



NEGOTIATING CLIMATE CHANGE IN CRISIS

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7. We'll Always Have Paris

Mike Hannis

Many were rightly sceptical of the Paris Agreement's choreographed performance of success, given its reliance on theoretical carbon trading, fantastical Negative Emission Technologies (NETs), and voluntary national 'contributions'. But was COP21 the high-water mark of climate co-operation? Can COP26 rekindle the internationalist spirit required to keep even the idea of a globally co-ordinated effort alive, in the face of resurgent nationalism and the proliferation of apparently more immediate crises? This article explores the chances of COP26 reinvigorating international co-operation, and with it the flagging credibility of the whole Paris process. It focuses in particular on the Paris Agreement's controversial Article 6 rules on voluntary carbon trading, and the urgent need to prevent emissions traded across international borders from counting towards Nationally Determined Contributions (NDCs).

All Eyes on Paris¹

For a few weeks in late 2015, all eyes were on Paris. High-level delegates from almost every country on Earth attended the 21st Conference of the Parties (COP) to the UN Framework Convention on Climate Change (UNFCCC)—more snappily known as COP21, or the Paris Climate Conference. Civil society and media swarmed in too. There are subsidiary climate COPs every year, but major ones follow a five-year cycle, making COP26 in Glasgow the next 'last chance to save the world'.

1 Parts of this chapter were first published in *The Land* magazine, 27 (2020), 18–20; 28 (2021), 4.

Before Paris, 2009's COP15 in Denmark had failed to live up to its ill-advised branding as Hopenhagen. A tentative goal of limiting temperature increases to two degrees above pre-industrial levels was agreed, subject to review in 2015, but no progress was made on any practical steps towards actually achieving this, or towards any kind of legally binding agreement.

2015's COP21 in Paris did see a genuine breakthrough. This was achieved, however, by abandoning attempts to create a legally binding system, and instead adopting the voluntary Paris Agreement (UNFCCC 2015). The Agreement upheld the below 2°C warming target, and even added an aspiration to keep warming within 1.5 degrees. Each Party (UNFCCC member states, plus the EU) agreed to set out its planned reductions in emissions, now termed Nationally Determined Contributions (NDCs). Reviewed every five years, NDCs can be amended to be 'more ambitious', but are never supposed to be revised downwards. This review process is intended to 'ratchet up' commitment to emissions reduction, but detailed discussion of how the new system would actually work in practice was deferred.

Before diaries were ripped up by the COVID-19 pandemic, COP26 was scheduled for November 2020. In time for this Glasgow meeting, Parties had been asked to set long-term decarbonisation goals, as well as to undertake the first five-yearly review of their shorter-term NDCs (Gabbatiss 2021). This process was to be governed by a 'Paris rulebook', details of which were intended to have been agreed and finalised in advance of COP26. These rules are supposed to make NDCs transparent, fair and robust by ensuring that all countries calculate them using agreed common methodologies, rather than doing the sums in whatever way works to their advantage. Standardisation would also allow the Intergovernmental Panel on Climate Change (IPCC) and others to plausibly translate the aggregated NDCs into global temperature change forecasts.

Carbon Trading Rules

Intermediate COPs since Paris largely saw fudges and grandstanding rather than real progress, but nonetheless the Paris rulebook was mostly agreed by the end of COP24 (held in Katowice, Poland in 2018), albeit

with the significant exception of rules on voluntary carbon trading. These are known as Article 6 rules, after the somewhat obscure but critically important part of the Paris Agreement they relate to (UNFCCC 2015: 4–5).

This trading issue is significant. The Paris Agreement explicitly allows countries calculating their NDCs to include emissions reductions elsewhere over which they have somehow gained ‘ownership’, as well as those actually achieved within their own territory. In so doing, it arguably makes voluntary carbon trading a more prominent mechanism for delivering emissions reductions than it ought to be. For clarity, the relevant UNFCCC COP21 Agreement Article 6 rules are as follows:

Article 6

1. Parties recognize that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity.

2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.

