

# Minimum ecological standards for German cinema, TV and online/VoD productions





# Preamble

Cinema, TV and online/VoD productions cause high CO<sub>2</sub> emissions and use up substantial amounts of resources.

A relevant part of these CO<sub>2</sub> emissions can be avoided by switching to a more environmentally friendly production system that preserves resources. For this reason, a broad alliance of key industry representatives from the German film, TV and VoD market has decided to produce a large part of their content in a climate- and resource-friendly manner. Within the "Green Shooting" working group headed by MFG Baden-Württemberg, broadcasters, production companies, VoD services and film funding entities have, for the first time, developed uniform minimum ecological standards for sustainable productions and committed to comply with them through a sustainability initiative since January 1, 2022.

The productions that comply with said standards will in future be marked with the specially developed green motion label in the credits and/or on promotional material. To this end, the working group, together with the film and TV sustainability expert Philip Gassmann, the filmmakers' initiative Changemakers.film, the climate researcher Prof. Dirk Notz, the environmental scientist Nils König and other representatives of the industry, have developed the following mandatory ecological standards for cinema, TV and online/VoD productions (hereinafter

referred to as minimum standards). They apply to non-fictional and fictional media productions, such as sports programs, entertainment shows, TV documentaries, feature films or series.

The experience and knowledge from the sustainability initiative of the working group "100 green productions" have also been incorporated. In 2020/21, this initiative sustainably produced 100 TV and film productions in a pilot test.

These minimum standards apply to all production phases: from pre-production to post-production and to those production parts that take place in Germany, regardless of whether the production company is located in Germany or abroad. If possible, compliance with these minimum standards abroad is welcomed and encouraged.

The minimum standards contain measures from various production areas, each of which uses elevated levels of resources and generates copious quantities of greenhouse gas emissions, while at the same time allowing for considerable savings. All measures can be implemented with limited resources. Adhering to these minimum standards is therefore a first, important and, at the same time, realistic step towards an ecologically sustainable production method for every production.





The minimum standards are divided into 15 areas. Most of these areas contain both mandatory and target specifications. Productions that comply with these minimum standards must observe the mandatory specifications. Here, not all mandatory specifications are relevant for all types of productions: documentaries, for instance, generally do not use OB vehicles. Unlike sports programs, the mandatory specification to not use diesel generators when employing OB vehicles (mandatory specification 5.5) is therefore irrelevant for documentaries. In such cases, the mandatory specification, which must be drawn up after each production and submitted to the responsible broadcaster/VoD service/funding entity can be filled in as "observed" in the final general report.

In justified exceptional cases where it was not possible to meet all the mandatory specifications, deviations are permitted for a maximum of three out of the 21 mandatory specifications (the number is to be reduced in the coming years). Deviations from the respective mandatory specification should be reduced to a minimum. Furthermore, any exceptions that hinder abiding with the mandatory specifications must be justified in the final report. The responsible broadcaster/VoD service/funding entity must check and approve the final report if, among other things, at least 18 of the 21 mandatory specifications have been met.

If the report is approved, the production with parts thereof produced in Germany is then authorised to use the label green motion, provided:

- either the production costs incurred abroad account for less than 25% of the total production costs,
- or at least 18 of the 21 mandatory requirements of the minimum standards were met by the production parts produced abroad and a separate final report was also drafted and approved abroad.

Alternatively, the final report can also be reviewed and approved by an external evaluating agency. The working group has commissioned the auditing company PwC to carry out this task.



The target specifications, unlike the mandatory ones, are not to be understood as strict regulations, but as an appeal for an ecologically sustainable production method. The implementation of the target specifications, like in the case of the mandatory specifications, brings about an effective reduction in greenhouse gas emissions and is therefore desirable. However, given the current state of the art, there will always be cases in which these target specifications cannot be met with reasonable effort.

The minimum standards will be adjusted and increased annually by the "Green Shooting" working group based on experience with these standards and new technical developments and possibilities for sustainable production methods.

