



Sustainable
Filming

SUSTAINABLE FILMING GUIDE

Green Screen

This handbook was developed within the framework of Green Screen, the European project geared at reducing the carbon footprint of film and television productions.

It is financed by means of ERDF funds, and its main mission is to raise the awareness of the audio-visual sector regarding the possibility of carrying out its activity by means of actions that are environmentally sustainable, promoting its role as an agent of change towards a greener model of production.



Green Screen
Interreg Europe



The project is a partnership between eight key European film-making regions:



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HOW TO USE THE GUIDE

This guide was designed as a roadmap to help you make eco-friendly choices throughout your audiovisual project.

Calculating your carbon footprint with the Carbon Calculator is an excellent way to determine your priorities. This will give you a snapshot of your carbon impact ahead of your project, help you choose the actions to take and follow-up on their progress.

After identifying your main CO2 emissions sources, please refer to the checklist of suggested actions. Each action deals with a specific part of the production process and some of them will be more or less relevant depending on the type of your current production.

The actions to be taken belong to a general category, and they correspond to the following icons:

-  Waste management
-  Responsible purchasing
-  Energy saving
-  Transportation
-  Team awareness

Make note of the “estimated” actions (the ones you think you will be able to take) before and during shooting and of the “planned” actions (the ones you think you will be able to take) before shooting; and during/after shooting, make note of the actions “taken”, the ones that you were finally able to carry out.

Your feedback is important for us; it is a way of sharing experiences and knowledge with other industry agents. Don't hesitate to contact us!

This handbook is based on the original Ecoprod © handbook.
<http://www.ecoprod.com/fr/>

COMMIT TO THE ECOPROD APPROACH AS EARLY AS POSSIBLE WITH YOUR BROADCASTER, PRODUCTION CREW, SERVICE PROVIDERS, PUBLIC POLICY-MAKERS AND LOCAL INSTITUTIONS.

USE THE APPROACH AS A CHALLENGE FOR THE CREW AND TO DRIVE EXTERNAL COMMUNICATION.

BEING GREEN IS NOT ONLY A RESPONSABILITY BUT AN ADDED VALUE FOR YOUR PRODUCTION!

NAME A GREEN RUNNER TO COORDINATE THE ACTIONS, TO FILL IN THE HANDBOOK AND TO LEARN IN DEPTH ABOUT THE SUBJECT. HE/SHE WILL BE IN CHARGE OF MANAGING THE PROCESS AND ENCOURAGING AND MOTIVATING THE CREW.

**REMEMBER THE 3RS:
REDUCE, REUSE, RECYCLE**

**SHARE YOUR EXPERIENCE:
ONCE COMPLETED, THIS EXPERIENCE IS A GOLD MINE OF INFORMATION FOR THE ECO-PRODUCERS! SHARE YOURS IN DIGITAL FORMAT WITH US OR IN YOUR WEB.**

THERE ARE MORE TOOLS AVAILABLE TO TAKE SUSTAINABLE SHOOTINGS TO THE NEXT LEVEL; HAVE A LOOK AT OUR WEBSITE.

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CARBON FOOTPRINT CALCULATOR

HOW TO CALCULATE YOUR CARBON FOOTPRINT

WHAT IS IT?

It is a **free, simple and accessible tool** to calculate the carbon footprint of an audio-visual production on the basis of the greenhouse gas emissions it generates.

You can calculate your **minimum footprint** or your **complete footprint**: the former as a first estimate and the latter as the complete calculation of your impact on the environment.

In order to calculate the minimum footprint, you have to use your budget, drafted in accordance with the format of the “Official form for a budget of the cost of a film [Modelo oficial de presupuesto de coste de película]” <https://bit.ly/2C9ePL4> of the Spanish Ministry of Culture and Sports. In barely 10 seconds after attaching the file, you have an approximate estimate of your minimum carbon footprint.

You can also calculate the complete footprint in case you do not have a budget drafted in accordance with said form. This is the most complete way of measuring the impact of your production, with graphs showing the sections of your project that are the most polluting, advice depending on the results and the real information regarding your project’s carbon footprint.

You can find this tool and user manual at www.promalaga.es

HOW TO CALCULATE YOUR PRODUCTION’S FINAL FOOTPRINT?

Start calculating before you begin shooting, adding the information about your production before incorporating green measures.

