CINE-REGIO GREEN REPORT 2017

ON SUSTAINABILITY IN THE EUROPEAN REGIONS cine • regio European network of regional film funds



TABLE OF CONTENTS

INTRODUCTION





BEST PRACTICE GUIDE	4
TRAINING AND WORKSHOPS	6
INCENTIVES/SUPPORT OF GREEN MEASURES	9
GREEN REWARDS, GUIDELINES AND CERTIFICATION	11
GREEN GUIDE WITH INFORMATION ON SUSTAINABLE SUPPLIES	14
TOOLS FOR SUSTAINABLE PRODUCTIONS	15
CARBON CALCULATOR	16
GREEN POST-PRODUCTION	17
COLLABORATION WITH BROADCASTERS AND STUDIOS	18
GREEN PRODUCTIONS	20
COLLABORATIONS AND PARTNERSHIPS	25
GREEN CINEMA	30
CONCLUSION	31
GREEN MEMBERS	

MAKING NEW MOVES

The 2017 Cine-Regio Green Report provides an overview of environmentally friendly efforts taken by the film industry across Europe. From pre-production planning to studio film production, from post-production to theatrical release, there are various approaches to sustainability that cover the entire production chain. A growing number of regional funds are gaining green experience with best practices, tools, and training that are shared and adapted by other regions.

The Cine-Regio network includes forty-four regional funds from twelve EU member states, and Norway and Switzerland, of which a dozen members have recognized the benefits of going green. Since the Green Cine Regio Subgroup kicked off in 2012, the number of new initiatives has increased: from Sweden to Spain, from Wales to Italy. Models and methods may vary from region to region. Green guidelines suggest sustainable actions while the implementation of green measures is supported by incentives and rewards – and they might be even verified by a certification system.

The 2017 Cine-Regio Green Report, providing an insight to the broad range of sustainable measures, was made possible thanks to financial support from:

the Commission du Film d'Ile-de-France; Film London; Filmförderung Hamburg Schleswig-Holstein; Sardegna Film Commission Foundation; and the Trentino Film Fund. Other Cine-Regio members that submitted materials to this report include: Film Cymru Wales; Film Väst - Sweden; Filmfonds Wien; Flanders Audiovisual Fund; Mallorca Film Commission & Fund; MFG Baden-Württemberg; and Screen

green regio

Brussels. Last but not least, the biggest thanks and gratitude to Birgit Heidsiek and her team for their efforts in producing this report, which is available as a free download on our website www. cine-regio.org/green

Structured by topic, the report reflects the ambitions different regions have in managing precious resources and taking environmentally

friendly measures to lower the carbon footprint of audiovisual productions. In many cases, regional collaborations and partnerships are supporting these approaches.

In addition to the exchange of green know-how within the Green Cine Regio Subgroup, 2017 is also inaugurating the EU-supported Green Screen program, which aims to foster the transmission of sustainability expertise to European regions that would also like to adopt environmentally friendly practices.

We can learn, benefit, and improve our actions in the film industry with more sustainably produced pro-

grams. Cine-Regio, whose actions reflect the sum of its members' ambitions, is keen to make new moves that will establish the way things will be done in the future.

Greening the film sector may challenge film professionals and film funds - but the challenge is nothing compared to the Climate Change Challenge. Therefore let's continue to inspire, exchange and share!

Charlotte Appelgren General-Secretary, Cine-Regio



BEST PRACTICE GUIDE

BEST PRACTICE GUIDE

BEST PRACTICE GUIDE

FFHSH - GERMANY

Filmförderung Hamburg Schleswig-Holstein (FFHSH) kicked off its program for sustainable Film/TV production when Hamburg was named the European Green Capital in 2011. Inspired by the Green Production Guide of the Producers Guild of America (PGA) and its recommendation to "reduce, re-use and recycle", a Best Practice Guide was subsequently developed in German- and English-language versions.

Over the course of the years, the green guide has been used by productions teams across Germany as well as by international co-productions to follow sustainable working methods.

FFHSH's Best Practice Guide includes specific instructions as well as practical advice on how to save resources – which also has cost-efficient benefits – in any production department from the production office to location shoots, from production and set design to costumes and catering, including post-production as well. The Best Practice Guide is available online at:

www.ffhsh.de/en/film_commission/gruener_drehpass.php



FLANDERS - BELGIUM

Different tools were developed within the e-Mission project:

- A brochure describing the rules for green production as well as the top measures that may be implemented in the film industry for transportation, energy usage, waste management, and materials recycling.
 An English-language version of the brochure will soon be available;
- Checklists of best practices for each department: production team, location management (including catering, waste collection, and disposal), sets and costumes, lighting, and energy; and
- Best practice sheets: concrete information about strategically choosing locations, the use of bicycles on set, carpooling, communication as outlined in production booklets, energy-efficient lighting, hybrid cars, and organic as well as vegetarian meals.

The e-Mission handbook, an eighty-page guide for a greener audiovisual sector in Flanders, contains:

- green measures for the production office as well as location and for studio shooting; and
- an address guide for green products and services (facility companies, catering, energy, waste management, office and print, mobility, and environmental organizations).

ECOPROD - FRANCE

The Ecoprod group develops and provides free tools to film professionals to reduce the ecological footprint of their productions. The Green Production Guidelines published in 2012 are one of these tools. It was inspired by the Producers Guild of America's Green Guidelines, and it was further refined by feedback from industry professionals.

The Ecoprod guidelines are organized by chapters: production office; transportation of crew members; hotel & catering; transportation of equipment; studios & set design; lighting; equipment rental; wardrobe and make-up; and post-production.

Updated every two years, the guidelines include timely recommendations as well as the latest technical innovations. Hard copies are available at the offices of Ecoprod partners as well as at film industry events. The guidelines are also available as free download from the Ecoprod website: www.ecoprod.com

Since 2014, three specific guidelines have been published on the subjects of lighting, set design, and workflow. These guidelines, dedicated to production managers, line producers, technical crew, and students contain practical information, such as the benefits and drawbacks of various materials and/or lighting equipment, labeling, as well as contact info and links for green organizations, such as NGOs, eco-organizations, and suppliers.

In 2017, Ecoprod plans to develop practical checklists for each department: "the five best practices for the line manager/assistant director" and so on.

MALLORCA - SPAIN

Since its creation in September 2016, the Mallorca Film Commission, with the support of the

Illes Baleares Film Commission, is committed to fostering sustainability measures in film production as well as in other activities related to the audiovisual industry. It is part of a wider program undertaken by the island's Council and the regional Balearic Government to

harmonize the interaction

of economy, culture, and nature. These goals will be spearheaded by a "Green Card" for producers and filmmakers, which

will grant them certain advantages and benefits for observing green guidelines on their shoots.

The Mallorca Film Commission is working on a green approach for film shoots. It will structure, by incorporating the previous experience of other territories, a series of measures in its guide for the island.

MFG - GERMANY

The Film Fund Baden-Württemberg is developing a Best Practice Guide that will target areas of film production for greening: communication, mobility, catering, and general energy and waste reduction. Structured by department, the guide will act as a practical assistant during production and it will be updated on an on-going basis. The Green Production Guide is envisioned to ultimately include workflows and referrals to service companies.



SARDEGNA - ITALY

The Fondazione Sardegna Film Commission started its program for sustainable film/TV production in 2014. Going green is a matter of survival for the island because recycling and energy conservation measures are no longer postponable. The Sardegna Film Commission Foundation, therefore, is focusing on sustainably-produced films and TV productions that will provide clear environmental, social, and economic benefits.

In compliance with the Best Green Practices of the Producers Guild of America (PGA), Sardegna developed recommendations in 2015 for film and TV productions. Updated in 2016, the guide covers the key areas of sustainable film production and provides concrete instructions for handling energy, transportation, set design, catering, and waste management to meet the requirements of a green set. This includes the use of renewables, LEDs, preference for local organic products, the involvement of local eco-organizations and community-based services, Euro 5 generators, and hybrid transportation. The guidelines are updated every two years and are available for download at the Sardegna Film Commission Foundation website: www.sardegnafilm.commission.it

TRAINING

TRAINING



TRAINING AND WORKSHOPS

WALES - UNITED KINGDOM

Ffilm Cymru Wales has embedded environmental sustainability training for the motion picture arts in its low budget film program, Cinematic, which offers training for up to ten creative teams at any given time. Parallel training is provided to all those who receive production or development support from the organization. The instructors have worked in collaboration with BAFTA to develop *albert*. These training courses offer certificates of participation, case studies of best practices, as well as the implementation of a carbon calculator which allows production managers to audit the actual carbon footprint of their production with respect to pre-production projections.



Green Stewards

Greenshoot, an award-winning environmental and sustainability consultancy based in London, offers a one-day training program for green stewards. Open to both novices and experienced runners, the program equips the participants with knowledge of basic good practice in sustainability as well as the daily practicalities of the job. As more production companies adopt sustainable practices, the role of green steward is increasingly in demand. The training program provides a stepping stone for those who wish to move up the production ladder, and is a constructive way for companies to help their runners develop their careers.

www.greenshoot.com/training/green-production-runner

FFHSH - GERMANY

Since 2014, the FFHSH has been organizing complementary best practice seminars and workshops for the German film industry that target key crew members of different departments.

Attended by participants from throughout Germany, eco consultants and sustainability experts share insights in sustainable production on a department by department basis: camera & lighting, production design, and catering. In 2016, energy and transportation were the key topics at a green workshop which introduced hybrid and gas generators as well as electric cars as eco-friendly solutions.

