Passing on Responsibility: Obstacles to Green Film Production in the Netherlands

Judith Keilbach and Fieke Spoler

Introduction

In light of the drastic effects of climate change, research in film and television studies has started to pay closer attention to the environment. In the last 15 years several books have been published that approach screen culture from an ecocritical perspective. There is an increasing number of studies on eco-cinema and on media's ability to raise awareness and ethical sensibility for the environment (Cubitt 2005; Lu and Mi 2009; Willoquet-Maricondi 2010; Rust et al. 2012; Kääpä 2014; Weik von Mossner 2014; Brereton 2015; Alex and Deborah 2016; Duvall 2017; Past 2019). In contrast, investigations into the environmental impact of media production have been rather limited—despite early calls to probe "cinema's material ecologies" (Ivakhiv 2008: 24). This might be due to the discipline's traditional focus on textual analyses and the critical reading

J. Keilbach (✉) · F. Spoler
Utrecht University, Utrecht, The Netherlands
e-mail: j.keilbach@uu.nl

F. Spoler
e-mail: f.spoler@uu.nl

P. Kääpä and H. Vaughan (eds.), *Film and Television Production in the Age of Climate Crisis*, Palgrave Studies in Media and Environmental Communication, https://doi.org/10.1007/978-3-030-98120-4_8

of films. However, theoretically-inspired perspectives as well as materialist approaches are providing new insights into the entanglement of media and the environment. They foreground the ecological impact and tangible effects of media technologies (Gabrys 2011; Maxwell and Miller 2012; Starosielski 2015; Starosielski and Walker 2016; Cubitt 2017), reflect on the relationship of film and its natural resources (Bozak 2012) or discuss material environmental implications of mainstream film culture (Vaughan 2019). Research into production practices—in film and media studies known as the subfield of 'production studies'—started only recently to address the ecological footprint of filmmaking, with Hunter Vaughan 'environmentally-driven production culture' studies (2021: 198).

Despite growing interest in environmental issues, film and television scholars struggle to specify the ecological impact of media productions. In addition to the complexity of assessing the media industry's footprint,[1] access to production processes and data transparency is one of the main difficulties that complicate such research. Scholars in the field of production studies have addressed this problem (Caldwell 2008; Mayer 2008; Ortner 2009) and pointed out that non-disclosure contracts hamper their academic work (Vaughan 2019).

Given this veil of secrecy it comes as no surprise that production companies often don't share their data and prevent academics to study and publish their greenhouse gas emissions. This explains why existing studies of the industry's impact on the environment are either an estimate based on an input output life-cycle assessment that uses public datasets (Corbett and Turco 2006), or they are conducted and published by the industry itself (albert 2020; Netflix 2021).[2] While the industry's engagement illustrates that media organizations and industry consortia worry about their environmental footprint, their self-assessment is often driven by self-interest since they seek, for example, to prevent the implementation of sector-wide regulations.[3] Their conclusions, often overly

[1] See for example Corbett and Turco (2006), Özdemirci (2016), Jancovic and Keilbach (forthcoming).

[2] For a critical analysis of the media industry's environmental management strategies see Kääpä (2018).

[3] In its report on the carbon impact of video streaming a consortium media companies (including the BBC, ITV, Netflix and Sky) concludes for example that "the carbon footprint of viewing one hour of video streaming is very small compared to other everyday activities" (Carbon Trust 2021: 8), thereby implying that no regulatory action is needed.

optimistic, are not only a reason to be critical of studies that are funded by the industry, but also illustrate why the inaccessibility of production and data causes a problem.

In this chapter we present the results of a small-scale research project on sustainable film production for which we conducted interviews with six Dutch film professionals. The Netherlands has a relatively small film industry that relies mostly on public film funding, with the Netherlands Film Fund supporting nearly 60 feature films (including co-productions) per year (Netherlands Film Fund 2020: 2). Despite efforts to create ecological awareness and generate behavioural change amongst filmmakers in the early 2010s, it has never been a priority of the Dutch industry to make sure that films are produced in an eco-friendly way. These green initiatives were framed as 'challenges' or linked to talent development programmes and, after the funding schemes expired, the projects simply petered out. Instead, the film industry installed a sustainability manager who has been offering consultancy and organizing workshops to share their knowledge. Although every film production can consult them to profit from their knowledge (Green Film Making 2021), little use was made of this option. This reluctance to consider implementing sustainable solutions—or even to think about the environmental footprint of one's film—triggered our interest. We wanted to understand the difficulties and obstacles that prevented the Dutch film industry from working in a more sustainable manner.

