BUILDING SUSTAINABILITY INTO MAJOR EVENT DELIVERY

BASIS

uk sport
powering success
inspiring impact

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Contents

About this guide

Sport in general, but particularly major sports events, have a two-way relationship with the environment. The events we organise have an impact on the environment; whether from the carbon emissions associated with long-distance travel or from the waste generated when crowds attend large-scale events. At the same time, event delivery and sport competition can all be adversely affected by environmental impacts such as extreme weather and poor air quality, so we must understand and take account of these risks in our planning and preparation.

This practical guide has been created to support event organisers to build sustainability into event delivery.

UK Sport is pleased to have worked with the British Association for Sustainable Sport (BASIS) in the production of this guidance.

It matters how elite sport is played

Playing sport needs a healthy environment for optimum preparation and performance. The impact of climate change on the environment can affect the event and the performance of the athletes, and a poor or disrupted environment is a sub-optimal competition arena.

It matters to stakeholders

The expectation, importance and credibility of environmental sustainability within sport is becoming increasingly relevant to all stakeholders:

UK Sport: as is demonstrated in its organisation strategy and by the publication of this guide, sustainability is an increasingly important consideration for UK Sport.

Host cities/councils: after the UK government signed into law the target to be Net Zero by 2050 in 2019, many cities and councils followed suit with their own net zero targets. Therefore, an event that is aligned to reducing emissions and being as sustainable as possible is likely to be aligned to the host city and council's long-term strategy too.

Staff and fans: there is a rapidly increasing sense of priority and expectation among society in relation to environmental sustainability. The People's Climate Vote polled 1.22 million people globally. 64% said that climate change is now an emergency and this figure rose to 81% in the UK. It is also widely recognised and researched that there is a growing expectation and priority, especially among the younger generations, around environmental sustainability. It is a growing necessity for sports events to reflect this wider changing consciousness.

Teams/athletes: reflective of society more widely, a growing number of athletes are also now starting to voice their support for environmental sustainability.

Sponsors/partners: As businesses and organisations respond to the shifting expectations around climate change and environmental sustainability, more are implementing their own commitments and setting targets. This presents an opportunity to align on sustainability values.

It matters to the wider industry

This topic is only accelerating within the wider industry too. From the Global Association of International Sports Federations (GAISF), in collaboration International Olympic Committee, building an online resource platform aimed solely at sustainability, to more and more positive examples of how sustainability is adding value in the business of sport.

The United Nations UNFCC Sports for Climate Actions Framework is also growing a network of sports organisations wanting to take steps in this area and sets out five useful core principles:

- Undertake systematic efforts to promote greater environmental responsibility
- Reduce overall climate impact
- Educate for climate action
- Promote sustainable and responsible consumption
- Advocate for climate action through communication

Overcoming the common perceived barriers

What are the benefits of implementing sustainability commitments, targets and actions?
The most significant benefit is that you will be joining with many other events, businesses and groups around the world in reducing our damaging impact on the environment, while amplifying your positive actions.

Benefits include:

- **Greater engagement with workforce, volunteers and fans –** in recent years the public has embraced sustainability and many people now expect organisations and events to be more sustainable. Positive actions breed positive responses and the people working for you and attending your event will understand and engage more positively as a result.
- **Meeting the requirements of new legislation –** legal requirements around sustainability are increasing and we will need to change the way we do things.
- **Working more closely with supply chains –** asking questions about sustainable practices lets you engage with your supply chain, finding common solutions to reducing your environmental impacts.

Is it going to cost more money to be sustainable?
Done properly, planning to deliver your event in a more sustainable way should not require you to do any more: you still plan transport and logistics; you provide catering and engage waste and cleaning services. All of these activities should already be included as part of the existing budgets. There may be a few sustainability activities that fall outside of your budget and the costs and benefits should be assessed as for any activity. You may even bring in unexpected sponsors, attracted to the more sustainable approach.

We don't have the resource or budget to do sustainability, how do I overcome this?
This guide has been designed to help build knowledge and provide practical ways of embedding sustainability into event delivery no matter the current state of resource and budget. Of course, there are aspects where more resource, expertise and training would be beneficial, and there will be an advantage if sustainability is a core principle factored in from the beginning across budgets and people resource.

We don't know what the issues are or how we should to respond to them?
This guide addresses this question. It aims to provide clear, practical and supportive guidance in how you can embed sustainability within your event. It provides information on the key issues and a systematic approach to embedding sustainability within events. It is designed to be accessible for different people in different operational roles. While each topic is different, each section will cover the following core questions:

- How do you identify the issue/challenge?
- How do you manage the issue/challenge?
- How do you measure the impact?
- What should you report?

Sustainable events and the One Health concept

Sustainability can appear to be complex, making it difficult to know where to start and how to embed it within your event.

Everything that you do in the planning, building and delivering an event will have some kind of impact; many of these impacts will be positive, but some will be negative. For example, the event may have a positive social impact, increasing the awareness of the sport and driving participation. On the other hand, bringing together large numbers of athletes and spectators in one place will generate greenhouse gas emissions and generate waste that needs to be managed. Managing events more sustainably aims to both balance the positive and negative impacts and to manage and reduce the negatives impacts as much as possible.

One myth, that often comes up, to immediately dispel is that managing an event more sustainably is something extra or an 'add-on' to try to adapt or to reduce the impact after it has happened. Every topic included in this guide is planned and delivered anyway, managing them in a more sustainable way simply means that we ask the right questions at the right time (usually as early as possible) to try to reduce negative impacts and increase positive impacts.

So, what is sustainability? There are a number of definitions, but all of them have three key concepts:

- The three interrelated 'pillars' of sustainability are **environmental**, **social** and **economic** issues
- These three pillars must be **balanced** to achieve the optimum result
- Your decision-making process should **look beyond the event** (for example, single use plastic has been convenient for events because it is used and thrown away – job done. But if that plastic enters the environment, it will take many decades, even centuries, to break down and can cause problems in the meantime).

To simplify sustainability BASIS has adapted the One Health concept for sport. The single theme of health can tie together the complexities of trying to manage your event in a more sustainable way:

- **Planetary health** is about understanding and taking action to minimise and mitigate your impacts on the natural environment. Increasingly, sports events will find that they have to adapt to changing environmental conditions.
- **Personal health** is about enhancing the physical and mental health, safety and wellbeing of your staff, players, volunteers and visitors.
- **Community health** is about having meaningful and resilient relationships with communities, suppliers and other stakeholders that work with, or may be affected by, your event.

This guide will focus on planetary health and environmental sustainability, but the other two aspects are important to keep in mind.

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Showing leadership

In this section we cover how to approach setting your ambitions and commitments for the event, alongside how this needs to be underpinned by good governance and accountability.

Key starting questions:

Where do I start?

Which key stakeholders do I need to get on board?

How can I start to embed sustainability into the core ethos of the event?

1.1 Bringing the approach to life: where to start

Secure buy-in and establish commitments:

- Engage key stakeholders to define the ambitions and commitments of the event

Set targets:

- Set out how you will measure your success by developing an agreed set of targets against your commitments.
- Use a mixture of qualitative and quantitative targets relating to key aspects including management, data and performance.

Establish priorities and actions:

- Bring all operational stakeholders together to decide which sustainability actions to pursue.
- Build into event planning as early as possible

Approach: Commitments, targets and actions

Successful sustainability action cannot be delivered in isolation, it requires buy-in and support from all stakeholders and operational staff involved in event delivery. It is always recommended that environmental sustainability be considered and adopted within thinking as early as possible and included within the feasibility process. If sustainability ambitions have not been defined through earlier feasibility or business case processes, now is the time to agree on the ambitions and commitments the event wants to makes.

These commitments will be underpinned by clear targets and well-defined actions. To be most effective, commitments, targets and actions should be discussed, agreed and integrated as early as possible within the event design and planning.

Create your commitments:

These are overarching principles by which your event will operate. Your commitments illustrate how the event will implement sustainability across key elements of event delivery. They can be used internally, as well as be public facing, from the early stages of an event's lifecycle.

It is recommended that your commitments should cover key topics including, but are not limited to:

- Management structure and governance
- Material operational topics relevant to your event
- Communications and engagement
- Collecting data, measurement and reporting

Commitments, while similar in purpose, are not limited to a particular format. Across the sports industry, you can see commitments being presented in a variety of ways such as:

- By signing up to the UN's Sports for Climate Action Initiative:
- A sustainability charter: Rugby League World Cup, World Sailing
- A policy: The Vitality Big Half
- A sustainability pledge: Birmingham 2022
- A designated space on the website: World Athletics, Formula 1, Formula E

It is recommended that your commitments are externally facing and when appropriate, actively communicated to the public and the media. Having them on your event's website, for example, shows a clear statement of intent towards sustainability and provides transparency on where areas of focus lie. It also allows you to share and communicate your sustainability ambitions early, prior to and without pressure of explicit targets which may take longer to create. By making these commitments public facing, it also embeds a higher level of accountability.

Further examples of what commitments could look like in practice can be found in Appendix A

You've outlined the event's commitments, now set some targets.

Targets

These sit under and support your sustainability commitments. While these may take more work to refine than the commitments, and may not become public facing straight away, setting targets is vitally important to fully embed action and accountability on sustainability into your event.

For events that are usually standalone or one-off, finding benchmarks from which to set quantitative targets can be difficult. Don't let this put you off, as setting targets is paramount to making sure that the commitments have substance and, at the end of the event, a clear measurement of success can be communicated and shared. Consider breaking the process down by setting a mixture of targets:

Management targets: Make it happen
These targets are easier to define as they relate to how sustainability at the event will be managed and embedded. Management targets cover topic areas such as having a public facing commitment to sustainability launched by a certain date, having targets set by a certain deadline and creation of energy management plans.

Data targets: Make it measurable
Having data is crucial to being able to measure and report performance. Having targets related to data will help emphasise focus and improvement on the quality of data.

Performance targets: Make it visible

- These targets are the quantitative measure of success. For example:
  - 40% of waste is recycled
  - No single use plastic bottles are procured by the event
  - Sharing sustainability related content to reach 80% of followers
- For one-off events, where little historical data and reporting may exist, knowing where to benchmark these quantitative targets can be difficult. Where this is the case, work with partners and key stakeholders (particularly the venue) to establish if there is any other proxy measurement that could be used as a benchmark. For example, for energy, this could be understanding typical usage of the venue in a time of similar occupancy to your event or for waste, what are the typical recycling rates of the local area. Appendix B outlines some questions that can be used to initially engage with key stakeholders in this context.
- The good news is that as environmental sustainability becomes more embedded and increasingly reported on across many more events, this process should become easier.

Examples of each type of target and the different elements of the event are included throughout this guide.

Having refined and set your targets, now put in the detail of how you are going to achieve them by fleshing out the key actions.

Actions

These are the practical steps to be able to achieve your targets and relate to day-to-day operational considerations, opportunities and decision-making needed to have a positive environmental impact.

While it is recommended that you agree your commitments and set your targets first, before fleshing out the key actions, it is appreciated that sometimes it doesn't always transpire that way and you may want to engage operational staff in the early conversations. Therefore, in reality, there are two ways you can approach this work; you can either run workshop/s with operational staff to create the list of actions and then build your targets around them or set the targets and decide what actions you need to deliver to achieve them.

Whichever approach you choose to create your list of actions, once you have that list, categorise and prioritise the actions into a more structured list.

- **Structure actions into key themes**
  While some themes may vary, themes such as energy, transport, waste and procurement/supply chain, are likely to be common, relevant themes of focus across your event.
- **Prioritise actions based on both the risk and opportunity**
  It is important here to consider both, as improving sustainability performance often involves maximising opportunity, not just averting risk.
- **Link the actions back to your commitments and targets**
  Mapping actions back to your commitments and targets helps to support buy-in from individuals, who can see how their action is making a tangible difference to the bigger picture.

