

Green Screen ambassador certification

Inspiration - case studies

Slide 1. Presentation Title

Slide 2. Which Role ?

The key question in the whole debate is: what role do you play? Not only as an individual, but also as a professional in the audiovisual sector. That role differs from person to person. Perhaps you are an employer and you can think about the commute of your employees? Or do you produce films and do you have an impact on the set? Perhaps you have a social role as a writer? It is important that you are aware of your personal role. Today, but also in the future.

You can potentially play a role in every part of the broader audiovisual sector. From the classroom to the cinema. And all the steps in between.

Examples:

For instance, as producers, trying to be greener in your day to day job could be about making your budget so that you have money for greener lighting equipment. And to bring others with you by organising a meeting about it, spread the message wherever you can (to your team and suppliers but also to other producers in your producers' associations or journalists when you promote a film etc.).

For instance, as a location manager, you can try to use public transport when possible. express your practical needs to suppliers or locations ("we would use compost if you had one" or "you could attract more shootings if you had a green policy") or ask your usual suppliers if they have green initiatives.

As a film commissioner, you can create access to waste management site to your location managers and when it comes to spreading the message, you can put the green topic on the agenda of your meetings, and not only in your region.

Slide 3. Inspiration: principles

Let's talk about solutions now!

In this inspiration part, we will go through:

- 1) Principles
- 2) On-set case studies
- 3) Industry-large case studies

Slide 4. Nature = 3,8 billion year of knowledge

Nature is a gigantic laboratory, several billion years old and rich in solutions. So we can take inspiration by the principles of life in our process and management systems as life creates and maintains the conditions for life.

Living organisms rely on:

- cooperation and diversity (collaborate)
- use waste as material (reduce first)

- supply locally
- use energy efficiently (99% solar) (test & learn)
- do not overexploit their resources
- constantly collect information and adjust
- rebound after shocks

Slide 5. Measure & plan

Before diving right into it, it is important to analyse where the impact will be so that our sustainability strategy makes sense.

This is why we advise you to make a first measure of what your carbon impact is going to be. Or at least think about what area of the shooting is going to generate the most emissions and waste. For instance, if you are shooting an international co-production, transportation is likely to be your biggest issue. So maybe you can focus your initiatives on this aspect to have the biggest impact.

Slide 6. Test & learn, step by step

Sustainability is still a young field to explore. You have the right to experiment and fail. It is impossible to get all the perfect solutions right away, especially as you are the ones who are going to invent them.

So focus on one action, one area which will have a big impact on your footprint. Invest some time at the beginning, test a solution, learn from it so that next time you will do better and save time. And tell others about it so that they build from your own experience.

Adding this dimension of innovation, learning into your day-to-day work can also boost your and your team motivation.

For instance, on the set of the French TV series Collapse the team has tried to be as green as possible. They tried out things and they confessed that not everything was a great idea. For instance, they spent an afternoon making wood stickers for their boxes painted by natural paints made out of hop. It was a lot of time for not such a big impact.

And Alexis Giraudeau, the location manager, said how great it was to actually put some meaning back into his job. Thinking about how we do things and try to make them better for the planet and the team.

Here is another example of experiment that has been made in Brussels for a crafty table. The location manager tested a new bike delivery system of sustainable food by a local organisation. Brussels is a small city and the idea is to develop a new bike delivery service for cinema productions. At the end, the first experiment did not completely succeed as the process has not been made clear within the production team, and the communication between the two parties (supplier and production team) was not optimal. Of course, we would have loved the story to be immediately a success. But reality is not always that easy. The next step consists now in fine-tuning the experience based on mistakes made the first time or...to take another direction if production teams realise that the solution is finally not adapted.

Slide 7. Collaborate

Sustainability is also the opportunity to change the way our organisations and our economy work. To go from fierce competition and distrust to collaboration and sharing. In such a complexity of challenges and changes, cooperation has to be seen as a source of creativity

and innovation.