3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating Parties.

4. A mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development is hereby established under the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Agreement for use by Parties on a voluntary basis. It shall be supervised by a body designated by the Conference of the Parties serving as the meeting of the Parties to this Agreement, and shall aim:

(a) To promote the mitigation of greenhouse gas emissions while fostering sustainable development;

(b) To incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorized by a Party;

(c) To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfil its nationally determined contribution;

and (d) To deliver an overall mitigation in global emissions.

5. Emission reductions resulting from the mechanism referred to in paragraph 4 of this Article shall not be used to demonstrate achievement of the host Party's nationally determined contribution if used by another Party to demonstrate achievement of its nationally determined contribution (UNFCCC 2015: 4–5).

The voluntary carbon trading framework established by Article 6 risks legitimising a wide range of questionable practices whereby richer countries offset their polluting activities by paying for allegedly emission-reducing or carbon-capturing activities in poorer ones. For instance, if the Norwegian government pays for some reforestation in Indonesia, or a British company pays to install a scrubber to remove potential carbon emissions from the chimney of a chemical plant in India, the resulting greenhouse gas reductions will be reported as part of the Norwegian or British NDCs (as provided for in Article 6.5). One problem immediately arising here is that the 'host Party', in this example Indonesia or India, might also want to report the resulting reductions in their own NDC.

Article 6 is clear that such double counting would not be allowed (see 6.2 and 6.5 above), which at first sight seems fair. But is it? Should the host really have to also identify and enact a *second* set of reductions which will count towards its own target? Would this not mean it was taking on a disproportionate share of the overall work? This kind of argument has been forcefully put, for example by Brazilian delegates concerned with retaining sovereignty over the Amazon Forest, but also by consultants (e.g. Streck 2020) whose creative interpretation of what constitutes double counting relies on the idea that private sector voluntary trading schemes (as opposed to government actions) should *not* be counted as part of NDCs. This apparently technical dispute masks a bitter standoff between countries hoping to offset their own activities by, for example,

funding preservation of the Amazon through carbon offset purchases, and a Brazilian government insisting on full sovereignty over the area's resources. Neither is on the side of the angels.²

OMG(E)!

There are also tricky practical questions about standards and verification. Who is supposed to make sure that any given scheme is not counted twice? How exactly might this be done? The answer may well be different for bilateral deals between two countries (covered by Article 6.2), and for trades undertaken within the regulated global carbon trading market mechanism envisaged by Article 6.4, but neither is clear.

The latter mechanism is intended to supersede the earlier Clean Development Mechanism (CDM), a dysfunctional voluntary trading scheme established by the 1997 Kyoto Protocol of the UNFCCC. Some countries hold vast numbers of old CDM credits, and have argued that they should be able to count these against future NDCs. In the case of Australia, cashing in these CDM credits would at a stroke have achieved (on paper) more than half the emissions cuts required to meet its NDC target of reducing emissions to 26–28% below 2005 levels by 2030. One Australian economist has described this situation as “tantamount to a drunk guy waving an expired Starbucks coffee voucher around in a McDonald's and acting surprised that nobody wanted to give him a coffee” (Denniss 2020). In the face of such ridicule this strategy was eventually dropped (Doherty 2020).

The overarching issue here is whether voluntary trading actually results in ‘Overall Mitigation in Global Emissions’ (OMGE), meaning a genuine net reduction, rather than just serving as a way for emissions in one place to be offset elsewhere, thereby allowing business-as-usual to continue (as also foregrounded in Lankford's discussion in this

2 This summary of post-Paris COP negotiations is largely derived from comprehensive coverage at www.carbonbrief.org. Article 6 of the Paris Agreement (UNFCCC 2015: 4–5) addresses “[voluntary] use of internationally transferred mitigation outcomes [ITMOs] to achieve nationally determined contributions”: for background, see <https://www.carbon-mechanisms.de/en/introduction/the-paris-agreement-and-article-6>. For an insider account of the recent bilateral agreement claimed to be “the first instrument that provides access to the voluntary carbon market to ITMOs under the provisions of the Paris Agreement”, see Elgart and Secada 2020.

volume regarding the necessity and difficulty of securing permanent CO₂ ‘salvage’, and in Dyke et al.’s chapter on the difficulties of achieving net zero emissions overall).