Now you have set the direction and plotted what actions need to happen, formalising the ownership of those elements is now crucial to making sure they happen.

Effective governance and accountability

Sustainability is a cross-cutting topic involving multiple, if not all areas of an event. Therefore, implementing sustainability requires a systematic approach to effectively engage all necessary stakeholders. Defining clear ownership by establishing clear lines of responsibility and accountability is crucial to this.

This process involves:

- Establishing high-level buy-in
- Ensuring high-level accountability
- Managing and maintaining the ownership throughout the delivery team

Establishing high-level buy-in

Although responsibility for sustainability will ultimately be shared across the whole delivery team, in the first instance this needs to be owned by top management and key stakeholders. This is because:

- For sustainability to be effectively integrated into the event and have maximum impact, it needs to be a strategic choice, not an ad-hoc addition.
- One-off events usually start with a small team that expands rapidly. Therefore, for sustainability to be embedded right from the start, key stakeholders and top management need to own, commit to and connect sustainability to the core ambition of the event.

This top management ownership is closely linked to the establishment and sign-off of sustainability commitments. As part of this process, it is also important to assign an ultimate owner of the sustainability agenda for the event. This is likely to be the event director but could also be another senior member of the delivery team.

Furthermore, ownership is not just about responsibility but also accountability. Therefore, by developing the targets as measurements of success alongside the commitments, accountability is naturally built into this structure of ownership.

Managing and maintaining ownership

Although top management is crucial to cementing strong foundations of a sustainability agenda, getting the rest of the team on board is critical to delivery. It is therefore important that individuals feel that the actions are a valuable, agreed and embedded part of their role.

Formalise the action plan

- Appoint an appropriate owner of each action.
- Create a project management tool which can be used to:
  - Track the ongoing status, challenges, and successes of each action
  - Illustrate action specific timelines and deadlines to each action's owners
  - Engage with the delivery team on their actions when appropriate
- Engage with all functional areas and action owners to:
  - Make sure owners understand the actions
  - Allow an opportunity for any initial concerns, questions or other uncertainty to be discussed and resolved
  - Communicate how actions will be managed, monitored and supported going forward
  - Get agreement, buy-in and commitment from owners on the delivery of sustainability actions

Monitor and manage the action plan

This can be done in numerous ways and should align to how all your other event deliverables are monitored and managed. Examples include:

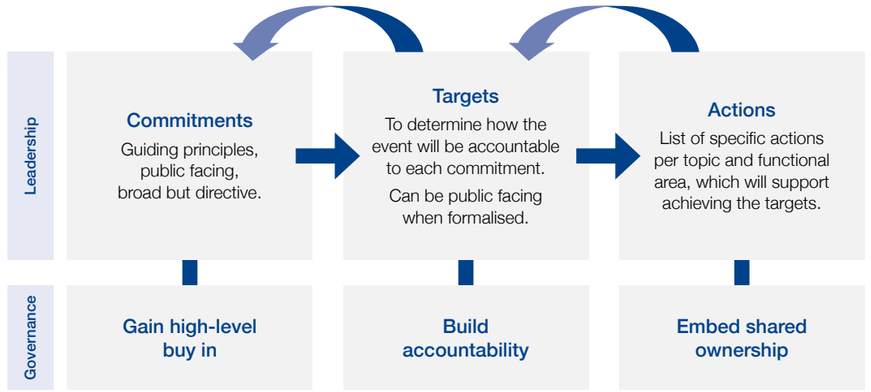
- Adding sustainability as a standing agenda item to key delivery meetings
- Creating a sustainability working group, where key work stream owners meet to discuss progress, challenges, and success
- Creation of sustainability champions in key functional areas who are responsible for:
  - Keeping track of progress
  - Being an extra support to other members of the team
- Feeding back any challenges or successes
- Making sustainability part of staff inductions and performance or line management reviews, where relevant

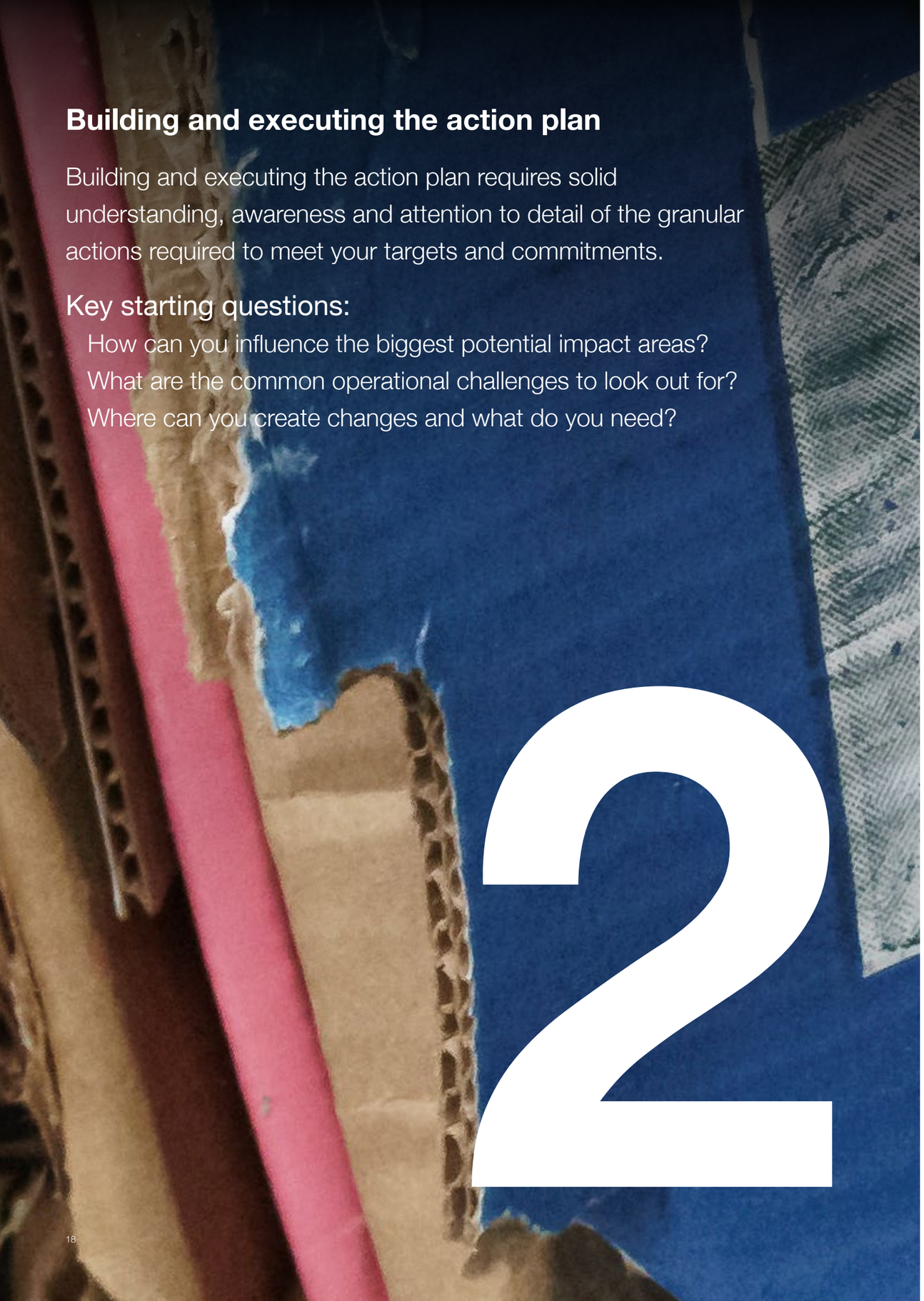
Report frequently

This should be done as an integrated part of the event's usual reporting requirements and expectations. This is also important at different levels:

- **Functional areas:** a requirement to also report on their sustainability actions (progress, successes and challenges) as part of other feedback formalities
- **Update reports:** when providing update reports to key stakeholders ensure progress on sustainability is included
- **Risk register:** add your sustainability targets to the event's risk register. This will create another driver to ensure they were being continually considered and the event was on track to achieve them

Summary of leadership and governance approach





Building and executing the action plan

Building and executing the action plan requires solid understanding, awareness and attention to detail of the granular actions required to meet your targets and commitments.

Key starting questions:

How can you influence the biggest potential impact areas?

What are the common operational challenges to look out for?

Where can you create changes and what do you need?

2

2.1 Energy management

Key principles
Power supply is almost always going to be fundamental for an event. Therefore, careful, thoughtful and clever management of energy is important to limit the environmental impact of powering your event.

As a starting point, it will be beneficial to consider the below principles:

- Understand where, how and why energy is being used across all operational areas to identify energy risks and efficiency opportunities
- Put in place an energy management plan to help minimise energy consumption and support the efficient use of energy across all areas, guided where possible by key principles of eliminate, reduce and substitute
- Have a policy in place that promotes the application of the energy management plan

Understand where, how and why energy is being used across all operations

- What are the power requirements for the event?
- Can you work with the venue to map the likely energy use across the site during the event?
  - When will peaks and troughs of power consumption occur across the day/night?
  - Where are the high energy consuming areas and/or equipment?
  - What granularity of data, does the venue record in relation to energy use?
- What policies and technology does the venue already have in place to reduce energy use?
- Does the venue procure energy from renewable sources?

This scoping and mapping exercise is a crucial part of understanding how event delivery will be powered and what those power requirements are expected to be. The information from this process will help with designing in energy efficiency.

Energy refers to all the power sources that may be utilised by the event such as electricity, natural gas, LPG, diesel etc.

Energy management plan

The objective of an energy management plan is to turn the understanding and learnings from the previous step, into an organised plan of practical actions, so energy needs can be met in the most efficient way. While operational contexts differ from event to event, there are number of core themes to consider.

Electrical appliances and equipment

Avoid unnecessary consumption by carefully planning electrical appliance requirements and choosing equipment in line with these requirements.

- **Eliminate:** clearly assess and define the need for each electrical appliance to make sure only necessary appliances are being procured and used. Consider if plans can be organised in a better way to reduce the amount of additional equipment or appliances, without significantly impacting output.
- **Reduce:** focus on efficiencies in operations, processes and energy management.
- **Substitute:** adopt lower carbon technologies, purchase products with lower embedded carbon and have minimum standards for efficiency of equipment. For example, where possible procure products with an A+++ energy label, but a minimum standard of A+

Lighting

Be smart with how you manage lighting both from a design and behavioural perspective.

- **Eliminate:** prioritise the use of natural light, where possible, over electrical lighting. For example, this includes not obstructing natural light sources with overlay or furniture.
- **Reduce:** ensure staff and volunteers are fully briefed and provide signage on where they can switch-off lights and where lights should be left on for necessary operational purposes.
- **Substitute:** have a preference for more efficient lighting, such as LEDs.

Heating, ventilation and air conditioning (HVAC)

Be proactive about optimising the use of the HVAC system by collaborating with the venue and M&E (Mechanical and Electrical Systems) contractor.

- **Eliminate:** assess the need for HVAC based on the usage and occupation of different areas. Work with the venue and key staff to turn off heating and/or air-conditioning in areas of little to no requirement. An example: avoid the heating or cooling of open or empty areas and using natural ventilation for cooling where possible.
- **Reduce:** where HVAC is required, assess the required ambient temperature and ensure controls are set to this temperature. Work with the venue and M&E contractor to align the event schedule and expected occupation times with plant run times.
- **Substitute:** if supplementary, temporary HVAC equipment is needed for a specific event purpose, ensure equipment meets minimum efficiency standards.

