

COP26 – so was that it?

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COP26 followed the pattern of all the previous 25 COPs over the last thirty years. In the run-up, there is always a big dial-up of the rhetoric. Lots of stuff about “the last best chance”, “one minute to midnight”. This time we had John Kerry for the US and Boris Johnson for the UK doing most of the hyping. COP26 was presented as a sort of Churchillian moment, without the Churchill, the James Bond moment, without James Bond – lots of what Greta Thunberg calls “Blah, blah, blah”.

At the Paris COP, the world leaders failed to come up with a legally binding set of targets (the aim since Kyoto and especially at Durban) and failed to come up with targets that added up to 2°C. So they proposed a higher ambition of 1.5°C, and hoped that at Glasgow the targets would be ramped up to meet this. The COP26 explicit aim was to “keep 1.5°C alive”. And, as at Paris, if it cannot be agreed now, propose that at some future date – the next COP – it will be. At all costs keep the COP process on the road, and the COP industry in business. As at Paris (and indeed Durban), Glasgow sang from the same old hymn sheet, whilst all around the concentration of carbon in the atmosphere marches on at the relentless 2 parts per million (ppm) per annum, all in the naive belief that one more heave, one more COP, is going to crack the climate change problem.

It has not and it will not. Where the political posturing, and the COP process, depart from reality is that 1.5°C warming is very likely to happen in at least one of the years before 2030 and possibly even by 2025. We are already at 1.2°C. Even if all the promises are met, China will go on increasing emissions for the rest of this decade, and not reach net zero until 2060, whilst India wants another 50 years to get there. If anything, Africa look worse.

How did it come to this? Why won't it work? And why such a huge gap between the promises and the hype and the relentless reality of adding 2ppm to the carbon concentration in the atmosphere every year since 1990? Why have the world leaders not noticed that in 2020 another 2ppm were added? Why does it suit them to

repeatedly claim that after 30 wasted years, one more heave of the COP process will get us there?

Instead of just keep digging a deeper hole, it is time to move on to something that might actually work – a bottom-up rather than a top-down strategy, a coalition of the willing unilateralists based on carbon consumption and not carbon territorial production, and incentivise the reluctant through proper carbon pricing for imports as well as home production.

It is on this bottom-up approach of coalitions of the willing that Glasgow has made some limited progress, and it is in developing the institutional architecture and the monitoring of performance that the UN has an important role to play. There were specific glimpses of this at Glasgow – on coal, on methane, and on deforestation. But sadly they are only glimpses, hidden behind a wall of “cake-ism”: the mistaken belief beloved of the UK PM that we can have something for nothing, that there are no consequences to us for living beyond our carbon means, no consequences of facing up to the costs of our carbon-intensive lifestyles, and no need for the ultimate polluters – us – to pay.

In order to start to shift onto a more productive paradigm and a strategy that might actually make some difference, we need first to clear away some of the debris, and take a cold hard look at what is actually causing climate change and what we would actually have to do to tackle it. The starting point is the emissions half of the problem, before thinking clearly about the sequestration half.

The fossil-fuel reality

The gaping hole at COP26 was any serious plan to wind down fossil fuels in the next 29 years to a remnant in the energy mix from around 80% today. The world has plenty of fossil-fuel reserves. Peak oil, peak gas and peak coal – the sorts of things that the early COPs convinced themselves would force a switch-away as they ran out – have turned out (sadly) to be rubbish. The climate change challenge is to keep these reserves in the ground, to limit and then close these industries down.

Yet Biden is begging the Saudis to *increase* oil production, and quietly the US is turning a blind eye to its own oil, gas and coal production. Johnson is doing deals with the Saudis

to keep the LNG gas flowing, and the EU is trying to get Russia to pump more pipeline gas. Both seem more worried about the impact of the immediate price increases on their electoral prospects.