This first calculation will give you information regarding your impact and the main sources of pollution (transport, catering, etc.). This **allows you to identify the sections that generate the most greenhouse gases (GHG)** in your production and to create a plan of relevant and useful actions that are focused on said sections.

Perform a second calculation at the end of shooting, noting the measures that you have finally taken. **This will show you the effectiveness of the action taken** and enable you to value the positive effect you have generated.

CHECK-LIST

BY DEPARTMENT

Fill in this box with the features of your production

Next, answer the sections of the checklist, first of all with the “estimated” actions and then with the “real” actions. When you finish the production, recalculate your carbon footprint and come back here to record your final footprint.

If you adopted green measures, you are sure to have reduced your carbon footprint!

Production project name:

Green runner:

Type of production

- Series
- Documentary
- Short film
- Feature film
- Advert
- Animated film

Programme duration:

Main filming location:

Initial estimated carbon footprint:

FINAL CARBON FOOTPRINT:

PRE-PRODUCTION

IN THE PRODUCTION OFFICE

ESTIMATED

ACTUAL

ADVICE

 Display posters and labels in offices and on set to raise awareness about turning off the lights and equipment as well as recycling

 Use digital documents whenever possible, save paper when distributing scripts and opt for videoconferences instead of travel

Nowadays there are plenty of online tools to distribute scripts through apps. You can use tablets or cell phones instead of paper. If you decide to print the script, use recycled paper, eco-friendly inks and reuse the printer cartridges

 Choose to buy certified paper. For more information click here <https://es.fsc.org/es-es>

 When possible, always print in black and white, double-sided and with the eco-setting on

 Choose energy efficient equipment

 Reduce air conditioning and heating and opt for a green energy supplier where possible

 Choose office supply companies that offer ecological products

 Limit the use of cleaning products and opt for certified products, such as those with the EU Ecolabel certification <http://ec.europa.eu/ecat/>

 Organise recycling or disposal of electronic equipment as well as printer cartridges, batteries, paper and packaging

 Place rubbish bins to recycle and separate waste, including toxic waste

At <https://bitly/1cCXoTa> you can find useful information, posters, etc., to distribute amongst the crew or put up on the premises

PRODUCTION

DURING FILM

ESTIMATED

ACTUAL

ADVICE

 Appoint a green runner to plan the initiative for the action plan

 Implement signage to raise awareness amongst the crew regarding recycling

At <https://bitly/1cCXoTa> you can find a concise guide on how to recycle, with ideas you can use for the signposts

 Involve the production team: add tips on working documents, Sustainable filming seal logo on the film website, etc.

At <https://bitly/2X16Zuf> you can find a TED video to raise awareness amongst the crew. In order to get everyone involved, you can organise a get together to watch it and then briefly discuss the issue. You can also send the video by email

 Estimate your carbon emissions with the carbon footprint calculator:

- Pre-filming carbon footprint
- Post-filming carbon footprint

 Create an eco-friendly production charter with the main initiatives, distribute it to the crew and leave it on display in strategic locations

 Share this information with suppliers and providers and if possible, choose service providers who have an environmental policy

 The film's story is also an important element for transmitting values. Whenever you can, show behaviour that is respectful with the environment

To complete the checklist, before you start shooting mark under “planned” the actions you think you will be able to carry out. Once you finish/during production, note under “taken” the green measures that you finally adopted.

TRANSPORTATION

LOGISTICS

ESTIMATED

ACTUAL

ADVICE

 Create a travel plan ahead of filming: identify public transport opportunities/possibilities and opt for videoconferences, carpooling and electric vehicles

 For non-local crew members, choose accommodation as close to the filming location as possible

 Provide crew with information about the nearest public transport and bike share stops to the filming location

 Organise carpooling between the crew members. Choose energy efficiency vehicles

 Talk with freight and car hire companies about the energy efficiency of their lorry and vehicle fleet and rent low-emissions or hybrid/electric vehicles. Opt for large-capacity vehicles (minibus, people carriers, etc.) and ensure vehicles are properly maintained.