Temporary or back up power

Generators can be an unwelcome cause of noise and air pollution, and so must be managed with this in mind.

- **Eliminate:** consider if there is an alternative model of delivery that would eliminate the need for generators, supported by a policy which prioritise the use of mains power where possible.
- **Reduce:** assess if generators need to be run 24/7 and where this is not necessary, ensure there is a clear process in place to turn these off when required. If multiple services require generators, look to organise in a way to share generators across the site so loading of generators is optimised for efficiency.
- **Substitute:** choose a supplier that can offer efficient generators, with a high exhaust emission standard and use alternative fuels to high emission fuels such as diesel.

Stakeholder engagement and communications

To enable the effective and consistent application of actions within the energy management plan, raise awareness among key stakeholders on their role to support this. Key stakeholders include the venue staff, event staff, volunteers and any contractors/suppliers working on site. This can be done in multiple ways:

- As part of training, onboarding or inductions brief people about the importance of energy management within the event.
- Develop and clearly communicate switch-off and end of day routines or checklists relevant for different roles.
- Ensure the last appropriate person on shift, completes an end of day walk around of operational areas to make sure all lighting and equipment is switched off where it should be.
- Where lighting or equipment needs to remain on for critical operational purposes, clearly label to give staff confidence about what is necessary to stay on.

Energy data

Ensure that the venue and suppliers are aware of the energy data they need to provide and communicate this expectation early. For more detail on the importance of data, see collection of data, measurement and reporting.

Hot topic: Sports presentation

As a crucial part of creating the event ‘spectacle’, with lights, camera and action, sports presentation is likely to be a key energy hotspot. Use the actions outlined within your energy management plan to engage with, and set expectations around, energy efficiency with your sports presentation supplier. Don’t be afraid to challenge your supplier, around the possibilities of designing and operating the sports presentation in a more efficient way.

Many sports presentation suppliers now operate to their own high sustainability standards and will likely be happy to talk about this.

Building sustainability into major event delivery

2.2 Waste management

Key principles

Waste is anything that has served its purpose and outlived its useful life and is no longer wanted or needed by the owner. There are two main items that you are likely to deal with:

- **Useful products –** these are items that serve a purpose in delivering the event or are part of the spectator or athlete experience. While some items may have a short useful life, many items used at events will have a serviceable life far longer than the duration of the event.
- **Packaging –** the purpose of packaging is to preserve the 'useful products' long enough that they arrive in good condition and are fit for purpose when needed. As such, packaging typically has a short useful life. Note that a minimum amount of packaging is necessary, the key is to manage this and avoid, reduce and recycle as much as possible.

The principles of waste management are well set and are a legal requirement across the UK. The waste hierarchy requires that we **avoid, reduce, reuse** and **recycle**:

Avoid

- The best thing to do is to avoid producing waste in the first place
- Ask yourself whether the items you wish to purchase are genuinely needed
- Change of mindset: is there a different way to deliver the outcome without needing to purchase anything new?

Reduce

If you decide that the items are definitely needed, consider how best to procure them.

- Hire items, such as office furniture; laptops and peripherals; bins, barriers and other overlay
- Be accurate on the volume you ordered
- Ask potential suppliers about their packaging Make it clear that packaging should be minimised to what is necessary and that all packaging should be recyclable. Some suppliers may even take packaging back for reuse or recycling
- Switch from single use products to multi-use, reusable products.

Reuse

Either purposely commit to reusable products or find another use for the items after your event. It is best to think of reuse opportunities from the beginning rather than retro-fitting.

- Try to make sure that as much event overlay as possible is not time specific. Inclusion of dates on banners and signage means that its useful life ends at the end of the event. Alternatively, branded materials, without dates could be usable again. Intelligent branding will be able to reduce the amount of 'time limited' messaging that goes into a venue and allow for more event overlay materials to be used again
- Work with your stakeholders to create a robust asset disposal plan, this should include donating items to community groups and schools.

Recycle

When you cannot reuse, items should be collected to be recycled and turned into another useful product. There are two types of recycling:

- Closed loop recycling is generally the best. Items are processed and turned back into the same or very similar products. Aluminium and glass can be recycled in this way almost indefinitely.
- Open loop recycling turns items into another, usually long-life product. For example, many plastics can be melted and remoulded into a range of plastic items from coat hangers to park benches. As such, these items are typically only 'recycled' once.

The principles of avoid, reduce and substitute align with the Carbon Reduction Hierarchy as set out by Institute of Environmental Management and Assessment

There are other ways of managing waste:

- **Composting** disposes of organic waste and may include food waste and grass cuttings (dependent on the event).
    - There are a number of products on the market that claim to be "compostable". Often these products require particular processes and conditions in which to break down. You should check with the waste management company at the venue to understand if they can process such items. If not, they will be a contaminant in other waste streams.
    - Note that just because something is called "eco" or "bio" it does not mean it is natural and compostable. Such names usually refer to the origin of the material rather than how it can be disposed of.
- **Incineration** burns waste. Most incineration in the UK takes place in energy-from-waste plants recovering energy to generate electricity.
    - This may appear to contribute to solving two problems at once – generating electricity without using fossil fuel and disposing of waste – however, burning waste still generates greenhouse gas emissions, and may disperse other chemicals into the air (dependent on the processing of the gases released into the air). With the phase out of coal fired power stations in the UK energy-from-waste plants will soon be our most polluting form of electricity generation.
- **Disposal to landfill** is the least preferred controlled disposal option, largely because the volume of available landfill is rapidly declining. Well managed modern landfill sites are not as damaging as the old 'hole in the ground' landfills and so do not leach as many breakdown chemicals into the ground or emit as many gases as the old type but, even where the waste is held in relatively benign conditions, this still represents a loss of potentially useful products from the economy, by burying them underground.
- **'Fugitive' waste** is uncontrolled waste that has escaped from the managed waste system. This may be from intentional abuse of the system, such as illegal dumping or fly-tipping, or may be due to accidental losses from poorly managed storage. A legal duty-of-care system for waste seeks to minimise fugitive waste.

With these different types of waste management processes, some dependent on the type of waste, one of the most important principles is to understand the potential end-of-life of the items you purchase alongside meeting their useful life requirements.

Waste stream management

Gone are the days when all rubbish can be thrown into one bin. Managing operational waste in a large venue can be a complex operation; waste from small bins in concourse areas or work spaces needs to be transferred to larger bins for transport to go into compactors or skips for collection. Without careful procedures waste could be cross-contaminated at any point.

Waste should be viewed as a resource which can be used again. As with any resource it has greater value the cleaner (i.e. the less contaminated) it is. You are likely to need to manage waste in a number of areas including:

- **Back of house areas –** such as kitchens, press/media rooms and volunteer rest areas
- **Front of house areas –** the spectator seating area and concourses, which may include food and beverage service areas
- **Fan zones / activations outside of the venue –** these may on the approach to the venue or completely separate to the main venue

There are a few principles that will help you manage your waste in the best possible way:

- **Collaborate with your venue:** understand from your venue (or prospective venue) what their waste management and recycling policies are, and whether or not they would be willing to adjust them for the period of your event. It is especially important to understand if the venue allows in any food or drink. This will allow you to understand the possible waste streams (it is hard to control what people bring in with them). When you have this information, assess how these fit with your aspirations and commitments and if adjustments can be made.
- **Clear signage:** design clear messaging to encourage staff, spectators, fans and other visitors to segregate their waste into the correct bin. Arguably this should be easier with staff and volunteers as the messaging can be reinforced during briefings. All waste streams should be consistently colour-coded to ensure that waste is not mixed and so ends up in the correct compactor or skip for collection.
- **Good bin availability:** Especially in front-of-house areas, all bins should be available in a group so that any piece of waste can be disposed of properly, otherwise contamination rates are likely to go up as people put their rubbish in the closest available bin. Bins serve a purpose and are a necessary part of the infrastructure of the event so they should be clear enough to be easily visible.

Segregate waste: As far as is practicable try to keep different types of waste separate. These include:

- **Food waste –** this is the most important type of waste to segregate. If it gets mixed up with other waste streams it can easily contaminate them. It is possible to treat food waste separately in de-waterers, composters or anaerobic digesters. It is important to make sure food is separated in back-of-house areas where larger volumes are produced and it is easier to manage. While it would be nice to segregate food in front-of-house spaces it isn't always practical and the volumes of food waste are often quite small.
- **Mixed dry recyclables –** it is often not practical, nor necessary, to separate out all the different types of recyclable material (there would be too many bins cluttering concourses). One solution is a mixed dry recyclable waste stream, with the waste segregated off site. It is important to make sure that the material that goes into this bin meets the expectations of the waste contractor, otherwise the load of recycling might be rejected, losing valuable resources from the recycling stream but also likely to cost significantly more money.
- **Residual waste –** this is anything that isn't food or recyclable.

There are other waste streams that venues collect separately, some of which are mandated under legislation. Things such as electronic equipment, batteries and paints and solvents must be kept segregated and disposed of separately. Wood and metal, typically only present in venues when being used by maintenance staff or contractors, can be kept separate. It is best to keep these out of general waste streams.

Asset disposal plan

In line with the reuse principle and the need to understand end-of-life disposal, creating a formal asset disposal plan for all purchased items is best practice. This can include:

- **Items to be resold:** anything that had to be bought (where you could not hire) could be listed for resale to give it a second life.
- **Items for reuse/donation:** where items might benefit a local community group, school, sport club or other good cause they could be donated for reuse.

Athlete waste

Athletes should adhere to the waste management and recycling requirements too, whether in venue or in accommodation provided, so relevant bins should be provided in athlete areas.

Athletes are role models and by demonstrating certain behaviours, can influence. Athletes should be provided with information on the waste management processes at the event so that they are aware how they can positively contribute, which in turn could encourage similar good practice at future events. This could include purchasing specific bins for athlete waste, such as tape they wrap their hands in.

To be effective role models, athletes also need to be informed and inspired themselves. They are important client group to communicate with during the whole lifecycle of the event and not just when they arrive.

2.3 Procurement and local economy/supply chain

Key principles

The things that you buy have an impact as much as the things that you do. Sustainable procurement is very important. The purchasing decisions you make, and the criteria you use, can have far-reaching implications for operational and sustainability performance. The actual impacts themselves sit within other principles (such as energy management, catering or waste management), but the purchasing decision at the start of the process will drive the impact.

Any product will come to you with 'embedded' environmental and social impacts. Each will have a history of resources, energy used and waste created in their manufacture and each will have a disposal requirement. Products will also have social impacts such as pay and conditions of the workers in supply chains. These elements should be taken into account, as far as is practicable, when making purchasing decisions.

Sustainability requirements need to be incorporated into tenders and included in supplier contracts to ensure the principles are embedded and clear. For example, waste management requirements (which would ideally be reuse or recycling, having already reduced) should be understood before purchase to ensure that the waste collection system can deal with the waste generated in an appropriate way.

Local providers will often have a lower impact and should be preferred where they can offer an equivalent product and/or service. Working with local suppliers also contributes to the local community, develops the local economy and creates good will in the local area.

Hot topic materials: plastics, printing and paper

Plastics and paper are often singled out as items to be avoided. However, both are very effective and useful materials when used appropriately. The issues come when they are not used appropriately, with no planning for reuse or recycling or are used excessively.

Plastics

Plastics are remarkable materials. They are very versatile and can be moulded into almost any shape for almost any purpose. They are also remarkably stable; they can be bent and are rarely attacked by any chemical that they might come into contact with, but this means that, if they get into the environment, they won't break down, at least not for decades or even centuries, and during that time they can cause all sorts of problems.

There are two aspects to think about when using plastics: what is it made of and can it be made into something else? Most plastics are made from oil. This means that a single use plastic that is discarded and incinerated is releasing fossil carbon to the atmosphere, exactly as burning refined oil as fuel. Consequently, incinerated plastics have a climate change impact.

