Decarbonisation action plan
For non-profits and institutions
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In March 2023, GCC in collaboration with Whitechapel Gallery co-produced Climate Crisis >> Art Action, a symposium that brought together the UK’s public art institutions to tackle the critical environmental issues we face as a sector.

Across 2 days, we heard from leading visual arts and environmental organisations as well as change-makers from beyond the sector. If you missed it, you can watch it, here.

From the outset, GCC and Whitechapel Gallery were determined that this was not “just another sustainability conference”. CC>>AA was to be grounded in clarity, actionable takeaways and the latest climate science, so that anyone in attendance could return to their desks on Monday morning equipped with relevant context and expertise - feeling empowered to implement effective change.

What was astoundingly clear from the event was the enormous role art has to play in engaging public audiences with environmental issues. Art can do this on an emotional level, in a way that transcends facts, figures and politics. This gives public art institutions a unique role to play, and a significant influence on public discourse.

By showcasing artworks, voices and stories that address the reality of the climate emergency, arts organisations can use their position to help tackle the crisis. Ultimately, this should be more impactful than the emissions reductions of any one organisation.

But, in order to do that work with credibility, arts organisations must be able to show they are embodying the change they urge – by decarbonising and implementing solutions in line with their environmental responsibility. For this, GCC is here to help.

We’ve collated the expertise and insights gathered from across the two days into this resource. We’ve also pulled together some of the key concerns, barriers and questions that arose, and sought to address these in Addressing the obstacles.

GCC has aimed to keep this internationally applicable in order to be accessible to our growing membership of over 800 - now from 40 countries across the world. (Although, where you are located will certainly impact your ability to follow particular pieces of advice. See Addressing the obstacles for further information on regional differences).

We realise this is a lengthy document, but we’ve tried to be as concise as possible, staying clear of jargon, and pointing to further resources and reading where relevant. We don’t expect it to be read line by line. We’ve tried to be as concise as possible, staying clear of jargon, and pointing to further resources and reading where relevant.
The Decarbonisation Action Plan has been developed to support anyone within the public or non-profit visual arts sector who feels determined to take urgent and effective climate action, in line with principles of justice and the latest climate science.

This document provides an overview of the key sector-specific issues and acts as a directory of where to look for further support. As well as this, it provides a step-by-step guide to creating a decarbonisation action plan and waste strategy, so that you can be confident that you are working towards GCC’s targets, effectively.

THE SECTIONS

1: Context relays the most up-to-date climate science, and places the environmental emergency into the context of the visual arts.

2: Decarbonisation strategy and 3: Waste strategy attempt to break down the steps involved in taking climate action on both carbon and waste.

4: Further Guidance can be treated as an encyclopedia of the key areas of impact for non-profits and institutions. Each page offers a summary of the issues and outlines actions to be taken. We’ve also commissioned leaders in this space to write up summaries of their work – with contributions from Ki Culture, Culture Unstained, Renew Culture, and the Design Museum.

5: Addressing the obstacles and 6: FAQs address the common hurdles many of our members face, and the questions we are often asked. We won’t have the answer for everything but we hope that by identifying the obstacles, collectively we can seek solutions.

WHO IS THIS FOR?

We hope that this resource will be useful for all types of cultural workers, from directors and Board members to those working as curators, technicians or conservators.

It was written to act as an entry point for those who might be newer to this conversation – although we hope it will also spark new ideas and insights for those who have been working on environmental responsibility for a while.

There is no ‘one size fits all’ approach to environmental responsibility and all organisations will face their own unique opportunities, as well as barriers to implementing change. Therefore, not everything in this document will be relevant to everyone. We hope that this resource will be shared widely among teams and networks.

E.g, you might share 1. Context: Targets Explained, pg. 10 with senior management, or 4. Further guidance: Shipping, pg. 51 with registrars. Or if you are a smaller team you could consider sharing this resource with local organisations, with the aim of coming together for a meeting to share findings and create a collective action plan.

If you are an individual, who isn’t sure if you’ll get buy-in from across your team, you might want to skip to 5. Addressing the obstacles: Organisational buy-in, pg. 62 for more advice on this point.
A movement starts to succeed when it bleeds into the art and culture of the day.
1 Context
The latest reports from the UN's Intergovernmental Panel on Climate Change (IPCC), offer us a stark warning about the future of our planet as global CO₂e emissions continue to rise and climate systems begin to hit harder.

KEY FINDINGS FROM THE LATEST IPCC REPORTS

1. It has been proved beyond all doubt that human activities are responsible for warming of the atmosphere, ocean and land.

2. The rate at which global temperature has increased since 1850 is unprecedented. At no point in the previous 100 millennia has the planet been as warm as it is now.

3. This trend will continue even if we were to cease all polluting activities tomorrow. With so much CO₂e already in the atmosphere temperatures will continue to rise.

4. There is already abundant evidence of global warming impacting weather systems across the world.

5. If global warming isn't limited to 1.5C, severe impacts will be felt by billions of people on the planet in our lifetime.

6. It's not too late to push the world onto a safer path and avoid the worst climate scenarios, if we act now with urgency and ambition.

IN THE CONTEXT OF THE ART SECTOR

The art world's emissions are disproportionately high given the size of the sector, particularly when it comes to cultural organisations in the Global North. This means museums and galleries have a strong responsibility to meet (at the very least, or exceed a goal to reduce emissions by 50% by 2030 (from a 2018/19 baseline)).

Visual arts organisations also have the potential for a disproportionately positive impact, thanks to their large public platform and outsized influence on public debate. By showcasing practical climate solutions and spotlighting artworks, voices and stories that highlight the reality of the climate emergency, arts and culture organisations can use their powerful and privileged position to help tackle the crisis. However, to do this with credibility they need to show they are also tackling their own emissions in line with climate science.

Many visual arts organisations have stated values and missions that relate to the preservation, promotion and accessibility of arts and culture. There is no greater threat to global cultures than the climate crisis, and so tackling this issue should sit firmly within the existing mission of most cultural institutions.

Many arts institutions have already acknowledged these issues by setting carbon reduction goals and/or ‘net zero’ targets. While this document is laid out as a step-by-step guide for those tackling these issues for the first time, it will also be useful for those aiming to meet (and potentially review/improve) existing targets.
In April 2021, UK-based environmental non-profit organisation Julie’s Bicycle (JB), were commissioned by AKO foundation to produce a report on the visual art sector’s climate impact. The report estimated that the art world’s total global carbon footprint is in the order of 70 million tonnes CO₂e per annum, including emissions from visitors travelling to museums and galleries. The report highlighted buildings and transport as significant areas in which the visual arts sector needs to reduce emissions, and noted that the visual arts will need to reduce its overall emissions by at least half by 2030 to align with the global goal of limiting warming to 1.5° C.
Role of GCC

Gallery Climate Coalition is a charity set up to provide guidance on environmental sustainability, specifically for the visual art sector. Our primary goal is to facilitate decarbonisation and the adoption of low-waste practices in a way that allows the art world to continue to thrive. Membership is free and open to anyone willing to take action in line with the principles of environmental responsibility.

THE COALITION

When GCC originally launched in 2020, our intention was to focus on London’s commercial galleries, as this was the community the initiative grew out of. But soon after launching it became clear there was demand for the information and resources we were providing beyond London and its commercial galleries. Responding to this interest, GCC has evolved and redefined its scope and mission and is now set up to serve any organisation or individual working across the visual arts globally. The coalition now has over 800 members from more than 40 countries, including artists, non-profits & institutions, as well as commercial galleries and art-sector businesses. By aligning this international cross-sector network to the same targets and strategies we can ensure that everyone in our professional community is working together in the transition to low-impact operations.

OUR ADVOCACY

Increasingly, GCC is taking on the role of conduit between the sector’s stakeholders: encouraging action, collaboration, innovation and standardisation, which we achieve through lobbying, partnerships and advocacy. With an enormous challenge ahead and limited time to act, we believe this is the only way forward.

"Action, collaboration and innovation is the only way forward."
THE PARIS AGREEMENT AND THE 2030 GOAL

In 2015, 196 governments came together in Paris and signed the Paris Agreement, a legally-binding international treaty on climate change. They pledged to limit global heating to well below 2 degrees, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.

This is important, because – according to climate scientists – 1.5 degrees is a hugely dangerous threshold that the world cannot afford to cross.

In 2018, the climate scientists on the Intergovernmental Panel on Climate Change (IPCC) produced a landmark report on what it would take to meet this target and limit global temperature rise to 1.5 degrees. They concluded that the world needed to reduce its greenhouse gas emissions by at least 45% by 2030, compared with 2010 levels.

WHAT ARE GCC'S CLIMATE TARGETS?

We are asking all GCC members to sign up to at least a 50% CO₂e emissions reduction by 2030, based on 2018/2019 levels.

A 45% cut from 2010 emission levels equates to roughly a 50% cut from 2018/19 emission levels, which is why the GCC has set a minimum target of 50% emissions reductions for our members by 2030.

However, in consideration of the urgency of the crisis and the slow pace of global progress since 2018, we strongly encourage all our members to go further than this – especially as most of our members are based in countries that bear a higher responsibility for the climate crisis, and so should be reducing their emissions at a faster rate than the minimum requirement.

We’re aware that many of our members are engaging with this issue for the first time, and for them, 50% by 2030 will feel like an achievable starting point. However, other GCC members – especially those in the non-profit and public sectors – have already started taking action, and many have already set more ambitious targets (or fall under the aegis of local governments or universities that have set more ambitious targets). Our hope is that if our more engaged and experienced members declare more ambitious 2030 targets (e.g., 70% - 90% emissions reductions), it will encourage the rest of our membership to keep upgrading their targets and move further and faster as new opportunities for decarbonisation become available over the next seven years.

TARGET 2

REDUCTION IN CARBON EMISSIONS FROM 18/19 LEVELS ACROSS SECTOR

50%

NEAR-ZERO* WASTE OPERATIONS ACHIEVED BY 2030 WHERE FACILITIES ALLOW

*Near-zero waste is defined by GCC as ‘As close to nothing as possible going to landfill or incinerator, in the regions where facilities permit’.
What should we include in our footprint?

The point of calculating a carbon footprint is to figure out the best opportunities to take action, and to track progress towards that goal. That means you don’t need to measure absolutely everything in perfect detail – instead, we recommend focusing on the largest parts of your footprint where you can make the biggest difference, especially if you have limited time and resources to spend on this work.

Building energy, staff travel, and art transport are three of the largest sources of emissions in the visual arts sector. They are also areas that aren’t too challenging to measure and where arts organisations have a number of options for immediate action. These should certainly be included in any carbon footprint, and can be calculated using GCC’s free online carbon calculator.

Packaging and printing are areas that typically have a lower carbon footprint than energy, travel and art freight, but should still be included if possible, especially as they link to other important environmental issues (such as the plastic waste crisis and the unsustainable use of material resources), separate from their climate impacts. Their carbon footprint can be estimated using the GCC free online calculator.

Retail and catering procurement, staff commuting and visitor travel tend to be more relevant to GCC’s non-profit and public members than our commercial members, and have not yet been incorporated into GCC’s carbon calculator as they are more complex to measure. We are working on new tools to help arts organisations estimate these emissions more easily, but until then we appreciate it may be difficult to include them in your carbon footprint. This doesn’t mean that you should ignore them though – see the section Further Guidance.

Other activities (such as gallery waste, water use, exhibition materials, and the transport and delivery of non-art materials) are likely to only add a small amount to your carbon footprint compared to the larger items above. If you have limited time and capacity, we suggest leaving these elements out of your carbon footprint initially. (But do be transparent about doing so).

We are working on updating the GCC carbon calculator to help arts organisations calculate the footprint of these elements more easily in future; however, if you want to include them now we recommend using Julie’s Bicycle’s carbon tools. In the meantime, arts organisations should still be acting to minimise their gallery waste and exhibition material, in order to meet GCC’s near zero waste by 2030 target.
Five things to know before you start

1. **YOU CAN BE MORE AMBITIOUS THAN YOU THINK**
   Things are changing fast. Renewable technology and sustainable transport options are rapidly becoming cheaper and more widespread, and this will accelerate over the coming years. Organisations in every sector of society are engaging with the climate crisis and becoming increasingly open to changes and solutions that would have seemed unthinkable a few years ago. It is vital to keep challenging your own assumptions about what is possible.

2. **YOU DON’T NEED TO KNOW ALL THE ANSWERS YET, BUT MILESTONES CAN BE HELPFUL**
   The rapid pace of change right now – in technology, society and the climate – mean that none of us knows what the world will be like in 2030. This means that we are setting targets that we don’t know exactly how we will meet – and that’s OK. However, we can make reasonable plans for 2025/26. So, it can be helpful to complement your long-term targets with specific goals and action plans focusing on the short-term, and the real changes you can make now.

3. **YOU DON’T NEED TO DO IT ALONE**
   Many cultural organisations are teaming up for joint projects to tackle these issues together. By working in tandem, pooling resources and sharing ideas, multiple organisations can make faster and more effective progress. GCC is here to help too! If you have questions, or are hitting roadblocks – get in touch. We may not have all the answers immediately, but the role of the coalition is to collectively seek solutions to our common challenges.

4. **EVEN THE MOST DIFFICULT BARRIERS CAN BE BROKEN**
   Some of the challenges in the low-carbon transition are common to many sectors. Others are specific to the visual arts, particularly in relation to regulations and standards. None of these should be seen as insurmountable barriers, however. The momentum behind climate action is building all the time, and there are always creative ways to do things within the rules. Plus, laws and regulations are often changed when no longer fit for purpose.

5. **THERE’S LOADS OF HELP AND ADVICE OUT THERE**
   Many organisations – including Julie’s Bicycle and Museums for Climate Action – have produced helpful guidance on environmental responsibility. This document attempts to provide an overview, as well as a step-by-step guide to creating a decarbonisation action plan. Where relevant, we will signpost other resources for more detailed information on many of the topics we touch on.
The Guggenheim Bilbao invested €1,300,000 in upgrades to LED lighting. Whilst the initial investment was large, the yearly energy savings of €288,000 will mean they break even within 4 and a half years whilst reducing their carbon output by 384 tCO₂e annually.
Decarbonisationstrategy
We need to take urgent action.