To map the difficulties and obstacles that impede greener film and television production in the Netherlands we conducted semi-structured interviews with six film professionals. We approached people with different positions—both above- and below-the-line—and ended up speaking to a caterer, a gaffer, a costume designer, a production manager, a director, and a producer. This selection resulted from their availability as well as the willingness of our interviewees to participate in a research project on sustainability. It comes therefore as no surprise that all respondents consider it important to work in an environment-friendly way.[4] Obviously, their answers are not representative and moreover, six interviews are by far not enough to provide a full picture of the situation and the varied attitudes towards sustainable film production in the Netherlands. However, we asked all participants to tell us more about the prevailing

[4] We are fully aware that we were 'studying sideways' (Mayer 2008; Ortner 2009) since like our respondents we are concerned about the deterioration of our planet.

tendencies in the industry, thereby addressing them as representatives of their profession. First results of a follow-up research venture that we are currently conducting for the Netherlands Film Fund confirm the findings of our previous small-scale interview project.

All our interview partners were to some extent aware of sustainable options in their field of work and have even been applying eco-friendly solutions, if possible. Nevertheless, all respondents believed that either they themselves or the Dutch film industry as a whole could or should do more to produce films in an environmentally acceptable way. At the beginning of each interview, we asked our respondents what exactly sustainability means to them and to their professional practice: depending on their particular activities in film production, their notions of sustainability ranged from vegetarian cooking to circular use of materials and avoiding artificial light, air travels or plastic waste.

Given our interest in difficulties and obstacles to enacting green policy, in this chapter we will not discuss the actions that our interview partners are already taking to work in an eco-friendly fashion. Instead, we will focus on what they are *not* (yet) doing, or more specifically, *why* they are not taking (more) action. What impediments or reasons prevent professionals in the Dutch film industry from working in a more eco-friendly way?

Production Culture

Production cultures in the film and television industry differ, depending on the type of the media product, its size and location of production. Academic research on media production pays most notably attention to labour conditions in the creative industries with a particular interest in below-the-line workers.[5] Focusing on the situation in the U.S., John Caldwell (2008) and Vicki Mayer (2011, 2017) both probe into the hierarchies, dependencies and anxieties that structure the work environment, identifying temporary employment as one of the main traits that characterizes work in the media industry. In his research on the production culture of the L.A.-based film and television industry, Caldwell classifies this situation as "nomadic labor system" and vividly describes how

[5] See for example Caldwell (2008), Mayer et al. (2009), Mayer (2011, 2017), Hesmondhalgh and Baker (2011), Szczepanik and Vonderau (2013), Banks et al. (2016), Curtin and Sanson (2016).

workers "must start angling for the next job even before their current one concludes" (2008: 113).

The size and approach of the Dutch film industry is of a substantially smaller scale; however, production in the Netherlands is organized in a similar way. As in the U.S., work is project-based and people team up only for a limited period of time, resembling Caldwell's observation that "each shoot is essentially a new corporation that starts up, functions intensely, and closes down in a matter of months" (2008: 113). Different from (part of the) U.S. industry, film professionals in the Netherlands are not unionized but do freelance work. Although the Dutch job market is less competitive, we realized in our small-scale research that concerns about the next assignment influence how Dutch film professionals think about sustainable film production.

Film production is not only project-based work but also requires a division of labour. It is realized by a team of freelance workers who collaborate closely while at the same time being organized according to a hierarchical structure. For film professionals and service suppliers in the Netherlands, the most important resource for getting a job is their network. Past collaborations, achievements and recommendations are therefore vital to be hired for a project. As a result, film professionals pay close attention to their reputation. They seek to have good relations with their superiors and co-workers and strive to deliver good work and operate efficiently.

