



# Ten Easy Wins

## 10 QUICK SUSTAINABLE WINS STAGING

### 1 WHAT WILL HAPPEN TO THE SET AFTER THE SHOW?

Think what happens to the set after the last show at the start of the design process. Work with all the stakeholders to establish the end of life for all elements of the set design.

### 2 CIRCULAR ECONOMY

Work to the concept of a circular economy of take, make, recycle.

### 3 INCLUDE SET DISPOSAL IN BUDGET

Put a line item in the budget for set disposal. This will make everyone understand the cost of disposing of items that need to go to landfill.

### 4 MINIMISE VIRGIN MATERIALS

Use as many rental assets or existing pieces as possible to minimise the use of virgin materials.

### 5 ENSURE PIECES CAN BE REUSED OR RECYCLED

For all custom-built pieces work with your creative team and your suppliers to ensure that they can be taken apart and the wood, aluminium, LED etc all can be recycled or reused on another project.

### 6 PLANNING

Encourage clients to allow enough time for planning. Reduced timelines for custom projects generate significant waste in expedited shipping and transport for critical products and materials.

### 7 ENCOURAGE CLIENTS TO BE SUSTAINABLE

Work with clients to select sustainable materials and encourage the use of reusable or recycled materials.

### 8 WORK WITH MANUFACTURING TEAMS

Work with the manufacturing teams to create processes that optimise resources and reduce waste.

### 9 CONSIDER TRUCK PACKS & FREIGHT

Design with truck packs & freight in mind. Reduce weight and maximise truck/air pallet/container spaces to reduce transport emissions.

### 10 WORK WITH SUPPLIERS

Work with your suppliers to source more sustainable environmentally products e.g. paint, wood etc. Have them work with their supply chain to create more sustainable projects.

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**LOGO**

# 10 QUICK SUSTAINABLE WINS

## ROCK N ROLL PRODUCTION OFFICE

### 1 RADIOS

Do not use the battery charger as a stand. When fully charged, the radio or battery should be removed as continuous charging will shorten the battery life and it will need to be replaced sooner than its intended life expectancy. To conserve energy, do not leave the battery charger stand switched on overnight.

### 2 PASSES

Tour passes should be made from sustainable and recyclable materials e.g. <https://oomphmade.com/pulper-cards/maxi> <https://passprinting.uk/store/product/environmental-biodegradable-passes/> And the same for lanyards–bamboo fibre and recycled PET lanyards are both eco-friendly options. Paper Wristbands rather than satin stickers.

### 3 ENERGY IN THE OFFICE AND VENUE

When leaving the office e.g. for lunch, turn off lights, any air-con or heating units, music systems etc to reduce unnecessary power output. On multiple shows, power down all systems before leaving.

### 4 PRINTING

Hard copies of Day Sheets and Set Lists should be kept to an absolute minimum and the information shared electronically wherever possible. Create digital itineraries– My Tour Book / Mastertour etc.

### 5 SINGLE USE PLASTICS

Single-use disposable bottles and cups should be eliminated where possible. Crew can bring (or be issued with) reusable containers and the venue should provide water coolers/towers throughout.

### 6 RECYCLING

Separate bins should be requested for offices, dressing rooms and all backstage areas for recycling glass, paper etc. During the tour advance Promoters should also be asking what the recycling policies and facilities are at the venues. Request venues to clearly mark recycling bins.

### 7 RUNNER VANS

Look at the greenest vehicle options with the lowest emissions. Are any available with alternative fuel sources (i.e. electric?) Try and minimise the number of journeys undertaken. If it's close enough, can the crew walk to/from the venue? Do you need to send a van to collect one person or can they come in 15 minutes earlier/later with the rest of the group?

### 8 TOWELS AND WASHING

If towels are provided, ask the venue to make sure they are bundled and bagged, with the clean/dirty piles clearly separated so that the venue does not have to wash potentially clean/unused towels ahead of the next show. Check Riders and query towel numbers if they seem excessive, often people ask for a lot more than they actually need. Consider touring your own towels and machines, that way washing towels and crew laundry can be done at a lower temperature and using natural detergents.

### 9 STATIONARY AND SUPPLIES

Is the office stocked with eco-friendly, sustainably sourced stationery? Are you carrying more production cases for the office than you need? Additional weight increases the truck's fuel consumption which, in turn, increases its emissions.

### 10 BATTERIES

Encourage the crew to bring you (or a nominated crew member) used batteries from mics, IEMs etc so that you can recycle them. Make sure they are never thrown into the general waste.

### 11 ALL DEPARTMENTS

Take time to make sure all other departments you are working with are aiming for gold with their own 10 Quick Wins

*Created 01/12/20 by Tour Production Group- an organisation committed to improving sustainability practices in live events*

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**TPG**  
TOUR PRODUCTION GROUP

# 7 QUICK SUSTAINABLE WINS TRUCKING

When you think of trucking, the first word that comes to mind probably isn't sustainability. However, since 1992 truck (and bus) manufacturers have been legislated into a steady progression towards better fuel efficiency and reduced emissions. Manufacturer's production lines are more sustainable and more truck components are recyclable. The current engine standard is EURO 6 and all new trucks sold in the EU since 1st January 2013 must comply with EURO 6 emission standards. Trucks made before 2013 are less efficient but can continue to be used. All diesel fuel sold in the EU now contains 7% biofuel but EURO 6 vehicles can run on 100% biofuel (HVO/Hydro-treated Vegetable Oil or GTL Gas-To-Liquids made from natural gas). Biofuels deliver up to 90% reduction in greenhouse gas emissions compared to conventional diesel. The biggest obstacle to improving trucking emissions and sustainability is the fact that Biofuel is not widely available and has yet to be introduced onto the forecourt. Bunkering facilities could however be made available at venues but artist/promoter support would be essential.

