

Feedback on the Theatre Green Book

NOVEMBER 2022



EQUITY
FOR A GREEN NEW DEAL

THE THEATRE GREEN BOOK: E4GND FEEDBACK

We fully support and commend the Theatre Green Book's overall focus of producing sustainable theatre in sustainable buildings that are operated sustainably. And we congratulate the authors and contributors on producing work on such large scope and scale which we recognise as a formidable challenge.

The Theatre Green Book's focus on people, particularly through the use of longer planning processes to prevent the need to use new and/or more environmentally harmful materials in productions is welcomed. If done properly, this will inevitably put money into the pockets of workers and towards practices that are the least ecologically harmful.

Longer planning processes, as advocated in the Theatre Green Book, are key in terms of accessibility as well as

sustainability. To that end, accessible versions of the Theatre Green Book itself are needed (for example, an audio version and a version that includes visual supports).

In addition, we believe the focus in prioritising making buildings lean first, then clean, and finally then green, is a sensible, welcome, approach informed by science.

However, for the Book to bring about the sustainability it seeks from theatre, it must properly incorporate and harness the theatre worker's voice, including within the make-up of the Book itself. It is, therefore, regrettable that the broader worker voice and union perspectives weren't part of the initial Theatre Green Book processes. We are happy to contribute to it now, and see our voice and how unions and workers can harness the Theatre

Green Book at as vital to its success.

Unions (including Equity, the Broadcasting, Entertainment, Communications and Theatre Union (BECTU) and the Musicians' Union, but also unions representing shop workers such as the Union of Shop, Distributive and Allied Workers (USDAW); café, restaurant and hospitality workers such as the Bakers, Food and Allied Workers' Union (BFAWU) and Unite) have an important contribution to make – not only to improve the content, scope and ambition of the Book, but to play an essential role in ensuring the Book is widely used. The Theatre Green Book could play a crucial role in forming new cultural norms, primarily through galvanized and empowered workers demanding that the principles contained within it are put into practice, holding organisations accountable if they don't. Moreover, it is essential that we consider a disabled perspective within every element of the Green Book so that it is possible for disabled voices to champion sustainability as opposed to avoiding it.

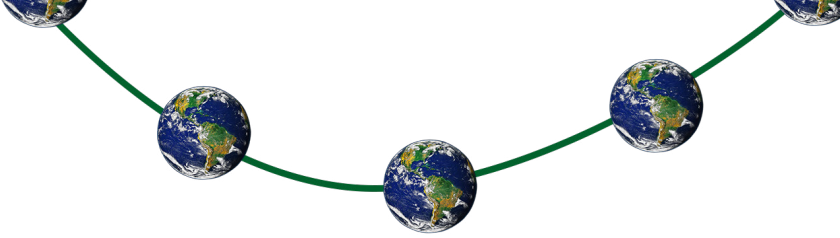
Unions and theatre workers wield great influence. Without them, theatre is not possible. A worker-led and union-led harnessing of the Book and its contents can fundamentally change the impact from positively aspirational

and incremental, to bold and meaningful. Producers and theatres can feasibly risk losing their workforce if they don't produce sustainably, in sustainable spaces, ran sustainably. Good theatre companies should demonstrate that they are willing to be held accountable to this risk as it will drive better practices and operational culture.

With these thoughts in mind, we have commented on where we see gaps relative to each book (or where no book exists we make this clear) of The Theatre Green Book in the sections below.

We detail below our summary critique setting out the concerns, recommendations or areas we consider gaps within all three volumes of the Theatre Green Book. We hope that these will be carefully considered and lead to amendments or inclusion in future future versions.

Given that general critique can easily appear negative in nature, we want to re-emphasise that whilst we feel the notes below are extensive and important, there are many more areas we haven't commented on because the Theatre Green Book has approached them so sensibly and adeptly.