The following pages contain a 5-step decarbonisation strategy that has been developed by GCC. This has been designed for those who are unsure where and how to take the first step. As with any initiative, getting started is often the hardest part. But with the climate crisis unfolding around us, we don't have time to delay.

Even for those who may be deeper into this journey, we hope the advice in this section will spark some new ideas, as well as offering support if you are facing barriers to implementation.

Of course, decarbonisation isn’t the whole story. The climate crisis is only one of a number of interlinked environmental crises we are facing, such as biodiversity loss and the buildup of plastics and other toxins in our air, land and water. But taking action on the climate crisis (and aiming for zero waste operations) should, if done properly, help make progress in these other areas too, while tackling the most urgent issue we all currently face.

Therefore, GCC’s position is that the urgency and immediacy of the climate crisis makes it our primary focus when helping arts organisations develop environmental action plans. However, it’s important not to forget the other interrelated crises that are facing our society and the living planet. See Waste strategy for more advice on moving towards a circular economy to transform our relationship with waste. We hope to do further work on how the visual arts can better support the solutions to the other environmental crises we face, from boosting biodiversity in outdoor arts spaces to reducing the toxins in art materials.

As always, GCC is here to help. If you have questions or concerns, or would like to share examples of positive action you’ve been taking, we are always happy to hear from you.

// Getting started is the hardest part, but we don't have time to delay

5 Steps
Taking action on carbon

• STEP 1 APPOINT A GREEN TEAM OR AMBASSADOR

• STEP 2 MEASURE EMISSIONS

• STEP 3 ANALYSE YOUR DATA

• STEP 4 SET REDUCTION TARGETS

• STEP 5 IMPLEMENT CHANGES
Establishing an internal team dedicated to environmental responsibility will embed a strong culture of sustainability within your organisation. This is a key step in normalising environmental considerations at all stages of decision-making. Depending on the scale, complexity and structure of your organisation, the shape and size of your Green Team will vary. Below are some key things to consider.

Green Teams should have input from all parts of the organisation, including individuals who hold key decision-making powers. This may include: a Registrar, Technician, Curator, Gallery/Studio/Facilities Manager, Financial Director, HR, Director.

Based on the structure of your organisation, it’s worth considering how this team will feed into senior management and/or board level decision making. Consider how your green team communicates with the wider organisation, and how does the wider organisation, in turn, feed into the green team. This could involve quarterly internal newsletters, or open ‘drop-in’ meetings to encourage those outside of the team to get involved.

**WE RECOMMEND THAT GREEN TEAMS:**
1. Establish a regular meeting time – ideally, at least once a month.
2. Assign a representative to be the GCC point contact. This person will be responsible for receiving and disseminating communications from GCC across the team.
3. Complete a baseline carbon report.
4. Build a bespoke Decarbonisation Action Plan. An example of this can be found on page 24.
5. Set targets and review them regularly.
6. Share successes and celebrate wins – both within the organisation and with GCC.

**EMBEDDING A CULTURE OF ENVIRONMENTAL RESPONSIBILITY**

Having a Green Team dedicated to identifying challenges and making changes across an organisation won’t solve every problem. Sustainability requires that everyone becomes involved, so embedding a culture of environmental responsibility beyond your Green Team is crucial. Below are some ideas on how to make sure that environmental considerations aren’t siloed within a single team:

Could you consider appointing an environmental voice to the board, to ensure that the planet is considered at every key decision-making moment? (As an example, this was recently done by cosmetics brand, Faith in Nature).

Include environmental responsibility criteria on all job descriptions, e.g. ‘demonstrable commitment to environmental sustainability’.

Consider how your commitment to sustainability is shared with new employees. Could sustainability training be integrated into the onboarding process? This could be as simple as a 30 minute sit down with the Green Team leader to share your organisation’s environmental goals, targets, and values.
Sometimes, artworkers don’t feel ‘qualified’ to speak about climate-related issues within their organisations. We’ve found that some members feel more confident after undertaking training in this area, such as Carbon Literacy training.

GCC recommends that organisations seek relevant training and encourages members to take part in Carbon Literacy training or equivalent to help build a level of confidence across the team. However – don’t let this delay you from taking action. Sourcing funds for, and setting up organisation-wide training should not act as a delaying tactic. No one is an expert, and all of us are learning. GCC produced this guide so that anyone, within any organisation, whatever their level of understanding, can begin taking action today.

GCC is here to support you in any way that we can. If you have questions, concerns, or are hitting roadblocks - get in touch. We may not have all the answers immediately, but the role of the coalition is to collectively seek solutions to our common challenges.
In order to set a 2030 target, we all need a starting point. That’s why we ask GCC members to calculate their 2019 annual carbon footprint. That figure will act as your starting point.

Measuring the carbon emissions of your operations is one of the most important steps you can take as an organisation. This will help you to be strategic with your climate action, based on the areas which have the most impact. We suggest 2019 as it’s a pre-COVID year that lines up clearly with the IPCC’s global carbon reduction targets.

YOU CAN’T MANAGE WHAT YOU HAVEN’T MEASURED!
GCC asks members to make carbon reporting an annual task, similar to tax returns or general financial record keeping.

By submitting regular annual data, you can effectively track the impact of implementing changes as your emissions reduce, and you move towards your reductions target.

If you are new to GCC, and gathering data for 2019 is inappropriate (e.g. if you were founded post-2019, or have grown rapidly in the last few years), we suggest you set a target against a 2021 baseline. Reducing emissions by 50% from a 2021 figure will still keep you broadly in line with global climate targets for 1.5 degrees.

GCC CARBON CALCULATOR
We’re aware that many of our members do not have the resources to carry out a detailed carbon audit. This is why we developed the user-friendly GCC online carbon calculator.

This online tool focuses on the most significant areas of emissions in the visual arts and where art organisations can immediately start taking action (shipping, flights and building energy), providing an easy-to-use method for measuring these emissions – as well as making a rough estimate of some of the smaller parts of your carbon footprint too. To find out more about what’s included, and what’s not, see our Calculator User Guide.

All data gathered via the calculator helps us develop more effective tools and strategies to tackle our emissions. For support in using the calculator, please see GCC’s Carbon Calculator User Guide, Data Collection Template and Video Tutorial.

GCC is currently working on updating the calculator to better serve our members. If you have suggestions or are interested in feeding into the redevelopment of the tool, we host regular feedback sessions. To register your interest in attending a feedback session, please email info@galleryclimatecoalition.org.
FOCUS ON WHAT YOU CAN MEASURE

As explained in the Targets section there are some footprint elements (such as retail and catering purchases) that are trickier to measure and aren’t included in the GCC calculator, yet. There are also areas of ‘shared responsibility’ such as visitor travel and staff commuting, that we’d recommend reporting on separately from your core operational footprint. We’re working on tools to hopefully make these things easier to calculate in the future, but in the meantime we’d suggest getting started on the things you can measure, and keep an eye out for guidance from GCC on how to assess and set targets against these trickier areas in the near future.

We recommend that larger organisations, those with more complex operations or that have the means to do so, should either use Julie’s Bicycle’s calculator or consult with external carbon auditors. Julie’s Bicycle’s tool is more detailed than the GCC calculator, and includes functions to measure water consumption, waste generation and recycling, and production materials.
Once you have calculated your carbon footprint, there are a series of questions for you or your Green Team or Green Ambassador to consider.

**WHAT ARE THE LARGEST PARTS OF YOUR CARBON FOOTPRINT?**
Understanding which activities create the largest climate impact allows you to prioritise the actions that will make the biggest difference.

**WHERE ARE THE MAIN OPPORTUNITIES FOR CHANGE?**
As soon as you dig deeper into your data, you will quickly spot which specific actions, events and time periods make the biggest contribution to your emissions. Perhaps three large exhibitions together accounted for half of your shipping footprint? Maybe a quarter of your air travel footprint came from a few long distance journeys to a specific destination? Which months of the year was your energy use highest? (This is useful because it will indicate whether heating or cooling creates the highest energy demand in your building or buildings or whether particular exhibitions had an especially high or low energy demand).

**HOW DO YOUR RESULTS COMPARE WITH OTHERS IN THE GCC NETWORK?**
We are asking all GCC members to share their results with the rest of the network, as this allows us to learn from each other and encourages others to measure their footprint too. You can see published results here.

**WHERE ARE THE ROADBLOCKS AND HOW CAN WE TACKLE THESE?**
Each organisation will experience different obstacles to decarbonisation. Take stock and consider what roadblocks will be specific to your organisation, then consider what can be done to work through these challenges. We’ve put together a section on addressing obstacles on page 56, based on the conversations we’ve had with our membership.

If there is something you are struggling with that isn’t covered here, don’t hesitate to get in contact with us at GCC. We also recommend reaching out to fellow GCC members. It is through collaboration that we can find solutions to our shared challenges.
It can be hard to plan for a target that feels far into the future. This is why we recommend setting an interim target at a mid-way point in your journey to 2030.

Whilst it may be possible to sketch out a pathway to achieving reductions, a certain leap of faith is required. We can’t know exactly what will happen over the next few years: what new challenges may arise, or opportunities might appear. However, we can’t allow uncertainty to prevent us from setting targets and taking action.

If in doubt, a 30% target by 2025 is a good starting point to aim for (depending on where you are starting, 2026 or 2027 could be a good mid-way point too). It will either put you ahead of the game for a 50% target, or act as a launchpad from which you can accelerate your efforts to a 70% reduction by 2030.
Once you have calculated your emissions and set your targets, it’s time to start taking action and implementing changes.

Sit down with your Green Team, work from your list of priorities and potential actions, and start allocating time and resources to creating change. This might involve bringing carbon reduction into your existing processes (e.g. ensuring that planning discussions about future exhibitions and events include conversations about flights and air freight from the outset), or starting new projects (e.g. arranging energy audits for your buildings).

The most important thing is not to be overwhelmed by the task at hand, as this can lead to inaction.

Choose somewhere to make a start, and get going. Aim for a mix of actions that will create short-term reductions, and those that lay the foundations for longer-term change. Make sure you’re not neglecting the largest parts of your footprint, and be careful not to get bogged down in discussions about minor sources of emissions. Whilst of course it is good to avoid plastic water bottles at your next event, make sure you’re not spending too long debating that, compared to tackling how to cut your air freight.

If you have questions, concerns, or are hitting roadblocks – get in touch. We may not have all the answers immediately, but the role of the coalition is to collectively seek solutions to our common challenges.
Supporting your decarbonisation strategy

Build a bespoke action plan

Once you’ve completed your Carbon Report and analysed the findings, sit down with your Green Team and work out your list of priorities and actions based on your largest areas of emissions.

At the start of this process, we’d advise sitting down and mapping out how this work might fit into the next 6 – 12 months of your schedule, and when and how progress will be reviewed.

GCC recommends producing an annual strategy, setting monthly or quarterly review points (depending on the action and how much time it will take to implement), and reviewing this year on year, alongside your carbon reports and budget reviews.

Some members have found it helpful to allocate a responsible member of staff or department to be responsible for implementing each action. The following pages give an example of how GCC Member, Nottingham Contemporary laid out their action plan.
<table>
<thead>
<tr>
<th>EMISSIONS AREA</th>
<th>PRIORITIES</th>
<th>ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY</td>
<td>Conduct annual energy audit in order to identify and reduce inefficiencies, and track reductions.</td>
<td>Investigate costs of BMS system upgrade for integrated metering, which would provide more data on how we’re consuming energy (Insert assigned department or staff member)</td>
</tr>
<tr>
<td></td>
<td>Reduce net energy consumption by investing in onsite power generation</td>
<td>Investigate HVAC regulations and loan agreement stipulations (Insert assigned department or staff member)</td>
</tr>
<tr>
<td>PROGRAMME SHIPPING AND TRAVEL</td>
<td>Consider location of artist/artworks and environmental impact of travel/shipping as part of curatorial decision-making processes, involving artists, lenders and relevant parties at an early stage in project timeline</td>
<td>Continue to seek necessary investment (£80–100k) for installation of solar panels – anticipate 11–12% reduction in energy consumption (Insert assigned department or staff member)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use networks to collectively lobby for proper capital investment in buildings (Insert assigned department or staff member)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commit to 2 projects p/a with UK-only shipping and 2 projects p/a with UK-based artists (Insert assigned department or staff member)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Invite non-UK contributors to deliver via Zoom/live-stream, avoiding international travel (Insert assigned department or staff member)</td>
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<tr>
<td></td>
<td></td>
<td>When possible, collaborate with other organisations or piggy-back on artists being in the UK for other reasons (Insert assigned department or staff member)</td>
</tr>
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</table>
### Supporting your decarbonisation strategy

#### Example action plan (example)

<table>
<thead>
<tr>
<th>EMISSIONS AREA</th>
<th>PRIORITIES</th>
<th>ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>This should be prioritised in order of your emission impacts. E.g. Their 2019 Carbon report showed that building energy use caused the most emissions.</td>
<td>This should clearly communicate what the aims are for your organisation. Try to stick to 1 or 2 objectives for each emissions area for clarity. Use GCC's Best Practice Guidelines &amp; Effective Actions to help guide your organisation's objectives.</td>
<td>These should include a mixture of short-term 'easy wins' and longer-term investments in change. It's important to assign each action to a department, or even better an assigned staff member who will be responsible for reporting back.</td>
</tr>
</tbody>
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#### SHIPPING AND TRANSPORT

**PRIORITY 3**

Plan shipping schedules well in advance, prioritising consolidated road freight, sea freight and other low emissions options (hybrid or electric). Use zero emissions couriers for short journeys.

**PRIORITY 4**

Keep emissions records as part of registrarial duties for each show.

#### STAFF TRAVEL

**PRIORITY 5**

Re-consider what is ‘essential’. Prioritise train and road travel over air, and consolidate meetings/research to make trips more efficient.