## 1 IMPROVE VEHICLE SPECIFICATION

Introduce cleaner vehicles aspire to EURO 6 and improve aerodynamics.

## 2 RENEW TRUCKS AND TRAILERS ON A REGULAR BASIS

## 3 REDUCE UNNECESSARY MILEAGE

By carrying out better route planning we can reduce unnecessary miles. It is essential that we have artist/agent/promoter support to do this.

## 4 USE HVO FUEL

Whenever possible/available use HVO fuel- again it is essential we have support from the artist/promoter.

## 5 USE LOCAL POWER

Use local power at venue parking to negate any need for idling.

## 6 USE "SUPER SINGLE"

Use "super single" rather than twin axle wheels on trailers.

## 7 INCREASE DRIVER TRAINING

Increase driver training and help them adjust their driving practises. This should include maintaining a steady high (not maximum) average speed saves fuel, use cruise control to save fuel, reduce idling particularly when loading/unloading to avoid unnecessary noise and save fuel, check tyre pressures regularly. Correctly inflated tyres are more fuel efficient.

There is a BUT to all this: EURO 6 trucks are more expensive, HVO is more expensive than regular diesel, trailers can run short distances with 1 tyre on a twin axle which is not possible if a super single fails. Replacement super single tyres are not as easy to source at the roadside. In conclusion, more sustainable means more expensive so artist support or further legislation is essential.

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# 10 QUICK SUSTAINABLE WINS RIGGING

The following ideas have been taken from the [circularity gap report](#) and extended to provide 10 Recommendations for how a Rigging company can become more circular. These items explain the approach of Unusual Rigging Ltd in the hope that they can inform and guide other companies in the sector to pick up a circular approach.

## 1 DESIGN

Design should prioritise simplicity, standardisation, and utility over novelty, 'one off' solutions and complexity. If bespoke bracketry or rigging solutions are required on a project to achieve a 'one-off' solution, the design team should always look to use existing products or design new items that will provide solutions for multiple requirements.

## 3 SUSTAIN AND PRESERVE WHAT IS ALREADY THERE

Making time to refurbish, maintain and repair your key assets (rigging equipment, hoists etc). Give time to inspection and certification.

## 5 RETHINK THE BUSINESS MODEL

Analyse your organisation's carbon footprint, benchmark against similar companies and identify hotspots (<https://www.carbontrust.com/resources/sme-carbon-footprint-calculator>) with a view to reduce your carbon footprint in line with the latest climate science (<https://sciencebasedtargets.org/>). Create greater value for your customers/clients by offering a continued service with all sales, therefore increasing your revenue opportunities too by servicing across a prolonged period. How can your services be improved to increase the circularity of the initial contract?

## 7 USE WASTE AS A RESOURCE

Can unwanted resources (e.g. taken from stripped out theatres – plywood, SWR, metal work) be re-purposed and used in new settings? (one person's waste is another person's resource). Objective – setting up an industry wide 'e-bay' platform.

## 9 INTER-INDUSTRY INSPIRATION

Expand lines of communication and therefore innovation and imitation by studying circular business models being implemented across other industries (e.g. Ripe Office – Dr. Greg Lavery – team up to create 'Learned value').

## 2 INCORPORATE DIGITAL TECHNOLOGY

Track resource reuse and trace an item's footprint with utmost precision and predictive analytics through asset tracking software by using QR code or RFID technology. (What gets measured gets managed). This will enable your organisation to accurately track equipment's service history, maintenance schedule, repairs and to identify with ease any items that are lost.

## 4 OPTIMISATION

Don't rest on your laurels regarding circular designs/ practices already implemented. Ensure you are constantly exploring, enhancing, expanding, and optimising your approach.

## 6 PRIORITISE REGENERATIVE RESOURCES

Committing to and working towards being 100% renewable in terms of your energy usage. Swapping fossil fuelled vehicles for electrified vehicles (Grants for small businesses are still available). The Energy Savings Trust offer a service which will review your existing vehicle fleet and report on the best way to save money and reduce your organisation's carbon footprint (<https://energysavingtrust.org.uk/transport/fleet/fleet-support>). Plenty of energy suppliers offer green tariffs, providing you with electricity from 100% renewable sources. Replacing old heating/energy systems for more eco effective alternatives – e.g. infrared heaters, air source or ground source. Removing single use plastics from business activities.

## 8 TEAM UP

Discussions across supply chains (up and downstream, from resource providers to resource collectors) could support designing out waste and ensuring effective resource reuse, whilst increasing transparency on longevity (Intra – Industry collaboration).

## 10 NEW HORIZONS & NETWORKING

New Horizons - Taking a systems approach means looking beyond current paradigms (current industry thinking & legislation) is essential to evolving our individual and collective practices. Networking – simply sign up to SiPA, to follow and share discussions with industry colleagues around good practices.

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# 10 QUICK SUSTAINABLE WINS POWER

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## 1 POWER DEMAND

Reduce overall power demand through energy efficiency.

## 2 GENERATOR SIZES

Match generator sizes and runtimes to actual power demand- this will improve generator efficiency.

## 3 SIZE GENERATORS

Use actual kit inventory and power requirements to size generators NOT just connection size.

## 4 TURN OFF GENERATORS

Identify times when it is possible to turn off generators when not required (and then do it). Not all operations require 24hr power, but generators are often left running just because no one actually knows what they are connected to. Make this information readily available at the machine and it can be labelled as being able to be turned off between certain hours.

## 5 TIMERS

Use timers, or do it manually.

## 6 AVOID RUNNING MULTIPLE MACHINES

Avoid running multiple machines 24/7 just for backup. There are other ways to back up systems and maintain baseload, without constant running.

