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# A Screen New Deal and Ökologische Mindeststandards

*A Discourse Analysis of Environmental Sustainability in the British and German Film Industry*

Rita Kovács

Master's Thesis in Screen Cultures  
Department of Media and Communication

01 June 2022



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## **Abstract**

Focusing on one best practice guide document from both the United Kingdom and Germany as case studies (*A Screen New Deal* and *Ökologische Mindeststandards*), the thesis investigates how the British and German film industries conceptualise environmental sustainability issues in film production; what they identify as problem areas, what they suggest doing about them, and whether there are any recurring elements in these texts. The thesis merges environmental sustainability studies with film production theory and practices, while uses discourse analysis as a method to examine the language of the two selected texts in terms of word choice, structuring, intended audience, and persuasion.

The two case studies show that when discussing environmental sustainability, the primary concern is climate change. The problem areas in the two documents are very similar, since most film productions have similar needs, but what differs is the amount of details given and the way the information is organised. In terms of the language of the texts, the British document uses both technical details and emotionally charged language to convince the reader about the importance of sustainability, while the German case study is tonally neutral and limited to information and recommendations. The findings also suggest that there is a significant difference between how Germany and the United Kingdom perceive their film industries' stage of development when it comes to environmental sustainability.



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*Rita Kovács*

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## Table of Contents

<b>1. Introduction</b> .....	1
1.1 Research question and objectives .....	1
1.2 Focus and scope.....	2
1.3 Previous research and contributions .....	4
1.4 Relevance of the thesis .....	6
1.5 Theory and method.....	7
1.6 Limitations.....	9
1.7 The structure of the thesis.....	10
<b>2. From On-Screen Representation to Green Production: A Literature Review</b> .....	12
2.1 The early days of media and the environment.....	12
2.2 Environmental storytelling on screen .....	13
2.3 Screen technologies enter the debate.....	15
2.4 The UCLA’s report on sustainability in the motion picture industry.....	18
2.5 Focusing on the film industry and its impact .....	20
2.6 Conclusion.....	24
<b>3. Sustainability and Discourse Analysis: Theory and Methodology</b> .....	26
3.1 What is “environmental sustainability”? .....	26
3.2 Language and its politics: critical discourse analysis .....	31
3.3 The selection of the case studies.....	36
3.4 Challenges and limitations.....	37
<b>4. “The film production industry requires systemic change to become sustainable.” - Sustainability Discourse in the UK</b> .....	39
4.1 The UK as a film giant – and its environmental cost .....	39
4.2 Early Steps: BS 8909 and BFI’s Sustainability Policies .....	42
4.3 A Screen New Deal (2020).....	47
4.4 Conclusion.....	57
<b>5. “Showing strength and commitment together!” – Sustainability Discourse in Germany</b> .....	58
5.1 The German film industry – a special constellation.....	59
5.2 The brief history of sustainability in the German film industry .....	62
5.3 Ökologische Mindeststandards (2021) .....	68
5.4 Conclusion.....	76

<b>6. Discussion and Conclusion</b> .....	78
6.1 Summary of findings .....	78
6.2 What the results can tell us .....	85
6.3 Limitations .....	87
6.4 Recommendations for future research .....	88
<b>Bibliography</b> .....	89

# 1. Introduction

In 2019 the United Nation's Climate Action Summit, titled "A Race We Can Win. A Race We Must Win" confirmed that "1.5°C is the socially, economically, politically and scientifically safe limit to global warming by the end of this century, and to achieve this, the world needs to work to achieve net zero emissions by 2050"<sup>1</sup>. This means that the various national governments need more ambitious climate policies and that all industries need to rethink their commitment to environmental sustainability.

The question of sustainability is a central one today, and many industries try to lessen their negative impact on the environment. And while many do not think of watching movies as a harmful activity for the environment, since 2006 there are studies<sup>2</sup> showing the film industry's impact on climate change and pollution. Which means that if the world wants to reach net zero emissions by 2050, the film industry also needs to change.

## 1.1 Research question and objectives

The primary goal of this thesis is to find out how the European film industry (meaning by that the national film institutes, production companies, and other relevant organisations) talk about and conceptualise environmental sustainability in film production, what they identify as problems or issues that impact the environment negatively, and what the suggested solutions are, if there are any at all. Focusing on one best practice guide document from both Germany and the United Kingdom as case studies (*A Screen New Deal* and *Ökologische Mindeststandards*), my MA thesis project answers the following main research question:

How do the British and German film industries conceptualise environmental sustainability issues in film production?

I also have two secondary questions to help guiding this exploration:

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<sup>1</sup> UN, "2019 Climate Action Summit".

<sup>2</sup> Corbet and Turco, *Sustainability in the Motion Picture Industry*.

1. What do *A Screen New Deal* and *Ökologische Mindeststandards* identify as problem areas and what do they suggest doing about them; are there any recurring elements?
2. How does the language of these texts work in terms of word choice, structuring, intended audience, and persuasion?

First and foremost, my research is a discourse analysis. I will look at how environmental sustainability is discussed through documents showcasing the initiatives coming from the film industry. The project is therefore qualitative in nature, I will analyse and compare different ‘best practices’ for sustainability in film industries in Europe. I am mostly curious about the problems raised and the possible solutions offered; in this project, I am not looking at how the recommendations are implemented in practice and whether they are successful or not. I will base my research on publicly accessible information; I am only interested in what was meant to be on display for a wider audience, to showcase how the industry ‘brands’ its approach to environmental sustainability and how these efforts are communicated towards the public. I will therefore not conduct interviews; I am not interested in industry insights or gossip.

This MA thesis merges environmental sustainability studies and film production theory and practices, while approaches the topic from a textual (discourse) analysis point of view, and focuses on specific parts of filmmaking, namely the pre-production and production level, infrastructure, and planning – these are also the areas my case studies focus on. This is an important distinction to make: by not including film distribution and exhibition (such as sustainable cinema operations<sup>3</sup>), I will not discuss the theory and practice of sustainable consumption.

## **1.2 Focus and scope**

I focus on the United Kingdom and Germany as case studies. Traditionally, the top five European production countries by both film presence and titles are the United Kingdom, France, Germany, Italy, and Spain. My first choice is the United Kingdom for the significant size of its industry but also because there are several, interesting initiatives coming from the country. The British Film Institute’s first sustainability strategy was published in 2012 with the unconcealed

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<sup>3</sup> There are initiatives dedicated specifically to green cinemas, a good example is The Green Cinema Handbook (Das Grüne Kinohandbuch) by FFA. (<https://grüneskino.de/blog/ueber-das-buch/>)

aim to become a global leader in sustainability practices<sup>4</sup>, in strong collaboration with BAFTA and the BBC. My other choice is Germany, being the biggest member of the European Film Academy, while also founding the Green Film Initiative and Green Film Shooting, as well as working on sustainability through the Berlin International Film Festival. Besides their relevance in the European film industry, comparing these two countries specifically can highlight whether their different geopolitical situations play any role in where they get their inspiration for industry policies. It is worth examining whether Germany's founder status in the European Union and its federal system or the UK's "special relationship" with the US translates into how environmental sustainability standards are approached in these countries.

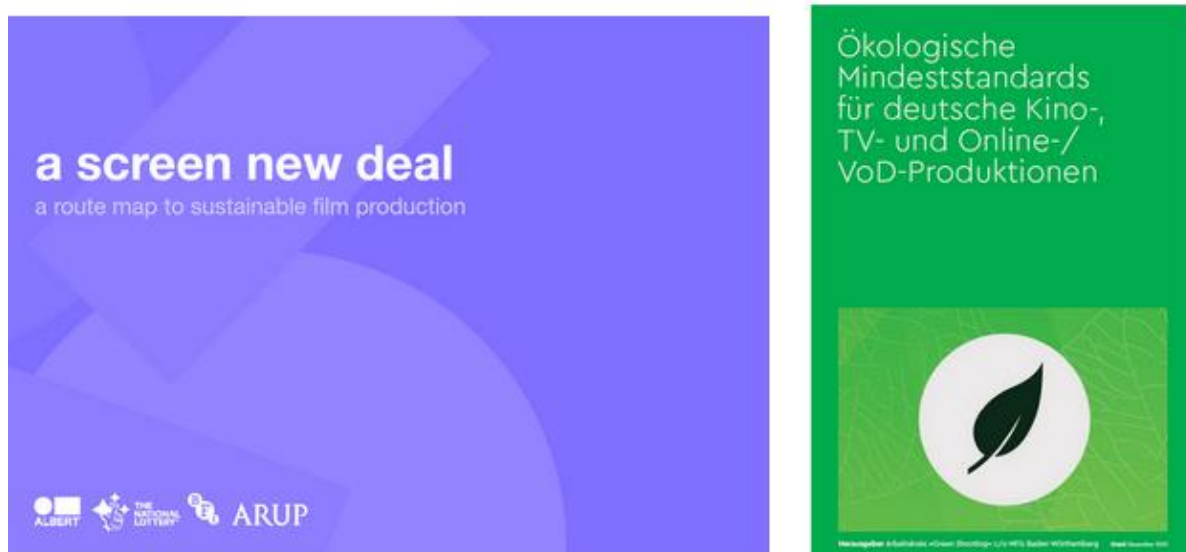


Figure 1. The two documents selected for the case studies: *A Screen New Deal* and *Ökologische Mindeststandards*

In terms of specific documents to analyse as case studies, I opted for one document from each country published after 2019. From the United Kingdom, I chose *A Screen New Deal - A Route Map to Sustainable Film Production*<sup>5</sup> from 2020. This 60-page long report is a collaboration between the British Film Institute (BFI), ALBERT Sustainable Production, and a sustainable development advisory firm Arup, and was created after the British government amended the 2008 Climate Change Act with the goal to become net zero by 2050. The document is a very comprehensive assessment of the current state of the British film industry, it is based on interviews with industry professionals and film set visits, and gives detailed recommendations for the various stages of a film production and provides best practice case studies from the

<sup>4</sup> British Film Institute, *Green matters*, 52.

<sup>5</sup> British Film Institute, *A Screen New Deal. A Route Map to Sustainable Film Production*, 2020

industry. Since the creation of the report coincides with the start of the COVID-19 global pandemic, it also gives insight into the industry at a crisis when challenges can be turned into opportunities.

From Germany, I focus my attention to the label Green Motion and the document *Minimum ecological standards for German cinema, TV and online/VoD productions*<sup>6</sup> (*Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/ VoD-Produktionen*). These minimum standards were published in a 13-page long document both in German and English, at the end of 2021, and contains fifteen different areas where change should be made during film production to create a greener filming process. The document was created by the Green Shooting working group which is also involved in developing the Federal Government Commissioner for Culture and the Media's green certificate, implying close relations between the film industry and the government when it comes to environmental sustainability standards. As we will see later in the case study chapters, there is a difference between the role politics play in Germany and the United Kingdom when it comes to transforming the film industry. I chose this document as it is the most recent and most complex one coming from Germany which received a significant amount of public attention. Interestingly, even though the document is so recent, it does not allude to the COVID-19 pandemic but rather tries to give recommendations that are not linked to whatever crisis the film industry goes through at any given moment.

### **1.3 Previous research and contributions**

While the question of environmental sustainability has been around in film and media studies for decades, it was approached from a different angle than what I chose in my thesis. There is a gradual 'evolution' of how the media and the environment were discussed together, from the environmental messages in media to examining the environmental impact of screen technologies and film production practices. Here I will give a short overview of the relevant research related to the topic and how my master's thesis fits into it, but I will give a more detailed literature review in Chapter 2.

The approach that characterised the academic discussion in the '90s was to analyse how (entertainment) media raises environmental issues for its audiences, what biases are present,

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<sup>6</sup> Green Shooting, *Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/ VoD-Produktionen*, 2021

and just in general what the media's responsibility is towards showcasing environmental subjects. A prime example of this approach in media studies is Alison Anderson's *Media, culture and the environment*<sup>7</sup> from 1997, analysing the media coverage of environmental debates from the 1980s and 1990s.

