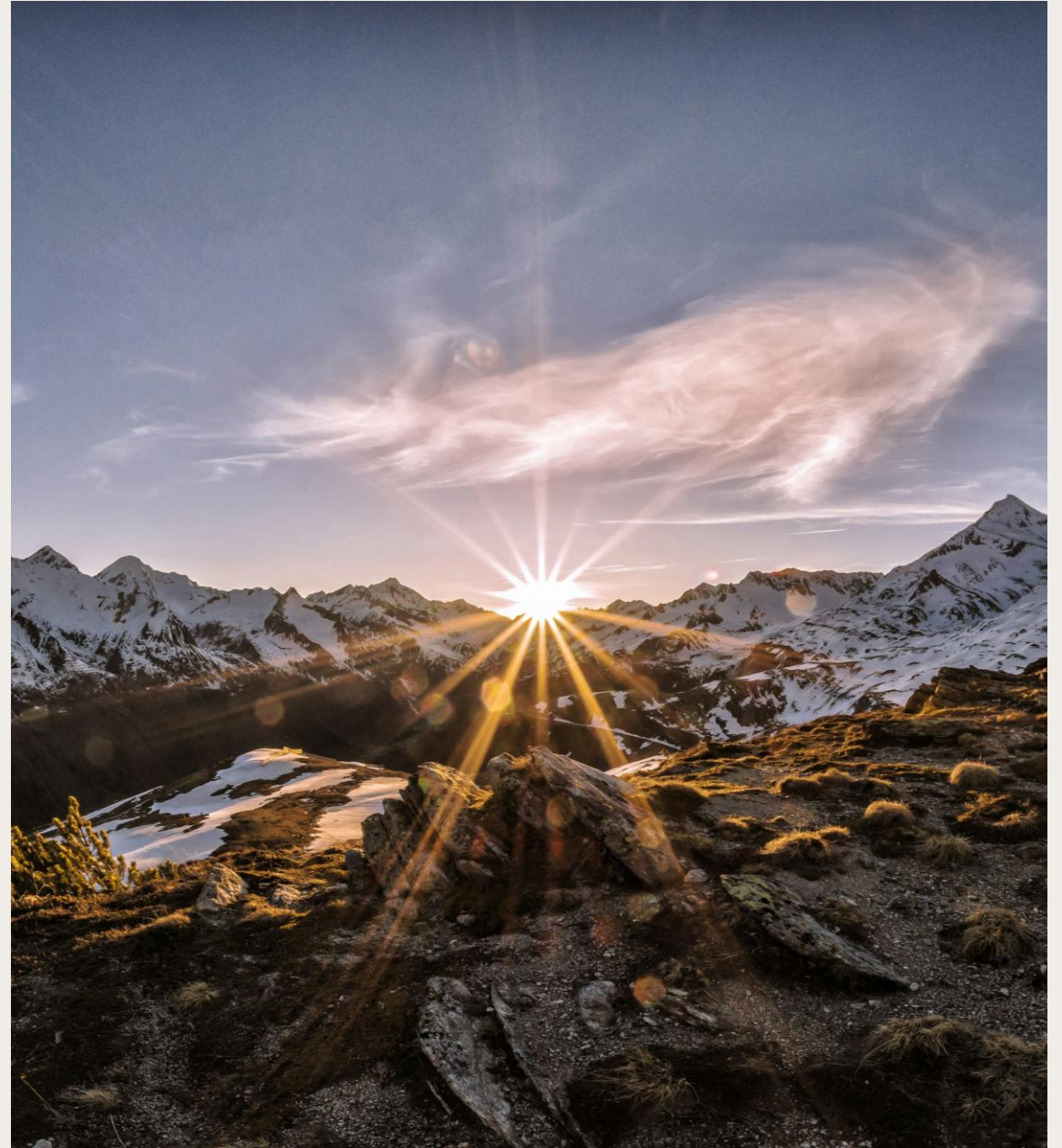


# Sustainable Production best practices

## Starter Guide

**AD NET ZERO**   
ALL FOR NONE





# What's in this Guide:

- 1 Top 10 sustainability production best practices**
- 2 More on Production carbon emissions measurement & AdGreen**
- 3 Data storage: Hard Drive Re-use best practice**



# Production emissions & measurement

Did you know... the average size of an advertising production (TV ad) is **6 tonnes of carbon?**

This is equivalent to the global average of a person's carbon footprint **for a whole year.**

And **60%** of all emissions are from **air travel.**  
(72% total for travel & transport.)

