



A QUARTERLY JOURNAL FOR DEBATING ENERGY ISSUES AND POLICIES

COVID-19: ACCELERATING THE CLEAN-ENERGY TRANSITION

Richard Black

Just 10 years ago, discussion of whether the energy transition could continue while the world's peoples laboured under a global pandemic would have been framed as a question of competing priorities. 'Green' costs money, the argument would have run, and money is tight. The conclusion would likely have been that while the energy transition would continue, its pace and urgency would inevitably be diminished by the uncomfortable clash of desire and reality.

In the UK and other nations of western Europe, the discourse and the conclusions are now of a very different hue. Even at the very top levels of government there is seen to be little conflict between the short-term need to get the economy moving after lockdown and the longer-term imperative to decarbonize; in fact, they are increasingly seen as two sides of the same coin. Now, the question is not whether the pandemic will delay the world's clean-energy transition, but whether the need to 'build back better' will accelerate it.

Acceleration is the likely outcome, driven by four mutually reinforcing factors – changes to the global energy system that predated the pandemic, pandemic-driven changes to the investment climate, recovery priorities that mesh well with clean-energy goals, and growing public support, especially in Europe.

A changing energy landscape

Over the last decade, vast swathes of the world's energy landscape have changed. Exhibit A is the tumbling cost of renewable energy and the now-inevitable demise of coal. This is complemented by the fact that many nations now generate a major slice of their electricity (up to 60 per cent in the case of Denmark) from variable renewables, and do so at reasonable cost with no sign of the power cuts that doubters insisted would inevitably follow such wind and solar abandon.

The hollowing out of the traditional energy system is being amplified by renewables now progressively undercutting gas generation as well as coal, reduced support for gas as a transition fuel, utilities procuring battery storage instead of backup gas generators, and the failure of the nuclear industry to remotely match up to renewables in terms of price and build rate. Storage is being followed quickly by electric vehicles, with almost every transport analyst now acknowledging that the end of the internal combustion engine is inevitable, and the most bullish projecting that all cars purchased will be electric within six years.

It is worth reflecting on just how wrong the climate and energy contrarians, who once warned of societal oblivion if humanity weaned itself off fossil fuels, have proven to be. The clean-energy transition has not led industry to flee to less discerning corners of the world; the denizens of western Europe have not grown materially poor by endeavouring to become renewables-rich; and the lights have stubbornly stayed on.

Changing investment priorities

As these energy trends have developed, business and investment appetites have changed. One of the most remarkable

aspects of current UK discourse on 'building back better' is the almost universal support among business organizations and lobbyists – for example, the Confederation of British Industry, EnergyUK, the energy utility SSE, and the National Farmers' Union – for a 'green' recovery.

Hence the second key factor behind the likely acceleration of the clean-energy transition is money – more precisely, the places where investors want to deposit it. In straitened, uncertain times – a category into which the COVID-19 pandemic period decidedly falls – money eschews risk for security. Now, in contrast to the post-crash environment of 2009, fossil fuels look risky while 'clean' energy looks safe. In many countries, to invest in solar or wind power is virtually to guarantee single-digit returns for up to 25 years: not highly attractive for high-stakes investors, but perfect as a foundation for risk-averse vehicles such as pension funds. As Lord Adair Turner and others have suggested, the attractiveness redoubles at a time when sovereign governments are offering bonds at negative interest rates, and finding takers.

Meanwhile, while owners of extant fossil fuel resources will generally seek to maintain those resources through the COVID-19 crisis and into the anticipated recovery, incentives to invest in replenishing the global stock of operating mines and wells as existing ones deplete are virtually non-existent. The demise of coal as a serious global fuel is already assured, with the only real attempts at investment coming from national governments such as India's and China's which are seeking to prop up domestic production at the expense of imports. COVID-19 is pushing oil towards the same fate, with some analysts arguing that 2019 may prove to have been the year of peak global consumption.

Whether such forecasts turn out to be precisely correct or not is beside the point. What matters in terms of the impact on the global energy transition is how the possibility of them being correct steers investment. Already CEOs such as BP's Bernard Loomey are acknowledging that oil companies were already in transition before COVID-19 struck and will be in faster transition as a result of the virus. In fact, it is hard to envisage a single oil (let alone coal) company that will not find COVID-19 accelerating the end of its business model, with only a number of carbon-states able to buck the trend by extending the life of their industries for reasons other than good economics.

Convergence of economic-recovery and clean-energy priorities

In recent months, as the scale of COVID-19's economic disruption became clear, a vast array of academic institutions, business groups, think tanks, and others have turned this mass of real-world experience into reports and analyses advising that governments can and should 'build back better'. In part the analyses have drawn on experience gained through rebuilding after the 2008/2009 crash, when a few governments, notably the US under President Barack Obama, did invest public money along 'green' lines, producing data on job creation that has acquired contemporary relevance.

The consistency of argument has been remarkable, with little if any support for 'building back exactly the same' – even though it is equally clear that this is what many companies in high-carbon sectors such as oil and gas, coal, automotive manufacturing and aviation have been lobbying for. In a few cases, such as in the UK with the Committee on Climate Change, statutory advisors have been able to fold existing analyses in with their own and submit them as official recommendations to government, which carries additional weight.