Where is the plan to close the US coal industry down? Where is the plan to wind down its shale oil and gas? To close its conventional wells? Biden followed in the path already trod by Bush, Obama and Trump – protecting the US surge in oil and gas production, and holding out for coal too. Obama now preaches to the rest of the world leaders. Do as he says, not as he did.

Johnson has the benefit of inheriting the closure of most of the coal industry, but even here he is ambiguous. He let it be known that he is against a new coal mine in Cumbria, but said that it was not for him to decide. Really? Since when was Parliament unable to legislate to rule out coal? Then there is the ambiguity about further North Sea oil and gas developments, notable the Cambo field. Like the reduction in aviation tax, weasel words are not really convincing. Merely pointing out that Scottish politicians also fly to London is not an excuse – others acting badly is not an excuse for him to do so also. Do as I say, not as I do.

Ironically Biden turned his climate fire on Saudi Arabia. He should do. Saudi Aramco is paying an annual dividend of \$75 billion – 75% of the \$100 billion target funding, and close to the actual climate funding since Paris. Just think this one through: *the annual dividend of the largest oil company is equal to the total amount of funding the world is going to provide to developing countries*. But no Biden plan to stop buying Saudi oil. On the contrary, he wants more, now for the extra reason of trying to head off the inflation caused in part by the great consumption boom his spending plans (and QE and very low interest rates) have helped to fuel. He may even be prepared to now turn a blind eye to the murder of the journalist, the human rights abuses, and start selling arms to the Saudis if only they will pump more oil.

At the global level, “Build Back Better” actually means burn more oil, gas and coal. It means more demand, which the fossil-fuel reserves will easily manage to accommodate as we motor past 100mbd. Johnson gets round this inconvenient fact with a flourish of Orwellian double-speak. He boasts that the UK is both boosting economic growth (his “boosterism”) and getting out of fossil fuels, on target for net zero in 2050. The trick is

in the claim that when we get to net zero, we will no longer be causing climate change (a claim also made by the UK Committee on Climate Change in its advice to Parliament to endorse net zero). It is very unlikely to be true. Take a look at all those containers at the docks in Felixstowe or Southampton, destined to try to make sure the Christmas consumption binge is not at risk. What do they contain? Where do all those goods come from? Could some of them come from China, made with coal-dependent electricity and coal-dependent steel and fossil-fuel plastics? Maybe the PM should himself go down to the docks and take a look – preferably by train.

Instead of honestly facing up to the UK's carbon footprint – its carbon consumption – Johnson prefers to point to numbers that suit his case, but which might even be making climate change worse. If the UK is in such a hurry to achieve territorial net zero carbon production, the PM should perhaps turn his fire on closing down the rest of the more energy - and carbon-intensive industries in the UK, and switch to imports instead. That would reduce territorial carbon production, but make climate change worse.

A more realistic PM would talk less about being a world-leading example, and show some humility for both the historical legacy of carbon the UK put up in the atmosphere and the continued scale of the UK's carbon footprint.

Johnson is of course not alone. He follows Biden's script here: freezing fuel duty, reducing regional aviation tax, supporting regional airports and encouraging people to spend more. Johnson very deliberately says that there should be no serious lifestyle changes, no guilt about flying and no hairshirts. We, the citizens, are the polluters, but the last thing we should be doing on the Johnson and Biden scripts is paying for the pollution we are causing. There are no serious carbon taxes, no carbon border adjustments. The UK government cannot even phase out red diesel subsidies to agriculture.

It is hard to think of any serious plan to phase out fossil fuels from their 80% share in just 29 years without a serious carbon tax. That is exactly what the world leaders at COP26 were most anxious to avoid, at least in the short term. They talk the talk, but don't walk the carbon tax walk. In that, they follow the voters: the moment there is mention of "costs", they find themselves rather less keen on tackling climate change. Leadership is about leading the public, about spelling out inconvenient truths, not

simply following the pack. Climate change will not go away because the leaders fail to face the facts and tell it as it is, and not how they and their voters would like it to be. That is why the concentration keeps going up at 2ppm every year. An unsustainable cake-ism will not be sustained. We will get a lot hotter.

