**Decarbonising the Law Conference[[1]](#footnote-2)**

[In October and November, the 2021 UN Climate Change Conference of the Parties (COP26) was held at Glasgow. A number of ‘outcomes’ were produced under the ‘Glasgow Climate Pact’ by consensus, which was said to have ‘completed the Paris Agreement’. The strategy is one of ‘mitigation, adaptation, finance and collaboration’ with the aim of securing universal ‘net zero commitments’ against 2030 emission targets to limit planetary global temperature rise to 1.5 degrees centigrade compared with pre-industrial levels. The UK Presidency stated that the Glasgow pledges, if fully implemented, would keep global warming below 2 degrees and that the goal of 1.5 degrees remains possible with further action over the next decade.

In March, the second Working Group reported on the effects of global warming on the living beings of the Earth. These include increases in drought and flooding over the past decade with 40% of the human population being ‘highly vulnerable’. On 4 April, the third Working Group reported that emissions must peak by 2025 and rapidly decline thereafter to remain within 1.5 degrees. They outlined a strategy to do so, which involve major lifestyle changes to diet, consumption and energy generation to reduce demand.]

In the context of the United Kingdom target to reduce greenhouse gas emissions by 78% against 1990 levels, Universities UK pledged in October to set targets in support of the Government plan, to clearly define how reporting of the targets would be done and to set out information on university websites about meeting the targets alongside information on how the universities are addressing the climate emergency through teaching, research, leadership, local contributions and campus responsibilities.

The 2022 International Law Association British Branch Annual Spring Conference was hosted at the University of Surrey on 26 and 27 April on the theme, [‘International Law and Climate Change’](https://www.surrey.ac.uk/events/20220428-international-law-association-british-branch-spring-conference-2022). Connected to the core University research theme of ‘Sustainability’, the Conference was conceived not only to discuss the great legal issues connected to the pressing problem of climate change but also to explore new paths in the organisation of the law conference to reduce the emission footprint of the law school. Panels on rising sea levels, foreign investment law, human rights and litigation engaged with the most recent developments on the climate emergency, as did a round-table on trade law, the law of the sea and the UNFCC process.

The Society of Legal Scholars awarded me £5,000 to engage a post-doctoral research assistant, Dr Maria Louca of the University of Surrey, who provided invaluable assistance both in research underpinning this report and the organisation of the Conference.

Hybrid Model

The Conference was designed with a core objective to achieve a low emission footprint, measured as accurately as possible. The first key decision taken was to make it a ‘hybrid’ conference, rather than entirely in-person or entirely remote.[[2]](#footnote-3) Until the disruption caused by the global pandemic, the standard mode of international law conferences was almost always an in-person one. Following the hasty adoption of the virtual format under pandemic restrictions, there has been a palpable hesitation on the question of conference organisation. Should we return to the ‘good old days’? Does demand even exist to do so, now that we have had a taste of low-cost, low-emission remote participation?

In 2021, the Conference had been an entirely-remote one, [hosted by QMUL](https://www.qmul.ac.uk/law/media/law/docs/events/ILA-Conference-2021---programme.pdf). In adopting the hybrid model, we wished to test the ability of conference organisers to achieve low-emission outputs while preserving the value – a qualitative and subjective one, yet real – of face-to-face human contact. As we had decided to invite two-thirds of our conference speakers and to select one-third from open competition, a second policy choice was to communicate an expectation to our speakers that we wished those who would be located overseas at the time of the conference to present remotely and those based in the United Kingdom to attend in-person. This was done primarily for footprint reduction – balanced against the need for sufficient critical mass to make for an enjoyable in-person experience – and secondarily to mitigate against the possibility of travel disruption from sudden Government decisions.