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- **Speak to insurers about covering sea freight** (Insert assigned department or staff member)
- **Communicate sustainability targets to shippers** (Insert assigned department or staff member)
- **Research zero emissions couriers in the UK** (Insert assigned department or staff member)
- **Research local electric taxi companies** (Insert assigned department or staff member)
- **Commit to train-first travel policy**, using tools such as Seat61 (Insert assigned department or staff member)
- **If unavoidable, quota of 2 short-haul and 1 overseas flight p/a** (Insert assigned department or staff member)
Once you have your mid-way and 2030 targets, it might be useful to set specific year-on-year milestones as you work towards these goals. You could do this by looking at the total tonnes of carbon emitted and then working out what level of reduction will be needed on average per year to reach that total goal. This is your ‘Carbon Budget’.

You can then look at your flights, shipping, energy use, etc. and think about the actions you need to take in each of these areas to reach the annual reduction you need.

The process is comparable to financial budgeting. Set yourself an annual total that should not be exceeded, then plan your activities accordingly.

This level of detail might not be necessary for all organisations – particularly smaller ones – but it can be a helpful way to make the sometimes abstract notion of emissions more approachable.

Larger organisations might want to break their carbon budget down between departments, locations, projects and operational categories.

Of course, our progress towards our mid-way and our 2030 targets is unlikely to be linear in real life. Some parts of the footprint might turn out to be easier to decarbonise than expected, whilst others might be harder. The COVID pandemic caused a major drop in most organisations’ emissions, which has bounced back at varied rates and in different ways in different locations and for different activities, and the longer term impacts of this are not yet fully clear.

Annual carbon allocations or carbon budgets won’t perfectly capture this, but they are a useful tool for driving change through an organisation.

See the FAQ section for more advice on setting annual carbon targets or budgets for different-sized organisations.

The process is comparable to financial budgeting.

Set yourself an annual total that should not be exceeded, then plan your activities accordingly.
Supporting your decarbonisation strategy
Set up a Strategic Climate Fund (SCF)

As has been widely agreed by environmental specialists, conventional ‘carbon offsetting’ is not the fastest, fairest or most effective way to tackle the climate crisis. Therefore, GCC does not recommend the use of carbon offsetting. Our reasons for this are outlined here.

However, there is still an urgent need for donations to frontline initiatives that protect the environment and biodiversity, as well as investment in effective decarbonisation projects.

Reducing your own emissions won’t be enough to address the climate emergency. We must decarbonise ourselves and support effective external climate initiatives.

As GCC membership is largely in the Global North, we have a responsibility to not simply reduce our own emissions but to acknowledge that the wealth, infrastructure and security that underpins our businesses and institutions has been built on hundreds of years of historical carbon pollution and colonialism. This gives us a clear responsibility to use our resources to accelerate wider change and support frontline initiatives, especially in the Global South.

Tackling all this into account, GCC has developed “Strategic Climate Funds” (SCFs), which is an ethical climate financing policy for the visual arts sector.

HOW DO SCFS WORK?

Arts organisations calculate their annual carbon footprint, set targets, create action plans and follow best practice guidelines in order to reduce their environmental impacts as much as possible.

They then either use the size of their emissions footprint (estimated via GCC’s Carbon Calculator) or set a percentage of annual revenue in order to calculate how much money to set aside each year into an SCF.

This fund can then be spent in any and all of the following ways, depending on the specific needs and preferences of the organisation:

1. Investing in carbon reduction measures within their organisation that would otherwise be unaffordable.
2. Supporting initiatives to urgently reduce the art world’s carbon footprint.
3. Supporting frontline projects and campaigns that will make a strategic difference to the climate crisis on the ground right now.

Important: This policy does not permit users to claim carbon neutrality or net-zero emissions as the result of making donations. The SCF process won’t make emissions disappear, but it is a fairer way to finance effective environmental projects and will help accelerate wider systemic change.

FINANCING STRATEGIC CLIMATE FUNDS

There are a few options for financing a Strategic Climate Fund. If we all commit to donating annually in line with any of these approaches, it would add up to a significant amount of funds going into world-changing projects.

Calculating how much to spend on SCFs will depend on what type of organisation you are. GCC recommends members pay into their SCF by either:

- Allocating a percentage of their annual revenue (recommended minimum 1-2%).
- Multiplying their annual CO₂e emissions by a figure between £50 – £100 per tonne to find a fund total.
- Or by fundraising specifically for their SCF at a level parallel to either of these calculations.
- Higher earning / higher polluting organisations should choose a figure towards the top ends of these ranges.

"It’s important to note that SCFs do not permit users to claim carbon neutrality as the result of making donations"
Supporting your decarbonisation strategy

Set up a Strategic Climate Fund (SCF)

SPENDING STRATEGIC CLIMATE FUNDS
Once you have money in your fund you will then need to decide how to spend it. As outlined above, this does not necessarily mean donating to external organisations, although we do strongly encourage doing this with at least part of your SCF. We refer to these as External Donations (i). The fund can also be used for Internal Investments (ii) that can directly reduce the environmental impacts of your operations by ‘greening’ your own operations and supply chain.

I. EXTERNAL DONATIONS: GCC STRATEGIC CLIMATE FUND PARTNERS
In line with the SCF Partner Selection Criteria, we’ve chosen projects that span three major areas where urgent climate action is needed:

a. Defending and expanding forests and wetlands.
b. Shifting to climate-friendly agriculture.
c. Keeping fossil fuels in the ground.

GCC works to raise awareness and funds from within the art market to support carefully selected organisations that:

• Keep fossil fuels in the ground and greenhouse gases out of the atmosphere.
• Protect natural environments, their biodiversity and their human inhabitants.
• Respect the principles of climate justice.

Based on these criteria, GCC has identified and partnered with several organisations that we would recommend our members to donate to, these are: Rainforest Action Network, ClientEarth, Solar Aid, Art to Acres, and AgroEcology Fund. GCC is confident that all of these schemes will have a positive impact within our 2030 timeline.

II. INTERNAL INVESTMENTS: SCFS ‘GREENING’ OPERATIONS
For a truly sustainable arts sector we need cleaner, affordable alternatives for international shipping, local art transport, low-energy lighting and temperature control, packaging, display materials, printing, and international travel. Some options already exist, but others need more support. This is where strategic investments in the arts sector via SCFs can help make a difference:

• Subsidise lower-carbon purchasing options, where you might otherwise have bought a cheaper but more polluting alternative, such as switching to art supplies made from reclaimed or recycled materials.
• Subsidise lower-carbon transport options, such as taking trains for medium-range journeys.
• Upgrading/retrofitting buildings to make them more efficient.
• Switching any owned or leased vehicles for lower-carbon alternatives, e.g. cargo trikes and electric delivery vehicles.
• Installing insulation and draught-proofing.
• Installing on-site renewable energy or heat generation such as solar panels.
• Replace a gas heating system with an electric heat pump.

"Reducing emissions alone won't be enough to address the climate emergency. We must be decarbonising and funding effective climate initiatives."
Thankfully, the sustainability conversation has progressed hugely in recent years, and more and more non-profits & institutions are taking their responsibility to adapt seriously.

With more of the sector now active in this space, transparency, alignment, and communication between networks becomes increasingly important. Collaboration is key. We don’t have enough time to work in silos.

Below are some ideas to consider, to ensure we are building strong communities and networks, better supporting one another, and making sure that we aren’t doubling up on the same work:

- **Be vocal.** Utilise your networks to share news of successes and innovations – as well as struggles. You never know who might already have a solution for you.

- **Build alliances on local, national and international levels.** Is there an International Volunteer Team local to you? If not, why not start one?

- **Become a GCC member.** By being part of the GCC community you’ll be kept up to date with the latest guidance, innovations and best practices.

- **Support our campaigning.** There is power in numbers, and GCC has already seen successes in harnessing the power of the coalition to lobby for systemic change.

- **Be transparent and accountable** – we encourage members to share their reports and case studies to enable transparency across the sector.

- **Contribute to the GCC blog.** We welcome submissions from members. These can articles, success stories, illustrations, case studies, product reviews etc.
A significant part of the art sector’s potential for positive change lies in who we choose to work with. By choosing to work with suppliers, banks, sponsors and other partners who prioritise environmental responsibility, we can make impacts that reverberate beyond the industry.

As an example, we have already seen art shipping companies take the need for emissions reductions more seriously in response to GCC’s Sustainable Shipping Campaign.

As part of any procurement process, require that your key suppliers demonstrate environmental best practices. This could involve:

- Ensuring that the shippers you work with are aligned with GCC’s Sustainable Shipping Campaign.
- Reviewing the banks, funders and partners you work with and ensuring that they are aligned with GCC’s Finance guidelines.
- Speak to your waste management company about your waste reduction goals and ask the questions as laid out in GCC’s Waste guidelines. GCC London have put together an email template to support this. (Log in as a member to view the template).
Hope without action is meaningless
3 Waste strategy

- Set a ‘near-zero’ waste target
- Complete a waste audit
- Review packaging practices
- Implement the 5 Rs
- Move towards circularity
Waste is one of the most visible aspects of the growing ecological crisis. Material waste (particularly plastic) is a separate, though related, environmental emergency from carbon emissions. However, it poses no less significant threat to long-term human survival on this planet.

Because of this, we ask that all GCC members commit to achieving a near zero-waste* target by 2030.

The GCC Waste & Materials research group have produced extensive best practice guidelines on packaging and waste to support members in reaching this target.

We’ve also commissioned research into what a circular economic model would look like in the visual arts.

Across the following pages, we’ve broken down our guidance into 5 steps to support members in building their own strategy to reach near-zero waste by 2030.
5 Steps
Taking action on waste

We are asking all GCC members to commit to reaching near-zero waste* operations by 2030, where facilities allow.

The reason for this target being ‘near-zero’, rather than simply ‘zero’, is that the availability of waste management infrastructure and systems is dependent on where you are based. Because our ability to successfully ‘recycle’ is somewhat beyond our control, we prefer to focus on the reduction of waste from the outset.

Even if recycling is a feasible option, it is not considered the best end-of-life option for most materials. The waste hierarchy (also known as the 5 R’s), is the go-to tool when building a waste strategy.

The 5 R’s situates recycling as the absolute last resort at the bottom of the hierarchy.

* Near-zero waste is defined by GCC as: ‘As close to nothing as possible going to landfill or incinerator, in the regions where facilities permit’.
5 Steps  Taking action on waste

All organisations should conduct a waste audit and set an annual target for reduction. This will allow you to better understand what types of waste you produce and identify areas for improvement.

A waste audit involves reviewing the waste created, and recording and analysing the findings. Please see Ki Culture's Waste and Materials Ki Book (p. 55) for a How To Guide.

GCC will soon be publishing examples of waste audits from members. If you would like to share yours, please get in touch.

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"Waste is the thing that nobody wants to think about, nobody wants to see, nobody wants to encounter. We threw that thing away, that’s where it belongs… But it’s only by embracing waste and looking at it squarely, that you can make changes, that you can enable the shift in society that we need to see."

Justin McGuirk, Chief Curator, Design Museum
Speaking at Climate Crisis >> Art Action

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Choosing environmentally responsible packaging materials for fine art shipping often presents a dilemma.

On one hand, we should use materials that are the least damaging to the planet – for example, naturally derived from renewable resources with a low carbon footprint and/or that are durable enough for multiple reuse. On top of this, we want materials to be either curbside recyclable (e.g. can be handled by your local authority/council/state waste management or biodegradable at their end-of-life. On the other hand, ensuring the safe transport of objects is paramount and requires a case-by-case assessment).

The synthetic packaging materials we traditionally use for fine arts shipping (e.g. plastic films, polyfoams, bubble wrap, and Tyvek) have been tried and tested as packaging materials, but are manufactured with petrochemicals – meaning chemicals derived from fossil fuels through processes that are toxic to the natural environment and humans alike.

While these materials are often theoretically recyclable, this frequently does not happen due to lack of recycling infrastructure, and thus are either incinerated (producing large amounts of CO2 and toxic emissions, which contributes to air and water pollution), or sent to landfill.

Takeback programs and collection points exist for these difficult-to-recycle materials, but are regionally specific and often only accept the materials in large quantities, presenting issues of storage and feasibility.

A blanket set of recommendations for sustainable packaging, unfortunately, does not exist, however, the waste hierarchy provides guiding principles and informs best practices.

It’s important to consider the below points when making a decision about the best type of packaging available:

- What types of packaging materials are available locally?
- What is the material and fragility of the artwork? What packaging materials should be avoided? How much packaging is necessary?
- Is the artwork being shipped one way or multiple times? If multiple, harder-wearing, reusable materials are preferable. If one-way, explore naturally derived materials.
- What is the duration of transport and the likelihood of storage? This will help to determine whether bio-based materials are preferable to reusable ones.
- What are the regional waste streams available to your organisation, and what materials can be easily recycled? Speak to your waste management company for clarity on this.
5 Steps
Taking action on waste

The 5 R's are a guide for managing and reducing waste. They follow a fixed hierarchy: Refuse, Reuse, Reduce, Repurpose, Recycle.

REFUSE

- Tell suppliers not to use unnecessary packing materials. Inform them of GCC’s Banned Materials list, and ask them to use alternatives.
- Refuse single use plastics. If a synthetic material must be used, make sure it can be reused multiple times.
- Substitute synthetic packing materials for natural biodegradable products whenever possible.

REDUCE

- Redesigning crates and packaging methods that reduce the amount of packaging materials is an easy win. PACCIN provides resources on the best practices in packaging methods.
- Rethink the amount of packing materials required for safe transport.
- Set a target to half the amount of packaging you order over the next year.
- Ask framers and other suppliers to minimise their packaging, especially for short journeys.
- Use custom or appropriately sized boxes to avoid filling empty space with excessive materials.

REUSE

- Employ proper packing techniques to ensure the reuse of the materials. Take pride in using materials efficiently and sustainably.
- Maintain cleanliness to prolong the life of the synthetic packaging materials. Wipe down working surfaces before packing artworks and keep packaging materials in containers away from dust and dirt. Regularly clean storage areas.
- Refer to the Advised Tape & Materials Combinations Chart in order to extend the life of wrapping materials.
- Tyvek is a highly versatile and low impact material. With appropriate care it can be reused many times.
- Be aware which tapes are compatible with what materials to minimise damage and allow maximum reuse.
- Tyvek is two-sided. Knowing which side is which is essential for correct usage.
- Tyvek can be washed with a damp cloth.
- Label packing materials with instructions for reuse.
- Prioritise reusable fine art packing materials such as crates and pouches.
- Traditional materials such as blankets, cotton straps and glassine are reusable and low impact.
5 Steps
Taking action on waste

- Reuse exhibition furniture to the point of failure. Be aware of the items in your inventory and make plans around them. Do not purchase materials or equipment that cannot be used multiple times.