## 7 CONFIGURE GENERATORS

Configure generators to operate on a Load on Demand system so only the generators that are actually required at any given point are running.

## 8 SYNCHRONISE LARGE SETS

Synchronise large sets with smaller sets to manage reduced baseloads e.g. overnight.

## 9 REMOVE THE NEED FOR DIESEL FUELLED GENERATORS

Utilise grid power, battery power and renewable energy to reduce or remove the need for running diesel fuelled generators.

## 10 SEEK ADVICE

Seek independent advice to supplement that of the power contractor.

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# 10 QUICK SUSTAINABLE WINS

## VENUE DESIGNER

The following ideas have been developed to provide 10 Recommendations for Theatre designers; consultants, architects and engineers. These items explain the approach of Charcoalblue LLP in the hope that they can inform and guide other designers in the sector to include in their procedures and designs.

### 1 SIGN UP TO SiPA

Sign up to support SiPA and find out more information on how to be more sustainable. [Share your stories](#) and experience whilst also learning from others.

### 2 SELECT RENEWABLE ENERGY

As part of a design team a theatre consultant should ensure that the mechanical, electrical and plumbing engineers try and use as much renewable energy in the designs as possible. Installing solar/PV panels on the roof, reducing or eliminating the use of gas in place of green electricity, grey water recycling and most of all ensuring that the main energy provider is one of the approved green providers. Using a website like <https://bigcleanswitch.org/>

### 3 SELECT LOCALLY SOURCED MATERIALS

As any theatre consultant knows, when it comes to specifying the types of equipment for the designs is a key part of a successful job. The next time you are selecting your products look at the supply chain and where the materials are sourced and items manufactured. Items like chairs for the auditorium use materials like timber, wool, and metal; where possible speak with the specialist contractors to ensure that they can source materials that are locally sourced and FSC approved.

### 4 THINK BEYOND THE CODE

All buildings should try and achieve the highest BREEAM standard possible but try and go beyond these standards when designing. At times BREEAM can seem like a box ticking exercise which is not what is was designed to do. If the project you're working on is looking to achieve [BREEAM](#) excellent or outstanding see what other methods can be included in the designs to ensure a truly sustainable building.

### 5 REDUCE - REUSE - RECYCLE

Either on new builds or renovations always look to reduce the amount of materials being used, try and reuse any existing or use reclaimed or recycled materials.

### 6 EMBODIED CARBON

Work with sustainability consultants to help you calculate the embodied carbon in the (depending the project type) demolition, foundation works, construction and running of the building.

### 7 KEEP LEARNING AND RESEARCHING

Keep your eyes and ears open to find new materials and building methods whenever starting on projects.

### 8 WORK WITH SUSTAINABLY MINDED DESIGN TEAMS

If you're lead consultant or have the chance to influence who's on the design team, ensure you work with companies who have sustainable policies and previous experience in this area.

### 9 GO PAPERLESS

Remove all need to print and use paper. Sharing meeting or onsite notes is easier now with programmes like Evernote, Teams, Trello, Navisworks etc. Using file sharing websites like Dropbox and BIM 360 also mean large documents can be stored online and viewed on devices. If printing of paper is required ensure to only use 100 percent recycled paper products which are FSC certified.

### 10 CUT DOWN ON TRAVEL

The lockdown has shown we can work remotely and function well as design teams. As and when more studios and offices reopen think about if you really need to go into the studio to work? If you can work from home and produce the same work as in the studio then this cuts down on using carbon hungry transport.

*Created 12/10/20 by Charcoalblue – a company committed to improving sustainability practices across the live events and performance space construction industries – [www.charcoalblue.com](http://www.charcoalblue.com)*

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# 10 QUICK SUSTAINABLE WINS

## VENUE OPERATION

### 1 STAFF ENGAGEMENT AND ACTIONS PLANS

Involve staff in green teams, and ensure membership includes those who have sustainability goals in their role (Facilities, Production Managers, IT Managers, Catering). Empower staff in roles of responsibility in these teams, have champions for different areas, set clear agendas and have a robust and published sustainability policy. Engage staff in a progressive action plan that sets regular review dates and constantly renews its ambitions and targets. Communicate to all staff regularly and positively, ensuring an awareness of sustainability is part of their daily working life.

### 3 INCLUDE SUSTAINABILITY GOALS IN JOB DESCRIPTIONS

Not only have energy and procurement in the job descriptions of Facilities or Operations staff, but include real requirements in the job descriptions of Production Managers, Technical Managers, Costume Supervisors. Include sustainability in contracts with designers and directors, this will require setting delivery dates that allow time for sustainability to be designed in, rather than left to the Production Manager to try and achieve the impossible.

### 5 PROGRAMME AND PRODUCE SHOWS WITH SUSTAINABILITY THEMES

Listen to your communities, find out what is important to them, engage with local schools and emerging artists, and give space for their voices. Consider using foyers as gallery spaces, and daytime activities for a wider demographic.

### 7 ENERGY FROM RENEWABLES

Purchase energy from renewable sources, and join or form a consortium of venues to make it more cost effective. Investigate the possibility of installing solar/PV cells on a flat roof or fly tower, recycle grey water for your non-potable water requirements.

### 9 INTRODUCE A SUSTAINABLE PROCUREMENT POLICY

Minimise your use of tech and don't have desktops and laptops for the same person, have hubs on desks instead. Ensure backstage monitors in dressing rooms have a sleep function or power down overnight/unoccupied mode. Don't have company phones but instead use dual sims in personal phones. When you replace, buy PCs and monitors that have a sleep function. Use biodegradable laundry products and buy in bulk. Consider where you purchase timber from for set construction, allowing for any higher cost that comes with ethical decisions to be allowed for in the budget without making the PM responsible for this choice. Purchase costumes and fabric ethically and consider where garments are made.