In the end, the balance of remote versus in-person presenters was a ratio of 3:1 (16:5).[[3]](#footnote-4) There was no resistance whatsoever to our request; to the contrary, we encountered universal understanding and support. To take but one example, one of the eight speakers selected from 86 abstracts submitted was an early career researcher who wished to attend in-person to benefit from the opportunity for in-person interaction. The speaker agreed to make the journey by train, rather than flight; I undertook to support a visa application. When the visa was awarded two days prior, the presenter discovered that the ticket prices were prohibitively expensive; in response to an honourable request to travel by flight, I suggested that the speaker consider a combination of ferry and train within the U.K., or revert to remote participation. The speaker elected with good grace to present remotely.[[4]](#footnote-5)

We took this policy a step farther by requesting in the advertisement of the Conference that registrants located abroad attending remotely, while registrants in-country and intending to attend in-person use public transport. Having benefited from the generous sponsorship of the FCDO, Fietta LLP, WilmerHale LLP, MUP, Intersentia and Hart, we priced tickets to strike what seemed to be a fair balance in the distribution of costs and incentives for remote versus in-person attendance.[[5]](#footnote-6) The conference dinner, hosted by Guildford Harbour Hotel, was priced as a free addition, capped at 45 registrants on a first-come, first-served basis. 113 persons registered of whom 66 were in-person and 47 remote.

As depicted in Graph One, total CO2 equivalent emissions from transport were an estimated **295 tonnes from 35 in-person attendees and 29 remote attendees**;[[6]](#footnote-7) not a single flight was taken to the event.[[7]](#footnote-8) As displayed in Graph Two, estimated total emissions from the remote attendees (based on location of home institution) would have been 379.8 tonnes. As shown in Graph Three, had the Conference been held in-person-only and the 64 attendees all attended in-person, transport emissions would have totalled **679.5 tonnes**. Thus, the estimated transport reduction arising from the hybrid model in terms of actual participants was approximately **75%** - a result in line with scientific study that accounts for sophisticated variables, such as regional distribution.[[8]](#footnote-9)

As depicted in Graph Four, had declared intentions at point of online registration not changed, the emissions resulting from our 52 absentees (29 remote; 23 in-person) would have totalled 215.7 tonnes. Thus, full attendance – shown in Graph Five, as a combination of the transport used by actual attendees plus the declared intentions of absentees – would have been approximately 500.7 tonnes. This shows that predicted emissions at the point of prior registration can decline due to absence or late switch to online attendance; in this case, by approximately 40%.

Footprint Calculation

To our knowledge, the calculation of a greenhouse gas emissions footprint for law conferences is rare and so we started with a low base of knowledge. Having searched for calculators designed for events, the one that seemed to be most suitable was the [British Petroleum Event Carbon Calculator](https://www.bp.com/en_gb/target-neutral/home/carbon-management-services/guidance-and-tools-to-run-lower-carbon-events.html). This offers an ‘automatic’ calculator by which one inputs numbers of participants, distances and modes of journeys; and a ‘manual’ calculator by which one inputs specific information for each journey. As we had collated and verified detailed data from our attendees, we intended to rely upon the manual calculator in the expectation that this would produce the more accurate result.

However, the results generated by both calculators on transport (accounting for 99% of emissions) are doubtful in different respects. In inputting manual data for train journeys for which we carefully examined each route to input reasonably exact distances, the emissions for the actual footprint are 216.3 tCO2e, while the automatic calculator reports 17.4 tCO2e.[[9]](#footnote-10) When inputting data for flights in our fully-in-person counterfactual model, both calculators reported bizarrely low levels of tCO2e per journey, even for long-haul flights. For automobile journeys, discrepancies appeared between the two calculators and no option exists for electric or plug-in hybrid vehicles.[[10]](#footnote-11) As BP does not publish the calculation principles, we have no means of checking the underlying assumptions made about train passenger levels, train fuel sources (i.e. – diesel versus electric), routes, flight passenger levels, aeroplane fuel efficiency, etc.