It was not just media studies however, that was interested in the representation of the environment: film studies were also preoccupied with nature's appearance on screen in the early 2000's. This took on various forms, starting with the analysis focusing purely on the aesthetics, for example by giving a historical overview of how film romanticises nature by creating almost utopian scenes with shots of nature<sup>8</sup>; or the examination focuses more on the plot, using film as an environmental storytelling device to engage with the ecological crisis and the non-human components of the Anthropocene<sup>9</sup>. Yet another trend in the academic literature is to still focus on the environmental themes of a film but not as part of a closed narrative within the film's world but as a way in which Hollywood or the film industry communicates its own environmental narrative, coming from its political-economic interests.<sup>10</sup>

An important milestone in the topic of environment and the media is Richard Maxwell and Toby Miller's book *Greening the Media* (2012), which is dedicated to how media technologies and production practices contribute to environmental problems such as pollution, climate change, and biodiversity loss. At this time, their approach was new in the academic literature and discussed a broad spectrum of topics related to sustainability, such as e-waste, harmful chemicals in newspaper printing, consumerism, the sustainability of labour, and the greenwashing of celebrities.

Interestingly, this shift in focus within film studies towards production processes comes from a 2006 contractor's report, which is often cited as inspiration in these books. The document titled *Sustainability in the Motion Picture Industry*<sup>11</sup> was commissioned by the California Integrated Waste Management Board and made by the University of California Los Angeles (UCLA) Institute of the Environment examines Hollywood's impact on the environment. The study was conducted between 2003 and 2005 and concluded that in the Los Angeles area the motion picture industry is a significant contributor to greenhouse gas emissions and conventional

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<sup>7</sup> Anderson, *Media, Culture and the Environment*.

<sup>8</sup> Brereton, *Hollywood Utopia: Ecology in Contemporary American Cinema*.

<sup>9</sup> Ingram, *Green Screen: Environmentalism and Hollywood Cinema*.

<sup>10</sup> Moore, *Landscape and the Environment in Hollywood Film: The Green Machine*.

<sup>11</sup> Corbet and Turco, *Sustainability in the Motion Picture Industry*.

pollutants<sup>12</sup>. The document is a novelty in providing concrete empirical evidence about the film industry's environmental unsustainability as well as giving an overview of how the issues is perceived by industry professionals and studio executives, creating a snapshot of the state of the industry in the early 2000s. The long-lasting legacy of this report is unquestionable: even though the report is about Hollywood in a very specific timeframe, the document became a reference point for both academics working on green filmmaking and industry professionals developing their own sustainability standards both in the United States and in Europe – as I will discuss this in detail in the case study chapters.

In the last couple of years' academic literature, there have been even more attention on the environmental impact of the film industry. In his book published in 2019<sup>13</sup>, Hunter Vaughan goes beyond Hollywood's representation of nature, and through an eco-materialist lens, using archival film production documents examines the environmental impact of the filmmaking process itself. The book is centred around the various spectacles (explosion, fire, excessive water usage) to question the ethical implications of environmental destruction for entertainment purposes as well as the audience's complicity in it.

Pietari Kääpä's 2018 book<sup>14</sup>, titled *Environmental Management of the Media: Policy, Industry, Practice* provides a European focus (the Nordic countries and the UK, specifically) to the environmental impact of the media industry as a whole, combining ecocritical analysis with the examination of the organisational management and political economy of the media industry. He discusses media regulations and management, production resources, and labour practices in broadcasting, publishing, and film. Kääpä's work provides a valuable starting point for the British chapter of my master's thesis, even though I work with qualitative methods and focus on the period after 2019.

#### **1.4 Relevance of the thesis**

As we can see, for a long time the major academic sources on film and environment either did not discuss sustainable filmmaking at all or focused primarily on Hollywood. And while these works also influenced how the issue is dealt with in Europe, a more localised overview of the

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<sup>12</sup> Ibid, 68.

<sup>13</sup> Vaughan, *Hollywood's Dirtiest Secret: The Hidden Environmental Costs of the Movies*.

<sup>14</sup> Kääpä, *Environmental Management of the Media: Policy, Industry, Practice*.



topic is needed. And when European film industries are examined, they either only serve as an illustration or focus primarily on organisational management and the policy environment. What my master's thesis offers is a further contribution to fill this gap in the literature by focusing on the film industry in Europe.

But I also do it from a different approach, the thesis is a discourse analysis of how the film industry of two European countries talk about green filming practices, what they understand by environmental sustainability, and what words they choose to convey what they do and why they do it. And by examining publications either made or commissioned by the film industry itself, I also focus the attention on their internal regulatory practices. Not surprisingly, the film industry does not like interference from the outside when it comes to rules and standards, they prefer to self-regulate. Therefore, it is of academic interest to see how they communicate what they do towards a wider audience to show that they are able to control the situation on their own and make the film industry more environmentally sustainable.

## **1.5 Theory and method**

As mentioned earlier, the main goal of this thesis is to examine how two European countries' (the United Kingdom and Germany) national film institutes and organisations in the industry talk about environmental sustainability issues in film production in publicly available documents, what they identify as problem areas, how the language of these texts work in terms of word choice, structuring, intended audience, and persuasion to convey these messages. This is a qualitative analysis, I scrutinize and compare documents from both countries in terms of their best practice recommendations for sustainable film production, and the tone in which they discuss these matters.

As my objects of analysis are texts, my method needs to be suitable for textual analysis. I chose critical discourse analysis (CDA) for this purpose, since it is a qualitative method designed to linguistically examine a few select texts in depth, as opposed to for example content analysis which is quantitative and aims to give a general overview of an issue. Discourse analysis was originally a method used in linguistics to help to pay closer attention to language, but in media studies it is often used to analyse visual imagery as well and their way of creating or delivering

meaning.<sup>15</sup> And since my objects of inquiry are well-made, catalogue-like publications with illustrations and other visual elements, critical discourse analysis' applicability to visual imagery comes in handy as well.

As opposed to discourse analysis, content analysis is a quantitative method that is good for measuring recurring phrases and images, generalising occurrences, because it samples a large amount of cases.<sup>16</sup> Therefore it can identify themes or problems that are recurring in texts and is good for picking up manifest meanings, while discourse analysis is a good tool for revealing latent meanings.<sup>17</sup> The reason why I chose not to do content analysis is because I am not interested in how environmentally sustainable filmmaking is portrayed in general, but how a select few organisations in power positions (those whose words 'matter' because of their size or status in the European film industry) define environmental sustainability and recommend solutions for a greener production process.

I also chose to differentiate between discourse analysis and critical discourse analysis, leaning towards the latter. Environmental sustainability is a societal issue, and I am curious whether the language of the discussion in the film industry reproduce any forms of power dynamics or socio-political context when talking about the importance of sustainable filmmaking. I am interested in whether these texts challenge or reproduce certain beliefs about environmental sustainability, talk about an "us" and "them" distinction, and if they address systemic issues or changes needed, either in the industry or in society.

Since my MA thesis investigates environmental sustainability in the film industry, a central concept that needs to be defined is environmental sustainability itself. As we will see later, some of the selected case studies focus on very specific parts of environmental sustainability, therefore it is important to examine what academics mean by it and what definition I keep in mind while conducting my analysis. In Chapter 3 I give a short overview of the various approaches to defining environmental sustainability as well as the planetary boundaries that can fundamentally change the Earth system if transgressed – and where climate change is only one of the issues to consider.

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<sup>15</sup> Hesmondhalg, "Discourse analysis and content analysis", 120.

<sup>16</sup> Ibid, 121.

<sup>17</sup> Ibid.

## 1.6 Limitations

The scope of this thesis, the method, and the selected case studies have their strengths, but they also pose their own challenges, and the research inevitably comes with some limitations that must be kept in mind when assessing the findings.

As I pointed out earlier, critical discourse analysis is a good method for paying close attention to the language, hidden meaning, and wider societal implications of select texts. Therefore, it is not a tool to be able to draw general conclusions or detect recurring or widespread assumptions about environmental sustainability in the selected European case studies. Critical discourse analysis is not just descriptive but also supposed to be normative<sup>18</sup>, it is also an “explanatory critique” aiming to explain the described realities, to show their effects and even test or challenge the realities the discourse creates.<sup>19</sup> Therefore caution is needed when forming normative statements based on the case studies, especially about controversial topics such as climate change and environmental sustainability.

The scope of the thesis, or more specifically the selection of case studies also has its limitations. I examine two, Western-European countries, the United Kingdom and Germany, and within these countries I also limit my examinations to two texts from the past two years. Therefore, my analysis is bound by geographical, economical, and temporal constraints, I might have received different results from different countries from different time periods. Which means that this thesis is not suitable for drawing Europe-wide conclusions about environmental sustainability discourse in the film industry; it provides a snapshot of how two countries currently approach the question.

There is another limitation set up by the research question itself: by focusing on discourse, the thesis does not provide insight into the practical applicability of the proposed sustainability practices in the industry. This thesis cannot tell whether the proposed changes are realistic or effective in solving environmental sustainability problems in the film industry. Neither can I rank these proposals and say that the British or the German approach is ‘better’ in any way, what I can show is how these texts communicate to their selected audience within their national context. This limitation however also has its advantage, especially in light of the COVID-19 pandemic and its effect on the European film industry. By focusing on the discourse and not

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<sup>18</sup> Fairclough, “Critical Discourse Analysis”, 9.

<sup>19</sup> Ibid.

the practical applicability of the recommended changes, the global lockdown and the industry's emergency measures to adapt to the circumstances did not directly affect my research.

### **1.7 The structure of the thesis**

Following the Introduction, Chapter 2 provides a literature review by describing the main trends and approaches in the English-speaking literature about film and the environment from the 1990s up until today. I outline the shifts and turning points that led from conveying environmental messages in the media, through the representation of nature on screen to greening the film industry itself and the inclusion of green filmmaking practices in the academic debate. I consider both media studies and film studies in my survey, firstly because both disciplines contributed to the development of the subject, and secondly because there is an overlap between these two disciplines when discussing environmental media content and the sustainability of screen technologies.

In Chapter 3, I look at the theory and methodology behind the thesis. Since the aim of this thesis is to examine relevant documents from the British and German film industry to see how the issue of environmental sustainability is talked about, this needs to be done through a form of textual analysis. I chose critical discourse analysis as a guiding principle, and in this chapter, I explain this method and the reasoning behind its application. I also provide a brief explanation of the concept of environmental sustainability, the method of selecting my case studies, as well as the limitations and possible shortcomings of these choices.

Chapter 4 is dedicated to the case study from the United Kingdom. First, I provide some background information on the British film industry by briefly describing the size and impact of the United Kingdom's film production to show why their approach to environmental sustainability matters on an international level. Afterwards, I introduce the various actors of the British film industry as well as some of the country's previous sustainable initiatives relevant to the research question. The rest of the chapter is dedicated to the textual analysis of the selected case study (*A Screen New Deal*).

In the next part of the thesis (Chapter 5), I discuss the second country chosen for a case study, Germany. The structure of this chapter follows a similar structure to the one on the UK: I discuss key facts and figures (size, impact, funding) about Germany's film production to provide a better understanding the impact of greening the German film industry could have on the

environment. Then I give a short overview of the environmental initiatives coming from the industry that are the most relevant for our investigation and are good to be familiar with in order to understand the German approach. As opposed to the United Kingdom however, where politics and the form of government played a marginal role in the film industry's approaches to environmental sustainability, here I will discuss the initiatives coming from Germany's federal states and some governmental-political proposals too, since they all shape the trajectory of green filming in Germany. Finally, the textual analysis of the selected case study (*Ökologische Mindeststandards*) closes the chapter.

And in the last chapter I discuss my findings, provide a summary of the thesis, and reflect on the possible future directions of the research.

## **2. From On-Screen Representation to Green Production: A Literature Review**

While the environmental sustainability of film productions is a relatively new topic in academic discourse, nature and ecology has been examined in media and film studies from different points of view throughout the decades. In this chapter, I will briefly outline the main trends and approaches in the English-speaking literature from the 1990s up until today, focusing on the shifts and turning points that led to the inclusion of green filmmaking practices in the academic debate. While doing so, I reference both media and film studies because both disciplines contributed to the development of the subject, and because there is an intersection between them when discussing environmental media content and the sustainability of screen technologies – which gets even more pronounced with the rise of digital media and subscription-based streaming services.

### **2.1 The early days of media and the environment**

The traditional approach to the relationship between media and the environment was to analyse how media raises environmental issues for its audiences. This means looking at the environmental content of media and see how certain topics and lobby groups are framed in news production, what type of biases are present in a coverage, and discussing more broadly the responsibility of media towards society when it comes to environmental sustainability. A good example of this approach is Alison Anderson's *Media, culture and the environment*<sup>20</sup> from 1997, which examines the media coverage of environmental debates from the 1980s and 1990s. Environmentalism as a topic became widespread in public discussion at that point, and the main goal of the book is to involve media studies in this conversation since the media coverage plays a crucial role in how environmental questions (such as global warming, air pollution, and animal welfare) are discussed and perceived.<sup>21</sup> The book raises many important questions about the media's role in framing debates, navigating impartiality, and holding politicians accountable

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<sup>20</sup> Anderson, *Media, Culture and the Environment*.