[Read the AdGreen Annual Review](#)

### Shoot / People Transport

- Non Shooting Spaces
- Shooting Spaces
- People Transport**
- Equipment Transport & Couriers
- Accommodation
- Catering
- Wardrobe
- Art department & SFX
- Data Storage

**What travel arrangements were made for this phase of the project?**  
Please detail any flights, train bookings, rental cars, or taxi services that were organised.

Type of transport  
Flight

From  To

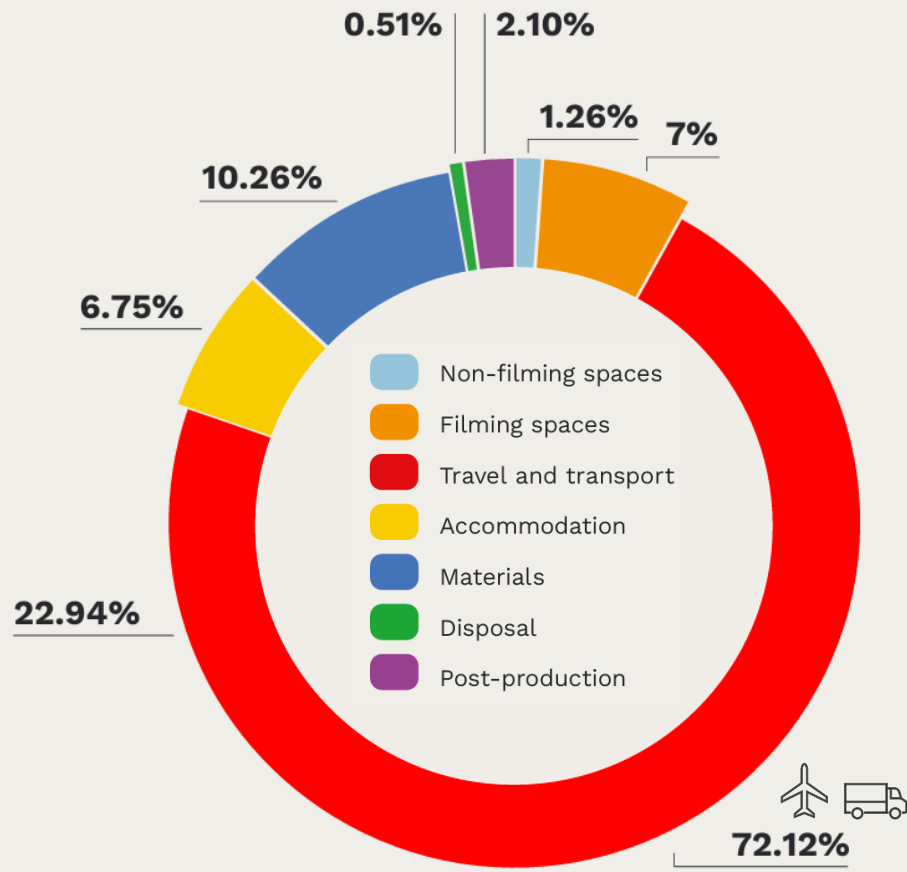
Please note: Airport codes (e.g., LHR, JFK) are currently not available. We will use the airport nearest to the town/city you enter.