In the registration process, done electronically by EventBrite, in-person registrants were requested to indicate their intended transport plans. These were universally answered with the great majority of registrants declaring an intention to travel by train and 18 registrants intending to travel in 12 automobiles of which 3 were electric, 1 was a hybrid plug-in, 2 were hybrids, 4 were conventionally diesel-fuelled and 2 were conventionally petroleum-fuelled. Postcodes and starting stations were provided to enable the organisers to calculate greenhouse gas emissions, using an event calculator tool that was produced by [British Petroleum](https://www.bp.com/en_gb/target-neutral/home/carbon-management-services/guidance-and-tools-to-run-lower-carbon-events.html) (the irony was not lost on us).[[11]](#footnote-12) To account for changes to intended travel plans, the paperless registration process on the day saw in-person attendees graciously agree to the organisers’ request to see transport tickets (or the page of the V5C registration describing the make and model of the vehicle) to verify the type of actual transport used on the day as exactly as possible.

Each participant, including the Executive Dean who opened the Conference, registered in the interest of achieving the most accurate estimate possible. We produced the following: 1) an estimate of the actual emissions generated, based on verified transport; 2) an estimate of the emissions that would have been generated, had we had full attendance, based on verified transport of actual attendees plus declared intentions at registration of absentees; 3) an estimate of what the footprint would have been for an in-person-only conference with full attendance, based on the estimated emissions of actual attendees plus reasonable assumptions of transport for persons who attended remotely. Using the automatic calculator, we assumed local travel to include an average of 8 miles; regional travel an average of 35 miles, including the London Underground; in-country travel an average of 260 miles; short-haul flights to be an average of 2,500 miles; and long-haul flights an average of 5,000 miles. In certain cases, short-haul flights were substituted for trains, such as the Eurostar route from Amsterdam to London.

We also attempted to locate other calculators for comparison. No official calculator exists, whether from the Government or UN sources. Other free online calculators offered even more inconsistent and sporadic results than did the BP calculator, which appears to be the most reliable. Overall, there is a lack of transparency amongst producers of these tools, including from BP, as to the principles and assumptions on which they are based. This is especially problematic when trying to offset emissions through their schemes.

Single-Day Model

The organisers designed the [programme](https://www.surrey.ac.uk/events/20220428-international-law-association-british-branch-spring-conference-2022) to fit the in-person element of the conference into a single day, 09:00 to 17:30hrs. This was not only to reduce emissions resulting from overnight hotel stays[[12]](#footnote-13) but also to make the conference attractive to attendees by facilitating a day commute from locations in the South-East of England or a single night of accommodation from other locations. To avoid dropping one of the five panels, the organisers designated the first panel as a virtual one and hosted it in the same theatre.[[13]](#footnote-14) While that panel was, inevitably due to the evening hour of a workday, less well-attended than the others, it was nonetheless an excellent one and enabled an additional panel to be arranged with minimal inconvenience and time commitment from delegates while preserving the single-day model.

The fact that we had the ‘remote option’ at our disposal brought major benefits not only for emissions reduction (transport and hotels) but also conference organisation. Invited and selected speakers based abroad were able to take part remotely at minimal expense, even with time differences. In stark contrast to in-person conferences, there was but a single withdrawal by a speaker – and that for a medical emergency. Another speaker, again for medical reasons, was compelled to switch to remote mode. The aforementioned late-visa problem is a commonplace one, as are cancelled and delayed flights. Remote participation also facilitated budgetary management: in the end, only four hotel nights were booked on the conference budget, to say nothing of subsidised transport for invited speakers. This, in turn, enabled us to subsidise tickets – particularly the free conference dinner – and to select more expensive or luxurious options for hospitality.

Sustainable Menus

We strove for a paperless environment: no conference bags were produced (usually destined for the bin, in my experience) while book stands were ditched in favour of virtual flyers, mini-sites and Zoom consultations by our publisher sponsors.[[14]](#footnote-15) Catering for breakfast, lunch and two tea breaks was estimated using the BP calculator on the basis of ingredients provided by Catering; the University Catering department emissions calculator remains in beta stage and so was not yet available.