 Optimise trips and track driven kilometres and useful fuel: apply eco-driving principles

 Optimise equipment loading and delivery

 Organise security during the night for equipment trucks to remain parked at the filming location and thus to remain parked at the filming location and thus avoid useless travel back and forth

 Opt for environmentally friendly transport options and select transport companies and select transport companies engaged in sustainable development (bicycles, skating, public transport for short distances); take trains rather than flights; purchase carbon offsets for long distances

CATERING

CATERING

ESTIMATED

ACTUAL

ADVICE

 Choose a supplier committed to sustainable development; otherwise, add this criterion on your invitations to tender (procurement, waste management, packaging reduction)

 Consumable purchases: carefully evaluate your needs to prevent waste

 To curb food waste, share leftover food with crew members or donate to a local association

 Do not use disposable dishes and cutlery; use large, reusable containers that can be customised (e. g. water bottles) to limit packaging; opt for reusable bags

 Ask your catering provider for local and seasonal fruits and vegetables

 In case you are organizing the catering, opt for organic and/or fair trade products when possible.

 Set up sorting bins and post/display waste recycling signs

 Try organising a "day without meat". One a week, propose this challenge as an awareness-raising act for the whole crew, showing them the large number of possible alternatives. In the long run, try to establish a menu with less meat, or a vegetarian menu

STUDIO & SET

STUDIO AND SET	ESTIMATED	ACTUAL	ADVICE
 Eco-designed sets: from design and setup, plan the dismantling, sorting and recycling of the set			
 Source local labour and materials when possible			
 Use recycled and/or certified materials, avoid toxic product and opt for plant-based materials			
 Ask the studio service provider to supply waste sorting bins (packaging), containers for paint water disposal, a skip for wood, etc.			
 Ensure that leftover materials are collected and recycled			
 Inform the team about the sorting policy: post signs on sorting bins			
 Select what can be reused for another production project or sold to crews, associations or local organisations			Give preference to sets that are easy to dismount so that they can be reused in other projects or easily sold
 Rent or reuse materials when possible instead of buying and building from scratch			
 Use sustainably harvested wood (FSC) with little or no formaldehyde (a carcinogenic substance)			

LIGHTING & ENERGY

LIGHTING AND ENERGY	ESTIMATED	ACTUAL	ADVICE
 Ask the studio about its environmental practices. Raising awareness happens through the customer/supplier relationship			Electric generators are a reality. Why don't you try them? They are already being used in some European cities: see https://bit.ly/2YmoqK
 Identify ways to use as little artificial light as possible for outdoor filming (opt for reflectors and natural light)			
 Plan ahead to shoot during the day and choose locations where you can connect to public utilities			
 Use LEDs and other energy efficient lamps whenever possible			
 Replace tungsten and incandescent lightbulbs when filming (opt for fluorescent, HID lamps, etc.)			
 Have a dedicated crew member who ensures lamps and equipment are turned off when not in use			
 Recycle used lightbulbs at designated disposal sites			

EQUIPMENT

EQUIPMENT	ESTIMATED	ACTUAL	ADVICE
 Rent high-efficiency digital equipment (cameras, hard drives, sound equipment, etc.) from local providers whenever possible			
 Raise awareness among crew on how to save energy (lights, equipment)			
 Choose rechargeable batteries and recycle single-use batteries			
 Use generators only when absolutely necessary; calculate the exact power required and opt for energy efficient generators			
 Limit waste and overconsumption of consumables (gaffer tape, grips, straps, ropes, etc.) and reuse/recycle when possible			
 For special effects, use the least harmful products possible and take the necessary precautions to limit damage to the environment and human health			
 Donate obsolete equipment or take it to an appropriate disposal organisation			

COSTUMES & MAKE-UP

COSTUMES AND MAKE-UP	ESTIMATED	ACTUAL	ADVICE
 Choose certified products			
 Limit the use of consumable (wipes, sprays, individual packets, etc.); opt for recycled cotton, buy in bulk and recycle packaging			
 Reuse, borrow, rent and buy second-hand clothing			
 Establish sustainable development purchasing and manufacturing criteria with regards to fabric components, origin and sourcing			
 Opt for energy-efficient and eco-friendly care practices (energy-efficient washing machine, certified detergent, low temperatures)			
 When the filming wraps up, keep clothing and accessories for another project, sell them to the crew, second-hand stores or costume rental companies, or donate to charity organisations; reuse or recycle accessories such as covers, belts and bags			

POST-PRODUCTION & NON-FILMING ACTIVITIES

POST-PRODUCTION	ESTIMATED	ACTUAL	ADVICE
 Ask the post-production studio about its environmental and energy saving approach (production room, equipment, practices, equipment disposal, green energy)			
 Opt for energy efficient and certified equipment			
 Choose virtual broadcasting techniques and digital archiving methods to limit energy consumption			
 Isolate machines that generate heat in air conditioned rooms			
 Always turnoff electric equipment when not in use			
 Organise recycling for waste electrical and electronic equipment			
 Compensate your carbon footprint by planting the equivalent in trees at the shooting location or in areas of the province that need them			

THANK YOU FOR COMPLETING THE CHECKLIST!