<sup>21</sup> *Ibid*, 1.

for their environmental commitments, but it also examines how audiences make sense of environmental messages coming from news media. Traditionally, film studies had a very similar approach to environmentalism, the ecological examination of film meant the detailed analysis of how nature looks on screen.

Pat Brereton's *Hollywood Utopia: Ecology in Contemporary American Cinema* (2005)<sup>22</sup> is an important, early contribution to ecological media criticism, advocating for interdisciplinary research, especially with geography and cultural studies. The book, instead of a narrative focus, offers a close reading of the spatial aesthetics and environmental idealism of popular movies, proving that ecology has been present in Hollywood since the 1950s.<sup>23</sup> Brereton shows that even when the narrative of the story has very little to do with environmentalism (such as the case with *Titanic* or *Men in Black*), there are recurring tropes and metaphors that convey certain ecological attitudes, and a utopian longing for living in harmony with nature.<sup>24</sup> However, Brereton is somewhat loose with the terminology: sometimes 'ecology' is just a synonym for natural environments depicted on the big screen, without any deeper connotations about the relationship between living organisms and their environment. This means that even though a dialogue has started in the academic literature that points towards the relationship between environmental sustainability and the media, there are still no well-defined parameters for what 'the environment' is in this context.

## 2.2 Environmental storytelling on screen

Another approach to nature on screen is a more plot-driven one, where the emphasis is on film as an environmental storytelling device and the ways it engages with the ecological crisis and the non-human components of the Anthropocene. *Green Screen: Environmentalism and Hollywood Cinema* by David Ingram from 2000<sup>25</sup> tries to synthesise between close textual analysis and general survey, while focuses on the environmentalist film, defined as "a work in which an environmental issue is raised explicitly and is central to the narrative"<sup>26</sup>. According to Ingram, these films constitute one end of a scale where on the opposite side are the films that

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<sup>22</sup> Brereton, *Hollywood Utopia: Ecology in Contemporary American Cinema*.

<sup>23</sup> *Ibid*, 11.

<sup>24</sup> *Ibid*, 233.

<sup>25</sup> Ingram, *Green Screen: Environmentalism and Hollywood Cinema*.

<sup>26</sup> *Ibid*, vii.

only use the environment as a backdrop to tell non-environmental stories. However, he also points out that this distinction can be misleading, since sometimes the omission or background status of nature can reveal hidden environmental implications in a film – as we have seen earlier in *Hollywood Utopia*.

The main thesis of the book is that “Hollywood environmentalist movies are ideological agglomerations that draw on and perpetuate a range of contradictory discourses concerning the relationship between human beings and the environment.”<sup>27</sup> It examines Hollywood’s framing of environmental issues as melodrama, the representation of wilderness and wild animals in American films, the aesthetics of landscape cinematography, and the environmental implications of land use and technology. The appeal of *Green Screen* is that it does not limit its scope to an overtly intellectual point of view. The films examined do not necessarily contain a profound, highbrow, or coherent discussion about ecological issues, and often use environmentalism as a springboard to revert to the more familiar Hollywood trope of the white male saviour and his romantic interest.<sup>28</sup>

Another example of analysing representations of nature in film is *Ecology and Popular Film: Cinema on the Edge*<sup>29</sup>, which argues that film can also be a form of nature writing, in which the primary subject is either the natural environment or the narrator’s encounter with it and the way it makes them feel. The introduction claims that the book “examines representations of nature in mainstream film, broadens definitions of nature writing to include film, and reads a selection of films embracing a variety of themes.”<sup>30</sup> These themes include the visuals of oil well fires on screen, the environmental politics of building dams on the Tennessee River, tragic eco-heroes in disaster films, and eco-terrorism. The authors make it clear that sometimes the environmental message is overly explicit and obvious after a surface level analysis, another times very subtle but both deserve the attention of ecocritical analysis. At the end of the book, there is also a comprehensive list of films with an environmental theme. Although the book is very heterogenous in the topics and genres of the analysed films, they are all held together by an ecocritical reading, some of which (for example environmental destruction as a spectacle) foreshadow later books in this literature review.

A later variation on the approach of media content is not treating environmental films as closed off, individual narratives, instead they are interpreted as mouthpieces for Hollywood to

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<sup>27</sup> Ibid.

<sup>28</sup> Ibid.

<sup>29</sup> Murray and Heumann. *Ecology and Popular Film: Cinema on the Edge*.

<sup>30</sup> Ibid, 11.



communicate the film industry's environmental messages, driven by political-economic interests. Ellen E. Moore's *Landscape and the Environment in Hollywood Film: The Green Machine*<sup>31</sup> attempts to identify the core environmental messages and trends of Hollywood films, with a special focus on environmental degradation. The book is concerned with the "growing economic and political influence of the US media industry, which has become increasingly dominated by a small number of powerful multinational corporations"<sup>32</sup>, and that this media deregulation and consolidation led to a significant impact on how environmental issues are depicted on the silver screen. And it is a very superficial and contradictory depiction: the films often depict a serious natural catastrophe, urging the audience to take action, but then they get reassured that eventually everything will be resolved. The main problem seems to be Hollywood's reliance on (over)consumption: the industry wants to be topical by addressing environmental concerns, but it cannot get to the root of environmental unsustainability without undermining its own business interest in selling film-related merchandise.<sup>33</sup> Moore also points out that while the news media's increased coverage of environmental issues resulted in a plethora of academic analysis in journalism and media studies about how these messages are depicted, film studies seem to fall behind on examining how entertainment media frames environmental questions.<sup>34</sup>

### **2.3 Screen technologies enter the debate**

As we can see, the predominant approach to the environment in media and film studies centres around representation and close textual analysis, which is still far away from the question of this master's thesis about the environmental consequences of the film production process itself. A pronounced break from the previous approaches has arrived in 2012 with Richard Maxwell and Toby Miller's book, *Greening the Media*<sup>35</sup>. The volume focuses exclusively on how media technologies and practices contribute to environmental decline, such as pollution, climate change, and biodiversity loss. Even though media owners feature prominently on the Political Economy Research Institute's annual top corporate air polluters list at least since 2004, being

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<sup>31</sup> Moore, *Landscape and the Environment in Hollywood Film: The Green Machine*.

<sup>32</sup> *Ibid*, 2.

<sup>33</sup> *Ibid*, 253.

<sup>34</sup> *Ibid*, 3.

<sup>35</sup> Maxwell, and Miller, *Greening the Media*.

responsible for around 2.5-3 percent of greenhouse gas emission worldwide<sup>36</sup>, there was little to no academic discussion about how the media as an industry deals with environmental sustainability. According to Maxwell and Miller, it was especially difficult to discuss the environmental effects of media technology at that time, because the enthusiasm for media/screen technologies and technological development in general was so overwhelming that it made critical assessment of their impact very difficult.<sup>37</sup>

*Greening the Media* discusses green consumption by asking how much media technology is necessary on both an individual and societal scale; investigates the ecological effects of both printed and digital media (from the toxic chemical processes used in newspaper printing to e-waste), and the relationship between labour and the environment through assembly lines and supply chains. The book also calls out ‘eco-celebrities’ advocating for environmentalist causes while not reducing their own ecological footprints; and examines theories of green citizenship and how they could be utilized for a greener media. “The battle for future green citizenship against the purveyors of business-as-usual media and ICT/CE is also a battle against the current enchantment with technology, technophilia, and technological fads, which has worsened the ecological crisis.”<sup>38</sup> The authors also point out that they could not rely on ecological media history during their investigations into media technology, since there is no existing tradition for it in media studies.<sup>39</sup>

In 2015, Richard Maxwell also contributed to an edited volume, titled *Media and the Ecological Crisis*<sup>40</sup>, which focuses almost entirely on screen technologies and their effect by “emphasizing the critical role that technological hardware and production processes play in climate change, environmental despoliation, and workplace hazards associated with chemical and mechanical methods of production.”<sup>41</sup> The book does not mention neither Hollywood nor film productions, even though the latter could fit into the technical approach of the volume. The reason why it is still worth considering in this literature review for our purposes is its advocacy for developing a greener media studies discipline, which in turn could open up the discussion about sustainable production practices.

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<sup>36</sup> Ibid, 2.

<sup>37</sup> Ibid, 6.

<sup>38</sup> Ibid, 158.

<sup>39</sup> Ibid, 7.

<sup>40</sup> Maxwell, Raundalen and Vestberg, *Media and the Ecological Crisis*.

<sup>41</sup> Ibid, xi.

Another edited volume, *Sustainable media: Critical Approaches to Media and Environment*<sup>42</sup> (2016) expands on what *Media and the Ecological Crisis* has started and aims to discuss “all of the ways that media and environment are intertwined: from the exploitation of natural and human resources to the installation and disposal of media in the landscape; from people’s engagement with ecological issues via film, television, and digital media to the mediating properties of ecologies themselves.”<sup>43</sup> In their introduction, the editors Janet Walker and Nicole Starosielski define the three primary objectives of the book: 1. exposing the relationship between media culture and media technologies and ecologies; 2. discussing the environmental impact of specific forms of media that are usually excluded from film and media analysis; and 3. identifying media practices (either existing or potential) that have positive impact on the environment.<sup>44</sup> As we can see from this, the book handles a wide array of topics, from the environmental impact of cell phone towers to *Final Fantasy VII*’s take on environmental risks. This variety is the strength of the book as it is made evident that the sustainability of the media industry is a complex problem where both the form and the content – as well as their interaction – raises questions about the environment.

But what makes this volume interesting for this master’s thesis specifically is the chapter called “500,000 Kilowatts of Stardust: An Ecomaterialist Reframing of *Singin’ in the Rain*”. In his paper, Hunter Vaughan examines the excessive use of one natural resource (water) during the production of *Singin’ in the Rain* (1952, dir. Gene Kelly and Stanley Donen) and offers an “an eco-critical approach that explores the film’s rich layering of conflicting discourses, the green ramifications of its material practices, and the larger significance of how it represents our relationship to the natural and the artificial.”<sup>45</sup> Although this is a very specific case study of one resource in one film (we can safely assume that not all productions need such an excessive amount of water, as opposed to the power the light and camera equipment uses), it convincingly points out the discrepancy between materiality and movie magic in Hollywood. This chapter also served as a precursor to Vaughan’s 2019 book *Hollywood’s Dirtiest Secret: The Hidden Environmental Costs of the Movies*, which I will discuss later in this chapter.

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<sup>42</sup> Starosielski, and Walker (ed.). *Sustainable Media: Critical Approaches to Media and Environment*.

<sup>43</sup> *Ibid*, 1.

<sup>44</sup> *Ibid*, 3.

<sup>45</sup> Hunter Vaughan, “500,000 Kilowatts of Stardust”, 24.

## 2.4 The UCLA's report on sustainability in the motion picture industry

Up until this point, I only talked about academic literature and its varying approaches to environmentalism in the different realms of the media. But what brought a real turning point to assessing the film industry's impact on the environment, and Maxwell and Miller also cite it as their inspiration for their chapter discussing Hollywood, is a contractor's report from 2006, made by Charles Corbet and Richard Turco at the University of California Los Angeles (UCLA) Institute of the Environment, titled *Sustainability in the Motion Picture Industry*<sup>46</sup>. The study was the result of a project between 2003 and 2005, commissioned by the California Integrated Waste Management Board, with the aim of identifying "existing environmental best practices within the industry, based on interviews and case studies, to develop a 'green production guide' based on those practices, and to organize forums for disseminating the findings to the motion picture industry".<sup>47</sup> The study includes both film and television when discussing the motion picture industry, and focuses entirely on production, not media distribution or content.<sup>48</sup>

First, the paper gives a historical overview of environmentalism in Hollywood by assessing the content of industry publications (such as *Hollywood Reporter* and *Variety*) targeted towards people working in the industry. The report concludes that even though environmental issues were frequently featured in the literature during the 1990s, and the industry showed significant interest in green content, the focus was almost exclusively on the environmental content of motion pictures rather than the environmental effect of industry operations<sup>49</sup> – which, as we have seen, was also the case with the academic literature related to film and media studies. This overview also considers environmental initiatives within the industry, such as the Environmental Media Association (EMA), noting that between 1991 and 2004 EMA's award only considered the environmental message of film and television when handing out the award, and only later included a separate category on greening the media production process itself.<sup>50</sup>

The paper examines both the macro and micro view of the motion picture industry's effect of the environment, examining factors such as air pollutants, energy consumption, greenhouse gas emissions, hazardous waste, recycling, protecting and restoring filming locations, and concluded that in the Los Angeles area the motion picture industry is a significant contributor

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<sup>46</sup> Corbet, and Turco, *Sustainability in the Motion Picture Industry*.