### 2 COMMUNICATION POLICY

Be connected to your peers and the industry, participating widely and enabling staff to do this in a meaningful way, allowing time and resources rather than as an afterthought or in spare time. Communicate with your audience and have a social media strategy for sustainability, have a consistent platform and ensure the platform is used regularly with consistent messaging, don't forget the power of the senior and artistic leads in your venue. And listen to your neighbours - be an advocate for change in your community.

### 4 SET SUSTAINABILITY PARAMETERS FOR DESIGNERS FOR EACH NEW PRODUCTION

Change the time-frames you work with to allow Production Managers to deliver within sustainability parameters. Set limits on certain materials, require sets to be built so materials can be recovered afterwards, and require designers to repurpose set/scenic elements you have in-house rather than re-make from new. Consider costume procurement and ethical supply chains. Set energy use limits for lighting designers.

### 6 ENCOURAGE AUDIENCES TO TRAVEL SUSTAINABLY

Consider local transport timetables when programming start/end times of performances, be as informative as possible on your website, ensure taxi options advertised are those with green credentials and collaborate with local firms to encourage changes in their own policies.

### 8 GO PAPERLESS

Ensure meetings notes and agendas are shared online, or on a screen in the meeting room. Consider smart printers that only print when you log in. Move to downloadable programmes, and minimise the number available for purchase. Notify audiences of cast changes on screens or a noticeboard in the foyer rather than paper handouts.

### 10 INTRODUCE A TRAVEL POLICY

Prioritise online meetings. Use public transport for local visits and meetings, use the train instead of flying to destinations in the UK and close European cities. Use taxi and courier firms with good green credentials. Plan in advance to ensure you ship your freight rather than fly it for touring. Carbon offset whenever you fly, and build the cost of this into touring budgets.



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# 10 QUICK SUSTAINABLE WINS VIDEO

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## 1 CARBON ACCOUNTING

Carry out a carbon audit for your organisation, going forward carbon accounting is as important as financial accounting.

## 2 DECISION MAKING

Sustainability should be at the forefront of decision making at every level within your organisation both internally and externally.

## 3 PROVISION OF VIDEO ELEMENTS

Provision of video elements can form part of a wider sustainable solution in any project.

## 4 TECHNOLOGY INVESTMENTS

All technology investments need to be made with long term lifecycles, rather for a single project.

## 5 UPGRADE PATHS

Upgrade paths are essential to keep older technology relevant and attractive to a wider audience.

## 6 INVOLVEMENT IN DESIGN SPECIFICATION PROCESS

Getting more out of less, being involved in the design / specification process earlier and adding value.

## 7 PACKAGING AND DEPLOYMENT

Efficient packaging and deployment methods, saving on transportation and labour resources.

## 8 LIGHT WEIGHT PRODUCTS

Aim to always operate lightest weight products in their class.

## 9 MOST POWER EFFICIENT PRODUCTS

Aim to always operate most power efficient products in their class.

## 10 KEEP UP THE EFFORT

Keep up the effort once you have started the process. This is the new normal.

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UNIVERSAL PIXELS



# 10 QUICK SUSTAINABLE WINS WARDROBE

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## 1 CREDENTIALS OF FABRICS

Check the credentials of the fabrics. Choose organic, Fairtrade, cradle to cradle, upcycling etc.

## 2 CREDENTIALS OF OUTLETS

Check the credentials of outlets where you buy artists clothing. Do they use sustainable fabric? Do they pay their workers living wages? Avoid buying fast fashion.

## 3 USE FILTERS

Use filters to stop synthetic microfibres entering the water stream every time you wash clothes.

## 4 RECYCLE CLOTHES

Recycle clothes at the end of a tour/production. Donate to charity or sell them to raise funds for charity.

## 5 USE ECO-FRIENDLY WASHING POWDER

Conventional detergents can contain ingredients that aren't good for you, your clothes, or aquatic ecosystems where the dirty water we wash down the drain can end up. Phosphates in conventional laundry soaps can cause algae blooms that negatively affect ecosystems and marine life. Look for labels that indicate a product is readily biodegradable and phosphate-free and made from plant and vegetable based ingredients instead of petroleum-based.

## 6 REPLACE FABRIC SOFTENERS

Fabric softeners can be replaced by a cup of white vinegar added to the washer during the rinse cycle. Vinegar naturally balances the pH of soap, leaving your clothes soft and free of chemical residue. Other natural products- cold-pressed olive oil often gives better results than commercial products.

## 7 CONCENTRATED LAUNDRY DETERGENTS

Choose concentrated laundry detergents because they have reduced packaging and a smaller carbon footprint. More useful product can be shipped using less space and fuel.

## 8 CONSIDER HOW YOU WASH CLOTHES

Wash clothes on shorter cycles and low temperatures. Hang and air-dry rather than tumble-dry.

## 9 AVOID DRY CLEANING

Avoid items that need to be dry cleaned.

## 10 AVOID IRONING

Don't iron if you don't have to. Not only is ironing a tedious chore, it also consumes energy and can deteriorate fabric.

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# 10 QUICK SUSTAINABLE WINS

## WINCHES AND AUTOMATION

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### 1 POWER DOWN MCCS

Power down your MCCs overnight or put the system in e-stop to minimise energy wastage.

### 2 REGENERATIVE BRAKING

Where practicable, specify a system on grid power with regenerative braking, rather than running off a generator with braking resistors. Thus energy generated is fed back into the grid rather than being wasted.

### 3 POWER FACTOR

Consider the Power Factor (PF) when specifying equipment, and investigate if there is a setting on your rectifier to improve PF. For example 'Extended Smart Mode' on Siemens SLM. A high PF reduces energy waste and loss.