Sustainability events are always held at environmentally friendly locations, such as an eco-hotel or the Hanseatische Materialverwaltung, which provides filmmakers, cultural institutions, universities, and artists with props and materials for social, eco-friendly or creative projects.



FLANDERS - BELGIUM

Personal coaching for film professionals and film crews – focusing on production managers, who spearhead production – is the e-Mission's beating heart. Starting in September 2013, each fiction feature or TV-drama/series that received VAF production support was supposed to implement sustainable production methods. Since film professionals don't always know how to produce sustainably, they are provided with tools summarizing best practices and training on how to implement these measures through a series of coaching sessions from planning and pre-production up to post-production. All training and coaching sessions are offered free-of-charge by FAV.

It is also planned to involve Flanders' film schools in the e-Mission project by developing and providing workshops for film students so that they may become familiar with green production methods at the earliest stages of their career.

In 2016, new technical workshops broadened the scope of the training VAF provides. These workshops focus on specific technical aspects: energy usage, lighting, location and waste management. Bringing together producers, crew members, and sustainable suppliers creates a reservoir of practical production methods and tested solutions that lower the environmental impact of productions and improve their efficiency.

VAF organized the following workshops:

• Efficient lighting

LED technology: technical advantages and cost benefits. Flemish suppliers presented a range of LED lighting equipment as well as other energy-efficient lighting technologies.



• Digital production platforms

Different planning tools (e.g., DzjinTonik) and post-production tools (e.g., Limecraft) can improve production efficiency.

Sustainable on-set energy supply

Successful methods for reducing energy consumption and providing green energy on-set. Two different suppliers presented hybrid generators that rely on battery power. These hybrid generators are more efficient than diesel generators, and they can be tied into either the electrical grid or solar panels. They are easy to use and they operate noiselessly when running on battery power. One hybrid generator that was built into a van was extremely flexible. The other was a more robust unit for bigger productions with greater power requirements.

ECOPROD - FRANCE

Audiovisual companies that are signatories to the Ecoprod Charter may enroll employees in free training programs conducted by sustainability development experts and green service providers (waste recycling companies, rental firms, etc.). The sessions are limited to ten participants in order to facilitate exchanges and to enable the dissemination of best practices. This training program supports the implementation of green practices for audiovisual suppliers. Participating companies are expected to submit a progress report every two years in order to monitor their progress as well as their application of green practices as imparted by the training seminar. The last training session was held in June 2016.

Ecoprod participates in numerous events, round table discussions, and conferences over the course of the year, including:



- A round table in January 2017 on sustainable development and digital technology held during the Paris Images Digital Summit called "How to include sustainable development in digital creation";
- A panel discussion on "Energy saving on film shoots" during the Deauville Green Awards in June 2016 as well as a special award given by Ecoprod to the three-minute campaign film Biocoop – La Campagne Eco responsable by Jason Freites; and
- A presentation of Ecoprod's tools at the Festival de la Fiction TV entitled "Sustainable production is not a fiction" in September 2016.

Raising the awareness of future professionals in the cinema and audiovisual industries is an important part of the Ecoprod mission, which engages film, audiovisual, and media schools as well as training programs offered by the CEFPF, Sup de Prod, and Paris 3 University.

MALLORCA - SPAIN

The first workshop on Green Film Shooting was held in Palma in March 2017 with the collaboration of the Hamburg Film Commission and the Editor-in-Chief of *Green Film Shooting* Magazine. Addressed to local producers and representatives of the regional Ministry for Environment, the event was well received by professionals. It served as a starting point for a series of similar workshops that focused on specific issues.

A Green Film Shooting Training Camp, open to producers and other audiovisual professionals from throughout Europe, to exchange experiences and best practices, will be organized on a yearly basis.

TRAINING

INCENTIVES

E

MFG - GERMANY

The Film Fund Baden-Württemberg is planning to offer a series of green workshops for producers, filmmakers, and film students. These workshops will be free of charge and will focus on sustainable production opportunities in various departments: transportation, production management, lighting, camera, set design, and catering.

SARDEGNA - ITALY

In 2014, the Sardegna Film Commission Foundation (FSFC) launched Project HEROES 20.20.20, which provides financial support to feature films, TV productions, and shorts that implement the Sardinia Green Film Shooting Protocol. The recipients are also expected to promote sustainability and renewable energy for the citizens of Sardinia. By giving support to about forty short films and web-series pilot episodes, HEROES 20.20.20

evolved into a training platform for Italian production companies that are interested in greening their workflow. Among them is Mommotty Productions, which produced four short films under the aegis of Project HEROES 20.20.20. Meanwhile, the company provides line producer services for video clips by Placebo and other pop bands.

In order to provide insights into production methods and approaches utilized in other countries, in 2015 the FSFC organized the European Cinema & Audiovisual Days which showcased strategies for eco sustainability. Italian film professionals had the inspiring opportunity to share experiences with green experts from France, Germany, The Netherlands, and the U.S.

The FSFC launched *Mia & Pepe*, a program whose target audience is children in primary school. The FSFC also provides training for young eco filmmakers.

MIA & PEPE ECO-STORIES IN MOTION THE TOURIST FOR VOING CREEN FILM MANDE.



INCENTIVES / SUPPORT OF GREEN MEASURES

FFHSH - GERMANY

According to the FFHSH's guidelines, sustainable projects and productions may receive specific green support as part of a production grant. The FFHSH approach is to promote sustainable film production as a cost saver. The film fund consultants call these possibilities to the attention of producers before they submit their applications.

The FFHSH also appraises additional measures that producers take, such as a sustainable production concept prepared with a green consultant during development, in order to make a sustainable production overseeing more effective. The FFHSH also factors into its consideration all costs disbursed relating to hiring a green runner or an eco-supervisor.



e-Mission is the Flanders Audiovisual Fund's ambitious project to develop sustainable film production in Flanders. Beginning in 2013, sustainable methods and practices were developed and implemented. The Flanders Audiovisual Fund (VAF) is investing in the eco-coaching of Flanders' filmmakers, and in return it collects data on the carbon emission levels of their projects.

The VAF chose to provide free coaching, as opposed to financial support, in order for sustainability to evolve on an industry-wide basis. The icing on the cake is sustainable film production is likely to have a positive impact on the production budget.

ECOPROD - FRANCE

In January 2017, the Île-de-France Region Film Fund updated its criteria. An eco-bonus will be granted to all productions that implement green best practices based on the Ecoprod guidelines. A carbon calculation and a description of the green actions undertaken by the production must be submitted. The grant amount ranges between €25,000 and €75,000 for films budgeted under €6 million, and up to €100,000 for films budgeted over €6 million.

MALLORCA - SPAIN

Support for the institution of green measures will become part of the local incentive program. It will grant producers certain advantages, which include shorter processing times for applications and reduced fees for shooting permits in protected nature areas.

MFG - GERMANY

The MFG Baden-Württemberg will support a green consultant who will optimize sustainability in the production process. With this position hundred-percent financed by the Film Fund, the Green Consultant will be tasked with

overseeing the implementation of green measures through all stages of production from planning and shooting to post-production. Fiction as well as documentary formats may apply for a Green Consultant, whose responsibilities include motivating the crew over the entire course of film production.



SARDEGNA - ITALY

In its 2016 Hospitality Fund, the Sardegna Film Commission Foundation introduced a reward of five additional points in meeting sustainable criteria to productions that apply the Sardegna Green Set Protocol.

8 _______ 9



INCENTIVES

REWARDS



TRENTINO - ITALY

The Trentino Film Fund is the first regional film fund that provides both financial incentives and green certification for environmentally friendly productions. Production companies shooting films or TV series in Trentino now have the option of adopting the T-Green Film rating system, which guides them through every stage of production in the application of environmentally and financially sustainable approaches. The rating system also provides an evaluation checklist, which tackles detailed criteria for energy conservation, transportation and accommodation, catering, selection of materials, waste management, and communication practices. In their application submission to the Trentino Film Fund, producers may communicate their intention to adopt the T-Green Film rating system. Producers can easily estimate the extent of their environmentally-friendly approach by completing the evaluation checklist in which green points are awarded for the fulfilment of green criteria.

	STAINABILITY PLAN	Rating
ALCONO.		round
PR1	Sustainability plan - obligatory prerequirements	
CD	ITERION A: ENERGY SAVING	
CK	TIERION A: ENERGY SAVING	Points
A1	Temporary connections to the electricity distribution grid	4
A2	Euro 5 electricity generators	1
A3	Green energy	2
A4	Fluorescent / LED lighting	max 3
	LED. 3 points Fluorescent + LED-1 point	
CD	ITERION B: TRANSPORT	
Allerton A.	D ACCOMMODATION ARRANGEMENTS	
	D ACCOMMODATION ANNAMODEMENTS	Paints
B1	Transport optimisation	4
B2	Euro 5 vehicles	1
83	Hybrid, methane or GPL vehicles	3
84	Accommodation arrangements: within 10 km of the set	3
85	Accommodation arrangements: host structure certificate	2
CR	ITERION C: CATERING	Points
CI	Drinking water	4
C1 C2	Drinking water Meals provision	4
-	Meals provision Reusable or compostable tableware reusable: 2 points	
C2	Meals provision Reusable or compostable tableware	3
C2 C3	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 2 points	max 2
C2 C3 C4	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 2 points	3 max 2
C2 C3 C4	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering)	max 2
C2 C3 C4	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering)	3 max 2
C2 C3 C4 CRI	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 2 points Ecoristorazione Trentino (Trentino Ecocatering) TERION D: MATERIALS SELECTION	max 2
C2 C3 C4 CRI	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 2 points Compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering) TERION D: MATERIALS SELECTION TCertified suppliers and products	Point:
C2 C3 C4 CRI D1 D2 D3	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering) TERION D: MATERIALS SELECTION TCertified suppliers and products Recyclable materials or materials deriving from reuse	Points
C2 C3 C4 CRI CRI D1 D2 D2 D3 D4	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering) TERION D: MATERIALS SELECTION TCertified suppliers and products Recyclable materials or materials deriving from reuse Reuse of props materials Paper-based communications	Points
C2 C3 C4 CRI CRI D1 D2 D2 D3 D4	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering) TERION D: MATERIALS SELECTION TCertified suppliers and products Recyclable materials or materials deriving from reuse Reuse of props materials	Point
C2 C3 C4 CRI CRI D1 D2 D2 D3 D4	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering) TERION D: MATERIALS SELECTION TCertified suppliers and products Recyclable materials or materials deriving from reuse Reuse of props materials Paper-based communications	Points
C2 C3 C4 CCRI CCRI CCRI CCRI	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 2 points compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering) TERION D: MATERIALS SELECTION TCertified suppliers and products Recyclable materials or materials deriving from reuse Reuse of props materials Paper-based communications TERION E: WASTE MANAGEMENT Waste differentiation	max 2
C2 C3 C4 CCRI CCRI CCRI CCRI	Meals provision Reusable or compostable tableware reusable: 2 points compostable and reusable: 2 points compostable and reusable: 1 point Ecoristorazione Trentino (Trentino Ecocatering) TERION D: MATERIALS SELECTION TCertified suppliers and products Recyclable materials or materials deriving from reuse Reuse of props materials Paper-based communications TERION E: WASTE MANAGEMENT	Points

