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TAKING A CUE FROM THE COVID LOBBY

Lessons for Greening Dutch Film Production

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In the 2010s, growing public concerns about global warming gave rise to several green filmmaking initiatives in a number of countries. Most of the initiators were filmmakers, some were film commissioners. Their intention was twofold: they aimed at raising a general awareness for environmental issues amongst people working within the film and television industries, and more specifically, they provided tips to reduce pollution and cut the greenhouse gas emission that each film and television production causes. Some of these bottom-up initiatives were slowly gaining traction when the COVID pandemic hit and film shootings were abruptly shut down. What happens to existential environmental initiatives in the face of a global pandemic? When production picked up again, did the film and media industries double down and integrate sustainable best practices in their work routines? Or were hard-fought goals cast aside in the face of a need for single-use masks and gloves as well as plastic-laden testing equipment?

This chapter explores how the Dutch film industry responded to the COVID pandemic and relates the reactions to (and demands for) measures to reduce the ecological impact of film and television productions. Using the Netherlands as an example, this chapter draws lessons from the industry's handling of the public health crisis and argues that the measures to secure continuation of work in the media industries during COVID show a path forward to a more sustainable way of filming. Before offering its insight, this chapter provides context for two research projects, on which the lessons are based. Although these projects focus on the Dutch film industry, many of the considerations that are discussed here are translatable to film industries in other countries and regions.

Green Filmmaking

Efforts to stimulate green filmmaking can be found in various countries. In the U.S., the *PGA Green* initiative of the Producers Guild of America is advocating for sustainability, the Sustainable Production Alliance provides green guidelines and toolkits, and companies like Earth Angel are helping to produce films in a more eco-friendly way. In Europe, where film financing relies heavily on public funding, some funding agencies, like the Flanders Audiovisual Fund in Belgium, demand that film projects take measures to reduce their environmental footprint, and different regional film commissions, like *MOIN* in Hamburg and Schleswig-Holstein or the Trentino Film Commission in Italy, ask production crews to commit to ecological standards. In Germany, Switzerland, and Italy training programs for green film consultants are emerging, and companies form consortia, like the British *albert*, to stimulate green innovations.

While some of these initiatives have been moving the dial, most production culture has hardly changed. It is uncertain how the global film and television industries intend to contribute to the commitments of the Paris Agreement, which strives for the reduction of emissions by 45% by 2030 and for net zero by 2050. Since time is running out to meet these targets, one wonders why the film industries are not taking more effective action by implementing powerful measures and starting a green transition. Admittedly, compared with sectors like energy production, agriculture, manufacturing, or transport, the film and television industry produces far less pollution and its share of total direct emissions are much lower. However, given the fact that current climate actions fall substantially short of limiting global warming to 1.5°C and that it is increasingly expected that the general public assumes environmental responsibility, the media sector cannot afford to stay inactive.

The Dutch film and television industry provides a good example for studying how a green transition is delayed, as the country's sustainability efforts are lagging behind other European film industries. However, this has not always been the case. In 2014, the Dutch initiative *Green Filmmaking* started to organize events that drew attention to the environmental impact of film production and offered a first workshop on sustainable production practices. Although *Green Filmmaking* got funding from the Netherlands Film Fund, the support from the Dutch film and television industry was limited. Filmmakers were not stimulated by the Film Fund or other industry organizations to seek advice from the initiative and consultancy about sustainable practices was a voluntary option. Furthermore, the important work and expertise of *Green Filmmaking* was barely acknowledged, let alone promoted, in industry communication. Therefore,

it comes as little surprise that green film production didn't gain traction in the Netherlands.

My research collaborator, Fieke Spoler, and I began exploring the challenges that hinder filmmakers in the Netherlands to work in an eco-friendlier way in 2019–2020. In 2019, Fieke conducted interviews with a few film professionals, and we saw lack of time for proper planning to move to sustainable practices. We then realized two profound problems: the fear of damaging one's professional reputation, and an overall refusal within the Dutch industry to take on responsibility and set change in motion.¹ In 2020, we presented these results at an online round table discussion with film producers and directors, a representative of the Netherlands Film Fund, and *Green Filmmaking*. The filmmakers' call to action, our insight in obstacles to sustainability, and the desire to close the gap on other European countries galvanized the Netherlands Film Fund and earned us a research assignment. Together with Marijn Kallenberg, Lara Hendriks, and Hester Brückmann, we tested the effectiveness of different measures to stimulate green film production in the Netherlands. For this purpose, we conducted six pilot studies that took place in 2021 and 2022. The research team intended to inspire the Netherlands Film Fund to make policy on sustainable film production—which to this day has not yet come true.

