

This has been an extraordinarily turbulent year for the global energy system. Covid-19 unleashed a crisis of exceptional ferocity on countries around the world, with severe impacts on lives and livelihoods. The crisis is still unfolding today – and its consequences for the world’s energy future remain highly uncertain.

The International Energy Agency (IEA) responded quickly and assertively to the pandemic, refocusing our work to assess the impacts of the crisis across all the key fuels and technologies. We enabled governments, companies and citizens to better understand the emerging trends, such as the unparalleled plunge in global energy investment and its consequences. We offered practical policy advice, most notably in the *WEO Special Report on Sustainable Recovery*, which shows how governments – by implementing targeted energy policies – can boost economic growth, create jobs and put global emissions into decline over the next three years. Following that, we drew on the IEA’s ever-growing convening power to bring together 40 Ministers from countries representing over 80% of the global economy at the IEA Clean Energy Transitions Summit on 9 July 2020, where they discussed the importance of a clean and resilient recovery.

The work of the IEA remains centred on the range of energy challenges the world faces today – and on how the pandemic is affecting them. We are contending with old and new threats, both to the energy supplies that economies and societies rely on today – and to the all-important clean energy transitions that will shape their future. Our flagship publication, the *World Energy Outlook (WEO)*, is no exception. This year’s *WEO* has adapted to the pandemic’s disruption in three key ways.

First, Covid-19 has introduced huge near-term uncertainty about the future of energy, so *WEO-2020* focuses much more than its predecessors on the next 10 years. We are entering a critical decade for accelerating clean energy transitions and putting emissions into structural decline.

Second, a key question is the future severity of the pandemic and its economic implications. In response, we have introduced a new scenario, the Delayed Recovery Scenario, to explore this and consider the different outcomes, depending on whether the world gets the pandemic under control in 2021 or it turns into a more prolonged crisis and a deeper economic slump. This has huge implications for the energy sector, especially in the developing world. A delayed economic recovery results in slower emissions growth, but it is not an answer to climate change. Our analysis makes it clear that the somewhat lower emissions come for all the wrong reasons and at huge economic and social costs.

Third, the rising number of countries and companies committing to net-zero emissions is a profoundly important development. All the pledges announced so far are in line with the vision mapped out in our Sustainable Development Scenario, in which countries achieving net-zero emissions by 2050 spur the world as a whole to reach it by 2070. But when I sat down at the beginning of this year with the lead authors of the *WEO*, Laura Cozzi and Tim Gould, we agreed it was time to deepen and extend our analysis of net-zero emissions.

That is why we have a new case in this *WEO*: the Net Zero Emissions by 2050 case, which examines what it would take to get the entire world to net zero by mid-century.

How the world rises to these challenges will define our energy future and determine the success or failure of efforts to tackle climate change. The IEA has made its own position clear. Since the scale of the Covid-19 crisis began to emerge, we have been leading the calls to put clean energy at the heart of the economic response to ensure a secure and sustainable recovery.

Today, we are seeing optimistic signs that clean energy transitions are gaining momentum. In this *WEO*, we highlight the enormously consequential nature of the choices and responsibilities facing decision makers. The massive sums of money they are committing to spur economic recovery are a historic opportunity to significantly accelerate transitions towards a cleaner and more resilient energy future. This is the moment for ambitious action. As this *WEO* makes clear, decisions taken now will echo down through generations to come.

I would like to conclude by noting that the essential insights contained in this publication are the result of a tremendous amount of painstaking number crunching, shrewd analysis and commendable hard work from the entire *WEO* team. I would like to thank all of those colleagues, under the exemplary leadership of Laura and Tim, for their dedicated efforts.

Dr. Fatih Birol
Executive Director
International Energy Agency

This study was prepared by the World Energy Outlook (WEO) team in the Directorate of Sustainability, Technology and Outlooks (STO) in co-operation with other directorates and offices of the International Energy Agency. The study was designed and directed by **Laura Cozzi**, Chief Energy Modeller and Head of Division for Energy Demand Outlook, and **Tim Gould**, Head of Division for Energy Supply and Investment Outlooks.

Stéphanie Bouckaert led on end-use modelling and analysis. **Daniel Crow** co-led the climate and environment analysis and led the behaviour analysis. **Tae-Yoon Kim** co-led the fuel supply analysis. **Christophe McGlade** co-led the climate and environment analysis, and the analysis of fuel supply. **Paweł Olejarnik** co-ordinated the oil, natural gas and coal supply modelling. **Brent Wanner** led the power sector modelling and analysis. **Daniel Wetzel** co-led the energy demand analysis.

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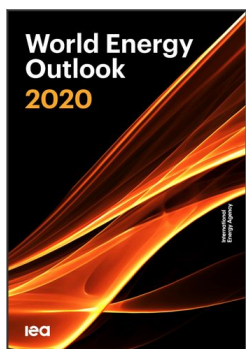
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