CRITIQUE

Finances

(Partially covered in Green Book 1, but the broader focus covered above is not currently contained in any of the Theatre Green Books)

The Green Book sets out that advanced productions should have a Green Production Agreement containing a clear divestment and ethical funding statement but doesn't define what that is or what it would be in practice. It implies that in order for a production to meet advanced sustainability standards, it could not be funded by any fossil fuel companies or unethical sponsors which is positive, but we would recommend providing more clarity on this, and expanding the focus of divestment and ethical funding beyond a per production basis to the wider opera-

tions of a theatre/theatre company.

We feel that arguably the biggest impact 'theatre' (using the broader definition) could make to reduce emissions is through supporting, advocating for and mandating (in respect of meeting standards) standards and actions in respect of theatre finances and theatre, and theatre companies rigorously interrogating their finances to mitigate impact as much as reasonably possible. In our view, this must include actions to address to limit or mitigate impact from [investment portfolios](#), [sponsors & funders](#), [pensions](#) and [bank accounts](#).

This is an area of such great significance that it could probably form a fourth Green Book. As it stands, without any emphasis on finances, a huge opportunity to make the

most significant reduction in Theatre related emissions and the biggest impact on building a sustainable future is lost.

On pensions alone, Equity for a Green New Deal has successfully lobbied Equity's pension provider Aviva to switch over £120m worth of pension funds to a more sustainable scheme.

We have also secured a completely fossil-free option for members to opt into if they so wish. A similar commitment to positive change should be shown by Theatre Companies and Theatres, and the Green Book should be advocating for such change.

Theatres and theatre companies should make a commitment to full fossil fuel divestment and to sustainable investment principles in respect of pension and investment schemes.

It is difficult to overstate the possibilities to curb carbon emissions and be of most ecological benefit through improving theatre pension funds and theatre investment portfolios. [Research](#) from *Make My Money Matter*, *SYSTEMIQ* and *Global Canopy* reveals that for the average pension holder, £2 in every £10 is

linked to investment in companies and financial institutions with high deforestation risks. Further [research](#) from *Make My Money Matter*, *WWF* and *Aviva* suggests that switching to a sustainable pension is 21x more effective at reducing your carbon footprint than giving up flying, going veggie and switching energy provider combined. The book should encourage theatre companies and theatre workers to demand and lobby pension providers to provide sustainable options in cases where they hold less control over the pension; and where companies or workers have more control of their pension fund or investments, they should be encouraged to switch to sustainable investments.

Similarly, there is no mention of sponsorship and the importance of theatre companies rejecting money from companies that fuel the climate crisis such as any companies or individuals with links to weapon manufacturing and fossil fuels. The same logic could apply to [choosing to bank](#) with the most responsible banks possible.

How can workers joining a production later on in process have voice and be part of the process?

(Book 1)

The Book is missing clear ideas or specificity on a communication strategy for workers who join the production later on in the process (i.e. actors and technicians) and should be able to have some voice in making productions sustainable.

Those types of worker should be able to see the Green Production Agreement (GPA) pre-audition and pre-contractually. We are working with the Casting Directors' Guild to find more transparent communication options for casting breakdowns, in which sustainability standards would be listed alongside pay and other key information given to actors before they audition.

Moreover, performance practitioners more widely should be added to the Green Book's suggested signatories of the GPA. It is presumably included in "others" at present, but it should be made explicit - this might mean that the GPA needs to be reviewed and re-signed at a later date once performers, and other self-em-

ployed workers and freelancers are contractually engaged in the production. Finally, the workers' opinions should be sought as part of the evaluation process of a sustainable production, either in significant part, particularly if that time can be paid, or at least through a survey.

More money spent on planning, less money spent on stuff

(Book 1)

We recommend that the Theatre Green Book does more to ensure the principle of 'more money spend on planning, less money spent on stuff' has a tangible basis with either positive impact or no negative impact on workers.