Now, once you have finished the production, recalculate your carbon footprint with the final information and go back to page 5 to make note of it.

Were you able to reduce your footprint?

SUCCESS STORIES

SUCCEEDED!

Feel inspired by professionals of the audiovisual sector who have incorporated green measures in their projects.

It is possible to transform your organisation, and although at the beginning it may require a little extra effort, in the long term it will turn into an added value greatly appreciated by both your clients and your industry colleagues, and by society in general as well.

Go ahead and try implementing a few measures; continue with future projects and develop your own long term green strategy so that it eventually becomes part of your business identity.

“We need to embrace clean technologies and efficient solutions, because they are much more than ‘ecological’, they are ‘logical’. They create jobs and generate profit, while also reducing CO2 emissions and preserving natural resources. **EVEN IF CLIMATE CHANGE DIDN’T EXIST, THEY WOULD MAKE SENSE.** Clean growth is much better than the dirty status quo we have today”

BERTRAND PICCARD

“We do not inherit the earth from our ancestors;
WE BORROW IT from our children”

NATIVE AMERICAN PROVERB



Fresco Film is a production service company in Malaga that works with international productions in Spain, the Canary Islands and Portugal.

It has worked with Game of Thrones, Snatch and Terminator 6, amongst other projects.

Environmental sustainability is another of the company's traits, having created a specific department in 2018 for "Marketing and Environmental Sustainability".

One of its key measures was implementation of the Fresquita, a reusable bottle placed at the disposal of all members of the crew as part of the project "water in plastic = 0".

Another example of the company's commitment is that they planted 200 trees in the area of Barruecos (Cáceres) in 2016 to compensate the carbon footprint produced during the shooting of Game of Thrones.



SchoolTraining is a film and sound school in Malaga that offers training in film and TV, sound and lighting, and musical production and DJ.

They are openly committed to the green cause, and are pioneers in the field of sustainability for having incorporated to their organic structure the specific job of Director of Production and Environmental Sustainability.

The training of the persons who will become the sector's future producers, directors and professionals is essential to ensure the progress of the industry towards green values.

The inclusion of sustainable values during the training phase is the basis for ensuring a progressively more eco-friendly sector. To start from the beginning to make sure that the sector's professionals will lead the transformation of the industry.

Take a look at the symposiums that have been organised: <https://www.youtube.com/watch?v=CfqSySUSIEk>



“EL SECRETO DE IBOSIM” is the first eco-film production in the world.

Amongst other measures, electric vehicles are used for transport, as well as ships instead of airplanes given the latter's lesser impact on the environment, and the script itself is used to transmit ecological values.

As the director Miguel Ángel Tobías said:

“Ibiza is an island that is deeply aware of sustainable tourism and I wanted to capture this essence throughout the film, showing the protection of the environment, the harmonious coexistence of the residents' high quality of life with the presence of tourists and the optimal use of environmental resources, respecting its authenticity.”

The process of creation was respectful with the environment, and the film also transmits these values through the story it tells.



This entails a double task of awareness-raising: behind the cameras, with all the industry professionals who participate in the shooting, clearly showing that doing things this way is possible; and in front of the cameras, transmitting these same values to the public at large.

Miguel Ángel Tobías is a producer and director of films, documentaries and TV programmes who is committed to transmitting values and public awareness, highlighting on the struggle for human rights in his projects.

El Secreto de IboSim is an example of how it is possible to make a green film that limits the audiovisual industry's carbon footprint.

“THE AUDIOVISUAL SECTOR IS THE MOST POWERFUL ENGINE TO CHANGE THE WORLD”

Miguel Ángel Tobías

<http://elsecretodeibosim.com/>

NOTES

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**FESTIVAL DE
MÁLAGA**



