

# Ecological Standards for German Cinema, TV, and Online/VoD Productions

## **Publisher**

"Green Shooting" Workgroup

Federal Government Commissioner for Culture and the Media

German Federal Film Board

Film Funding Institutions of the Federal States



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# Preamble

The public and private media industry reaches an audience of millions with their audiovisual productions. With this scope comes social responsibility for a sustainable production of these contents. Audiovisual film and TV productions that are eco-friendly and protect resources are an essential contribution towards reducing CO<sub>2</sub> consumption and at the same time a process of technological transformation comprising both technical and artistic changes.

Therefore, the Federal Government Commissioner for Culture and the Media (BKM), the German Federal Film Board (FFA), the film funding institutions of the federal states, and the "Green Shooting" workgroup have agreed to the present, nationwide uniform ecological standards for audiovisual productions. As part of a work process, the workgroup and film funding institutions have jointly established a set of requirements for ecological standards. It is based on the ecological minimum standards published by the "Green Shooting" workgroup on January 1st, 2022, and experiences gained in the so-called "Reallabor", carried out on behalf of the BKM and the federal film funding institutions.

The ecological standards are a learning system. They are evaluated on an ongoing basis and adapted according to the availability on the market, the current state of science and technology as well as climate and environmentally relevant developments. The workgroup and the funding institutions all agreed on aiming toward a steadily growing level of ambition. A sustainability board with equal representation of members from the "Green Shooting" workgroup and national and federal funding institutions is to be implemented. The industry is to be involved through the sustainability board.

The ecological standards are currently phrased as means oriented. To increase efficiency, they are to be transferred toward target value specifications in perspective.

Resilience, credibility, and transparency are the main pillars of ecological standards. Compliance is ensured through standardized verification.

The ecological standards are met by many production companies, broadcasters, and VoD services and are a basis for funding requirements in the framework of state and federal funding. Additionally, there is an option of receiving the green motion label upon fulfillment of the ecological standards.



# Application of Ecological Standards

The ecological standards apply to all stages of production from pre- to postproduction and for the parts realized in Germany, generally irrespective of whether the production company is based in Germany or abroad. Production conditions allowing compliance with the standards for the production parts carried out abroad and meeting the standards are welcome.

The ecological standards are divided into five fields of action. Most of the fields of action comprise requirements that both should and must be met. Those that must be met are mandatory. A minimum number of mandatory requirements must be met for the fulfillment of the ecological standards.

In justified exceptional cases where the mandatory requirements cannot be met, a maximum of five deviations from the 22 mandatory requirements are admissible (so-called 5-of-22 regulation). This regulation is intended to be evaluated after 2024 and the number of possible deviations may be reduced to three if necessary. Deviations from the respective mandatory requirement should be reduced to a minimum.

In case a mandatory requirement is justifiably not relevant (for example the production does not include external accommodation (cf. requirement IV.1), the mandatory requirement is considered to be fulfilled. Therefore the 5-of-22 regulation must not be applied.

Unlike the mandatory requirements, the target requirements should not be considered a strict regulation but an appeal for an environmentally sustainable mode of production. Implementing the target requirements, just like implementing the mandatory requirements, produces an effective reduction of greenhouse gas emissions and is therefore desirable. Prospectively, target requirements are to become mandatory in the framework of the ecological standards' evaluation and further development.

For details regarding an issuing of the green motion label please refer to the separate leaflet.



# Ecological Standards in Detail

## I. General Requirements

### I.1 Responsibility Statement of the Management and Line Producer(s)

● **Mandatory requirement** (non-discardable as part of the 5-of-22 regulation)  
Prior to the production's start, management and line production must jointly issue the following statement to the film funding responsible or, if no film funding is involved, to the broadcaster/VoD service responsible or, if no broadcaster/VoD service is involved, the inspection body:

"It is asserted that the current regulations regarding the 'ecological standards for German theatrical, TV and online/VoD productions' have been acknowledged in their entirety and shall be observed completely and appropriately during the production of the above-mentioned film/series/AV production."

A template of this management and line producer(s) responsibility statement can be found on the website. The statement may also be issued in the production contract.