All plastics can be recycled into something else, at least in theory. The issue is whether it happens in practice. Some reasons why you should choose or avoid certain plastics are:

- Recycling opportunities can vary depending on where you are in the country as the facilities. It is worth finding out from the local waste management provider which plastics they can manage.
- Plastics in a mixed waste stream are usually sorted in a machine using a laser. These lasers can't recognise black and darkly coloured plastics, so they are not sorted and recycled.
- Some plastics look similar and can be used for the same purpose, but the value of the recycled material varies. For example, PET plastic, often used for cups and food containers, is frequently recycled into a food-grade use (a closed-look recycling process which generates rPET plastics; the "r" standing for "recycled"). Where you have the option and the waste management processes support, using PET or rPET plastics has a lower impact overall.
- You will need to have a certain amount of material for it to be viable for a waste provider to collect it. As a general rule, you usually need about a tonne of material to make it worth collecting. For a very light plastic this could be a very large volume, and you may not use enough during your event or, if you do, it may be difficult to find the space to store it. Ask any potential suppliers (because this question should be asked at or before tender stage) if they can take back product for reuse or recycling because they are more likely to be able gather more (from all of their customers) and so be able to collect enough to make it viable.

The key principles for plastics are shared with many other products:

- minimise the amount you use
- where you can, reuse
- when you have to dispose of plastics, be sure to recycle

There will be times when plastics are the best material for functions that have to happen. For example:

- Signage, branding and wayfinding is crucial to enhancing spectator experience and the event spectacle as a whole. Often plastic based materials, due to their durable and weather-proof nature, are a necessary material in this context. Nevertheless, there are still plenty of actions you can take, as outlined in this IOC guide to reduce the overall impact.
- Accreditations are necessary for security reasons, they need to be durable, clear and secure. Plastics are likely to offer the best solution. The best option would be to hire rather than purchase holders. As a minimum, if holders are purchased, they should be kept to be used again at future events or offered to others for use.
- Lanyards can be made from recycled materials. Again, hire if possible, but also keep for future use or pass on to a future event. Does the lanyard need to be branded for that event, or can it be plain.
- Reusable versus single use cups is an interesting case. A single use cup is increasingly viewed as wasteful. It is good to encourage people to reuse and reusable cups are now available. Because of the resource need to manufacture a reusable cup, it needs to be used at least six times to balance out the extra material and energy compared to the single use. The best option would be to use either the cups used by the venue if they already have their own reusable solution in place or encourage spectators and your workforce to bring in a cup they already own.

Paper

Paper is another material that is often frowned upon, but similar principles apply. Of course, digitising information and using electronic copies makes sense in many cases but sometimes hard copies are needed. As with all resources, use of paper should be kept to a minimum and the paper used collected for recycling.

One area where technology can now avoid using paper is electronic tickets. Material savings can be made by not printing and sending paper tickets (which also have the envelope and often other information included) and clearly communicating with spectators that they don't need to print at home. But remember to consider accessibility needs of your spectators and ensure they are still looked after.

Where local printing of documents is necessary always print double-sided and set this as the default option where possible. In some cases, it may even be possible to print two pages per side. You will usually save money if you print in black and white too. Where larger documents, such as reports, need to be professionally printed it is worth looking for printing companies that use more sustainable printing techniques such as plant-based inks and waterless printing technologies.

Merchandise and giveaways

Merchandise and giveaways may be difficult area; while many see them as necessary marketing and activation materials, other see them as wasteful and unnecessary. Have a clear policy that is clearly communicated to partners and sponsors. High volumes of giveaway items can make them difficult to manage and some can quickly become litter in, and around, the venue. Also, their short-lived nature means that, where people do take them home, they are often not kept for long. Where a partner activation relies on a giveaway, a slightly higher quality item may give greater returns. Merchandise and giveaways should be:

- Kept to a minimum as far as possible, especially physical items, in particular if they are made of sensitive or difficult materials like difficult to recycle plastics. Experiences, especially something that can be delivered on the day, may be more effective and memorable for many customers
- Avoid cheap electronic items that may be discarded inappropriately
- If possible, ensure they are made from materials that breakdown naturally should they be lost to the environment, such as non-coated paper rather than plastic, to reduce any impact from fugitive waste.

Volunteer and staff clothing

The quantity of uniform provided should be considered depending on needs and budgets. Can volunteers be asked to wear, for example, their own trousers and shoes and are given a branded top and/or jacket? In line with the common theme of the guide, not producing something is the most sustainable thing to do. But this needs to be balanced against the needs and expectations of the event. In any case, the sourcing of materials and the manufacturing conditions are important and should be researched.

Any excess kit needs a disposal plan. Textiles can be recycled, so it is best to make sure that certain garments are made of one type of material as far as possible, otherwise the value of the material goes down if it is mixed. This also means that you should segregate any returned materials.

Venue dress: temporary overlay, equipment, branding and wayfinding

Most events will have items that are only relevant to that one event. The key is to try to minimise the impacts as much as possible. The waste hierarchy plays a role here:

- **Avoid:** consider whether the item/s are even needed for successful event delivery
- **Reduce:** only use the absolute necessary amount of overlay materials; if it isn't needed, don't use it. There will be a balance to strike between a well branded event and a wasteful event, and this may result in some difficult conversations. This is why a clear over-arching sustainability policy is needed.
- **Reuse:** can materials from other events be used? Have 'hire first' policy for overlay materials, to minimise the need for bespoke items. Where you do need to have overlay items made, minimise the amount that has to be thrown away and extend their useful lives by making them re-usable. Some examples include:
  - Mix generic branding with event specific branding
  - Avoid dates or specific locations if possible so that branding or signage can be used flexibly. This could include flexible wayfinding where directional arrows can be detached and replaced/reused.
  - Have a clear asset disposal plan, including the donation of materials to clubs and venues so that they can use them.
- **Recycle:** where a product has to be made and cannot be reused, reduce its impact by using recycled materials, where possible. Similarly, use materials that can be recycled in the waste management processes available to you in your venue / location. Refer to the Waste management section for more details on this.

It's always best to make these arrangements as early in the process as possible so that disposal is understood early.

Wondering what materials are best for your branding and signage?

This guide, which was prepared for the IOC and UEFA, offers a fantastic environmental impact evaluation of branding and signage solutions for events

Breaking down a complex supply chain
While all of the principles could apply to every purchasing decision, you should focus your efforts so can achieve the biggest impact. Identify the larger (and likely, larger impact) suppliers and focus on these. There will be some products that you buy that will have an impact, whether this is simply because you are buying a large quantity or because they inherently have a bigger impact. And there will be others that are more sensitive because they are high in the public awareness (such as the heightened awareness of single use plastics). Therefore, targeting high volume, high impact, high sensitivity products makes sense. Decisions should always be based on available evidence and the principles should be used as consistently as possible across all supplier contracts.

One way of broadening your impact is to ask the right questions to the right people at the right time. Be sure to put some responsibility onto the supplier and use their commitment to sustainability as a criterion in your tender selection process.

- Communicate your sustainability policy clearly and emphasise that this is genuine and important to the event and its stakeholders and that suppliers must follow the principles.
- Include sustainability in all tender processes and in final contracts. You do not need to be the expert in every case, but adding clauses that reserve the right to challenge suppliers on sustainability issues will make it clear to them from the start that their sustainability performance will be a clear criterion for winning the contract.
- Identify and target the large tenders for embedding sustainability criteria.

2.4 Catering

Key principles
With many different groups to cater for within your event, one size won't fit all and you will need to manage expectations across your stakeholders. Nevertheless, there are key themes of focus that are relevant to all:

- Be pro-active and collaborative with all your catering suppliers
- Avoid and minimise packaging where possible, especially single-use plastic
- Prioritise sourcing local, Fairtrade and seasonal
- Promote a more extensive vegetarian offering and reduce portion sizes relating to meat products, especially beef
- Reduce food-related waste by planning food menus, minimising contingency, having a responsible disposal plan (e.g. alternative meal uses, charitable partnership, food to go app, etc.)

Packaging
There is no doubt packaging plays an important role in catering. However, the volume of packaging and the materials used can definitely be evaluated and challenged.

Packaging options:

- Work with your catering suppliers to understand the packaging associated with your procured food, meals, sandwiches etc. Are there any opportunities for there to be less packaging, lighter packaging or more recyclable packaging?
- **Reduce:** while single-use plastic receives the most attention, reducing all excess packaging should be a priority, no matter the material. Not only does this save resources in the first instance, but it also means less waste will be produced.
- **Watch out for mixed-materials packaging:** it's also a good principle to move away from mixed-material packaging where possible. For example, cardboard lined with plastic film for sandwich packaging. Having just a single material improves the chances of it being recycled. Plan with the end in mind.
- **Be creative:** Don't shy away from being creative and thinking differently about how this could be done.

5 out of the top 10 most prevalent single-use plastic items found on beaches are related to food and drink.

Plastic bottles and lids
Crisp packets and sweet wrappers
Plastic cutlery and straws
Coffee cups and drinks containers
Food containers and fast food packaging

Source: City to Sea

Tableware and cutlery

- **Prioritise reusable:** ban single-use plastic tableware and cutlery where possible. Instead opt for reusable cutlery and tableware in areas where people have the opportunity to sit down and eat. Where the catering is more on a 'food-to-go' basis, encourage catering suppliers to limit the amount of excess optional cutlery available.

- **Be aware:** biodegradable and compostable packaging is not the easy answer to all your packaging problems. While it may appear to be a good alternative to single-use plastic, it has its own challenges of disposal. Most compostable packaging is only compostable in specific conditions, and as such needs to be collected and kept as a separate waste stream. Otherwise, it will end up contaminating the recycling or going to incineration or landfill with the general waste. Check, with your venue or waste contractor about whether they can deal with a 'compostable' waste stream in an effective way. Or, even better, avoid it in the first place if you can. Refer to the waste management section for more details.

Condiments and crisp packets

- **Get rid of the sachets:** sauces often come in individual packets made of non-recyclable plastics and usually appear where it's primarily 'food-to-go'. Work with catering suppliers to ban these individually packed condiments and instead offer sauces or seasoning in bulk containers. This will reduce the amount of discarded plastic and instead promote a refillable solution.

- **Take on the tricky items:** if you are offering snack options such as crisps, chocolate bars and biscuits, these won't get recycled in the normal recycling waste streams. They need to be recycled in a different way and exploring other options, such as those offered by Terracycle, will be helpful.

Drinks

- **Encourage reusable:** communicate and encourage staff and volunteers to bring their own reusable coffee cup and water bottles to use while at the event. Offer an incentive for spectators to bring and use their reusable coffee cups too and make sure this is communicated in advance of the event. A charge to provide a cup is proven to be more effective than a discount as a reward.

- **Say no to bottled water:** make sure there are water fountains available and encourage use of them. Where you have direct control, such as in the back of house areas, have a policy of no bottled water. If possible, also explore this policy as much as you can with suppliers.

- **Deposit-return scheme:** if there is the option to explore a deposit-return scheme with your event/venue, then this should be considered over the use of single-use cups. However, if the event is a short-term, one-off event this may not actually be the most efficient option (see hot topic materials: plastics and paper). If single-use cups have to be used, try use easily recycled plastics such as PET, and in particular recycled rPET. Beware of paper cups with a film lining, these may need to be collected separately to be recycled, adding an extra waste stream to your event.

Don't forget to work with the security team to ensure that the right processes are in place to allow reusable cups and bottles into the venue.

Food options

Catering is often a notable emissions and impact hotspot on events. While packaging may seem the big and obvious element to consider, don't forget the food itself. There is a lot that can be done here too.