<sup>47</sup> Ibid, 1.

<sup>48</sup> Ibid, 2.

<sup>49</sup> Ibid, 5.

<sup>50</sup> Ibid, 5.

to greenhouse gas emissions and conventional pollutants.<sup>51</sup> Compared to five other sectors (hotel sector, petroleum refining, aerospace, apparel, and semiconductors), the motion picture industry produces less hazardous waste, however, relative to its size it has the largest number of injuries resulting in death, which opens up the discussion about not just the sustainability of the industry from an environmental point of view, but also from a human well-being aspect.<sup>52</sup>

The report has some interesting observations about environmental sustainability and the film industry's ambivalent approach to it. First, there are signs of progress and open-mindedness, the interviewed individuals seem to be genuinely concerned with the environment and show a proactive attitude towards innovation. The motion picture industry itself however has a very strict hierarchy and a complex organisational structure in which the production teams rotate frequently, therefore there is not enough flexibility to adopt even those environmental standards that are seen in other industries.<sup>53</sup> The other difficulty is the high visibility of the industry and its dependence on public perception. The report draws attention to the fact that while other industries around the world were open, oftentimes even enthusiastic to discuss their environmental practices with researchers (although sometimes asking for anonymity), Hollywood studios were not keen on being transparent about their policies: they were afraid of getting bad rap for their shortcomings and needing to implement costly solutions as a response.<sup>54</sup> The general line of thinking seemed to be that if the studios start talking about how they become more environmentally sustainable, that draws attention to the fact that they were not sustainable before, so it is better not to address the topic at all. What the audience does not know does not hurt them – or the profit of the studio.

The authors of the paper also include some case studies of best practices in the film industry such as the carbon offset of *The Day After Tomorrow* (2004, dir. Roland Emmerich) by planting trees; give an overview of the existing green production guidelines and checklists, and recommend standards worth implementing from other industries. However, they also concluded that these guidelines can only create a measurable impact if they are backed up by an organization with sufficient knowledge and resources to navigate the suggestions and keep these standards updated.<sup>55</sup>

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<sup>51</sup> Ibid, 11.

<sup>52</sup> Ibid, 16.

<sup>53</sup> Ibid, 3.

<sup>54</sup> Ibid, 68.

<sup>55</sup> Ibid, 64.

While it is difficult to estimate the actual impact *Sustainability in the Motion Picture Industry* had on film and television production practices, it is a significant milestone in talking about the environmental consequences of producing entertainment media. And even though the report is about a specific geographic location (Los Angeles) in a specific timeframe (2002-2005), it has long-lasting effects: citing the document as a starting point is quite common in present day environmental sustainability proposals coming from the film industry, both in the United States and Europe. It is frequently referenced in the academic literature about film production and environmentalism, which makes it into a seminal work of the field. The document is also highly relevant for the purposes of this master's thesis for its assessment of the various stages of a film production process and their environmental impact, and for looking at filming as a separate industry with its standards and practices and not just as a sub-genre of media. However, it is also important to note that a lot has changed in understanding the environmental damage of film production, in sustainability sciences, and in the technology used for making films since 2006, so – as we will see later – not all the best practices and suggestions offered in this paper stand the test of time.

## **2.5 Focusing on the film industry and its impact**

Nadia Bozak's *The Cinematic Footprint: Lights, Camera, Natural Resources*<sup>56</sup> (2012) was published the same year as *Greening the Media* and also cites the UCLA report as a starting point. The book's focus is "the inextricable relationship between moving images and the natural resources that sustain them"<sup>57</sup>, in other words cinema and its dependence on industrialization and energy consumption. Bozak is interested in how film production takes natural resources and turns them into moving images, and how this process affects the environment in return. The focus is mostly on energy consumption and the carbon footprint, because these are the less visible harmful effects – as opposed to hazardous waste for example which was such a radical consequence of filmmaking that it received more attention and consequently stricter regulations.<sup>58</sup>

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<sup>56</sup> Bozak, *The Cinematic Footprint: Lights, Camera, Natural Resources*.

<sup>57</sup> *Ibid*, 1.

<sup>58</sup> *Ibid*, 5.

While the book praises the UCLA report for being “the go-to guide for carbon-neutral film initiatives and organizations in the United States”<sup>59</sup> and drawing attention to the industry’s natural resource use, it also points out that the text is way too carefully phrased to provoke any drastic changes. Bozak is also critical towards the report’s good examples. UCLA’s report mentions the filming of *The Day After Tomorrow* as a good practice because of its attempt to offset the production’s CO<sub>2</sub> emission by planting trees through the Future Forests project and investing in climate-friendly technology.<sup>60</sup> Although the report admits that not creating greenhouse gas emission is of course better than later trying to counterbalance it, it is still mentioned as a positive example: the creators of the film were at least aware of the damage they caused and tried to do something about it. But six years later this good practice is already interpreted as not doing enough. Bozak argues that carbon trading and offsetting is a non-transparent business venture where it is extremely difficult to follow up various commitments and hold actors accountable for them.<sup>61</sup> It feels like an easy way to throw some money at an environmental initiative and in return get absolution for the environmental harm the film production caused – while the most fruitful action would be to regulate the industry’s CO<sub>2</sub> emission so that it does not produce greenhouse gases to begin with.

The strength of *The Cinematic Footprint* is that it combines eco-criticism and film studies to show the film industry’s dependence on natural resources, raises important questions about the relationship between filmmakers and nature, and acknowledges the changes related to the digital age (which was missing from the UCLA report), pointing out that technological innovation in itself does not guarantee an environmentally friendly filming practice, echoing Maxwell and Miller by pointing out technophilia’s limitations. However, the chapters read more like philosophical essays about waste and energy that raise important questions but do not go into concrete examples on industry practices related to natural resources. It would have been also interesting to get a historical approach to Hollywood, since there were many technological changes (for example sound and colour) throughout its evolution that changed the industry’s energy needs.

The newest take on film production and the environment does consider classical Hollywood cinema, however. Published in 2019 with an attention-grabbing title, *Hollywood's Dirtiest Secret: The Hidden Environmental Costs of the Movies*<sup>62</sup> by Hunter Vaughan examines

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<sup>59</sup> Ibid.

<sup>60</sup> Corbet and Turco, *Sustainability in the Motion Picture Industry*, 37.

<sup>61</sup> Bozak, *The Cinematic Footprint*, 6.

<sup>62</sup> Vaughan, *Hollywood's Dirtiest Secret: The Hidden Environmental Costs of the Movies*.

Hollywood through an eco-materialist approach, going beyond the representation of nature on screen and focusing on the environmental impact of the filmmaking process. The book with its chapters organised around the four elements, mainly discusses explosions, fires, and excessive water usage, from *Singin' in the Rain* (1952, dir. Stanley Donen and Gene Kelly) to *Avatar* (2009, dir. James Cameron) to question the ethical implications of environmental destruction as a spectacle. “This book explores how the messages and methods of mainstream cinema as well as our participation in it as a willing and eager audience have cultivated our perceptions of the environment and treatment of natural resources and how films’ production and viewing practices have generated profound but unspoken modes of environmental impact.”<sup>63</sup>

The work strongly relies on archival film production and marketing documents to construct the environmentally focused material history of Hollywood filmmaking, which makes it a refreshing addition to the sustainable film production literature. Vaughan also discusses at length the digital transition in the industry, and the role of CGI. Through the example of *Twister* (1996, dir. Jan de Bont), he shows that to be able to seamlessly merge the CGI components with the rest of the film, the scenes had to be lit more brightly, which needed more energy, and required more angles and footage, which created an excess that could have been avoided if the film did not need CGI.<sup>64</sup> The book’s strongest chapter is about digital media and *Avatar*, namely the contradiction between the film’s environmental message and the illusion that digitalization is immaterial and has no effect on the environment, which connects to both Nadia Bozak’s argument and the wider discussion around sustainability in contemporary media studies.

*Hollywood's Dirtiest Secret* is a thorough overview of the destruction spectacle so typical of blockbusters, the modern-day overconsumption, and our ambivalence towards digital (im)materiality, but in some places the excessive number of anecdotes and industry gossip also weakens Vaughan’s argument, making the book into a passive-aggressive list of Hollywood hypocrisy and ‘sins’ against the environment. It would have benefited from a stronger, less narrow theoretical foundation and a look at the industry regulations and sustainability practices, because those are the things that need to be changed in order to get more environmentally friendly films.

On the European front, a big step towards in the direction of assessing industry practices is Ekin Gündüz Özdemirci’s *Greening the Screen: An Environmental Challenge*.<sup>65</sup> The paper examines

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<sup>63</sup> Ibid, 2.

<sup>64</sup> Ibid, 120.

<sup>65</sup> Gündüz Özdemirci, “Greening the Screen: An Environmental Challenge.”



green filming practices and sustainability challenges in the British film and television industry, based on case studies and interviews with several industry representatives, with the aim of discussing “the possibilities of creating a change in behavior in the film industry, not only in terms of embedding green measures but also reconstituting industrial mechanisms on behalf of environmental sustainability.”<sup>66</sup> The paper gives a thorough overview of the current state of environmental sustainability practices and initiatives in the British film and television industry, and gives concrete examples of the various aspect of a film production process that needs to be examined from an environmental perspective – such as using MDF boards to build sets which can cause cancer, to non-recyclable props and the carbon footprint of catering and non-energy efficient lighting.<sup>67</sup>

And although Gündüz Özdemirci sums up the history and best practices of the British film industry, it still seems like the United Kingdom only serves as an illustration of the current state of sustainable film production, and argues that “environmental sustainability in the British film and television industry remains a voluntary practice that depends on one’s sense of moral imperatives rather than particular financial or legislative imperatives.”<sup>68</sup> The main question the paper raises is if there is an incentive for the film industries worldwide to be environmentally sustainable that is more substantial than just hoping for the goodwill of the people involved; and “whether profitable businesses such the film and television industries can practice sustainability in the broader sense by balancing general business expectations with environmental well-being, and if they are able to cover and prioritize essential environmental needs under current regulations.”<sup>69</sup>

Another, Europe-focused study is Pietari Kääpä’s book, titled *Environmental Management of the Media: Policy, Industry, Practice*.<sup>70</sup> The volume discusses the environmental impact of the media industry as a whole, examining production resources, media regulations, management, and labour practices in broadcasting, publishing, and film in the Nordic countries and the UK, while combines ecocritical analysis with the organisational management and political economy of the media industry. Kääpä also differentiates between the needs of the various branches of media when discussing their impact on the environment. “Here, publishing tends to focus on print, which comes with a visible and widely acknowledged material footprint. Broadcasting

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<sup>66</sup> Ibid, 1.

<sup>67</sup> Ibid, 6.

<sup>68</sup> Ibid, 7.

<sup>69</sup> Ibid, 1.

<sup>70</sup> Kääpä, *Environmental Management of the Media: Policy, Industry, Practice*.

sees most of its emissions from travel and large-scale operational areas like offices and studios. Film tends to have most of its emissions generated by location shooting, but also deals with general concerns for the industry such as building management, set construction, accommodation, digital infrastructure, and so on.”<sup>71</sup> But despite these different priorities, the segments also have enough in common to “provide the building blocks for the development of solid media policy that would also be able to take into account the particular core competencies of each media form.”<sup>72</sup> The strength of the book therefore is striking a balance between acknowledging the uniqueness of the various aspects of media production and their approach to sustainability but also seeking out new ways to build on what they have in common.

Chapter five of this book (*The sustainability rhetoric of film and television organizations*) is especially relevant for this master’s thesis as it provides an overview on the British film industry’s organisational structure and communication about sustainability, roughly between 2005 and 2015. The chapter discusses the British Film Institute’s (BFI) role, the BBC, the BS 8909 standard, which is the world’s first standard for sustainable film production (and I will discuss it in more detail in the case study chapter of the United Kingdom), and several industry manuals and the quantitative analysis of various key words the texts are using to discuss environmental sustainability. Although my master’s thesis works with qualitative methods and primarily focuses on the period after 2019 when the UN Climate Action summit forced national governments to step up their games in reducing greenhouse gas emissions, this chapter provided a great starting point and an invaluable overview of the British film industry my work can build on.

