

THE THEATRE GREEN BOOK

1 : Sustainable Productions : short version
(Version beta.3 for trialling)



The Theatre Green Book is built on years of thinking, research and advocacy by pioneering organisations, theatres, theatre companies and individuals. You'll find their names in the acknowledgements and bibliography, and their ideas throughout.

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Foreword

The Theatre Green Book is an initiative by theatre-makers and sustainability experts to create common standards and a common method for sustainable theatre.

Sustainable Productions, the first volume of the Theatre Green Book, focuses on how to make productions more sustainably.

This short version of Sustainable Productions is designed for smaller companies and productions. It contains exactly the same guidance as the full version, but in a form designed for small teams working under pressure of time and cost. The longer version gives much more information on the principles behind the Green Book, as well as a toolkit of resources for working sustainably.

Sustainable Productions was inspired by the expertise of small scale theatre-makers in creating excellent shows with minimum resource. Sustainable Productions turns that knowledge into a clear path to sustainability.

Paddy Dillon, Green Book Co-ordinator

Sustainable Productions has three standards:

- **Baseline**
- **Intermediate**
- **Advanced**

To achieve Baseline, a production team needs to:

- Make sure 50% of all materials come from reused or recycled sources
- Make sure 65% of them go on to future lives, through storage or re-use
 - Avoid harmful and unsustainable materials
 - Run technical systems sustainably
 - Reduce journeys and deliveries

To make that happen, Green Book teams need to:

- Agree a standard before starting
 - Appoint the team early
 - Work collaboratively
 - Measure outcomes
- Pass on what they learn

'Intermediate' and 'Advanced' standards follow the same principles with higher targets.

The next page shows how to achieve each standard.

It divides the production process into a number of steps.

Carry out each step, and you've achieved a show to that standard.

3 Steps Towards Sustainability

Choose which Green Book standard to work to. The following pages give detail on each.

	1 Baseline
Invitation	B.1 The production's Green Book Baseline standard is stated as part of the initial invitation to everyone involved.
Production Agreement	B.2 A Green Production Agreement is signed by everyone involved in the production.
Team	B.3 The full team is appointed early to allow for collaboration on sustainability.
Sustainability Champion	B.4 A Sustainability Champion is appointed at the outset to track, guide and support sustainability efforts across the team.
Budget & Schedule	B.5 The budget and schedule are set to support sustainable working.
Concept	B.6 An early meeting at concept stage includes makers, so the whole team can work on how to achieve the vision sustainably.
Development	B.7 A 'Green Card' meeting of the whole team reviews sustainability against standard, and agrees actions.
Evaluation	B.8 A Materials Inventory lists the sources of ALL materials, and their planned disposal routes after the show.
Making	B.9 The Sustainable Workshop guidance is understood and agreed by all, to establish green workshop practices.
	B.10 50% of each category of materials used in the production (set, props, costumes etc) has a previous life.
	B.11 New materials are sustainably sourced if possible. 100% of plastics are reusable, recyclable or compostable.
	B.12 Materials and products which damage the environment are avoided if possible.
	B.13 Deliveries are minimised, and last minute deliveries avoided if possible.
Technical	B.14 Technical teams follow guidance in chapter 8, reducing energy through switch-off routines etc.
Costumes	B.15 The Costumes guidance is understood and followed, to maximise reuse and manage costumes sustainably.
Review	B.16 A review meeting is held by the Sustainability Champion to assess the show's outcome and share lessons learnt.
Disposal	B.17 After the show, 65% of materials are re-used or recycled. Technical systems are maintained, reused or sustainably returned.
Outdoors	B.18 Outdoor / Site Specific shows follow Green Book guidance for Outdoor / Site Specific shows.
Touring	B.19 Touring shows follow Green Book guidance for Touring (see Toolkit).