US, Russia and Saudi Arabia – what the three big oil producers do next

With the appetite for oil and gas still so very strong (and growing), and with the great Keynesian stimuli policies of the US, the EU and China in full flow, the three oil and gas big producers have in front of them a booming market. This can only further increase demand in the short term, and push towards and then beyond a 100mbd market for oil. Saudi Arabia aspires to move from 9.5mbd to 12mbd, encouraged by the US, amongst others. Putin's regime depends upon the oil and gas revenues, and US production is recovering. These three together make up 30% of the world's oil production. Unless all three act to start closing down their fossil-fuel industries, climate change will not be stopped. At all previous COPs, these big players have slowed things down. They were still at it in Glasgow, even if the rhetoric from the US was Biden's rather than Trump's.

Added to this rising demand for oil comes the surge in gas demand. Our leaders are anxious to try to get the gas price down. The US has shale. Russia has lots of conventional gas reserves, and Saudi Arabia can meet its own needs and anyway use oil where others have been switching to gas. Indeed on the gas front, the great producers (including Qatar) see the opportunities in a switch from coal in the EU and in urban areas of China (for air quality rather than climate change reasons). As the demand ramps up, so will production, and the current price spikes will abate.

In the UK the Governor of the Bank of England forecast that gas prices will stay high in part because of the switch from coal. What he seems not to have noticed is that there is more than enough oil, and especially gas and coal to fry the planet many times over. A little exposure to 101 economics might lead the Governor to ask whether supply might respond to the higher demands he forecasts – as the supply of oil has responded for decades to rising demand. That matters because gas remains a potent competitive threat to renewables.

A great hope at Glasgow was that the great ESG drive towards disinvestment in fossil-fuel producers might do the trick. If government cannot stop demand going up, might

not the private investors and companies kill off new capital investment in new resources and hence choke the fossil-fuel industries to death? Sadly not, and it might exacerbate some dimensions of fossil-fuel production, notably the associated other environmental detriments.

The key fact that these ESG enthusiasts seem not to notice is that *the vast majority of oil, gas and coal is produced by state-owned and state-controlled companies* (the national oil companies, NOCs, as they are collectively known). Even where there are private investors, such as in Saudi Aramco and Rosneft, the reality is that in both cases it is the Saudi and Russian governments that control and determine their investments.

None of these NOCs really depends upon the sorts of funding that ESG covers in fossil-fuel companies. The reason is simple: oil, gas and coal production throw off lots of cash. Historically, much of the fossil-fuel industries were self-financing until the great fashion of leverage and gearing came along in the 1990s and especially in the negative real interest rates from 2000 onwards. But financial engineering of balance sheets is not the same thing as real physical investment.

As a result of targeting of the independent oil companies (IOCs) – Exxon, Chevron, BP, Shell, Total and Equinor and others – the market share of the NOCs in Russia and Saudi Arabia and elsewhere looks likely to grow. The NOCs can and probably will replace the relatively cleaner US and European companies' production with more of their own, often to lower environmental standards. Neither Saudi Aramco, nor the Russian companies, really depends upon Western banks to fund their investments: cash flow should be sufficient. Iran and Iraq may take part in this benign (from the perspectives of the NOCs) market context, as will other smaller producers around the world outside the Western domain. The higher the price, the easier the funding will be. Little ESG applies to them. They don't tolerate Extinction Rebellion gluing and chaining themselves to their head offices in Riyadh, Beijing and Moscow, and certainly not in Tehran.

If climate change is to be tackled, all these producers have to exit their production and gradually close themselves down. They would have to stop new E&P, and pursue a

harvest-and-exit strategy, as set out in my book: *Burn Out*.¹ The Glasgow COP provides no incentive to do so.