### I.2 Green Consultant

● **Mandatory requirement**

Employing an external Green Consultant or a member of staff qualifying as a Green Consultant is mandatory. Both must provide a sound, in any case, multi-day training certificate as green consultants with up-to-date knowledge. They accompany the respective productions from the planning to the approval stage. Their consultation refers to compliance with the ecological standards and an altogether preferably resource-saving, CO<sub>2</sub>-reduced mode of production. The entire crew is to be integrated for this purpose.

The Green Consultant's field of work might entail the following areas:

- energy use
- personnel and material transport
- accommodation & catering
- employment and use of material.





# Ecological Standards in Detail

## 1.3 Preparatory Carbon Footprinting

One of the ecological standards' essential objectives is the reduction of CO<sub>2</sub> emissions in the various stages of film production. Therefore, it is crucial to already get a systematic record of the CO<sub>2</sub> emissions in the planning stage of production.

- **Mandatory requirement** (non-discardable as part of the 5-of-22 regulation)  
Before the production's commissioning, respectively prior to the application to the film funding, a recording of the planned CO<sub>2</sub> emissions must be carried out with the MFG CO<sub>2</sub> calculator. This recording is made with a simplified calculation method – available in the MFG CO<sub>2</sub> calculator. Alternatively, the recording can be made via calculation programs, for example, Sesam, provided that these are able to produce a verifiably comparable calculation in the result. This recording enables the production to set standards for an altogether ecologically sustainable process.

## 1.4 Subsequent Carbon Footprinting

- **Mandatory requirement** (non-discardable as part of the 5-of-22 regulation)  
After the production is completed, a detailed recording of the data must be carried out with the MFG CO<sub>2</sub> calculator. Alternatively, the recording can be made via calculation programs, for example, Sesam – on the condition that these are able to produce a verifiably comparable calculation in the result and, for funded film productions, meet the current requirements of the film funding legislation.

## 1.5 Final Report

- **Mandatory requirement** (non-discardable as part of the 5-of-22 regulation)  
After the production is completed, the production company must submit a final report based on a standardized template (or two reports if more than 25 % of the overall production costs are incurred abroad and the company has also applied for the green motion label). This report accounts for the fulfillment of the mandatory requirements and the production's actual CO<sub>2</sub> emissions, calculated after the production's completion, are identified (see also "1.4 Subsequent Carbon Footprinting"). The forms are available on the website.



# Ecological Standards in Detail

## II. Energy Use

The switch to certified green energy is one of the fastest and easiest methods to slash CO<sub>2</sub> emissions. Diesel generators on the other hand are frequently responsible for high emissions of greenhouse gas and particulate matter.

This is why electricity should be obtained from the grid and not generators whenever possible. If the mobile power supply is indispensable, the perspective aim is to particularly use hybrid power supply (from CO<sub>2</sub> neutral energy sources), mobile power storage systems (charged with green energy), or photovoltaic systems. Hybrid (fossil-fuelled) systems and (fossil-fuelled) gas generators should rather be considered a transitional solution for the replacement of diesel generators. Lighting in the studio and on location frequently causes high power consumption and accordingly high emissions of greenhouse gas. Based on systematically optimized planning for the energy use of lighting, a high proportion of the previous energy consumption can be saved through the implementation of energy-saving lighting technologies.

## II.1 Green Energy at All Production Sites

### ● **Mandatory requirement**

Certified green energy must be used at all company sites of the production (including the postproduction) and all studios which are used for the production.

## II.2 Green Energy for Temporarily Used Sites

### ○ **Target requirement**

Certified green energy should be used for temporarily used sites (production offices or similarly used sites) wherever possible.





# Ecological Standards in Detail

## 11.3 Green Energy at "On Location" Productions

### ○ Target requirement

Certified green energy should also be obtained wherever possible if the "on location" production is mains-operated (see also criterion 11.4). This applies with regard to existing mains supply access and set-up accesses for power consumed on site.

## 11.4 Green Energy in Postproduction

### ● Mandatory requirement

If the post-production occurs outside the production company's sites, exclusive use of green energy for the execution of the task must be ensured by the commissioned service providers.