- Within the **tender process** for catering suppliers, consider how their offering aligns to your event's sustainability ambitions or, even better, a sustainable food policy.
- Choose a **responsible supplier** who is open to and has demonstrable ability of factoring sustainability into their service.
- Work with your catering suppliers to ensure there is an expectation to source **locally** and **seasonally** where possible.
- For items such as tea, coffee, sugar and chocolate, encourage the sourcing of **Fairtrade** options.
- Consider the promotion of a greater proportion of **vegetarian** meals.
- Through your food offering, you can **communicate** some really positive messages to many people including volunteers, athletes and spectators.

Food waste

Where there is catering, food waste is inevitable reality. You can still take steps to help minimise food waste. For example:

- Avoid over ordering by carefully planning and confirming the number of meals you require as early and as accurately as possible
- Ensure the supplier has designed appropriate serving sizes to reduce of food waste
- Create a menu where meals cover a range of dietary requirements, thus limiting the number of different meals needed to be made and therefore the likelihood of food waste associated with each meal

Further explanation around the responsible management of food waste can be found in the waste management section.

2.5 Travel and transport

Key principles

The main environmental impacts of travel and transport are:

- Greenhouse gas emissions (mostly carbon dioxide from fossil fuels)
- Air pollution caused by exhaust gases and particulate matter

Petrol and diesel engines produce carbon dioxide and other gases as a result of combusting fossil fuels. Carbon dioxide is a greenhouse gas and contributes to climate change. Other emissions, such as nitrous oxide, cause local air pollution that can contribute to higher incidence of respiratory disease.

The key principles in reducing environmental impacts from travel and transport is to reduce the amount needed to a minimum and, where necessary, promote the use of less polluting vehicles, such as public transport or active travel. A travel policy should be a core document in the planning of the event from a logistics perspective; this document will include commitments and guidelines to reduce the impacts of travel and transport.

You can minimise travel and transport by:

- Holding virtual, online meetings where possible
- Consolidate deliveries and collections as much as possible
- Establish a policy for staff to use public transport and active travel as much as possible
- Increase the use of electric and hybrid vehicles
- Once all practicable actions to minimise impacts have been implemented, consider offsetting travel and transport related emissions. See the collecting data, measurement and reporting section for more information.

Travel and transport data should be recorded in accordance with your travel and transport policy to allow the impact to the quantified.

Flights and hotels

Flights are a necessary part of international sporting events. Your travel and transport policy could advise people to take terrestrial transport options within a certain distance of the event, but it will be hard to implement an outright ban. For LOC staff the number of flights should be minimised (by using virtual meetings and by carefully planning site visits to optimise the productivity of the visit) and flights within the UK should only be taken if absolutely necessary.

The travel and transport element of the sustainability policy needs to consider the scope of the event's footprint and decide who 'owns' the emissions associated with athlete travel. Once the scope is established, it may be possible to come to an agreement with national bodies or with a commercial sponsor to offset the travel-related greenhouse gas emissions against a reputable, certified offset scheme. More on determining the scope of the carbon footprint can be found in the collecting data, measurement and reporting section.

Many hotels have sustainability policies. Where staff and/or athlete accommodation is booked by the event organiser, hotels should be asked for their sustainability policies for consideration as part of the tender process. With other policies being equal, the closer the hotel to the necessary training and competition facilities the better to reduce the amount of in-event travel.

In-event transport

In event transport should be managed to minimise its impact.

Where large numbers of people are due to travel, such as team travel to and from training and competition facilities, a full coach is the preferred option (despite most coaches still operating on fossil fuels).

Where smaller numbers of athletes and officials need to be moved, active travel and bulk transport, are preferred where distances and security considerations allow. Where a shuttle service is being offered by the event for athletes, technical officials, delegates and those with special requirements, consider an optimised schedule, rather than having a continuous shuttle timetable. Where small numbers of people have to move electric or hybrid private vehicles are preferred.

Spectator travel

Spectator travel is another area where policy decisions need to be made, particularly over the scope of the carbon footprint of the event. Due to the number of travelling fans, spectator travel is likely to heavily contribute to the overall carbon footprint for most events, if included. While there are ways to estimate the carbon footprint of fan travel, it is almost impossible to obtain an accurate estimate. If fan travel is to be included, then a robust measurement protocol needs to be put in place.

Spectators should be dissuaded from using cars to get to the venue and instead encouraged to use public transport and active travel. It may be possible to link their event ticket with free or subsidised local travel on public transport networks. As a minimum, you should supply information on walking routes from nearby stations and travel hubs and should provide secure parking for cycles.

2.6 Events within the event

Key principles
For larger events, it is often the case that while the competition event is happening, there are other events happening too. These ‘events within events’ play an important strategic role of enhancing engagement, widening the reach of the event and ensuring a positive experience for those beyond the arena walls. As they are a related by-product of the event, don’t forget to include these within your sustainability plan.

Fan zones
The nature of the fan zone will determine how different or similar these will be compared to other areas of event delivery. For example, for an outdoor event, the fan zone may follow similar requirements such as the need for temporary power and a more open plan, outdoor set up. Whereas for an indoor event where the fan zone is located within the city, the set up between venue and fan zone will be slightly different.

Irrespective of the differing contexts, the key impact areas covered elsewhere in this guide such as energy management, waste management, procurement, catering and travel still apply.

Opening and closing ceremonies
These are milestone events celebrate the athletes and sport alongside weaving in wider cultural and creative celebrations. This means, depending on the scale, there are usually many extra stakeholders involved. It is important, that as a symbolic, highly visible moment related to the event, sustainability efforts remain in the conscious mind of the ceremonies’ design and delivery too.

- Ensure the event’s sustainability values and commitments are well communicated to those stakeholders solely focussed on the ceremonies, ideally as early as the commissioning process.
- Provide a full brief and engagement piece with the ceremonies stakeholders on how the production and running of the ceremony can reduce its environmental impact.
- While different to the rest of the event, ceremonies also have the same basic requirements and therefore should consider the same principles covering key impact areas such as energy management, waste management, procurement, catering and travel.

VIP hospitality including congress and international relations/delegates
VIP hospitality is often separately run compared to other deliverables of the events. Make sure any external suppliers involved in the planning and delivering, such as caterers and hotel suppliers are considered when it comes to sustainability. When procuring gifts or other extra comforts for VIP hospitality, make sure that they remain in alignment as much as possible with the sustainable procurement considerations outlined in this guide. The key thing here, is managing expectations when it comes to VIP hospitality and hosting international relations. Of course, provide a service and hospitality to the level required for these select groups, but don’t be afraid to still factor in sustainability and where decisions have been made to be more efficient or more considered in relation to sustainability be sure to communicate this early.

2.7 Biodiversity

The impact of events on biodiversity may not seem obvious and will vary significantly dependent on the sport, venue, location etc.

In general, high quality sporting performance requires a clean and healthy environment. Biodiversity is fundamental to the functioning ecosystems that provide those conditions. In addition, many people see inherent value in biodiversity, wildlife and the natural world, and any destructive impacts of sporting events may run a reputational risk for that event.

The closer a sport is to the natural environment the more obvious its potential impact. Sports such as open-water swimming, triathlon, sailing or canoeing use the environment as their ‘playing field’. Meanwhile, stadium-based or indoor sports seem more distant from the natural world. This section includes general issues that should be taken into account.

Sports events may impact biodiversity directly by:

- Damage to habitats, including vegetation, soil and water courses
- Disturbance of wildlife, including introduction of alien species on unclean kit and equipment

Pollution and waste
Sports events may impact biodiversity indirectly by:

- Emissions causing climate change
- Purchasing of goods that result in damage in distant areas

Event organisers should consider whether their event will impact biodiversity directly or indirectly and implement mitigation policies. Where impacts are expected definite plans to minimise these impacts during the event and to mitigate subsequent impacts should be created.

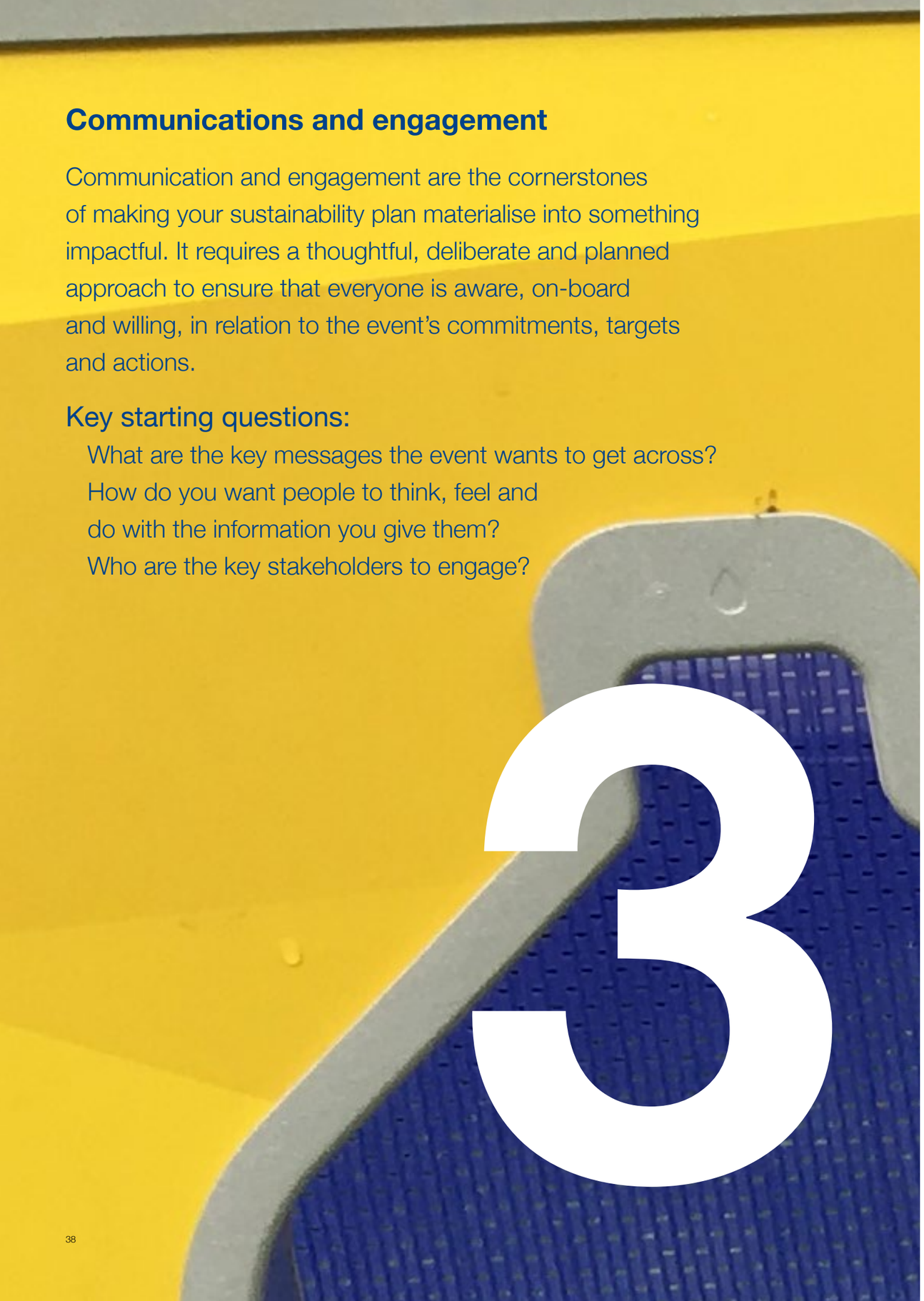
Major events provide a platform to both deliver activity to enhance local biodiversity (particularly by supporting local projects) and drive awareness and generate positive messaging through your communication channels. Like many areas of sustainability, there is a high chance that it could attract interest from sponsors.