The American studios have shown how together they could be stronger. Their sustainability managers worked together to have an impact, a bigger negotiation power on their lumber suppliers. They managed to create a FSC-certified lumber supply chain to build their constructions, because together, they were bigger than alone.

Another example could be the Green Screen project itself. It was amazing to see how fast could some regions go thanks to the support of more advanced regions who had already created solutions. For instance, Promalaga adapted the carbon calculators that already existed in the partnership to create its own one and go even further by integrating a new feature: the possibility to integrate your film budget directly into the calculator.

Slide 8. Reduce first

Do you know what the 5Rs are?

It is the five actions you should implement to reduce your impact. It is well known with waste but it also works for any kind of consumption, even energy consumption.

Actually there are more than 5 “Rethink, refuse, reduce, repair, reuse, reduce, recover, repurpose, rot, recycle...”

But the idea is always the same. First you rethink or refuse how things are done today, you try to reduce your consumption to bare minimum. For instance, refuse the single-use water bottles and bring your own reusable water bottle. Then you try to repair, recover, reuse what you already have as much as you can, for instance reusing your water bottle, repairing it when it breaks. And if you really really have to use something that you cannot reuse, you recycle it, donate it or make it rot.

Slide 9. Make it attractive!

Video *Taylor Swift's Legs and Climate Change* :
<https://www.youtube.com/watch?v=R45wnNkeuCA>

How do we motivate people to get interested in such a frightening, important problem?
How do we make it beguiling, attractive, charming so that the audience, your team wants to talk about about?

Some answers:

- make it easy
- make it practical
- make it positive, solution-oriented
- make it fun
- make it a competition or a game
- going green is not only about saving the planet! It is also about saving time, money, building team cohesion, raising awareness about your film or TV series...

Slide 10. Common sense

Green filming is actually quite easy, it is mostly common sense. Most film crews do it without being aware of their positive environmental impact: when they plan carefully to avoid unnecessary and expensive travels, when they re-use props from their last shooting...

Slide 11. Inspiration: On-set case studies

Now that we have talked about the philosophy of green filming, we would like to introduce some practical solutions that exist all around Europe (and sometimes the world). We could not be exhaustive and a lot of other case studies have been initiated.

In the ambassador certification toolbox, there are website links where you can find more (resources).

We divided the case studies in the different areas of filming.

Slide 12. SCRIPT

First, you write a script. It is not about shooting as such but we should all be aware that if the audiovisual sector can reduce its own environmental impact, it has another, even more powerful way to change the world for the better: its content. Films, TV programmes or advertising influence the way we see the world and the way we act. The audiovisual sector is a messenger.

So how can a script be more sustainable today?

Kind en Gezin is a Flemish government agency that works to promote the well-being of the child. They developed 'Breastfeeding extras', a project in which young mothers are asked to appear as extras in film and TV projects. The aim: to highlight breastfeeding and to encourage young mothers to choose breastfeeding. It's promoting breastfeeding through "product" placement.

When you check 'Breastfeeding extras' against the SDGs, you can instantly see how sustainable this project is: breastfeeding has a positive influence on the mental wellbeing of mother and child, boosts immunity, prevents breast cancer, requires no fossil fuel to heat up the milk, and there is no packaging waste or transport. So it has no adverse impact on climate or biodiversity. Breastfeeding costs nothing, so it also combats poverty. It makes little difference in terms of production: the mother and child are present anyway. The only difference is choosing between breast or bottle.

Of course, the idea is not that you have to show a breastfeeding mother in every film, but it is possible! It's about consciousness, as a writer. Be aware that through such subtle choices, you have an important social impact.

More info:

<https://www.kindengezin.be/>

<https://www.borstfiguranten.be/>

Slide 13. Script - product placement

The example of breastfeeding is a sort of "product" placement, it promotes a behaviour. Why not change actual product placement as well?

Green Product Placement in the US and Pixetik in France are two companies which missions are to inspire a more sustainable world thanks to the power of drama. They only work with ecological or social brands to promote a more sustainable lifestyle.