The Book and Standards need to provide more of an emphasis on the importance of this principle, truly requiring longer term processes of planning. Sustainable working must not translate to more work within similar or existing timeframes being put on the shoulders of an existing workforce that are often already overworked and underpaid.

Anecdotal evidence from our members suggests that creative staff

and assistant producers are being expected to do even more work to make productions sustainable but in the same time frame as usual with no additional payments to cover the extra work covered. The Book does not suggest any processes for workers to hold theatres accountable and for theatres to hold themselves accountable when workers are being tasked to do more work in similar time frames to help make productions more sustainable.

From an accessibility point of view it is important to note that, while materials for set or props should absolutely be sourced sustainably, if materials are required for access reasons that cannot be sourced in a different way (for example disposable equipment related to medication, COVID safety/coordination, or consuming food/drink) then this needs consideration in the overall carbon budget. Access needs that require impactful materials are still access needs — and this issue relates to the above comment about involving workers who join productions later in the process because disabled workers are often actors, who join the process when a sustainability plan has been made already and the capacity to make changes is limited.

Casting Advertisements and Job Ads: Allow and Encourage accountability

(Book 1)

Theatre and Theatre companies should be expected, if meeting any Theatre Green Book standards, to specify what standards they will be meeting on casting ads and job ads, alongside providing a link to a publicly available company sustainability policy with targets that are regularly reviewed and transparently conveyed so that potential workers can make an informed decision about future work and employers. In addition, casting ads and job ads should also include a link the sustainability policies of the rehearsal space and the theatre space where performances will take place.

We recommend that the above must be met in order to meet even Baseline Theatre Green Book standards.

Lower working week/reduction in operational days

(Books 1, 2 & 3)

Another hugely beneficial way of reducing carbon emissions and improving the lives of theatre workers

would be to promote and support shorter working weeks and shorter operational weeks, including during the performance run.

The evidence suggests that future workforces are likely to have more caring commitments due to the [ageing population](#) of the UK. The industry must adapt to support carers and the increase in caring responsibilities through improving work life balance and offering shorter working weeks. This will also give parents and carers more opportunity and longevity in the industry and give better opportunity for industry to have a workforce that is demographically representative of local/UK populations.

Importantly, shorter working weeks are hugely beneficial in building sustainability and reducing emissions both from industry operations but also in the aggregate personal lives of workers who, when given more time off, tend to engage in lower-impact activities compared to those working long hours who are associated with higher consumption of environmentally intensive goods (even when correcting for income). Better work-life balance for everyone working in a theatre builds more environmentally sound working because workers are more likely to

stay local, cook, and engage within their local communities.

There are great gains to be made in improving society as a whole because, as Jason Hickel outlines in his book *Less is More: How Degrowth will Save the World*, the evidence strongly suggests that giving people more time off results in significant improvements in quality of life, health outcomes, job satisfaction and happiness, and promotes greater gender equality.

There are huge sustainability benefits to reducing the number of working days in rehearsal and performance schedules, particularly if a theatre decides not to run operations (e.g. is closed) on the day when performances do not run. An extra day or two of a theatre building not being in use (or an outdoor event space not being used, particular if powered by diesel generators) can result in significant emission savings, and could be done efficiently without necessarily resulting in lower profit base or loss of income, through, for example, saving on energy use (and related emissions), other costs (could allow for food to be fresher when it needs to be, reducing food waste and extra deliveries) and maximising audience attendance. This

would, almost inevitably, result in a more enjoyable experience for performers (and other creative workers) and audiences. This would also help productions and work to be more accessible to disabled artists or other workers (service staff, box office, janitorial), including parents and carers, who may need more rest days or flexibility in working. Not only are there emission reductions from these practices, there are benefits ensuring that workforce are more reflective of local/UK demographics.

Unfortunately, apart from mentioning flexible working, there is no realistic consideration of these practices being an effective way to reduce emissions and ecological impact (as well as improve welfare) in any of the Books. We believe, for the reasons mentioned, the Theatre Green Book should be updated to recommend and encourage a reduction in working and operational days.