- Share equipment, furniture and materials with other organisations to avoid bringing new objects into existence.

**REPURPOSE**
- Start a ‘scraps bin’ for material off cuts.
- Store received materials and adapt for future use.
- Repurpose art packaging materials for regular packaging needs, such as this tabbing technique using cardboard.
- Repurpose cardboard into softpacks for framed artworks.
- Turn Tyvek and foam scraps into support cushions for crate padding.
- Share materials that are no longer suitable for art packing with studios, local schools or community centres, or post materials on material-sharing platforms, such as BARDER.art.

- Repair, modify and adapt existing exhibition furniture rather than sending them to landfill.

**RECYCLE**
- Recycling isn’t as commonplace as one may think. Most municipal recycling facilities are not equipped to sort different polymer groups and often incinerate plastics instead of recycling them.

- Plastic bags, films, and wraps are not kerbside recyclable because they jam the machinery at recycling facilities. Synthetic foams and Tyvek are also not typically kerbside recyclable. However, various recycling programs are available for these materials, depending on location.

- Refer to the GCC Waste resource or your regional GCC sub-site for more information on recycling programmes.

**5 Steps**

**STEP 1**
SET A NEAR ZERO WASTE TARGET

**STEP 2**
COMPLETE A WASTE AUDIT

**STEP 3**
REVIEW PACKAGING PRACTICES

**STEP 4**
IMPLEMENT THE 5 Rs

**STEP 5**
MOVE TOWARDS CIRCULARITY
Three Approaches to Waste

The ultimate solution to the waste problem is a circular economy. Sustainability is not possible unless we change the way we consume.

The art sector has a problem with packaging consumption and disposal. To solve this issue new systems based on innovation, clearly defined responsibilities, and circularity are urgently needed.

Circularity is a new and quickly evolving field. In the next few years there will be a significant shift in how materials are consumed which means that whoever introduces packaging materials into the system would remain responsible for them throughout their lifecycle. Until these systems are widely implemented at a legislative level, GCC advises members to:

- Innovate and support the development of truly sustainable materials so that all products used are reusable, recyclable or compostable.
- Circulate materials so that they remain within the system as long as possible.
- Materials that cannot be eliminated or reused must be collected, sorted, recycled or composted after use. Improving and scaling these systems is a key challenge to achieving a Circular Economy.

In our current economy, we take materials from the Earth, make products from them, and eventually throw them away as waste – the process is linear. In a circular economy, by contrast, we stop waste being produced in the first place.

Ellen Macarthur Foundation

5 Steps
Taking action on waste

- **STEP 1** SET A NEAR ZERO WASTE TARGET
- **STEP 2** COMPLETE A WASTE AUDIT
- **STEP 3** REVIEW PACKAGING PRACTICES
- **STEP 4** IMPLEMENT THE 5 Rs
- **STEP 5** MOVE TOWARDS CIRCULARITY
Further guidance
We urgently need to make buildings environmentally responsible. That may be a challenge financially, but it’s not hard to work out what each building needs, put in hand easy wins, and plan for more major works.

**THE FOUR PRIORITIES FOR ENVIRONMENTALLY RESPONSIBLE BUILDINGS**

**Be Lean.** The greatest impact comes from making a building need less energy to cool and heat it. That means insulating roofs and walls, double-glazing windows, and protecting entrances with draft lobbies, so the building loses less heat.

**Be Clean.** The next priority is to go through everything in the building that uses energy: heating, cooling and ventilation, lighting, lifts, catering equipment etc. Over time, all will need replacing with new, more efficient equipment. In the short term, you can reduce how much energy the building uses with more advanced controls that switch off lights and heating when rooms are empty and turns down heating and aircon.

**Be Green.** The third – and only third – most important action is to find opportunities for generating renewable energy through the building itself, such as Photovoltaic cells or heat pumps.

**Support Biodiversity.** Do all you can to support biodiversity with new planting, and reduce how much water you waste.

**YOU CAN’T DO EVERYTHING AT ONCE.**

If you rent your building, it may not be down to you to carry out major building works at all. As you list all of the relevant upgrades, the essential thing is to divide them into categories.

‘Easy Wins’ might include cheap insulation in lofts, or putting thermostats on radiators so they’re hot less frequently.

‘Maintenance works’ are the sort of improvements you can put into an annual maintenance budget.

‘Capital Projects’ will only apply if you own the building, or operate it on a long lease. They might include re-roofing with better insulation, replacing boilers, or fitting PVs. Such projects will be expensive, and will probably need planning, listed building or landlord’s consents.

**TRY THE ‘HOME SURVEY’ TOOL**

The Arts Green Book contains a ‘Home Survey tool’. You fill in simple details about your building, and it generates an initial sustainability plan. The plan will suggest what’s likely to be appropriate for your building. The suggestions will be listed in order of impact so you know you’re getting the best outcome for your investment. In times of increasing energy costs, that also means savings for your organisation.

**EFFECTIVE ACTIONS**

- Carry out a ‘home survey’.
- Draught-proofing windows and doors is a relatively low-cost way of reducing energy loss.
- Install smart heating controls, so you’re only heating spaces while they are being actively used.
- Install movement detectors and daylight sensors on your lighting, so you’re only lighting spaces when needed.
- Put hot water flow restrictors on hot taps.
- Switch lighting to LED.
- Control ventilation of large spaces with carbon monoxide detectors, so the ventilation only comes on when required.
- If you have a Building Management System, get some training to make sure you’re using it as effectively as possible. Upgrade it if you can.
- Install insulation on hot water pipework.
- Fit draught lobbies or heat curtains on all entrances.
Climate control

For organisations with HVAC systems, Climate Control is usually the most carbon-intensive aspect of their operations. With rising energy costs across much of the world, many will also be painfully aware of the financial costs of these systems too.

HISTORY OF CLIMATE CONTROL
Climate-controlled environments are a relatively new concept. Until the 20th Century, artworks were stored and hung in unheated spaces. By the mid-20th Century, temperature and humidity controls became standardised after the advent of the HVAC system. This technology inspired conservators to consider how climate impacts materials, and researchers at the National Gallery, London published guidelines offering advice on protecting their collection. This included ideal temperature and relative humidity settings for paintings, based on the capacity of the HVAC technology and London’s variable climate.

The research caught on and these guidelines were widely adopted: being applied across the world – from Australia to Argentina, despite obvious climatic differences (not to mention different types of collections and historical conditions).

In the last 20 years, cultural organisations have begun questioning the logic behind implementing these ‘standards’. After much research, we now have the scientific understanding to know that collections don’t require such strict conditions to keep them safe.

ICCC
In November 2022 Ki Culture and GCC hosted the first International Climate Control Conference. Across 24 hours, key voices from across the world joined together online to unpack the realities, roadblocks and obstacles to change.

THE KEY TAKEAWAYS:
Change is possible!
Not only is change possible, but it’s already happening. We’re seeing leading institutions already updating their climate control ranges and saving large amounts of money, energy, and carbon.

Terminology.
There is a lack of clarity between ‘standards’ and ‘guidelines’. Many of the ‘standards’ that are used today were actually intended to be ‘guidelines’. There is a key difference here – guidelines should be seen as advice, rather than specific and strict numbers to follow. Guidelines often are not a set of numbers, but rather methodologies for arriving at best practice, based on the type of collection, geographic location and historical conditions.

We also often talk about ‘relaxing’ or ‘increasing’ ranges – really this should be described as ‘upgrading’ or ‘upgrading’ your climate control, to better reflect professional practice. It is not just about increasing ranges to lower carbon emissions and energy consumption, updating climate control conditions takes into account an object’s specific requirements alongside considerations of its environment.

Tailor your conditions
The real ‘best practice’ is implementing individual and tailored conditions, designed for the specific collection and the environment of the local area, with the use of microclimates for sensitive objects.

Collaboration is key.
Change can feel challenging – especially if you are doing it on your own! Systemic problems require collaborative solutions. We must work together – across departments and across the world.

We are all on the same page.
By bringing the key stakeholders together, from insurers to registrars to museum directors, the ICCC proved that everyone is willing to make a change. Sometimes it’s just about starting the conversation!

CASE STUDIES
The Rijksmuseum has saved 10% on its total energy consumption simply by adjusting its HVAC systems and shutting down the systems at night.

The Mary Rose Trust saved £3,000 monthly by reducing the fan speeds on their HVAC systems at night.

WHERE DO WE GO FROM HERE?
Ki Culture recommends that the first step in updating your climate control is to identify the key stakeholders in your organisation – who needs to be a part of the conversation to incite change?
Climate control

This may include:

• Facilities Management
• Collection Care Team / Conservators
• Registrars
• Lawyers / Legal Department
• Insurers
• Directors

Too often, especially in larger organisations, we work in silos. By breaking down the barriers between the key stakeholders in this conversation, we can better understand each other’s motivations and concerns and can work together to overcome the obstacles to change.

Start the conversation by asking the relevant parties, “What are our climate control settings, and WHY?”

CONSIDERATIONS

Ensure that you are considering the following elements when discussing changes to your climate control:

• Your collection (type of materials, historical conditions)
• Your geographic location and climate
• Your building and its equipment – what are the limitations and opportunities?
• Your loan agreements

Changing your climate control conditions is entirely possible – but does require collaboration and conversations. Make sure to include everyone from your organisation and make sure everyone is on the same page when making change!

GETTING CLIMATE CONTROL UNDER CONTROL PILOT

The Getting Climate Control Under Control Pilot recognises that in order for one organisation to make changes, we have to all change. By working together and moving in the same direction collectively, we foster peer consensus and cooperation in addition to eliminating fear-based obstacles and issues around loan exclusions.

The Climate Control Pilot puts changes into action, resulting in concrete change and real savings!

Participating organisations from around the globe will be guided through the process of addressing and changing climate conditions and loan agreements. Through education, peer-to-peer learning, and tailored coaching, participants will implement bespoke conditions for their collections and optimise energy efficiency of their buildings. And with expert input and guidance from world-renowned experts, all changes made through the programme are backed by science – eliminating fear and lowering risk.

Learn more about the Ki Futures Getting Climate Control Under Control Pilot Program here.

Museums could save around 24–25% on energy costs just by making minor adjustments to temperature and humidity

Sustainable Buildings: Reducing Energy & Carbon Costs in Culture (Recording + Highlights), Articheck
Climate Justice

The climate crisis is not about the climate alone. It involves a complex web of issues that inextricably intersect with other environmental, social, ethical, political and justice crises. By focusing purely on science, data and stats, this interrelation can sometimes seem less than apparent.

The concept of climate justice seeks to highlight and address the interconnections between climate change and other social crises.

WHAT DOES A JUSTICE-CENTRED APPROACH TO CLIMATE ACTION LOOK LIKE IN THE VISUAL ARTS SECTOR?

Given how broad GCC’s membership is, there isn’t going to be a one-size-fits-all answer here, and organisations will have different capabilities and limitations, as well as different communities, structures and audiences, all of which are important considerations.

Climate justice is a vast topic, entangled with many other complex societal issues – but the enormity of the issue should not stop you from taking action.

Recognise that you can’t do everything at once, but that the best first step is to start somewhere.

Here, we have outlined areas with potential for positive action particularly relevant for Non-profits and Institutions. If you have other ideas, we would love to hear from you.

DECARBONISE!

Particularly for those of us based in the Global North, working to reduce your emissions is a crucial step to ensuring that justice is met. Aiming for a larger than 50% emissions cuts by 2030 (eg 70-90%) is one way we can take a fairer share of the global challenge.

A JUST TRANSITION

We are deeply tied to an economy that relies heavily on fossil fuels. Many livelihoods depend on it. However, we know that polluting industries are going to change drastically in the coming years and decades as society decarbonises. So how do we ensure that the livelihoods of those who rely on polluting industries aren’t negatively impacted in the process? This is a challenge to which many argue a ‘just transition’ is the solution.

Greenpeace defines a just transition as “moving to an environmentally sustainable economy without leaving workers in polluting industries behind. It aims to support good quality jobs and decent livelihoods when polluting industries decline and others expand, creating a fairer and more equal society.”

Providing fairly paid, decent work with strong workers’ rights and fair conditions will shape a just transition in the visual arts. Strong workers rights can increase the resilience of communities exposed to climate impacts, with more pay, and better conditions leading to higher levels of adaptability. This should extend to the external suppliers, partners and supply chains that you work with. When procuring services, for example an external cleaning or waste management company, ask to see their policies on labour as well as environmental standards.

RESPONSIBILITY & REDISTRIBUTION

We know that organisations within key art centres (usually the richest cities in countries with the largest economies) have more responsibility to act when it comes to decarbonisation.

Larger organisations with larger emissions also, usually, have more resources to support their action. Organisations with better resources should work to support those with less, to achieve the targets of the coalition through collaboration, knowledge and resource sharing.

RESTITUTION

Decolonising collections through restitution is a critical part of climate justice for museums, galleries and other organisations that hold collections. This is not a new conversation, but recent years have seen more and more organisations acknowledging the suffering caused by their collections and the need for restitution.

GCC cannot claim expert knowledge on this subject – but there are plenty of organisations who are working to support the cultural sector in this conversation. As a starting point, and for more advice and information about museums’ roles in decolonisation, see the Museums Association’s decolonisation campaign.
Climate Justice

COMMUNITY

Whilst the visual arts can play an important role in foregrounding and expanding the climate justice movement on a public scale, we should also look inward and consider how our internal structures, hierarchies and working conditions can positively influence the movement.

It’s important to consider whose voices are represented within your organisation. Who is on your team? Who is part of your management? Who sits on your board?

If you are part of an organisation, how can you reallocate resources to ensure that the treatment and fair pay of your workers is a priority? Consider writing a JEDI (justice, equity, diversity and inclusion) policy if you don’t already have one. This should highlight the importance of environmental and social responsibility to your organisation and can be shared publicly to inspire transparency across the industry, as well as with collaborators, funders, partners and freelancers.