Communications and engagement

Communication and engagement are the cornerstones of making your sustainability plan materialise into something impactful. It requires a thoughtful, deliberate and planned approach to ensure that everyone is aware, on-board and willing, in relation to the event's commitments, targets and actions.

Key starting questions:

What are the key messages the event wants to get across?
How do you want people to think, feel and do with the information you give them?
Who are the key stakeholders to engage?



3

3.1 Internal communication and engagement

Key principles

Sustainability is not a standalone topic. You can have all the ideas and plans in the world, but if people don't know what the objective is, why it's important and most crucially, how they can contribute, then it's not going to work. Thoughtful and effective communication and engagement is the cornerstone of this.

When planning how to communicate the sustainability commitments, targets and actions to staff, suppliers and volunteers, consider:

- What do you want the person/group of people to **think**, **feel** and **do** with the information you give?
- Are you being clear **why** you are sharing the information?
- Is it relevant to broader strategy and does it **align to key values** of the event?

Event staff

It is important staff, volunteers and contractors are aware of what the event is striving for in relation to sustainability, and by extension, feel part of it.

Share with staff the journey of why sustainability matters to your event, how you have developed the commitments and targets and how they can contribute going forward. You want a workforce that clearly knows what sustainability means for the event, feels proud and inspired by the event's aims and as a result wants to contribute through their own role.

Include a sustainability section within inductions
Providing information on sustainability as part of staff inductions is a valuable way to keep an evolving workforce aware of the event's focus on sustainability.

Utilise sustainability champions
Not everyone will be inspired and energised by the sustainability agenda. However, having a willing and engaged sustainability champion or buddy as part of each functional area can be an effective way to make sure all functional areas stay involved in the journey. Internal champions can be a useful line of communication into FAs, can help the rest of the team stay on task in relation to sustainability and be a central point of contact to simplify project management.

Keep people up to date
Identify opportunities to give staff regular updates on successes, challenges and general information relating to the sustainability strategy.

This can be done in numerous ways depending what information you want to share. For example, staff meetings, internal newsletters, nominations for a sustainability champion of the quarter, intranet noticeboard etc. Whatever channel is utilised, providing regular updates is important to building awareness.

Partners and Suppliers

With new commercial partners, introducing them to your event in the right way will further cement their buy-in into the event and their support of it. Engaging suppliers throughout the whole process, from tender through to delivery, is a crucial way to ensuring you are building a wider team who are going to be allies, not blockers, in the realm of sustainability.

- Involve and brief suppliers on the event's sustainability values as part of the tender process
- Be clear on expectations and deliverables early, such as providing relevant data.
- Communicate and collaborate in an open and honest way about the event's sustainability ambitions and how they can help. If you're not sure how you might do this, a briefing template is offered in Appendix C.

Volunteers

Come event time volunteers are a critical part of the workforce. They are often friendly, enthusiastic and passionate about contributing to and being part of the event. Harness those volunteer superpowers.

Include a sustainability section within volunteer onboarding and training

- Share with the volunteers the event's sustainability commitments and targets, as well as some of the key actions that have been taken. You want the volunteers to feel sustainability is already an embedded value of the event, so they too carry that as a core value through their role.
- Be clear about the key messages and actions you want volunteers to take and share during the event.
- Encourage volunteers to share any ideas or feedback on sustainability.

Sustainability champions

Volunteer champions can be a good way to activate sustainability on event and engage a wider audience such as spectators and other volunteers on the event's sustainability initiatives.

- Be clear about the key messages and actions you want the champions to facilitate and share
- Empower volunteers to share these messages and actions on event

Athletes

As mentioned, athletes have the potential to be brilliant role models to promote your sustainability efforts, but they also have their own sustainability journey to consider. For some it will be an education piece and for others it will be to reassure them that interventions have been put in place, so they don't feel that competing at your event isn't compromising their personal impact on the planet. Building in athletes as a key client group into your action plan will ensure they are not forgotten about on the topic of sustainability.

3.2 External communication and engagement

Key principles

As with internal communications, there needs to be a purpose behind the external communications strategy.

Your key stakeholders for external communications are likely to be:

- Spectators coming to the venue – let them know what they can expect in terms of travelling to the venue and how they can contribute while they are at the venue.
- Fans who follow your event but cannot come to the venue – be sure to tell them of the great work that is going on behind the scenes to make sure the event is a success for the sport and for the planet.

Pre-event communications

Be sure to communicate your sustainability activities to the people coming to your venue. Survey after survey show that people want to be able to behave in a more sustainable way, but it is often difficult if you don't know what to expect. When sending out pre-event information be sure to let people know:

- How to get to the venue: provide information on how to get to the venue by public transport. Provide maps that show walking or cycling routes from local public transport hubs. Let them know about options for cycle parking, including if there are any cycle hire schemes operating. Avoid people bringing cars as much as possible but do highlight if there are electric car charging points available in the vicinity.
- Tell people about what to expect at the venue: encourage them to bring their own refillable water bottle if you can give access to refill points. Advise on whether they are able to bring their own food and drink or not and how waste will be segregated and recycled. If relevant for your event, encourage people to take food packaging away with them. Let people know how deposit schemes will work, if you are using them for reusable cups, for example.
- Finally, share the good news stories. Let your fans know what you have done and why you have done it. Share why sustainability is important to your sport and your event.

Event-time communications

Building on your pre-event messages, don't be afraid to keep telling your different client groups and about the changes you have made and how you would like them to behave while at your event. You have the opportunity to utilise sport presentation and volunteers to share these messages.

Media engagement

With any sport event the main news will often be the sport, but there is always room for good news and personal interest stories around the events. Your sustainability story can be part of that mix.

Engage with the print and broadcast media to tell them the story about your sustainability journey. Let them know why sustainability is important to your event and the actions that you have taken, especially if there is context for your sport being affected by climate change (for example) or if it links into local groups.

This can feel intimidating and there might be a worry that the media will find something that hasn't been done perfectly. This shouldn't be a reason to avoid talking about it, instead have a response planned as much as possible; if something wasn't done, why wasn't it done? Most media outlets are now very sympathetic towards good sustainability stories and while they'll be rigorous, it's unusual for them to be critical.

Be brave with the messaging and the reception is likely to be very positive. Sustainability is high in the public awareness and journalists want to report good news.

Media centre and broadcast

The media will regularly work on site throughout the event but will not be under the direct management of the event team. However, they can play a vital role in the credible delivery of a sustainable event.

In the first instance, they are participants in the event and so should follow the same guidelines as staff and volunteers. Make sure they are briefed on the sustainability policies and actions for the event, ideally before arrival, but this should be reinforced on site. Make sure there is information available, including clear signage in media areas about, for example, saving energy by switching off lights and equipment when not in use. Provide adequate bins to allow them to recycle waste and offer water bottle refill facilities and china coffee cups, with a place to wash them, to reduce their use of single-use bottles and cups.

The media can be key in the success of the sustainability commitments and, for this reason, there should be active engagement. The communications team should actively engage with the media to generate positive stories around sustainability commitments. But be especially careful that the messages you put out to the public are consistent with what the journalists see, otherwise that could lead to criticism that the policies are inconsistent. In general, the media is very supportive of sustainability actions, but they may call out inconsistency and what they consider to be "greenwash".

Collecting data, measurement and reporting

Mitigating climate change impact continues to emerge as a priority and expectation for all stakeholders, in all areas. Collecting the necessary data to both measure and report this impact robustly and transparently is important.

Key starting questions:

Why is measuring the event's carbon footprint important?

What activities should be included in the carbon footprint?

What data do we need to calculate the footprint?

Is the delivery team aware of their role in capturing the relevant data?

4

Basics of Greenhouse Gas (GHG) reporting

Greenhouse Gas reporting, otherwise known as a carbon or emissions footprint, is the act of measuring, calculating, and reporting how much carbon dioxide equivalents (CO2e) are caused directly and indirectly by a person, organisation, event or product.

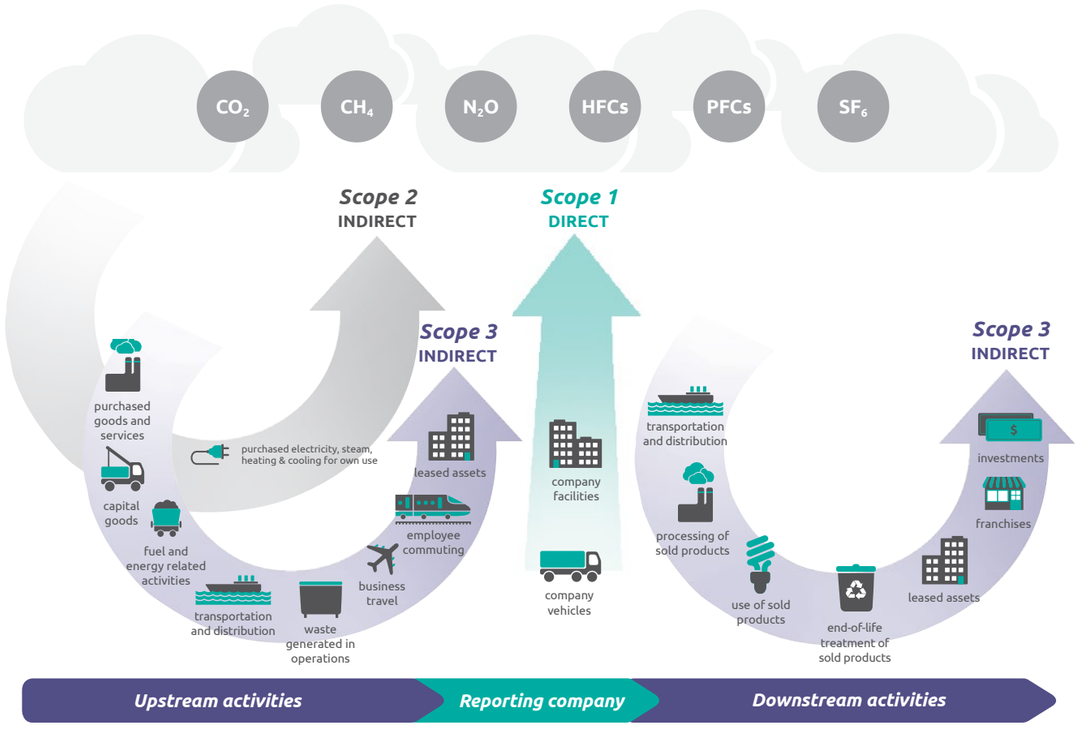
Why is measuring the carbon footprint useful?

- It allows for the measurement and reporting of the event's impact and its contribution to climate change.
- Identifies where emissions are created within your operations, from both direct (Scope 1) and indirect (Scope 2 and Scope 3) sources, so 'hotspot' areas can be highlighted. These 'hotspots' are then useful for informing strategy, focus areas and actions for future events.
- Provides a useful benchmark for future events.

Table 1: The GHG Protocol Corporate Standard classifies a company's GHG emissions into three scopes.

Scope of Emissions	Description	Examples
Scope 1	Direct emissions from owned or controlled sources	• Natural gas burnt in boilers • Fuels burnt in on-site generators • Fuels burnt in fleet vehicles used by the event
Scope 2	Indirect emissions from the generation of purchased energy	• Electricity for energy • Electricity for vehicles
Scope 3	All indirect emissions (not included in scope 2) that occur in the value chain of the event, including both upstream (things you buy) and downstream (things you sell) emissions. The GHG protocol identifies 15 categories of Scope 3 emissions	• Purchased goods and services • Spectator travel • Waste

Fig 1: Overview of GHG Protocol scopes and emissions across the value chain



Scopes of emissions and scopes of responsibility: When measuring a carbon footprint, emissions are usually spoken about within three scopes as defined by the Greenhouse Gas Protocol (GHG Protocol) (see Table 1 and Fig. 1). The GHG Protocol is the most widely used international accounting tool to understand, quantify, and manage greenhouse gas emissions.