## **2.6 Conclusion**

As this literature review illustrates it, it was a long way to come from the environmental messages in entertainment media to examining the environmental impact of screen technologies and film production practices. This chapter also revealed that the major academic sources on the topic focus on Hollywood, and while these works also influenced how the issue is dealt with in Europe, a more localised overview of environmental sustainability in the film industry is sadly missing. And when there is a discussion of Europe, it is usually the British film industry

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<sup>71</sup> Ibid, 209.

<sup>72</sup> Ibid.

that serves as an example. But whether it is a result of the UK being an important film-producing country that is easily accessible to scholars because all the documents are in English, or there is something else in their environmental sustainability practices that demands this special attention is something I will reveal in Chapter 4 which is dedicated to the UK as a case study.

What has also been missing from the academic literature but has started to show up in the past couple of years is the examination of the environmental policies and practices coming from the industry itself. Instead of an external force interfering, the film industry (not surprisingly) prefers to self-regulate, and there are several industry standards, recommendations, and internal guidelines adapted by national film institutes and international organisations, as well as rules and regulations coming from the political sphere that influence how environmental sustainability is handled during filmmaking. The aim of my master's thesis is precisely to look at these self-produced documents, specifically the ones intended for public display that communicate towards both the industry and its wider audience, and see how they define environmental sustainability, its challenges and opportunities for the film industry.

### **3. Sustainability and Discourse Analysis: Theory and Methodology**

The main goal of this thesis is to examine how European national film institutes, production companies, and other relevant organisations in the industry conceptualise environmental sustainability issues in film production, what they identify as problem areas and what they suggest doing about them.

By applying critical discourse analysis, I want to look at how environmental sustainability is discussed through initiatives coming from the film industry, using the United Kingdom and Germany as case studies. The project is qualitative in nature, I analyse and compare different ‘best practices’ for sustainability through documents from these two countries. I am mostly curious about the problems raised and the possible solutions offered; in this project, I am not interested in how and with what success rate the recommendations are implemented and/or enforced. I base my research on publicly proposed and accessible information, I am only interested in what is transparent and was meant to be on display for the wider public, to see how the industry ‘brands’ its approach for an audience.

In this chapter, I explain the concept of environmental sustainability, the theoretical method chosen for my analysis, and the reasoning behind the selected case studies, as well as the limitations and possible shortcomings of these choices.

#### **3.1 What is “environmental sustainability”?**

One of the questions this MA thesis attempts to answer is how the selected European film industries “conceptualise” environmental sustainability, in other words: what they mean when they say they want to make the film industry more environmentally sustainable. And as I chose this question for a reason, maybe it will be no surprise that the selected case studies focus on very specific parts of environmental sustainability. Since it is a central concept to my research, it is important to examine what the academic literature means by environmental sustainability and what definition I keep in mind while conducting my analysis.

The most widespread definition of sustainability relevant to our discussion comes from the 1987 report of the UN’s World Commission on Environment and Development (WCED), colloquially known as the Brundtland Commission, named after its chair, Gro Harlem

Brundtland.<sup>73</sup> The document, titled “Our Common Future” defined sustainability as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.<sup>74</sup> Although this is not a universally accepted definition, it covers the most important aspects of the concept therefore it provides a standard for talking about sustainable development. In 1991, the International Union for Conservation of Nature (IUCN) in partnership with the United Nations Environment Programme (UNEP) and World Wide Fund for Nature (WWF) published a document titled “Caring for the Earth: A Strategy for Sustainable Living”, which defines sustainable development as “improving the quality of human life while living within the carrying capacity of supporting ecosystems”.<sup>75</sup> It is worth pointing out that the concept of sustainable development was present in academic discussions decades before the Brundtland Commission’s report, but it was this document that popularised the concept and elevated it into a more general political discussion.<sup>76</sup>

There is also a slight difference between sustainability and sustainable development, even though the two concepts are closely linked. However, sustainability is mostly understood “a system property referred to as quality”, while sustainable development is a “pragmatic and anthropocentric” concept that “primarily focuses on people and their wellbeing”<sup>77</sup>, but it also acknowledges that humanity does not exist in a vacuum and that human development needs to strike a balance when interacting with nature.<sup>78</sup> Both the Brundtland Commission and the IUCN/UNEP/WWF document has an anthropocentric point of view when talking about future generation’s needs and the quality of human life, as opposed to an eco-centric approach, and it marks an interesting distinction when talking about sustainability: is it humanity or all living beings for whom we should preserve the planet?

Even though the previously mentioned two definitions talk about “sustainable development” in more general terms, the phrasing – especially in the case of the IUCN/UNEP/WWF proposal – is understood as the primary focus being on the environment, talking about natural resources as finite and needing protection to be able to support life in the future as well.<sup>79</sup> In 2001 the European Union’s Gothenburg Sustainable Development Strategy, and also its revised edition in 2006 named six areas needing special attention for sustainable development, and four of them

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<sup>73</sup> Thomsen, “Sustainability”, 2358.

<sup>74</sup> Brundtland, *Our Common Future*, 43.

<sup>75</sup> IUCN/UNEP/WWF, *Caring for the Earth*, 10.

<sup>76</sup> Purvis et al., “Three pillars of sustainability”, 684.

<sup>77</sup> Moldan et al., “How to understand and measure environmental sustainability”, 4.

<sup>78</sup> Ibid.

<sup>79</sup> Ibid, 5.

are related to the environment: climate change and clean energy, sustainable transport, sustainable consumption and production, conservation and management of natural resources, and public health.<sup>80</sup> However, there are two aspects that are more social than natural problems: demography and migration, and global poverty and sustainable development challenges.<sup>81</sup> And this brings us to the various dimensions of sustainability.

As of today, the most common understanding of sustainability is a three-pillar model with economic, social, and environmental aspects.<sup>82</sup> This trinity is often depicted with three intersecting circles or three pillars holding up sustainability. It is mostly understood as delicate balance between three equally important areas of human development where the wellbeing of future generations needs to be met as well. Interestingly however, according to the literature, this tripartite classification does not have a traceable theoretical development: there is not one text from which this concept originates from, but by 2001 it popped up in the literature as “a common view of sustainable development, so commonplace it seems not to require a reference”.<sup>83</sup>

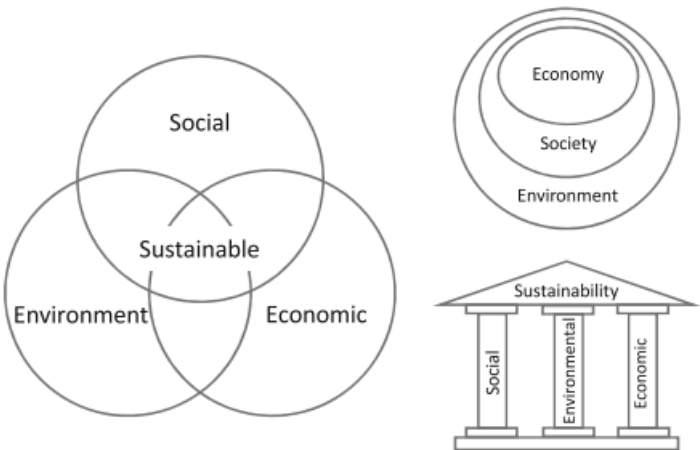


Figure 2. Typical depictions of the three aspects of sustainability (Source: Purvis et al., 682.)

For the purpose of this research, it is not relevant whether there is a sound scientific basis for these distinctions between economic, social, and environmental sustainability. What is important however is that since these three categories are commonly used in both academic and public discussions, it is important to specify which aspect of sustainability we are referring to. In this work, I focus solely on the environmental sustainability of the film industry, and unless

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<sup>80</sup> Ibid.  
<sup>81</sup> Ibid.  
<sup>82</sup> Purvis et al., “Three pillars of sustainability”, 681.  
<sup>83</sup> Ibid, 685.

stated otherwise, this is what I mean when I use the term “sustainability”. But as we will later see in the case study of the United Kingdom, the earlier proposals about sustainability in the film industry also included social and economic aspects, and only later, when climate change emerged in public discussions as the predominant challenge facing future generations, became environmental sustainability the main (and often only) concern of the sustainability proposals of the industry. Therefore, it is important to acknowledge the three pillars and see the evolution of the various dimensions of sustainability and sustainable development.

There is another concept I would like to introduce here to help us understand the various environmental issues that pose a challenge for sustainable development. In 2009, a group of scientists led by the director of the Stockholm Resilience Centre, Johan Rockström classified “nine processes that regulate the stability and resilience of the Earth system”<sup>84</sup>. These processes and the boundaries created by them, first introduced in Rockström et.al. 2009, and later modified in Steffen et al. 2015, define a “safe operating space for humanity based on the intrinsic biophysical processes that regulate the stability of the Earth system”.<sup>85</sup> In other words, the research identified nine processes and their boundaries (planetary boundaries) which – if not crossed – provide a safe zone for humanity to develop. Crossing them however can cause irreversible or abrupt changes in the environment that jeopardises the wellbeing of life on Earth.<sup>86</sup> The nine planetary boundaries are:

1. climate change
2. ocean acidification
3. stratospheric ozone depletion
4. atmospheric aerosol loading
5. global freshwater use
6. biogeochemical flows (of nitrogen and phosphorus)
7. land-system change (percentage of global land cover converted to cropland)
8. biodiversity loss
9. chemical pollution<sup>87</sup>

There are slight changes in measuring, naming, and grouping the boundaries in the updated version (Steffen et al. 2015) of the planetary boundary framework but what is important for our purposes here is that there are at least eight other environmental considerations besides climate

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<sup>84</sup> Stockholm Resilience Centre, “Planetary boundaries”.

<sup>85</sup> Steffen et al., “Planetary boundaries”, 1259855-1

<sup>86</sup> Stockholm Resilience Centre, “Planetary boundaries”.

<sup>87</sup> Rockström et.al., “Planetary boundaries”.

change that determine whether this planet will be able to support human life in the future or not. According to Steffen et.al, however, there are two core boundaries, climate change and biosphere integrity (formerly known as biodiversity loss), that have the power on their own to fundamentally change the Earth system if transgressed.<sup>88</sup> Therefore it is not surprising that climate change is in the centre of attention when discussing environmental sustainability, but I am still interested to see whether any of the other planetary boundaries will be taken into consideration (or mentioned at all) in the film industry strategies that I examine in the following chapters.

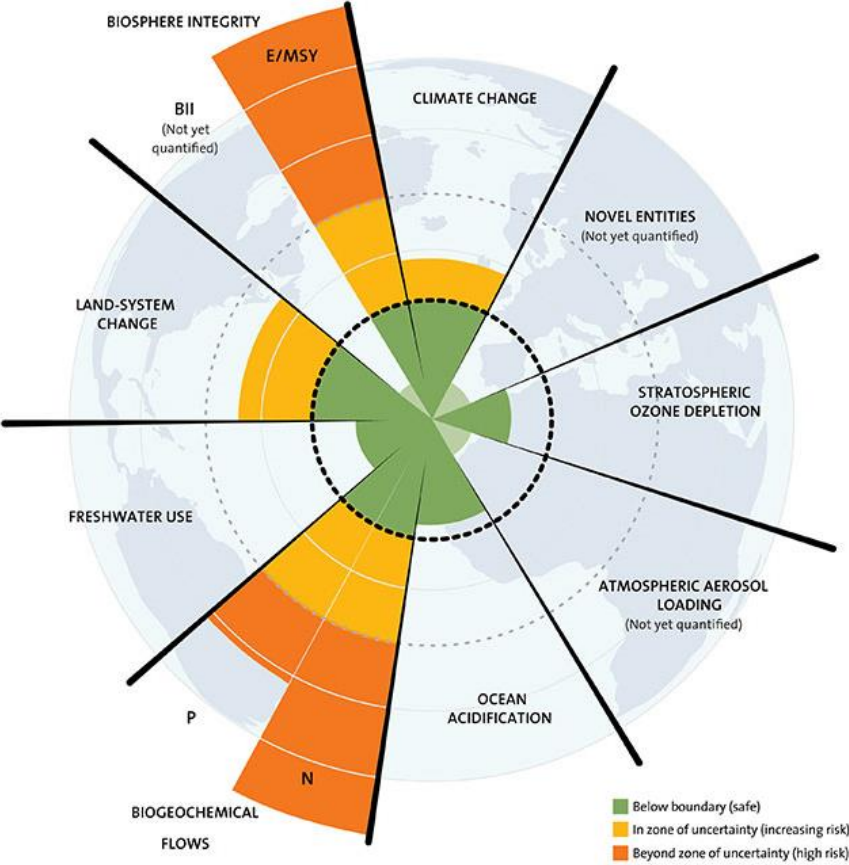


Figure 3. Planetary boundaries. Source: <https://www.stockholmresilience.org/research/planetary-boundaries/the-nine-planetary-boundaries.html>

These definitions about sustainable development, environmental sustainability, and planetary boundaries are mentioned here to guide us in understanding the main trends and concepts related to them, I do not intend to use them in a prescriptive way, my aim is not to go through these notions as a checklist when conducting my analysis. What I am interested in is how the

<sup>88</sup> Steffen et al., “Planetary boundaries”, 1259855-1



various reports and publications in my case studies define environmental sustainability (if they do), what aspects are emphasised, or whether there are any noticeable omissions in relation to the most common understandings of the term. In short, I am interested in what and how my sources talk about when they talk about environmental sustainability in the film industry.