Class   Number of people

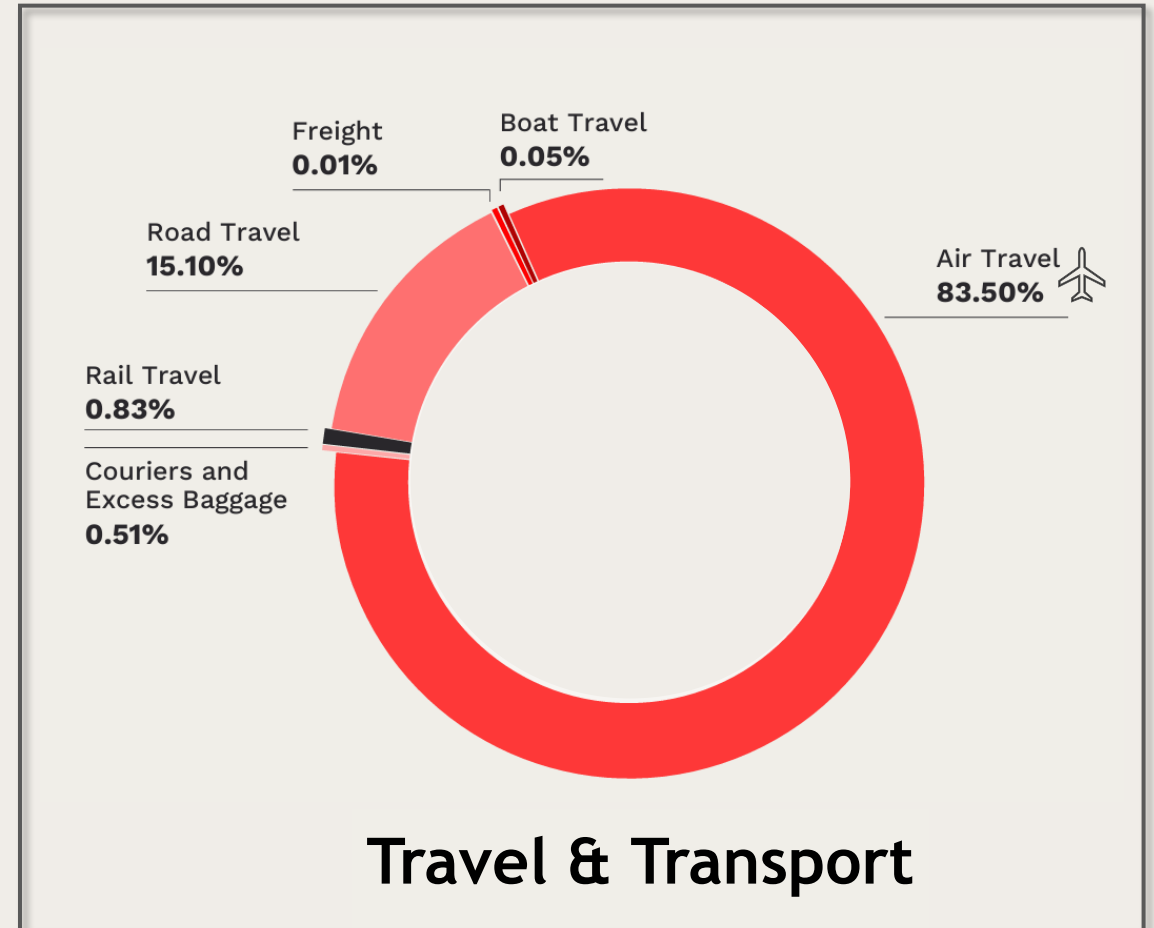
Additional info  Optional



# Measurement: Production Emissions breakout from 2023 AdGreen report



All activities



Travel & Transport



**1**

**Top 10 sustainable  
production best practices**

# 10 Actions for a Greener Shoot

1

## EARLY CONVERSATIONS

- ❑ **Commit early:** Discuss the plan with filmmakers, studio, Line Producer, UPM, and Supervisors.
- ❑ **Pre-production meeting:** Gather department heads to introduce the Eco Supervisor and clearly communicate the sustainability plan.

6

## HYDRATION

- ❑ **Reuseable water bottles & stations:** Cut down on single-use bottles.
- ❑ **Eco Supervisor:** Oversee water station setup & remind crew to bring own bottles.

2

## ECO SUPERVISOR / GREEN PA

- ❑ **Hire an Eco Supervisor:** A key role to drive success, they join as department head to implement and manage sustainable systems from prep through wrap.

7

## CATERING

- ❑ **Plan for food sustainability:** Source seasonally, sustainable catering.
- ❑ **Limit meat** (avoid beef particularly).
- ❑ **Composting & Reusables:** use composting stations & reusable tableware (or compostable if needed).
- ❑ **Donate leftovers** to local charities.

3

## MEASURE

- ❑ **Measure carbon emissions:** Have the Eco Supervisor track emissions using [AdGreen](#), [albert](#), or the [Green Production Guide](#). Measurement is key to managing impact and building sustainable habits.

8

## GENERATORS

- ❑ **Tie into the local power grid** instead of using a generator, or switch to biodiesel for diesel generators, or use generators that run on solar energy.
- ❑ Whenever possible, **power down any generator** that is not in use.

4

## LOCATION

- ❑ **Shoot locally** to cut travel emissions.
- ❑ **Think of the impacts** of wrapping the job even before getting to the prep stage. The more you plan, the better.
- ❑ **Opt for sustainable transit:** carpool, public transport, or Hybrid Ubers/Lyfts.
- ❑ **Waste management:** compost, recycle, donate.
- ❑ **Hire a recycling-friendly waste hauler** via the Eco Supervisor.

9

## HARD DRIVES

- ❑ **All "Enterprise Class" hard drives should be reused** multiple times during the manufacturer's declared warranty period.
- ❑ **Save data on twin LTO tapes** instead of hard drives.