Cruise Ships and Festival Spaces

(Books 1, 2 & 3)

The Green Book (and indeed Theatres Trust') could consider making a clear statement about the impact of

theatre operations on cruise ships, an industry which [is extremely harmful](#) to the environment. As it stands, a producer could theoretically put together a GPA with highest standards on a production which takes place on a (and helps to support the use of) a cruise ship, which would make a mockery of the real intentions behind the Theatre Green Book.

We also feel that more should be said about just how damaging outdoor festivals and outdoor performances can be if reliant on diesel generators, particularly if not running a heightened efficiency. We feel that there should be more signposting to the resources and research of '[a greener festival](#)' and supporting seeking accreditation or only working with accredited festivals.

Furthermore, the Green Book has a big gap in considering and commenting on the sustainability of theatre which takes place within fringe festivals and other festival contexts such as in tents and on pop-up stages, many of which are both high-emitting in terms of carbon emissions and high-polluting in terms of air pollution and plastic waste. Many of our members are engaged in these types of theatre for which, without more guidance or steer, they

may continue to unintentionally or inadvertently support.

Materials Hierarchy

(Book 1)

The materials hierarchy referred to, particularly in Book 1, can be misleading and could be improved upon to give a better understanding of how waste is managed and the impact through incineration which is not referred to. For example, in many local authorities, waste incineration is more widely used than landfill. Whilst both of these systems should be avoided, the Book should be clearer about how waste is handled, particularly because the use of incinerators results in more immediate emissions through burning of waste (often plastic), and correlated to higher failures of local authorities to meet recycling targets. Importantly, the emission levels from incineration for energy generation are comparable to coal. See: <https://www.source-material.org/blog/dirty-white-elephants>

<https://www.theguardian.com/environment/2021/mar/07/revealed-why-hundreds-of-thousands-of-tonnes-of-recycling-are-going-up-in-smoke>

The hierarchy sets out and the Book takes too neutral (or arguably positive) a stance on biomass and wood burning (see below).

Biomass and wood burning

(Books 1, 2 & 3)

The Book appears to hold a neutral or even positive position on burning biomass, particularly in the burning of timber or wood pellets. We recommend that there should be far more stress within the Book that biomass should be the absolute last resort, and a much clearer outline of how highly damaging it is to use as a fuel source due to the high carbon emissions and air pollution associated with its use.

The argument that burning timber and wood pellets is “considered to be renewable” is a highly contentious and irresponsible statement, especially without including the voices of [expert views](#) explaining how [problematic](#) its use [can be](#) from a sustainability and ecological standpoint. Wood biomass often produces [higher carbon emissions](#) than burning coal. It also strongly linked to [deforestation](#). By burning something which stores carbon and for which the carbon would otherwise

naturally release it over a very long period (with significant amounts reabsorbed into soil in natural forest processes), that carbon is released into the atmosphere all at once.

Pellets which include recycled materials in the make-up from sawmills and genuine waste wood, tend to only have a recycled material make-up of 10/20% with the remaining makeup for pellets coming from [whole trees forestry](#).

When the science dictates that we need to curb emissions drastically, as soon as possible, describing wood burning and biomass as renewable is mirroring the greenwashing argument of huge emitters such as Drax and makes the Theatre Green Book far less credible as a tool which directors, producers and practitioners should use and adhere to make theatre sustainable.

Furthermore, where there is some reference to the air quality impact of using biomass in urban areas, it omits that the use in rural areas is extremely problematic because wood burning stoves (e.g. biomass) are the leading cause of air quality problems in these areas. The description perpetuates an unhelpful myth that air quality is generally

good in rural areas when air quality and the health impacts are a problem in almost every area of the country. Research from [Imperial College](#) London reveals that more than 97% of all UK addresses exceed WHO limits for at least one of three key pollutants, while 70% of addresses breach WHO limits for all three, the three being PM2.5; PM10 and NO2.