EFFECTIVE ACTIONS

• Map and monitor your suppliers. Where is your biggest spend? Where could effective supply chain due diligence and workers-led environmental, climate and human rights monitoring have the biggest impact?

• Map and monitor your programmes. Take a decolonial and reparative approach to the stories you tell.

• Map the communities impacted by climate and environmental injustice in your community and amplify their voices.

• Understand who makes up the workers and decision-makers in your organisation, and collaborate with justice, equality, diversity and inclusion specialists so that both groups are inclusive.

Recognise that you can’t do everything at once, but that the best first step is to start somewhere.
For most arts organisations this will be a relatively small part of their carbon footprint. However, as exhibitions incorporate more and more audio-visual elements, and as digital and/or online exhibitions become more widespread, high-quality and ambitious, the carbon footprint of these activities are starting to creep upwards. So while this may not be a top priority area for measurement and target-setting as a cultural organisation, it is still worth paying attention when you can – especially as it’s a topic that audiences and stakeholders are increasingly asking about.

For a typical arts organisation, emissions from digital operations will most often relate to the use of data storage, video calls, emails, and running a website. Another key area of impact is the manufacturing of computing or audio-visual equipment, which can have a carbon footprint higher than all the energy the device will use in its lifetime.

Whereas in-house grid energy consumption is easy to measure via your energy bill, digital services are likely to be hosted by third party companies that might not be transparent about the emissions their services produce. This means measuring your emissions here can be challenging.

However, there are still some simple steps you can take to minimise your impact in this area.

**EFFECTIVE ACTIONS**

- Minimising the number of electrical devices you buy and keeping them as long as possible.
- Asking your website and cloud hosting services about their sustainability goals and the energy consumption of their data centres. Treat any claims that they use green energy with caution – they are probably just using a “green” tariff or buying renewable energy certificates, which only have a limited effect (see here for more details).
- Following energy-efficient practice for your website development, such as using stock fonts and a “dark mode”, and minimising the use of large images and embedded videos.
- Minimising data storage and transfer needs by regularly deleting files and emails that are no longer needed, and using instant messaging services for staff conversations rather than long email chains.
- Using video calls wisely – they are much lower-carbon than travelling to physical meetings, but if you’re speaking to colleagues you already know well you can save significant amounts of offsite energy by making an audio rather than a video call.
Ethical sponsorship

In recent years, the tide has turned on fossil fuel funding in the arts and leading cultural organisations have ended their sponsorship deals with major oil and gas companies. As climate impacts around the world intensify, the case against taking money from these polluting sponsors has never been stronger.

However, with so many arts organisations having made the shift away from fossil fuel funding, why is it important that we continue to take action on the issue of ethical sponsorship?

THE POWER OF REJECTING MONEY FROM POLLUTING SPONSORS

Firstly, we need to discern between donations that are genuinely philanthropic and money given with the expectation of gaining reputational or other benefits to the sponsor. Polluting companies with a toxic image to clean-up are strategic about how and where they promote themselves. Working with high-profile arts venues allows them to deflect attention away from their environmental and human rights impacts, and instead associate their corporate logos with the progressive values of the arts.

NO MONEY IS GIVEN IN AN ETHICAL VACUUM

Even if BP or Shell seem unlikely to approach your organisation, adopting a stance on sponsorship that is consistent with your commitment to climate action is a crucial step. Many artists and arts organisations are now looking beyond fossil fuel funding to raise important questions about other polluting sponsors, such as banks who invest in coal mining, or airlines and car companies more interested in greenwashing than taking action to curb their emissions. But rather than seeing this as a slippery ethical slope, it should be taken as an opportunity to create a space for honest discussion within our organisations and to develop ambitious new ethical fundraising policies.

CREATING SPACE FOR NEW POSSIBILITIES

When polluting sponsors are rejected and our ethical stance is communicated publicly, space may then open up for new collaborations with the potential to deepen our work on climate justice. Communities once alienated by the promotion of polluting sponsors might re-engage, while the potential for self-censorship around climate issues is lessened.

Meanwhile, those funders who genuinely share your values may seek you out precisely because of your climate leadership.

EFFECTIVE ACTIONS

• Develop an ethical fundraising policy for your organisation. Remember that this will be an ongoing process that should be updated over time. Start by defining what you already agree upon and where your red lines lie, before thinking about new areas where disagreements may arise.

• When accepting funding, think about the power dynamics at play. What agency do you have to set conditions about how support is acknowledged, or the limits of your relationship with a funder? Crucially, set out any deal-breaking scenarios that would prompt you to leave a partnership that no longer aligns with your values.

• Set out how decisions are going to be made, who will be consulted, and who has final say. Rather than waiting until controversy arises when an offer of support is already on the table, try and think about the steps you would take to resolve conflict in advance, so that everyone is clear about the process.

• What ‘due diligence’ processes should be in place for assessing offers of support? It’s important to think about whose perspectives you are centring, and when you might draw from primary and secondary sources to inform yourself about a potential funder’s record. Think about whose voices might be left out of these conversations and how you could proactively seek to include them.

• Join with others and share examples of best practice. You can sign-up to the ‘oil sponsorship free’ commitment which allows you to visibly highlight how you are collaborating with peers in order to embed a new ethical standard. Think about new areas of collaboration that could be useful, such as sharing examples of policies or experiences about ethical funding challenges.

Chris Garrard, Art activist and co-director of Culture Unstained
When planning and developing temporary or permanent exhibitions for museums and galleries, there are important steps to take from initial research phases to project closure.

STEP 1: GAIN SUPPORT AT THE HIGHEST LEVEL
No matter what your role is in the organisation, the first step is to find allies who care about making climate action a priority. Seek out senior colleagues who either understand the importance of reducing the environmental impact of your activity, or at the very least are keen to learn more. This is crucial to sustain focus and momentum.

STEP 2: FIND ALLIES IN YOUR PROJECT TEAM
Research shows that in any group of people, if 25% adopt a new behaviour, that is the critical number for systems to change and to create a cultural shift*. Get buy in early from your project team.

STEP 3: SET THE TONE WITH DESIGNERS AND BUILD CONTRACTORS
When commissioning designers and contractors, highlight the importance of environmental impact in the brief/tender as part of the main document. Make sure it’s not an afterthought hidden in an annex that no one reads.

Communicate your ambition at interview and ask questions to understand if designers and contractors have demonstrated the ability to minimise climate impact in their work. If not, is this something they are genuinely interested in working on? This might be the opportunity they’ve been waiting for to learn more about designing in a new way. Once you’re aligned, keep coming back to these goals at every design stage so they’re weaved into every decision.

STEP 4: ASSESS MATERIALS
With the project team and designers, use a decision tree to assess the best materials for your project depending on duration/touring ambitions etc. Then commit to using the most appropriate materials which have the lowest impact and brief build contractors accordingly.

STEP 5: ASSESS OBJECTS/ARTWORKS
When an object wish list is around 80% complete, use a carbon calculator to understand the impact of curatorial choices and a decision tree to consider the costs vs the benefit of shipping the item to your venue. Don’t leave this to the last minute as it might be too late to research alternatives and rework designs.

STEP 6: CHASE DATA
Use a trusted carbon calculator throughout project development and after close to understand the impact of your exhibition. This can help test assumptions and give you more information – the more you know, the more you can improve. Encourage designers and contractors to assess carbon impacts before making final decisions on materials.

STEP 7: BE COURAGEOUS
Don’t be afraid to challenge conventions, to suggest different ways of doing things, to test and try unfamiliar approaches. If you meet resistance, ask colleagues to back you up (see Steps 1 and 2). A transition to new ways of working might throw up difficulties – that’s OK. Rise to meet them and bank the learnings. Don’t let aiming for perfect drive out the good.

STEP 8: REFLECT TO IMPROVE
Discuss the overall impact of your exhibition with all key stakeholders. Are there areas that, with the benefit of hindsight, could be improved? What were the lessons? Are there contractors/providers/colleagues who let you down? How can you work with them to improve in the future? Consider your sphere of influence and find ways to increase it on the next project.

STEP 9: CELEBRATE THE WINS
Well done! You completed a project differently. Enjoy the successes and ensure all stakeholders are aware of the positive impact for their combined work.

Commit to maintaining a focus on this work to your manager, colleagues and the organisation. Keep holding yourself and others accountable through informal and formal processes (such as forward job plans).

STEP 10: BE PATIENT
Be patient. It might take several exhibition cycles to see meaningful and lasting change. Share your learnings, keep asking questions and scan your horizon for inspiring ideas and individuals.

* Research from energy and climate expert Tom Bailey speaking on the ReThink BBC podcast

Elise Foster Vander Elst, Head of Exhibitions and Environmental Impact at the Design Museum, London
Think about all the agriculture required to provide the ingredients for an art gallery’s restaurant or cafe, and all the raw materials, manufacturing and printing needed to supply a museum shop. These activities can have very significant carbon footprints, but it isn’t yet common practice to measure or set targets against them.

The biggest reason for this is that these emissions are usually challenging to measure, especially where a large number of different items are on sale to the public. At GCC, we are aiming to develop quick ways to estimate these emissions without requiring a detailed audit, to allow cultural institutions to understand their approximate scale, set initial targets against them, and identify opportunities for action.

However, until these tools are available, unless you have the resources to pay for a professional carbon audit, we suggest a slightly different approach to these parts of your operations. If you have a café, restaurant or shop, we suggest the following:

- Review what you have on sale and start taking action immediately to reduce its environmental impact.
- Once you are able to count the emissions from these operations – either estimating with future GCC tools, or via a more detailed carbon audit – you can build those emissions into your existing 2030 reduction targets, or set a separate reduction target against them. You’ll be measuring from a previous baseline (eg. 2019 or 2021), so any action you have taken in the meantime will count towards these targets.

Here are some suggested actions to get you started, that should be relevant for most retail and catering operations, whether or not you have measured their carbon footprint yet. If these operations are managed in-house, then you should be able to take some of these steps fairly quickly; if your retail or catering operation is run via a contract with an external provider, you will need to sit down with that provider and start a conversation about these issues.

Taking the steps below – or ensuring that your contractor does so – should start to make a positive impact, which you will hopefully be able to measure and track at a future date.

If you have already calculated or estimated the emissions from your catering operations, please let us know, as this will help us develop tools for estimating these emissions for others.

RETAIL
Are you selling significant numbers of items made from metal, plastic, or textiles, or that contain electrical parts? These categories of item tend to require the largest amounts of energy and resources to manufacture from scratch. Are any of these products made from reclaimed or recycled materials? If not, then could they be? Or could any of these product lines be replaced with different items made from lower-carbon materials (eg. sustainably-sourced wood, card or other plant-based materials), or sourced from suppliers with reputable credentials for regenerative practice?

Check the origin of items made from paper and card. While FSC-certified paper from sustainable sources is better than non-certified paper, it still takes significantly more energy and resources to cut down and grind fresh wood into paper than collecting, pulping and cleaning waste paper, so recycled paper is nearly always the lower carbon option.

With regard to waste reduction and circularity, how durable are the items on sale (as compared to being single-use or of temporary interest)? Are they recyclable or reusable at the end of their life?

Sourcing things locally can also help to reduce their carbon footprint (although for most items, the manufacturing will have a much larger climate impact than the transport, unless it’s transported by plane or from very long distances).

If you are selling anything that might contain toxic chemicals (eg. paints), check the ingredients carefully and investigate more environmentally friendly options (see here for some initial suggestions).

Ensure that any changes in product or supplier also consider social issues such as fair pay and labour rights for manufacturing workers.

More broadly, what is the business model for your retail outlet? Do you rely on selling large numbers of short-life novelty items cheaply, or a smaller number of more durable items at a higher price?
Food and retail

If you sell any meat or dairy products, then the quickest and most effective way to reduce the climate impact of your catering will be to swap out as many of these meals as possible for vegetarian or plant-based alternatives. This could be via a general shift across the whole menu, or by setting aside particular days or times as meat-free or vegan.

If your operations are already vegetarian, then shifting away from dairy to plant-based meals can create significant further reductions. You should also be aware that highly processed vegetarian meals (such as meat substitutes) usually have a higher footprint than less processed plant-based meals (such as vegetable soups, curries and casseroles), so finding a good balance here is recommended.

Aim to offer seasonal and local products where possible. Talk to your suppliers about the sourcing of any ingredients you use in significant amounts, and ensure they aren’t being transported long distances by plane, or grown in artificially heated greenhouses out-of-season.

Source organic or wildlife-friendly ingredients wherever possible, ideally via direct relationships with producers whom you know are taking these issues seriously.

Regularly review the levels of wastage in your catering operation, and find ways to minimise it and/or ensure any surplus food goes to somewhere it is needed.

Taking these steps should start to make a positive impact, which you will hopefully be able to measure and track at a future date.
From GCC Carbon Reports, we can determine that internationally transporting artworks – specifically via air freight – is one of the largest contributors to greenhouse gas emissions in the visual arts.

SUSTAINABLE SHIPPING CAMPAIGN

To support the sector’s transition to environmentally responsible freight operations, GCC launched its Sustainable Shipping Campaign in May 2022.

In collaboration with leading arts organisations and key industry suppliers, this campaign hopes to challenge and adapt current dependencies on air freight and single-use plastic packaging, by:

a Raising awareness about the sector’s environmental impacts relating to global freight, particularly its dependency on air freight and consumption of single-use plastic packaging.

b Providing guidance on best practice and target setting.

c Encouraging galleries, institutions, collectors and artists to request low impact freight services whilst encouraging shippers and suppliers to provide and promote necessary services.

For more information see the campaign’s Sector-wide Targets and Campaign Actions specifically for Galleries, Museums, Art Fairs, Collectors and Artists.

CO2 USED PER TONNE OF CARGO SHIPPED 1KM

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As an ongoing campaign, we are keen to hear from you. We know that there is lots more work to be done, particularly in overcoming some of the challenges faced by the non-profit sector. If you are experiencing hurdles and/or successes in this area - please get in touch! In the meantime, we've outlined some key learnings here:

**REDUCE**
Sustainable shipping doesn't just mean moving to sea and road freight over air freight, it also means an overall reduction in volumes of shipments. Therefore, environmental considerations around shipping should be embedded in every stage of the decision-making process. When planning exhibitions, curators should be strategic about the locations of objects, and where possible consolidate. See exhibition design for more guidance on this topic.