	2 Intermediate
	I.1 The production's Green Book Intermediate standard is stated as part of the initial invitation to everyone involved.
	I.2 As Baseline.
	I.3 The team is given an information pack of in-house & local resources to support sustainability.
	I.4 All key members of the team have undertaken carbon literacy training before production starts.
	I.5 As Baseline.
	I.6 As Baseline.
	I.7 As Baseline.
	I.8 As Baseline.
	I.9 As Baseline.
	I.10 75% of each category of materials used in production (set, costumes, props etc) has a previous life.
	I.11 All other materials are sourced sustainably.
	I.12 Materials and products which damage the environment are avoided.
	I.13 Vehicle mileage associated with the production and deliveries is tracked and recorded.
	I.14 As Baseline.
	I.15 As Baseline.
	I.16 As Baseline.
	B.17 After the show, 80% of materials are re-used or recycled. Technical systems are maintained, reused or sustainably returned.
	I.18 As Baseline.
	I.19 Vehicle mileage associated with the tour is tracked and recorded.

	3 Advanced
	A.1 The production's Green Book Advanced standard is stated as part of the initial invitation to everyone involved.
	A.2 The Green Production Agreement contains a clear divestment and ethical funding statement.
	A.3 All supply contracts, tender documents and contracts require Green Book Advanced standard to be met.
	A.4 A Carbon Budget is set, and the Sustainability Champion trained in using a Carbon Calculator.
	A.5 As Baseline.
	A.6 As Baseline.
	A.7 Sets are designed with modular components for easy reuse.
	A.8 A Carbon Calculator is used to track the production's footprint.
	A.9 Sets are made for easy disassembly to allow for recycling of materials
	A.10 100% of materials in the production have a previous life, are from 100% recycled content, OR ...
	A.11 All new materials are accredited carbon zero.
	A.12 The production uses no toxic or environmentally harmful production materials.
	A.13 The production only uses electric vehicles, rail, cycles, or public transport.
	A.14 As Baseline.
	A.15 As Baseline.
	A.16 As Baseline.
	A.17 After the show, 100% of materials are re-used or recycled. Technical systems are maintained, reused or sustainably returned.
	A.18 An Ecological Impact Assessment is carried out for any outdoor locations used.
	A.19 A Carbon Calculator is used to understand the impact of each leg of the tour.

Everyone has a role to play in moving forwards with sustainability.

Not everyone has to do everything - but if we all do what we can, then we'll move things forward.

The next three pages - one for each standard - suggests who needs to do what to achieve each step.

Who does what? Baseline

Use the links to go straight to resources in the Toolkit.