While the focus of these two projects was green filmmaking, their temporal proximity and overlap with the COVID pandemic prompted a comparison which made the industry's delay of green action even more visible. This inaction is disturbing, but the swift changes in the wake of the global health crisis also provide insight for a path forward toward a greener future of film and television production. Similar to the COVID pandemic, climate change is a global crisis that affects us all, but in contrast to COVID, the urgency of taking transformative steps is ignored despite the massive impact that global warming has already had. To further a transition of film and television production, we took note of six lessons that we learned while observing the dual crisis.

Lesson 1: Changes to Routines Are Possible, Especially If People Fear for Their Health or Income

We were in the middle of mapping different factors that above- and below-the-line film workers mentioned as obstacles to change, when the COVID pandemic turned many of their work routines and habits suddenly upside down. After film and television production came to a halt in March 2020, the Association of Dutch Content Producers and the Netherlands Audiovisual Producers Alliance quickly commissioned a task force consisting of producers, directors, managers, and consultants to

draw up a COVID protocol for the audiovisual sector. The guidelines and rules followed the recommendations of the Dutch National Institute of Public Health, and when the self-determined protocol was approved by the government at the end of May 2020, projects that had been halted could be resumed. The preamble of the protocol explains that the audiovisual sector considers it necessary to continue with work “because of the direct and indirect economic interests and because of the vital cultural and social function of audiovisual productions.”²

The protocol asked film and television professionals to change their habits and routines and to reorganize their workspace (see also similar protocols discussed by Miranda Banks and Tanya Horeck and Susan Berridge in this volume). They were advised to work from home, frequently wash their hands, and keep 1.5 meters distance from others. Only a limited number of people were permitted on set, and to maintain the required distance between people, additional equipment had to be used and one-way walking routes were laid out. In an annex to the protocol, the measures were explained for all production stages and departments. A table even indicated the degree of risk of infection that each occupation bears (see Figure 19.1). The measures were quickly and easily implemented, and when productions resumed, our subjects reported that screen workers followed the rules of the COVID protocol.

For our project about the obstacles of reducing the environmental impact of film and television production, the pandemic provided an unexpected but compelling reference for comparison. After our interviewees addressed a wide variety of reasons why changes in the production culture are extremely difficult—or even impossible—to achieve, the same workers quickly and diligently implemented radical new rules for day-to-day processes. This behavioral change illustrates the potential for taking

Stage/phase - Department/Position	LOW	MEDIUM	HIGH	Nr. PRECAUTIONARY MEASURES THAT DESERVE EXTRA ATTENTION PER STAGE/PHASE AND DEPARTMENT
Preproduction/Production Cast				Preproduction/Production Cast
Actor/Actress		X	(X)	16 Where possible, deploy a 'work from home' policy for all work that does not have to be performed at the office or work site such as script development, research and editorial work.
Casting director	X			17 Organise discussions and meetings so that where possible they can be carried out/held by phone, via videoconference or by using other digital means of communication.
Agent	X			18 Organise casting sessions, auditions or other preproduction work and postproduction work so that these activities can be carried out 'remotely' where possible.
Extra		X	(X)	19 For necessary location visits, meetings for consultations or working on location and postproduction work, the number of participants is to be kept to a minimum and the hygiene rules and the 1.5 metre reciprocal distance rule will be complied with (including by reorganising the workplaces; walking routes etc.)
Musicians	X			21 Travel to and from the work site on your own as much as possible. Make sure there is a transparent (plastic or other) partition between the front and rear row of seats if you have a passenger. Wear a face mask on public transport.
Animal handler	X			37 Before using them, disinfect all devices, equipment, tools and other instruments, including those from suppliers, and repeat this disinfection in between times where necessary (for example during breaks and/or when surfaces may have also been touched by others).
				41 Actors, presenters, performers, extras, jury members and other participants have to take care as much as possible of their own clothing/styling/oufits and make-up/hair and the attachment of any audio transmitters.

FIGURE 19.1 Annex to the Netherlands COVID protocol for the audiovisual sector: indicative risk assessment table, version 2.0, May 29, 2020, p. 5

transformative steps toward a more green and sustainable approach to film and media production if, and only if, we make a collective and concerted effort.