### **3.2 Language and its politics: critical discourse analysis**

Since the aim of this thesis is to look at relevant documents from the British and German film industry and examine how the issue of environmental sustainability is talked about, this needs to be done through a form of textual analysis. I chose critical discourse analysis (CDA) as a guiding principle because it is a qualitative method designed to linguistically examine a few select texts in depth, as opposed to content analysis which is quantitative and aims to give a general overview of an issue. I would also like to specify that it is not just a discourse analysis I want to base my research on, but a critical discourse analysis: environmental sustainability is a societal issue, and I am curious whether the language of the discussion in the film industry reproduce any forms of power dynamics or socio-political context when talking about the importance of sustainable filmmaking. Do these texts try to give a certain impression to the audience, if so, how? How are they emotionally charged or even manipulative? How do they question or challenge certain common beliefs or accept them at face value? Is there any form of “us” and “them” distinction present? Do they talk about systemic issues or changes needed, either in the industry or in society?

Discourse analysis grew out of linguistics, it helps paying closer attention to language, but in media studies it is also often used to analyse visual imagery and their way of creating or delivering meaning.<sup>89</sup> In contrast to discourse analysis, content analysis as a quantitative method samples a large amount of cases, therefore it is good for measuring recurring phrases and images, generalising occurrences, and it can identify themes or problems that are frequently popping up in (media) texts.<sup>90</sup> Content analysis is good for picking up manifest meanings, while discourse analysis is a good tool for revealing latent meanings.<sup>91</sup> The reason why I do not choose to do content analysis is because I am not interested in how environmentally sustainable filmmaking is portrayed in general, but how a select few organisations in power positions (those

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<sup>89</sup> Hesmondhalg, “Discourse analysis and content analysis”, 120.

<sup>90</sup> Ibid, 121.

<sup>91</sup> Ibid.

whose words ‘matter’ because of their size or status in the European film industry) define environmental sustainability and recommend solutions for a more eco-friendly production process.

Critical discourse analysis by nature is an interdisciplinary method, however the various subject areas (such as history, media studies, political science) all have their extensive literature on the application of CDA to their specific field of expertise. Here I will draw on the media studies approach to the method. The reasoning behind this is not just that this is a master’s thesis within media studies but that the topic of the analysis (filmmaking) is about visual media and that the documents I examine fit mainly into the category of media products. The texts I refer to in the case study chapters consist of publicly available documents in a form of information brochures, press releases, or special issue magazines, therefore they can be understood as PR publications: the organisation publishing them controls the content, and they communicate a message towards a wider audience. Even though I am interested in the politics behind these texts, the publications itself are not political in nature and the best way to categorise them is as media texts.

According to Norman Fairclough, discourse as a term can be used in two main senses depending on whether it comes from linguistic studies or social sciences: it can either mean a “social action and interaction, people interacting together in real social situations” or “social construction of reality, a form of knowledge”.<sup>92</sup> Although discourse as a concept or method is not originated from Fairclough, the reason why he is a great starting point for us is because he brings these two meaning together. Alongside Teun van Dijk, Fairclough “draws connections between the use of language and the exercise of social power”<sup>93</sup>, and this merger is often referred to as critical discourse analysis because of its special attention to the social use of language.<sup>94</sup> Fairclough argues that it is useful to analyse media texts as it can reveal representations, identities, and relations through language, and he poses three questions that can be answered about media output:

1. *How is the world (events, relationships, etc.) represented?*
2. *What identities are set up for those involved in the programme or story (reporters, audiences, 'third parties' referred to or interviewed)?*

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<sup>92</sup> Fairclough, *Media Discourse*, 18.

<sup>93</sup> Hesmondhalg, “Discourse analysis and content analysis”, 122.

<sup>94</sup> *Ibid.*

3. *What relationships are set up between those involved (for example, reporter-audience, expert-audience or politician-audience relationships)?*<sup>95</sup>

Moreover, Fairclough claims that “a useful working assumption is that any part of any text (from the media or from elsewhere) will be simultaneously representing, setting up identities, and setting up relations.”<sup>96</sup> In his book *Media Discourse*, Fairclough uses a very detailed textual analysis of the linguistics of a current affairs programme to prove his point, but it is also important to note that he is critical towards linguistic analysis as it can be very superficial and detached from societal meaning, and does not explain the connections between the language used and the socio-cultural processes that are present in the text.<sup>97</sup> He starts out from a micro sample and scrutinises words and syntax and tenses, and pays close attention to language use, but the point of this is not just to identify specific properties of language used in the media but to also reveal the macro socio-cultural implications and power relations of all of this.<sup>98</sup>

Fairclough’s theory also has another important distinction compared to his predecessors, such as the poststructuralists, and that is viewing discourse as both constitutive and constituted.<sup>99</sup> In his view, discourse “is an important form of social practice which both reproduces and changes knowledge, identities and social relations including power relations, and at the same time is also shaped by other social practices and structures.”<sup>100</sup> Fairclough’s understanding of discourse is therefore that it is a “dialectical relationship” with various social dimensions, and it is capable of both reproducing and challenging existing structures through language.<sup>101</sup>

Although Fairclough provides a substantial theoretical basis for my work, I would also like to draw on certain aspects of Teun van Dijk’s approach to critical discourse analysis. According to him, CDA is “a movement or perspective of multidisciplinary discourse studies that specifically focuses on the discursive reproduction of power abuse, such as sexism, racism, and other forms of social inequality, as well as the resistance against such domination.”<sup>102</sup> While it is not the aim of this thesis to discuss power abuse and inequalities related to environmental sustainability, based on van Dijk, David Hesmondhalg identifies linguistic ‘tools’ that can help

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<sup>95</sup> Fairclough, *Media Discourse*, 5.

<sup>96</sup> Fairclough, *Media Discourse*, 5.

<sup>97</sup> Jørgensen and Phillips, “Critical discourse analysis”, 66.

<sup>98</sup> Hesmondhalg, “Discourse analysis and content analysis”, 128.

<sup>99</sup> Jørgensen and Phillips, “Critical discourse analysis”, 65.

<sup>100</sup> *Ibid.*

<sup>101</sup> *Ibid.*, 66.

<sup>102</sup> Van Dijk, “Critical Discourse Analysis”, 466.

to analyse media language. He creates three groups of terms based on their functions in the language:

1. persuasion (rhetoric, hyperbole, metaphor, rhetorical repetition)
2. structuring and priorities (passive sentences, comment, topicalization)
3. word selection for persuasion (register, lexicalisation, ingroup designator)<sup>103</sup>

These linguistic components and rhetorical devices give us a more concrete understanding of what to look out for during a discourse analysis of a text.

In another work, *Society and Discourse* (2009), van Dijk also points out the challenge of working with media texts specifically. He argues that communication media (e.g. television, newspapers), especially in a contemporary setting has a “multimodal nature” which makes it difficult to assess whether media is part of the text or the context.<sup>104</sup> It shows both characteristics; the mode of the media can constrain or enable certain properties which would make it part of the context, yet it is different from other forms of contexts (such as participants), while also seems to ‘mediate’ between text and context.<sup>105</sup> Van Dijk leaves the question unresolved as there are valid arguments for both approach. What is important for my research is to keep in mind that the format/medium of the analysed texts (press release, booklet, online magazine, etc.) might hold significance as it has its own narrative tradition, physical form, and intended audience.

There is also a long tradition of using discourse analysis specifically for environmental topics, especially to assess environmental policymaking. I argue that while strictly speaking neither of my case studies are policy documents, they do propose technical changes and guidelines, as well as set directions for the course of action for the film industry, therefore it might worth looking into how discourse analysis is applied in an environmental policy context. Feindt and Oels argue that one of the changes discourse analysis had on the subject is the understanding that there is no single concept of ‘nature’, it is like all other types of knowledge, depends on the historical and societal context and being “discursively co-produced” by them.<sup>106</sup> Discourse analysis (especially critical discourse analysis) is also useful for detecting underlying power structures when deciding on a policy decision to implement. There are always various possible courses of action and marginalised voices that offer alternative solutions but are excluded from

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<sup>103</sup> Hesmondhalg, “Discourse analysis and content analysis”, 135.

<sup>104</sup> van Dijk, *Society and Discourse*, 150.

<sup>105</sup> Ibid.

<sup>106</sup> Feindt and Oels, “Does Discourse Matter?”, 168.

the predominant discourse.<sup>107</sup> Discourse analysis can show how subjects and objects are formed in environmental discussions: “it shows that, like all discourses, environmental discourse constitutes identities, expectations and responsibilities that play their part in disciplining individuals and society at large.”<sup>108</sup>

The method is good for conceiving “time and space as contested concepts”, and to deal with the various levels of environmental discourses, such as transnational (or global), national, and regional, and their interactions.<sup>109</sup> All of these various aspects contribute to the democratisation of environmental discourse as it challenges the pre-existing notions of ‘the environment’, draws attention to the various local and global levels on which the discourse is conducted and can detect biased assumptions and marginalised voices. “Discourses contribute to processes of institutionalization and show characteristics of institutions without being liable to democratic practices. Thus discourse analysis helps to reflect on the preconditions and limitations of environmental justice and democracy.”<sup>110</sup>

Because discourse analysis is imbedded in the political and socio-cultural context of communication, it is also a popular tool to research climate change debates. This can mean focusing on public perception, the communication choices of various stakeholders, the themes dominating climate change debates, as well as certain linguistic contexts, forms, and interactions chosen to discuss the topic. Critical discourse analysis can also take into consideration the social, political, cultural, and economic context in which audiences engage with messages about climate change.<sup>111</sup> These are all aspects I need to keep in mind when conducting my analysis as the mode and content of environmental discussion in the film industry is informed by the wider political context of environmental sustainability, and it is expected that the recommendations for industry professionals also signal something towards the government – either suggestions for the future directions of environmental policymaking or that the industry is capable of renewing itself without state intervention.

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<sup>107</sup> Ibid, 169.

<sup>108</sup> Ibid.

<sup>109</sup> Ibid, 170.

<sup>110</sup> Ibid.

<sup>111</sup> Koteyko and Atanasova, “Discourse Analysis in Climate Change Communication.”

### 3.3 The selection of the case studies

It would be a difficult undertaking and too big a scope for this project to try to establish how “the European film industry” (if there is such a generalised thing) handles environmental sustainability, and the aim of the thesis is not to conduct a quantitative analysis with generalised conclusions and more apparent meanings. To examine how European national film institutes, production companies, and other relevant organisations in the industry conceptualise environmental sustainability issues in film production, what they identify as problem areas and solutions, case studies are needed.

I chose the United Kingdom and Germany as case studies. Traditionally, the top five European production countries by both film presence and titles are the United Kingdom, France, Germany, Italy, and Spain.<sup>112</sup> My first choice is the United Kingdom for the significant size of its industry, its domination over the European market, but also because there are several sustainability initiatives coming from the country, some of them with the explicit desire to become the industry standard and making British film the global leader in best practices for environmental sustainability. My other choice is Germany, another of the traditional top five European production countries. Germany is also in a significant position as the biggest member of the European Film Academy (745 members, as of May 2022, twice as much as the second place Italy)<sup>113</sup>, while also founding the Green Film Initiative<sup>114</sup> and Green Film Shooting<sup>115</sup>, and working on sustainability issues through the Berlin International Film Festival<sup>116</sup>.

Both countries are in a unique situation to make their voices heard about changes in Europe for a more environmentally sustainable production practice, as they have a big film industry, dominate the European market, and members of key decision-making organisations. They are in a good position to exert influence over the future of the industry, therefore documents coming from their film institutes could shed some light on underlying power politics and make a critical discourse analysis more imbedded in socio-political dynamics. Both the United Kingdom and Germany have several differences as well that will enrich the analysis. For instance, they have different geopolitical situations, and it is worth looking into whether the fact that United Kingdom has a close relationship to the USA (where the first academic assessment of the film

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<sup>112</sup> European Audiovisual Observatory, “40 000 European film titles currently available on 367 VOD services in Europe”.