**PROGRAMME SCHEDULES**
In many non-profits & institutions, programme schedules are planned 3–5 years in advance. Despite this forward planning, the logistics are often left until the final moment, to accommodate last-minute updates and changes. Organisations should aim to finalise logistics as far as possible in advance to optimise opportunities for consolidation and sea freight.

**INSURANCE**
A common roadblock to implementing environmentally responsible shipping is concerns around insurance. GCC has made some progress in this area and has produced guidelines for insuring sea freight, developed in partnership with Lloyd's Market Association (LMA) Joint Specie Committee - in response to lobbying from galleries who have been receptive to the demands for more sustainable industry practices. A good first port of call is to speak with your insurers, to better understand what is possible when it comes to sea freight and consolidation. See the Insurance section for more advice on this.

**PEER-TO-PEER LEARNING**
What can you learn from others in the sector? If you are experiencing particular hurdles (or successes - these are worth sharing too!) reach out to other GCC members to exchange knowledge and learn from each other's experiences. GCC will be sharing case studies and examples of best practice to help aide this. If you'd like to share your experiences via GCC, get in touch!

**EFFECTIVE ACTIONS**
- Prioritise consolidated road and sea freight, over air, for local and international shipments.
- Plan shipping schedules as far in advance as possible and involve artists and clients in the process so they are aware of the deadlines and shipping times.
- Only work with suppliers and shipping companies who support sustainability.
- Start a conversation with your insurance company and consult GCC's best practice for insuring sea shipments.
- Collaborate with other galleries to overcome obstacles, learn from one another, and coordinate and consolidate shipping wherever possible.

**CASE STUDY: THOMAS DANE GALLERY**
"Using sea freight instead of air freight for 3 shipments has reduced our emissions by 34.11 tCO2e which is incredible and, not only this, but we have also saved approximately £24,000."

Read more about Thomas Dane Gallery’s recent shipping experiences here.
Travel

In the last 20 years, the visual sector has become increasingly reliant on international travel. Passenger flights represent over a third of the direct operational emissions that GCC members have calculated and shared with us so far.

As flying is the single most carbon-polluting action you can take as an individual, attitudes towards air travel need to be reassessed. Only the most crucial and worthwhile journeys should be made.

Finding alternatives to flying is an achievable and positive step in reducing our carbon footprints, and there are obvious economic benefits to reducing travel overall.

AIR TRAVEL
Travelling by air is extremely carbon-intensive, as it puts a large number of greenhouse gases into the air in a short space of time. On top of this, burning aviation fuel at high altitudes means air travel causes a larger amount of global warming than other forms of travel. This is called Radiative Forcing.

Thankfully there are plenty of ways to reduce our reliance on flights. To learn more about the impacts of and solutions to the visual arts reliance on flying, see GCC’s Travel Guidelines.

LOCAL TRAVEL
Whilst long-distance and air travel are the most carbon-intensive forms of travel, it is also worthwhile analysing how colleagues travel to work and encouraging cycling, using public transport, or considering working from home where appropriate.

Commuting isn’t included in the GCC carbon calculator as its footprint is hard to measure (without carrying out a detailed staff survey) and it isn’t under the direct control of the organisation. However, if a large percentage of your staff are driving to work every day, this will add up to a significant carbon footprint, and there are steps you can take so it becomes easier for your staff to make more carbon-friendly choices.

For more information about staff commuting, and audience travel see page 54.

EFFECTIVE ACTIONS
• Wherever possible, do not fly. Instead consider travel by train, road or sea and implement a ‘Train First’ policy for business travel.
• If you do have to fly, follow the 10 Steps to Limit the Impact of Air Travel.
• Plan travel schedules as far in advance as possible and set a quota for the maximum number of flights you take in a given year in line with emissions reduction targets, carbon budgets or annual CO₂e allocation.
• Plan for international exhibitions/art fairs/events etc. to be completed with the least amount of travel possible. This might mean reducing the number of staff taking international trips, installing exhibitions remotely, working with local freelancers or car sharing where possible.
Visitor travel and staff commutes

If significant numbers of visitors or staff are driving to your organisation in fossil-fuelled cars, that's going to result in a large amount of emissions.

Even if people are mostly using buses or trains, if you have large volumes of visitors that will still add up to a significant carbon footprint over the course of a year. And of course, if anyone's getting in a plane to visit your gallery that's going to have a big impact too.

**SHARED RESPONSIBILITY**

However, visitor travel isn’t a straightforward part of any public venue’s carbon footprint, because it isn’t purely under the gallery’s control. The immediate decision to travel to a gallery or museum, and the decision over which method of travel to use, lies with the individual visitor rather than the gallery.

However, the gallery can have an influence over those decisions through its communications with its audience, the facilities it provides, the location and timing of events, the choices it makes over which audiences it is trying to attract (local, national or international), and the siting of any new gallery spaces.

For these reasons, GCC views visitor travel as an area of shared responsibility between an arts organisation and its audience, to be considered separately from the organisation’s main carbon reduction targets.

**SETTING TARGETS & MEASURING EMISSIONS**

We recommend that cultural organisations prioritise measuring and setting targets against their core operational emissions where they have more direct responsibility and control. However, we strongly suggest that public arts organisations should also try to estimate their visitor travel emissions, and take what action they can to help reduce them.

GCC is hoping to develop a tool to make it easier to estimate these emissions. In the meantime, to measure the emissions of your visitors’ travel, you’ll need to carry out a visitor survey to determine how people travel to your venue and from what locations. You can then use the results to calculate a carbon footprint (for example, using Julie’s Bicycle’s free online carbon tools).

Like every other source of emissions, this footprint will need to be halved (at least) by 2030.

However, while we believe that cultural institutions have a responsibility to be part of the solution here, it will also require behaviour change by audiences and wider social, cultural and technological shifts towards lower-carbon travel methods, better connected, affordable and fossil-free public transport, cycle-friendly cities, and so on. Arts organisations can – and should – play a role in this change, but this should be part of a shared effort across society.

GCC therefore recommends that visitor travel emissions should be measured and tracked, but separately from your main carbon targets, to recognise the fact that they are not your sole responsibility.

If you have already calculated or estimated the emissions from your visitor travel please let us know, as this will help us develop tools for estimating these emissions for others.

**EFFECTIVE ACTIONS**

- Providing secure parking or storage for bicycles and scooters, and electric charging points for EVs.
- Limiting car parking where possible (while ensuring enough is available as needed by disabled visitors).
- Working with local authorities and other local venues and businesses to improve public transport services for your audiences.
- Offering discounts and incentives for visitors who use low-carbon travel methods or car-share.
- Re-examining assumptions about who your audiences are and who your organisation should be appealing to. This could go hand-in-hand with other important live discussions about museums’ role in their local community. An arts organisation that primarily serves people from its local area will have a much lower visitor travel footprint than one with an operational model built on national or international tourism.
- Considering how more geographically distant audiences might be able to engage with your exhibitions and programming using digital technology, without needing to physically travel to your venue(s).
A common hurdle to taking climate action is finding the time and capacity to do the legwork. To overcome this, we’ve been seeing examples of cultural organisations working together on collective initiatives to address common challenges in unison. Through coordinated efforts, consolidating their resources, and exchanging insights, organisations can make more impactful progress, collectively. We spoke with Suzanne Golden, BACKLIT Co Director and founder of Art NEST to learn about their approach.

WHAT IS ART NEST?
The Art NEST (Nottingham Environmental Sustainability Team) is led by BACKLIT and is a space for the arts sector in Nottingham to collectively share resources and tools to help guide our environmental choices.

WHY DID YOU DECIDE TO FORM THE GROUP?
The group was formed as a result of a collaborative project with BACKLIT, Environment Agency and Joshua Sofaer in October 2021.

‘Regulated Exhibition’ saw BACKLIT Gallery transformed into a ‘factory’ where the public dropped off plastics in our ‘Depot’ which was accepted and sorted by Science Communicators. Throughout the exhibition, the Environment Agency (EA) periodically regulated the processes undertaken and provided an insight into their work. As a legacy to this, we have continued the conversation about the way we work and developed the network Art NEST as a means to bring in different experiences and resources to support and enable each other on a local level.

WHO IS PART OF ART NEST?
Art NEST is led by BACKLIT and consists of arts and culture organisations across Nottingham. This includes Nottingham Playhouse, Nottingham Contemporary, New Art Exchange, City Arts, UKNA, Broadway, National Justice Museum, Primary, Fabric, Leftlion, Green Hustle alongside representatives from the Environment Agency, Carbon Neutral 28 team at Nottingham City Council and the Nottingham Trent Uni Sustainability Team.

WHERE AND HOW OFTEN DO YOU COME TOGETHER TO MEET?
We meet online, quarterly.

WHAT KIND OF PROJECTS HAVE YOU BEEN WORKING ON AND WHAT TYPE OF ISSUES HAVE YOU BEEN TACKLING?
As a network, it’s all about resource sharing, working in numbers and connecting the dots in skillset and resources between different organisations, rather than feeling excluded and isolated when it comes to working on environmental concerns. I see this network as in its early stages, and I’m leading this to learn as much as everyone else, it remains a work in progress, and is fairly informal with a ‘no frills’ approach. As a result of the group, people have accessed training, shared templates for carbon tracking information, funding opportunities, and environmental suppliers. I’ve set up an online site to host the resource for accessibility.

The forum allows us to share experience and good practice, for example:

• Problem solving around obstacles and barriers to change.

• A network to build like-minded thinking across the City to help initiate change, and bring in wider support and voices from groups like the Council, Universities or the Environment Agency to help advise.

• Shared training and learning around implementing environmental changes to our spaces e.g. carbon management training.

• To creatively link up members - what someone is looking to get rid of could be repurposed to be of use to someone else, i.e. a stage set that would otherwise be disposed of could be repurposed within an artist’s studio.

As a support network, it acts as a space (outside of the immediate workplace) where people can share and where they can learn about how others are tackling environmental changes. It aims to be educational, informative and progressive.
Addressing the 5 obstacles
One of the most powerful decarbonisation tools we have is the question “why?”. So many polluting art world practices – from first-class courier flights for single objects to overspecified energy-hungry climate control settings – are happening out of habit, rather than need. We all need to get better at challenging conventions and habits that are no longer appropriate in a climate emergency, as well as being more open about being challenged ourselves.

If you’re feeling nervous about questioning long-held practices in your workplace, remember that many people around you are probably feeling the same. Levels of concern about the climate crisis have rocketed over the last few years, and overwhelming majorities of people across the world now understand the need for action. At GCC, we’ve seen this increased concern very much reflected in the arts and culture sector, perhaps even more so than in general society.

If something at your workplace seems difficult to change, don’t try to do it alone – talk to your colleagues, find allies, and look for creative and diplomatic ways to show what needs to change and why.

Of course, it’s not only our own problematic practices we need to challenge, but those of our partners and collaborators too. This can be even more tricky, but the bottom line is that we shouldn’t be afraid to say no, and turn down a potential collaboration or partnership if the other party is insisting on carbon-heavy activities and unable to compromise. There will almost certainly be alternative partners you could work with who better understand the climate emergency, or different ways of doing the project.
Financial limitations

Times are financially tough for many public arts institutions. This may seem like a difficult moment to invest in low carbon measures, even if they’ll save money in the long run.

If this is the case for you, we’d recommend the following:

- Get started with the actions that you can afford. Some measures, like cutting unnecessary staff travel, shifting art freight from air to sea, and reusing exhibition materials might even save you money right away. Others, such as training staff in more energy efficient behaviour, or pushing your suppliers to cut their own emissions, might be largely cost neutral.

- Focus on spending money where it will make the most difference. For example, switching to a “green” energy supplier can be an expensive choice that only makes a minimal difference, as explained by Ethical Consumer magazine. Holding off on switching suppliers until you have more space in your budgets, and instead prioritising spending on upgraded insulation or LED lighting could be more effective with regard to both your carbon emissions and your running costs.

- If you’re considering actions that require significant upfront investments, such as insulation upgrades, solar panel installations or switching a gas boiler for a heat pump, start by getting the best possible information on the costs and long-term savings (in terms of both money and carbon). Is there a local campaigning charity or friendly engineering firm who might offer you a free or discounted energy audit of your building? Once you have a clearer picture of the options and costs, make a plan and timeline for how you might raise the money needed. Grants or cheap financing options for low-carbon measures are increasingly available from governments, banks and energy companies.

- For actions with ongoing costs (such as switching to more climate-friendly suppliers and contractors), see if there are deals or partnerships you could form with local green suppliers and start-ups, who might value the profile they would get from public association with an arts organisation. You could also investigate whether there are parts of your supporter base who might be willing to pay a bit more in order to fund lower-carbon practices.

- If your institution is connected to a larger body, such as a university or local authority, check whether they have climate action plans and targets of their own that you might fall into. What resources do they have available to meet those targets, and can they allocate any of these to help your transformation?

- What are the possibilities for specific fundraising around a low-carbon transformation of your operations? Could you bid for funding for programmatic work that includes an element of green transformation, share resources with other arts organisations, or crowdfund for specific measures that will support your artistic work by reducing your running costs and carbon emissions at the same time? As mentioned in the SCF section of this document, we would love to hear from any arts organisations that have found creative ways to fund low-carbon measures, so we can share positive examples and case studies.
Insurance

When it comes to updating shipping practices or making changes to HVAC systems, insurance is often perceived as a significant hurdle for many organisations.

For those of us who aren’t insurance experts, this can feel like a complex and scary roadblock. Many non-profits and institutions also fall within government indemnity schemes which creates an added layer of complexity.

COMMUNICATION IS KEY

Speaking to your insurers and insurance brokers is an important step in implementing change. Help them understand your carbon reduction targets and motivations for making improvements to your operations. Many insurance companies and brokers offer free risk management advice, even if you aren’t a client. Make use of this.

Since launching, GCC has developed positive working relationships with the insurance industry, and has seen some key breakthroughs in areas that once felt difficult to change.