Film workers in the Netherlands tend to follow the established routines of their departments or profession and are reluctant to experiment with green technologies or new modes of working. One reason for their reservations is the time pressure under which films are made in the Netherlands which is due to tight financial budgets. Not only does the workflow allow no margin for breaking with production routines, they also result in a limitation of communication that focuses on solving production-related problems and leaves no room to add sustainability to the list of topics. Simply put, time pressures impede the potential for collective discussion about how a film could be produced in a more eco-friendly way.

In our interviews it became clear that the prevailing work culture, power structures and time pressure affect the extent to which film professionals adopt sustainable solutions in their field of work. We identified five topics that occurred several times and vividly illustrate the obstacles that complicate the enforcement and implementation of environmentally

sustainable film production in the Netherlands: the importance of one's reputation, the lack for clear instructions from above, the question of responsibility, the image of green film making, and ethical and financial dilemma's.

The Importance of Reputation

In general, we found that film and television production crew members fear that they may damage their reputation by pushing for more eco-friendly working. Below-the-line workers seem to be especially afraid to annoy anybody by suggesting green solutions and therefore hindering the production flow, and fear to decrease their chance to get hired for the next job. Even if film professionals rank high in their respective department and can work relatively autonomously, their position as a freelancer hinders them to take environmentally aware actions. It seems that anxieties related to reputation which in turn result from pressure on the labour market play a major role in the way crew members decide on their own working methods. Our interviews clearly indicate that the fear of not getting hired for the next job outweighs by far the intention of taking or promoting more eco-friendly actions.

A passage from our conversation with a caterer illustrates the influence leveraged by concerns about reputation. Even without explicitly being asked about sustainable solutions, she mentions vegetarian cooking and reflects on how often her catering service offers meatless meals. Producers usually leave it to her what is included on the menu and she acknowledges that she could increase the number of vegetarian meals. At the same time, she recognizes that fear of damaging her reputation prevents her from adding a second day without meat. 'You quickly get a certain name,' she remarks in our conversation and adds: 'You have to make sure that you don't become known as 'that caterer' who doesn't want to serve meat.'

In a similar vein, the costume designer doesn't want to be considered a 'difficult person.' At a certain moment in our conversation, she describes her job as being paid 'to do shopping' and is critical about the general expectation that 'a lot of stuff is available' for the director to choose from. Reflecting on the workflow within film production she addresses the tendency to delay costume decisions and points out that taking final decisions in pre-production would prevent a lot of waste and therefore be much more eco-friendly. However, since film directors usually want to postpone creative decisions as long as possible, she considers herself—as

a costume designer—not in a position to discuss this topic or set limits to the director. In addition to concerns about job opportunities and one's reputation it is thus also the hierarchical structure within a film production that prevents working more sustainably and complicates bottom-up initiatives that might exist in different film departments.

A Vision from Above

The project-based nature of film production and the division of labour makes it difficult to create a shared eco-friendly work culture. The different departments function separately from each other and make use of different forms of knowledge and expertise. This departmental separation complicates the formulation of shared goals regarding the environmental impact of a project. Such goals usually don't exist—unless they are assigned 'from above'. But Dutch producers and directors are reluctant to give instructions to work in more eco-friendly ways and therefore the level of sustainability that a film production achieves is highly dependent on the intrinsic motivation and ambition of individual crew members. Our interviews indicate that especially below-the-line workers are missing a vision 'from above' that encourages sustainable action. What is more: if they themselves suggest or implement more eco-friendly solutions they don't feel supported by the production management or people with positions above the line.

The caterer mentions an interesting example that shows how the division of labour and the lack of cooperation between departments hampers sustainable action. She tells us that she would like to recycle glass and paper, however the responsibility for processing waste lies with the location management. According to her, the people there are 'usually much blunter and say, 'it all just goes together in the trash.' That green efforts of one department are counteracted by another leads to frustration. Similarly, the gaffer is irritated by small disposable plastic bottles, that were distributed on the set due to a sponsorship deal, while he was at the same time doing his best to limit transportation and the use of a diesel generator. Defining sustainability as an overall objective would prevent not only the wasteful use of resources but also a feeling of discouragement.

