China ‘must shut 600 coal-fired plants’ to hit climate target

Move towards renewables to hit net zero by 2060 would also pay off with saving of $1.6tn, analysis finds

Wind turbines in Gansu, Wuwei, China, pictured in November 2020. Photograph: Rex/Shutterstock

Fiona Harvey Environment correspondent
Thu 15 Apr 2021 00.01 BST

China must shut down nearly 600 of its coal-fired power plants in the next 10 years, replacing them with renewable electricity generation, to meet its goal of net zero greenhouse gas emissions by 2060, a report has said.

But replacing the 364GW of coal generation with renewable power would achieve a net saving of $1.6tn (£1.2tn) over the period, since wind and solar power are now much cheaper than coal, according to the analysis company TransitionZero.

The coal consumption of China, the world’s biggest emitter, is of global concern. The country has ramped up plans for new coal-fired power stations in an effort
to spur economic growth after the recession caused by the coronavirus pandemic.

Last September the country’s president, Xi Jinping, surprised the world by pledging that China would achieve net zero emissions by 2060, and that its emissions would peak before 2030.

Urgent policies needed to steer countries to net zero, says IEA chief

However, while climate experts have applauded the long-term goal they are concerned that allowing emissions to rise for the next 10 years will bust the global carbon budget.

Matthew Gray, the co-chief executive of TransitionZero, said: “If China fails on coal, the rest of the world will fail on containing dangerous climate change. But the stars are now somewhat aligning on breaking China’s addiction to coal.”

The finding that China could save money in both the short and longer term by replacing coal with renewable energy brightens the prospect of it moving decisively away from coal in the next few years.
Al Gore, who wrote a foreword to the TransitionZero analysis, said: “This shows that not only can China meet their climate goals, the country and its leaders can accelerate them rapidly. The economic opportunity presented by a transition from coal to clean energy shows that climate action and economic growth go hand in hand.”

China is preparing to submit a new climate plan, called a nationally determined contribution, or NDC. Such plans are a requirement for all countries under the 2015 Paris climate agreement, and will form the key part of Cop26, the vital UK climate talks taking place in Glasgow this November.

António Guterres, the UN secretary general, has urged China to move swiftly away from coal, but the International Energy Agency has warned that China’s coal consumption is rebounding strongly after the shock of Covid-19.

Gray said the transition away from coal would still be difficult politically since the fuel was “deeply embedded” in China’s economy and society. Vast amounts of infrastructure, from railways carrying coal from mines across the country, to steel and cement plants, are reliant on coal today.

The new report, said Gray, did not examine jobs in detail, but he said a transition from coal to clean energy in China was likely to create as many, if not more, jobs as had been lost in traditional coal industries. “Moving to net zero will be jobs intensive,” he said.

Reducing the country’s reliance on coal would also bring many health benefits, for instance by cutting air pollution, and go some way to easing looming water shortages in central Chinese regions, Gray added. Coal-fired power stations require vast quantities of water, in increasingly water-stressed regions.