<sup>113</sup> European Film Academy, “Members per country”.

<sup>114</sup> <http://www.greenfilminitiative.de/>

<sup>115</sup> <https://greenfilmshooting.net/blog/en/>

<sup>116</sup> Berlinale, “Sustainability at the Berlinale” press release.

industry's environmental impact originates from), or that Germany is a federal state and one of the founding members of the European Union's predecessor influences in any way where these countries get their inspirations from for their industry standards.

When selecting the specific documents for in-depth analysis, one of the important criteria was that they must be publicly available and easily accessible – part of my research question is to see how these organisations 'brand' their efforts toward environmental sustainability, what it is that they put on display. Therefore I am not interested in interviews with industry professionals or backroom deals, but what was meant for the public. One indicator for finding the right texts for this purpose was the frequency in which they were referenced or adapted by other key industry actors. Timewise I am mostly focusing on recent documents, from 2019 onwards since generally this year is considered as a turning point in dealing with climate change and other environmental challenges. For example, in the case of the United Kingdom, the British government amended the 2008 Climate Change Act in 2019 with the goal to become net zero by 2050, which meant that all industries had to assess how to change their practices to reach this new goal.

### **3.4 Challenges and limitations**

In this chapter, I attempted to give a short overview of my methodology and the selected objects to analyse, and the reasoning behind these choices. However, both the method and case studies pose their own challenges and limitations that must be kept in mind.

As mentioned earlier, critical discourse analysis is a great way of paying close attention to the language, hidden meaning, and wider societal implications of select texts. Therefore, it is not a tool to be able to draw general conclusions or detect recurring or widespread assumptions about environmental sustainability in the selected European case studies. According to Fairclough who writes about what is and what is not critical discourse analysis, CDA is not just descriptive but also supposed to be normative.<sup>117</sup> It is normative because it evaluates existing realities and their relation to certain values, and not just describes them.<sup>118</sup> CDA is also an "explanatory critique" because the aim of the analysis is also to explain the described realities, to show their effects and even test or challenge the realities the discourse creates.<sup>119</sup> Therefore one must be

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<sup>117</sup> Fairclough, "General Introduction", 11.

<sup>118</sup> Fairclough, "Critical Discourse Analysis", 9.

<sup>119</sup> Ibid.

cautious in forming normative statements based on the objects of inquiry, they must be scientifically sound and avoid unsubstantiated or biased claims - especially since climate change and environmental sustainability are hotly debated, controversial topics.

Regarding the case studies, it is also important to keep in mind that it would be deeply problematic to draw Europe-wide conclusions about the film industry's sustainability initiatives from two wealthy, Western European countries. But since the chosen method of analysis is also a qualitative tool that is not intended for making generalised assumptions, this trap can be easily avoided.

When conducting the analysis, especially with its focus on the documents generated in 2019 and onwards, to some extent I also must take into consideration the COVID-19 pandemic and its effect on the European film industry. The pandemic and the consequent lockdown did not directly affect my research as it is interested in the discourse of environmental sustainability and not its implementation in practice, but it is still a relevant factor as it is frequently referred to in industry documents as either a challenge because it requires a different approach to film production or an opportunity because if the industry needs a reboot then it could just as well be a more environmentally sustainable one.

It is also important to acknowledge what this master's thesis is not doing, which is a limitation set up by the research question itself. It is a critical discourse analysis; therefore, I cannot answer whether any of the analysed case studies and proposed changes have an effective way of solving environmental sustainability problems in the film industry. This research project is not capable of detecting whether a recommendation brings a positive, long-lasting change on production practices or just serves as greenwashing on the part of the film institutes who are issuing these recommendations. It would require an entirely different research project to be able to assess these questions.



#### **4. “The film production industry requires systemic change to become sustainable.” - Sustainability Discourse in the UK**

The main goal of this thesis is to examine how European national film institutes, production companies, and other relevant organisations in the industry conceptualise environmental sustainability issues in film production, what they identify as problem areas and what they suggest doing about them. The first case study to help us with this task is the United Kingdom. I chose the UK because of the significant size of its industry, British film dominates the European market, but also because there are several, interesting initiatives coming from the country. The British Film Institute’s first sustainability strategy was published back in 2012 with the unconcealed aim to become a global leader in sustainability practices, in strong collaboration with BAFTA and the BBC.<sup>120</sup>

In this chapter, I discuss the size and impact of the United Kingdom’s film production and why it matters what they do in terms of environmental sustainability, and then the various actors and initiatives relevant to the research question. I am primarily interested in seeing how the problems and solutions of sustainability are conceptualised and then presented for a wider audience, therefore I do a textual analysis of *A Screen New Deal - A Route Map to Sustainable Film Production* published in 2020 that takes the British film industry’s sustainability efforts to the next level – after the United Kingdom’s government amended the 2008 Climate Change Act in 2019 with the goal to become net zero by 2050.

##### **4.1 The UK as a film giant – and its environmental cost**

Traditionally, the top five European production countries by both film presence and titles are the United Kingdom, France, Germany, Italy and Spain, and the order of ‘importance’ between them is usually determined by what factors we choose to include in our assessment. According to the European Audiovisual Observatory’s 2020/2021 Yearbook, the United Kingdom has Europe’s second biggest audio-visual market with €21.5 billion, following Germany.<sup>121</sup> Even

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<sup>120</sup> Gündüz Özdemirci, “Greening the Screen”, 5.

<sup>121</sup> European Audiovisual Observatory, *Yearbook 2020/2021 - Key Trends*, 32.

though Brexit unsettled the power balance of the market, especially in relation to broadcasting licences, but the United Kingdom is still the biggest TV channel supplier (with 1026 channels) on the continent with a 22% share – despite of a 6% drop compared to pre-Brexit.<sup>122</sup> Besides this share in serving the other European countries, the UK also has the biggest number of established TV channels by country in Europe.<sup>123</sup> The UK is also the primary supplier of on-demand services among the EU28 countries: the UK provides 237 pay on demand services<sup>124</sup> while also provides content for Subscription Video on Demand (SVOD) services: almost 50% of available TV seasons in Europe come from the UK.<sup>125</sup> On a global scale, 15% of SVOD films worldwide are of European origins with the UK (41%) and France (18%) providing the most European films for export.<sup>126</sup> The UK’s audio-visual market is also considered to be more developed than other big European countries in relation to its population.<sup>127</sup>

As we can see from these statistics, the United Kingdom’s film and television production has a significant role in Europe’s film industry, in some areas even dominating it. However, the film sector is also a powerful segment within the UK’s economy. According to the British Film Institute’s 2020 Yearbook, £2.84 billion were spent on film and high-end TV production (HETV), and it is a 21% decline compared to 2019 and caused by the COVID-19 pandemic.<sup>128</sup> The need to suspend production in the spring of 2020 also shows in the total number of productions: 231 feature film and HETV productions has started principal photography, which is a lower number than usual.<sup>129</sup> The inward investment and co-production takes up 83% of the full production spend and costs £2.36 billion.<sup>130</sup>

The United Kingdom’s industry is a lucrative business, it moves great amounts of money, people, and resources, which also means that its environmental impact is noticeable. The UCLA’s 2006 sustainability report about the motion picture industry already pointed it out how much emissions film productions create, even though their economic activity is not as big as the hotel or clothing industry’s.<sup>131</sup> An average film production with a budget of at least \$70 million can generate 2,840 tonnes of carbon dioxide equivalent (CO<sub>2</sub>e), and on average, a

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<sup>122</sup> Ibid, 26.

<sup>123</sup> Ibid, 32.

<sup>124</sup> Ibid, 26.

<sup>125</sup> Ibid, 32.

<sup>126</sup> Ibid, 25.

<sup>127</sup> Ibid, 32.

<sup>128</sup> British Film Institute, *Screen Sector Production Full Report 2021*, 5.

<sup>129</sup> Ibid.

<sup>130</sup> We Are UK Film, “Facts and Stats”.

<sup>131</sup> Corbet and Turco, *Sustainability in the Motion Picture Industry*.

filming day's environmental impact is more than one person's annual carbon footprint.<sup>132</sup> The main culprit behind this high number is transportation that takes up around 51% of the total carbon emission of a production, and the ratio is 70%-30% between land and air transport.<sup>133</sup> The typical explanation for it is the tight schedule of filming, where it is easier to prepare for all possible contingencies and transport more than what is needed at that moment than sit around wasting time and money because something is missing from the set.<sup>134</sup>

After transport, energy use is the next big contributor (34%) to the industry's total carbon footprint, which consists of electricity and gas usage.<sup>135</sup> This consist mainly of production activities (30%) and rented temporary accommodations, such as hotels and apartments (the other 4%).<sup>136</sup> A film productions total carbon emission also entails the use of diesel generators (15%), which were the traditional power sources on set, the number could go up to 20 generators on set<sup>137</sup>. Here the problem again is suitability: even though fossil fuel impacts the environment negatively, diesel generators are flexible and convenient, therefore are preferred over new, battery-based alternatives which require more planning ahead.<sup>138</sup> A recurring theme in interviews with film crews about sustainability is that money can be lost by wasting time, and it is risky to experiment with new technological solutions (even though they are better for the environment), because something might go wrong or they require more planning in advance which is difficult in a high-paced, hectic environment such as a filming location.

Compared to other industries and the ongoing political debate about the impact of climate change, it counts as progressive that the film industry recognises its impact on the environment, and the mindset and challenges behind unsustainable practices. Identifying problem areas is a logical first step towards more sustainable industry standards, however, spending too much time analysing the problem can hinder action. After assessing the situation and formulating problems and solutions, the next step is implementation. And when we talk about solutions, it is important to differentiate between reducing negative emissions to lessen the damage caused by the industry and establishing practices that can facilitate positive impact.<sup>139</sup>

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<sup>132</sup> British Film Institute, *A Screen New Deal*, 6.

<sup>133</sup> *Ibid.*

<sup>134</sup> *Ibid.*

<sup>135</sup> *Ibid.*

<sup>136</sup> *Ibid.*

<sup>137</sup> Patten, "Sustainable Sets & Green Filmmaking – The Future of Power in Film".

<sup>138</sup> British Film Institute, *A Screen New Deal*, 6.

<sup>139</sup> *Ibid.*, 4.

The United Kingdom's general approach to climate change is determined by the 2008 Climate Change Act<sup>140</sup> which among others sets “a target for the year 2050 for the reduction of targeted greenhouse gas emissions”, makes “provision about adaptation to climate change”, and provides financial schemes to reduce waste and recycle more.<sup>141</sup> In 2019 this Act was amended in order to change the target the UK wanted to reach by 2050: previously, the goal was to reduce emissions by 80% but now the country commits to becoming net zero by 2050.<sup>142</sup> This means that the pressure for all sectors and industries to do their share and reach the target has increased, and the film industry also has a job to do. For the past decade or so there were several steps taken in order to make the film industry more environmentally sustainable. In the following part of this chapter, I look at some of the most significant documents coming from the film sector.

#### **4.2 Early Steps: BS 8909 and BFI's Sustainability Policies**

The first milestone towards environmental sustainability in the British film industry is from 2011 when the UK Film Council commissioned the British Standard 8909, titled “Specification for a sustainability management system for film”.<sup>143</sup> The document was commissioned in 2009 and is considered to be the very first sustainable film production standard.<sup>144</sup> It is worth noting however, that this document does not focus on environmental sustainability, it uses the term in a much broader context and deals with social and economic sustainability (diversity, inclusion, fair wages, ethical business, child labour).<sup>145</sup> The standard is the result of a collaboration with the Department of Business, Innovation and Skills, therefore it is not that surprising that the focus is heavily on the business aspect of filmmaking.<sup>146</sup> The aim of the standard is to ensure that “a film company's environmental impact is minimised and its social and wider economic benefits maximised”.<sup>147</sup> The British Standards Institution's Director of Standards Mike Low summarised the aim of the document as follows: “[...] British Standard BS 8909 provides a comprehensive framework for all parties involved in the development and launching of films

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<sup>140</sup> Climate Change Act 2008, c. 27.

<sup>141</sup> Climate Change Act 2008, c. 27, Introduction.

<sup>142</sup> Dray, “Climate change targets: the road to net zero?”

<sup>143</sup> Gündüz Özdemirci, “Greening the Screen”, 5.