On the other hand, crew members quickly seem to doubt their producer's or director's green ambitions if they indeed implement measures to work in an environmentally more acceptable way. Their efforts are not always understood as attempts to meet ecological ideals or realize

a vision of sustainable film production but rather they are perceived as pure formality. Certain green actions even backfire on the producers if crew members perceive them as a form of greenwashing. The gaffer, for example, tells us about a particular project and reports that the production department decided to stop printing call sheets—'as a green statement', according to him. Instead, they sent the documents by email. 'If this is the best that people can think of,' the gaffer voices his criticism and leaves no doubt about his opinion: 'I find this rather disappointing!'.

During our conversations, it became clear to us that crew members feel left alone in figuring out and pursuing methods to reduce the environmental impact of their work. They point to the producers from whom they expect a clear and explicit vision of a project's sustainability goals. They also want them to encourage more cooperation between the departments to collectively take sustainable actions. From the answers of our respondents, we realized how important it is that producers find the right tone when addressing green production. Crew members don't want to be lectured, they rather want to be trained and—most of all—inspired.

Giving and Taking Responsibility

Conventional production culture—with its division of labour, hierarchical structure, freelance workers, and tight budget—seems to create a gap in which clear communication is lost regarding who is responsible for sustainable film production. In our conversations we noticed an implicit distinction between initiating and implementing green measures that resulted in conflicting expectations about who should take action. Since these expectations are often not discussed explicitly, sustainability remains an intention without manifest consequences.

In our conversation, the producer recognizes for example: 'Of course, the ultimate responsibility for sustainable production lies with the producer,' since they 'can choose whether or not to do this.' However, she immediately starts talking about the agency of others by saying: 'But in the end, the executive producer and production manager must push for it to actually happen, because they do all the negotiations and conversations with all the crew members.' It is noteworthy that when we asked her if she ever speaks with people in these positions about their alleged responsibility, her answer is a simple 'no.' A production manager with whom we talked, confirms this lack of communication about expectations regarding the implementation of sustainable measures. She considers

herself more than willing to stimulate and inspire more eco-friendly practices for her film crew. However, none of the producers or directors with whom she had worked so far had ever instructed her to actually bring up this topic.

Film directors seem to have a particular complicated role with regard do sustainable film production. Their power within a film production would allow them, on the one hand, to enforce environmentally acceptable methods of working. On the other hand, their primary task is related to creative aspects, and coming up with sustainable solutions is not their line of action. According to the director to whom we talked, it is nevertheless often directors who start the conversation about sustainability, while producers listen to them when it comes to taking decisions about green measures. However, the director seems to struggle with this power and adds: 'It's not like I make the films alone. If the director of photography says that something takes a lot of time, then I'm not the one who is going to work against him. Because that makes for a grumpy crew, which is bad for life on the set.' Especially his last remark indicates that he refrains from pushing his green ambition too much for fear of ruining the atmosphere as well as his own image. It is striking that even he seems to be afraid of a bad reputation, despite his position at the top of the food chain.

In our small-scale project we realized that there are above-the-line film professionals who strive for producing films in a more sustainable way. However, they refrain from imposing green measures on their crew, because they are afraid of resistance. They rather expect crew members to take action by implementing eco-friendly production methods on their own initiative. Conversely, there are below-the-line film professionals who would like to work more eco-friendly, however, they want to be guided and supported by their superiors. Film producers and directors seem to overlook these needs and miss the chance to inspire and train their crews about the possibilities of green film making. Creating a situation for open discussion could help to close the gap between green intentions and green actions.

The Image of Green Film Making

As mentioned before, Dutch films are often produced under great time pressure and with tight budgets. Therefore, producers do not make it a priority to invest in eco-consultancy, -education or extra hours for

the crew to do research into sustainable solutions. But eco-friendly film production depends on adjustments in the working routine, which in turn require knowledge and time. Because both are usually lacking, crew members often choose convenience and old habits over the environment. Environmentally aware producers, on the other hand, expect the crew to work in an eco-friendly way, but are either not aware of their needs (inspiration, training, support) or not able to facilitate them (more time). In the end, this complex situation leads to the perception that sustainable film production is first and foremost a hassle that involves extra workload or expenses.