Recent [Government data](#) reveals that since the late 2000s, significant decreases in particle pollution from coal burning, industry and vehicles have been “largely offset by increases in emissions from wood burning in domestic settings and [biomass] burning by industry” and is the leading cause of particulate air pollution in the UK.

In addition to general air quality, indoor air pollution from biomass and wood burning is now a considerable concern. Theatre workers nor audiences should not have to suffer the impact of its use when it should be prevented save for the most exceptional reasons.

Animal agriculture already creates significant ecological and environmental hazards, and these hazards are being exacerbated through

farms receiving 'Renewable Heat Incentive' subsidies (which closed in 2021 but will continue for those in receipt until 2040) to burn timber and biomass dry pellets for heating the intensive pig and chicken units in farms. See our other comments on Food and Drink

Royal Court Carbon Footprint Example

(Book 1)

It is not clear what percentage of the theatre's carbon footprint is currently represented by 30,000kg of materials represent now? The projected figure for 2030 is less useful without a present day comparison figure for context (we appreciate this figure might have to be an estimate but think it is significant nonetheless).

E-Cargo Bikes

(Books 1, 2 & 3)

E-cargo bikes are an extremely effective, time-saving and low emitting method to transport large and heavy items. It is disappointing that there is not even a mention of them within the three books, and, therefore, no recommendation to use or consider their use as a suggested solution

and practice in theatre.

As part of suggestions about more sustainable courier services, the Book should discuss E-cargo bikes as a positive solution.

The types of bikes can also be used, for example, through Pedal Me, as a low carbon passenger solution.

The purchase of and use of E-Cargo bikes could be shared by theatres and theatre companies making best use of resources.

The use of e-cargo bikes also makes it easier for theatre companies to foster relationships with their local community, for example, from picking up and taking items from local second-hand shops.

They are an effective way to deliver general produce to and from theatre spaces/theatre companies, even as a last mile service to limit or reduce carbon emissions, overall traffic, air quality and impact on roads.

Promoting Active Travel/ Discouraging Harmful Travel

(Books 1 & 3)

We believe theatres and theatre

companies should be encouraged to go further in respect of encouraging active travel through discouraging and disincentivising workers from driving into work where this is not necessary for health, accessibility or safety reasons. Theatres working to Green Book standards should not support or pay for petrol as an expense, unless there are sound health, accessibility or safety reasons for it. The company should ensure that there is positive messaging on the health benefits of active travel. This is also a positive method to support worker welfare.

In the event where harmful travel is required for accessibility reasons, theatres and theatre companies should consider options such as ride-sharing for workers near each other. Alternatively, a theatre company might be able to pair a disabled artist in a taxi with transporting a particularly difficult piece of set (where they were based closely together). They could also pair a disabled artist needing travel for access reasons with someone needing that sort of travel for safety reasons. Again, if workers who have accessibility and safety considerations are involved in the planning earlier on in the production process, the most ambitious carbon budgets can be adhered to.

Receiving Houses (or mainly receiving houses)

(Books 1 & 3)

We believe greater stress could be placed on the important role receiving houses could play by making ambitious or at least baseline sustainable standards a condition of hire/use of theatre. This should form the basis of intermediate or baseline operational standards for theatres.

Where possible, receiving houses should actively assist visiting companies in committing to sustainable practices. For example, The Space in the Isle of Dogs keeps pieces of set in an outbuilding and allows companies to use whatever they can find there. If more receiving houses did this, then perhaps smaller companies could default to a more sustainable way of making theatre.

At the very least, they should be expected to encourage visiting companies to use Theatre Green Book Standards for productions and commit to other sustainable practices.

Food and Drink

(Books 1 & 3)

We support the encouragement in the Theatre Green Book for theatres to offer plant-based options. However, the book does not go far enough in clearly laying out the facts related to meat and dairy related emissions.