		Producers	Directors & Designers	Production Managers	Production Staff, Makers, Suppliers
Invitation	B.1	Reference Green Book Baseline standard as part of the initial invitation to all team members.			
Production Agreement	B.2	Prepare a Green Production Agreement, which all team members sign. → link	Sign Green Production Agreement.	Sign Green Production Agreement.	Sign Green Production Agreement.
Team	B.3	Appoint the full team early to allow for collaboration on sustainability.	Welcome early collaboration. Foster trust and collective working.	Provide the team with information about in-house resources.	
Sustainability Champion	B.4	Appoint a Sustainability Champion → link to guide the team and maintain Materials Inventory. → link	Support the Sustainability Champion in helping the team meet targets.	Support the Sustainability Champion in helping the team meet targets.	Support the Sustainability Champion in helping the team meet targets.
Budget & Schedule	B.5	Set budget and schedule to support sustainable working. → link link		Help set budget and schedule. Establish sustainable data & communications. Co-ordinate sustainability meetings.	Provide insight on suggested changes to budget and time needed based on previous experiences.
Concept	B.6	Call an early meeting with makers, so the whole team can work on achieving the vision sustainably.	Include sustainability in conceptual thinking. Work on the concept to reduce late change. Do more with less.	Co-ordinate team to collaborate on sustainability in early concept meeting.	Attend early meetings to help achieve the creative vision sustainably.
Development	B.7	Call a 'Green Card' meeting of the whole team to review sustainability and agree actions. link	Be flexible. Collaborate to realise ideas sustainably. Prefer reused / shared resources. Avoid late change.	Co-ordinate 'Green Card' meeting to review sustainability and agree actions. → link	Attend 'Green Card' meeting to help review sustainability and suggest actions to improve.
Evaluation	B.8	Help the team resolve questions and reach decisions so as to embody the creative vision in a sustainable show.	Contribute to Materials Inventory listing the source of ALL materials, and their planned disposal. → link	Contribute to Materials Inventory listing the source of ALL materials, and their planned disposal. → link	Contribute to Materials Inventory listing the source of ALL materials, and their planned disposal. → link
Making	B.9			Ensure Sustainable Workshops guidance is understood and agreed by all. → link	Follow Sustainable Workshops guidance. → link
	B.10	Help the team resolve questions and reach decisions so as to embody the creative vision in a sustainable show.	Help ensure 50% of each category of materials (set, props, costumes etc) has a previous life. → link	Help ensure 50% of each category of materials (set, props, costumes etc) has a previous life. → link	Ensure 50% of each category of materials (set, props, costumes etc) has a previous life. → link
	B.11		Minimise virgin materials. Source sustainably where possible. Source all plastics sustainably. → link	Co-ordinate team to minimise virgin materials, & source sustainably, including all plastics. → link	Minimise virgin materials. Source sustainably where possible. Source all plastics sustainably. → link
	B.12		Don't insist on products which break the guidance.	Ensure Harmful Materials guidance is understood by all. → link	Avoid Harmful Materials where possible. → link
	B.13		Specify essential props and materials early. Avoid last-minute deliveries.	Co-ordinate across teams to minimise deliveries. Avoid packaging where possible.	Co-ordinate across teams to minimise deliveries. Avoid packaging where possible.
Technical	B.14		Prefer modular systems. Resist unnecessary technical upgrades. Use natural acoustic if possible.		Technical teams follow guidance in chapter 8, reducing energy through switch-off routines etc. → link
Costumes	B.15		Prefer reused. Source responsibly. Specify natural materials.		Follow Costumes guidance to maximise reuse, and source & manage costumes sustainably. → link
Review	B.16	Call a Sustainability Review, and share lessons learnt.	Attend the Sustainability Review, and share lessons learnt.	Help the Sustainability Champion collate data. Attend the Sustainability Review, and share lessons learnt.	Help the Sustainability Champion collate data. Attend the Sustainability Review, and share lessons learnt.
Disposal	B.17		Help plan in advance how 65% of materials can be reused, donated, repurposed, recycled or stored.	Co-ordinate to ensure that 65% of materials are re-used or recycled.	Help ensure that 65% of materials are re-used or recycled. Dispose of technical equipment sustainably.
Outdoors	B.18	Follow Green Book guidance on Outdoor / Site Specific shows. → link	Follow Green Book guidance on Outdoor / Site Specific shows. → link	Follow Green Book guidance on Outdoor / Site Specific shows. → link	Follow Green Book guidance on Outdoor / Site Specific shows. → link
Touring	B.19	Follow Green Book guidance on Touring. Minimise freight. → link	Follow Green Book guidance on Touring. Minimise freight. → link	Follow Green Book guidance on Touring. → link	Follow Green Book guidance on Touring. → link

Who does what? Intermediate

Use the links to go straight to resources in the Toolkit.

