

GREEN MOTION

Guidelines Ecological Set

The various trades involved in a film come together on the set. In order to maintain an overview of the green measures during operation, the presence of Green Consultants is indispensable. They ensure that the agreed measures are implemented, can react professionally to new challenges on the set, and are the contact persons for questions from the team. But at the same time, each Green Consultant is only as green as the whole team. When it comes to acting responsibly and prudently, everyone is called upon.

The following guidelines therefore provide concrete advice for sustainable work on the set.

LOGISTICS AT AND TO THE FILMING LOCATION

AVOID UNNECESSARY TRIPS AND JOURNEYS

Precise planning of locations, distances and relocations helps to improve the carbon footprint. Efficient logistics of the location on site ensure the smooth running of a production. Every aspect of logistics should be carefully considered and its potential synergies exploited.

Tip

Tools such as [timeanddate.de](https://www.timeanddate.de) and [routerank.com](https://www.routerank.com) can help with the planning.

USE 360 DEGREE LOCATION SHOTS

In the pre-production phase, 360-degree shots can reproduce the room and lighting conditions 1:1 and save non-essential trips to the location.

LOOK FOR ALTERNATIVE ACCOMMODATIONS POSSIBILITIES

A good alternative to trailers can be locations nearby, nightliners or buses. Also, caravans can be used multiple times by using mobile partitions.

LIGHT AND ENERGY

USE LED LIGHTING ON SET TO THE EXTENT POSSIBLE

The energy savings compared to tungsten (incandescent) lighting are gigantic, and even compared to HMI, a number of LED lights offer significant advantages.

LED light fixtures have a service life many times longer than conventional light sources.

Further advantages of LEDs:

- no change in color temperature when dimming
- color foils are often superfluous, since the color can be changed continuously with Bi-Color or Color LED spotlights
- there is little heat generation on the set
- often easier and more flexible to use

Meanwhile, there are also large LED units:

- Luxed 9 and 12 as an alternative Dino-Lights, i.e. for MBF und tone type
- Mole Richardson Tener or 20K LED, see for example mole.com/led
- for example, Muses of Light by Desisti as an alternative for large HMI or artificial lighting units

USE (REAL) DAYLIGHT AND REFLECTORS

If possible, use reflectors instead of spotlights. In conjunction with sun position apps, this can save a lot of electricity. Cardboard styros are an environmentally friendly alternative to classic bounce-boards made of Styrofoam. Heliostats also automatically follow the path of the sun and always direct the light in the same direction. In addition to using daylight, it also makes sense from an energy perspective to select locations according to available natural light.

Reflector systems such as CRLS, KFLECT or Dedolight Lightstream offer many new creative possibilities in addition to the massive electricity and spotlight saving effect. A win-win for environment, budget and creativity!

USE GREEN ELECTRICITY WITH A QUALITY SEAL

Not all green electricity is the same. To achieve a sustainable eco-balance, 100% green electricity must be used for the Green Motion label in all production premises used for production and in all studios used. For temporarily used premises, this should also be the case to the extent possible. Increased demand determines supply and therefore change. These labels certify green electricity:

- Grüner Strom Label
- ok-power
- TÜV Nord
- TÜV Süd

An overview of the different providers is provided by the following websites:

- oekostrom-anbieter.info
- oekostrom-vergleich.com
- stromauskunft.de
- stromspiegel.de

ASK FOR ALTERNATIVES TO DIESEL GENERATORS

With the Green Motion label, diesel generators may only be used in exceptional cases. Instead, electricity should be obtained via a grid connection wherever possible. Alternatively, gas generators, hybrid generators, mobile electricity storage systems with green electricity and solar generators are to be preferred over diesel generators. There are already very efficient hybrid systems on the market. For example, intermediate hybrid storage systems can cut the time a diesel generator is running in half, significantly reducing CO₂, soot, nitrogen oxides and costs. Small gas generators are also much more environmentally friendly. They are quieter and produce almost no particulate matter or soot. Ask your technology rental company about the latest products and test them. The demand for hybrid gas and solar generators can be increased.

As an example, Polyma hybrid batteries can reduce costs and consumption. A good rental company is e.g. Mobilespace in Hamburg.

Other providers include:

- alba.info/standorte
- mobilespace.de
- ademax-strom.de
- arvey.eu/arvey-solargenerator-alternativstrom

TRY NEW TECHNOLOGIES

Less is more: Modern technical equipment is usually lighter. The use of light-sensitive cameras is very sensible and desirable from an ecological point of view. Tests before shooting begins can help to try out new technologies on set and reduce general reservations.

TRANSPORTATION AND MOBILITY

The areas of transportation and mobility are also big CO₂ levers on the set. Between ten and 50 percent of total CO₂ consumption is generated here. But travel and transportation can hardly be prevented during filming. This makes it all the more important to use environmentally friendly technologies in this area. The greatest pollution is caused by CO₂, greenhouse gases, soot, nitrogen oxides and noise. Airplanes are the most environmentally damaging means of transport, followed by cars and trucks.

SAVE CO2 WITH ECOLOGICALLY-FRIENDLY PRODUCTION VEHICLES

For the Green Motion label, at least one third of the passenger car fleet must have a CO₂-reduced drive type. Rented trucks should be 20% CO₂-reduced. Diesel vehicles must meet the EURO6 diesel standard. Ask vehicle rental companies what alternatives are available. Again, demand increases supply.

CNG vehicles are the best alternative in the film sector for medium and longer distances. Compressed Natural Gas (CNG) is the international term for natural gas fuel, which is now also available as bio-gas and e-gas.