Slide 14. Transportation

The next step, after the scenario development, is the production phase. A whole cast and crew on the set day in and day out naturally has a major impact. The choices you make influence the sustainability of the project.

In Flemish shootings, mobility represents 40% of the average emissions and we saw that people's and equipment transport was also the biggest emitters on British projects.

Slide 15. Gangsta

Numerous sustainable choices were made during the shooting of Gangsta, a 2018 Flemish film. The production

- rented an apartment near the film set in Antwerp, where the majority of the shooting took place. A place to sleep was provided for four department heads.
- rented a parking place for production vehicles in the parking lot of a local tow truck company.

Normally, each person would commute back and forth between their home, the rental company depot and the set. By allowing both people and trucks to spend the night locally, the production significantly reduced the number of kilometers driven. That represented savings of some 19,000 km, nearly 10,000 euros and 3 tons of CO₂.

Plus, there is also a positive influence on personal well-being: by staying overnight locally, crew members no longer had to make long commutes.

Slide 16. Gangsta

The filming of Gangsta also required working abroad: the 3 shooting days in Morocco represented 114,000 km of journeys by plane and an increase in CO₂ emissions of 30 tons. This is just to give you an idea of the impact of air travel.

This is why it is best to check when traveling abroad:

- Whether there are alternatives to air travel (www.ecopassenger.org)
- Whether you can work with local people and resources
- Whether you can avoid unnecessary travels or abroad locations

Slide 17. Transport-useful tips

To sum up, here are some sustainable transportation good practices:

- first, reduce your travels
 - by choosing wisely your filming location
 - by finding local accommodations or parking
 - by working with local people and companies

And when it is necessary to travel:

- promote public transport, biking and carpooling,
- rent or buy more sustainable cars and trucks

Slide 18. Energy impact

5% of the CO₂ impact can be attributed to energy consumption on the set. We use a lot of power on set. For lighting, for cooling or heating, for recharging batteries, for catering, for computers...

Slide 19. On-site electrical box

This photo was taken on the set of *Buck*, a Flemish TV series. The majority of the shoots were done at a fixed location. A on-site electrical box was requested to provide the set with energy. This had big advantages: it's environmentally friendly, user-friendly, no disturbing noises or exhaust gases, less transport, lower costs. The use of a traditional generator, the capacity of which was adapted to the specific needs on the set, was limited to 2 days.

For people not familiar with an on-site electrical box: you often see a temporary power supply of this type on construction sites. You request this connection via the local power distribution company. The electrical box is rented and inspected; once installed, you can sign up for any electricity plan with a standard supplier.

Slide 20. Buck

Not using a generator has a major impact on CO₂ emissions. *Buck* saved no less than 36 tonnes of CO₂. There were also savings of 12,000 euros in the budget.

Buck's example was picked up by the city of London. Dozens of film projects take place there every day. Although the concept of the on-site electrical box is unknown there, the savings potential is enormous. This does not work in every country though or sometimes the processes are too long. Maybe it is a solution the industry all together can ask the municipalities or film commissions to implement or improve?

Slide 21. Energy needs

If you cannot get energy from your location or a electrical box, you have to rent a generator. But you can choose a more sustainable one!

In Canada, Portable Electric rents VOLTstack which are not generators but batteries (13kW, 55-110 kWh) that you can recharge in 6 hour (fast recharge). Productions such as Netflix's *Altered Carbon*, Amazon's *The Man in the High Castle*, *X Files*, *Freaks and Geeks the Documentary* have used it with success.

Slide 22. Energy needs

In his innovation work for Green Screen, Benoît Ruiz has also identified innovative, more sustainable gensets: diesel and battery, diesel and biodiesel, solar and storage etc.