This issue was discussed at the Paris COP, and while detail is lacking, the principle of OMGE is acknowledged in Article 6.4 as an objective of the proposed global trading scheme. Worryingly, however, no such objective is included in Article 6.2 on bilateral trading, although this Article does explicitly mention the need to avoid “double accounting” of emissions reductions. As things stand there appears to be no watertight obligation to ensure that any given offsetting transaction between two countries actually results in a net emissions reduction. It has been largely left to the Association of Small Island States, whose territories are already literally disappearing under the waves, to point out how disastrous this could be (Dizzanne 2019).

COP25 (held in Madrid in 2019) was supposed to see all these arguments settled. To the dismay of many but the surprise of few, once again this did not happen. Newly minted climate celebrity Greta Thunberg captured the mood when she told a restive plenary hall that the COP seemed to have “turned into some kind of opportunity for countries to negotiate loopholes” (Evans and Gabbatis 2019: online). The lamentable failure to agree Article 6 rules before COP26 means that the five-yearly review of NDCs is happening without agreement on crucial elements of what these can or cannot contain. This raises a real danger that Parties’ emissions reductions may be inflated beyond what has actually been achieved, meaning that the world is even further from achieving ‘net zero carbon’ than reported figures suggest.

Better Late than on Time?

Quite apart from the sorry outcome of preparatory negotiations, there was widespread relief that COP26 did not have to take place against the backdrop of the US’s formal withdrawal from the Paris Agreement, which came into effect on 4 November 2020, just before the original Glasgow dates. Trump’s contrarian refusal to co-operate on climate had of course been an elephant in every COP negotiating room since 2017. The incoming Biden administration wasted no time in rejoining the Paris Agreement, and has submitted a relatively ambitious NDC promising

a 50–52% reduction in greenhouse gas emissions by 2030 from a 2005 baseline, alongside goals to create a “carbon pollution-free power sector by 2035” and a “net zero greenhouse gas emissions economy by no later than 2050” (White House 2021: online). Nonetheless while US re-engagement provides a much-needed boost to the flagging credibility of the whole Paris process, there are several lost years to make up before optimistic Democrat claims about ‘re-establishing climate leadership’ will appear credible. Veterans of former US President Obama’s Paris negotiating team have been recruited to assist, and will be working hard in Glasgow.

Climate economist Nicholas Stern claimed that the delay gave time to prepare for a big push at the Glasgow COP towards ensuring that rather than propping up business as usual, the massive funds being poured into pandemic recovery fund a transition to a sustainable and resilient economy (Harvey 2020). Was his optimism realistic? How will the new world of post-COVID international relations handle the need to co-operate? It is still too soon to say whether Stern’s vision of pandemic recovery funds kick-starting a new global economy “in closer harmony with the natural world” (Harvey 2020: online) will come true, but early signs are not good. While there have been encouraging noises from the EU about making sure its COVID recovery plans are at least congruent with its NDC targets, there are (as ever) questions around whether this rhetoric will be matched by action. Elsewhere, many countries have given massive bailouts and loans to airlines and fossil fuel companies, without even attaching conditions on improved environmental performance (Bailoutwatch 2021; Transport and Environment 2020). This financial stimulus risks locking in business-as-usual for decades to come. Meanwhile, researchers identify a growing trend towards ‘cutting green tape’ as politicians accept arguments from business that climate-related regulation is hindering economic recovery (Bond et al. 2020). This tendency is happening in many countries but again the most egregious example has been the US, where the former Trump-led Republican administration seized on recovery rhetoric to justify its existing plans to rescind or weaken a truly alarming number of environmental regulations (Popovich et al. 2020).