Lesson 2: Extra Money Is Available, Especially If It Helps to Prevent Problems That Are Deemed to Be a Societal Risk or Could Cause a Cultural Decline

Making transformative change to an entire industrial sector is extremely expensive, but if the alternative is seen as catastrophic (especially economically), then funding is usually found. When everything came to a standstill in mid-March 2020, the Netherlands Film Fund and the public broadcasters, among others, jointly announced that they would cover additional production costs, “so that projects are given room to respond to changes in production.”³ By April 2020, the Dutch Ministry of Education, Culture, and Science made EUR 300 million available to support the cultural sector, with Netflix and the Netherlands Film Fund together launching a EUR 1 million relief fund to help screen workers affected by the pandemic. For a small country like the Netherlands, with less than 18 million inhabitants and a small film industry, the Ministry’s financial packages, including the ones that it released in the following months, were substantial. Beyond supporting other cultural organizations and workers, they also covered the 10–25% extra costs of film and television production that resulted from protocol application.⁴ Protocols required the use of additional equipment, the employment of extra people who manage shooting and catering areas, and the training of COVID managers—all of which contributed to increased expenses.

The industry generally considers green film production to be too costly. Rental fees for the diesel generators that power a film set cost less than battery packs, which are considered more environmentally friendly. Similarly, electrical film production vehicles are usually more expensive to rent, although they are the more sustainable solution. Furthermore, there are costs associated with deviation from work routines to organize more eco-friendly practices of filming. Educating an entire industry of workers about how to reduce the environmental footprint of a film production and establishing a network of companies that provide green film technologies adds to expenditures as well. These extra costs are often used to explain why the film industry neglects a green transition, especially if financial resources are restricted, as in the Dutch context. However, against the background of the financial support to cover COVID-related expenses, it has become clear that money can be found to do it. If the health of workers—and of the industry—is at stake, then the money can be found.

Lesson 3: It Is Possible to Disseminate Knowledge Quickly, Especially with Support for Training and Learning

The speed with which a new coronavirus was discovered as cause of the pandemic and with which vaccines were developed demonstrates how substantial funding can fast-track research and innovation. A whole new infrastructure that included multidisciplinary research teams, the pharmaceutical industry, and test and vaccination centers was quickly built and staffed with doctors, health professionals, and semi-skilled and unskilled workers to ensure protocols were in place to ensure public health and keep people working (see also Kate Fortmueller's chapter outlining external stakeholders in US media production). This speed is in stark contrast to the slow implementation of innovations and infrastructures that reduce ecological damage.

For years, green activists in several countries have been putting together guidelines and best practices for sustainable film production and are keeping track of ecological innovations. This shows the existence of experts and of green technologies, both of which are needed to facilitate the green transition of the media sector. But this knowledge and innovation are disseminated and implemented very slowly because investment in training programs and an infrastructure for green film production is either minimal or completely absent.

People working on green initiatives are usually more than willing to share their knowledge and expertise. When we were preparing our pilot studies, their generous input and help was crucial. Amongst the measures we intended to try out were the introduction of eco-managers who would support the producers of a film by researching and managing sustainable practices. Since film professionals with such qualifications do not exist in the Netherlands, we would first have to find suitable people who were interested in fulfilling this function and then ensure that they know enough about green film production. In order to convey this knowledge to three eco-managers-to-be, we set up a one-day workshop with (international) experts from green initiatives.

Comparing our pilot workshop with the program that the Dutch media sector developed on short notice for COVID managers makes it clear that with funding, training for eco-managers is doable and scalable. In a three-day training for COVID managers, 40 screen workers acquired enough knowledge to be responsible for the health and safety measures for an entire film or television set. This illustrates that in a short amount of time and with economic support, people can be trained to become experts and regulators on set—either for public health or for sustainability.

Lesson 4: It Is Possible to Improve Both Ecological and Labor Conditions, Especially If There Is Time for Preparation

Looking back one year into the pandemic, Anna Pedroli from the Netherlands Audiovisual Producers Alliance stated in March 2021 that for film

production, COVID measures “mean that everything takes longer and requires more organization.”⁵ Filming with 1.5 meters distance and only a limited number of people on the set requires meticulous planning of the shooting days, including the layout of walking routes and exact timetables for cast and crew to avoid waiting time and the presence of too many people. Furthermore, extra time needs to be allocated for regularly washing hands, sanitizing equipment and props, and for preventive COVID testing.

Pedroli’s observation invites us to imagine having more time at work. Envision the benefits of film projects that are realized under less time pressure. Slowing down the speed of production would allow improving both labor and environmental conditions. Less time pressure reduces stress and excessive work hours, prevents work accidents, and breaks unhealthy work routines. Having more time at work enables better preparation of the tasks on set which could also include implementing green practices. Imagine if film professionals had time to research the most sustainable way of shooting and to enact these best practices.