		Producers	Directors & Designers	Production Managers	Production Staff, Makers, Suppliers
Invitation	I.1	Reference Green Book Intermediate standard as part of the initial invitation to all team members.			
Production Agreement	I.2	Prepare a Green Production Agreement, which all team members sign. → link	Sign Green Production Agreement.	Sign Green Production Agreement.	Sign Green Production Agreement.
Team	I.3	Appoint the team early and connect them with other teams. Provide sustainability resources. → link	Work collectively. Collaborate with other teams to share resources, materials & equipment.	Share sustainability information. Share resources, materials & equipment with other teams.	Collaborate with other teams to share resources, materials & equipment.
Sustainability Champion	I.4	Appoint a Sustainability Champion → link Support the team in carbon awareness training. → link	Support the Sustainability Champion in helping the team meet targets.	Support the Sustainability Champion in helping the team meet targets.	Support the Sustainability Champion in helping the team meet targets.
Budget & Schedule	I.5	Set budget and schedule to support sustainable working. → link link		Help set budget and schedule. Establish sustainable communications. Co-ordinate sustainability meetings.	
Concept	I.6	Call an early meeting with makers, so the whole team can work on achieving the vision sustainably.	Include sustainability in conceptual thinking. Work on the concept to reduce late change. Do more with less.	Co-ordinate team to collaborate on sustainability in early concept meeting.	Attend early meetings to help achieve the creative vision sustainably.
Development	I.7	Call a 'Green Card' meeting of the whole team to review sustainability and agree actions. → link	Be flexible. Collaborate to realise ideas sustainably. Prefer reused / shared resources. Avoid late change.	Co-ordinate 'Green Card' meeting to review sustainability and agree actions. → link	Attend 'Green Card' meeting to help review sustainability and suggest actions to improve.
Evaluation	I.8	Help the team resolve questions and reach decisions so as to embody the creative vision in a sustainable show.	Contribute to Materials Inventory listing the source of ALL materials, and their planned disposal. → link	Contribute to Materials Inventory listing the source of ALL materials, and their planned disposal. → link	Contribute to Materials Inventory listing the source of ALL materials, and their planned disposal. → link
Making	I.9			Ensure Sustainable Workshops guidance is understood and agreed by all. → link	Follow Sustainable Workshops guidance. → link
	I.10	Help the team resolve questions and reach decisions so as to embody the creative vision in a sustainable show.	Help ensure 75% of each category of materials (set, props, costumes etc) has a previous life. → link	Help ensure 75% of each category of materials (set, props, costumes etc) has a previous life. → link	Ensure 75% of each category of materials (set, props, costumes etc) has a previous life. → link
	I.11		Help source all other materials sustainably, using lowest carbon options. → link	Co-ordinate team to source all other materials sustainably. → link	Source all other materials sustainably, using lowest carbon options. → link
	I.12		Help makers avoid Harmful Materials. Avoid polystyrene, PVC and tropical hardwood. → link	Share Harmful Materials guidance. Help team avoid polystyrene, PVC and tropical hardwood. → link	Avoid Harmful Materials, including polystyrene, PVC and tropical hardwood. → link
	I.13		Specify essential props and materials early. Avoid last-minute deliveries. Prioritise local suppliers.	Track all vehicle mileage. Prioritise local makers and suppliers.	Co-ordinate across teams to minimise deliveries. Avoid packaging. Prioritise local suppliers.
Technical	I.14		Prefer modular systems. Resist unnecessary technical upgrades. Use natural acoustic if possible.	Encourage sustainability collaboration between technical and other team members.	Technical teams follow guidance in chapter 8, reducing energy through switch-off routines etc. → link
Costumes	I.15		Prefer reused. Source responsibly. Specify organic textiles with organic dyes. → link		Maximise reuse. Source & manage responsibly. Specify organic textiles with organic dyes. → link
Review	I.16	Call a Sustainability Review, and share lessons learnt.	Attend the Sustainability Review, and share lessons learnt.	Help the Sustainability Champion collate data. Attend the Sustainability Review, and share lessons learnt.	Help the Sustainability Champion collate data. Attend the Sustainability Review, and share lessons learnt.
Disposal	I.17		Help plan in advance how 80% of materials can be reused, donated, repurposed, recycled or stored.	Co-ordinate to ensure that 80% of materials are re-used or recycled.	Help ensure that 80% of materials are re-used or recycled. Dispose of technical equipment sustainably.
Outdoors	I.18	Follow Green Book guidance on Outdoor / Site Specific shows. → link	Follow Green Book guidance on Outdoor / Site Specific shows. → link	Follow Green Book guidance on Outdoor / Site Specific shows. → link	Follow Green Book guidance on Outdoor / Site Specific shows. → link
Touring	I.19	Follow Green Book guidance on Touring. Minimise freight. Track vehicle mileage. → link	Follow Green Book guidance on Touring. Minimise freight. Track vehicle mileage. → link	Follow Green Book guidance on Touring. Minimise freight. Track vehicle mileage. → link	Follow Green Book guidance on Touring. Minimise freight. Track vehicle mileage. → link