5

## SET DRESSING/PROPS

- ❑ **Eco-friendly props:** Choose sustainable or reusable materials.
- ❑ **Design sets for reuse** – easy disassembly enables repurposing.
- ❑ **Use local rentals** to reduce shipping emissions.
- ❑ For greens, **rent or borrow plants**.

10

## HAVE FUN!

Congratulations! You are making an impact on your community and the environment. **Have fun with these suggestions and know that you are doing the right thing!** Progress not perfection.



# Sustainability Tips for All Departments

The core principles of sustainability in production focus on conserving fuel and energy, and minimizing landfill waste, among other efforts.

Early identification of priorities and challenges is essential, and hiring an Eco Supervisor can significantly enhance your success. They will engage with Heads of Departments (HODs) early and consistently to set clear sustainability expectations. Effective communication is key to aligning goals and ensuring that each department contributes to a green production process.

Remember, sustainability is about progress, not perfection. Every small step and action contribute to a meaningful impact!

Resources: [Green Production Guide](#), [Green the Bid](#)



# Locations Best Practices

Whether in a studio or on location, take every measure to manage waste, protect the landscape, and re-use materials whenever possible. Here are some quick tips:

- ❑ **Shoot locally** to reduce travel emissions.
- ❑ **Opt for sustainable transit:** Encourage carpooling, public transport, or using hybrid rideshare options. Provide public transit information with maps given to cast and crew.
- ❑ **Manage waste efficiently:** Set up clearly labeled compost, recycle, and garbage stations.
- ❑ **Provide sorting bins:** Ensure catering and crafty have compost and recycle bins readily available.
- ❑ **Hire a recycling-friendly waste hauler** through your Eco Supervisor to manage waste sustainably.

Resources: [Green Production Guide](#), [Green The Bid Location Department Resources](#)





# Transportation Best Practices

Consider these tips to reduce emissions from transportation:

- ❑ **Biodiesel vehicles:** When renting, opt for vehicles that run on biodiesel to lower carbon emissions.
- ❑ **No Idling:** Implement and enforce a strict no idling policy to reduce unnecessary fuel consumption.
- ❑ **Public transit & carpooling:** Offer incentives for using public transit or carpooling to encourage eco-friendly commuting.
- ❑ **On-site transportation:** Re-think transportation on set by using electric or solar-powered golf carts, or bikes if feasible.
- ❑ **Generators:** Whenever possible, connect to the local power grid instead of using generators. If generators are necessary, consider biodiesel or solar options and always power down when not in use.

Resources: [Green Production Guide](#)



# Catering & Craft Best Practices

Reduce food waste and promote sustainability with these tips:

- ❑ **Sustainable sourcing:** Hire a caterer who prioritizes seasonal and sustainably sourced ingredients.
- ❑ **Meat reduction:** Limit meat options, especially beef, to lower the environmental impact.
- ❑ **Composting & reusables:** Set up composting stations and reusable tableware. If necessary, opt for compostable alternatives.
- ❑ **Food donations:** Arrange to donate leftover food to local charities.
- ❑ **Reusable water bottles & stations:** Minimize single-use bottles by encouraging cast and crew to bring their own water bottles ahead of time.
- ❑ **Eco-friendly snacks:** Avoid individually wrapped snacks, or choose companies using biodegradable packaging.
- ❑ **Eco Supervisor role:** Ensure the Eco Supervisor oversees the setup of water stations, recycling, landfill, and compost bins, and reminds crew to bring their own bottles.



# Set Dressing Best Practices

Focus on reusing materials and mindful strike and wrap to reduce waste. Here are some quick tips:

- ❑ **Eco-friendly props:** Choose sustainable or reusable, or salvaged materials whenever possible.
- ❑ **Wood waste management:** Recycle any wood scraps that cannot be donated, or hire a wood chipper to convert wood waste into garden mulch.
- ❑ **Reusable sets:** Rent or design sets for easy disassembly to enable reuse and repurposing.
- ❑ **Paint:** Utilize leftover paint as primer and opt for recyclable steel gallon cans instead of plastic buckets.
- ❑ **Local rentals** Use local rental services to cut down on shipping emissions.
- ❑ **Greens:** Rent or borrow plants to reduce waste and environmental impact.
- ❑ **On-screen impact:** Replace single-use items such as plastics and Styrofoam with reusable alternatives on-screen.
- ❑ **Wrap planning:** Arrange in advance for schools, theatres, or recycling centers to take donations of used sets and materials.