The COVID pandemic taught us a lesson about the interrelation of health and labor. In contrast to other sectors, one can claim that in the Dutch media industries, COVID improved labor conditions: It led to increased health and safety measures, financial support for screen workers, professional development programs, and an understanding that careful preparation takes time. Such a change of perspective reminds us that media industries can transition to practices of film and television production that are socially more responsible. At a time when welfare and safety are regular topics of conversation, including sexual harassment and toxic work cultures, such a transition is urgently needed. But social improvements cannot continue without accounting for ecological change. In a world that is heating up, health risks for workers are increasing. In the future, when shooting on location, film professionals will be exposed more frequently to extreme weather or air pollution, which will harm their health and can cause serious conditions and illnesses. As greenhouse gas emissions had been significantly reduced during the pandemic, COVID gave us a glimpse of the possibilities not only for labor improvements but also for a greener future.

Lesson 5: Good Solutions Consider More Than One Problem at a Time

Despite such glimpses of transitional change, the pandemic also demonstrated that it is almost impossible to prioritize eco-friendly decisions during a public health emergency. In the case of film and television production, the generation of waste to safeguard the health of individuals illustrates the problem. In our research, we collected many great examples of how screen workers reduced their environmental impact by reusing materials (props,

sets, fabrics, dishes), by avoiding plastic packages and by separating waste. But immediate health risks took precedence over environmental solutions. When talking with screen workers about best practices of green filmmaking, we often heard that an important first step would be to reduce the flood of plastic and waste that the COVID measures brought about.

The Dutch COVID protocols contained a number of hygiene rules that made the hearts of eco-managers sink. For example, while car sharing helps to cut down the CO₂ (carbon dioxide) emissions of a film production, the protocol asked everybody to travel to the film set on their own, thereby increasing car traffic. Similarly disheartening was the amount of trash that resulted from the COVID measures. The protocols turned every tool back to its single-use by instructing: “wear [...] disposable gloves and face masks” or hand out drinks and food in individually wrapped packages. Similarly, props were “to be used a single time” and then to be disinfected or “replaced where necessary.”⁶ The task force that formulated the Dutch COVID protocols seemingly ignored any green initiatives in the creation of their plans.

For a lesson about greener responses to a public health crisis, we can turn to our neighbors in Belgium. Their film production protocols emphasized the reuse of water bottles and make-up as reasonable practices during the pandemic. It stipulated that “each employee must have [...] a personal drinking bottle/coffee cup” and that “main cast will receive a personalized make-up kit.” Furthermore, it stated that the mode of transportation was a personal choice “as long as the physical distance of 1.5 meters is respected [in that mode].”⁷ The rules even explicitly mentioned public transport (train, tram, bus) as an option. It is unknown whether the differences in the Belgian and the Dutch COVID protocols affected the number of on-set infections, but it is clear that the film industry in Belgium did its best to limit some COVID-related pollution. Although this might be a rare example from a country with a small media sector, it proves the point that sustainability can be included in considerations regarding a public health emergency.

Lesson 6: Solving Short-Term Emergencies Does Not Preclude the Urgency of Long-Term Crises

In the face of the pandemic, the Dutch film and television industry adjusted its practices and routines in the blink of an eye. The spread of the virus and the number of people who died from respiratory failure created a sense of urgency that made far-reaching changes of work routines and of financial resources possible. This willingness to change and the speed with which action was taken have stood in stark contrast to the reluctance of the Dutch sector

to transition toward more eco-friendly production practices. Obviously, it has been considered less pressing to slow down global warming by reducing greenhouse gas emissions than to avoid a COVID infection. But the urgency of climate change is real.

The different reactions of the film and television industry to the health and to the climate emergency indicate that the degree of urgency differs between these two crises. This is not least due to their specific temporalities: While COVID affects the health of people directly and immediately, climate change unfolds slowly. Its long-term effects often seem to be far away from our lived present. This means that our current behavior (be it continuous CO₂ emission or immediate reduction) will show its impact only in the future, just as the environmental catastrophes we experience today (drought, flooding, heat waves, wildfire, etc.) are consequences of actions in the past. Although we know the causes of global warming, their delayed effects seem to make immediate action less urgent.

But if one looks closely, climate change is already impacting film production. In July 2021, during preproduction for one of our pilot studies, floods swamped one of the film set locations and forced the crew to reschedule a production shoot. The cause of this filming crisis could be traced to extreme rainfall in Germany, where 180 people died due to flash flooding and landslides. The water rose in neighboring countries, inundated regions in the Netherlands, and resulted in the evacuation of several Dutch villages. When we asked the film producer about the flooded location, he agreed that the weather event “forced you to face the facts” of climate change. And yet, he admitted, “you are so occupied with the film that your first thought is: ‘Oh no, there goes my location!’ You don’t think: ‘Oh no, there goes the world.’” While the long-term crisis is already happening, we are focusing on short-term emergencies, without reflecting on what causes them in the first place.