Who does what? Advanced

Use the links to go straight to resources in the Toolkit.

		Producers	Directors & Designers	Production Managers	Production Staff, Makers, Suppliers
Invitation	A.1	Reference Green Book Advanced standard as part of the initial invitation to all team members.			
Production Agreement	A.2	Prepare a Green Production Agreement with a clear divestment and ethical funding statement. → link	Sign Green Production Agreement.	Sign Green Production Agreement.	Sign Green Production Agreement.
Team	A.3	Appoint team early. Write Green Book standard into all tenders and contracts.	Work collectively. Collaborate with other teams to share resources, materials & equipment.	Share sustainability information. Share resources, materials & equipment with other teams.	Collaborate with other teams to share resources, materials & equipment.
Sustainability Champion	A.4	Appoint a Sustainability Champion trained in carbon Calculators. Set a carbon budget. → link	Support the Sustainability Champion. Work with the team to understand and achieve the carbon budget.	Support the Sustainability Champion. Work with the team to understand and achieve the carbon budget.	Support the Sustainability Champion. Work with the team to understand and achieve the carbon budget.
Budget & Schedule	A.5	Set budget and schedule to support sustainable working. → link link		Help set budget and schedule. Establish sustainable communications. Co-ordinate sustainability meetings.	
Concept	A.6	Call an early meeting with makers, so the whole team can work on achieving the vision sustainably.	Include sustainability in conceptual thinking. Work on the concept to reduce late change. Do more with less.	Co-ordinate team to collaborate on sustainability in early concept meeting.	Attend early meetings to help achieve the creative vision sustainably.
Development	A.7	Call a 'Green Card' meeting of the whole team to review sustainability and agree actions. → link	Design using modular components for easier reuse of components. → link	Co-ordinate team to design with modular components for easier reuse. → link	Assist designers in modular design for ease of reuse. → link
Evaluation	A.8	Help the team resolve questions and reach decisions so as to embody the creative vision in a sustainable show.	Supply data for carbon calculation. Use carbon evaluation to inform design decisions. → link	Co-ordinate data for carbon calculation. → link	Supply data for carbon calculation. → link
Making	A.9		Support design for disassembly, for easy recycling. → link	Ensure Sustainable Workshops guidance is understood and agreed by all. → link	Make sets to modular systems for easier reuse. Make for disassembly for easier recycling. → link
	A.10	Help the team resolve questions and reach decisions so as to embody the creative vision in a sustainable show.	Help ensure all materials (set, props, costumes etc) have a previous life, OR ... → link	Help ensure all materials (set, props, costumes etc) have a previous life, OR ... → link	Ensure all materials (set, props, costumes etc) have a previous life, OR ... → link
	A.11		... are accredited carbon zero. → link	... are accredited carbon zero. → link	... are accredited carbon zero. → link
	A.12		Help makers ensure the production uses no toxic or environmentally harmful materials. → link	Co-ordinate the team to ensure the production uses no toxic or environmentally harmful materials. → link	Ensure the production uses no toxic or environmentally harmful materials. → link
	A.13		Help ensure the production uses only electric vehicles, rail, cycles, or public transport.	Co-ordinate the team to ensure the production uses only electric vehicles, rail, cycles, or public transport.	Help ensure the production uses only electric vehicles, rail, cycles, or public transport.
Technical	A.14		Prefer modular systems. Resist unnecessary technical upgrades. Use natural acoustic if possible.	Encourage sustainability collaboration between technical and other team members.	Follow Technical guidance. Make modular rigs for easy disassembly. → link
Costumes	A.15		Prefer reused. Source responsibly. Specify organic textiles with organic dyes. → link		Maximise reuse. Source & manage responsibly. Specify organic textiles with organic dyes. → link
Review	A.16	Call a Sustainability Review, and share lessons learnt. Share data from carbon calculation.	Attend the Sustainability Review, and share lessons learnt.	Help the Sustainability Champion collate data. Attend the Sustainability Review, and share lessons learnt.	Help the Sustainability Champion collate data. Attend the Sustainability Review, and share lessons learnt.
Disposal	A.17		Help plan in advance how 100% of materials can be reused, donated, repurposed, recycled or stored.	Co-ordinate to ensure that 100% of materials are re-used or recycled.	Help ensure that 100% of materials are re-used or recycled. Dispose of technical equipment sustainably.
Outdoors	A.18	Follow Green Book guidance on Outdoor / Site Specific shows. → link	Follow guidance on Outdoor / Site Specific shows. → link	Commission an Ecological Impact Assessment for outdoor locations. → link	Follow Green Book guidance on Outdoor / Site Specific shows. → link
Touring	A.19	Follow Green Book guidance on Touring. Minimise freight. Track vehicle mileage. → link	Follow Green Book guidance on Touring. Minimise freight. Track vehicle mileage. → link	Follow Green Book guidance on Touring. Minimise freight. Track vehicle mileage. → link	Follow Green Book guidance on Touring. Minimise freight. Track vehicle mileage. → link