What is needed is an approach to climate change that does trigger a reduction on the demand side for all the fossil fuels by introducing serious carbon taxes, and especially carbon border taxes, and consequently a big incentive by switching to low-carbon electricity. This would be serious if the taxes were big enough, and if the main fossil-fuel buyers were switching to electric vehicles (EVs), using green and not blue (or even grey) hydrogen, and exiting plastics. Even then there are all the fossil fuels burnt to generate the electricity to power the EVs, and the electrification of much of the developed economies. Electrification does not necessarily mean low carbon.

The acid test for COP26 is whether it provides any such incentives for these big fossil-fuel producers to change their strategies and start to close down their oil, gas and coal industries. COP26 does very little. It is hard to see Putin and Mohammed bin Salman telling their fossil-fuel companies to start exiting, and there is no chance of Biden taking on the US motorists. It needs endlessly repeating that the US, China, India and Russia are not prepared to sign up even for an exit from coal.

“Phasing down” is clutching at straws – a face-saver but not the end of coal. That requires “exiting coal”.

The China and India and Africa problem

Thinking ahead to 2030, on current growth rates China may be nearly twice its economic size by then. India may be on a similar path, and Sub-Saharan Africa is not far behind. Imagine if China, India and Sub-Saharan Africa were all nearly twice their current GDP size and with a parallel growth in their demand for energy in 2030. Or even just 50% bigger. Pointing to the relative growth of renewables is interesting, but does not address the *absolute* growth in demand for oil and gas (and coal). And this is only up to 2030. Keeping these growth rates going through to 2050 amounts to a huge increase in the demand for energy. In 29 years’ time, the world economy may be two or three

¹ Helm, D. (2018), [*Burn Out: The Endgame for Fossil Fuels*](#), Revised Edition, Yale University Press.

times its current size. That indeed is what the leaders at Glasgow are trying to achieve in their day jobs of maximising economic growth.

China, India and Sub-Saharan Africa should be the prime focus of all climate change strategies. The question is: do the measures proposed at COP26 change the carbon emissions of these three areas? China is now at almost 30% of total global emissions, almost as much as the next four biggest emitters put together: the US, Russia, India and Japan. China proposes to go on increasing its emissions to 2030, before then taking a further 30 years to get to net zero. True, it has signed up to cooperation with the US on decarbonisation, but it is a struggle to think that Chinese leaders in Beijing are overly worrying about this, as against the suppression of the Uighurs, the taking-back of Taiwan, the exclusion of the US from the South China Seas, and adding to their missile and nuclear weapons stockpiles (and, as an aside, the military emissions from the US, Russia, China, the UK and France are not part of the overall targets, or even properly reported). The fact that this “agreement” between the US and China is reported as a major step forward gives an insight into how threadbare COP26 has been.

The Indian Minister of Energy set out the perspective of developing countries very sharply back in the summer. Why should India forgo the fossil-fuel-based economic growth that Europe and the US have enjoyed over the last century and a half? Most of the carbon stock in the atmosphere was put there through these great industrialisations of the past. The increase of the stock of carbon in the atmosphere is not the fault of India. Even for China, income and emissions per capita are still dwarfed by those of the US (and for the UK if carbon consumption is properly measured).

On this very cogent argument, the developed countries should pay compensation to the developing countries for the global warming caused by the developed countries so far, and pay the developing countries not to go down the high-fossil-fuel route in the future. Put another way, India does not propose to do anything much to change direction unless there is a great North–South funding transfer. It is not about finance; it is *funding* – direct monetary transfers – that is required. That is why India’s net zero target is *50 years away* – in 2070.

The trouble with this argument is that there is not a shred of evidence that this is going to happen. At COP26, the major economies struggled to try to agree to \$100 billion per

annum. By way of comparison, the UK spent over £300 billion on the coronavirus pandemic, and in the meantime cut its aid budget from 0.7% GDP to 0.5%. Whilst the UK government is promising (eventually) to put the aid budget up again in due course, it is nowhere near what would be required to incentivise India or Africa, and in any event there is almost certainly going to be some creative accounting about reallocations and relabelling of the meagre aid that is currently in place. There is no evidence that the US, the EU or the UK is going to seriously up their funding transfers.