In our conversation the production manager, for example, remarks that sustainable film production 'means extra work for everyone' and explains that 'crew members really have to do it all by themselves.' The producer mentions that green films are sometimes the result of economic considerations, although sustainability had never been an end in itself, and admits that she utilizes the argument of 'being green' since cost reductions can be easily entered on the sustainability side. Despite her awareness of the environmental impact of films, she does not seem to be willing to change working methods and implement more eco-friendly solutions. Instead, she uses films that are by accident (or due to financial restraints) produced in a sustainable way, to paint a rosy picture of the film makers' goals and visions.

The producer, director and production manager all suggest the need to appoint an eco-manager whom they envision a crew member who is knowledgeable in green solutions and contributes with their knowledge to producing a sustainable film. Although all three respondents consider the employment of such a person the best measure to green the Dutch film industry, they immediately voice their concerns about the budget and emphasize that under the given conditions it is impossible to hire an additional crew member. Rather they would want to train someone who is already on their payroll. The director suggests for example upgrading the skills of the production or location manager. 'That would be really nice for them,' he argues. 'Location managers never get anything; they are really at the bottom of the ladder. So, for them it would be really cool to get some extra training.' Putting an intern in charge of sustainability was another proposal we heard during our interviews, which indicates not only the low priority of adhering to environmentally acceptable working practices but also illustrates that those who rank high in a

film production's hierarchy envision a subordinate and rather powerless eco-manager.

In the Netherlands the perception of eco-friendly film production is intertwined with the image of Green Film Making, an organization initiated and financed by the Netherlands Film Fund and run by one sustainability manager. For many Dutch film professionals this individual symbolizes green film production as a whole. When asked about sustainable production practices our respondents almost immediately started to talk about the sustainability manager from whom they seem to expect a solution to the sector's environmental problems. In our interviews her description ranges from a woman with an impossible mission to a person who harasses producers and directors with sustainable solutions that don't match reality.

The production manager acknowledges the tough situation of the sustainability manager who 'had to do it all alone'. She claims that everybody feels the urgency to produce films in a more sustainable way, 'but we are at the same time all creatures of habit'. Passing responsibility to initiate change on to the sustainability manager she asks: 'How can one woman alone counter our habits?' Less empathetically the producer portrays her as 'a special woman with a mission' and describes the collaboration as 'annoying' since she causes everyone whom she approaches to think 'No, thank you! I really don't need this right now!' It is noteworthy that these depictions, echoed by the director, use gender biased language and are interspersed with connotations and stereotypes that devalue the work of the sustainability manager. At the same time our respondents place her and her green visions and ambitions in direct opposition to an 'unwilling' Dutch film industry—in which they themselves play a significant role.

Ethical and Financial Dilemmas

Some film professionals seem to struggle with a common dilemma: on the one hand films can convey social and political messages and their narratives can make a positive impact, while on the other hand all filmmaking essentially harms the environment and stopping film production altogether would be the most eco-friendly course of action. In our interviews eco-friendly considerations are therefore often contradicted by the importance of a story that needs to be told. The producer grapples most with her personal and professional contribution to the environmental crisis and admits: 'Sometimes I wonder: is it perhaps my social responsibility to

stop producing films? On the other hand, I really love this profession so much and some of the storytelling is so good! But at the same time, there is so much content created. I go back and forth about this all the time.' Similarly, the production manager asks herself to what extent it is still responsible to continue producing more and more films. Apparently, they are both struggling with a dilemma that leaves them paralyzed, since despite their awareness they do not—or cannot—take any action.

For the director, in contrast, the case is clear: As a filmmaker 'you must put content and creativity first. Otherwise, you just don't get the most out of the project's potential—and might as well not make a film at all'. With this reasoning, he creates a free pass to sideline environmental considerations. References to other industries with a significantly larger carbon footprint, like aviation ('Schiphol') or to the media industry of other countries ('Hollywood'), were another strategy that our interview partners used to point to the relatively small environmental impact of Dutch film production—and to salve their green conscious.