# Lighting & Grip Best Practices

Conserve energy and reduce waste with these quick tips:

- ❑ **Rechargeable batteries:** Use rechargeable batteries to minimize waste.
- ❑ **Energy-efficient lighting:** Opt for fluorescent or LED lights instead of incandescent bulbs whenever possible.
- ❑ **Dimmers:** Utilize dimmers to lower energy consumption between bright shots.
- ❑ **Switch off:** Turn off all lighting and equipment when not in use.
- ❑ **Reuse color gels:** Save color gels for use in future productions.
- ❑ **Recycle expendables:** Recycle any expendables that cannot be reused.

Resources: [Green Production Guide](#), [Green The Bid Camera & Lighting Department Resources](#)



# Camera & Sound Best Practices

Conserve energy and reduce waste with these tips:

- ❑ **Energy Star equipment:** Rent Energy Star-certified equipment when available.
- ❑ **Hard Drive reuse:** Reuse [hard drives](#) to minimize waste.
- ❑ **Power down:** Unplug equipment with standby modes when not in use.
- ❑ **Rechargeable batteries:** Opt for rechargeable batteries to reduce waste.
- ❑ **Digital recording:** Prefer hard drives or flash drives over film for digital shoots.
- ❑ **Memory card reuse:** Reuse memory cards after data transfer to the DIT.
- ❑ **Battery recycling:** Set up an on-set receptacle for dead batteries and properly dispose of them.
- ❑ **E-waste recycling:** Recycle unused film and packaging through certified electronic waste haulers.

Resources: [Green Production Guide](#), [Green The Bid Sound Department Resources](#)



# Wardrobe, Hair & Makeup Best Practices

Simple steps to reduce waste & conserve resources for your department:

- ❑ **Sourcing talent wardrobe:** Where possible, borrow talent's own clothing, or source from second-hand shops.
- ❑ **Dry cleaning:** If dry cleaning is necessary, choose services that avoid perchloroethylene (PERC).
- ❑ **Reusable garment bags:** Use reusable garment bags instead of plastic covers.
- ❑ **Donate:** Set up donations of unused clothing to local charities or recycle irreparable items at a hard-to-recycle-center that accepts textiles.
- ❑ **Cruelty-free products:** Opt for hair and makeup artists who use cruelty-free, vegan products.
- ❑ **Avoid aerosols.**
- ❑ **Packaging:** Opt for refillable products or biodegradable packaging.
- ❑ **Recycle:** Responsibly recycle the empty cosmetic containers.

Resources: [Green Production Guide](#), [Green The Bid Resources](#)





**2**

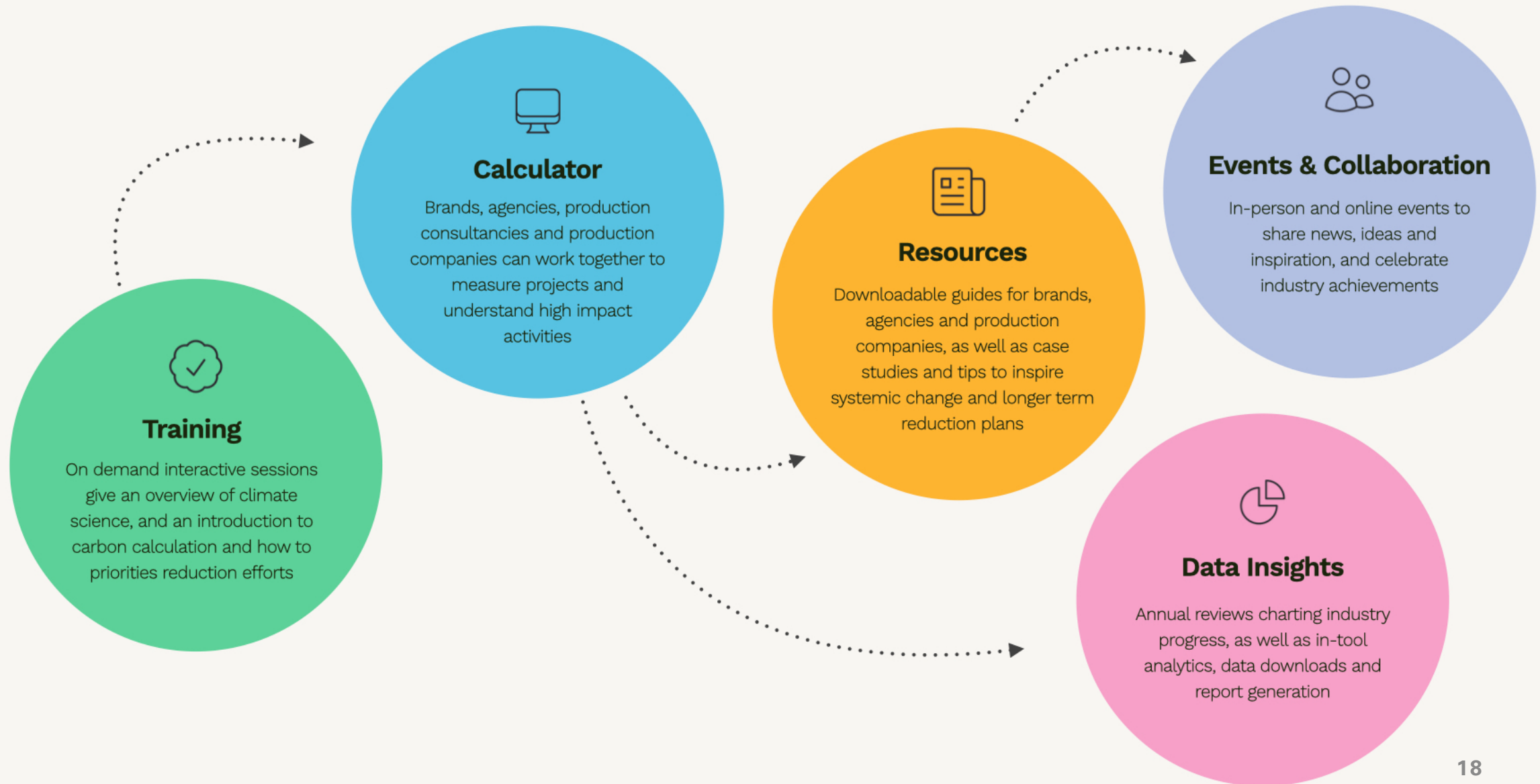
**More on Production emissions  
measurement with AdGreen**