The next adjustment is planned for January 1, 2023, when the minimum ecological standards of the working group will be unified with the minimum standards currently developed by order of the Federal Government Commissioners for Culture and Media and the State Funding Representatives.



# The minimum standards in detail

## 1. Green Consultants

### ● Mandatory specification

1. Either an external Green Consultant or an expert who has been trained as a Green Consultant must be employed. Both must demonstrate a well-founded training or participation in an advanced training course lasting several days to become a Green Consultant, as well as be up to date on the latest developments. They must accompany the production during the entire process: from the beginning, including pre-production, and right through to the approval of the final report. They advise on the compliance with the minimum standards and, overall, on production methods that save resources and have low CO<sub>2</sub> emissions. They must involve the entire team in the process.

## 2. Accounting

### ● Mandatory specification

1. The planned CO<sub>2</sub> emissions must be calculated using the MFG's CO<sub>2</sub> calculator before commissioning the production or before applying to a subsidising body. This estimate is based on a simplified calculation method that will be available in MFG's CO<sub>2</sub> calculator from the end of this year. Alternatively, the calculation can also be performed using programs such as Sesam, if it can be proven that the obtained results are comparable. This calculation makes it possible to check in advance if the production complies with the minimum standards and assure that the production as a whole will be carried out in an ecologically sustainable manner.

### ● Mandatory specification

2. After production has been completed, the data must be calculated in detail using the MFG's CO<sub>2</sub> calculator. Alternatively, the calculation can also be performed using programs such as Sesam, in 2022 without conditions and in 2023 on the condition that these programs can demonstrably process a comparable calculation in the result and comply with the current requirements of the German Film Funding Act (Filmfördergesetz) in the case of subsidised film productions.



### 3. Final Report

- **Mandatory specification**

1. After production has been completed, the production company must prepare one – or, where applicable, two – final reports based on a standardised template. This must include the specifications that have been met and include the actual CO<sub>2</sub> emissions calculated after the end of production (see also criterion no. 2, "Accounting").

### 4. Green Electricity

Switching to certified green electricity is one of the quickest and easiest methods to drastically reduce CO<sub>2</sub> emissions.

- **Mandatory specification**

1. Certified green electricity must be used in all production facilities of the production company and in all studios used for production.

- **Target specification**

2. In the case of temporary premises, certified green electricity should be used wherever possible.



## 5. Generators

Diesel generators usually cause high greenhouse gas emissions.

### ○ Target specification

1. Whenever possible, the electricity should be provided over a grid connection and not come from generators.

### ○ Target specification

2. Gas generators, hybrid generators, mobile electricity storage systems with green electricity and solar generators should be given preference over diesel generators.

### ○ Target specification

3. Diesel generators may only be used in the exceptional cases individually defined below. They should at least comply with the Stage IIIA emissions standard and be equipped with a particle filter, and must not be filled with heating oil.

### ● Mandatory specification

4. No (diesel) generators may be used in studio-based entertainment productions.

### ● Mandatory specification

5. In the case of external broadcasts using OB vans in which there is a technically suitable and available network connection nearby, this must be used for the regular power supply. Diesel generators may not be used as power supplies. An emergency generator system may additionally be used as an exception in cases in which a redundant power supply is required for safety reasons but not available.

### ● Mandatory specification

6. A technically suitable and available network connection at a distance of up to 100 metres must be used for on-site fiction productions. Diesel generators must not be used in this case.

### ○ Target specification

7. Diesel generators should not be used for longer than three days in the case of on-site fiction productions without a technically suitable and available network connection nearby. Exceptions to this rule (i. e., situations in which diesel generators are used for longer than three days) must be justified in the final report.

### ○ Target specification

8. When using several (diesel) generators at one location, an energy-saving power grid management system should be employed wherever possible.