	Duration	Duration of the shooting in Trenting		
	≥ 4 weeks	3 weeks	< 3 weeks	
Green points	Extra evaluation points			
20-24	1	0	0	
25-29	2	1	0	
30-34	3	2	1	
35-39	4	3	2	
40-44	5	4	3	
45-49	5	5	4	
50	5	5	5	

Accrued green points are then converted according to the following conversion table into extra points for the evaluation.

For example, a production company shooting in Trentino for three weeks, which declares its intention to adopt sustainable measures (for which it is granted 36 green points), will be granted 3 extra points. Extra points may then result in additional financial support.



During production, the production company will work closely with APPA (Agenzia per la Protezione dell'Ambiente), an independent local environmental agency that will verify the company's performance with respect to the green measures it has been undertaken.

At the end of the shoot, APPA will award the film with a T-Green Film certification, at which time the Trentino Film Fund will then release its financial support.

GREEN REWARDS, GUIDELINES AND CERTIFICATION

WALES - UNITED KINGDOM

Ffilm Cymru Wales is committed to cultivating an environmentally, socially, and economically sustainable film sector as expressed in the new guidelines that encourage applicants to consider a sustainable approach to filmmaking. Wherever possible, the film fund will support the use of local talent, services and facilities, including a requirement to take on trainees for all supported productions. These measures will help reduce the carbon impact of productions and improve the sustainability of local businesses.



Due to the many international co-productions that are supported by Ffilm Cymru Wales, the international cast, crew and services are encouraged to work responsibly to limit carbon emissions due to excessive travel by using local expertise and talent.

Ffilm Cymru Wales suggests the following:

- At the application stage, consideration must be given to the environmental, social, and economic impact;
- Obtaining carbon literacy through training, case studies, and interactive tools such as wearealbert.org
- The use of local services, crew, and talent.

www.ffilmcymruwales.com/index.php/en/film-makers/production-support-for-film-makers

VIENNA - AUSTRIA

In January 2017, Austria launched a green producing label for film/ TV productions. It acted on the European Ecolabel policy for environmentally friendly products and services which had already been introduced twenty-five years ago. The ecolabel for film is awarded to a specific production instead of a production company. A key requirement is hiring a green producing consultant to oversee all the sustainability measures undertaken by crew members. In order to reduce the carbon footprint of the production, climate-neutral transportation is a key

issue. Eco-friendly mobility measures include public transportation and carpooling. The production office and other departments such as set design, costumes, and catering must utilize environmentally friendly materials, sustainably produced products, and a program of waste management and recycling. Thanks to the explicit communication of green goals, carbon emissions may then be calculated and reduced.

FFHSH - GERMANY

With the introduction of the Green Shooting Card, the FFHSH created a green brand of approval for sustainable productions in 2012. The green label may be awarded to any film/TV format that is sustainably-produced in Germany. The Green Shooting Card is awarded to productions that successfully manage their resources



REWARDS

REWARDS



and lower their energy consumption in at least four of six categories: production office, catering, set and production design, camera and lighting, transportation, and mobility. The productions may also choose to deliver a carbon footprint. Meanwhile, the FFHSH has awarded its 100th Green Shooting Card, which is issued to productions ranging from feature films, TV movies/series, 3D films, animated films, entertainment shows, shorts, and student films throughout Germany. Certified by the environmental authority of the City of Hamburg, the Green Shooting Card is awarded to productions that have demonstrated their adherence to sustainable production methods.

FLANDERS - BELGIUM

An e-Mission label was developed and introduced in autumn of 2015. The e-Mission label guarantees that both efforts have been made and that results have been obtained in the reduction of energy usage, waste, as well as of the total carbon footprint during the production of a film or TV serial. As of now, eight productions – five feature films and three serials – have been awarded an e-Mission label because they reduced the environmental impact of their productions.

An e-Mission label is not mandatory and it may be requested along with the carbon calculator. Points are awarded for the implementation of different measures during production.

In 2017, the guidelines for obtaining an e-Mission label were revised. Now a production must score at least 45 to 70 points in order to be awarded an e-Mission label. Sixty-four points may be earned simply by implementing different categories of green measures during production in the areas of transportation, energy, catering, waste management, materials recycling, and post-production. Another six points are awarded to the carbon footprint category if the footprints falls below the average – compared



The Flemish children's film Cloudboy

VAF regulations state:

'Flanders Audiovisual Fund developed a methodology, a set of tools and a carbon calculator, that supports film producers and crews in the transition towards more sustainable production methods. When production support is granted to a fiction feature, the producer commits to participation in a coaching trajectory as well as to reducing the ecological impact of the supported film production.'

Participating in coaching sessions, making efforts to use approved sustainable methods, and delivering a completed carbon calculator are required in order to receive the final installment (10% of the total amount) of production support.



TRENTINO - ITALY

The Trentino Film Fund issues T-Green Film certification to film and TV Productions. Certifying environmentally friendly practices, in addition to providing financial incentives, are significant benefits that will surely be followed by other regional funds.

The criteria considered for T-Green Film certification are as follows:

- Energy conservation: To ensure a significant reduction in the film/TV production's environmental impact which limits, to the extent it is possible to do so, pollutive emissions as well as wastage of energy resources. These requirements are: the exclusive use of electrical energy as supplied through tie-ins to the electrical distribution grid; and the use of Euro 5 generators, renewable energy sources, and LED lighting.
- Transportation and accommodations: To reduce pollutive emissions resulting from transportation via combustion engine vehicles through rational alternatives, which involve the use of Euro 5, methane or LPG vehicles, as well as the selection of certified accommodations within a 10 km radius of the set.
- Catering: To providing crew members with nutritional meals that respect the environment by reducing, to the extent possible, waste from catering operations and CO₂ emissions originating from environmentally and/or economically costly choices. The requirements include: the elimination of the use of plastic water bottles and plastic cups, and the use of local water along with drinking flasks; catering must avoid the use of plastic or paper boxes in favor of either a self-service buffet or nearby restaurants; the use of reusable or compostable tableware and the use of catering companies that adhere to Trentino's Ecoristorazione initiative.
- Materials selection: The requirements
 are: the use of non-toxic materials that
 respect the environment; the avoidance
 of waste by finding efficient solutions for
 recycling; the choice of certified suppliers and
 products as well as the use of recycled materials;
 the recycling of set materials; and the reduction of
 the use of paper to a minimum.

- Waste management: During the entire course of filming, the production must ensure proper waste management and give priority to the recovery and recycling of materials as opposed to their disposal. These actions presume on-set waste separation.
- Communications: Communication linked to the film production must allow for the adoption of best practices in relation to sustainability. These initiatives include: the press-kit, documents illustrating the execution of sustainability measures; and the production of a trailer/clip outlining environmentally sustainable practices.

The certification is granted through a collaboration between Trentino Film Fund and APPA (see *Collaborations and Partnerships*), and it is awarded together with additional support that rewards environmentally friendly production. (See *Incentives/Support of Green Measures* for details)





SUSTAINABLE SUPPLIES

TOOLS



GREEN GUIDE WITH INFORMATION ON SUSTAINABLE SUPPLIES

FFHSH - GERMANY

The FFHSH developed a Green Production Guide, which lists sustainable service providers, suppliers, and organizations that are instrumental for successful green productions. The Green Production Guide is updated on a permanent basis and will be available online at: www.ffhsh.de/en/film_commission/gruener_drehpass.php

FLANDERS - BELGIUM

VAF foresees expanding the e-Mission label to include suppliers who work sustainably or provide sustainable products and services. Companies that supply lighting equipment, generators, rental vehicles, post-production services, catering, as well as certain professionals – as in the case of location managers or DoPs – may be granted e-Mission certification.

ECOPROD - FRANCE

An online catalogue of sustainable supplies, as suggested by Ecoprod guidelines, is being planned.

SARDEGNA - ITALY

The Sardegna Film Commission Foundation built a database of contact information for sustainable supplies as well as suppliers and companies that offer products with eco labels and green services, including, of course, renewable energy. The database is updated monthly. The Foundation provides to applicants and, upon request, to other interested parties the Sardegna Green Set Protocol guidelines as well as lists of sustainable supplies.



