermans, the Executive Vice President of the European Commission responsible for the European Green Deal, and Kadri Simson, the Commissioner for Energy. They discussed how the IEA could contribute to a wide range of critical issues spanning energy resilience – notably electricity security – and clean energy transitions. This includes key technologies such as renewables – especially offshore wind – energy efficiency, electric vehicle batteries, electrolysis for hydrogen, and carbon capture, utilisation and storage. Dr Birol also spoke with Michał Kurtyka, the Polish Minister of Climate, and Dan Jørgensen, the Danish Minister of Climate and Energy, about how the IEA can help countries come out of the crisis with cleaner and more resilient energy systems.

Tackle the pandemic. Revive the economy. Boost energy resilience and bring down emissions.

How economic stimulus programmes can help clean energy transitions was also the topic of a wide-ranging interview between Dr Birol and Christiana Figueres, the former Executive Secretary of the UN Climate Change process, on her **most recent podcast episode** (Dr Birol’s interview begins about 14 minutes in).

Governments will play a central role in determining the pace of deployment of renewables, which could be derailed by the coronavirus crisis. In **our latest commentary**, we look at the disruption the pandemic is likely to cause for crucial technologies like wind and solar.

You can read more about **key areas where governments can act** to seize opportunities for creating jobs and improving vital infrastructure while accelerating the all-important transitions to cleaner energy in this commentary **first published** in Prospect magazine.

Getting a clearer picture of global methane emissions

In the case of carbon dioxide (CO2), it seems almost certain that global emissions will fall this year because of the global slump in economic output, transport activity and fossil-fuel combustion caused by the COVID-19 pandemic. However, a similar drop in methane emissions from oil and gas cannot be taken for granted, even if oil and gas consumption falls.

For example, a decline in revenues from oil and gas operations could mean that companies pay less attention to efforts to tackle methane emissions. Low natural gas prices may lead to increases in flaring or venting, and regulatory oversight of oil and gas operations could be scaled back. However, as our newly updated **Methane Tracker** shows, methane leaks are not an inevitable part of today’s

oil and gas business. They can be reduced cost-effectively – and this has to happen if the world is to address climate change.

In a **new analysis**, we examine four key areas in the measurement of methane emissions and efforts to reduce them, including how satellites and other forms of airborne monitoring are helping provide a better picture of the scale and location of methane leaks.

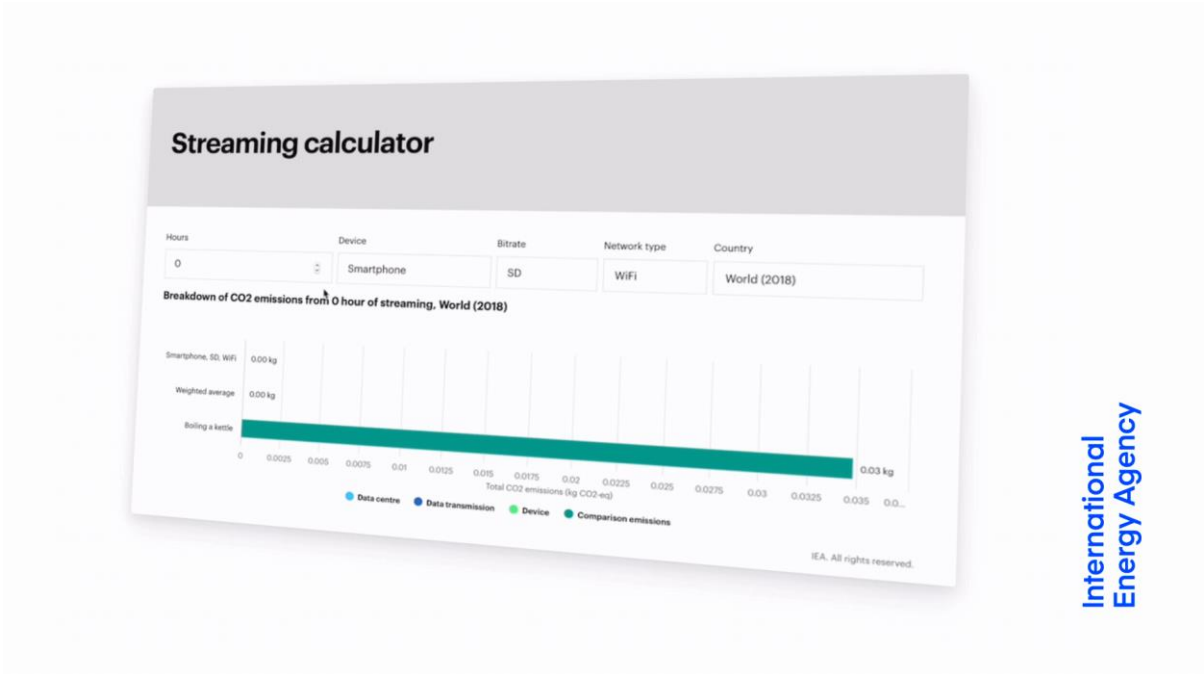
If the energy sector is to tackle climate change, it must also think about water

If this year's expected fall in CO2 emissions is to represent a lasting peak, industry and governments need to accelerate efforts to deploy the technologies and solutions that bring near-term emissions reductions at scale. However, the fuels and technologies used to achieve this transition could exacerbate stresses on the supply of fresh water.

Some technologies, such as wind and solar PV, require very little water, but others – like biofuels, concentrating solar power, carbon capture and nuclear power – can have significant water demands. This underscores the importance of factoring water use into energy policy decisions.

Read more about the importance of the water-energy nexus in the **latest in a series of commentaries** on the topic by IEA Energy Analyst **Molly Walton**.

ENERGY SNAPSHOT



Based on the global average electricity mix, streaming a 30-minute show on Netflix would release 28-57 grammes of CO2, or the same amount as driving a conventional passenger car just 200 metres.

However, this figure depends heavily on the generation mix of the country in question. In France, where around 90% of electricity comes from low-carbon sources, the emissions would be only around 4 grammes, equivalent to just 20 metres of driving.

You can now use the IEA's new **video streaming emissions calculator** to estimate your emissions based on a range of variables including device type, bitrate, network type and country.

ACRONYM EXPLAINER: CO2-eq

Methane emissions are the second largest cause of global warming and though methane tends to receive less attention than CO2, reducing methane emissions will be critical for avoiding the worst effects of climate change. The energy sector – including oil, natural gas, coal and bioenergy – is one of the largest sources of methane emissions.

Methane has a much shorter atmospheric lifetime than CO2 (around 12 years compared with centuries for CO2), but it is a much more potent greenhouse gas, absorbing much more energy while it exists in the atmosphere. There are various ways to combine these factors to estimate the effect on global warming; the most common is the global warming potential, which can be used to express a tonne of a greenhouse-gas emitted in CO2 equivalent terms (CO2-eq).

Learn more in the IEA's updated **Methane Tracker 2020** or on our **methane abatement** technology page.

WHAT WE'RE READING

- **Why the oil price shock is nothing to celebrate** [Financial Times]
- **Carbon emissions are falling sharply due to coronavirus. But not for long.** [National Geographic]
- **An environmental stimulus bill could help us bounce back from COVID-19** [Popular Science]
- **Oil-Price War Batters Poorer OPEC Members as Coronavirus Looms** [Wall Street Journal]
- **Green Focus Pledged for EU's Virus Recovery Plan** [Bloomberg]

COMING UP

- **15 April:** Oil Market Report
- **Mid-April:** Global Energy and Carbon Emissions Report
- **May:** World Energy Investment 2020
- **June:** Energy Technology Perspectives 2020