### 4 MAINTAIN AND SERVICE EQUIPMENT

Maintain and service your equipment, well-maintained equipment lasts longer, and therefore has less environmental impact.

### 5 REPAIR

Repair rather than replace damaged equipment.

### 6 RENTAL PRODUCTS

Incorporate 'off the shelf' rental products into your design, rather than build custom items that then go to scrap.

### 7 ORDER IN ADVANCE

Order your equipment well in advance to avoid the need to airfreight.

### 8 ROPE

If using synthetic rope, speak with your supplier about sustainable products- for example, bio-based Dyneema.

### 9 RECYCLE

Recycle and dispose of all components appropriately, including electronics, cable, oils

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**TAIT**

# 10 QUICK SUSTAINABLE WINS

## VENDOR GUIDELINES

### 1 GO PAPERLESS

Ensure all internal procedures, process and communication are sent digitally - limiting unnecessary printing and use of paper. An online file storage solution should be invested in for all colleagues for storage and file sharing. Should paper be required ensure to only use 100 percent recycled paper products which are FSC certified.

### 3 RENEWABLE ENERGY

Green power sources such as solar, wind and wave are extremely accessible from multiple energy providers and companies of any size can switch to a green tariff. It is also easy to discuss the installation of solar panels to your property to make use of expansive warehouse rooftops.

### 5 ECOLOGICAL REUSABLES

Ensure all refillable liquids such as hand soap, sanitiser, laundry detergent and cleaning products are sourced from a sustainable (local if possible) company who are able to offer a refilling service. An example of this can be found at [www.nakedpantrynewforest.co.uk](http://www.nakedpantrynewforest.co.uk) In food preparation areas remove all single use plastic and materials such as cling film and foil and replace with reusable containers, reusable sandwich bags or beeswax wraps. In areas where bin liners are used source bags which can be washed and reused or polythene product bags which have a degradation process triggered by daylight or warmth and break down through oxidation- these pieces will then decompose.

### 7 UNPLUG AND CONSERVE

Ensure all computers, printers, photocopiers, coffee machines and other electronic items that do not require power 24 hours a day to be unplugged / turned off at the end of the night. Consider installing sockets with a remote switch with can be made switching everything off quicker and easier for team members. Also consider installing switches with a timer.

### 9 REDUCE - REUSE - RECYCLE

Where possible always reduce the amount of excess packaging waste on purchases and or shipping. Steer clear from as much plastic purchasing as possible. Ensure any deliveries which are not in flight cases such as components for spare parts from manufactures are available in a reuse section of the facility. This should include all boxes and internal packaging. Source materials which are natural and break down via compost. A great example of this would be the packaging the retailer LUSH uses, which when put under water breaks down entirely. There should be a internal system for the recycling of materials which include glass, plastic, cardboard, metal, food waste for all parts of the building. Signing up to a local TERRACYCLE scheme is also a great way to extend the recycling procedure as most local governments do not offer this as part of the regular recycling methods.

### 2 INTERNAL & EXTERNAL LIGHTING

Adjusting when and how lighting in your building can make a big impact on overall energy use. Look to install motion sensors in areas of the building alongside timers for when the certain areas of the building is not used. Consider removing all incandescent bulbs and replacing with compact fluorescent (CFLs) and LED instead. Use natural daylight as much possible and reposition.

### 4 PLANTS

Encourage all team members who have a working station (where appropriate) to bring in a desk plant to improve air quality. Plants improve air quality and offset any chemicals released in the air.

### 6 ECO-FRIENDLY CONSUMABLES

Purchase sustainably produced consumables for the office such as tea, coffee and snacks. Where possible try to work with local companies as this not only reduces your carbon footprint, but also can streamline the purchase process as well as helping the environment. If purchasing lunches for internal meetings use local companies who work with seasonal and local produce. You'll likely get brilliant service and the repeat business will support your local community.

### 8 MAXIMISE NATURAL LIGHT

Rearranging your working environment so peoples desks are closer to the windows now only can save your energy bill but also the World Green Building council reports a 15% higher production rate from employees working near sunlit windows. If possible move workstations to within 25 feet of peripheral walls with windows.

### 10 ECO CONSCIOUS PARTNER; GREEN COMMITTEE

The last point is probably where the most impact can be made overall. When choosing which manufacturing partners to work with ensure you have asked about their sustainability policy. This should include the end of life cycle for the products once they reach their end of use.  
 -Ask for their RoHS (Restriction of hazardous substances) statement relating to directive 2002/95/EC  
 -WEEE (Waste Electrical and Electronic Equipment) statement  
 -Sustainability policy and check their carbon neutral goals and what processes they have implemented internally to ensure their product life cycle is need driven rather than marketing cycle driven.

It's important to note that all green policies are a living document and will have adjustments made to them regularly. All companies should be looking at ways to improve their methods and take ownership for their impact on the environment. Policies should be requested with every investment to check updates to the companies to ensure they are also continually improving as you are trying to.

Created 12/10/20 by Christie Lites- a company committed to improving sustainability practices in live events - [www.christielites.com](http://www.christielites.com)

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# 10 QUICK SUSTAINABLE WINS

## ROCK N ROLL TRUCKING

### 1 VEHICLE AGE PROFILE

Ensure that all vehicles supplied are as new as possible and that no vehicles are less than Euro 6 Rating. Euro 6Engines are the most environmentally friendly heavy trucks truck engines currently available. It will take five Euro 6 trucks to produce the same amount of NOx as just one Euro 5 truck. It will take three Euro 6 trucks to produce the same particulate matter as one Euro 5 truck.