## 11.5 Conditions for the Employment of Generators

### ● Mandatory requirement

Essentially, the entire production is to be mains operated. However, the following exceptional cases allow for generator use:

■ "on location" productions without technically suitable access to the grid and with a cable length of up to 100 meters available

■ productions with contractually stipulated uninterruptible power supply may employ a redundant generator system – "Twin Power/Twin Pack" – if the production cannot be realized otherwise. It is recommended that sustainable modern options such as a single (hybrid) generator in stand-by mode with downstream battery and parallel fixed current settings should be used.

## 11.6 Time Limit for Diesel Generators

### ○ Target requirement

If the use of diesel generators is necessary (under the conditions of 11.5), these should not be employed for more than three days. Exceptional cases where they are used longer than three days must be justified in the final report.





# Ecological Standards in Detail

## II.7 Exhaust Emission Standard Stage IIIA for Diesel Generators

### ○ Target requirement

If diesel generators are employed, they must at least meet the exhaust emission Stage IIIA standards, be equipped with a particle filter, and not be filled with heating oil. Where diesel generators cannot fulfill exhaust emission Stage IIIA standards or higher, an efficient hybrid system should be used, or the generators should run on fuels from certified regenerative residues (so-called second-generation HVO fuels).

## II.8 Using a Power Grid Management System

### ○ Target requirement

An energy-saving power grid management system should be used wherever possible if several (diesel) generators are employed at one location.

## II.9 Efficient Lighting Technology in the Studio

### ● Mandatory requirement

Light sources with a high level of energy efficiency such as LED spotlights must be exclusively employed for studio productions. Light sources such as light bulbs and halogen spotlights ("artificial light") must be avoided.

## II.10 Efficient Lighting Technology on Location

### ○ Target requirement\*

On-location shooting should (as of 2025: must) exclusively employ light sources with a high level of efficiency such as LED spotlight. Light sources such as light bulbs and halogen spotlights ("artificial light") should (as of 2025: must) be avoided for spot/headlights up to 2 KW.

\*Mandatory as of 2025



# Ecological Standards in Detail

## III. Personnel and Material Transport

It is generally desirable to reduce mobility.

Optional approaches:

- preferentially using production sites and locations that can be reached by train/public transport and provide suitable accommodation in the vicinity
- logistic optimization of transport via time- or space-based pooling
- supporting the development of car-pooling
- employing local respectively small crews.

The choice of means of transport is also crucial. Flights produce high greenhouse gas emissions and should be avoided whenever possible. Cars, small vans, mini-busses, and trucks also produce high greenhouse gas emissions. Using bicycles and e-bikes on the other hand is almost CO<sub>2</sub> neutral. Other than that, trains are generally the most environmentally friendly way of transport. On average, they emit 90 % less greenhouse gas than planes. Therefore, trains, public transport, bicycles, and e-bikes should be used wherever possible.

## III.1 Public Transport Benefits for Audience Participation

### ○ Target requirement

For studio productions with audience participation, members of the audience should be offered discounted mobility options for public transport if possible. This could be in combination with tickets for the event and by making use of the respective discounted offers of the regional public transport service providers.

## III.2 No Flights if Trains Take Less Than Five Hours

### ● Mandatory requirement

Domestic and international flights are not permissible if the respective train ride would take less than five hours. No private planes must be used on the production side unless they are shown in the picture.





# Ecological Standards in Detail

## III.3 Employment of Low-Emission Vehicles

### ● **Mandatory requirement**

One in three cars (excluding those in the picture) owned or rented by the production must be a CO<sub>2</sub>-reduced vehicle with low particulate matter and nitrogen oxide emission\*. This comprises vehicles that are entirely electrically powered (preferably using green energy), CNG vehicles (preferably powered by bio-CNG), and hybrid vehicles (classic hybrid vehicles and plug-in hybrids, the latter preferably only used in E-mode).