The context here was not only climate denial and cronyism (as also flagged by Bigger et al. in this volume), but a wholesale repudiation

of international agreements of all kinds. Trump withdrew the US not only from Paris, but also from numerous other international treaties on issues from nuclear arms control, to human rights, to the militarisation of space. His administration even quit the World Health Organisation in the middle of a pandemic. Clearly, internationalism of any kind was firmly off the table and it will not be politically easy to turn this supertanker around. It would take a very brave Democrat to stand up and say that America is no longer First.

Meanwhile, varieties of Trumpism live on in countries such as Brazil, Australia and India—all major players in climate negotiations. China is setting stronger domestic targets, but has never been noted either for its multilateralism or for its altruistic stance on global affairs. Despite the fall of Trump, this does not appear to be an auspicious time for Paris-style voluntary co-operation (Sachs 2019).

UK, EU, CO₂

Squirming in the COP26 host's spotlight will be a UK government incongruously obsessed with the idea that the country should make its own buccaneering way in the world, beholden to no-one. A desperate scramble to sign trade deals with anyone other than the EU led UK negotiators to accept that any US/UK deal must not even mention climate change (Hannis 2020). Whether this will change under Biden remains to be seen.

As the host of COP26, the UK is expected to set an example, and virtue-signalling on climate is also seen as an easy way for a newly isolated blond populist to build bridges with the Biden administration. Unfortunately, talking up the UK's climate commitment now takes the distinctly Trumpian form of claiming that a clean, high-tech Britain is forging ahead of the dirty old EU, not to mention the rest of the world.

In the proud new era of unchallenged sovereignty, no opportunity is missed to make clear that Britain is Best. Even when the UK drugs regulator licensed a COVID vaccine created in Germany by a Turkish couple, for a US drug company to manufacture in Belgium, puppyish cabinet minister Gavin Williamson explained that this proved British scientists were "the best in the world", and that "we're a much better country than every single one of them" (Euronews 2020: online). If

still in post, Williamson may perhaps get deployed to Glasgow. His breathless, fact-free enthusiasm would be perfect for press releases like this:

The UK's new target to reduce greenhouse gas emissions—our Nationally Determined Contribution (NDC) under the Paris Climate Agreement—is among the highest in the world and commits the UK to cutting emissions at the fastest rate of any major economy so far. Today's target is the first set by the UK following its departure from the EU, demonstrating the UK's leadership in tackling climate change (BEIS 2020a: online).

The UK NDC promises to reduce emissions “by at least 68% by 2030, compared to 1990 levels”, meaning that “UK emissions per person will fall from around 14 tCO₂e [tonnes of CO₂ equivalent] in 1990 to fewer than 4 tCO₂e in 2030” (BEIS 2020c: 1, 28). This sounds impressive, but most of this reduction has already happened, due largely to the historic move from coal to gas power stations between 1990 and 2015 (Thomas et al. 2019). The per person figure for 2019 was 5.3 tonnes, so the new target in fact proposes a less impressive cut of only around a quarter of this amount over the next decade (Evans 2020). The equivalent EU target is a cut of 55% by 2030 (Climate Action Tracker 2020). This is certainly a lower headline figure than the UK's proposed 68%, but it is also an average across twenty-seven countries facing many different challenges. Current EU average per capita annual emissions are around 6.7 tonnes, and if the 2030 target were met this would reduce to around five, meaning that a similar drop of around a quarter from today's levels is envisaged by 2030 (Eurostat 2021).

Even ten years ahead seems a very long time under present conditions, but these 2030 targets are intended as stepping stones towards reaching the current holy grail of ‘zero carbon by 2050’, to which both the UK and the EU have committed, along with a growing list of other countries. A timely measure of how hard this will be is provided by work estimating that the dramatic drop in global economic activity caused by the pandemic will impact global temperature by no more than 0.01 degrees (Forster et al. 2020).