### 3 MAXIMISE PAYLOAD / ALLOCATE CORRECT VEHICLE SIZE

Ensure that vehicles are loaded to maximum safe capacity (bearing in mind crew proximity for Covid 19 safety measures when loading and tipping). If a smaller Truck can be used rather than running a Truck at part capacity, we will do so. This has reduced fuel consumption, emissions output, road wear, etc.

### 5 VEHICLE MAINTENANCE

Complete a full regular proactive maintenance programme to ensure that vehicles are operating at prime efficiency to minimise emissions, fuel burn, wear and tear on consumables.

### 7 INVESTIGATE ALTERNATE ROUTINGS

Look at Ferry Routings / Transmodal Operation on a Tour by Tour basis to see whether there are more environmentally friendly / sustainable ways of completing moves that are viewed as standard routings.

### 9 RECYCLE / ENVIRONMENTALLY FRIENDLY DISPOSAL

Look to recycle consumables such as tyres, Truck Batteries, etc. wherever possible and where not possible, look to re-purpose or dispose in as an environmentally friendly manner as possible. Landfill should be a last resort.

### 2 DRIVER TRAINING

Undertake regular Driver Training with manufacturer support to ensure that vehicles are being driven as well and efficiently as possible to maximise MPG Fuel Burn and reduce wear and tear on consumable parts.

### 4 REGULAR TYRE CHECK AND MAINTENANCE

Ensure use of Premium Tyres. Tyre pressures to be checked and maintained as part of Drivers Routine Checks as well as part of proactive maintenance programme. This will ensure better wear (and reduce Tyre Replacement requirements) and ensure best possible vehicle MPGs thereby minimising emissions as much as possible.

### 6 ROUTE PLANNING

Route Tours / Stand Alone Shows to ensure Trucks are taking the most efficient (not necessarily cheapest) route to and from venues. Minimise Road Wear, Fuel Burn, Wear and Tear and vehicles and Tyres etc.

### 8 MORE SUSTAINABLE / ENVIRONMENTALLY FRIENDLY FUELS

On a move by move or even Tour by Tour basis, investigate the possibility of using more environmentally friendly / sustainable fuels. Although a lot of Bio-Fuels do not really offer a great benefit in terms of sustainability or emissions reduction, there are such fuels as HVO Bio Diesel (I can provide you with a spec sheet of it helps) that are produced from 100% renewable source and reduce emissions massively. These come at a cost premium but should be considered where possible and practical.

### 10 DRIVER INFORMATION

Wherever practical (and legally possible) share all information with driving team via electronic means rather than paper copies. Use of Apps or email and image sharing to be the preferred option for information sharing.

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# 10 QUICK SUSTAINABLE WINS

## THEATRE SET DESIGNER

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### 1 DECLARE A FOCUS ON SUSTAINABILITY

Declare a focus on sustainable practice as early as possible. Make it part of contractual and management conversation.

### 2 REDUCE & RE-PURPOSE

Work with Tech and Production managers to try and reuse and re-purpose as much old scenery and props as possible allowing as much time within a design process for their use to be incorporated.

### 3 RECYCLED MATERIALS

Demand use of recycled materials where possible within construction of your set and costume design. Choose materials mindfully, minimising the use of virgin materials.

### 4 GO PAPERLESS

Go paperless in as many ways as possible using digital formatting for drawings etc. and always use biodegradable Foamcore and model materials etc. when essential. Remember Reduce – Reuse – Recycle.

### 5 BUY REFURBISHED EQUIPMENT

Buy refurbished tech equipment rather than new.

### 6 BUY LESS NEW CLOTHING

Work closely with your costume supervisor to buy less new clothing for costume purposes. Avoid fast fashion!

### 7 INSULATE YOUR STUDIO

Use carbon neutral energy suppliers and minimise energy consumption within your studio practice.

### 8 TRAVEL LESS

Combine as many necessary trips as possible making environmentally sensitive travel choices.

### 9 USE FEWER HARMFUL PRODUCTS

Use fewer aerosols and environmentally harmful products within the studio. Dispose of paint and harmful products environmentally.

### 10 SHARE WITH STAGE DESIGN COMMUNITY

Reuse and share model boxes of venues, and share as many material elements within the Stage Design community.

*Created 12/10/20 by Scene Change- an organisation committed to improving sustainability practices in live events - [www.scene-change.com](http://www.scene-change.com)*

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# 10 QUICK SUSTAINABLE WINS

## THEATRE PRODUCTION MANAGERS

### 1 SOURCING MATERIALS

When sourcing and obtaining equipment and materials:

- Use existing stock or re-purpose/find dead stock or materials-
- Borrow
- Buy or hire locally
- Buy online prioritising small businesses or marketplaces

### 3 ENCOURAGING DESIGNERS TO REUSE SET

Encourage designers and builders to consider the plan for strike and reuse of a set:

- Plan for the future life of all materials used
- Reduce build techniques which render materials difficult to reuse, for example use mechanical fittings over glue, screws over staples and nails
- Consider modular choices which can be repurposed, and build to standard material sizes as possible
- Build network of charities, community groups, school, and community scrap schemes who can reuse materials
- Include the disposal costs of a set in the build budget

### 5 POLICY OF MATERIALS AND EQUIPMENT

Consider a policy of materials and equipment you will not use, and review annually:

- Some suggested items to consider would be polystyrene, balloons, glitter, helium, single use plastics, wipes etc.

### 7 SUPPLIER'S SUSTAINABILITY POLICIES

Ask suppliers to provide copies of their sustainability policies:

- Enquire about the footprint of materials before purchasing
- Consider the ethics of your suppliers including high street shops and larger store fronts.
- Ask questions about environmental claims, for instance, biodegradable - under what circumstances, recyclable - widely recyclable?, carbon neutral - through what method?