With the developed countries failing so lamentably to match their ambitions for the developing countries to cut their emissions with hard cash, they instead extol the virtues of private sector involvement. Advocates of Mark Carney's initiative make the non-credible claim that the private sector has already committed a sum greater than that needed to decarbonise the world already. This is fantasy, and with the risk of greenwashing and double-counting. It is based upon the assumption that lots and lots of decarbonising investments are going to be profitable. Really? So why do governments need to subsidise the renewables, the networks and the infrastructures? If it is all going to be paid for by the private sector anyway because it is going to be so profitable, why bother with COP26?

Note, too, that the Carney approach tends to confuse funding and financing. The developing countries may benefit from access to financing, but what they really need is funding – and the Carney approach is not and cannot offer this on behalf of banks and financial institutions. The only way the private sector “solves” the problem is if decarbonisation is indeed profitable. But that takes governments to put in place a really serious carbon tax and border adjustment. And that is exactly what COP26 fails to do.

Brazil, Indonesia and the other great destroyers of the forests

The other (and much neglected) half of the climate change problem is sequestration. Maybe COP26 can make carbon offsetting profitable? Could carbon offsetting really help towards the 29-year drastic closure of the fossil-fuel industries, rather than provide a prop to keep it going?

A high enough carbon price would help, but *many companies see offsetting as a way to carry on with more emissions*. Instead of sequestrations *and* emissions reductions, many banks, financial institutions and companies are declaring their own net zero targets, to

be met in part by a modern version of the religious practice of buying indulgences – and hence to carry on burning some of that oil, gas and coal. Plant a forest in North or South America, and then claim that an LNG cargo of gas from say Qatar to say the UK is carbon-neutral and hence compatible with net zero. Whatever the rationale for carbon offsetting, and there are circumstances where it is a good thing, it should not be used to make dramatic claims about its contribution to net zero. To repeat: we need both carbon sequestration *and* emissions reductions, not one or the other.

To COP26's credit, there was at least a serious engagement with deforestation, and with understanding the importance of the destruction of the ability of the great forests to sequester carbon. Having spent the last 30 years on half the problem of emissions, attention is finally shifting towards the ability of the natural environment, including the oceans, to absorb the extra carbon.

The question is whether COP26 has been able to translate any of this new and welcome enthusiasm into concrete and practical policies that will make a difference in this decade, and of course afterwards. The difference between “urging” countries to “take measures” and the countries actually taking them bedevils the final COP26 text.

The burning of the Amazon has received a lot of attention recently, and in particular the startling fact that the Amazon is now a net emitter of carbon. Less attention has been paid to the destruction of the Mekong, and in particular the part played by China in the great dam-building. Largely out of sight has been the growth of palm oil plantations (and the use of palm oil as a “renewable fuel” for EU transport) and the scale of the loss of carbon from the seabed as a result of bottom-trawling fishing has only just started to get some recognition. More generally, the destruction of the carbon stores in the soils has finally very tentatively brought agriculture into the frame. With roughly four times the carbon concentration of the atmosphere, and with most of the world's biodiversity below our feet in the soil, the urgency of tackling soil and peat emissions cannot be overstated. Trawling and disturbing shallow coastal waters is pretty bad too.

So what exactly has COP26 done to practically change the trajectory of the intensification of world agriculture, the further stripping of the soil carbon, the associated destruction of biodiversity, and the control of trawling and seabed damage? The answer comes down partly to funding and financial transfers again. The numbers

are spectacularly underwhelming. The combined private and public funding proposed to tackle deforestation is less than the amount the UK spent on its failed *Track and Trace* testing scheme for Covid-19.