If the intention is for the book to result in genuine sustainability in theatre, then it needs to accept and acknowledge the stark reality: there are barely any ways in which [including meat](#), [fish](#) and [dairy](#) on menus and in products, at least within the current system of UK and world agriculture, can be considered genuinely sustainable. From our perspective, the Book is not approaching the topic of meat, fish and dairy from a bold and honest standpoint.

As the ethos of the Book is not just about reducing carbon emissions but considering the climate crisis as an ecological crisis, a franker and more radical position needs to be taken. Advocating for theatres to offer 'high-welfare' meat and dairy is inconsistent from a sustainability standpoint because the carbon

emissions related to high-welfare meat and dairy products are usually higher and almost inevitably result in [more land use](#) and emissions. This is particularly problematic when the existing land from animal agriculture use is [already extremely high](#).

Recommending RSPCA Assured or Red Tractor certified meat and dairy would likely result in higher carbon emissions and increase ecological harm than using lower-welfare meat and dairy which seems inconsistent with the purpose of the Theatre Green Book.

We are not suggesting that theatres should use lower welfare meat and dairy – it is logically sounder for the Book to be pushing for not including them in products and menus at all because of the significant emissions and ecological damage/ land use associated with animal agriculture in general.

By advocating for RSPCA Assured or Red Tractor certification, the Book is also perpetuating a myth that they are high welfare systems, when they are often, at best, only marginally better for animal welfare than most non-certified products. For example, Red Tractor certification is awarded to farms which barely go beyond

simply operating legally. Worse still, as is described in Ed Winters' *This is Vegan Propaganda (And Other Lies the Meat Industry Tells You)*:

Red Tractor approved farms have been exposed for illegally electrocuting animals, for breaking the necks of animals while still alive, for deliberately stamping on and throwing animals, and much more. In fact, illegal practices have been documented on farms that have passed multiple Red Tractor Audits, again making a complete mockery of the scheme and its auditing process.

Undercover investigations in RSPCA assured farms and slaughterhouses show similar cruelty and abuses.

It is highly questionable that the certification standards are rigorous enough to be meaningful. For example, Red Tractor claim to perform 60,000 audits on farms each year, but a study revealed that only 0.08 per cent of visits were unannounced.

The Book also omits to consider Soil Association Organic certification for meat and dairy products when such certification is much higher welfare and, generally speaking, far more ecologically beneficial than Red Tractor certified and RSPCA Assured.

Suggesting a theatre can consider their overall practices as meeting 'advanced' sustainability standards by having fish, meat and dairy in products or in menus based on the dominant methods of fishing and animal/dairy agriculture is simply not credible. There needs to be an honest appraisal of this fact. However, we also accept and recognise that decision-makers, patrons and customers may find this position to be unpalatably radical and too unrealistic to immediately enter into despite our position being rooted in fact. We would therefore recommend, as a sensible compromise towards building for genuine sustainability, that the Baseline Theatre Green Book Standard in Operations starts at what is currently set out at A.5 (but with a ban on beef and lamb, and for all other meat and dairy to be Soil Association Organic), and that Advanced Standards are to be 100% meat, dairy and fish free.

We understand that from an accessibility point of view it may not be possible to adhere to a 100% plant based diet (for example, those who have been placed on a low FODMAP diet may need an alternative option). Overall we recommend that the Green Book should be unequivocal

ocal in stating the harm caused by meat and dairy, but should allow theatre a limited amount of flexibility to ensure they can best cater to specific dietary and textual requirements relating for disabled users and others with specific health needs. Depending on the theatrical venue's resources, multiple plant-based options could also incorporate other intolerances and accessibility considerations, for example providing plant-based options that are legume free, mushroom free, acid free and gluten free. Where resources are more limited - and we acknowledge that this will be the case in a lot of theatre restaurants - the Green Book could advocate for flexibility in allowing disabled visitors and workers and others with health issues to be able to eat some of their own food when it's for dietary or access requirements within the space, and for staff to be sensitive to this.