Electric vehicles only make sense if they are powered by green electricity and are used in the city and for shorter distances.

Compared with a gasoline-powered vehicle, a CNG vehicle emits up to 25 percent less CO₂ – and even up to 100 percent less if bio-CNG (bio-gas) is used.

Sources: ec.europa.eu, ecotransit.org, autoumweltliste.ch, greengear.de

FOREGO OR COMPENSATE FOR AIR TRAVEL

Air travel is known to be one of the biggest climate killers. A trip by air generates 150 percent more CO₂ per person than a trip by car and 950 percent more CO₂ than using the train. You should always consider the actual time saved, draw up a cost comparison and include all factors such as travel, check-in, waiting time and baggage collection. For the Green Motion label, air travel may only be used for 5 hours or more of travel time.

Tip: Offsetting air travel is simple and straightforward. See also umweltbundesamt.de and atmosfair.de. For the Green Film Pass, a compensation payment must be made that supports regional projects such as Climate Partner, Moor Futures or Moorland.

EQUIPMENT

The greatest environmental impact is on construction and consumable materials and environmentally friendly disposal. Material costs and the time pressure for completion play an important role. These aspects should therefore be considered right from the start.

Tip: Tricks like depth of field, backdrops and 3D image elements like mattes, scaffolding and CGI can save a lot of effort and CO₂ on set.

CHECK MATERIALS USED FOR TOXIC SUBSTANCES

These include paints, varnishes, adhesives, sealants and construction foam. It is also important to avoid the use of polystyrene and epoxy resin.

BORROWING FURNITURE AND REQUISITES IS ALWAYS BEST

Providers such as “Hanseatische Materialverwaltung” bring the furniture back into the use cycle so that it is subsequently available for further productions.

ONLY USE WOOD WITH WITH AN FSC-CERTIFICATION

When building sets, there are often environmentally friendly alternatives, e.g. plant fiber chipboard. When using wood, look for the FSC seal or use alternatives such as the honeycomb cardboard re-board or from SWAP.

Instead of PVC boards, e.g. Katz Display Boards are suitable, a possible alternative for Styrofoam is Mycomaterial (ecovatedesign.com).

Further information is available here:

- schadstoffberatung.de
- umweltanalytik.com
- nachhaltiges-bauen.de

CATERING

In the area of catering, the ecological claim of a production becomes visible. And the areas of food, drinks, crockery, vehicles, cooking, cleaning and disposal are also very important for the ecological balance.

Tip: The be-all and end-all is an intensive exchange with the catering before shooting begins:

Get quotes and test meals delivered and motivate the chefs to come up with new recipes and alternatives to meat consumption.

BUY ORGANIC FOOD OR FOOD OF REGIONAL ORIGIN

For this purpose, it is important to make a precise inquiry about eating habits before filming begins. For the Green Motion label, at least 50 percent of the catering must be regional and 33% organic.

AVOID WASTE

To reduce the amount of waste on set, reusable cups without plastic are indispensable. In exceptional cases, disposable cups made of FSC cardboard with PLA coating or PLA cups from certified sources can also be used. These consist of 100% natural raw materials. Consistent waste separation is also essential, as well as the disposal of food leftovers as organic waste or with an appropriate disposal company such as ReFood.

Further information:

- refood.de
- alba.info/standorte
- Ökomüllbeutel; z.B. über memo.de
- stadtreinigung.hamburg.de

Water dispensers with tap water connection (best option!) or larger containers can be rented for water drinking consumption. Such systems also work without electricity. In cases of electric cooling, it is best to use a fixed connection with green electricity.

Appropriate labeling of garbage bins helps with waste separation. Waste disposal routes at the various locations should be checked and organized.

Tip:

Also think about recycling cigarette butts, e.g. via [terracycle.com](https://www.terracycle.com) or [tobacycle.de](https://www.tobacycle.de).

COSTUME DESIGN

The textile industry generates 1.7 billion metric tons of CO₂ each year and is responsible for five percent of global carbon dioxide emissions alone. They arise from the extraction of plastic fibers, further processing and long transport routes.

That's why sustainability, recycling technologies and resource conservation should be the main criteria in costume design.

TRY TO BUY FEWER NEW THINGS

...and increase the lending rate for requisites as well as for local suppliers of green fashion products. Engage in dialogue with actors and talk about the environmental challenges of costume design. Many open-minded actors show strong commitment to ecological fashion designers.

Cleaning and dyeing should also be done according to ecological standards.

Helpful tips and more information:

- [nachhaltige-mode.de](https://www.nachhaltige-mode.de)
- [utoxia.de](https://www.utoxia.de)
- [fairfashionguide.de](https://www.fairfashionguide.de)
- [avocadostore.de](https://www.avocadostore.de)
- [kleiderkreisel.de](https://www.kleiderkreisel.de)
- [fundus51.de](https://www.fundus51.de)
- [zeitkostuem.de](https://www.zeitkostuem.de)
- [kleiderei.de](https://www.kleiderei.de)

MAKE-UP DESIGN

Make-up is also one of the sensitive areas within a production, so tests with the actors are recommended before introducing organic or ecological products. This is the only way to build up trust and routine in order to obtain satisfactory results during filming.

AVOID DISPOSABLE MATERIALS FOR MAKE-UP AND SKINCARE PRODUCTS

These include disposable wipes, pads, sprays or single doses. Such products can be replaced with environmentally friendly materials to reduce the amount of waste. Packaging waste can also be reduced by buying in larger quantities, using recyclable materials and looking for plastic-free products.

Further information available here:

- drhauschka.de
- boerlind.com
- undgretel.com