## 6. Rechargeable Batteries

### ● **Mandatory specification**

1. Disposable batteries may not be used during the entire production, either on the set or in the production offices and studios. Rechargeable batteries must be used instead. These should be as recyclable as possible. Exception: button batteries for in-ear pieces.

## 7. Lighting

The lighting in the studio and on site requires high power and, thus, is responsible of producing greenhouse gas emissions. Thanks to technological progress, a large part of this power consumption can be saved by switching to energy-saving illumination.

### ○ **Target specification\***

1. Only LED headlights or other light sources with comparable efficiency should (from 2024: must) be used for studio productions.

\*Mandatory from 2024

### ○ **Target specification\***

2. Only LED headlights or other light sources with comparable efficiency should be used for on-site shooting. Additionally, from 2025, only LED headlights or other light sources with a comparable efficiency will have to be used for headlights of up to 2 kW of power.

\*Mandatory from 2025



## 8. Travel and Transportation

Air travel causes exceedingly high greenhouse gas emissions. Rail travel is generally the most environmentally friendly means of transport and emits an average of 90 % less greenhouse gas emissions than an aircraft. Cars, (small) vans, minibuses and trucks are also high greenhouse gas emitters. In principle, it is advisable to reduce mobility.

### A. Rail, public transport, bicycles and e-bikes

#### ○ Target specification

1. Rail, public transport, bicycles and e-bikes should be used wherever possible.

### B. Air travel

#### ● Mandatory specification

1. Domestic and international flights must be avoided if the corresponding train journey would take less than 5 hours.

#### ○ Target specification

2. Furthermore, other flights should also be avoided whenever possible.

### C. Cars

#### ● Mandatory specification

1. If the fleet has more than two cars per production (cars owned by the production facility or rented/leased by it without considering picture cars), at least 30 % (from 2023 at least 40 %, from 2024 at least 50 %) of the cars used must be vehicles with low CO<sub>2</sub>, soot and nitrogen oxide emissions. These are electric cars (preferably using green electricity), natural gas vehicles (preferably using bio-CNG) and hybrid vehicles (classic hybrid vehicles and plug-in hybrids; in the case of plug-in hybrids, they should only be used in the electric mode).





#### D. (Small) vans, minibuses and trucks

##### ○ Target specification

1. If the fleet of the production has five or more (small) vans, minibuses and trucks in the weight class of up to 7.49 t (vehicles owned by the production or rented/leased by it without considering picture cars), at least 20 % (from 2024 at least 40 %) of the vehicles used in this class should have low CO<sub>2</sub>, soot and nitrogen oxide emissions. These include electric vehicles (preferably using green electricity), natural gas vehicles (preferably using bio-CNG) and hydrogen vehicles. Special vehicles with complex integrated technology are exempt from this specification.

##### ○ Target specification

2. If the fleet of the production has at least 3 trucks in the weight class over 7.5 t, at least 30 % of them should be vehicles with low CO<sub>2</sub>, soot and nitrogen oxide emissions. These include electric vehicles (preferably using green electricity), natural gas vehicles (preferably using bio-CNG) and hydrogen vehicles. Special vehicles with complex integrated technology are exempt from this specification.

##### ● Mandatory specification

3. Every diesel vehicle used must comply with the Diesel EURO6 standard without exception.

## 9.

### Accommodation

Every overnight stay causes high greenhouse gas emissions, whereby stays in hotels generally cause higher greenhouse gas emissions per night and person than overnight stays in apartments or holiday homes. At hotels, greenhouse gas emissions can be significantly reduced through appropriate measures.

##### ○ Target specification

1. Wherever possible, apartments/holiday homes or hotels with recognised environmental measures should be booked for overnight stays.\*

##### ● Mandatory specification

2. Apartments/holiday houses or hotels with recognised environmental measures must be booked for at least 50 % of the overnight stays, provided they are located within 15 kilometres of the production site.\*

\* Hotels that offer at least the following measures are considered to be "hotels with recognised environmental measures": green electricity, energy-saving measures for heating and air conditioning, water-saving measures and waste separation.