As with the methane and coal, there is a non-binding pledge by some countries to stop buying some of the most egregious stuff from cleared rainforests, such as soy and palm oil. All good aspirations, but we have been here before – notably in 2008 and in 2014. There is nothing to inspire confidence that it will work this time. How exactly are the COP26 signatories going to stop China buying more palm oil, and more soy from Brazil?

The methane problem

COP26 started to address methane. From a climate change perspective, the distinctive feature of methane is that it is a very powerful greenhouse gas, and it is short-lived in the atmosphere. If it is quickly reduced, it could make a big short-term dent in climate change, and, if so, it would probably be a reason for some optimism about the next 29 years to 2050.

There is the very real risk of a great surge in methane emissions, from which the climate would probably have no return for centuries. If the methane leaked out from a melting tundra, if mass leakage from the methane hydrates on the sea floor were triggered, the game would be over.

World leaders have put together a voluntary agreement by the willing to set a 2030 30% methane-reduction target. It has the merit of being a start, and the demerit of being wholly inadequate to the task. The really big players – notably China, Russia and India – are not part of this side agreement. Together they dwarf all the others, except the US. Remember, too, that much of the methane emissions is diffuse – from things like coal mines, tundra, waste, and cattle. It is less obvious how increases in methane concentrations in the atmosphere are going to be assigned to specific countries, even those who have signed up to this voluntary agreement.

Yet to surface are two practical policies: a serious methane tax (alongside the developing carbon taxes); and a serious disaster plan for what happens if methane emissions surge. The latter should concentrate minds. By spelling out the scale of the possible disaster, it would point to rapid engagement with countries like Russia and

Arctic Canada, where the threats are greatest. Russia might reply that the melting permafrost is not primarily its doing. It is not its fault, and there is little it can immediately do to stop the rapid Arctic warming. What response is a voluntary set of targets by the willing?

These impacts may dwarf the consequences of lots of burping cattle and the campaign to focus on diets rather than these more fundamental methane-emissions challenges. Reducing methane leakages from natural gas extraction may help, but if it raises the relative price of gas to that of oil and coal (coal-mining is a great methane emitter) then the results could be a switch from the less carbon-intensive gas to the more carbon-intensive coal and oil.

The missing bits – agriculture

COP26 widened the net to include methane and deforestation, but as noted above it left agriculture largely out, despite the sector being responsible for over a quarter of global emissions. Indeed it might be more, since the emissions from soils and peats are poorly measured.

Why the neglect? The obvious reason is that tackling agriculture is political dynamite. In developed countries it comes up against the most powerful lobbyists – the farmers' unions in the EU, US and the UK. In developing countries it comes up against the emotive issues of food and food supplies, and the very real need for increasing food production. It raises major ethical challenges, given that the intensity and the share of meat and dairy in the EU, US and the UK diets mean that the agricultural carbon consumption emissions per head are so much higher.

Yet for all the political challenges, it is obvious that climate change cannot be halted without a radical reconsideration of land use. The trouble is that, in developing countries, that change is towards agriculture and towards more intensive production, in things like Brazilian soy beans for Chinese pigs, and Brazilian meat for EU markets. When Brazilians burn down the Amazon rainforest, they do not do it for fun: they do it to increase food production, much of which is for export markets. These emissions are, from a carbon-consumption perspective, very much Chinese, American and European. The ultimate consumers are the ultimate polluters.

The challenge to cake-ism – carbon taxes and making polluters pay

In the face of the challenges of global warming, the COP26 steps are timid, even if some are useful at the margin. Why is this? Why can't much more urgent action be taken? The main reasons are: that the developed countries are unwilling to admit that there are big costs to addressing climate change; that carbon consumption and past emissions are a true measure of their contribution to climate change; and the unwillingness to confront populations (and electors) with the inconvenient truth that they are living beyond their carbon means, and will have to take a hit on their living standards.