### 9 INTRODUCE A SUSTAINABLE PROCUREMENT POLICY

Sustainability should be part of the planning conversation from the beginning of a project.

- Include sustainability in all inductions with stage management, freelancers, and contractors include sustainability as an agenda item at all parameters, design and production meetings
- Keep sustainability in the conversation

### 2 DESIGN, TRANSPORT, SOURCING & SUPPLIERS

When considering design, transport, sourcing and suppliers, remember:

- Is it a good idea?
- What are the environmental consequences?
- What are the alternatives?
- Are the alternatives reasonably practical?
- What impacts would they have?
- Is it appropriate to change?

### 4 MATERIALS

Consider these preferred materials:

- FSC certified timber
- Low VOC adhesives
- Waterbased paints,
- Use of compressors instead of tins of aerosol
- Fabric cable ties instead of LX tape
- Rechargeable batteries
- Natural fibres over petroleum based fabrics

### 6 ENVIRONMENTAL POLICIES

Make environmental policies and guidelines an appendix to contracts:

- Everyone on a project can play their part
- Make it part of your toolbox and induction talks

### 8 IF USING NON-BIODEGRADABLE MATERIALS

If you are considering using plastics or other non-biodegradable materials? Remember:

- Avoid
- Reduce
- Reuse
- Recycle - last resort

### 10 TRANSPORT

When planning transport, consider:

- Planning tours to avoid backtracking and reduce journeys
- Planning the most fuel-efficient route
- Travel arrangements for the full company, including public transport and car sharing
- Planning the build and pack to reduce the required number of vehicles
- What needs to be transported and what can be procured locally for tours
- Having single days in the week for pick ups and deliveries to reduce van use

Created 02/11/20 by Production Manager's Forum – an organisation committed to improving sustainability practices across the live events industry – [www.productionmanagersforum.org](http://www.productionmanagersforum.org)

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# 10 QUICK SUSTAINABLE WINS LIGHTING

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## 1 CONSUMABLES

Take consideration when ordering and using consumables.

## 2 SMOKE AND HAZE

Work with the venue and design team to reduce the use of smoke and haze preshow.

## 3 GO PAPERLESS

Continue using paperless technology where possible with 'paperwork' and plots being shared and worked from digitally.

## 4 MINIMISE TRUCK SPACE

Cut down on unnecessary quantities of spare equipment to minimise truck space and impact of carrying extra weight.

## 5 RECYCLING CONSUMABLES

Ensure any spent consumables are recycled in the most efficient way- reduce, reuse, recycle.

## 6 REGULAR MAINTENANCE ON EQUIPMENT

Keep up regular maintenance of equipment to avoid unnecessary spares shipments.

## 7 TRAIN CREW IN ROAD REPAIRS

Train crew in road repairs and consider carrying commonly needed parts as opposed to full spare fixtures.

## 8 WORK WITH ALL DEPARTMENTS

Work with other departments such as video to balance how bright the show needs to be and thereby lower overall power consumption.

## 9 POWER MONITORING

Integrate power monitoring into systems and set goals to minimise power use outside of shows. This can include minimising the amount of time the rig is running for during load-in and testing. Douse fixtures when not in use and avoid running test sequences for prolonged periods. Place more focus on balancing loads and power systems to be as efficient as possible.

## 10 POWER REQUIREMENTS

Ensure that power requirements are as accurate as possible when specifying supplies so as to not have incorrectly sized generators or unnecessary additional or oversized cable. Work with point 9 to achieve this.

*Created 01/12/20 by Hadyn Williams, Michael Straun and Christie Lites who are all committed to improving sustainability practices in live events.*



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CHRISTIE LITES

# 10 QUICK SUSTAINABLE WINS

## FLIGHTS & HOTELS

### 1 AVOID FLYING

Avoid flying if time allows. Trains far less hassle, stress, security & safer. Flying shorter distances are also less efficient than further distances, so try to consider alternate modes of transport when travelling short distances.

### 2 AVOID FLIGHTS WITH STOP OVER

Fly non-stop over connections where you can. It uses less emissions than landing and taking off again.

### 3 RESEARCH THE COMPANIES YOU FLY WITH

When flying to Europe (or further afield via the dreaded connections see above!), Air France and KLM have some of the highest environmental credentials going. They are ranked as the top transportation company globally in the Dow Jones Sustainability Index. Outside of the travel industry, they are ranked in the top 24 sustainable companies of all industries worldwide. KLM powers many of its flights with biofuel and is constructing its own plant in the Netherlands to produce the resource. They are retiring all of their inefficient Boeing 747s also. <https://www.airfranceklm.com/en/commitment/environmental-protection?language=en>

### 4 CONSIDER USING HYATT OR ACCOR

Hyatt are a big chain with a big focus on environmental sustainability, focused on water wastage education. Accor are probably the biggest hotel group out there, and they also have a focus on offering sustainably sourced food in their restaurants and eco-certified building design and products. <https://about.hyatt.com/en/hyatt-thrive/our-planet.html>

### 5 CONSIDER CHOOSING CATHAY PACIFIC

If you're heading to APAC, Cathay Pacific is very progressive in terms of their air traffic management (avoiding lots of unnecessary and fuel burning circling before landing). They also have a pledge to reduce single-use plastics and have recently gone paperless in their cockpits.

### 6 CONSIDER HOW YOU USE YOUR PHONE

Think about the way you use your PHONE whilst travelling. Did you know that the "cloud" i.e. data storage produces the same amount of greenhouse emissions globally as global travel including planes?! Try to use wifi where possible as this uses less bandwidth than 4G. Switch off apps that use background energy. Try to cut down on the amount of photos and files you are saving and sharing!