## 10. Catering

Current food production causes a considerable proportion of global greenhouse gas emissions. This applies in particular to the production of meat, but also to the worldwide transport of food and the use of artificial fertilizers and pesticides.

### ● **Mandatory specification**

1. If catering is provided by an external, separate catering service, at least 50 % of the food used, measured by the purchase price, must be produced locally. Locally produced food products are those that have been processed within a radius of about 100 km or less from where the media is being produced.

### ● **Mandatory specification**

2. If catering is provided by an external, separate catering service, at least 33 % of the food used, measured by the purchase price, must consist of organic products with the EU organic logo or an organic logo recognised in Germany.

### ○ **Target specification**

3. The consumption of meat should be reduced as much as possible during production.

### ● **Mandatory specification**

4. If catering is provided by an external, separate catering service, the food offer must be purely vegetarian at least once a week.

### ● **Mandatory specification**

5. At the start of filming, the production team must be informed about the ecological food choices and, among other things, be involved in the selection process through a survey about meat consumption.

### ● **Mandatory specification**

6. The catering service is not allowed to use disposable crockery (plates, cutlery, cups, etc.) nor single-use bottles during the entire production.

### ○ **Target specification**

7. Adjusting the food portions is advisable to avoid food being thrown away.



## 11. Paper

Paper production is a major driver of deforestation, since around 40 % of the world's logging is done for paper production alone.

Germany has the highest per capita paper consumption in Europe and the world and uses as much paper as Africa and South America combined.

### ○ Target specification

1. Paper documents should be avoided. Instead, all production documents should be digital.

### ● Mandatory specification

2. If paper is used it must be recycled with a recycled fibre content of at least 90 %. This applies to all forms of paper (copy paper, toilet paper, kitchen paper, envelopes, paper towels, etc.) except for props and if there is a proven technical need for 100 % colour fastness during the creative process.

## 12. Materials and Supplies

### ○ Target specification

1. Backdrops, decorative objects and materials should be reusable. This target can be accomplished by storing the materials, renting them or using second-hand items, for example. The aim is to have a circular economy.

### ○ Target specification

2. In order to preserve natural resources, the minimum amount of material should be carefully selected and used when building backdrops and decorative objects.

### ● Mandatory specification

3. If new wood or new wood-based materials must be used, these must come from sustainably managed forests and have the FSC label.

### ○ Target specification

4. Materials and substances that pollute the environment during manufacture, processing or disposal, such as formaldehyde, PVC, solvent-based paints, styrofoam, isocyanates and brominated flame retardants (BFR) should not be used. Exceptions to this specification must be justified in the final report.





○ **Target specification**

5. Preference should be given to materials with a high percentage of recyclates.

○ **Target specification**

6. Different base materials should be combined in such a way that they can be easily separated from one another during disposal and can thus be recycled.

## 13. Costumes

○ **Target specification**

1. Costumes should be reusable. This can be achieved, for example, by keeping costumes in storage, lending or using second-hand items. Where appropriate and after consulting, the main characters in front of the camera should be given the opportunity to use their own clothing. Fast fashion and clothing from retail discounters should be avoided. Local providers should be used as far as possible to reduce the transport routes of costumes and props.

## 14. Plastic

○ **Target specification**

1. Disposable plastic should generally be avoided in all production areas and replaced by more environmentally friendly solutions. Only make-up products without microplastics should be used.

## 15. Waste Sorting

● **Mandatory specification**

1. The waste produced must be separated at every production facility (including on site), in all studios and in all offices. Waste must be separated into, at least, the following categories: paper, glass, plastic and packaging/wrapping, metal, organic waste and wood.

○ **Target specification**

2. Decorations that cannot be reused should be separated into their base materials when they are disposed of (see the "Materials and Supplies" criterion).

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