This reluctance manifests itself in the desire to keep petrol and diesel prices down, to subsidise red diesel for farmers, to delay the switch from natural gas heating, to lower the costs of flying, and to reduce foreign aid. In the UK it is called “cake-ism”. It is the idea that decarbonising is not only a good thing to do per se, but also because it is cheap and even free. As the PM put it, there is no need for hairshirts and no need to stop flying:

...this strategy shows how we can build back greener, without so much as a hair shirt in sight. In 2050, we will still be driving cars, flying planes...²

He is not alone. Cake-ism is best seen as generational selfishness. We, the polluters (for it is us, as the consumers), are not paying for the pollution we are causing, and we have no willingness to atone for the pollution we have caused in the past with all that carbon our industrialisation put in the atmosphere.

How could world leaders get away with this? The answer is by reframing the question. It is to focus not on the climate change we are causing through our carbon consumption, but to focus on something much narrower - our territorial carbon production- in the sure knowledge that it is going in the right direction anyway. It also helps to reframe decarbonisation as largely a technology question, and to stress the consequent lack of any need to change behaviour.

The UK PM in this respect walks the walk of his cakeism talk. He can fly from London to Newquay in Cornwall for the G7 Summit on climate change rather than take the train. He can take a private jet from Rome to Glasgow and back to London in time for a dinner

² HM Government (2021), “Net Zero Strategy: Build Back Greener”, October, Foreword from the Prime Minister, p. 9.

with a journalist. He can take long-haul foreign holidays. This can be seen as “leadership” based upon cake-ism, and he can brazen out the lack of an example of leadership set for the rest of us.

Technology will be crucial, but it is a mistake to see the entirety of the carbon problem through this lens. Climate change is both a demand and a supply problem, and not just a supply one. More pertinent in the next 29 years (and indeed the next decade), when technology change will be limited, is to ask is whether the world can absorb another 2 billion people, and a doubling of GDP in India, China and Africa (and much of the rest of the world as well) and still stop climate change. It requires an energy revolution, but in many respects this is the easier bit. Electrification is at least a known strategy (though it still relies heavily on fossil fuels). But what about food and agriculture, the destruction of the sequestration capacity of the oceans and coastal waters and the rivers, the clearing of rainforests and so on?

Take a look at your own carbon diary – the record of what you consume in a typical day – and you will get a glance at the embedded carbon in your spending, in your food and its transportation and packaging, and in the fertilisers and chemicals used in its production, and the embedded carbon in your clothes, in your commuting and school runs, in your foreign holidays and flights, and so on. This all causes carbon emissions, reduces sequestration and hence causes climate change. Carbon does not know any boundaries. From a climate change perspective (but not biodiversity) the location of emissions and sequestration is not relevant. (And it would be interesting to know what the UK PM’s carbon diary looks like!)

As noted in the discussion on exiting fossil fuels, any serious carbon policy starts with the polluter-pays principle, with the demand side and this in turn requires a price of carbon. A price of carbon at the level necessary for the world to reach global net zero by 2050 would quickly make the dangerous delusions of cake-ism become all too apparent. That price would be high, and hit consumption hard.

On the supply side, technology and switching will be faster with a carbon price. In the long run, new technologies may enable humans to live in a world where global warming has stopped. But not for the next few decades and not before well over 2°C of warming

on the current path. There will therefore have to be both a demand and a supply response: lower carbon consumption; and more low-carbon production.

Economic growth in this world goes on. There is no let-up in the new ideas and technologies that drive growth. But it is an illusion that it can be done with no impact on the standards of living over the next few decades to 2050 at least. Just because this is all very difficult politically does not make the problem go away.

The coalition of the willing and the bottom-up approach

If COP26 is pathetically inadequate to the task, is there another way that is both complementary and also likely to have a bigger impact? Fortunately, the answer is yes: it is possible to build a coalition of countries who unilaterally want their populations to no longer cause climate change.