The conference dinner was more precise: in response to the organisers’ request, the Hotel Head Chef agreed to design a ‘sustainability menu’ bespoke for the event, which featured lamb as a low-emission meat source for the main meal, vegetables and other low-intensive ingredients. As their usual sources for the ingredients were based overseas (e.g. – their asparagus comes from Peru) the Hotel agreed to purchase them from Hill House Farm in Dorking, Surrey, transporting them in a single journey. As dinner tickets under-sold by five, the Hotel had a waste management plan that featured composting of unconsumed food and drink, though disposal into landfill waste also occurred. University Catering used compostable disposables for tea breaks and composted food waste, while the buffet lunch – hosted at the Hillside Restaurant on campus – featured re-usable cutlery and crockery and no food waste.

Technology

Knowing from experience the perils of hybrid mode, we prepared ourselves for the technology, including a rehearsal session with the AV equipment and Zoom Webinar platform in the lecture theatre and audio-visual testing with each of the speakers in the quarter-hour before their respective panels. The Conference saw smooth delivery until lunchtime, when a well-intentioned soul deactivated the AV and Zoom Webinar system, accidentally nullifying the calibrations that we had done before the conference start. Though we suffered a 15-minute delay to the start of the first afternoon session while we recalibrated the system, this was easily regained with a curtailed Q&A and coffee break while such delays are by no means rare in fully in-person events.

Other incidents were comparatively minor; in a few cases, speakers’ audio receptions (identified during testing) were a bit weak for want of headsets, while we sustained a brief loss of connectivity with one speaker. Having briefed speakers in detail on the contingency arrangements for such eventualities, we were able to smoothly continue the proceedings until the speaker re-joined and was reintegrated. The conference opened and closed to the programmed timings. The lecture theatre, one of the prestige venues of the University equipped with the necessary and instinctive system, had been booked six months in advance.

An Integrated Audience

In hybrid mode, remote attendance can often feel like second-class citizenship: no eye contact, remote hand raised endlessly without recognition, no prioritisation for interventions. Organisers and speakers were briefed to the location of the camera for the virtual audience to include in their fields of vision. No prioritisation was made between the two audiences, save for the convenience of grouping questions. Likewise, remote speakers were excellent in focusing on their computer cameras, thus conveying an image of eye contact to the in-person audience. The very ‘even’ distribution of speakers and delegates alike made for a seamless and natural experience with good use made of the ‘Q&A’ and ‘raise hand functions’ in [Webinar mode](https://support.zoom.us/hc/en-us/articles/115005474943-Meeting-and-webinar-comparison). Coughing, background noise, and forgotten muting were eliminated by using the Webinar platform instead of Meeting, enabling the technical host to control the audience.

The Workload

Is the workload greater for a hybrid conference, than an in-person or virtual one? It depends. Having been a convenor, presenter and attendee for dozens of virtual, hybrid and in-person events of varying scales over the past decade, my own answer is: ‘marginally, if that.’ Certainly, the workload differs: more planning is required to anticipate problems, to enhance the virtual experience and to genuinely integrate the participants. Equally, the in-person event can be bedevilled by logistical difficulties, particularly high costs, transport disruptions and last-minute speaker withdrawals. For organisers starting from a lower base of technical knowledge and experience, the higher learning curve must be factored. For example, we were able to run the virtual platform without the luxury of an on-hand IT technician.

Convening Power

In making these design choices, we took risks. We could not know how great the demand for such an event might be or how people might react to enquiries, requests and suggestions from us about their personal travel plans – by far, the largest emission category of the great majority of conferences. The overwhelmingly-positive response was at once inspiring and humbling. If people – particularly contrarian lawyers and academics – might have resented such an approach even ten years ago, this is no longer the case. To the contrary, there was a widespread willingness to respond to the efforts being made, backed by concrete action: multiple delegates notified us that they would switch from automobile to train, several car-sharing arrangements were evidently made and numerous speakers and delegates wrote to us to express their appreciation for our emission-reduction efforts.

In terms of intellectual output, I can attest that the hybrid format certainly did not hinder the high standard on display; if anything, when it came to the ‘round-table’ session, it might even have enhanced it. What to make of the lower actual attendance levels relative to registrations? This is a fact-of-life for conferences of any mode due to personal circumstances, which the ‘remote option’ helped to alleviate: in certain cases, we noticed remote attendees joining for part of the day who had registered to attend in-person. In an in-person-only format, they would not have been able to attend at all.