For example, as part of GCC’s Sustainable Shipping Campaign, we worked with representatives of the Lloyd’s Market Association (LMA) Joint Specie Committee to develop best practice guidelines for the insurance of artwork travelling via sea freight, hopefully leading to greater adoption of this method of transportation.

To reach this agreement, insurance industry rivals came together to discuss the urgency and need for change, and collectively came to a solution. The last time this group had met to discuss new parameters and guidelines was in the aftermath of the 9/11 attacks.

CHANGE IS HAPPENING

In the face of climate catastrophe, the insurance industry is having to consider how they can support the transition to a decarbonised world. We are confident that as climate action continues to gain momentum, our insurance policies will start to reflect the changes that are necessary to create an environmentally responsible visual arts sector.

We are starting to see some government indemnity schemes reviewing the standards they expect organisations to adhere to, in light of the climate emergency (including in the UK, led by Arts Council England. You can find out more about the ACE GIS environmental conditions review here.)

Whilst these larger shifts are taking place, we’ve put together effective actions for organisations of all shapes and sizes to help them dismantle this roadblock and start implementing changes today.

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EFFECTIVE ACTIONS

• Speak to your insurers and insurance brokers. Get an understanding of what is and what isn’t covered by your current policies. This will help build a level of literacy within your teams. Many insurance companies and brokers offer free risk management advice, even if you aren’t a client. Make use of this.

• When implementing any changes, put together a list of questions for your insurance providers or brokers: what are you hoping to change and how will this impact your insurance? (eg. what would it mean for our insurance policies if we were to make changes to our current HVAC systems?).

• Always get a second and preferably a third opinion. If the answer is ‘no’, you may be speaking to the wrong person.

• If using government indemnity schemes, weigh up their value. Sometimes this is seen as ‘free insurance’, but depending on the value of the works, the stipulations may end up being more costly than working with a commercial insurer.

• Ask your insurers what they are doing to reduce their own climate impacts. This puts pressure on the industry to work better and faster to implement change.
Broadly speaking, legislation around the world has been gradually shifting towards encouraging more environmentally responsible practices (thanks to many years of pressure from campaigners, scientists and pioneering organisations). However, there are still many laws and regulations around the world that are making the transition to a safer, lower-carbon world more difficult rather than easier.

These legislative challenges vary from country to country and state to state, from planning laws stacked against renewable energy installations to charity regulations that bar certain investment choices. If you’re facing legal barriers to the environmental actions you’re trying to take, here are a few general tips for moving forward:

- If you’re facing this challenge, you’re probably not alone. Ask your peers and wider community if they’re in a similar position, and find allies to work together on solutions.

- Laws and regulations that are no longer fit for purpose can be changed, with enough pressure and demand. We’ve seen this in the UK with the main government arts funding body, the Arts Council, being responsive to changing its guidelines to allow arts organisations to make lower-carbon choices.

- If certain rules currently feel immovable, there may still be ways to make progress within them, by being thoughtful and creative. Again, we can probably find other organisations who have found ways to do this if we speak to our networks and connections.

- If you’ve hit a legal brick wall and aren’t sure what to do, contact GCC and let us know. We may know other organisations in similar situations who’ve found a way through, or might be able to connect you with others to build a critical mass to help challenge an unhelpful piece of regulation.
Loan agreements

Loan agreements are often pointed out as one of the key roadblocks in the environmental responsibility conversation.

Legal documents can sometimes feel mysterious, or even set in stone - but it's important to remember that most loan agreements are simply templates. Often, these templates are passed around and signed, without scrutiny, or specific thought about the particular object that is being loaned and what is needed for it.

If loan agreements are blocking change in your organisation - there are some questions worth considering:

• What are your expectations when borrowing a work?
• What are the lender’s expectations?
• Have they got specific requirements?
• Can the lender’s requirements be met?
• Do the requirements align with our environmental commitments?
• Do we actually need to borrow this particular object if it’s very vulnerable to risks, and the potential uncertainties about whether it could get damaged outweigh the actual benefit of having the loan?

It is worth seeing the loan agreement as the start of a conversation, rather than the endpoint. If something seems unnecessary or meeting the requirements would affect your organisation’s ability to reach its emission targets – question it.

These moments are where a sustainability policy can be helpful. If you are faced with a lender who sets very specific humidity and temperature requirements, is there a wider discussion to be had within an organisation about whether or not you accept this loan if this lender isn’t meeting our reduction targets?

By considering these points ahead of time, we can approach loans with a degree of clarity, and where possible, seek to negotiate with a lender.
Organisational buy in

While there are always useful actions you can take within your specific role, getting senior management and Board support for broader environmental action will almost certainly be crucial.

If they're not already on board with the need to act on the climate crisis, you might seek to connect more directly with their specific interests and concerns. A few things we suggest to bear in mind:

- **Don’t try to do it alone.** Start by finding and building up a network of allies within your organisation who share your understanding of the need to act quickly and ambitiously on the environmental crisis.

- **Where possible, create good examples.** Do what you can within your own roles to show that this kind of action is not only possible, but also popular with audiences and key stakeholders.

- **Talk to senior staff and Board members and find out their key concerns and any perceived barriers to embracing this work.** Are they worried about costs, staff time, or potential threats to commercial income? Are they concerned about accusations of paying lip service or greenwashing if your organisation becomes more outspoken on these issues? See the previous sections of this document for advice on reassuring people on these points, from the falling costs of climate action to the fact that acting now should save time, expense and potential embarrassment in the long run.

- **Find and share case studies of similar organisations** who have taken action and succeeded in saving money, accessing extra funding, raising their positive profile, avoided reputational risk etc.

- **Look out for GCC events and resources to help you connect with others in the sector** and build a strong case for change that’s tailored to your own organisation and its challenges. If you have any specific needs or requests, please let us know.
Regional differences

GCC has members in over 40 countries. We’ve tried to make this document as internationally-relevant as possible, but there are many local and regional differences in terms of culture, practice, legislation, funding, and the availability and affordability of environmental solutions.

If you need a more local or regional perspective on any of the issues covered in this document, please let us know – GCC has local volunteer-run branches in Berlin, Italy, LA and Taiwan, and connections with arts organisations who’d be happy to share their local knowledge in many other locations.

Conversely, if you have a specific local or regional perspective you think it would be important for us to share with the wider network, please do let us know that too.
Technological limitations

All the technologies we need for a zero carbon society already exist. The Centre for Alternative Technology in Wales has been demonstrating this for years, through their series of Zero Carbon Britain reports, mapping out how fossil-fuel dependent economies could completely decarbonise with existing renewable technologies. The challenge is making these technologies available and affordable to everyone, and rolling them out everywhere.

The good news is that things have been progressing rapidly on this front. The price of solar panels has dropped by 90% in 10 years. A 2022 study found that electric vans in the UK were now 25% cheaper than diesel vans over their lifetimes, including upfront costs. Around 10% of heating for buildings globally is already provided by air source or ground source heat pumps, with the figure growing steadily each year. The COVID pandemic and the war in Ukraine temporarily slowed down some of these trends, but things are set to accelerate following large-scale investments in low-carbon technologies by the US, the EU, China and other major players in 2022 and 2023.

As the costs of important decarbonisation technologies – from batteries to wind turbines – continue to fall, the rule of thumb for all of us is going to be: if a low-carbon solution was too expensive or unavailable last year, check again. Prices have probably fallen, new grants may be available, a new local start-up might have appeared offering exactly the solution you need.
Even with the best intentions, finding sufficient staff time and capacity to manage the shift to low-carbon operations can be challenging.

Some key points to remember here:

- If your organisation has the resources to officially designate some staff time towards this work, by incorporating it more formally into people’s roles, this can be extremely helpful – as long as the rest of the organisation don’t then assume they have no responsibility for this work themselves.

- Ensuring that this work doesn’t just fall on one or two people’s shoulders is vital. Forming a Green Team (see page 16) is an important step, but that team shouldn’t be expected to do all the work – their role is to keep pushing change through the organisation and ensuring everyone outside the immediate team understands their roles in this work too.

- Being proactive on these issues should save you staff time and resources in the long run. Government regulation, funder requirements and audience expectations around environmental responsibility are only going to increase. Being on top of these issues and able to demonstrate active change is a much more efficient approach than scrambling to catch up with growing environmental demands from partners, funders and regulators.

- You are not alone! GCC is here to help and provide tools and resources to make things easier and save you time, along with other organisations such as Julie’s Bicycle, Ki Culture, Art + Climate Action, and others. Together, we can build alliances across the art world, share resources and find ways to work together to make this transformation easier for everyone. If you need any particular help or support and can’t find it, please let us know.
The climate crisis can feel overwhelmingly overwhelming, and one’s sense of agency can feel tiny. But we have agency, we have responsibility – and now we have an opportunity to make change, both individually and institutionally.
6 FAQs

What included in the Carbon Calculator and why?

How do I build a carbon budget?

What if we can’t calculate a 2019 baseline?

What about carbon offsetting?

What if our organisation is planning to grow?

What about going ‘net-zero’?

What if we already have a ‘carbon neutral’ target?

What if we can’t calculate a 2019 baseline?
What’s included in GCC’s Carbon Calculator and why?

For our carbon calculations for arts organisations, we follow the guidelines laid down by the Greenhouse Gas (GHG) Protocol, which sets the standard for carbon footprinting worldwide. This means we include all direct energy and electricity use (known as “Scope 1” and “Scope 2”). Everything else that could be included in a carbon footprint is called “Scope 3”.

For Scope 3, we focus on the parts of an arts organisation’s carbon footprint that are:

• Measurable
• Significant
• Within the organisation’s responsibility and control

In other words, the calculator purposely excludes areas of Scope 3 that would require an excessive amount of work to calculate, compared to their likely impact and the organisation’s ability to actually do something about it.

The areas of Scope 3 that are included in the footprint are business travel, shipping, packaging, and printing. These are all areas that can be calculated without too much difficulty, and where arts organisations have the ability to make a difference.

The following Scope 3 areas are likely to have a relatively small impact, but would require a significant amount of work to collect the necessary data, and so have been excluded for now:

- Materials purchased for framing, displaying and exhibiting artworks
- Use of hotels by staff
- The footprint of data services
- Waste disposal
- Water supply and disposal
- Other purchased materials (furniture, office equipment)
- The footprint of investments, pensions and banking

However, we will be refreshing the calculator over the next year, and are looking at ways we could include more of these elements in an optional and user-friendly way in the future. Also, if you carry out a waste audit then several of these elements (such as exhibition materials and gallery waste) will be captured there, and will have greater significance in that context than as part of your carbon footprint.

The following areas of Scope 3 may have a significant impact in some cases, but collecting the data would require a significant amount of work, added to which these areas are not under the full responsibility or control of the arts organisation:

- Staff commuting
- Energy used by staff when working from home
- Transport of artwork and materials to the galleries by third parties, not paid for by the gallery

None of the above elements are included in the carbon calculator, and we do not expect members to measure or set specific targets against them.

However, we would encourage all members to keep these elements in mind and make the lowest-carbon choices possible in relation to them, even though these will not show up in the calculated footprint. Again, if there is interest and demand across membership, we will investigate adding some of these items into future versions of the calculator.

Retail procurement, catering and visitor travel tend to be much more relevant to our non-profit and public members than our commercial members, and have not yet been incorporated into the carbon calculator due to their complexity. They are special categories where we would recommend taking a slightly different approach with regard to measurement and target-setting. See page 54 for more details.

There are also some “one-off” events, i.e. the construction of a new gallery/studio, that could have a significant footprint but wouldn’t fall into the typical annual activities of a gallery and so aren’t captured in the calculator. Again, we suggest these be investigated on a case-by-case basis so galleries can make the lowest-carbon choices possible.
How do I build a carbon budget?

Organisation-wide carbon budgets can be a useful tool to support your action plan. They involve deciding in advance what you want your maximum emissions to be in a specific year, and then working to stay within that budget – in exactly the same way as a financial budget.

Here are a couple of ways of doing this:

**OPTION 1**

Use your annual carbon report to look at the total tonnes of carbon emitted and work out what level of reduction will be needed on average per year to reach that total goal.

So for example, to reach a 30% reduction by 2026 from a 2021 baseline, you would need to see, on average, a 6% reduction every year between 2021 and 2026. That means that in 2022 you would want your total emissions to be 6% lower than in 2021, then in 2023 they’d need to be 12% lower than 2021, and so on.

If you’re starting from a 2019 baseline then your calculations will be different, especially as your emissions probably fell during the initial pandemic lockdowns in 2020, and then rose back again in 2021 and 2022. For example, if your emissions in 2022 bounced back to 90% of your 2019 baseline, you could aim to halt that bounceback and bring your emissions down to 70% of your 2019 emissions by 2025. That would require a 5% year-on-year reduction between 2022 and 2025.

Once you’ve confirmed your baseline and sketched out a path to a 30% reduction by your chosen milestone date (eg. 2025 or 2026), you can then look at the main parts of your footprint (e.g. flights, air freight, building energy) and calculate how much lower they’d each need to be to add up to that total reduction.

The GCC Carbon Calculator can be a useful tool for working this out – you can use it to plug in some speculative values for flights, shipping and energy and see what carbon total they come out with. Once you’ve decided what reductions will be needed in each of these areas to achieve the 2023 reductions, you can then do the same for 2024, 2025 and so on. In this way, you can calculate your “upper limits” for km of flights, tonne-km of shipping and KWh of electricity and gas each year. These upper limits can then become your “carbon budget” for each of those years – a total you’ll aim to keep within, just like a financial budget.

**OPTION 2**

Alternatively, you could start by calculating the total reductions in flights, air freight, energy footprint etc. that you need to aim for in order to reach your midway carbon budget.

These figures can each be divided by the number of years in order to get the annual reductions – and thus the annual budgets – for each of these parts of your footprint between 2023 and 2026, as above.

[1] / 2
How do I build a carbon budget?

CARBON BUDGETS WORK BEST WHEN THEY ARE:

• **Presented to staff in understandable terms, rather than as tonnes of carbon.**
  For example, if your goal is to reduce the carbon from business flights by 10% in a given year, then it might be easier to set budgets based on the total distance flown by each team/department rather than the tonnes of CO₂e generated by those flights.