\* as of 2025 this requirement applies to one in two vehicles

## III.4 Employment of Low-Emission Minibuses, Vans, and Small Trucks

### ○ **Target requirement**

One in three vehicles (excluding those in the picture) owned or rented by the production must be a CO<sub>2</sub>-reduced vehicle with low particulate matter and nitrogen oxide emission. These are:

- vehicles that are entirely electrically powered (preferably using green energy)
- hydrogen-powered vehicles
- CNG vehicles (preferably using Bio-CNG)

Special vehicles with elaborate integrated technology are excluded from this regulation.

## III.5 Employment of Low-Emission Trucks over 7.5 Tons

### ○ **Target requirement**

One in four trucks exceeding 7.5 tons owned or rented by the production must be a CO<sub>2</sub>-reduced vehicle with low particulate matter and nitrogen oxide emission. These are:

- vehicles that are entirely electrically powered (preferably using green energy)
- hydrogen-powered vehicles
- CNG vehicles (preferably using Bio-CNG).

Special vehicles with elaborate integrated technology are excluded from this regulation.





# Ecological Standards in Detail

## III.6 Only EURO 6 Diesel

### ● **Mandatory requirement**

If diesel vehicles are employed, they must meet the diesel EURO 6 standard. Special vehicles with elaborate integrated technology or specific elaborate fittings are excluded. All the production company's existing vehicles as well as the technical service providers are transitionally excluded from this mandatory requirement regarding vans and trucks until the end of 2024. Here, this does, however, not apply to rented vehicles.

## III.7 Charging Electrically Driven Vehicles with Green Energy

### ○ **Target requirement**

During production, certified green energy should make up at least 30 % of the total quantity used to charge the electrically driven vehicles (owned or rented/leased by the production excluding vehicles in the picture).



# Ecological Standards in Detail

## IV. Accommodation and Catering

External accommodation produces high greenhouse gas emissions, whereby hotel accommodation generally causes higher greenhouse gas emissions per person and night than accommodation in apartments or holiday homes. Greenhouse gas emissions in hotels can be substantially reduced by appropriate environmental measures. This is why apartments/holiday homes or hotels with acknowledged environmental measures should be booked whenever possible.

Here, it is important that these accommodations are in the vicinity of the production site. However, not just accommodation but catering, too, is CO<sub>2</sub>-relevant during production. The current food production causes a considerable degree of greenhouse gas emissions worldwide. This applies in particular to the production of meat, but also international transport of food and the use of artificial fertilizers and pesticides. By reducing the consumption of animal products and a specific selection of environmentally friendly grown primary products, the environmental impact of food can be effectively reduced.

### IV.1 Minimum of 50 % of Environmentally Friendly Accommodation

#### ● **Mandatory requirement**

At least 50 % of accommodation must be booked in apartments/holiday homes or hotels with acknowledged environmental measures if available within a 15-kilometer radius of the production site.

"Hotels with acknowledged environmental measures" are hotels providing at least the following measures: green energy, energy-saving measures regarding heating and climate, water-saving measures, and waste separation.





# Ecological Standards in Detail

## IV.2 Using Regional and Organic Food

### ● **Mandatory requirement**

In case the catering is provided by an external service it is mandatory that

- either the food used from the sectors of fruit, vegetables, salad, eggs, meats, dairy, and cold drinks must be at least 50 % – measured by the purchase price – (as of 2025: 70 %) of regional origin. Regional food is food produced within a radius of 150 km or less of the respective production site.
- or at least 33 % – measured by the purchase price – of the food used must be certified organic food with an EU organic label or an approved German organic label.

## IV.3 Vegetarian Catering

### ● **Mandatory requirement**

If an external separate catering service is employed, catering options must be strictly vegetarian at least once a week.

## IV.4 Information on Catering and Enquiry on Meat Consumption

### ● **Mandatory requirement**

Prior to shooting, production must inform the crew regarding the environmentally oriented selection of food and include crew members in this selection via an inquiry on the topic of meat consumption.

## IV.5 No Disposable Tableware

### ● **Mandatory requirement**

Disposable tableware (plates, cutlery, cups, etc.) and disposable bottles must not be made available during the entire production.

## IV.6 Demand-oriented Meals

### ○ **Target requirement**

Food waste is avoided through preparing and serving demand-oriented – and not pre-portioned – meals.