Funding schemes create another dilemma for filmmakers, since producers often resort to international co-productions to get a film financed, which in turn requires that a film is shot or produced in all co-funding regions or countries. This funding structure increases the transportation volume of a production, while at the same time the transport of people, equipment and goods causes the largest amount of CO_2 emission of a film.[6] The producer recognizes that 'co-productions are without a doubt bad for the environment and the planet' and explains that getting a film acknowledged internationally (for example at film festivals) basically presupposes that its crew moves around the globe, or at least across borders and regions. 'A story about a Dutch family [that is shot only] in the Netherlands' is simply 'not the right content' for an international market.

Her explanation points to the complex structure of and interdependencies within the film industry that complicates transformations and more sustainable practices. It is thus not only individual film professionals who shirk responsibility; with their selection of films that they consider transnationally appealing, festivals and distributors also hinder

[6] According to Albert (2020) 35% of the CO_2 emission of a British film production is created by fuel used in car journeys and 16% by air travel. For the Netherlands, MA students from the Sustainable Development program of Utrecht University estimate that more than 40% is created by transport of persons and goods (Akbarbeyglu et al. 2020).

more eco-friendly film production, as do funding schemes and national and international film policies. Their (explicit and implicit) requirements create a dilemma for filmmakers that in the end prevents them from taking any environmentally aware action at all.

This inability or unwillingness to act might also be related to the fact that in the Netherlands the climate crisis is still perceived as abstract and distant. Until the Dutch are standing up to their ankles in rising waters the urgency seems not to be tangible enough.[7] In the neoliberal Dutch society that praises itself for meeting environmental challenges with technological solutions (since centuries) and answers ethical questions with market-oriented pragmatism, reflecting upon dilemmas can function as smokescreen that camouflages the lack of action. This doesn't mean to deny their reality, however: being caught in such dilemmas assures oneself the comfortable combination of gesturing to environmental engagement without having to change one's lifestyle or work practices. In the Dutch film industry this attitude leads not only to a continuation of business as usual, it also misses the opportunity to integrate environmental topics (subtle or prominently) in a film's story world to create awareness and therefore make an impact.

Conclusions

Our small-scale interview project shows that Dutch film professionals are quite aware of the environmental impact of film production and are knowledgeable of sustainable solutions, but are not taking action to implement more eco-friendly practices. Their responses indicate several reasons for this paradoxical situation. Firstly, it seems that due to the particular work culture and hierarchical structure that characterize film production in the Netherlands, nobody is taking responsibility for initiating or integrating environmentally aware production practices. Film professionals in all hierarchical layers attach great value and importance to their reputation and are afraid of damaging their status by asking for green solutions. Particularly low-ranking workers refrain from suggesting or implementing more eco-friendly ways of working in order to get hired for the next job. To get out of this gridlock, producers and directors need to emphasize the urgency and importance of environmentally aware work

[7] In contrast, the Covid 19 pandemic demonstrated that due to urgency it was easily and in no time possible to change working routines and to allocate extra time and money.

practices and encourage and support their crew in changing their work routines, habits and behavior.

Secondly, a hierarchically loaded communication gap seems to hamper the implementation of green film production. Below-the-line workers expect guidance from above, while producers are reluctant to give instructions, fear resistance of their crew and are in turn waiting for higher authorities to make a move. Policy makers at the Netherlands Film Fund on the other hand are hesitant to formalize environmental commitment and, rather, assume that filmmakers initiate voluntarily sustainable ways of working.[8] However, none of these expectations are clearly communicated. Greening the Dutch film production therefore first and foremost requires an open discussion that involves all hierarchical layers to clarify existing assumptions, create a shared vision, find workable solutions, and make sure that the responsibility for environmentally aware ways of working is accepted collectively.

Finally, it became clear to us that the way in which films are currently financed constrains the implementation of more eco-friendly practices of production. Tight budgets and the related time pressure result in standard routines and leave no room for thinking about new, sustainable ways of film production. However, working with environmental awareness necessitates training and planning. To make the Dutch film industry greener therefore requires extra money and time to enable training crews and to research and plan sustainable solutions before a production starts.