TOOLS FOR SUSTAINABLE PRODUCTIONS

LONDON - UNITED KINGDOM

Digitise your office - Sargent-Disc DPO is a cloud-based system for the electronic creation, approval, and distribution of purchase orders (POs). DPO replaces paper POs and physical distribution. The application is part of the Digital Production Office initiative launched by Sargent-Disc Ltd.



Digital Production Office

The albert carbon calculator estimates that DPO can save 49 g of CO₂ per PO, which translates to 50 kg for an independent film, and to 350 kg for a studio picture, with very large productions saving nearly a ton of CO₂, due in part to DPO's use of carbon-neutral servers. In the past, paper POs would have to be printed in five different colors and either mailed or faxed/ emailed, and then printed by the recipient for distribution. DPO avoids this entirely. The productions of Iron Sky: The Coming Race and Game of Thrones found that DPO saves time, streamlines processes and delivers environmental benefits: real savings on paper, color toner, postage and transportation.

FFHSH - GERMANY

Ever since the launch of its sustainability program, the FFHSH has been raising awareness of the need for green film production. The Film Commission Hamburg Schleswig-Holstein (FCHSH) developed a green checklist tailored for each department of a film production.

The FFHSH also supports the German/English-language magazine Green Film Shooting, which covers sustainable film and media production in Germany as well as abroad. The FFHSH and Green Film Shooting furthermore co-host a panel discussion on green film production at the Berlin International Film Festival each year. In 2016, their collaboration deepened when they initiated the first Sustainability Production Workshop in Hamburg, which brought together representatives from film organizations, funds, broadcasters, and production companies from six European countries.

FLANDERS - BELGIUM

In 2017, the carbon calculator was revised along with the e-Mission label in conjunction with the release of a new brochure. The application of measures monitored by the calculator align with those presented in the brochure and by the e-Mission label.

Additional tools have been developed to calculate ecological as well as economic turning points to aid basic decision-making during

- The first tool determines at what point during the production it becomes desirable to have the crew stay in a hotel near the set versus having the crew drive home. This figure is arrived at by taking both carbon-footprint and budget factors into consideration.
- The second tool determines at what point during the production it becomes desirable to rent a hybrid versus a traditional combustion engine automobile. This figure is also arrived at by taking both carbon-emission and budget factors into consideration.
- The third tool was designed to calculate fuel consumption, total energy costs, and carbon emissions produced by diesel generators. These statistics are based on a generator's total power output, its average number of in-use hours per day, and the number of in-use days.

ECOPROD - FRANCE

The Ecoprod group has made its online resource center available at www.ecoprod.com.

The resources available for sustainable production include:

- Posters designed to facilitate on-site waste sorting as well as to demonstrate and sustain morale and eco-commitment during shooting; and
- Best practices fact sheets for each workstation. They're all available online and are updated regularly. During the past two years, Ecoprod has edited three new best-practice fact sheets focusing on the set, lighting, and workflow.

SARDEGNA - ITALY

The smart solutions for sustainable productions that the FSFC is suggesting include consultation, creative producing strategies, and networking with local entrepreneurs and investors.

All productions that institute the Sardegna Green Set Protocol receive from the Foundation complementary reusable water bottles to avoid water wastage as well as the excessive use of plastic on set; and they also receive complimentary portable ashtrays to prevent litter from cigarette butts in the environment.

CARBON CALCULATOR

POST-PRODUCTION

CARBON CALCULATOR

LONDON - UNITED KINGDOM

The number of film-specific carbon calculators available online has risen sharply over the past five years as interest in sustainable film production has increased. These tools will calculate the precise weight of carbon emitted by a production. Production staff input data into the calculator according to various production activities, e.g. energy used in studios, fuel for generators, travel, and materials used. The calculator will define the specific overall tonnage of carbon emitted in physical production and during post-production.

The carbon calculator then produces a series of charts showing the resulting carbon impact. This provides a benchmark for the production, so the next time a program episode or film is shot there is a level of achievement for them to beat. The production receives its carbon calculations in some of the following ways:

- 1) the total amount of CO₂ emitted over the course of production;
- 2) the amount of CO_2 emitted per £100k of budget; and,
- 3) CO₂ per production hour, a critical figure.

For example, a TV series or continuous drama can chart its perfomance from season to season. It's key that all stakeholders be engaged in the process to make the carbon tonnage of emissions as low as possible, so all crew, cast, and supply chain personnel should be aware of the measures introduced to help make the shoot more sustainable. This effort needs everyone on board to make it a success.

There are many examples of organizations that offer the use of a carbon calculator, including Ecoprod, Greenshoot, albert, and PGA Green. Unsurprisingly, as the number of carbon calculation tools increases, awareness likewise spreads and more productions adopt sustainable practices, which leads to the ultimate goal of a carbon-neutral audiovisual production industry.

The partners in the Green Screen (EU) project (see below) will carry out a comparative analysis of existing carbon calculators as part of the development of a European evidence base, and they will make recommendations on the use of appropriate CO₂ measurement tools in different settings. (See *Collaborations and Partnerships*)



FLANDERS - BELGIUM

A carbon calculator has been developed for the Flanders' film industry. With this Excel tool, carbon emissions can be calculated for the following sectors: transportation; energy use on set and at the production office; waste; catering; hotels; materials; and post-production.

The Excel tool was chosen as opposed to an online one because it's easier to revise the template of the calculator on an as-needed basis. Since producers are familiar with Excel, they can keep track of carbon emissions throughout the production. The calculator may thus be used to define the scope of sustainable efforts as well as to make production choices. The calculator is important for measuring and evaluating the implementation of green measures, which then enables producers to determine the amount of reduction in the carbon footprint. The carbon footprint results may then be compared to the combined average of Flemish productions and to similar productions.

ECOPROD - FRANCE

The Ecoprod group developed the first carbon-footprint calculator dedicated to broadcast productions: Carbon'Clap. Based on the "Bilan Carbone@" methodology developed by ADEME (the French environmental and energy management agency), Carbon'Clap is an easy-to-use tool adapted to monitor fixed factors in the production process. A film or TV production's carbon footprint may be determined by using quantitative data on crew travel, electricity consumption, and equipment rental. Users complete a form detailing the production process: location, transportation, the number of shooting days, etc. After having obtained the Carbon'Clap results, the production crew may then take reduction initiatives during the production process.

The calculator is available online free of charge. More than 400 Carbon'Clap appraisals have been made since 2010. For example, shooting a fiction feature film in France produces 200 tons of CO₂; the average one-hour TV program produces twelve tons of CO₂.

In 2016, the Ecoprod group released a new version of Carbon'Clap and reevaluated the impact of post-production (including VFX, 3D, etc.), which has grown more significant in the production process.

MFG - GERMANY

The Film Fund Baden-Württemberg offer producers a complimentary carbon calculator so that they can monitor carbon emissions generated during production. The carbon calculator enables producers to track emissions that result from power consumption, heating, mobility, and hotel bookings as well as from catering and set design. Developed in collaboration with German broadcaster SWR (Südwestrundfunk) and the Tübingen-based company KlimAktiv, the tool provides producers with data at all stages of production so that they can reduce future carbon emissions.

SARDEGNA - ITALY

The Sardegna Film Commission Foundation, in collaboration with regional government agencies as well as with the Sardinian Environmental Agency, is developing a carbon calculator as part of the Governance and Public Policy (GPP) recognition process.

GREEN POST-PRODUCTION

ECOPROD - FRANCE

In January 2017, a round table discussion on sustainable development and digital technology called "How to include sustainable development in digital creation" was organized for the Paris Images Digital Summit. Launched by the Île-de-France Film Commission, the Paris Images Digital Summit brought together visual artists and VFX designers from around the world to speak about the latest trends and innovations in CGI, motion-capture, 3-D, and disruptive technologies in film, TV, and media. It was the start of an effort to promote green best practices to support the post-production sector, which is getting larger and is using a great deal of energy, to make the transition to sustainability. Electrical consumption (e.g., computer operations and heating/cooling systems) is a key challenge for the industry as well as for

the environment. The animation production company TeamTO has been adhering to sustainable production methods with best practices (renewables, waste management, and energy-efficient equipment) since its founding in 2008. Innovation is playing a role in green IT, as is the case with the Stimergy system, which collects heat from data centers, which it then transmits to provide heating for public as well as residential buildings.

SARDEGNA - ITALY

The Sardegna Film Commission Foundation treated the subject of green post-production in its Green Film Shooting Protocol. Its goal was specifically to target animation and video game projects because of their intense power consumption.



BROADCASTERS AND STUDIOS

BROADCASTERS AND STUDIOS

COLLABORATION WITH BROADCASTERS AND STUDIOS

FFHSH - GERMANY

Ever since the long-running TV series *Großstadtrevier* was awarded a Green Shooting Card in 2012, sustainable production snowballed at Studio Hamburg, one of the largest film/TV studios in Germany. Green expertise helped to further refine the greening of: the TV series Notruf Hafenkante and The Peppercorns; the feature films Simple and The Peppercorns.

With the TV game show *The Quiz Champion*, Studio Hamburg subsidiary Riverside Entertainment introduced sustainable production to entertainment television. The program, which is produced at studio G in Berlin Adlershof, was the first German TV show to be awarded the Green Shooting Card. Due to its high consumption of energy and materials, The Quiz Champion was not by nature a green production. But multifaceted measures were taken in studio production to save resources: carpooling; the use of porcelain instead of plastic plates and cups in the catering department; locally-sourced food; and regional water in returnable bottles. Waste management was also optimized.