This unilateralism and *the coalition of the willing has to be based upon carbon consumption, and carbon consumption targets*. It is only by going to net zero carbon consumption that a country can be sure that it will no longer be causing an increase in the concentration of carbon in the atmosphere. For countries and individuals, this is the only way net zero can deliver the intended ambition.

A unilateral carbon consumption net zero target means that all consumption is treated on the same basis. This means that imports are on the same basis as domestic production, and all sectors are treated alike – agriculture, transport, heating and increasingly cooling, and energy. Carbon knows no geographical boundaries, and carbon emitted by burning red diesel in agriculture or from fertilisers is just as relevant as from a coal power station.

To ensure that the net zero carbon consumption target is met, there needs to be a price of carbon, and that price needs to be at a level that will ensure the target is met.

Avoiding a carbon price for political reasons does not mean that there will not be a price. Choosing other regulatory mechanisms has implicit carbon prices, which are the costs of the policy interventions. There will need to be regulatory standards and carbon prices, but as long as there are costs, these are effectively prices.

The universal application of the carbon price, explicit or implicit, has to cover sequestration as well as emissions, and properly incorporate the soils and the peat

bogs. Carbon consumption comes from the way that land is used to produce the things in our carbon diaries as much as it comes from the emissions from burning fossil fuels. Sequestration is not a get-out-of-jail card for continuing with fossil fuels. It is the other half of the climate change problem, and interference with the ability of the land and the seas to absorb carbon is a cost that the polluters – us – should pay too.

These are the basics of a coherent plan to halt climate change by 2050. This approach does not solve climate change but it does incentivise others outside the coalition of the willing unilateralists to gradually join in. Instead of subsidising carbon-intensive imports from countries like China (by taxing home production but not imports) the carbon border price creates a level playing field. What is even better, the exporting country (in this example China) has a choice: it can introduce an equivalent carbon price at home and pay it to the Chinese government, or pay an import carbon duty to the UK government in this example. China and others outside the coalition of the unilateral willing will prefer the former, and hence implicitly – or hopefully explicitly – join this coalition. The carbon consumption approach therefore pluralises carbon pricing, one essential building block. This approach is set out in much more detail in my book, *Net Zero*.³

It does not solve the funding question, but then neither does COP26. That needs to be tackled head on. It is why climate change is a North–South issue. It does not solve a host of other issues, but then COP26 solves very little. But it does mean that when the public are told – and believe – that they will no longer be causing climate change, this will turn out to be true. Net zero on a carbon consumption basis actually would mean what it says.

The obvious question is whether this unilateral bottom-up approach of the willing has any chance of success? Is it not simply political suicide? It might be the latter, but that is just to recognise that the current populations are not really willing to walk the walk on climate change. They may prefer the reassuring cake-ism of the UK PM. In doing so, and in perpetuating the myth that the COP process is the route to global climate salvation, they risk another 30 wasted years through to 2050, repeating the experience since 1990

³ Helm, D. (2020), *Net Zero: How We Stop Causing Climate Change*, William Collins.

of adding roughly 2ppm to the carbon concentration in the atmosphere, year in year out, without exception. Just like in 2020, even with the coronavirus lockdowns.

That is indeed what is most likely to happen. There will be more COPs, more political rhetoric about “saving the world”, more work for the UN, more opportunities for activists to demonstrate and more declarations “urging” countries to act. But in the meantime the clock will carry on ticking, and eventually we will all wake up to a much hotter world than we are already experiencing.

None of this is inevitable. Climate change is a crackable problem. There is another option complementary to these COPs. We do not have to have another 30 wasted years, but we will if we go on with COP after COP and 2ppm per annum year after year. Appeasing the voters, telling them it is not going to cost them, suggesting, as in some ESG, that it is all the fault of nasty polluting companies, rather than our own consumption, makes good short-term politics, but it is not leadership and it is not going to crack the problem.



[Net Zero: How we stop causing climate change](#)

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