# About AdGreen





# AdGreen provides these services free to the industry



# Calculator

Sign up

5 Step guide

Sign up for a free account in the AdGreen Carbon Calculator to take control of your production emissions. Use the calculator to understand your high carbon items, and identify opportunities for reduction.

- ✓ Methodology reviewed by PwC and Mediasense
- ✓ Developed for global use, with 200+ electricity factors
- ✓ Connected via API to the Climatiq database, for accuracy
- ✓ Formatted for familiarity with activities organised by production stage and budget section
- ✓ Ad production focussed to make data gathering easy
- ✓ Reports and downloads make analysing and sharing data easy

 People Transport

 Work Spaces

 Equipment Transport

 Accommodation

 Shooting Spaces

 Data Storage

 Catering


 Non-Shooting Spaces

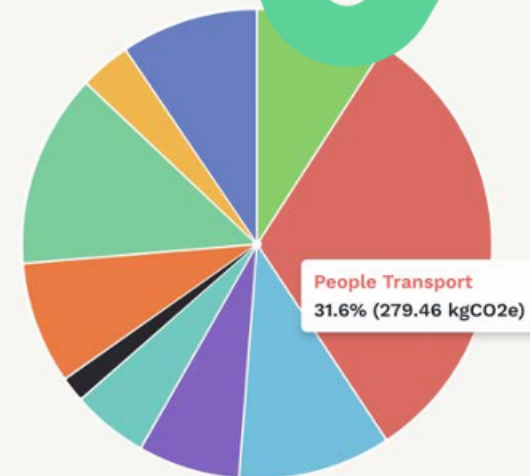
 Wardrobe

 Art Dept & SFX



## » Project details

### PROJECT INFO

ID	0001
Project budget	1,000,000.00 GBP
Status	<span>OPEN</span>  Close project
Project start date	14 Sep 2023
Project end date	14 Dec 2023
Number of shoot days	1
Incorporated existing material?	No




# AdGreen Production Carbon Calculator

 Projects AdGreen\_Staging 


## Brand Ad Shoot


BRANDS COMPANIES PROJECT DETAILS


 [Manage](#) **Project budget** - [Show details](#)

Your total carbon footprint data will appear here. Start tracking to see your impact.

### Pre-production No data

 **Work Spaces**

Need some help?  
click here 



# ✓ Training



Book now

Take our training to learn why the advertising industry needs to reduce emissions across production.

## **Production 101/Overview**

This online session covers climate science, the advertising production industry and its impact, and more.

