Old king coal has surrendered to solar, says global power report
Nick O'Malley The Age October 13, 2020

Solar power has been declared "the new king of electricity" by the International Energy Agency in its annual energy outlook report, which finds it is already cheaper than power generated by new coal and gas developments in most countries and is providing, "some of the lowest-cost electricity ever seen".
For the first time since the industrial revolution, coal-fired power will constitute less than 20 per cent of the world's energy by 2040, according to one scenario in the report, which found the end of the coal era has been accelerated by the COVID-19 pandemic.
The report has major implications for the Australian government, with Tim Buckley of the Institute for Energy Economics and Financial Analysis saying it was hugely significant that the IEA was now predicting that coal was in structural decline in all of its modelled scenarios, as in previous years in some scenarios it predicted that coal demand would have continued growth at lower rates.
“It deprives Australian state and federal governments of a crutch. They have relied on the IEA modelling in the past to say there was evidence of continued growth, so has the industry,” he said.

This year global greenhouse gas emissions will fall by 7 per cent to 33.4 gigatonnes according to the 2020 World Energy Outlook, but the agency warns that the economic slump cannot be viewed as a solution to climate change. Unless nations adopt green economic recovery policies emissions will quickly rise in the recovery, it says.

"The economic downturn has temporarily suppressed emissions, but low economic growth is not a low-emissions strategy – it is a strategy that would only serve to further impoverish the world’s most vulnerable populations,” said IEA chief Dr Fatih Birol.
Instead, governments should adopt policies to drive down emissions.

The report models four possible scenarios of recovery and energy use, ranging from one in which governments adopt policies to reach net-zero emissions by 2050 to one in which governments respond with their already stated policies. In this scenario greenhouse gas emissions bounce back to pre-COVID levels by 2023.
All the scenarios predict that coal’s peak use has already passed and cast renewables as taking "starring roles".
"I see solar becoming the new king of the world’s electricity markets. Based on today’s policy settings, it is on track to set new records for deployment every year after 2022," said Dr Birol. "If governments and investors step up their clean energy efforts in line with our sustainable development scenario, the growth of both solar and wind would be even more spectacular – and hugely encouraging for overcoming the world’s climate challenge."

The report predicts peak oil demand will hit in the coming decade, but unless governments shift policies that support its use it could plateau for years after that.
Gas demand is expected to rise in Asia over coming years under one scenario as governments use it to replace coal energy plants, but for the first time the agency is predicting that gas demand will begin to decline by 2040. Gas’s environmental credentials will be challenged by new technologies demonstrating that methane “fugitive emissions” associated with gas are causing significant harm to the climate, it says.

"An uncertain economic recovery also raises questions about the future prospects of the record amount of new liquefied natural gas export facilities approved in 2019," the report says. "Investors are looking with increased scepticism at oil and gas projects due to concerns about financial performance and the compatibility of company strategies with environmental goals."
Mr Buckley said the IEA’s acknowledgement of the climate impact methane emissions related to the gas industry have was also a signal of future uncertainty for the industry, though he said he did not believe it would prompt the government to reconsider its support for a gas-led recovery.
Director of the Grattan Institute’s energy program Tony Wood said it would be difficult for Australia to dismiss the IEA’s modelling because it is one of the agency's most long-standing and active members.
Kingsmill Bond, an energy analyst with Carbon Tracker, a finance and climate change think tank in London, welcomed the recognition that the world began to hit fossil fuel peaks in 2019, but said he believed it underplayed how far and fast solar costs would continue to fall.
"The IEA is forecasting a massive slow-down in the rate of fall of solar costs. Costs have been falling at 18 per cent a year since 2010," he said. "The [report] expects that the rate of cost falls reduces to just 2 per cent a year in the period to 2040. This is simply not credible."
Mr Bond also said he believed solar would continue to expand at a faster rate than that predicted by the agency's business-as-usual scenario.