Slide 23. Energy needs: useful tips

So here again, remember the 5Rs principle:

- Reducing your energy needs is the best choice : can you use natural light? Can you rent more energy-efficient equipment, LEDs for instance?
- Find a local, sustainable source of energy: either plug in the grid via your location or an electrical cabinet or market connections in a public space
- Use a sustainable generator
- Use your generator right: if really you have no choice and must rent a traditional generator, you can at least make sure you are using it right, so that you do not waste energy or fuel. Is your generators correctly scaled? Don't hesitate to discuss your needs and sustainability with the supplier. More info: http://www.powerful-thinking.org.uk/site/wp-content/uploads/PowerfulThinkingGuideMarch2017v1_UK.pdf

Slide 24. Catering

Catering is perhaps the most important domain of all: people like to eat and drink well. 8% of the impact is attributable to what we eat and drink. What are we eating? Where does it come from? Is it seasonal? Possibly vegetarian? These are all ways to reduce the impact of food.

Slide 25. Good planning

It goes without saying that good planning is important: how many people are working on the set? What specific agreements do you make with the caterers? How does the caterer deal with, for example, waste, transport, vegetarian diets?

Slide 26. On the set of Collapse (France)

On the set of the French TV series *Collapse*, all the meals were vegetarian. They could afford to impose this diet because their shooting days were scattered. Any production can still decide vegetarian is the norm and leave meat as an option people have to ask for. It is what *Buck* did on their shoot. Going vegetarian has a big impact: *Collapse* divided its catering carbon footprint by two and saved 3 tonnes of CO₂.

The team also made their crafty table sustainable. They banned plastic and tried to reduce packaging to a minimum thanks to a partnership with day by day, a French groceries store where you can buy everything in bulk.

It is a money-saver!

Slide 27. Cost Analysis: Conventional Vs Sustainable Crafty Table

Ecoprod, the French group on sustainable production, and the green filming company Secoya eco-tournage has conducted a cost-analysis to challenge the commonly-believed statement: sustainable craft services are more expensive than conventional ones.

Assumptions : provisions for a 10-week shooting of 60 crew members

Comparing the costs of : 1) Tableware 2) Coffee 3) Water

Results:

Sustainable tableware is almost the same price as the conventional plastic one: it is more expensive by a small €3.37 difference for an entire shooting!

Choosing to buy coffee beans in bulk rather than coffee pods can save productions €4,150 or €83 per shooting day!

Replacing 50cl water bottles by water fountains and individual re-usable water bottles can save productions €1,270 total or €25.40 a day! Without taking into account all the water saved from waste: it has been observed on shootings that crew members would not finish their water bottles because forgetting which one is theirs.

Conclusion: Switching to sustainable coffee and water solutions can allow productions to save €5,420. These savings can offset small overpricing of other sustainable solutions.

More info:

https://drive.google.com/file/d/1bpvv4G1mjx0yvG_vCbWH51ZD.JAz-eG22/view?usp=sharing

Slide 28. Catering & Crafty Table: Useful Tips

- Veggie food: veggie reduces by 52% CO2 impact of your meal and is less expensive
- Tap water is good to drink and cheaper
- Avoid coffee capsules. More money, less waste!
- Buy local, seasonal and organic and with less packaging

Slide 29. Waste and materials

28% of the average impact is related to waste and materials. We are not only thinking of all the materials needed to build and decorate sets, but also waste generated on the set, in the studio or production office.

Slide 30. Missions

Missions is a French TV drama. For the season 2, the production decided to do as much as they could to be more sustainable:

- water bottles and reusable cups for everyone
- no plastic cutlery and no plastic in general
- no coffee pods
- rechargeable batteries
- sorting out of the waste
- for construction: reusing, donating, recycling

⇒ from 5x100L waste bags per day of shooting to 1 bag!

It is easier to manage afterwards and make you save time and space.

A lot of waste come from set building and materials.

To reduce your waste, you have to think in advance about how you will be able to dismantle your set and so how you are going to build it.

Slide 31. *The Marvelous Mrs. Maisel*

An example from the US: the TV series *The Marvelous Mrs. Maisel* used wall skins made of recycled materials which are compostable and free of toxins instead of scenic panels.