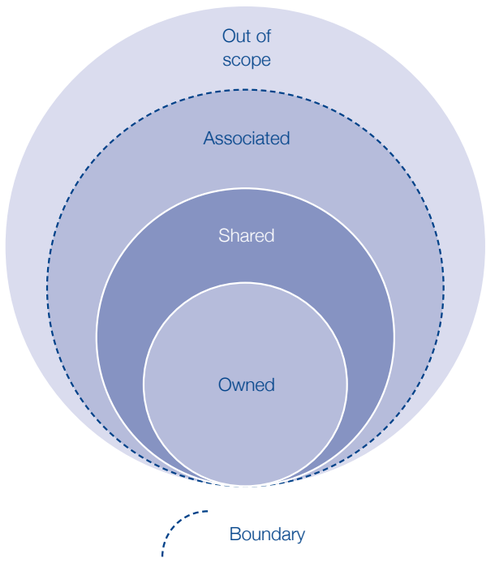
These **scopes of emissions** should not be confused with the **scope of responsibility** which - as outlined in table 2 - in the context of an event, is also crucial to understand in the context of setting the footprint boundary.

Setting the carbon footprint boundary
The carbon footprint boundary refers to the principles and clear understanding of what activities are included and excluded in the carbon footprint calculation.The distinction between the scopes of emissions and the scopes of responsibility is important when it comes to determining where that boundary should lie. While in an ideal world all activities related to an event would be included in the footprint, it is often not practical or relevant to include everything. This could be due to reasons such as data limitations, lack of meaningful control or the impact of the activity is not material.

There are a couple of key steps in this boundary setting exercise:

- Create an inventory of all the activities related to your event in terms of the scopes of responsibility. This is known as the organisational boundary.
- Refine the boundary to make sure that all relevant and impactful activities have been included, and where not included this is clearly and reasonably justified. This will primarily relate to further reviewing inclusion of the associated activities.

For more detail on the practical steps of setting your carbon footprint boundary, refer to UK Sport's guide *How to Scope Carbon Emissions for your Event*.



Source: London 2012 Carbon Footprints Study

Table 2: London 2012 and The IOC Methodology breaks down activities in three scopes of responsibility

Scope of Responsibility	Description	Examples
Owned	Core activities wholly funded by your event's budget/ delivery team. Effectively under control and decision making of the event delivery team.	• Overlay and temporary infrastructure • Energy use • Catering, back of house, procured by the event • Fleet transport
Shared	Activities partially funded by the event delivery team or wholly funded by event partners - public agencies, transport authorities, councils. Event delivery team has some influence but likely to depend on contractual or official relationship.	• Venue, front of house, catering with incumbent supplier • Broadcasting services
Associated	Activities closely associated with the Games, but not funded by the delivery team or event partners. Event team has little influence on the activity.	• Spectator travel • Volunteer travel

Calculating a carbon footprint

In its simplest terms, calculating a carbon footprint involves multiplying activity data by emission factors (also known as conversion factors) to get an emissions output of kgCO2e or tCO2e for that activity. The summation of the emissions output for all activities, within the defined boundary, equals your carbon footprint.

The carbon footprint therefore depends on two key elements:

- **Activity data:** this is the quantitative measure of an activity, for example, litres of fuel consumed, distanced travelled, weight of material or spend data.
- **Emission factors:** these convert the activity data into the GHG emissions associated to that activity and relate to the emissions per unit of activity (e.g. the kgCO2e per km travelled, or per litre of fuel consumed).

For all types of activities there are varying types of data that can be collected offering varying degrees granularity (see Appendix D). This is important as the emission factor chosen relates specifically to the granularity of the data. The more granular the data, the more accurate the emission factor which can be applied, and therefore the more accurate the calculation and footprint. This is why setting a data target, as highlighted in the Leadership section, is a useful thing to do.

The basic equation for calculating carbon emissions is:

carbon emissions = activity data x emission factors

Data as a process

At its heart, a carbon footprint is all about activity data. However, it is important to not think of this data in the static sense only relevant at the end of the event. Without awareness and priority, collecting data for a carbon footprint could easily be left until the last minute, risking low data availability and data quality. Collecting activity data is very much a process and journey throughout the whole event lifecycle, with a prerequisite of shared understanding, responsibility and collaboration among all functional areas/data owners and by extension, where necessary, among other stakeholders to get as accurate a footprint as possible.

To help illustrate this, the key steps of the carbon footprint process are outlined in table 3.

Table 3: Overarching process of calculating a carbon footprint

Key steps	1 Create an inventory and set the boundary	2 Understand what activity data you need to collect	3 Work with FAs to obtain the required activity data	4 Calculate the carbon footprint
Explanations	Establish where the event begins and ends in terms of measuring emissions. You will decide what activities are included and excluded.	There are different levels of data granularity that can be used to calculate emissions. From spend data to more accurate sources such as fuel consumption, distances and material types.	The data you need will be held by many different people across the event. Engaging with people early will mean they are better prepared when you later request it.	To calculate the emissions from the data collected, specific conversion factors are applied to the activity data collected. The sum of activity emissions equals the overall carbon footprint.
Principles and Recommendation	You should include all owned activities in your footprint as well as shared and associated activities where there is a strong sense of relevance (e.g., large emission source or you have reasonable to good level of influence). The typical 'big hitters' are: • Travel and transport • Overlay and temporary infrastructure • Catering • Energy use • Other procured goods and services	You should aim to get as granular data as possible to ensure the most accurate footprint possible. However, for key areas, it is often not possible or practical to get the most granular data and that's normal. Based on the data hierarchy, map out the ideal data you want to aim for and then work with data owners and FAs to understand what is feasible. (See Table 4. and Appendix D, for further guidance on this step.)	Based on the mapping exercise completed in the previous step, set out a plan in collaboration with data owners to collect and collate the required data. (See Table 4 for further guidance.) Much of the activity data may already exist and be collected by the event team, but some data will need more work and engagement to obtain.	The use of conversion factors is key to calculation. The more accurate the data, the more accurate the emission factors which can be used to calculate the footprint. When calculating, make sure all data sources, any assumptions, and the calculations themselves are clearly recorded to enable a quality assurance review.

Engaging with FAs and other stakeholders on activity data

From the previous section, it is clear engaging with FAs and other stakeholders on activity data throughout the event is crucial to the process, but this can also be challenging. Given the complex web of activities needed to make an event happen, it is important to have a structured approach to this engagement.

A more in-depth process to support the effective management and collection of activity data is exemplified below.

Table 4: Example approach for the effective management and collection of activity data

Map data requirements	Understand what type of data is required to calculate carbon emissions from all the activities and emissions sources within your boundary
Map the likely data owners	• Map the likely owners of the different data sources. • This is likely to be the action owners identified in the action plan, however there may be instances where this is not the case. For example, where expense or procurement spend data may be needed the finance department may be a more relevant contact.
Engage with the data owners	• Engage with the data owners to understand what data is currently available and what opportunities there may be to further improve prospective data. • Prioritise areas where efforts to improve data will have the biggest impact. For example, while spend data may be the most feasible data to get in relation to procured goods and services, you may want to channel efforts to improving data from just your three biggest suppliers.
Establish data collection processes	• Formulate the best way to collect this data for example, sending structured information requests, or set up a file sharing system. • Where appropriate, align this data collection process, with other event processes. • Set clear timelines on data collection for, aligned to FA activity timelines

Carbon reduction and offsetting

Carbon offsets can often be seen as a quick fix to negating the impact of your carbon footprint. However, while offsetting is better than nothing, it can also be a controversial topic if it is not done in a transparent and credible way.

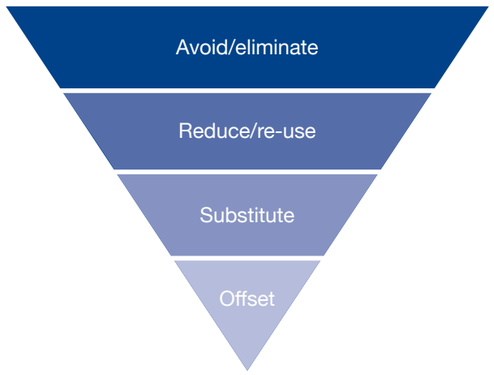
Before any consideration of offsetting it is important that a reduction first approach is taken. Only after efforts have been made to reduce carbon emissions where possible, can the offsetting of residual emissions be considered a credible option.

Also, offsetting carbon emissions costs money so by not prioritising reducing your carbon footprint, you risk creating a larger, unnecessary expense later down the line.

Carbon reduction hierarchy

As we discussed in the waste management section, a reduction first approach to managing carbon emissions is the most credible approach.

- **Avoid:** make business decisions to prevent carbon emissions in the first instance. This could involve rethinking if certain activities or goods/services are necessary, challenging the existing way of doing things or using alternative products/services.
- **Reduce/reuse:** make business decisions to reduce carbon emissions through focussing on efficiencies in operations, processes, fleet and energy management.
- **Substitute:** adopt renewable/low carbon technologies and choose goods and services with lower embodied emissions.
- **Offset:** compensate unavoidable emissions with credible carbon offsets.



Source: IEMA GHG management hierarchy

Credible carbon offsets

There are many types of offsets and offsetting projects, which can be boiled down into two primary categories.

- **Carbon removal projects:** initiatives that sequester carbon dioxide directly from the atmosphere, for example, tree planting.
- **Emissions avoidance projects:** initiatives that may still release some GHG emissions into the atmosphere but help avoid the release of larger GHG emissions. For example, replacing fossil-fuel derived energy with renewables or cookstove projects.

Due to the complexity, variety and challenges with offsetting solutions, offsets can be a controversial topic if not done in a credible and transparent way. To ensure credibility the following key principles should be strongly considered when choosing any offsets:

- **Additionality:** working to reduce your emissions before offsetting / purchasing carbon credits
- **Permanence:** ensuring emissions are kept from the atmosphere for a reasonable length of time / reducing the risk of destruction through robust management plans.
- **Avoiding double-counting:** making sure offset credits are evidenced as retired once bought.
- **Governance:** ensuring a strong, reliable and robust processes for crediting.
- **Positive social and environmental impact:** should not contribute to social or environmental harm.
- **Global Net Zero:** alignment to removing GHGs from the atmosphere.

There are also internationally recognised offsetting standards that help ensure this credibility, such as Gold Standard, Verified Carbon Standard (VCS) and UN carbon offset platform.

Definition:

Carbon offsetting is the process of compensating for carbon emissions arising from an activity or activities through carbon sinks or carbon credits.

Source: Carbon Trust

Reporting

The value of reporting all the good work, challenges and learning should not be underestimated. Transparency is a key word that has been mentioned frequently in this guide in relation to credibility, and reporting will help facilitate this transparency. As part of your event there will already be different reporting requirements in place. Look to include sustainability as part of this reporting cycle.

Update reporting

When providing update reports to key stakeholders throughout the event delivery phases, be sure to include sustainability as part of this process. Illustrate the key priorities, actions, achievements and challenges you are focussing on or are facing in relation to delivering the event in an ethical way.

Post-event report

Compile your event's sustainability journey in a post-event report. By reporting on your environmental performance, alongside other key aspects of the event, you are demonstrating that environmental performance is and has been is a priority for you and the event. It is also a good way to help influence others and transfer knowledge to future events, helping to improve the legacy this area.