• **Allocated clearly within an organisation.**
  For example, if you own five different galleries that each carry out international shipping, it may seem fair to ask each of them to reduce the emissions of their shipping by 5%. However, if one gallery already does half its shipping by sea while the rest exclusively use air freight, then it might be fairer (and easier) to ask the galleries using air-freight only to do more.

• **Backed up by detailed data.**
  In order to ask staff to work to carbon budgets, you need to provide annual – or better still quarterly – figures to each team/department/gallery to allow them to track their progress, presented in a way that gives them the information they need.

• **Integrated with existing planning processes.**
  To be effective, carbon budgets need to be discussed at key planning meetings and taken on as an organisational responsibility, not left as individual day-to-day decisions. For example, if management asks staff to fly 10% less whilst also committing to attending more art fairs, then staff will find it challenging to meet that flight’s budget without management support and agreement on changes in practice, allowing, say, fewer staff to attend each event.

• **Aligned with financial budgets**
  To avoid mixed messages or incorrect incentives, a planned 10% reduction in flights should be accompanied by a 10% reduction in the financial budget for flights – and an increase in the financial budget for train travel and/or videoconferencing.
What about carbon offsetting?

A question we are often asked is:

Should I offset the emissions I can’t reduce?

GCC advises against conventional offsetting schemes, as it is difficult to verify the effectiveness of the claims made by many of these schemes, and even if they work as planned they are unlikely to create the reductions we need within a 2030 timeframe. For more information on the problems with offsetting, see our latest advice on this topic [here](#).

Instead, GCC recommends putting funding into projects where we can be more confident they will have an immediate positive impact, either internally or externally. Rather than spending money on schemes that claim to ‘balance’ or ‘neutralise’ some portion of future emissions (claims that are nearly always difficult to justify), we recommend putting that money into measures that will reduce our own emissions more rapidly in the immediate term, and/or help accelerate wider systemic change, even if we can’t attach a specific carbon number to those measures.

We call this approach “Strategic Climate Funds” (SCFs). See the SCF section on page 27 for more detailed advice and guidance on how to do this.
What about going “net zero”?

Here’s our advice on ‘net zero’ targets and carbon offsetting. It’s a position shared by a growing number of environmental organisations and charities, and one that we hope will help simplify the climate targets and action plans of arts organisations.

At the UN climate talks in Paris in 2015, after much debate over targets (and pressure from climate activists and countries of the Global South), the world’s governments agreed that the amount of carbon emitted globally by society should be ‘balanced out’ by the amount absorbed by nature (and maybe some technology) by the second half of the century. This is where the concept of ‘net zero by 2050’ came from – it was never intended as a final target, but as a milestone on the path to zero emissions. Also, crucially, it wasn’t a target proposed by climate scientists but a political compromise to try to keep the world’s governments on board.

While ‘net zero’ does mean something on a global scale, it makes significantly less sense as a target for individual organisations (unless they own or manage large amounts of land). To reach that global net zero milestone, we need everyone who’s emitting greenhouse gases to rapidly reduce those emissions, and everyone with responsibility for lands and oceans to help defend and expand the natural carbon stores provided by the living planet. It makes far more sense for each organisation to focus on the bits of the global balance sheet (emissions or absorptions) where they have the most influence or responsibility, rather than spend resources on making these things appear ‘cancelled out’ within their own operations – especially when the main tool available for this is offsetting, a practice beset with problems (see the SCF section of this document for more details).

So, slightly counterintuitively, the best way to reach global net zero may be for individual organisations to not set individual net zero targets, but instead focus their resources on where they can make the biggest differences, either by reducing emissions or increasing carbon absorption. For most people in the arts and culture sector, unless you own a park or a forest, it’s the reducing emissions bit where you’re going to have the biggest impact.

Three years after the Paris Agreement, a 2018 UN climate report laid down a clearer and more important target for holding global heating at 1.5 degrees: global emissions reductions of 45% from 2010 levels by 2030 (which equates to 50% reductions from 2019 levels by 2030). This is the minimum target that GCC asks all its members to sign up to – but we strongly encourage everyone to go further and faster than this if they can, and aim for as close to “real zero” as possible, as soon as possible.

This is where GCC’s “Strategic Climate Funds” come in – these are a way to encourage our members to step up their ambitions and support frontline climate solutions without getting tangled up in problematic carbon neutral targets or offsetting schemes. See the SCF section of this document for more details.
What if we already have a ‘net zero’ or ‘carbon neutral’ target?

Don’t worry! Many organisations have done this, following in the footsteps of governments and others*. We’re not suggesting you change your net zero target immediately, especially as so many of these targets are hard-won results of lots of internal work and persuasion. Plus, these targets are often out of the direct control of individual institutions, as they’ve been set by a higher body (e.g. a local authority or university).

Instead, we’d recommend you do the following:

- Make sure the path to your ‘net zero’/‘carbon neutral’ target includes a minimum 50% reduction in your actual emissions by 2030. The latest guidance from the Science-Based Targets Initiative states that offsetting should never be used to cover more than 5–10% of your target emission reductions; this means that, following best practice, your ‘net zero’ target should be seen as a commitment to at least 90% reductions in real-life emissions by that date. Knowing this, you should be able to track a path to that target that includes at least a 50% reduction by 2030. Of course, if your ‘net zero’ target is 2030, this means you are already effectively committed to a 90% reduction in emissions by 2030, and thus are already more than compatible with the GCC targets.

- Start putting less emphasis on the ‘net zero’ part of your target and instead concentrate on the urgency to reduce emissions by 2030, and the actions you’re taking towards that goal. Set some milestone reduction targets for specific parts of your carbon footprint by 2026 or 2027, and plan how to achieve them.

- At an appropriate moment, if you are able, review your net zero/carbon neutral target and check it is still fit for purpose in light of ongoing revelations and growing concerns around offsetting. Seeing as the latest ‘net zero’ standards require a real-life emissions reduction of 90–95%, what would be the pros and cons of simply setting that as your target instead? Conversely, if meeting your net zero target would require more offsetting than stated in the SBTi guidelines, then how else might that money (and time) be spent if you weren’t buying offsets?

- If you choose to move away from a net zero target, then setting up a Strategic Climate Fund (see below) combined with some firm reduction targets can be a positive alternative, and a way to show you aren’t reducing your ambition by making this change, but instead being more strategic with your resources whilst staying in line with climate science.

*Following the 2015 Paris agreement, many countries and organisations set their own ‘net zero by 2050’ targets. Much of this no doubt happened in good faith; however, it’s hard to ignore that this particular target is not only decades away, but also allows for the use of offsetting or the promise of (unproven) future ‘carbon capture’ technologies, making it attractive for governments and businesses wishing to avoid real emissions cuts today. This led many other organisations to assume that ‘net zero’ targets were best practice, and thus set similar targets.
What if we can’t calculate a 2019 baseline?

If it isn’t possible to set a 2019 baseline (perhaps because data from that year is unavailable, or because your organisation didn’t yet exist in its current form), then a 2021 baseline can be used instead.

Global emissions in 2021 were only slightly higher than 2019 (following the disruption of the COVID pandemic), and so 2021 can be used as a reasonable proxy. However, we would strongly advise setting a 2019 baseline if you can, as this will allow you to capture the emissions from your pre-pandemic operations, which when compared with your current emissions can provide all kinds of useful information.
What if our organisation is planning to grow?

Arts organisations that are planning to grow their operations significantly between now and 2030 – for example, by opening new galleries – are in a slightly more complex situation than those planning to remain roughly the same size.

On the one hand, the climate doesn’t know or care whether our organisations are growing – the only thing that matters is how much greenhouse gas we are putting into the atmosphere. From this perspective, we need to make sure that we are halving our emissions over the next seven years, even if planning to increase in size.

On the other hand, because GCC’s goal is to reduce the carbon footprint of the art world as a whole by 50% by 2030, there is the potential for some flexibility within that framework.

If the arts organisations that are growing are taking up space left by others who are shrinking or closing down (sadly, a common situation during COVID), then as long as the growing organisations are reducing their relative carbon footprint, the emissions from the sector as a whole will still come down.

Any arts organisations planning for significant (more than 50%) growth by 2030 should speak to us, and we can discuss what this means for your target-setting and whether you should set a relative rather than an absolute target. We will need to make sure this is done fairly across the whole sector.

This is an interesting topic and we don’t have all the answers. But we are keen to explore this area further with future events and resources.

Do you work for an organisation that is planning on expanding and don’t know what that means for your emissions targets? Get in touch – we would like to hear from you.
CARBON AUDIT
A carbon audit is an assessment of the emissions of carbon dioxide equivalents (CO2e) produced by an organisation, individual or project. This is a more intensive and in-depth assessment than one produced using the GCC Carbon Calculator. It is usually conducted by an external assessor, consultant or carbon audit agency.

CARBON NEUTRAL
If something is carbon neutral, it means that any carbon emissions created are balanced by taking the same amount out of the atmosphere. There are limited ways to remove carbon from the atmosphere – for example, you can plant trees which absorb CO2 and release oxygen. However, to be truly “net zero” the emissions would need to be removed from the atmosphere at the same rate that they are being emitted – something that is very difficult to achieve except on a global scale.

CARBON NEGATIVE
Carbon negative is the point where global emissions become so low that more carbon is being removed from the atmosphere (through absorption by forests, soils, oceans etc.) than is being emitted by humanity. This is a goal we need to reach globally, and the next step beyond “net zero”. It is theoretically possible for a product or organisation to become carbon negative, but (as with net zero) this is difficult to achieve except on a global scale. There are very few credible examples of “carbon negative” organisations or products, even though there are many claims out there – as with offsetting, there’s the problem with timescales, with companies claiming that carbon savings from tree-planting or soil restoration over the next few decades will more than cancel out their current emissions.

CARBON OFFSETTING
Carbon offsetting is a process of reduction or removal of emissions of carbon dioxide or other greenhouse gases made in order to compensate for emissions made elsewhere. As has been widely agreed by environmental specialists, conventional ‘carbon offsetting’ is not the fastest, fairest or most effective way to tackle the climate crisis. Therefore, GCC does not recommend the use of carbon offsetting. Our reasons for this are outlined here.

CIRCULAR ECONOMY
The circular economy is based on three principles: eliminate waste and pollution, circulate products and materials and regenerate nature. It is underpinned by a transition to renewable energy and materials. A circular economy decouples economic activity from the consumption of finite resources. It is a resilient system that is good for business, people and the environment.

CO2
CO2 refers specifically to carbon dioxide.

CO2E
CO2e stands for carbon dioxide equivalent. It is a system of measuring and comparing the equivalent global warming potential (GWP) of a range of gases against a common unit. CO2e totals often include the equivalent sums of a number of other gases such as nitrous oxide (N2O) and/or methane (CH4).

DECARBONISATION
Decarbonisation is a term used to describe reducing CO2e emissions resulting from human activity, with the goal of untangling society from our reliance on fossil fuels.

GCC CARBON REPORT
A GCC Carbon Report is the term we use to describe reports produced using GCC’s free Carbon Calculator. This is different from a carbon audit. The carbon calculator was designed to strike a balance between ease of use, so it relies on various estimates and assumptions that allow users to get a quick breakdown of the key areas of emissions associated with their operations (you can find out more about these metrics in the Calculator User Guide). Because it relies on users entering their data correctly, Carbon Reports cannot be verified for their accuracy, and therefore cannot be considered an ‘audit’.

Glossary
INCINERATION
For many countries waste that is diverted from landfill is sent to be burned in incinerator facilities instead. Incineration is a waste treatment process that uses combustion technologies to burn waste and, as many companies like to claim, transform this ‘waste into energy’ during the process. However, research shows that incinerators are detrimental to our environment and human health.

NET ZERO
At the UN climate talks in Paris in 2015, the world’s governments were debating global climate targets. Unable to agree on firm dates for specific reductions, they ended up with the following compromise: that the amount of carbon emitted globally by society should be ‘balanced out’ by the amount absorbed by nature (and maybe some technology) by the second half of the century. This is where the concept of ‘net zero by 2050’ came from – it was never intended as a final target, but as a milestone on the path to zero emissions.

SCOPE 1 EMISSIONS
Scope 1 emissions are greenhouse gases directly emitted by an organisation, such as from gas burned to heat a building or petrol purchased to burn in a car.

SCOPE 2 EMISSIONS
Scope 2 emissions are greenhouse gases from the production of electricity purchased directly by the organisation.

SCOPE 3 EMISSIONS
Scope 3 emissions are greenhouse gases from the production of electricity purchased by the organisation and other “indirect” emissions. This includes everything that the organisation spends money on, from taxis to flights to printing to shipping.

STRATEGIC CLIMATE FUNDS (SCFS)
GCC has developed “Strategic Climate Funds” (SCFs), which is an ethical climate financing policy for the visual arts sector. Reducing emissions alone won’t be enough to address the climate emergency. We must be decarbonising and funding effective climate initiatives. Learn more about how SCFs work on page 27.

ZERO WASTE
Zero Waste is a waste management approach focused on waste prevention. This ensures that products and materials are designed to have a long life, and will be reused, repaired, or recycled rather than landfilled or incinerated.

ZERO WASTE TO LANDFILL
Zero waste to landfill is a waste management approach focused on diverting as much waste as possible from ending up in landfill. However, this approach can end up glorifying incineration and ‘waste-to-energy’ facilities as an alternative waste management solution, thus encouraging more waste production.

ZERO CARBON
Zero carbon means that no carbon emissions are being produced from a product or service (for example, a wind farm generating electricity, or a battery deploying electricity). Energy sources like wind and solar do not create carbon emissions when they are used to produce electricity – we refer to these sources as zero-carbon.
This plan was developed by Gallery Climate Coalition and builds on GCC’s 2021 Decarbonisation Action Plan. GCC intends to publish revised versions of these Action Plans to ensure the information is up-to-date and relevant to our expanding membership. If you have comments about this resource or are interested in contributing to future Action Plans, please get in touch.

Through the generosity of our Supporters Circle, we have been able to build the foundations of a truly meaningful and sector-specific response to the climate crisis. GCC would like to give our donors a special thank you for their continued support, without which the production of this resource would not have been possible.