Oddly, the UK's NDC announcement carried endorsements from banks, energy companies, Tesco and Coca Cola Europe (BEIS 2020a). Their enthusiasm may in part be explained by the fact that the NDC target does not include any emissions elsewhere in the world, such as

those arising from the production of goods for UK consumption, or from overseas activities of UK-registered companies. It also excludes international aviation and shipping.

The Return of Article 6

On the face of it, the UK's NDC does at least commit to achieving reductions by actually emitting fewer greenhouse gases, rather than by international offsetting or voluntary carbon trading. But perhaps inevitably, voodoo carbon economics reappear in the small print:

While the UK intends to meet its NDC target through reducing emissions domestically, it reserves the right to use voluntary cooperation under Article 6 of the Paris Agreement. Such use could occur through the linking of a potential UK emissions trading system to another emissions trading system or through the use of emissions reductions or removals units (BEIS 2020b: 27).

Meanwhile the recent Energy White Paper proclaims in now-familiar triumphal tones:

Having left the EU, we are ready to lead the world again.

We will establish a UK Emissions Trading Scheme (ETS) to replace the UK's participation in the EU ETS. [...] the UK is open to linking the UK ETS internationally [...] we are considering a range of options, but no decision on our preferred linking partners has yet been made (BEIS 2020c: online).

An unlinked UK ETS would be implausible, and the only realistic 'linking partner' will be the much bigger EU scheme, so it seems inevitable that any UK ETS will effectively become an offshoot of the EU ETS, sharing the many flaws of that scheme while having lost the ability to influence it (Gabbatiss 2020). Post-Brexit threats to genuine decarbonisation will of course come not only from the disingenuous carbon trading facilitated by Article 6, but also from old-fashioned physical trade. Importing and exporting goods across the world rather than across the English Channel is not exactly going to help with reducing carbon emissions. More broadly, EU law and oversight have been the key upward drivers of UK climate and environmental standards for decades. No-one seriously believes that the sacred 'divergence' will result in UK environmental

standards being higher than those in the EU. But they will be *British* standards, so of course they will be better.

Beware the Bubble

If the retreat from global co-operation continues in Glasgow, one outcome might be that Article 6.4's projected global carbon trading mechanism never gets off the ground. As discussed above this might well encourage further growth in poorly regulated bilateral offset deals under Article 6.2. There are worrying signs that the UK may seek to become a hub for brokering such deals, given its stated aspiration to "position the UK, and the City of London, as a leader in the global voluntary carbon markets" (BEIS 2020d; for background see also Mikolajczyk and 't Gilde 2020).

There may, however, be a more constructive option, and indeed one which should appeal to those sceptical about international co-operation. Could failure to achieve a global trading regime encourage the Parties to actually take responsibility for their own emissions? Nothing in the Paris Agreement stops a country producing an honest NDC based on genuine reductions in emissions, with no reliance either on carbon trading or on fanciful 'negative emissions technologies' (Hannis 2017; Herzog 2018). Such honesty would also mean including emissions associated with everything the country consumes, no matter where it was produced. The Johnson Government has so far shown little interest in work mapping out what this could mean for the UK (see, for example, Allwood et al. 2019; Allen et al. 2019). Genuine leadership at COP26 could start here, rather than with attempts to reflate the carbon trading bubble.

References

- Allen, Paul, Laura Blake, Peter Harper, Alice Hooker-Stroud, Philip James, Tobi Kellner, et al., *Zero Carbon Britain: Rising to the Climate Emergency* (Machynlleth: Centre for Alternative Technology, 2019), <https://www.cat.org.uk/info-resources/zero-carbon-britain/research-reports/zero-carbon-britain-rising-to-the-climate-emergency/>.
- Allwood, Julian, M., C. F. Dunant, R. C. Lupton, C. J. Cleaver, A. C. H. Serrenho, J. M. C. Azevedo, et al., *Absolute Zero: Delivering the UK's Climate Change Commitment with Incremental Changes to Today's Technologies* (Cambridge:

- University of Cambridge, 2019), <http://www.eng.cam.ac.uk/news/absolute-zero>, <https://doi.org/10.17863/CAM.46075>.
- Bailoutwatch, *What Fossil Fuels Really Did with Their Bailouts* (Bailoutwatch.org, 2021), <https://bailoutwatch.org/analysis/what-fossil-fuels-really-did-with-bailouts>.
- BEIS (Department for Business, Energy and Industrial Strategy), *UK Sets Ambitious New Climate Target Ahead of UN Summit* (Gov.uk, 2020a), <https://www.gov.uk/government/news/uk-sets-ambitious-new-climate-target-ahead-of-un-summit>.
- BEIS (Department for Business, Energy and Industrial Strategy), *United Kingdom of Great Britain and Northern Ireland's Nationally Determined Contribution* (Gov.uk, 2020b), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/943618/uk-2030-ndc.pdf.
- BEIS (Department for Business, Energy and Industrial Strategy), *Energy White Paper: Powering Our Net Zero Future* (Gov.uk, 2020c), <https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future>.
- BEIS (Department for Business, Energy and Industrial Strategy), *The Ten Point Plan for a Green Industrial Revolution* (Gov.uk, 2020d), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936567/10_POINT_PLAN_BOOKLET.pdf.
- Billy, Dizzanne, 'Controversial Carbon Markets and Small Island States' (Earthjournalism.net, 2019), <https://earthjournalism.net/stories/cop25-focus-controversial-carbon-markets-and-small-island-states>.
- Bond, Alan J., Angus Morrison-Saunders, Francois Pieter Retief, and Meinhard Doelle, 'Environmental Regulations Likely to be First Casualties in Post-pandemic Recovery' (Theconversation.com, 2020), <https://theconversation.com/environmental-regulations-likely-to-be-first-casualties-in-post-pandemic-recovery-137941>.
- Climate Action Tracker, *CAT Climate Target Update Tracker: EU* (Climateactiontracker.org, 2020), <https://climateactiontracker.org/climate-target-update-tracker/>.
- Denniss, R., 'Until Recently, Pressure on Australia to Drop Carryover Credits Had Little Impact. But Times Change' (Theguardian.com, 2020), <https://www.theguardian.com/commentisfree/2020/dec/09/until-recently-pressure-on-australia-to-drop-carryover-credits-had-little-impact-but-times-change>.
- Doherty, Ben, 'Australia Won't Use Kyoto Carryover Credits to Meet Paris Climate Targets, Scott Morrison Confirms' (Theguardian.com, 2020), <https://www.theguardian.com/world/2020/dec/11/australia-wont-use-kyoto-carryover-credits-to-meet-paris-climate-targets-scott-morrison-confirms>.
- Elgart, Veronika, and Secada, Laura, 'The Peruvian-Swiss Article 6 Agreement: How it Came About and How it Works', *Carbon Mechanisms Review* (4)