This support for focusing investment in clean energy is reinforced by the fact that its proponents were able to win the battle of ideas on grounds not directly concerned with climate change and the case for emission cuts. Instead, 'go for clean' beat 'stick with dirty' on issues far closer to the heart of the immediate problem – near-term job creation, near-term return on investment, and the need to spend now-scarce public money prudently. And the arguments were made convincingly – with the UK research organization Vivid Economics, for example, showing that every £1 invested in energy efficiency returns £3–8 to the local economy; the Energy Transitions Commission flagging up the rationale for governments making adherence to Task Force on Climate-related Financial Disclosures processes a precondition for bailouts; and the Energy and Climate Intelligence Unit showing that in the UK context, home energy efficiency upgrades have the biggest potential for job creation in areas where there is the greatest need. Thus the evidence shows that at least some 'green' measures are among the most effective for job creation and job retention – a marked change, again, from the situation a decade ago.

Growing public support for clean energy

The fourth factor is the public mood. While no opinion survey can truly capture where the global public stands along the axis from 'building back better' to returning to the status-quo-before-COVID-19, an Ipsos-MORI poll conducted in 16 nations in May found that citizens in all those nations expect their governments to prioritize environmental concerns as they build back. Altogether about three in four poll participants expressed this view, rising to 91 per cent in China.



In many countries there are indications that the public will not stand for governments throwing their money at companies such as airlines and oil majors that are perceived to do very nicely when times are good but to come running cap in hand in more difficult circumstances. Although this may partially have its roots in distrust of elites, it appears to speak also to the substantial public majorities supporting action on climate change.

This is so far a largely European phenomenon – of necessity, because Europe has been quicker than most regions to control the spread of coronavirus and implement economic support measures. It will be interesting to see how the global picture unfolds, particularly in nations such as Brazil, where President Jair Bolsonaro has based his populist posture on dismissal of science as it concerns both climate change and COVID-19.

But in Europe, the public clearly does not want to go back to business as usual. For example, a recent UK survey commissioned by the Conservative Environment Network found around 70 per cent of the public supporting rebuilding efforts that incorporate decarbonizing measures such as home energy retrofits. About the same proportion said that if government failed to initiate such a programme, they would see it as a sign that ministers were not listening to them. This is noteworthy in that it not only demonstrates that taxpayers want to see their money spent on decarbonization, but also raises the possibility that the British public would see failure to tackle climate change as elite and out of touch. Equally noteworthy was the conclusion of the French Citizens' Assembly on climate change, which produced 149 recommendations on decarbonization in areas ranging from homes and diets to taxation and constitutional change, and did so while coronavirus raged around it.

This has not come about because of a Damascene conversion to acceptance of the evidence on climate change and commitment to its solution. Awareness and support have been rising year by year and heatwave by heatwave. Rather, the coronavirus pandemic seems to have inspired a greater public focus on clean-energy concerns, for a range of reasons that may include renewed appreciation for clean air and nature, distrust of big business, and the idea that as governments are inevitably going to spend previously unimaginable sums of money supporting jobs and businesses, they might as well spend it in ways that deliver other goals simultaneously.

Conclusion

On its own, none of the four factors discussed above would have been enough for COVID-19 to accelerate progress towards the low-carbon future. Collectively, however, they can have a powerful impact – not in every sector (it is hard, for example, to argue that they will drive a global uptake of carbon capture), and not in states whose economic interests are heavily dependent on fossil fuel exploitation – but enough to make a real difference.

The issue cannot be judged, as some would, simply by how 'green' governments make their recovery packages – still less by how much public money they put into the 'better' element of 'building back better'. The effect is far more subtle than that, and the interplays between factors more nuanced.

And all of the trends discussed in this article will be modified as the pandemic and its aftermath play out – not least because current expectations about beginning to recover from the pandemic within a few months are likely to prove wildly unrealistic. Much of Europe may be through the pandemic's intense initial phase, but most of the wider world is not; and the trends shaping investment, public opinion, and government spending may play out over far longer timescales than is often assumed in politicians' speeches and media coverage.

Meanwhile, as science discovers more about how this virus spreads, it is possible that the virus itself may come to be seen through an emissions lens. There is evidence that air pollution makes infection more likely and more serious; a significant number of recent outbreaks are associated with meat packing and distribution. Confirmation of either trend would provide new arguments and, one must assume, further movement of public opinion in favour of low-carbon measures, such as outlawing petrol and diesel cars, or raising less livestock.

Christiana Figueres's climate change campaign Mission2020 argues that a transition away from fossil fuels by mid-century is 'necessary, desirable and feasible'. The climate change impacts that make it necessary are still present, largely unchanged by the coronavirus. The recent taste of clean air, the jobs reboot, and a renewed need to invest money prudently are all increasing the transition's desirability. And the willingness of governments to open their coffers for COVID-19 has proven, in case anyone seriously had their doubts, that swiftly combatting a global emergency is absolutely feasible.