# Ecological Standards in Detail

## V. Employment and Use of Material

The production and disposal of material used for stage and scenery construction and set design – often just employed once – bind large amounts of natural resources and release problematic emissions.

Specific environmental burdens for individual productions can be distinctly reduced through the repeated use of the material in different productions.

Employing recycled materials and an environmental-oriented selection of material are effective approaches that should be sought in terms of a resource-saving recycling economy.

### V.1 Multiple Use of Material for Sets and Decoration

#### ○ Target requirement\*

Sets, decorative elements, and material should be used multiple times. This can be implemented through storage, rental or

leasing, or secondhand use. The aim is to employ a recycling economy. The proportion of the new material acquired for the construction of sets and scenery should (as of 2025: must) be reduced to less than 50 % of the overall use of material.

\*Mandatory as of 2025

### V.2 No Disposable Batteries

#### ● Mandatory requirement

Disposable batteries must not be used during the entire production on either the set or in production offices and studios. Rechargeable batteries must be employed instead; these should be recyclable if possible. Exception: mini batteries for in-ear devices.

### V.3 New Wood Must Carry FSC or PEFC Seals

#### ● Mandatory requirement

If new wood and new wooden composites are used, they must originate from sustainable forest management and carry the FSC or PEFC seal.





# Ecological Standards in Detail

## V.4 No Material with Problematic Substances

### ○ Target requirement

Materials and substances such as formaldehyde, PVC, solvent-based colors, polystyrene, isocyanate, and brominated flame retardants polluting the environment through their production, processing, or disposal should not be used. Exceptions must be justified in the final report.

## V.5 Separable Connection Between Basic Material

### ○ Target requirement

Different materials should be put together in a way they can be easily separated in the disposal process and thus recycled in a targeted manner.

## V.6 Reuse of Costumes

Costumes should be used multiple times. This can be implemented through storage, rental or leasing, or secondhand use. Whenever suitable and upon agreement, protagonists should be allowed to use their

own clothes in front of the camera. Buying fast fashion and discounter clothing should be avoided. Transport of costumes and props should be reduced by using regional services if possible.

### ● Mandatory requirement

For all necessary costumes in the production, costume designers must do a comprehensive check on whether wardrobes can be bought secondhand or re-used from the inventory instead of buying new.

## V.7 Avoiding Disposable Plastic

### ○ Target requirement

Plastic articles only used once should be avoided in all areas and replaced by environmentally friendly solutions. Makeup products used in production should not contain microplastics.

## V.8 Preferred Use of Recycled Material

### ○ Target requirement

The use of material with a percentage of more than 50 % recycled components should be preferential.





# Ecological Standards in Detail

## V.9 90 Percent Recovered Fiber in Paper

### ● **Mandatory requirement**

Whenever paper is used it must be recycled paper with a proportion of at least 90 % of waste fiber. This applies to all consumables (copy paper, toilet paper, kitchen paper, envelopes, paper towels, etc.) except props, and in case of demonstrated technological need of 100 % colorfastness in the creative process.

## V.10 Waste Separation Requirement

### ● **Mandatory requirement**

Separation of the produced waste at all production sites (also on location), at all studios, and in every office used must be carried through at least in the categories paper/glass/plastics respectively "Gelber Sack" (separately collected recyclable materials in Germany)/metal/organic waste/wood. If regional disposal companies cannot provide these categories, compliance with alternative regulations according to the disposal companies is permissible. The alternative requirements must be verified.

## V.11 Separation of Decoration Prior to Disposal

### ○ **Target requirement**

Sets and decorations which are not re-used should be separated into their principal materials in the disposal process (see "V.1 Multiple Use of Set and Decoration Material").

Especially due to funding regulations, productions funded by the Federal Government are also obliged to

- submit an initial report. It must be attached to the film funding application and – based on a standard template – contains:
  - name and description of the responsible green consultant's type of qualification employed for the production.
  - results of the preparatory carbon footprinting (I.3)
  - presentation of the implementation of envisaged measures
- inform on the fulfillment of the target requirements alongside the MANDATORY Requirements in the final report (I.5).

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