Reporting can take many formats of varying depth and detail depending on the size, scale and type of event, from a high-level infographic or a section included as part of the larger event report, to a standalone sustainability report. Choose a format that most appropriately fits with the context of your event and ambitions. There are some key things you would want to cover when reporting on your sustainability journey and performance:

- Outline your commitments and targets
- Illustrate how you have ensured good governance relating to delivering sustainability
- Highlight some of your high impact actions
- Be transparent about any challenges or things you would have liked to achieve but were not feasible this time
- Share learnings
- Show any measures of quantitative impacts

Glossary

Activity data: The quantitative measure of an activity, for example, litres of fuel consumed, distanced travelled, weight of material or spend data.

BASIS: British Association for Sustainable Sport. A non-profit member organisation committed to achieving positive impact and integration of sustainable development into all aspects of sport by facilitating collaboration and best practice.

UK Sport is pleased to have worked with BASIS in the production of this guidance. For more information and resources visit basis.org.uk

Carbon dioxide equivalents: A metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP).

Carbon offsetting: The process of compensating for carbon emissions arising from an activity or activities through carbon sinks or carbon credits.

Carbon footprint: The best estimate that we can get of the full climate change impact of something.

Carbon footprint boundary: The principles and clear understanding of what activities get included in the carbon footprint calculation, and what activities get excluded.

Emission or conversion factors: These convert the activity data into the GHG emissions associated to that activity and relate to the emissions per unit of activity (e.g. the kgCO2e per km travelled, or per litre of fuel consumed).

Energy label: A label found on a product which gives information about the energy efficiency of the product.

Fugitive waste: Uncontrolled waste that has escaped from the managed waste system

GHG Protocol: The most widely used international accounting tool to understand, quantify, and manage greenhouse gas emissions.

Greenhouse gases: Any gaseous compound (naturally occurring or anthropogenic) that is capable of absorbing infrared radiation thereby trapping and holding heat in the atmosphere. For the purposes of carbon accounting, in alignment with the GHG Protocol, Greenhouse gases are the six gases listed in the Kyoto Protocol: carbon dioxide (CO2); methane (CH4); nitrous oxide (N2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride. (SF6).

Greenhouse gas (GHG) emissions: The release of greenhouse gases into the atmosphere.

Scope 1 emissions: Direct emissions from owned or controlled sources.

Scope 2 emission: Indirect emissions from the generation of purchased energy

Scope 3 emissions: All indirect emissions (not included in scope 2) that occur in the value chain of the event, including both upstream (things you buy) and downstream (things you sell) emissions. The GHG protocol identifies 15 categories of Scope 3 emissions.

Sustainable development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs

tCO2e: A tonne of carbon dioxide equivalents

Waste Hierarchy: A hierarchy of options for managing waste in terms of what is best for the environment.

Appendix

In the appendix are some useful examples, case studies, templates and tools to further help the practical side of embedding sustainability.

Appendix A
Example of sustainability commitments

Commitments are the overarching guiding principles by which your event will operate. But what might these actually look like in practice? To help thinking and support the development of your own commitments, a list of indicative commitments is given below under key headings. Note these examples are based on real life examples and although written together, are collated as a bank of examples rather than a cohesive list.

We commit to:

Management

- Creating a structure of responsibility, including top level support, in relation to implementing, managing and investing in the environmental sustainability of the event
- A member of senior management owns and is accountable for sustainability
- Sustainability performance is discussed and targets are set at the highest level of management
- Sustainability is included as part of employee personal development and performance evaluation
- Sustainability is included and managed as part of the events risk register

Practical steps

- Taking formalised steps to manage and reduce energy consumption across all direct operating areas of the event
- Promote and facilitate the uptake of sustainable modes of transport across all stakeholders.
- Having a procurement policy and commercial strategy to include minimum standards of sustainability relating to, but not limited to; ethical standards, materials and packaging, sourcing locally, transparency, animal welfare, etc.
- Developing and implementing a sustainable sourcing code
- Managing all our waste in accordance with the waste hierarchy: avoid, reduce, reuse, recycle
- Providing training, where required, to allow staff and volunteers to operate in a more sustainable way
- Seeking partnerships and sponsors that will enhance our ability to deliver sustainability in a credible and collaborative manner

Measurement and reporting

- Measuring the carbon footprint of the event
- Measuring the amount of waste produced and the amount of waste recycled
- Setting and reporting against key performance indicators for each of our identified targets.
- Reporting in the post-event report against our sustainability targets
- Reporting against externally generated performance criteria, such as the Global Reporting Initiative
- To take a reduction first approach to managing the event carbon impact, only offsetting our unavoidable emissions
- Any offsetting that we undertake will be in alignment with credible internationally recognised offsetting standards

Appendix B
Some key questions to ask the venue when establishing targets

Energy:

- What data do you collect for electricity and gas at [venue(s) being used]?
    - For example, half-hourly meter, meter reads, invoice?
- Can this data be provided during [event name]?
- Who is the venue's energy supplier? Do they provide electricity from renewable sources, or do you know the energy mix of the electricity supplied?
- Are you able to provide us with data from previous events of a similar scale and size (number of days, hours of operation)?
- Have you, as a venue, already set any energy reduction targets?
- Are there any actions you [as a venue] are taking, or planning to take, to improve energy efficiency on site?
- Do you think there is benefit in setting separate targets for the arena and other areas – warm up areas, fan park?
- Are there any other actions you think we, as an event, can do to help you as the venue better manage energy?

Waste:

- Do you as the venue have any waste targets?
- What data do you collect for waste? For example, waste streams, MRF performance, contamination rates etc.
- Is this data basedon actual weights or estimated bin sizes?
- Can you confirm that this data can be provided during the event?
- Who is your waste contractor?
- Are you able to provide us with waste data for other similar events you've hosted?
- Are there any actions you are taking to improve waste management on site?
- Are there any actions you think we can help implement that will help reduce waste? (e.g. engagement with event staff/spectators)

Travel:

- Do you have any research or idea how many customers/spectators usually travel to the venue by public transport?
- What public transport facilities are available around our venue?
- Do you have facilities to encourage active travel, such as bicycle racks?

Catering (venue or incumbent supplier):

- Do you collect any data in relation to sustainability/ environmental impact?
- What data do you hold that will help facilitate us calculating our carbon footprint?
    - How do you plan and quantify the 'make-up' of the meals?
- Do you have an inventory of ingredients per weight, per order as part of the service planning?
- What is your typical split of vegetarian/non-vegetarian meals and is there scope to influence menus beyond dietary requirements?
- For example, is it possible to increase the percentage of vegetarian meals and is there a way to measure the impact of this?
- What packaging is used and do you think there are any efficiencies that can be made here, without compromising quality/safety?
- Is there anything you are already doing to reduce food waste as part of the design/planning phase?
- Do you have any targets as a business in relation to sustainability?
- Do you have water bottle refill points available to staff and spectators at the venue?
- How do you manage food waste at the venue? Is it segregated for other waste streams? How is it processed after leaving the site?

Appendix C
Some key questions to ask the suppliers when establishing targets

This document aims to explain to our suppliers:

- Our position and intentions in relation to sustainability at [add event]
- What we expect from our suppliers in terms of sustainability

What do we mean by 'sustainability'?
Set the scene with a brief description/paragraph about what sustainability means to your event.

Our values
Outline any values you hold as an event. Stating and aligning to values is an important way to set overarching standards and find mutual motivations between yourself and contractors.

Our commitment
What is it you are trying to achieve?

Our impacts
What impacts are you trying to negate/create?

Our sustainability commitments
Making clear your environmental/social sustainability objectives, so all parties are clear of the outset.

Considerations and commitments from suppliers
Give contractors an idea of the commitments and endeavours you're expecting from them.

Appendix D
Guidance on data required for measuring a carbon footprint

You need data to measure a carbon footprint. While there is an element of technical expertise needed for detailed carbon accounting, the information below offers an overarching description of the different types of data (activity and emission factors) you will need to think about per the key activity categories, so you can factor it early into your thinking. Remember, in its basic form:

Carbon emissions = activity data x emission factor

The types of data are written in order of granularity; however, it is not always possible to get the most granular data for every activity. Therefore, use this information to guide your data collection process for the greatest granularity, while balancing practically what might be possible and feasible.

If you are feeling really interested in digging even more into the detail of data and carbon accounting the GHG Protocol offers useful technical guidance.

Fuels (Scope 1)

Measuring the impact of owned fuel use (e.g. diesel, petrol, natural gas, coal etc.)

Emission factors:
Utility specific emission factors and easily available from the UK Government website.

Activity data:
Consumption of fuels based on:

- Known volume of fuel (litres, m3), per types of fuel used
- Estimated volume of fuel worked out by, dividing the spend data per fuel with the average unit price of that fuel.

Utilities (Scope 2 and Scope 3)

Measuring the impact of electricity use (Scope 2) and water (Scope 3)

Emission factors:
Utility specific emission factors and easily available from the UK Government website.

Activity data:
Consumption of energy based on:

- Half-hourly data
- Invoice data
- Meter reads pre and post event
- Spend-based method
- Estimate based on a reasonable proxy measure

Consumption of water based on:

- Invoice data
- Meter reads pre and post event
- Spend-based method
- Estimate based on a reasonable proxy measure

Purchased Goods and Services (Scope 3)

Measuring the carbon impact of what you buy

Supplier specific method

Emission factors:
Lifecycle assessments (LCA's): these will likely be limited and only be available if you are working with a supplier who is advanced in their sustainability journey. Ask the question, but don't be surprised or concerned if LCA is not currently available.

Activity data:
The number of units per product/service purchased.

Industry average method

Emission factors:
Industry average emission factors are available for different materials and industries.

Activity data:
For products, this will include the weight/volume and types of materials of the product. For your material suppliers where you are purchasing a lot of product, consider the feasibility of this method.

Spend-based method

Emission factors:
Available from different sources and used to allocate an emissions output per unit of monetary spend.

Activity data:
Budget or amount spent per product or service. This could also be per supplier and allocating a category of product or service to that supplier. The least accurate, but with complex supply chains or for smaller suppliers where materiality is low, often the most feasible.

Waste disposal (Scope 3)

Measuring the carbon impact of waste

Supplier specific method

These are rarely available.

Waste specific method

Emission factors:
Industry average emission factors are available for different materials and industries.

Activity data:
Total weight disposed of per waste stream, per disposal route

- In an ideal world, the exact weights of waste per waste stream and disposal route would be logged and recorded – check with your waste suppliers if they provide this. If this is not possible you can also estimate weights of waste based on bin sizes and number of collections.

Spend-based method

Emission factors:
Available from different sources and used to allocate an emissions output per unit of monetary spend.

Activity data:
Budget or amount spent on waste disposal.

Travel and transport (Scope 3)

Measuring the carbon impact of how people and 'stuff' moves:

Fuel-based method

Emission factors:
Fuel specific factors and easily available from the UK Government website.

Activity data:
By volume, per types of fuel used.

Distance and mode of transport method

Emission factors:
Transport specific factors and easily available from the UK Government website.

Activity data:
Total distance travelled per type of vehicle/mode of transport

- In an ideal world, the exact distances travelled would be logged and recorded. If this is not possible you can also estimate distances based on broader origin and final locations.
- Road transport: If possible, understand and collect the size of vehicles, as well as the fuel-type (e.g. Petrol, Diesel, Hybrid, Electric). If not possible, an average assumption can be used.
- Air travel: If possible, understand the ticket class per flight, if not possible an average flight can be assumed.

Spend-based method

Emission factors:
Available from different sources and used to allocate an emissions output per unit of monetary spend.

Activity data:
Budget or amount spent on travel per land, air and sea.

For further support in building sustainability into event delivery please get in touch with UK Sport's Major Events team.