- ✓ Climate science and key climate terminology
- ✓ How carbon is measured and reduced
- ✓ The advertising production industry and its impact

## **Intro to the Carbon Calculator**

Book a live session to invest in creating an environment for in-depth discussions on sustainable production - and using the carbon calculator to get measuring.

- ✓ The climate science expanded
- ✓ How AdGreen can support your low carbon aims
- ✓ A typical shoot for the ad industry
- ✓ The business case for sustainable production
- ✓ A practical demonstration of the carbon calculator where you'll learn how to use your budget as a guide

The AdGreen reduction resources are available to everyone working in advertising, providing information and support to tackle production carbon emissions.



## Resources Guides

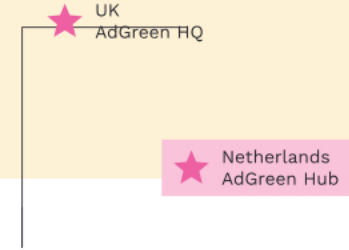
Our resources guides are tailored for different company types, providing an overview of how to use the carbon calculator, questions to ask your production partners and steps you can take as an organisation to reduce the footprint of a shoot.



## Reports

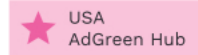
A collection of reports to be read, referenced and utilised by anyone working in the advertising industry to bring about sustainable change.

# Where is AdGreen?



## A small but mighty team

AdGreen's HQ is in the UK with hubs in the USA and the Netherlands. We provide support to the community, be it with online training, measuring productions or downloading resources, wherever you are.



[Contact us](#)

## A globally available tool

The AdGreen carbon calculator allows you to measure your production no matter where it takes place. This includes calling the best electricity factor for the offices, studios and locations depending on your country or region.

# Why engage with AdGreen?



## **Respond to regulation and policy**

With 2030 and 2050 net zero targets getting ever closer, understanding the full picture of the emissions you are responsible for now will give you an advantage when it becomes time to declare them.



## **Set, meet, and exceed key targets**

Understanding the carbon impact of one contained aspect of your business, such as production, can provide repeated opportunities to trial new approaches, before implementing them elsewhere.



## **Save money**

While there is a perception that sustainability greater equals spend, it is entirely possible for the reduced carbon option to be the more affordable one, and this may be the incentive an organisation needs to consider a reduced carbon approach.



## **Create new job opportunities**

With innovation comes new opportunities. Many organisations have already introduced sustainability specific roles, and the demand for all teams to upskill continues to grow.



## **Win new business**

With many agencies and production companies still in the early stages of carbon measurement, becoming an early adopter and showcasing your expertise could unlock work opportunities that may have previously been unattainable.



## **Motivate and inspire your team**

Working for an organisation which aligns with an individual's values is becoming an increasingly important criteria for employees, and a focus on sustainability is becoming non-negotiable for many entering the workforce.



**3**

**Data storage:**

**Hard Drive Re-use best practice**



# HARD DRIVE RE-USE BEST PRACTICES FOR PRODUCTION & POST

Key advertising industry trade bodies align on new industry best practice to safely re-use hard drives throughout advertising production and post processes.

## The New Industry Best Practice

Once hard drives have been wiped and tested before use, all "Enterprise Class" drives should be reused multiple times during the manufacturer's declared warranty period, provided such reuse would not put the agency or production company in breach of any of its contractual obligations.

## The problem with single use hard drives:

Currently, our industry uses hard drives as single-use items. Working in this way contributes to unsustainable mining practices and raises concerns about rare element depletion and environmental degradation. The carbon associated with an average 5TB hard drive, (static or spinning) from manufacture to responsible disposal, is around 200 - 250kg of CO<sub>2</sub>e – a significant percentage of the carbon footprint of an average production.<sup>1</sup>

## The impact of reuse is:

On average, archiving a 5TB commercial shoot on twin LTO tape vs. hard drives will result in a carbon savings of 90%, when compared to the current practice of single use hard drives.



Did you know that the **Film and TV industry** already abide by similar best practices when it comes to the re-use of hard drives?

The average carbon cost of storing a 5TB job to hard drives is **400kg of CO<sub>2</sub>E**, the equivalent of driving from NY to Miami (1200 miles), in an average combustion engine car<sup>2</sup>

Re-using those hard drives and storing onto LTO instead, creates a savings of **370kg of CO<sub>2</sub>E**, or just over 90% of the carbon.<sup>3</sup>



ADVERTISING ASSOCIATION



1. Film Locker Global  
2. Film Locker Global  
3. EPA

## Frequently Asked Questions

### Can you please elaborate on the new best practices?

Sure, here's a checklist:

- Use high-quality, Enterprise Class hard drives (check product box and price point to be sure).
- Use hard drives for up to their period of warranty (also listed on the box).
- Wipe hard drives following the advice below.
- Always have a back-up hard drive (also re-used).
- On completion of project, archive the project onto twin LTO tapes rather than on hard drives or in cloud services. - I.T practices would always dictate two tape copies held in separate locations as a minimum for security and redundancy.