In order to avoid creating trash, the production furnished its offices with rented, as well as with second-hand, furniture. The set decorations and props are solid, reusable components which are stored near the studio, while rented LED displays are returned to the rental house after the show.

In order to reduce the carbon footprint, renewable energy is being used, and solar panels on the roof of the studio generate power that is absorbed into the city's power grid. In fact, throughout Studio Berlin, the energy supply is going green. The heat supply comes from the municipality, 90% of which is generated by low-emission power-heat coupling, i. e., the simultaneous production of electricity and the utilization of "waste" heat for home/business environments. The show has been perspicaciously powered by clean energy. And the entire lighting system in the studio yard is also going to be upgraded with energy-efficient lamps. For TV producers, the show must go on – but in a climate-friendly fashion.

The Green Shooting Card label was also awarded to the Bavaria-Film-produced entertainment show Verstehen Sie Spaß?

FLANDERS - BELGIUM

A dialogue on sustainable filmmaking has been initiated with the regional Flemish public broadcaster VRT. In addition to acting as a co-producer for the serial Buck, which is supported by VAF, VRT is also implementing sustainable measures recommended by e-Mission. VAF provided coaching on sustainable filmmaking to Buck's producers and crew, which caught the attention of upper management at VRT because of the enthusiasm one of its in-house

If sustainable production methods can inspire a Flemish broadcaster, then these methods may be leveraged for the implementation of sustainable measures on a grander structural scale.





ECOPROD - FRANCE

The two principal French broadcasters, France Télévisions and TF1, are founding members of Ecoprod. They contributed their expertise to the development of Ecoprod's guidelines and Carbon'Clap.

In 2014, Ecoprod launched a Green Charter for audiovisual companies, which introduced sustainability to their operations. It's a progressive approach, which allows companies to improve the sustainability of their operations in a series of steps. Ecoprod consultants provide training sessions and follow-up support in setting up the Charter.

The Charter is a reference credential as well as identity branding for all companies in the film industry that are engaged in eco-responsible operations, which is one of the dimensions of CSR – Corporate Social Responsibility.

Since the Ecoprod Charter was launched, it has been signed by more than 100 members, including studios and suppliers.

MALLORCA - SPAIN

Palma Pictures, the main production company on the island, introduced a full sustainability program in 2009 for its shoots as well as for the management of its studio premises and equipment. It collaborated with the MFC on the implementation and extension of these measures.

SARDEGNA - ITALY

Doctor Pietro, which is set and shot in Sardinia and which features the Italian singer Gianni Morandi, is the first sustainably-produced Italian TV series. The successful TV production company Lux Vide, which gained worldwide acclaim with the sale of its Bible Series to 140 countries, chose to shot the series on the Island of Carloforte, Sardinia. The celebrated company subsequently became an advocate of green protocols in the Italian TV industry. The advertising campaign for the TV series features, as part of its marketing strategy, the greening of the set as well as adopting financially and ecologically sustainable production methods.

Lux Vide's efforts inspired other broadcasters. Meanwhile, RAI and SkyArte are also developing series that are expected to be sustainably produced.



GREEN PRODUCTIONS

GREEN PRODUCTIONS

GREEN PRODUCTIONS

LONDON - UNITED KINGDOM

City of Tiny Lights and The Dark Mile are two of the 51 UK productions managed under the Green Screen environmental program, a collaboration between Film London and Greenshoot

City of Tiny Lights

Film noir thriller City of Tiny Lights, directed by Pete Travis and starring Riz Ahmed, tested the application of British standard BS 8909 for sustainability management systems (SMS) during its six-week production filming in and around London in 2015. The production measured its social, environmental and economic impact in crew education, energy reduction, supply chain management, locations, travel planning, recycling, and digital office management and reporting.

Producer Rebecca O'Brien and line producer Eimear McMahon encouraged a high level of engagement from all crew. Claire Anderson, the costume designer, used cold water to wash costumes as well as reusable bags, hangers, and water bottles.

Transportation formed an important part of the framework. The crew used London public transport, which significantly reduced automobile commuting. Key learning points included the use of photos to assist in correct recycling as well as understanding the need to appoint a green runner as point person for the initiative.

The Dark Mile

Thriller The Dark Mile, a Bridge Films production, was filmed in the Scottish Highlands. It followed particularly stringent sustainable measures, including a full waste recycling program, unprecedented for previous productions in the Highlands.

As a result, The Dark Mile production was the first to be granted access to shoot scenes in a Site of Special Scientific Interest (SSSI) as well as in ancient woodlands. Waste was transported off-site by river for 60% of location work, which reduced carbon emissions as well as the need for vehicle access to locations. Crew members also shared travel to work when practical. The lighting team invested in LEDs. Water

management became a major issue because the cost of providing water bottles for filming in remote locations was significant. Crew education in environmental best practices and climate change formed an important part of the program. The producers also adopted digital office practices to reduce paper waste, protect IP, and generally operate more efficiently.

VIENNA - AUSTRIA

The Austrian urban crime story Höhenstraße directed by David Schalko was the first film/TV production that was awarded the Austrian Ecolabel. Produced by Superfilm in cooperation with Austrian broadcaster ORF, and supported by the Filmfonds Wien as well as by the TV Fund of Austria, it was the actual production company in this case that urged the development of an Ecolabel for film/TV production. During the production process, the company was advised by the Vienna-based ÖkoBusinessPlan, a green consulting company. Superfilm was awarded the Ecolabel for environmentally friendly measures undertaken across several

Whenever available light was an option, the gaffer used a reflector system that required no electrical power. Further activities included carpooling as well as the use of organic and regional food from local farmers and the use of reusable cups by the catering department in a larger program of waste management.

> The impact of not using 200 – 300 plastic cups on a daily basis contributed to a tremendous reduction in the amount of garbage. Instead of four-to-seven bags of garbage per day, the daily average was reduced to only one.

> > In total, the production saved 25,000 liters of waste, 2,000 liters of diesel oil, and 3,000 plastic



The travel budget was cut by 20% thanks to fewer flights taken by actors, so total carbon emissions ended up being cut by 70%.

For all these sustainable efforts, Höhenstraße was awarded the first green label for film/TV production in Austria.

FILM VÄST – SWEDEN

Zentropa Sweden began developing general environmental strategies applicable to film production. During the shooting of the web-series *Hashtag*, various environmental efforts were undertaken. The production team discovered that these efforts not only had a positive effect on the environment, but that they also had a positive impact on the over-all production. The increased efficiency actually gave the crew more time for filming. Thanks to the choice of organic and vegetarian catering, the crew was healthier. The food was mostly vegan, but the crew loved it even though many of them include meat in their daily diet. Most surprising was that the crew did not complain about the menu, of which it had been advised beforehand.

All the actors and most of the crew members took public transportation. The crew members who relied on automobiles carpooled. The production also minimized travel time by choosing locations in surrounding neighborhoods.

Since Hashtag was a rather modest production, the film was shot documentary-style with available light. This decision was not simply a budgetary matter; it was also a choice to take responsibility for the environment.

The location manager, production manager, and production assistant worked out a plan for on-set waste management. The production assistant's schedule included a visit to the recycling center. Additionally, on-location waste was reduced by providing the crew with re-usable water bottles and coffee cups. Food was served on porcelain plates that were purchased at second-hand stores. The production avoided plastic of all kinds. Every department and each location had a fully realized waste management plan.

The act of communicating environmentally friendly measures improves them. When a production kicks off, a "Welcome to Zentropa" package informs the crew of green measures. According to Zentropa's environmental policy, better results are obtained when the crew discusses their environmental values and when each member is recruited to do their job in an environmentally responsible manner.

FFHSH - GERMANY

Thanks to the Green Shooting Card, the number of sustainably produced films and projects in Germany has kept growing since German comedy star Michael "Bully" Herbig's sustainably produced action comedy Buddy. Co-produced by Warner Bros, Buddy was the first

produced web series Hashtag German feature film that implemented the FFHSH's Best Practice Guide. A sustainability consultant was already involved in the planning of the production and a calculator was used to determine the carbon footprint left by the *Buddy* production. Theatrical feature films that were also sustainably produced include the tragicomedy Schrotten, the international co-production Antboy 3, and the coming-of-age comedy Simple. At Studio Hamburg, long-running TV series such as Großstadtrevier, Notruf Hafenkante and the children's adventure series The Peppercorns all went green. German broadcaster ZDF has also been greening The Quiz Champion.



Thanks to their collaboration with the Hamburg Media School (HMS), student filmmakers are already being instructed in sustainable production at the initial stage of their careers. HMS alumnus Ilker Çatak followed the best practices when he was shooting his debut feature Once upon a Time in Indians Country.

The most famous green German film is In the Fade by Hamburgbased writer/director Fatih Akin, which is premiering in Competition at the 2017 Cannes Film Festival. Staring Hollywood actress Diane Kruger, the film was shot on location in Hamburg where it was awarded the Green Shooting Card.

GREEN PRODUCTIONS

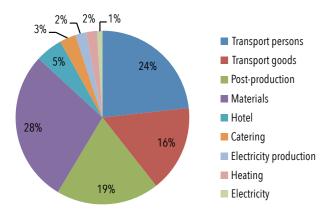
GREEN PRODUCTIONS



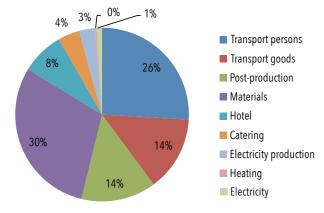
FLANDERS - BELGIUM

For the September 2013 – December 2016 period, forty feature films and nineteen TV-drama/series from thirty different production companies signed on to e-Mission. These projects either have been coached or are now in the process of being coached.

