

This latest edition of the International Energy Agency (IEA) flagship publication, the *World Energy Outlook (WEO)*, comes at a time when energy is increasingly at the centre of political and geopolitical tensions. Of course, the links between energy and politics have always been close, but when we look at the energy world in recent decades, there is no other time when energy security tensions have applied to so many fuels and technologies at once.

Governments are contending with a formidable array of potential threats, vulnerabilities, dependencies and uncertainties spanning areas such as oil, natural gas, electricity, energy infrastructure, critical minerals, technology supply chains, data centres and AI, and more.

Energy security today is truly a matter of economic and national security – and safeguarding it requires the same spirit of cooperation and focus that governments showed when the IEA was created after the 1973 oil shock.

Take, for example, critical minerals, which are a major theme of this *WEO* but also reflect the broader role of the IEA on issues of energy security, where we move quickly to identify and address emerging vulnerabilities.

The IEA was the first to highlight the risks of high concentration of critical mineral supplies, especially in refining and processing. Today, a single country is the leading refiner for 19 out of 20 energy-related strategic minerals. As we pointed out in our landmark report on the subject in 2021, reliance on a small number of suppliers raises the risks of supply disruptions or economic coercion.

Over the past few years, the IEA has invested heavily in building up our global data and analytical capabilities in critical minerals, mirroring the world-leading capacities that we have across other parts of the energy sector, and setting up a Critical Minerals Security Programme. The topic was also a major focus at our Summit on the Future of Energy Security, held in London partnership with the UK government in April 2025.

Today, the risks that we identified in 2021 are no longer a theoretical concern; they have become a hard reality. The implications spread across different energy technologies but also apply to other strategic sectors such as energy, automotive, AI and defence. They affect millions of jobs. As we highlight again in this *Outlook*, urgent action is needed both in the near term to strengthen preparedness against potential disruptions, and over the longer term to diversify supply chains and reduce structural risks. All of this shows how the IEA's analysis transfers across into real-world impact.

There are many other aspects of this *Outlook* that also have real operational implications for energy policymakers. The focus on electricity security; the countries like India, Indonesia and Brazil that are increasingly shaping energy market trends; the sea change in gas markets that is on the horizon with the new wave of liquefied natural gas (LNG), led by the United States.

We also highlight, once again, two critical areas where the world is clearly falling short: universal energy access and climate change. Both of these have been longstanding focus areas for the IEA and the *WEO* for decades. We present a new pathway in this year's *WEO*

for enabling everyone around the world to benefit from the advantages of electricity connections and modern cooking stoves – advantages that many of us take for granted. This builds on the momentum created by the landmark Summit on Clean Cooking Africa that the IEA and our partners organised in Paris in May 2024.

And we highlight once again that, far from limiting global warming to 1.5 °C or well below 2 °C, we are currently heading towards outcomes in the range of 2.5-3 °C, with severe implications for lives and livelihoods around the world. There are still pathways that mitigate these risks significantly, while the options to reduce emissions substantially are well understood and, in many cases, cost effective.

I would like to warmly thank the team of IEA colleagues who worked extremely hard on this new *WEO* under the outstanding leadership of my colleagues Laura Cozzi and Tim Gould. More than ever, the world needs clear data and analysis to help navigate a complex and dangerous world. The *WEO* has always fulfilled that vital role and I am very glad and proud that it remains in that role today.

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