For me, the case for the hybrid conference is proven for the standing, large-scale events, such as the SLS Annual Conference, and medium-scale ones, such as workshops. For smaller events, such as evening seminars, there remains a place for the in-person-only mode – when participants are all local to the venue – and the virtual platform, when they are not. In general, however, the routine of international – certainly, inter-continental – jet-setting to attend a one-to-two-day event, or even a five-day one, **must** end. Not only can the hybrid conference be done and done well, but it even offers hidden benefits and opportunities. After three years of disruption to the old ways and amidst an escalating climate emergency, law practitioners and academics are ready to permanently change to low-emission conferences.

Let us make that change. Now.

1. The term ‘decarbonising’ is employed to signify reduction in greenhouse gas emissions, which comprise not only carbon dioxide but also methane, nitrous oxide, water vapour and fluorinated gases. [↑](#footnote-ref-2)
2. One study has shown that, accounting for variable factors and measured in terms of the trade-offs between transport and resource consumption from virtual participation, entirely-remote conference achieve a footprint reduction of 94%, a 50% remote participation rate reduces it by 66.67% while a 70% rate reduces it by upwards of 80% - Tao, Steckel, Klemeš and You, ‘Trend towards virtual and hybrid conferences may be an effective climate change mitigation strategy’, 12 *Nature Communications* (2021), No. 7324. [↑](#footnote-ref-3)
3. In one case, the organisers agreed to the request of a speaker based in the United Kingdom to present remotely due to a health-related agreement with the institution of the speaker. [↑](#footnote-ref-4)
4. The point about visas also arose for a prospective registrant from Kazakhstan, who enquired about support for a visa for in-person participation. She did not reply to the author’s suggestion of remote attendance and to facilitate the best possible virtual experience. An abstract-submitter from Brazil who was selected in reserve stated that she did not value remote participation and so would have attended in-person, combining it with another intended event in London the following week. [↑](#footnote-ref-5)
5. The ticket structure was as follows: £70 in-person, individual; £50 in-person, ILA member; £35 remote; £20 in-person, student; £10 in-person, student ILA member. [↑](#footnote-ref-6)
6. As remote attendance fluctuated from panel to panel, the number is a notional average. [↑](#footnote-ref-7)
7. Three attendees based abroad had flown to the United Kingdom on other business in Edinburgh and London; they travelled by train from an event in Edinburgh to Guildford and thence to London for their other business before flying home. We certified this as mixed rail-flight travel from Edinburgh to Guildford to London to Reykjavik on the basis that they would have flown to the U.K. regardless of the event. Other long rail journeys included Lancaster and Birmingham. [↑](#footnote-ref-8)
8. Note 3, *supra*. [↑](#footnote-ref-9)
9. To establish a baseline, we calculated two people travelling from London by train for a 70-mile return journey. The manual calculator generated 11.1 tCO2e and the automatic calculation a result of 3.4 tCO2e. [↑](#footnote-ref-10)
10. We counted the electric vehicle journey as having been made by foot, inputting the correct mileage, to produce zero emissions. Based on market data of hybrid plug-in vehicles, we reduced the mileage for a hybrid journey by 35 miles to reflect a full charge on the electric battery. [↑](#footnote-ref-11)
11. This was not a simple process, as calculating routes accurately for different types of journeys (e.g. – rail distances) requires careful use of different calculators. [↑](#footnote-ref-12)
12. Hotel stays by delegates were overlooked for tracking and so are omitted from the event footprint, though they should be counted as part of it. [↑](#footnote-ref-13)
13. A half-dozen delegates accepted our invitation to attend the virtual panel from the theatre on Thursday evening, which enabled us to further test the hybrid interface. [↑](#footnote-ref-14)
14. In truth, this is probably a part of the experience that should be done primarily in-person – nothing quite replaces the touch and turn of a book. Yet, having the remote option available to publishers to attend virtually is invaluable for availability and other logistical reasons, particularly as conference budgets have tightened in the sector. [↑](#footnote-ref-15)