The carbon footprint of these productions is being tracked. A total of twenty-four calculators for feature films and serials have been submitted.



The initial data shows promising results. The average carbon emissions of these films, as indicated by e-Mission's data from the developmental phase, amounted to 83 tons per film; films produced in 2015 and 2016 averaged 73 tons of carbon emissions per film.



For TV serials, however, there was no baseline measurement. TV serials produced in 2015 and 2016 averaged 73 tons of carbon emissions per episode.

ECOPROD - FRANCE

The three-minute campaign film Biocoop – La Campagne Eco responsable was made by Jason Freites (2016), who not only promotes sustainable production but also practices green shooting behind the camera. The green measures he takes include using a bicycle-driven generator, relying on locally-sourced food, shooting with average for the source of the shooting with a so

generator, relying on locallysourced food, shooting with available light, using train transportation, eco-printing for advertising posters, and accommodating film crews in eco-certified hotels.

MALLORCA - SPAIN

Palma Pictures, a Mallorca-based production company for film, TV, and photography in Spain, is also committed to social responsibility. Palma Pictures works on a daily basis with crew members, clients, and suppliers to create a more sustainable approach to high-quality film production. Each year since 2010, Palma Pictures has been awarded an ISO 14001 & EMAS certification for environmentally friendly practices. Its actions include: a company-sponsored Environment Day; meatless Fridays; reusable water bottles; the donation of leftover food; re-use of props and set pieces; and waste management. The office recycles paper, printer cartridges, and beverage cans while the on-set catering company separates food packaging and beverage cans from general waste.

The lighting department keeps old polystyrene reflectors and sends them to a local plant for re-use as construction materials. Palma Pictures uses an authorized waste disposal company to cart hazardous waste (automobile mufflers, batteries, and electronics) and dispose of them correctly.

In collaboration with one of their main wardrobe specialists, Palma Pictures started a costume rental house in Mallorca to avoid unnecessary expense and waste. After each shoot, unwanted items are donated to the store. Subsequent shoots are charged a small flat fee to borrow as many items as they need to costume their cast.

The company's goal is to minimize its environmental footprint, to create a great workplace for employees and clients, and to promote diversity within the company.

SARDEGNA - ITALY

Thanks to the HEROES 20.20.20. Project, the FSFC has launched about forty short films and web-series pilot episodes that were not only sustainably-produced but were also following green storytelling approaches by promoting sustainability and renewable energy to Sardinia's citizens. Each of these productions implemented the Green Film Shooting Protocol. Thanks to the success of this program, this format will be further developed.

Also produced under the aegis of the HEROES 20.20.20. Project is Italian Producer Alessandro Bonifazi's web series *Ta Spantu*, directed by Pierluca Di Pasquale and produced by Bonifazi's company Blue Film. *Ta Spantu*, which was produced in adherence to green requirements, is raising the public's awareness of sustainable behavior. The production was committed to using natural resources responsibly. The measures taken included: the reduction of waste and energy consumption; the use of renewables; and sustainable transportation. The crew tied into electric power from the grid instead of using generators. The crew also used LED lamps, electric and/or hybrid cars, and relied on local and seasonal products for catering.

For Mommotty Productions, participating in the HEROES 20.20.20 Project gave them an opportunity to get green know-how. Meanwhile, the company provides line-producer services for sustainably-produced video clips by popular bands such as Placebo, which shot its music video *Jesus' Son* on Sardinia's stunning beaches.

The green film projects coming out of Sardinia are establishing an international reputation. The animated short film *Strollica* by Peter Mercias premiered at the 2017 Cannes Film Festival, where it was presented at the Short Film Corner.



Italian director Gianfranco Cabiddu also followed green guidelines when he shot *La Stoffa dei Sogni (The Stuff Of Dreams)* on the island Asinara, part of Arcipelago Protected Marine National Park.

Another project under the aegis of HEROES 20.20.20. is the documentary web series *We Will*, which is going to be presented at the EXPO 2017 in Astana, Kazakhstan. *We Will* portrays heroes of the green economy.



Last, but not least, the award-winning Italian Director Laura Bispuri, who received the Nora Ephron Prize for her drama *Sworn Virgin* at the 2015 Tribeca Film Festival, will follow the Green Film Shooting Protocol for her new feature film *Figlia mia* (*Daughter of Mine*) which she is planning to shoot in Sardinia.

2014

• The Stuff of Dreams by Gianfranco Cabiddu, produced by Paco Cinematografica (comedy-drama)

HEROES 20.20.20. Projects:

- Everything in Its Right Place by Paolo Zucca (web-series pilot)
- Urban Bike Messengers by Marilisa Piga (short film)
- You Are Our Hero by Michela Anedda (animated short film)
- Domus by Salvo Nicotra (docu-fiction)
- The Right Move by Davide Melis & Emanuel Cossu (short film)
- Little Great Heroes by Giorgia Soi (short film)
- My Dog Is Called Wind by Peter Marcias (animation short film)

at the Short Film Corner



GREEN PRODUCTIONS

COLLABORATIONS

2015

HEROES 20.20.20. Projects:

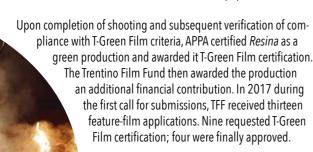
- Amazing! by Pierluca di Pasquale (web-series pilot)
- Sheepfolds by Tomaso Mannoni (web-series pilot)
- Sardegna 20.20.20. by Davide Mocci (docu-fiction)
- New Era by Manuele Trullu (web-series pilot)
- The Life in Green by Joe Bastardi (web-series pilot)
- Sardinia Green Trip by Andrea Mura (web-series pilot)
- H.O.m.E by Gianni Cesaraccio and Fabio Donatini (web-series pilot)
- Green Route by Silvia Perra (short film)
- City of Eden by Gemma Lynch (web-series pilot)
- The Bus by Giovanni Columbu (short film)
- My Splatter Green Life by Joe Bastardi (web-series pilot)
- Hansel & Gretel the Green Brothers by Matteo Incollu (short film)
- For Piccina... by Andrea Assorgia (web-series pilot)
- Toward the Future by Manuele Trullu (short film)
- Await by Nicola Contini (short film)
- Nurakman and the Adventurous Energy Sources by Alessandro Madeddu (web-series pilot)
- Green Power Gym by Andrea Vacca (short film)
- Wind Raver by Luciano Curreli (short film)
- The Color of Energy by Gemma Lynch (short film)
- Could Be! by Jacopo Cullin (short film)
- I Love Bike Sharing! by Paolo Zucca (short film)
- The Windy Little Witch by Peter Marcias (animated short film)
- Straw by Claudio Marceddu (docu-fiction)
- Civitas Solis by Emanuel Cossu (short film)

2016

- Doctor Pietro with Gianni Morandi, a Mediaset TV series produced by Lux Vide
- Kentannos by Victor Cruz, prod. by Kino Produzioni (docu)

2017

- Noise by Nicola Telesca, produced by Gagarin (drama)
- Twin Flower by Laura Luchetti, prod. by Picture Show (drama)
- Daughter of Mine by Laura Bispuri, prod. by Vivo film (drama)
- Women Shepherds by Anna Kauber, prod. by Solares (docu)
- Red Slime by Alberto Diana, prod. by Slingshot Film (drama)
- Looking for the Elixir by Monica Dovarc, produced by Il circolo della confusione (documentary)



TRENTINO - ITALY

Resina, a feature film produced by OneArt Produzioni, directed by Renzo Carbonera and shot entirely in Trentino in 2016, was the first project to adopt green measures. It served as a bench test for the T-Green Film rating system and its evaluation procedures.



Resina had a five-week shooting schedule. The production successfully implemented many of the measures described in the T-Green rating system. For example, during the shoot, all electrical equipment was powered exclusively by renewable energy from the power grid (without the use of generators). LED projectors were preferred. The crew was accommodated at hotels within walking distance of the sets, and e-bikes acted as the principal means of transportation for crew members. Euro 5 certified vehicles transported equipment. Drinking water was supplied in reusable flasks instead of disposable plastic bottles. Meals were served at local restaurants, while porcelain dishes and cups were used for on-set food deliveries. All communications on set were delivered via e-mail, which limited the use of paper.

COLLABORATIONS AND PARTNERSHIPS

WALES - UNITED KINGDOM

Ffilm Cymru Wales started a new training program called *Foot* in the Door, which is intended to recruit new entrants to the film industry from economically deprived areas in order to achieve inclusivity as well as to add new crew members to the labor pool.

By working in partnership with local community service organizations, the local Housing Associations in particular, Ffilm Cymru Wales was able to offer transportation, childcare, and training that allows new entrants from economically underdeveloped areas to access entry level positions in the creative industries, with a particular stress on transferable jobs - hairdressers, electricians, carpenters, administrators, photographers - which will enable the new entrants to work across a variety of creative industries (e.g. film, TV, advertising, theatre, dance, opera) in addition to opportunities for work that lies outside the creative industries (e.g., construction, health and beauty). Thus, the labor pool increases in any given region, which in turn reduces the need for travel and increases employment opportunities for these individuals across industries in their locals.

For further info, please see: www. ffilmcymruwales.com/index.php/en/ news-and-events/586-get-your-foot-inthe-door-of-the-film-industry (Working Title Films); Free Fire (Rook Films); and City of Tiny Lights (BBC Films).

Productions can easily register online in order to access resource guides, customized crew memos, and green tips tailored for each production department. Once a production achieves its environmental goals, it is awarded the official Green Screen stamp, which it may feature in the closing credits, as well as other promotional materials to promote its green credentials.