Conclusions

Paradoxically, it is a sense of urgency that can hamper transformative ecological change. Production-related crises that occur in all film and television projects tend to demand immediate solutions. The twin pressures of money and time often compromise sustainable practices. Imagine if the filmmakers who had to deal with the flooded location, instead of rushing to find another one, took the time to acknowledge the root cause as to why their location was destroyed in the first place. Imagine if they considered collectively how they could contribute, as individuals and as professionals, to a more sustainable world. What if they supported people who were affected by the flood, if they decided to integrate documentary footage in

their movie to emphasize the urgency or if they consequentially changed their harmful work habits and routines?

In film and television production, there is usually no time for the extra effort that is needed to organize green alternatives. It takes vigorous energy to set new protocols, to disseminate knowledge, to learn how to handle new technologies, and to establish an infrastructure that boosts green production practices. For these to become the norms in all film and television departments would take an effort that nobody in the industry has been readily able to spend.

By using the COVID pandemic as reference for comparison, it is clear that swift and transformative change is possible. Under the lead of the Association of Dutch Content Producers and the Netherlands Audiovisual Producers Alliance, and with the support of government and industry, the Dutch media sector was able to change production routines. The health requirements of the Dutch National Institute of Public Health that needed to be met to continue shooting played an important role for the speedy reactions. Clear and industry-specific regulation helped ensure that protocols were followed. The same is needed for creating a holistic transformation to a sustainable Dutch film and media industry. In the European context, where some funding agencies and film commissions demand a commitment to sustainable practices, time will tell how effective these measures are.

The need to reduce emissions and waste is emphasized in every green best practice guide. Their advice is to reuse and recycle materials such as sets, props, fabrics, and dishes, which reduces not only the amount of waste that a film shoot generates, but also prevents the production of new items and things that emit greenhouse gases and pollute the environment. But these guides do not address a reduction of film production, and unsurprisingly, green industry consortia, funding agencies, and film commissions won't help us question how many films and television shows the world really needs. Ultimately, it will be impossible to reduce the media industries' environmental impact, unless the overproduction of content is tackled.

The necessity to both speed up change and to take time to do it right characterizes our paradoxical situation. Amongst the lessons that the global health crisis taught us are the impossibility to solve such contradictions and the possibilities to navigate them. And yet, time is running out. As a species, we have learned to understand complex relations, we know the causes of climate change and we are able to predict its effects. It is about time we put this knowledge into action.

Notes

- 1 Judith Keilbach and Fieke Spoler, "Passing on Responsibility: Obstacles to Green Film Production in the Netherlands," in *Film and Television Production in the Age of Climate Crisis: Towards a Greener Screen*, ed. Pietari Kääpä and Hunter Vaughan (Cham: Palgrave Macmillan, 2022), 163–179.

- 2 Association of Dutch Content Producers (NCP) and Netherlands Audiovisual Producers Alliance (NAPA), “Netherlands COVID-19 Protocol for the Audiovisual Sector, English Edition, Version 2.0,” May 29, 2020. https://www.producentenalliantie.nl/siteAssets/images/0/2._20200529_COVID_19_Protocol_AV_sector_v2.0_PROTOCOL_ENG_def.pdf, 1.
- 3 “COVID-19 and Its Consequences for the Dutch Film and AV Sector,” *Nederlands Filmfonds*, March 17, 2020. <https://www.filmfonds.nl/en/updates/covid-19-and-its-consequences-for-the-dutch-film-and-av-sector>.
- 4 Karin Wolfs, “Film & AV-Sector: Zichtbaar & Onzichtbaar Drama.” In *Cultuur En Corona: Een Jaar Later*, ed. Kunsten’92 (Amsterdam: Kunsten’92, 2021), 17. <https://www.kunsten92.nl/wp-content/uploads/2021/06/Cultuur-en-Corona-Een-jaar-later.pdf>.
- 5 Wolfs, “Film & AV-Sector,” 17.
- 6 NCP & NAPA, “Netherlands COVID-19 Protocol,” 4–6.
- 7 Screen Flanders, “Film Production Protocol in Order to Prevent Spreading of the COVID-19 Virus in the Workplace in Film Production,” October 20, 2020. https://screenflanders.be/documents/75/Film_production_protocol_20_10_2020_X4utVd6.pdf, 7, 10, 11.

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