We also think that a principle of favouring "British-sourced products to reduce food miles" is far [too simplistic](#) and could have unintended consequences of increasing carbon emissions in operations. We recognise that the guide needs to be accessible and there is a risk to making it too dense in terms of usability. However, as the genuine

purpose of the Book is to reduce environmental impact of theatre, we feel it must accept the nuances of food miles and acknowledge the [complexities involved](#). For example, [research suggests](#) that New Zealand lamb, dairy and apples imported to UK is still significantly lower carbon than the UK counterparts.

Reducing carbon emission through buying locally produced produce is often best done depending on the season that the food is bought. For example, if planning to buy lettuce, [it is better](#) in terms of carbon emissions from the production and transport of the food to purchase UK lettuce in summer and Spanish lettuce in winter.

If trying to reduce carbon from food and drink used in operations, the Theatre Green Book should be clear, unambiguous and unequivocal in stating that the most immediate and significant reductions must come from reducing or cutting meat and dairy, particularly red meat, cheese and milk. The Green Book could push for carbon emission descriptions to appear on menus in theatrical venues so that patrons can make informed choices.

We recommend the Green Book does more to support theatres offer-

ing menus and products that support genuinely regenerative agriculture which, in turn supports soil enrichment, carbon sequestration and broadening biodiversity that either outweighs the or matches the extra land use for such farming methods. With more emphasis on eliminating meat, it is more in keeping with supporting a system change mode of thinking whereby that land used for animal agriculture can, instead, be used to support regenerative agriculture or rewilding.

Retail

(Book 3)

If a decision is made that fashion items will be sold by a theatre or as merchandise by a theatre company, wherever possible, the theatre or theatre company should look to only sell items from companies that make those items from upcycled material, or should even consider upcycling items themselves.

The Home Survey

(Book 2)

The home survey would be improved and likely to be used more if it worked on and was optimised

to be used on mobile devices (with alternatives provided for those who struggle with screen reading).

The survey and emphasis within the Theatre Green Book should include consideration around the importance of occupancy modelling (see below).

Modelling Occupancy

(Books 2 & 3)

In order to develop a package of energy efficiency measures to reduce the energy demand for any building, understanding and modelling the occupancy is a fundamental part of the process. Understanding how the building is used impacts on the internal heat gain from people and equipment and feeds into the design of services such as ventilation and heating/cooling. The importance of modelling occupancy to meet energy saving and emission reduction outcomes is not made sufficiently clear within the Book.

Embodied carbon and toxicity of materials

(Book 2)

The Theatre Green Book has insufficient emphasis on the importance of

avoiding materials with high toxicity and/or high embodied carbon which would be of great benefit to the health of building users and the wider environment. We feel the Book should place more emphasis on the importance of using, wherever possible, materials made from natural materials and with low embodied carbon. Reference to a clear visual guide to measure and compare different building materials may be a useful addition to the Book and encourage 'circular construction'. One such resource is the interactive 'Construction Material Pyramid' (<https://www.materialepyramiden.dk>)

Furthermore, the use of breathable ('vapour open') materials such as wood fibre insulation may be beneficial for retrofitting traditionally constructed buildings with a vapour-open construction.

Whilst the idiosyncrasies of different retrofits may be difficult to cover in the Book, it should be clear that following the general advice provided by the Home Survey, each theatre will require (in addition to the design of energy saving measures) a careful analysis of how the retrofit design will improve airtightness, be suitable for vapour-open (or -closed)

construction and provide suitable ventilation to the building.

Learning from historic mistakes in retrofit

(Book 2)

There needs to be a very bold and clear statement that expert guidance will usually be required on retrofitting projects because there are significant risks to getting retrofitting wrong (as well as great benefits to getting it right).

We should learn the lessons from historic and significant failures in housing retrofit, and we would suggest pointing to case study examples of why this is so important in the Book.