Each Green Screen production helps to make UK screen industries more sustainable and cost-efficient through reduced waste and energy consumption.

Green Screen has also been adopted by advertising shoots, such as Lloyd's

Bank "A New
Dawn". By using
minibuses and
vans instead of
cars to transport
80 – 90 crew
members daily
between locations, hotels and
base, they reduced
CO₂ emissions by
85%.

Film London has now made participation in Green Screen a requirement for productions funded through its London Calling and Microwave programs, which help

emerging filmmakers learn about sustainable production and put these green techniques into practice, www.green-screen.org.uk

Green Screen (EU) – promoting sustainable practice across Europe Green Screen (EU) is a partnership project linking eight EU regions that aims to reduce the carbon footprint of film and TV production across Europe by improving policies and practice at the regional level. Funded by Interreg Europe, Green Screen (EU) is seeking to standardize green production practices and influence regional policies to encourage and equip the current and future workforce to adopt sustainable practices and thus reduce CO₂ emissions.

Led by Film London, the project builds on its Green Screen collaboration in the UK with the sustainability consultancy Greenshoot,



the UK.

Green Screen - UK collaboration by Film London and Greenshoot Green Screen is an online tool to help producers and crew reduce the environmental impacts of their productions. A collaboration between Film London and sustainability consultancy Greenshoot, the initiative originated with a 2009 policy report on sustainable practice in London's film and TV industry. It resulted in launching Green Screen as an online platform in 2015 www.green-screen. org.uk. Piloted in London, it is now available to productions across

The platform enables productions to set their own environmental targets and gives them an action plan to help achieve their goals. Productions that have already been awarded a Green Screen stamp include: *The Crown* (Netflix); *The Theory of Everything*

The green minoring





COLLABORATIONS

COLLABORATIONS



which is working at a grassroots level with producers and crews to improve sustainable practices.

Partners in the European Green Screen project have significant experience in supporting film and TV production in their respective regions. They include: the Municipality of Ystad (Sweden); Promálaga, the Municipal Company of Initiatives and Activities of Málaga S.A. (Spain); Bucharest-Ilfov Regional Development Agency (Romania); Flanders Audiovisual Fund (Belgium); Ile-de-France Film Commission (France); Rzeszow Regional Development Agency (Poland); and the Regional Development Agency Senec-Pezinok (Slovakia).

The Green Screen (EU) project runs for five years from 2017 to 2021. By collaborating across Europe, partners hope to share the best examples of policy and practice, learn from each other's experience, and shape policy in their respective regions to promote green production. Policy makers and producers interested in finding out more about Green Screen (EU) are welcome to contact Louise Vale, Project Co-ordinator at Film London louise.vale@filmlondon.org.uk. www.interregeurope.eu/greenscreen.

FILM VÄST – SWEDEN

In Sweden, waste management and recycling is a legal obligation. Companies and businesses must manage their waste and its disposal in an environmental friendly manner. Film productions in the Västra Götalands region are complying with these requirements whether they are shooting in the studio or on location.

Film Väst's facilities are equipped to sort packaging as well as household and other similar kinds of waste. Receptacles for larger waste items must be leased by each production. The fulfillment of sorting and recycling responsibilities is not supervised.

Productions, however, may leave unsorted waste but they are charged higher fees. Some building elements may be re-used during set construction in a studio. There are also local companies that recycle props.

FFHSH - GERMANY

Launched in 2013, the collaborative efforts for sustainability between the Filmförderung Hamburg Schleswig-Holstein (FF-HSH) and the Hamburg Media School (HMS) are a success story that has been adapted by other European regions. The model's approach is to train student filmmakers at an early stage of their careers to follow best practices. A green runner or eco consultant on the student film's production crew oversees the workflow and also acquires green sponsors for eco-friendly alternatives such as reusable bottles and props. The benefit of this green crash course at film schools is that filmmakers learn to integrate green practices into their workflow so that they automatically become "green natives". For HMS alumnus Ilker Çatak, who sustainably produced his debut feature *Once upon a Time in Indians Country*, eco-friendly production is the normal way of doing things.

The FFHSH is also participating in the City of Hamburg's ECOPROFIT (Ecological Project for Integrated Environmental Protection) Program. This public-private partnership model uses integrated environmental technologies to strengthen businesses economically and simultaneously to improve the local environment. ECOPROFIT addresses production companies as well as hospitals, hotels, service companies, and tradespeople with the goal of reducing the cost of processing waste and raw materials, as well as of reducing water and energy usage, thereby reducing the size of the carbon footprint these businesses make. After the first year, participating companies are audited for compliance and for environmental performance and programming.

In 2016, the City of Hamburg Senator for Environment and Energy presented the FFHSH with an award for its successful participation in the ECOPROFIT program. The film fund implemented a digital management system for film/TV production contracts, equipped its offices with LEDs, and organized various workshops and events on green film production. By participating in the ECOPROFIT program, the FFHSH set a positive example for others to follow. By replacing DVDs with web links for screenings, the use of 1,260 media units was avoided. Further measures include the development of a system and data

base for online applications, as well as for membership in car-sharing programs which avoid the use of company vehicles.

FLANDERS - BELGIUM

In order to tackle recurring problems with which productions are confronted, VAF collaborated with potential partners to find solutions designed to benefit the entire film industry. These solutions include hybrid car rentals, separate waste collection, rental of energy-efficient lighting units, and the use of biodiesel generators. Collaboration with these partners is optional.

In 2016, a variety of workshops were organized in conjunction with suppliers to provide information as well as solutions to issues involving lighting, energy usage, and production planning. In 2016, the five Flemish film schools forged an important partnership on sustainable production with VAF. The partnership's goal is to integrate and standardize methods of sustainable film production in the program curriculum of all five schools. The King Baudouin Foundation Fund for Sustainable Materials and Energy funded the two-year pilot program.

During the first and second years of the program, various information sessions on sustainable filmmaking were organized for senior students at all five schools. Next, students were expected to apply their acquired knowledge on the production of their own short films. Workshops were organized and set visits were made to coach the students through the process. The students were also encouraged to use checklists and carbon calculators.

The response has been stimulating. Students and teachers are enthusiastic about sustainable approaches. The subsequent sustainable production experience demonstrated the ease of producing sustainably, even when under the constraints of a limited production budget.

These synergies help create a sustainable audio-visual industry because today's students are tomorrow's filmmakers and production professionals. It's also more efficient to teach best practices from the start as opposed to unlearning unsustainable practices later. The project will end with the development of a curriculum guide on sustainable filmmaking. Teachers will receive training as well so they may transfer this body of knowledge to the next generation — today's students.

Contacts have been initiated with the cities

of Bruges, Ghent,

Ostend,

problems involving the waste collection and separation, energy supplies and usage, and the overnight stays of technical vehicles on location. These cities often serve as locations for Flemish films and TV dramas, but they also remain popular with foreign film and TV productions. Most of these cities have a local film office to provide support to large productions. These municipal film offices can partner with VAF to communicate approaches to sustainable filmmaking to producers and they can help film productions produce more sustainably by advising them on waste collection and separation, access to the power grid, and the avoidance of diesel generators.

Antwerp and Leuven on sustainable filmmaking to tackle different

ECOPROD - FRANCE

The Ecoprod group includes public and private broadcasters, production support structures, and government experts as well as the industry's pension fund. Membership is open to any new organization that is willing to adopt the group's working methods, which are governed by a partnership agreement.

- ADEME: the Agency for Environmental and Energy
 Management is a public entity, which is under the joint
 supervision of the Ministries of Ecology, Energy,
 Sustainable Development and Planning and Higher
 Education and Research, that supports industrial and
 commercial concerns.
- AUDIENS: the welfare group dedicated to the trades in broadcasting, communication, media, and entertainment aims to provide its membership with life-long support in the areas of healthcare, pensions, retirement, and complementary social action.
- Commission du Film d'Île-de-France: enhances the attractiveness of the Île-de-France region as a film location and promotes it as a privileged space for film and audiovisual production.
- The Centre National du Cinéma et de l'Image Animée (C.N.C.): The national film fund supports, regulates, negotiates, promotes, and distributes cinema in





COLLABORATIONS

COLLABORATIONS



- DIRRECTE IDF: The Regional Directorate for Industry, Research and Environment Île-de-France, together with the local office of the Ministry of Economy, Industry and Employment (MEIE), are dedicated to an economic development mission in the Paris region, which participates in the development of industrial and/or service industry SMEs.
- France Télévisions: As a public service broadcaster, France Televisions must set an example for businesses in maintaining their value through changing times by serving their audience. The channel, which has a longstanding commitment to sustainable development, broadcasts programs throughout the year that educate viewers on issues related to fair and sustainable development for all.
- Pôle Média du Grand Paris: a Northern Paris a nonprofit organization for the audiovisual and film industry that brings together enterprises, public authorities, academics, and researchers. The members cover all the activities of the digital media industry: cinema, television, cross-media marketing, CGI animation, and digital archiving, among others.
- TF1: is the premiere French television channel and market leader. TF1's activities cover the entire spectrum of activities from audiovisual television and film production to the distribution of DVDs and music CDs. TF1 also produces multimedia content and it also enjoys a presence in the pay-TV business with channels in France and abroad (Eurosport).

Ecoprod is also collaborating with the City of Paris as well as the French energy provider ERDF to equip frequently used film production locations with power from the electrical grid. In Paris, there are about 80 locations that are used on a permanent basis: the Eiffel Tower; the Arc de Triomphe; and the banks of the Seine. These locations are equipped with power grids so that crews don't have to use generators. Ecoprod is working closely with professional organizations (representing set managers, DoPs, line managers, and production managers) to get regular feedback on production organizations and regulations. Their expertise helps design green tools properly, and they play a key role in promoting green best practices among film crews.