A Toolkit is available *here*. In it, you'll find resources compiled by theatre-makers to help you work sustainably.

The most important tool is a *Materials Inventory* - a spreadsheet that keeps track of everything in the production: where it comes from, and what happens to it afterwards.

Acknowledgements and Thanks

How the Green Book has been prepared

Theatre has been working to reduce its carbon footprint and embed sustainable practice into its productions for many years. Many of the people who have pioneered such efforts have been involved in the development of this document, or their work has been foundational to it.

The Green Book has been prepared through an extensive period of interviews, focus groups and consultation with dozens of theatre-makers, as well as a survey of nearly 200 practitioners. This process has been coupled with an extensive literature review of guidance on green theatre – including work by Broadway Green Alliance, Creative Carbon Scotland, Culture Declares Emergency, Freelancers Make Theatre Work, ISAN, Julie’s Bicycle, SiPA, White Light and more – to develop a database of recommendations for greener theatre processes. These recommendations have then been organised by their relative impact on reducing carbon emissions, the ease with which theatre-makers believe they can be implemented (at the time of writing) and the stakeholders and groups whose involvement would be needed to achieve them. The Green Book brings this information together in one place, and sets out simple standards and systems to make shows more sustainably.

A Bibliography is included on the next page.

Future versions of the Green Book

The Green Book draws together the understanding of best practice sustainable theatre-making at the time of writing. However, ‘best practice’ will evolve and develop as understanding of sustainable theatre-making grows, research sheds light on new opportunities and challenges, more options for low carbon and reused materials become available, and the wider political and infrastructure landscape unfolds.

Recommended standards and targets will be refined as part of this process, as will many of the principles and goals.

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We apologise if any names have been missed. Very many others have helped by answering questionnaires, and joining sustainability groups convened by the many theatre organisations, companies and freelance collectives who are working for sustainability, and whose thinking has contributed to this guide. We know many more would have liked to help this initiative if time had allowed, and look forward to their thoughts and feedback.

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<https://www.burohappold.com/about/>

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