<http://pulpartsurfaces.com/>

<http://greenfilmshooting.net/blog/en/2019/10/12/set-in-new-york/>

Slide 32. MODS

In Belgium, the company MCB Atelier has created MODS, a modular system made of wooden frames. They come with standard openings for bolts and technical pipes. With this system you can build sets, 3D structures, stages, stands, furniture, etc. The modules can easily be screwed together. You rent or buy them, and finish them as you wish. Afterwards you disassemble everything and you can reuse the MODS.

More info: <https://www.mymods.be/>

Slide 33. Make-up

Here are some practices by the make-up team on the Belgian TV serie 'Champion' (2018) to reduce consumptions, waste and improve cast members health:

- reduction of make-up remover cottons: use of large rather than small cottons, you reduce the number used.
- buy refills of stem cotton and put them in boxes designed for this purpose to reduce container waste.
- prefer oils for make-up removal rather than traditional make-up removal creams + micellar waters filled with heavy metals.
- work with reusable capes to cover collars with costumes rather than paper towels on collars. By counting two towels per person and per make-up, you quickly realize the waste that can be avoided by using a cape.
- use essential oils so that the actors do not get sick, have no pimples...

Slide 34. Waste And Materials: Useful Tips

Mainly, just use common sense, because smart choices pay off. Pay attention not only to the items you purchase (bulk instead of individually packaged products, 2nd hand, ... But also ensure the correct disposal of your residual waste. Donate reusable items to people who can use them.

Slide 35. Post-production

The last domain is pre and post production. This represents 19% of the average impact. Most of the impact in this category is related to energy: heat and electricity in the production office during the preparatory phase and post-production and power for editing, special effects, etc.

Slide 36. Good Practices In An Animation Studio

TeamTO is a French animation studio which has set sustainability as a priority, understanding that it was also interesting budget-wise.

They measured that the production of their animated TV series *Plankton Invasion* was 16 tonnes of CO₂ (39 episodes of 7min 30sec) and it mostly comes from energy.

They have put in place a lot of different kinds of solutions to save energy. For instance, they have an automatic system: the last person going out switches off all the screens automatically. No need for human efforts, a lot of energy saved! They bought energy-efficient equipment and switched to a green energy supplier which means their energy emits less carbon. They also know building all the equipment they need (computers, data processors, screens etc.) uses a lot of energy so they take good care of it and keep it more than 3 years (which is the usual life expectancy of this kind of equipments in accounting) to avoid buying new ones.

TeamTO has even gone a step further by reusing their heat. They implement an innovative solution called Stimergy.

Slide 37. Innovative Solutions

Today, our industry is getting more and more digital. The problem with digital is that it seems it does not have an impact on the environment as it is not tangible, But it does, and a big one!

For instance, servers where we keep digital data and processing power. They run on energy. But servers also need a second source of energy: the energy air conditioning needs to cool down the room in which the servers work and create heat.

Two French companies have decided to use the heat instead of using more energy to destroy it.

Stimergy uses the heat to heat water, either water boilers or swimming pools!

This is the solution TeamTO uses. This way you save 2 sources of energy: no need for air conditioning anymore and no need to heat water anymore as the heat from servers becomes their energy.

Qarnot computing has placed processors into radiators so that studios creating special effects can heat houses.

More info:

<https://stimergy.com/en/>

<https://www.qarnot.com/>

Slide 38. Post-production: Useful Tips

Here are some tips for making sustainable choices in the field of pre and post-production:

Here again, good coordination with the supplier is important: when choosing a partner for post-production, aspects such as accessibility and energy efficiency can be a criterion. Good

agreements about mutual expectations (what do you want as a customer, what material must be supplied): prevent unnecessary work.

The notion of 'Recycling image material' may sound outlandish, but it's actually possible. By using existing material, you can save tremendously on production.

And did you know that online video viewing emitted 1% of the global carbon emissions? It is as much emissions as Spain (300 MtCO₂)! So also think about how people will watch your video: do you need to export it in high quality?