A comparison with other countries demonstrates how sustainable film production can be stimulated, for example by awarding eco-labels, using financial incentives (bonus, tax rebates etc.) or offering workshops and coaching.[9] Environmentally aware ways of working can even be made compulsory by obliging every film production that receives funding to get certified, to work with a CO_2 calculator or employ an eco-manager.[10] It is noteworthy that it is usually funding agencies or film commissions that

[8] During a round table discussion at the Netherlands Film Festival in 2021 a representative of the Netherlands Film Fund expressed this reluctance and justified it by arguing that 'the Dutch' don't like to follow rules.

[9] See for example the policies of the Flanders Audiovisual Fund, the film commissions of Trentino, Mallorca or Lower Austria, or of Creative Europe. For more on environmental media policy see also Kääpä (2018).

[10] See for example the Flanders Audiovisual Fund, the media and film funds in Baden-Württemberg (Germany) and the film funds Hamburg Schleswig-Holstein (Germany).

adapted their policy to set change in motion, and it is thus the Netherlands Film Fund that should play an important role in greening the Dutch film industry.

In addition to reconsidering its policy the Netherlands Film Fund should also reflect on the way it installed, financed and presented the sustainability manager to the industry. Due to the missed opportunity to promote her aims and services in combination with the absence of a green ambition, the Netherlands Film Fund played a part in how the sustainability manager was perceived by the Dutch film industry. With its lack of action the Netherlands Film Fund has demonstrated the low priority that it attached to sustainability in the last few years.

Greening the Dutch film industry can't just be limited to film production, it is also necessary to take distribution and content into account. On the one hand, filmmakers need to know (and try to reduce) the ecological footprint of the production and distribution of their films; on the other hand, they should be aware of the social impact that their stories might have. While studies into eco-cinema discuss a variety of films that are able to inspire environmental consciousness, there are only few Dutch films that deal with the degradation of the planet. Telling stories about environmental topics could even provide an answer to the ethical dilemma as to whether or not, in light of its footprint, film production should continue at all, since it could be argued that a film is worth its emissions if it contributes sufficiently to raising public awareness for the urgency of climate action.

References

Akbarbeyglu, D., L. Hendrikx, M. van Heck, M. Kallenberg and M. Schots. (2020). *Sustainable Film Production. A Research into the Environmental Sustainability of the Dutch Film Industry and Ways to Move Forward*. Utrecht University, MA Sustainable Development, Student Report.

Albert. (2020) *A Screen New Deal. A Route Map to Sustainable Film Production*. Report produced as collaboration between albert, BFI and Arub, https://wearealbert.org/wp-content/uploads/2020/09/200901_FinalDraft.pdf (accessed 06/02/2021).

Alex, R. K. and S. S. Deborah. (eds.) (2016). *Ecodocumentaries. Critical Essays*. London: Springer.

Banks, M. J., B. Conor and V. Mayer. (eds.). (2016). *Production Studies, the Sequel! Cultural Studies of Global Media Industries*. New York: Routledge.