- (2020), 10–18, <https://www.carbon-mechanisms.de/en/publications/details/carbon-mechanisms-review-04-2020-managing-the-interim>.
- Evans, Simon, 'UK's CO2 Emissions Have Fallen 29% Over the Past Decade' (Carbonbrief.org, 2020), <https://www.carbonbrief.org/analysis-uks-co2-emissions-have-fallen-29-per-cent-over-the-past-decade>.
- Evans, Simon, and Gabbatis, Josh, 'Key Outcomes Agreed at the UN Climate Talks in Madrid' (Carbonbrief.org, 2019), <http://www.carbonbrief.org/cop25-key-outcomes-agreed-at-the-un-climate-talks-in-madrid>.
- Euronews, 'Gavin Williamson: UK Better Than France, US and Belgium, Says Minister on Vaccine Race Win' (Euronews, 2020), <https://www.euronews.com/2020/12/03/gavin-williamson-uk-better-than-france-us-and-belgium-says-minister-on-vaccine-race-win>.
- Eurostat, *Greenhouse Gas Emission Statistics—Carbon Footprints* (Ec.europa.eu, 2021), https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Greenhouse_gas_emission_statistics_-_carbon_footprints.
- Forster, Piers M., Harriet I. Forster, Mat J. Evans, Matthew J. Gidden, Chris D. Jones and Christoph A. Keller, et al., 'Current and Future Global Climate Impacts Resulting From COVID-19', *Nature Climate Change*, 10 (2020), 10, 913–19, <https://doi.org/10.1038/s41558-020-0883-0>.
- Gabbatiss, Josh, 'How Does the UK's 'Energy White Paper' Aim to Tackle Climate Change?' (Carbonbrief.org, 2020), <https://www.carbonbrief.org/in-depth-qa-how-does-the-uks-energy-white-paper-aim-to-tackle-climate-change#brexit>.
- Gabbatiss, Josh, 'Which Countries Met the UN's 2020 Deadline to Raise 'Climate Ambition'?' (Carbonbrief.org, 2021), <https://www.carbonbrief.org/analysis-which-countries-met-the-uns-2020-deadline-to-raise-climate-ambition>.
- Hannis, Mike, 'After Development? In Defence of Sustainability' *Global Discourse*, 7(1) (2017), 28–38, <https://doi.org/10.1080/23269995.2017.1300404>.
- Hannis, Mike, 'Night of the Long Spoons', *The Land*, 26 (2020), 4, <https://www.thelandmagazine.org.uk/articles/night-long-spoons>.
- Harvey, Fiona, "We Must Use This Time Well": Climate Experts Hopeful After Cop26 Delay' (Theguardian.com, 2020), <http://www.theguardian.com/environment/2020/apr/02/we-must-use-this-time-well-climate-experts-hopeful-after-cop26-delay-coronavirus>.
- Herzog, Howard, 'Why We Can't Reverse Climate Change with 'Negative Emissions' Technologies' (Theconversation.com, 2018), <https://theconversation.com/why-we-cant-reverse-climate-change-with-negative-emissions-technologies-103504>.

- Mikolajczyk, Szymon, and 't Gilde, Lieke, *Leveraging Ambition Through Carbon Markets: Effectiveness of Abatement Action Through International Carbon Markets* (Ebrd.com, 2020), <https://www.ebrd.com/carbon-markets.pdf>.
- Popovich, Nadja, Livia Albeck-Ripka, and Kendra Pierre-Louis, 'The Trump Administration Is Reversing Nearly 100 Environmental Rules. Here's the Full List' (Nytimes.com, 2020), <https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks.html>.
- Sachs, Noah, 'The Paris Agreement in the 2020s: Breakdown or Breakup?', *Ecology Law Quarterly*, 46 (2019), 865909, <https://doi.org/10.15779/Z38H708140>.
- Streck, Charlotte, 'Corresponding Adjustments for Voluntary Markets— Seriously?' (Ecosystemmarketplace.com, 2020), <https://www.ecosystemmarketplace.com/articles/shades-of-redd-corresponding-adjustments-for-voluntary-markets-seriously/>.
- Transport and Environment, *Bailout Tracker* (Transportenvironment.org, 2020), <https://www.transportenvironment.org/what-we-do/flying-and-climate-change/bailout-tracker>.
- Thomas, Nathalie, Leslie Hooke, and Chris Tighe, 'How Britain Ended its Coal Addiction' (Ft.com, 2019), <https://www.ft.com/content/a05d1dd4-dddd-11e9-9743-db5a370481bc>.
- United Nations Framework Convention on Climate Change (UNFCCC), *Paris Agreement* 2015, https://unfccc.int/sites/default/files/english_paris_agreement.pdf.
- White House Press Release, *President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good Paying Union Jobs and Securing US Leadership on Clean Energy Technologies* (Whitehouse.gov, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>.