More info :

https://theshiftproject.org/wp-content/uploads/2019/07/Excutive-Summary_EN_The-unsustainable-use-of-online-video.pdf

Slide 39. Saving The Planet, Money And Time

We have gone through the main areas of a shooting.

These good practices have something in common: they allow your production to save the planet but often money and time as well. Sometimes you need an investment in money and time at first, but soon this investment pays.

This is a message you can convey when communicating about green filming.

Slide 40. Communication

During the whole process, communication is key to...

- understand the needs of everyone and find the sustainable solutions which are going to work for them
- get people on board, make them understand why it is important to change and what are the benefits
- help new habits dig in

And remember our principles and Taylor Swift's legs... how can this communication be attractive?

Research in psychology or communications have developed tips to better communicate about climate change and make people act on it.

For instance:

- make it local: use examples close to home so that people can identify
- mix your vocabulary: use both "ideal and ought", "advance and protect" "avoid missed opportunities and avoid mistakes" so that both promotion-focus and prevention-focus people feel concerned by your speech

and many other advices: <http://guide.cred.columbia.edu/>

And practically, during production, what can we do?

- ⇒ organise a dedicated meeting as soon as possible during pre-production
- ⇒ communicate case studies, testimonies
- ⇒ add a note on sustainability into all your documents: contracts, set bible, call sheets, posters on set etc.
- ⇒ use nudges

Slide 41. Nudges

Nudges make it easier for people to adopt sustainable habits.

For instance, adding a sign next to a switch off button or a bin to catch attention.

Or create an incentive not to throw away your cigarette butt on the ground. This cigarette butt bin is like a ballot box. For instance: do you prefer live theatre or cinema?

Slide 42. Communication to the audience

Consumers have an important role to play in the development of sustainability because they are the ones deciding to buy or not a product.

It is harder to use this leverage in the audiovisual industry as the audience is not aware of how a film is made and if it was sustainable or not. It is slowly changing. In France in September 2019, the sustainability of the audiovisual industry was touched upon and discussed on the most popular radio breakfast programme.

Should raising green filming awareness among the audience a priority?

It is at least today a marketing advantage for pioneers.

For instance, the slovak film *Stand Up* by Juraj Bohuš' got more press releases the producer Katarína Krnáčová would have imagined. Why? Thanks to its sustainable production efforts. Similarly, the journalists found in the sustainable production of the TV series *Collapse*, a different, innovative take on TV series. The TV channel coms team was also stimulated by this new message they could spread to the press.

Slide 43. Should I Hire An Eco-warrior? (1/2)

As we just have seen, sustainability can be a lot of work at the beginning: creating, sourcing and putting in place solutions and motivating the team. There has been a debate in the sustainable production world: is it necessary to have a member of the team dedicated to sustainability or can we spread that responsibility on the crew managers? It would seem that today most pioneers agree that having an eco-supervisor or manager - whatever you call it - is really a big help. This person can monitor the overall aspect of sustainability, help out and motivate all the staff members. It really does not mean though that this person does everything and that other team members do not have to care anymore: sustainability is really a team effort.

Slide 44. Should I Hire An Eco-warrior? (2/2)

There is a diversity of ways to get help from an eco-warrior.

A producer can hire a dedicated company which will advise and follow-up on the whole production process: set up a strategy in pre-production, send an eco-manager or eco-supervisor on set to raise awareness and find solutions and measure the impact. Such companies exist in the US -Earth Angel was a pioneer- in France -Secoya eco-tournage- or in Denmark -Jordaener Creative.

The producer can also choose to be coached by a state-related programme or organisations.

For instance, if you are supported by the VAF, the Flanders audiovisual fund, you will be advised and guided by their sustainability coach. In the UK you can be certified by Green Screen (the UK Green Screen, not the European Green Screen!), the programme of Film London and Green Shoot, which offers you support along the way.