### 7 EAT LESS MEAT & EAT LOCAL

Eat less meat on tour and eat local! Encourage caterers to have veggie-only days or to commit to locally sourced food so you aren't contributing to food being flown across the world, and you're supporting local businesses too. Avoid buffets which generate lots of waste and eat as locally and seasonally as possible. Don't order a burger in Spain; get yourself some delicious tapas!

### 8 CONSIDER CHOOSING MELIA HOTELS

Melia Hotels were named the most sustainable hotel brand in the world in 2019. They are located in most European cities so they are great for green touring. <https://www.meliahotelsinternational.com/en/our-company/reputation-sustainability/environmental-commitment>

### 9 USE AIRLINES WITH YOUNGER FLEETS

Use airlines with younger fleets which are more fuel efficient. Most of the middle eastern carriers e.g. Qatar, Emirates, FlyDubai have very young fleets, along with some European carriers e.g. Norwegian Air and Aeroflot!

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[www.tag-group.com](http://www.tag-group.com)

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# 10 QUICK SUSTAINABLE WINS

## EDUCATION

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### 1 GREEN CAPTAIN

Empower the students by having a Green Captain in each cohort to promote and advise on sustainable practices.

### 2 ENVIRONMENTAL RESPONSIBILITIES

Deliver a Environmental Responsibilities session at the beginning of their studies.

### 3 SUSTAINABILITY ASSESSMENT

Add a Sustainability Assessment of some form to their list of required show documents.

### 4 SUSTAINABILITY AWARENESS

Aim to include Sustainability Awareness into their learning outcomes and module descriptors so that they can be formally assessed on that criteria.

### 5 PASSING ON

Make connections with schools and amateur groups in your area to help facilitate passing on of scenic elements or spare materials.

### 6 RESEARCH/DISSERTATION

Inspire students to explore sustainability as a research/ dissertation topic.

### 7 LITERATURE

Include sustainability literature onto reading lists.

### 8 RENEWABLE ENERGY

Lobby for their institution to change energy provider to renewable energy.

### 9 SUSTAINABLE TEAMS

Develop and maintain a culture of sustainable teams- to ensure that wellbeing is both a personal and collaborative responsibility.

### 10 FUTURE GENERATIONS

Remind them that tomorrow is theirs, and together they will improve industry practice for future generations.

*Created 27/01/21 by Guildford School of Acting - an organisation committed to improving sustainability practices in live events*

[www.gsauk.org](http://www.gsauk.org)

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# 10 QUICK SUSTAINABLE WINS CATERING

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## 1 SOURCING SUSTAINABLE FOOD

Ask for ethically sourced, local, sustainable food to be supplied only– local seasonal fruit and vegetables, free range eggs, high welfare meat, MSC Certified fish– cut down the food miles and support local.

## 2 REDUCE WASTE

Communicate with the caterer as to what you do and do not need– update riders regularly, carry anything that is essential with you, accept local substitutes.

## 3 BUS FOOD

Review what you are ordering and what is being thrown away.

## 4 REUSABLE WATER BOTTLES

Supply crew with reusable water bottles and ask venues to supply water coolers throughout.

## 5 AVOID DISPOSABLE CUTLERY

Use real china and cutlery in catering– more sustainable than disposable.

## 6 DISPOSABLE CUTLERY STANDARDS

When using disposable cutlery, ensure it is both biodegradable and compostable.

## 7 WORK WITH VENUES

Encourage venues to provide proper recycling throughout and to use sustainable products in concessions too.

## 8 LEFTOVER FOOD

Arrange for leftover food to be collected by local recyclers/ food redistributors such as <https://www.cityharvest.org.uk> or <https://www.rockandwrapitup.org/>

## 9 REDUCE SINGLE USE

Reduce single use portion packs (when possible).

## 10 RED MEAT FREE DAYS

Reduce your carbon footprint by reducing red meat choices on menus and having days where all meals are plant based.

Created 01/12/20 by Eat To The Beat- a company committed to improving sustainability practices in live events - [www.gigcatering.com](http://www.gigcatering.com)

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**EAT to the BEAT**  
CATERING HEADLINERS SINCE 1984

# 10 QUICK SUSTAINABLE WINS AUDIO

## 1 PROMOTE SUSTAINABILITY

Promote a sustainable work attitude and approach amongst the whole department with emphasis placed on minimising quantities of consumables, recycling where possible and sharing transport and travel arrangements etc.

## 2 EQUIPMENT

Purchase flight cases made from sustainable products: traditional laminates are not recyclable, there are greener alternatives. This extends to considering sustainability in all equipment investments, what will happen to the item once it has reached its end of life? How will you plan to dispose of it?

## 3 TAPE ALTERNATIVES

Use less tape: use Velcro straps or cord to tie cables.

## 4 ONLY POWER PA WHEN NEEDED

Only have the PA powered up when needed. And when off check that equipment is not in standby.

## 5 RECHARGEABLE BATTERIES

Use rechargeable batteries where previously disposables have been used in RF equipment, measuring devices and torches.

## 6 PRINTING ALTERNATIVES

Share daily prediction/rigging information with other crew via email or message rather than being printed.

## 7 CALCULATE POWER REQUIREMENTS

Ensure that power requirements are calculated as accurately as possible when specifying supplies so as to not have incorrectly sized generators or unnecessary additional or oversized cable.

## 8 MINIMISE TRUCK SPACE

Cut down on unnecessary quantities of spare equipment to minimise truck space and impact of carrying extra weight.

## 9 HAVE A TEAM SET OF TOOLS

Have a team set of tools and not individual tool boxes. This cuts down on the weight and volume that a show carries.

## 10 WORK WITH ALL DEPARTMENTS

Work with other vendors, suppliers, manufacturers, designers and specifiers to promote that sustainability should be incorporated into their work, their thought processes and practices. Help change attitudes.

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