Bozak, N. (2012). *The Cinematic Footprint. Lights, Camera, Natural Resources*. New Brunswick: Rutgers University Press.
Brereton, P. (2015). *Environmental Ethics and Film*. London: Routledge.
Caldwell, J. T. (2008). *Production Culture. Industrial Reflexivity and Critical Practice in Film and Television*. Durham: Duke University Press.
Carbon Trust. (2021). *Carbon Impact of Video Streaming*. White paper based on research by Dimpact. Available at https://prod-drupal-files.storage.googleapis.com/documents/resource/public/Carbon-impact-of-video-streaming.pdf (accessed 08/08/2021).
Corbett, C. and R. Turco. (2006). *Sustainability in the Motion Picture Industry*. University of California Los Angeles, UCLA Institute of the Environment. Available at https://www.ioes.ucla.edu/wp-content/uploads/mpisreport.pdf (accessed 28/08/2020).
Cubitt, S. (2005). *Eco Media*. Amsterdam: Rodopi.
Cubitt, S. (2017). *Finite Media. Environmental Implications of Digital Technologies*. Durham: Duke University Press Books.
Curtin, M. and K. Sanson (eds.). (2016). *Precarious Creativity. Global Media, Local Labor*. Oakland: University of California Press.
Duvall, J. A. (2017). *The Environmental Documentary. Cinema Activism in the 21st Century*. New York: Bloomsbury Academic.
Gabrys, J. (2011). *Digital Rubbish. A Natural History of Electronics*. Ann Arbor: University of Michigan Press.
Green Film Making. (2021). Available at https://greenfilmmaking.com/about (accessed 10/10/2021).
Hesmondhalgh, D. and S. Baker. (2011). *Creative Labour. Media Work in Three Cultural Industries*. New York: Routledge.
Ivakhiv, A. (2008). 'Green Film Criticism and Its Futures', *Interdisciplinary Studies in Literature and Environment* 15(2): 1–28.
Jancovic, M. and J. Keilbach. (forthcoming). 'Streaming Against the Environment. Digital Infrastructures, Video Compression, and the Environmental Footprint of Video Streaming', in K. van Es and N. Verhoeff (eds.). *Situating Data: A Cultural Inquiry*. Amsterdam: Amsterdam University Press.
Kääpä, P. (2014). *Ecology and Contemporary Nordic Cinemas. From Nation-building to Ecocosmopolitanism*. London: Bloomsbury Academic.
Kääpä, P. (2018). *Environmental Management of the Media. Policy, Industry, Practice*. Abdington: Routledge.
Lu, S. H. and J. Mi (eds.). (2009). *Chinese Ecocinema. In the Age of Environmental Challenge*. Hong Kong: Hong Kong University Press.
Maxwell, R. and T. Miller. (2012). *Greening the Media*. New York: Oxford University Press.
Mayer, V. (2008). 'Studying Up and F**cking Up. Ethnographic Interviewing in Production Studies', *Cinema Journal* 47(2): 141–148.

Mayer, V. (2011). *Below the Line. Producers and Production Studies in the New Television Economy*. Durham: Duke University Press.
Mayer, V. (2017). *Almost Hollywood, Nearly New Orleans*. Oakland: University of California Press.
Mayer, V., M. J. Banks and J. T. Caldwell (eds.). (2009). *Production Studies. Cultural Studies of Media Industries*. New York: Routledge.
Netflix. (2021). *Environmental Social Governance 2020*. Sustainability report. Available at https://s22.q4cdn.com/959853165/files/doc_downloads/2021/03/2020-SASB-Report_FINAL.pdf (accessed 08/08/2021).
Netherlands Film Fund. (2020). *Film Facts & Figures on the Netherlands*. June 2020. Available at https://www.filmfonds.nl/page/8855/film-facts-figures-2020 (accessed 10/08/2021).
Ortner, S. B. (2009). 'Studying Sideways. Ethnographic Access in Hollywood', in V. Mayer, M. J. Banks and J. T. Caldwell (eds.). *Production Studies. Cultural Studies of Media Industries*. New York: Routledge, pp. 175–189.
Özdemirci, E. G. (2016). 'Greening the Screen. An Environmental Challenge', *Humanities* 5(2), 35. https://doi.org/10.3390/h5020035.
Past, E. (2019). *Italian Ecocinema Beyond the Human*. Bloomington: Indiana University Press.
Rust, S., S. Monani and S. Cubitt (eds.). (2012). *Ecocinema Theory and Practice*. London: Routledge.
Starosielski, N. (2015). *The Undersea Network*. Durham: Duke University Press.
Starosielski, N. and J. Walker (eds.). (2016). *Sustainable Media*. New York: Routledge.
Szczepanik, P. and P. Vonderau (eds.). (2013). *Behind the Screen. Inside European Production Cultures*. Basingstoke: Palgrave Macmillan.
Vaughan, H. (2019). *Hollywood's Dirtiest Secret. The Hidden Environmental Costs of the Movies*. New York: Columbia University Press.
Vaughan, H. (2021). 'A Green Intervention in Media Production Culture Studies. Environmental Values, Political Economy and Mobile Production', *Environmental Values*, 30(2): 193–214.
Weik von Mossner, A. (ed.). (2014). *Moving Environments. Affect, Emotion, Ecology, and Film*. Waterloo: Wilfrid Laurier University Press.
Willoquet-Maricondi, P. (ed.). (2010). *Framing the World. Explorations in Ecocriticism and Film*. Charlottesville: University of Virginia Press.