Producers can also choose to hire a dedicated, trained crew member as any other crew member. We will talk about training later but some film schools now train eco-supervisors as they train script supervisors or directors of photography. The production of the French TV series *Collapse* had decided to hire a dedicated crew member who was sustainable production manager. She was in charge of finding sustainable solutions, raising awareness on set and writing the sustainability production report.

And you can also mix these solutions. The best way to do it is the one which fits your project.

Slide 45. Inspiration: Industry-large Case studies

This question leads us to talk about what tools and solutions are available out there to help producers and crew members implement their sustainability dreams. Indeed, this ideal green audiovisual production world will not be built only by production teams. They need help from every side of the audiovisual eco-system to green their productions.

Slide 46. A sustainable supply chain

When discussing on-set case studies we indeed realised that production teams needed green, innovative solutions to exist to be able to use them. For instance, waste management solutions, sustainable catering, energy-efficient equipment etc.

These changes can be implemented by traditional film suppliers. This is where production teams have a big leverage power. By telling suppliers “I would like to reduce the packaging or transportation of this product” or “I would like to find this sustainable product or equipment in your catalogue”, production teams create the demand traditional providers need to invest in a new offer.

Solutions can also be provided by new suppliers or found in other sectors of the economy. Indeed, the audiovisual industry has similar needs as the events or construction sector. This is why Green Screen asked the innovation consultant Benoît Ruiz to identify innovative solutions that could also be implemented in the audiovisual industry.

Slide 47. What sustainable innovations for the audiovisual industry?

Benoît Ruiz has worked for Green Screen on the innovations helping the audiovisual sector to become greener. He has identified innovations to serve the whole audiovisual value chain: pre-production, shooting, post-production and broadcasting and data management.

Slide 48. Innovation database

He has identified 24 processes during these 4 steps of production. For instance, getting energy, transportation, equipment etc.

He has found 335 technologies and optimisation opportunities. Most of them can be found in the European funding programme H2020 and the European Institute of Innovation & technology (EIT).

These innovations are planet- but also money-savers. Their goal is to optimise the way we produce and watch our audiovisual content (and not drastically change it).

The database will be made available on the Green Screen website in the beginning of 2020.

Slide 49. 4 examples of innovations

Here are four examples of innovations Benoît identified:

- a duct tape made from recycled materials
- a green poly, which reflects light, made from bamboo and not polystyrene.
- reusable coffee cups made out of... coffee
- batteries made out of salt and not lithium or cobalt (rare and contaminating materials)

Slide 50. Tools

Now, we could ask: will these innovations not be more expensive to rent than traditional solutions? First of all, Benoît has also selected them because they were money savers so this is not certain they will more expensive. Secondly, funds are being created all over Europe to finance productions which would like to go green.

Slide 51. Financing

There are two different approaches to financing green filming:

- some believe green filming should be required as any other criteria in the funds and therefore be mandatory. For instance, VAF, the Flemish audiovisual funds, gives you the last 10% of your grant only if you have measured your impact and implemented some actions to reduce it.
- some funds adopt a “bonus” approach: green filming is not mandatory yet but if you do it voluntarily you will be rewarded. This is the case of the Trentino Film Commission and the Sardegna Film Commissions (Heroes programme) in Italy or the Ile-de-France Audiovisual Fund in France. The fund can also choose to finance one specific green expense: the MFG Baden-Württemberg in Germany has created a green shooting grant of 5.000€ to hire a green consultant on your shooting.

Slide 52. Certification

Certification often comes hand in hand with financing initiatives. Indeed, in order to give out the dedicated financing, film funds need to make sure the company has respected the set criteria.

Here are some examples:

The Green Shooting Card of the Filmförderung Hamburg Schleswig-Holstein was one of the first green filming label in 2012. Since then, they have certified 140 films and they are now working with other institutions to make it national.

The Trentino Film Commission has created a rating system called Green Film which has its own dedicated website: <http://green.film/>

In the UK, both Green Shoot (which partnered with Film London to create the UK Green Screen) and Albert has developed comprehensive certification programmes where different levels can be achieved.