### How many times can I write to a drive before it goes bad?

Drives come with a period of guarantee which assumes a certain quantity of data can be written and erased each day. This is often referred to as "Drive Writes Per Day" (DWPD) or in "terabytes written" (TBW). For example, if a Solid-State Drive (SSD) has a capacity of 200 GB and comes with a five-year warranty, which means users can write and erase 200 GB onto the drive every day for the warranty period before it fails. SSD's have an average TBW of 150 in its lifetime and last on average 25% longer than HDs.

### Is there a security risk using a drive for multiple clients/projects?

So long as the drive has been wiped and tested, the risk is minimal.

### Aren't new hard drives required by insurance?

According to top industry insurance brokers across the UK and US, contractual agreements will rarely stipulate the use of new hard drives. The requirement is typically around equipment being tested for soundness before shooting. However, it is recommended parties check with their own insurers for clarity.

### What are best short-term storage practices to ensure a long lifespan for the drive?

Keep hard drives regularly used in the production workflow, in a safe, flat, dry space and avoid extreme temperature fluctuations. Note that humidity plays only a small part in predictive drive failure (see paper by UseNix) whereas errors made in transport (i.e. dropping the device) are a more common contributing factor to breakage and/or data loss. If drives are stored for the long term, (not advised) then the static environment is a consideration and note that data loss is a risk. Aside from that, storing them in a safe, flat, dry, non humid environment is best. Normally a standard workplace / office provides a decent environment.

### If not hard drives, how should we be archiving assets?

Archiving on hard drives and in the cloud will instantly increase a project's carbon footprint, therefore, we recommend twin LTO tapes, an industry standard format that is robust, reliable, and low carbon. Tapes are guaranteed for up to 30 years. Data retrieval should take no longer than 24 hours. Always make two copies to tape and store in separate locations.

### How do we get HDs back to reuse?

Many software solutions exist to wipe data from external drives. It's possible to use the installed 'disk manager' on both Mac OS and Windows to wipe a drive. The existing data and any empty space on the drive is overwritten with 'random data' and choosing 'two passes' offers good security. Crypto erasure is sometimes used by DIT's to wipe drives for reuse on set with specialist software.

### How do I ensure my data is truly wiped from the drive?

Many software solutions exist to wipe data from external drives. It's possible to use the installed 'disk manager' on both Mac OS and Windows to wipe a drive. The existing data and any empty space on the drive is overwritten with 'random data' and choosing 'two passes' offers good security. Crypto erasure is sometimes used by DIT's to wipe drives for reuse on set with specialist software.<sup>3,4</sup>

### If the client transfers the data to LTO and returns the drives to production, is the production company taking a risk by re-using a drive that's been out of their possession?

If the drive is still in warranty and is wiped and tested, then there is minimal risk in reusing the drive. Production companies are generally obligated to reuse equipment that is 'tested and fit for purpose' as part of their contractual agreements with clients, agencies and insurance companies.

### If the production company is required to provide drives back to the client at the end of the job, how can re-use happen?

Once data is transferred off the hard drive and into long term archival (ideally LTO), then the client/agency can make the drives available for the production company to reuse. If the data is being stored sustainably then this will be a simple process. Please inform your agency/client to store the data on LTO and return the drives for re-use.

### Beyond the hard drive re-use and the LTO tape, are there ways I can reduce the carbon associated with this archival process?

Consider all factors associated with the process, including (but not limited to) transportation. Whenever possible, use couriers that rely on EVs, hybrid vehicles, motorbikes, bicycles or walking to transport the drives. Ensure data is not replicated multiple times across drives, and that all files are clearly labelled and organised.

### Are there cost implications?

Re-using hard drives is a cost effective way to manage production assets. Clients should be charged for the long-term archiving of their projects (everything else is charged for, only long term data storage is not!), and a fee for a term (normally 5 years but check your contract), can be charged upfront and this used to archive to twin LTOs. In addition to the contractual obligations, it is reliant on the client agreeing to any cost/timeline implications (that result from this process/using a 3rd party company).



ADVERTISING ASSOCIATION



5. Avast  
4. Avast

# AD NET ZERO

ALL FOR NONE

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