The Ecoprod Collectif, in partnership with the Île-de-France Film Commission, is pleased to take part in the Green Screen project, which will continue and amplify the awareness-raising effort being conducted by the group since 2009. Green Screen is an Interreg-Europe funded partnership project working across eight EU regions to improve policies and achieve measurable success in reducing the carbon footprint of the film and TV industries. These industries, important contributors to the European economy, are a successful growth driver across Europe.

From 2010 to 2014, 7,769 feature films were produced in the EU. Five of the world's top ten markets for film production are



in Europe

(the UK,

France,

Spain,

Germany,

practices, and improve regional policies so that sustainable measures for producing films, TV, and audiovisual content may be adopted across Europe. Through Green Screen, participating regions will improve policies to motivate and equip the current and future workforce to adopt sustainable practices and thus reduce CO₂ emissions.

The Green Screen project runs from 2017 to 2021. Its partners include:

- Film London (UK) Lead Partner
- · Bucharest Ilfov Regional Development Agency (Romania)
- Flanders Audiovisual Fund (Belgium)
- Île-de-France Film Commission (France)
- Municipality of Ystad (Sweden)
- Municipal Company of Initiatives of Malaga S.A. -Promlaga (Spain)
- Rzeszow Regional Development Agency (Poland)
- Regional Development Agency Senec Pezinok (Slovakia)
- Greenshoot (UK) as advisory partner

The project is funded by the EU's Interreg Europe program through the European Regional Development Fund.

The Île-de-France Film Fund is a member of Cine-Regio organization, which institutionally links Ecoprod to the Regional Film Fund and enables its participation in the Cine-regio Green group.

MALLORCA - SPAIN

The Mallorca Island's Council and the Fundació Mallorca Turisme, the Balearic regional Government and its Ministries of Culture and Environment, and the Balearic Tourism Agency are together engaged in supporting an environmental friendly audiovisual sector. The Association of Audiovisual Producers of the Balearic Islands (APAIB), THE BASE Film and Photo Association, and The Association of Cineastes of the Balearic Islands (ACIB) are committed to the application of sustainable production methods. Measures will be taken to incentivize the introduction of green shooting practices.

SARDEGNA - ITALY

All the Sardegna Film Commission Foundation's various programs and projects are developed in collaboration with the EU as well as with Italian film commissions and funds that support green initiatives and cinema tourism. Partner organizations include: the Italian Ministries of Environment and Tourism; regional government agencies; NGOs; and cultural as well as arts-oriented associations involved in sustainability efforts. Further cooperative efforts consist of involving universities and research centers to direct their attention to local materials as well as to nature research, the national park system, and marine protected areas; involving the Italian National Association of Sustainable Tourism, the Italian Writers Guild, as well as various producers associations.

The Sardegna Film Commission Foundation works closely with regional government agencies as well as with universities and environmental NGOs. Thanks to the cooperation of the National Parks Service and the Marine Protected Areas in Sardinia, Italian director Gianfranco Cabiddu was able to shoot La Stoffa dei Sogni (The Stuff Of Dreams) on the environmental-protected island of

The Sardegna Film Foundation launched the HEROES 20.20.20. Project in collaboration with the Sardinian Regional Department of Industry, the Energy Service, and Sardegna Ricerche. Its goal is to promote eco-sustainable best practices at the local level by creating a new public awareness campaign to celebrate the "everyday heroes" of environmental sustainability. The approach consists of producing audiovisual projects that may be distributed across various platforms, including theatrical release, television, and the Internet.

The Foundation produced a detailed statistical report on the socio-economic impact of the HEROES 20.20.20. Project, which includes gender data analysis to determine the number of women professionals who were involved. The report was presented at The Aesthetic, Identity, and Cultural Industries of Local Cinema, an international conference organized by the University of Cagliari.

BRUSSELS - BELGIUM

The Screen.Brussels Fund and the Screen.Brussels Film Commission have joined forces to promote Brussels internationally as a great location for film shoots. They provide a service that assists producers with location permits, parking reservations, logistics support, set construction, and location scouting. In 2016, the Film Commission undertook a collaborative effort with Bruxelles propreté, the regional department of sanitation.

In order to ease the burden on crews for sorting waste, and for waste management in general, large-scale cinema and advertising productions may now benefit from free access to the two regional waste container parks. They may also schedule bulk pickups of waste from any location.

In order to avoid waste, the Film Commission also launched a reusable bottle program that distributed reusable drinking flasks to crew members. Since this program was launched in 2016, crew members are indeed using these light metal flasks, which they are even customizing.

In 2017, the sustainability program is going to continue its efforts with a set/decor recycling program as well as with an





GREEN CINEMA

CONCLUSION

TRENTINO - ITALY

The development of the T-Green Film rating system was made possible thanks to collaborative efforts with two local partners with extensive experience in environmental protection and sustainability.

APPA (Agenzia Provinciale per la Protezione dell'Ambiente) is the regional Environmental Protection Agency of Trentino. APPA collects and interprets environmental data with its technical-scientific consulting capabilities. It also performs on-site technical inspections. In recent years, APPA has gained vital experience in the creation, structuring, and control of environmental quality branding across various economic sectors.

With respect to the film sector, APPA is the regulator charged with drafting the final document that identifies not only the environmental actions that have been fulfilled by a production but also the extent of their fulfilment in order to confirm or reject

> the contributions that have been thus far made and to determine whether or not to grant T-Green Film Certification.

> > TIS Engineering is a Trento-based consulting firm whose expertise is focused on sustainability certification and energy conservation. TIS Engineering was involved in developing the T-Green rating system and it is now acting as green manager for productions shooting in Trentino.



FFHSH - GERMANY

The Filmförderung Hamburg Schleswig-Holstein (FFHSH) is planning a program that will reward local cinemas for implementing sustainable practices: energy-efficiency measures; the use of renewables; waste management; and environmentally friendly solutions for the concession stand.

MALLORCA - SPAIN

Since the reopening of the arthouse theatre CineCiutat in Palma de Mallorca by a cooperative in 2014, this cinema is one-hundred percent powered by renewables. Located in the Palma city center, the four screening rooms have a total of 560 seats, which attract 70,000 cinemagoers yearly. Further environmentally friendly solutions include the installation of LEDs as well as organically and locally farmed food and beverages that are served by the cinema.



ESCORXADOR

CINECIUTAT

Renzo Piano's Muse - Science Museum in

SARDEGNA - ITALY

Located in a restored landmark building, the newly converted 570-seat quad theatre will be powered by renewables. The restauration of the cinema was the result of a partnership of the regional energy agency and a local energy company, which is also installing a charging station for electric cars in the parking lot. The cinema's restaurant will offer local organic specialties and locally produced food and drinks.

Thanks to a firm recycling policy, the former theatre chairs were donated to local art schools as well as to Sassari student housing. A collection center for recycled props and set materials is also

> The Cinema Moderno and Spazio Odissea ANEC's network have scheduled the opening of new sustainable art house cinemas in different towns in Sardinia.



SUSTAINABILITY FIRST

Sustainability first is not just the motto of our green production panel at the 2017 Cannes Film Festival but it is also the way we need to address climate change. Environmentally friendly practices can be implemented in the workflow of any film or media production – as various projects in the Cine-Regio Green Report demonstrate.

Eco-friendly behavior must become the new normal - in production as well as in everyday life.

The Green Regio Subgroup is expanding its membership, activities, expertise, and cross-industry collaborations.

The IT industry, for instance, is making an ever growing impact because any clip, trailer, or film we watch online is hosted on a server. Millions of servers worldwide, a significant delivery platform for the film and entertainment industry, are operating 24/7. Most data centers are not powered by renewables but with fossil fuels such as coal, instead, which are generating carbon emissions and leaving their thermal discharge unutilized.

But smart solutions have been developed and put into practice in France which prove that rendering

farms can heat offices, apartments or even a public swimming pool in Paris. Green post-production has tremendous potential – as well as cost-efficiency.

> The careful management of resources is often a win-win situation – for the budget as well as for the environment. This is understood by an increasing number of film productions all across Europe.

In Hamburg, the 100th Green Shooting Card has been awarded. Among the productions that were awarded the green label is the 2017 Cannes Competition film In the Fade by Fatih Akin.

In the 2017 Cannes film entry An Inconvenient Sequel, Al Gore points out that there is still hope if people act.

Raising awareness, best practices, and training for more eco-friendly film and media production must become common, everyday features in our industry so that it will be self-evident: Sustainability first.

Birgit Heidsiek

Editor

IMPRINT

Publisher: **English-Language** Cine-Regio Copy Editor: Milo Yelesiyevich Charlotte Appelgren c/o VAF, Bischoffsheimlaan 38 1000 Brussels, Belgium Layout: info@cineregio.org, [take shape] www.cineregio.org media design, M: +45 40 40 35 45

Editor: Printed on 100% Birgit Heidsiek recycled paper

Markus Schaefer

Birgit Heidsiek, a film and media journalist, has been working as a writer/editor for national and international film newspapers, magazines and trade publications for many years.

As Publisher and Editor-in-Chief of Green Film Shooting magazine, she runs the Internet platform European Centre for Sustainability in the Media World.

She also teaches courses in the Electrical Engineering, Mechanical Engineering, and Technical Journalism Departments at the Bonn-Rhein-Sieg University of Applied Sciences. www.greenfilmshooting.net

CineCiutat, Palma de Mallorca 30

GREEN MEMBERS







www.trentinofilmcommission.it