For an exhaustive list of all the green filming tools and initiatives that exist in Europe: https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1539848889.pdf

<https://greenfilmshooting.net/blog/de/wp-content/uploads/sites/2/2017/05/CineRegio-GreenReport-web-2017.pdf>

Slide 53. Tools: Carbon Calculators

As we said, any green filming initiatives should begin with measuring and understanding where the environmental impact of your production is going to be. It is an interesting pedagogical tool as well. Financing or certifying green filming often require evidence of impact. This had led some organisations to develop their own carbon calculators, which suit the audiovisual production.

Green Screen has launched a consultancy to compare the different calculators and see if it would be interesting to make some underlying values uniform all over Europe. This way European co-productions would not have to fill in different calculators several times. However, some argue that each calculator should still be different because of local shooting specificities.

Slide 54. Guides

Now, almost every country or film commission has its own green film guidelines, which often contain or come with a list of local green suppliers.

The guidelines and suppliers' list are practical tools production teams appreciate because they need hands-on, clear and quick solutions to often urgent needs.

You can find the list of them here:

https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1539848889.pdf

Slide 55. Training

Some organisations have developed a training session on sustainable production for film professionals. Each of them have a different format or angle.

Albert in the UK has adapted the one-day Carbon Literacy Training to film production. Ecoprod delivers a programme of two half-days. k,k)

The Lower Austrian Film Commission has gone further in creating a whole comprehensive 4-day training.

There are also trainings at film school level: either it is a full programme as in Hamburg film school, run with the Filmförderung Hamburg Schleswig-Holstein (FFHSH) or a simple 2-hour presentation to raise awareness as what does Ecoprod in France.

Slide 56. Local support

Support can go beyond creating guidelines, trainings, carbon calculators, suppliers' list etc. Film crews often need a local, very practical support.

For instance, the Brussels filming office, screen.brussels film commission, helps productions for waste management. By contacting the office, productions can:

- Obtain 80-litre 'films' bags for specific shooting purposes; the local public waste agency picks them up at the filming location on the basis of a form to be completed 10 days in advance;
- Obtain a free access badge to regional waste collection centres (for a 150€ deposit);
- Receive sorting posters;
- Receive bottles to eliminate the plastic bottles and glasses.

It is also the business of companies such as Box Rentals in Flanders or Secoya eco-tournage in France to identify existing sustainable solutions and adapt them for film productions.

Slide 57. Regulation

Finally, regulation can also be a tool to force your stakeholders to adopt more sustainable practices.

It can be "soft" regulation, a Charter for instance. Some principles your organisation strives to respect and ask your clients, partners to adopt them as well. It is a lot of communication and sending a signal. For instance, Studio Kremlin in France has displayed the Ecoprod Charter as a poster in its kitchen to remind its customers and tenants that the studio commits to sustainability.

You can ask your suppliers for sustainable practices but you can also make it mandatory for them to follow them: some companies have included some specific sustainable specifications in their calls for tenders. For instance TF1, a French TV group, has understood that as a customer, it could change the way things are done.

Slide 58. Strict Regulation for (external) crew

As a company too you could go a step further than the Charter and include specific rules for your team and external crews. For instance, AED studios in Belgium has set rules such as "mandatory to throw your waste in a bin", "mandatory to throw your cigarettes butts in the ashtray (outside)".

Of course, regulating bodies such as regional film funds, national film centers or the state can also decide to make it mandatory for the audiovisual sector to follow sustainability rules.

The challenge here, at least in France, is making sure the rules or laws are respected. For instance, France has laws which compel companies to sort out 5 types of waste but it is not implemented.

This shows again the need for every actor of the industry, from film crews to suppliers to film commissions, to use all move and use all these tools at the same time because they all are necessary and to make the audiovisual industry more sustainable. For instance, when solutions exist or the crew has been trained, it is easier for them to respect regulations.