There have been huge failures in historic retrofit projects, particularly domestic retrofit, due to a number of factors including poor planning, a culture of 'passing the buck' and typically the adoption of single measures without sufficient consideration to knock-on effects or future-proofing. Often the cost of a poor retrofit is outstripped by the cost of rectifying the problems that arise.

We therefore recommend that the Book incorporate the lessons

learned from the housing sector that are reflected in the recently launched PAS 2035 (public specification) to ensure that energy efficient measures can deliver on the promised benefits and avoid the harm that poor retrofit can result in (e.g. mitigating against the risks of condensation/mould or undermining building safety). Although PAS 2035 has been developed for domestic retrofit, we feel that advocating for adoption of a similar approach to non-domestic retrofit, will be an effective way to ensure that retrofitting is done properly, including through data storage of the retrofit plans, and having trained and certified Retrofit Coordinators, Assessors, Designers and Installers to undertake the work.

CONCLUSION

Considering the current manifestation and use of the Theatre Green Book is without cooperation and contribution with unions and broader theatre workers, we posit the following questions with the hope that they are considered how they are intended: constructive.

- How will the Theatre Green Book facilitate holding theatres and theatre companies to account?
- How can the Theatre Green Book be harnessed by unions and workers to be the best it possible can be and to be widely used within the sector so as to make a more meaningful difference?
- How is it planning to raise ambitions upwards from the baseline level, which is where most theatres are likely to pledge their initial commitments?
- How will it incorporate Disability advocacy in conjunction with sustainability?
- Does the Theatre Green Book want to advocate for the great-

est possible reduction of emissions in the sector, or will it simply give theatres permission to tinker at the side of their environmental responsibility, committing too little and too late?

The theatres and producers with largest income and funding have the most responsibility to radically alter the sector's landscape so as to make and provide work that is sustainable and allows theatre workers the dignified future they deserve. We must put in place the best possible system to hold them to this requirement. With an estimated 8 years left to avert cataclysmic ecological breakdown, this work couldn't be more important.

It is on all of us, collectively, to build a theatre workforce which is educated, passionate, galvanised and empowered about the climate crisis.

We expect workers to hold theatre and theatre companies accountable by rightfully refusing or withdrawing labour if those companies are not

providing a sustainable future, and we aim to harness the use of the Theatre Green Book so that our members and other theatre workers have the right methods and tools to make informed decisions about what work to take on and when not to take it.

The Theatre Green Book is an essential tool for the theatre and live performance sector. Its greatest strength lies in its lateral thinking, geared towards structural change. However, in order for it to make the biggest difference, it requires the addition of a worker and union focus, and the lens and language of radicalism because at this point in our human history it is a necessity.

The theatre industry, despite many best efforts of those working within it, is still embedded within a capitalist, white-supremacist, racist system which favours extractivism for the primary purpose of [constant growth in place of meeting human needs](#). This system is responsible for the over-shooting of planetary boundaries, and [hitting climate tipping points](#) that could have devastating consequences for nearly all animal and plant life on this beautiful planet.

Nevertheless, we must still allow the-

atres and theatre producers who can demonstrate that they are genuinely doing their best within significant constraints imposed upon them, to, in the words of Samuel Beckett, "Try again. Fail again. Fail better."

Equity for a Green New Deal stands ready to give support and assistance so that the Theatre Green Book makes the language and politics of radicalism accessible, and not to distil the message for the fear of losing 'buy-in' from organisations. We are also ready to give our solidarity and support to theatre companies doing their utmost against the strong and growing tide of funding indifference from the public sector.

We feel that the Theatre Green Book is already delivering real change in the industry, but it is only through an iterative improvement process which adopts and embraces a more radical focus, and, in addition, through workers and unions harnessing the use of the Book that its full use can and will be realised. The choice is truly stark: theatres and producers can either choose to go green or face desertification.