<sup>144</sup> Käöpä, *Environmental Management of the Media*, 79.

<sup>145</sup> Gündüz Özdemirci, “Greening the Screen”, 5.

<sup>146</sup> Käöpä, *Environmental Management of the Media*, 79.

<sup>147</sup> BSI Group, “UK Film Industry Pioneers Sustainability Standard Developed by BSI”.

to adopt. It encourages companies to address the environmental, social and economic impacts of their work – from the initial concept for the film right through the process, even down to any merchandising and advertising.”<sup>148</sup>

What the document recommends specifically about reducing this negative environmental impact of the industry evolves around travel and the carbon footprint. It suggests reducing the carbon emission of “wasteful travel” by planning out routes more carefully, choosing vehicles with a better CO<sub>2</sub> rating or a better mode of transportation.<sup>149</sup> The document seems very technical and anthropocentric, and lacks a wider environmental perspective of the issue. The pragmatism of the document can be explained by the fact that it was produced for the British Standards Institution (BSI), a business standards company offering industrial best practise standards, which is also a member of the International Organization for Standardization.<sup>150</sup> But this approach has its benefits: it helps to normalise sustainability practices by giving a guideline to which already existing procedures can measure up to.<sup>151</sup> However, there is also a significant downside to the standard: in order to make a BS 8909 compliant film production, all of the policies included in the standard has to be applied. And since it has such wide-ranging topics (diversity, economic sustainability, etc.), most film production companies wanting to be more environmentally sustainable opted for implementing separate environmental policies instead of adopting the entire BS 8909.<sup>152</sup>

Since its publication, the BS 8909 has been the subject of several assessments, one of them is the 2015 “Trialling the BS 8909” by the British Film Institute (BFI).<sup>153</sup> This document provides case studies about the productions that followed the sustainability standards, and also gives detailed information about the productions that received BFI funding in 2013/14.<sup>154</sup> “Trialling the BS 8909” also opens up the environmental debate by alluding to the Paris Climate Conference in 2015, and discusses climate change debates and climate science.<sup>155</sup> On the other hand, the document still talks about “greater efficiencies and longterm cost savings”, which still frames the question of environmentalism primarily as a business management problem and not as a global challenge impacting the wellbeing of current and future generations.<sup>156</sup>

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<sup>148</sup> Ibid.

<sup>149</sup> Ibid.

<sup>150</sup> Kääpä, *Environmental Management of the Media*, 79.

<sup>151</sup> Ibid, 80.

<sup>152</sup> Gündüz Özdemirci, “Greening the Screen”, 5.

<sup>153</sup> Kääpä, *Environmental Management of the Media*, 77.

<sup>154</sup> Ibid.

<sup>155</sup> Ibid.

<sup>156</sup> Ibid.

Following the “British Standard 8909: Specification for a sustainability management system for film”, the next milestone was BFI’s first Sustainability Policy from 2012. The British Film Institute is an important organisation in the British film industry: sponsored by the Department for Digital, Culture, Media and Sport, BFI is a “cultural charity, a National Lottery distributor, and the UK's lead organisation for film and the moving image”<sup>157</sup>, therefore their say in environmental sustainability has a deep impact on the country’s film industry.

The two-page document - signed by chief executive Amanda Nevill - outlines the BFI’s sustainability commitment and is a direct result of BS 8909: it commits to adapting the standard and urges other film organisations to follow their example.<sup>158</sup> Here again sustainability refers to economic, environmental, and social sustainability, and defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.<sup>159</sup> Under “sustainability issues” the document specifies “energy, waste, water, transport, procurement, diversity and training”<sup>160</sup> which indicates that the environmental considerations of sustainability are gaining some momentum. The short text also provides some bullet points outlining the commitment BFI intends to make, with interesting ratios: the economic subcategory only contains 1 bullet point, the environmental 5, and the social 6 points.<sup>161</sup> The environmental aspect discusses protecting biodiversity (or at least not harming it: “we will manage our activities to ensure biodiversity and habitats are not adversely affected”<sup>162</sup>); monitoring, benchmarking, reducing energy use and greenhouse gas emissions; following the reduce-reuse-recycle principle in waste management, and as a mid-term goal reaching zero waste; reducing water consumption; and adopting a green travel plan.<sup>163</sup>

Even though this is a very short and a somewhat vague document that only marks the general direction of sustainability in the British film industry but does not give any concrete indications on what they mean by “scrutinizing” and “managing” their activities, it is diverse in the sense that it does not only focus on carbon emission but considers the issue of biodiversity and water management as well, which is not always the case in sustainability related documents. At the same time, the Sustainability Policy is still very much business focused. While reasoning for adopting BS 8909, the text argues that: “A coordinated approach to sustainability using BS

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<sup>157</sup> British Film Institute, “About the BFI”.

<sup>158</sup> British Film Institute, *Sustainability Policy 2012*, 1.

<sup>159</sup> Ibid.

<sup>160</sup> Ibid.

<sup>161</sup> Ibid.

<sup>162</sup> Ibid.

<sup>163</sup> Ibid, 1-2.

8909 will help us all meet UK carbon budgets and will lead to greater efficiencies and long-term cost savings so that budgets can be used to better support the film industry.”<sup>164</sup>

BFI’s Sustainability Policy is subject to frequent revisions according to the changing annual sustainability targets of the Institute. The latest changes happened with the 2019/2020 targets in mind, and while the economic and social aspect is still there, this version focuses much more on climate change and environmental sustainability in general compared to the 2012 document.<sup>165</sup> “Addressing environmental sustainability and the climate emergency has never been more urgent globally and our screen industries have an important role to play in driving change. As the lead body for film in the UK, we embrace best practice and take seriously our responsibility to co-ordinate a UK-wide sustainability strategy for all parts of the film sector.”<sup>166</sup> BFI pledges to support BAFTA’s ALBERT initiative (a carbon calculator helping to reduce the CO<sub>2</sub> emission of programme-making in the film and television industry), funding research on industry specific sustainability practices, and “influencing” the film sector through National Lottery funded activities.<sup>167</sup>

The revised policy, while keeps the general environmentalist keywords of the earlier version, provides more specific (and quantified) information on the sustainability goals. It mentions that the BFI managed to reduce its carbon footprint since 2012 by 40%, and they work on a strategy to become net-zero by 2025, and its progress will be trackable through the Institute’s annual reports published on their website.<sup>168</sup> BFI also has a zero to landfill waste management policy, where the non-hazardous industrial waste goes to an energy recovery facility.<sup>169</sup> The 2019/20 policy mentions that BFI’s carbon emission for that period has been reduced by 3.4%, they use renewable energy for electricity, and “actively seeking ways” to become less dependent on natural gas.<sup>170</sup> In general when travelling, BFI adheres to their transport and travel policy which was developed to prioritise lower carbon options. The document mentions that in addition to this, they also do not take flights within mainland UK.<sup>171</sup>

Alongside these numbers and concrete measures and results, there are some more vaguely defined categories as well. For example, the complex issue of resource consumption is dealt

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<sup>164</sup> Ibid, 1.

<sup>165</sup> British Film Institute, *Sustainability Policy 2019/20*.

<sup>166</sup> Ibid, 1.

<sup>167</sup> Ibid.

<sup>168</sup> Ibid, 2.

<sup>169</sup> Ibid.

<sup>170</sup> Ibid.

<sup>171</sup> Ibid.

with in one single sentence: “We monitor resource consumption in our activities and attempt to procure the least impactful options.”<sup>172</sup> The text does not elaborate on what this “monitoring” entails and what kind of “attempt” they make and what the desired outcome is. Similarly, the document says that BFI’s procurements “engage with sustainability at an early stage” and sustainability is “scored alongside performance and value for money”<sup>173</sup>, but there are no further details on the topic. Of course, not every environmental sustainability category can be easily quantified, or can we expect an in-depth explanation from a 3-page long document.

The most noteworthy subcategory of the environmental sustainability commitments is the one about biodiversity because it is a planetary boundary regarding sustainable development which gets frequently overlooked in sustainability strategies. Seeing it as early as 2012 in a document focusing on the environmental impact of a very specific industry that no one would immediately associate with questions of biodiversity shows a certain level of commitment. But while the 2012 Sustainability Policy recognised biodiversity loss as an important issue, I argue that it only pledged a very passive approach: try to do no more harm, as opposed to a more active involvement which would help not just stopping the damage but also facilitating a positive impact on the environment, or even restoring it. The updated policy however improves this by stating that “where possible we seek to actively improve biodiversity by using organic pesticides, planting for biodiversity and enabling beekeepers to locate their hives on our estate.”<sup>174</sup>

While it can be debated whether these commitments are enough to have a meaningful impact on the environment, it is noticeable how the focal point of the sustainability discourse has changed between 2012 and 2020. While the earlier version of the document acknowledges environmental preservation as a responsibility towards future generation, the issue does not have a special importance in the sustainable development goals. Today, however, the expression “climate emergency”<sup>175</sup> appears in the introduction of BFI’s Sustainability Policy, placing it as a central issue of the document. And while it might be problematic that other issues of sustainability presented in these documents (such as anti-discrimination and wage equality) do not get that much attention anymore, it is a fact that political discourse has shifted in a way that brought environmental sustainability to the forefront in 2019.

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<sup>172</sup> Ibid.

<sup>173</sup> Ibid.

<sup>174</sup> Ibid.

<sup>175</sup> Ibid, 1.



### 4.3 A Screen New Deal (2020)

As mentioned earlier, 2019 can be seen as a turning point in the British film industry's approach to environmental sustainability, since the 2019 amendment of the 2008 Climate Change Act to become net zero by 2050 required all sectors to switch gears. In response to this new situation, a systemic change and a more comprehensive guideline was needed in the film industry as well to reach this goal, thus *A Screen New Deal - A Route Map to Sustainable Film Production* was born.

The 60-page long report is a collaboration between the British Film Institute, ALBERT, and a sustainable development advisory firm Arup, and was “funded by the BFI Research and Statistics Fund, which is supported by National Lottery funding and Arup”.<sup>176</sup> The document was made between November 2019 and July 2020 and published in Autumn 2020 in a pdf format on the collaborators' websites, available for free for the public. As we can see from the dates, the study also coincides with the COVID-19 pandemic. Even though it was unintentional, there might be an advantage to the timing since the global lockdown also required the entire entertainment industry to evaluate existing practices and come up with new, creative solutions to emerging challenges.

The document explains its methodology as an integrated “industry-focused qualitative and quantitative data with global trends and best practices”.<sup>177</sup> There were more than 50 interviews conducted for the report from both the United Kingdom and the USA, from studio stakeholders to service providers, set and costume designers, sustainability experts, and building infrastructure designers.<sup>178</sup> For the report, there were also five film studios visited (in England, Wales, and California), and the sustainability reports of 19 tentpole film productions from the past five years were analysed (both from the UK and USA) to see if there are any patterns of resource consumption and energy management that could indicate recurring, systemic issues in the industry.<sup>179</sup> The reports also integrates the review of 44 papers, both industry reports and academic analysis about current challenges and possible sustainability solutions.<sup>180</sup> The official communiqué of the BFI described the document as the “first study of its kind for the film industry, providing proposals for studios, recommendations and case studies of best practice

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<sup>176</sup> British Film Institute, *A Screen New Deal*, 2.

<sup>177</sup> Ibid, 5.

<sup>178</sup> Ibid.

<sup>179</sup> Ibid.

<sup>180</sup> Ibid.

and new innovation models from around the world.”<sup>181</sup> A recurring theme in the collaborating organisation’s press release is the term “systemic change” that the film industry needs in order to become more environmentally sustainable.<sup>182</sup> In the following, I will go through each chapter of *A Screen New Deal* and examine the terms used and the issues described in them to see what and how the report deals with the question of environmental sustainability in the film industry.

## forewords



**Aaron Matthews**  
Head of Industry Sustainability, albert

In 2019 the Climate Change Act was amended to legislate for net zero emissions in the UK by 2050. It means that every sector, including the Film Industry will be required to make significant changes to meet this statutory target.

At albert we have long understood the significant contribution that studio and location filming has on the environmental impact of the film and television industry. This study shines a light on the systemic changes required to alter that trajectory. The innovation needed will be made possible if the industry can unite in collaboration and openness with a shared vision for the future.

As we emerge from a worldwide lockdown and try to restart our industry, the idea of introducing complex changes might feel overwhelming, but this is exactly the right time to rethink our processes. By engaging with the challenge now, we can take advantage of the long amortisation and lead times involved in infrastructure change. But the most exciting opportunity is for the film community to lead by example with a positive, impactful transformation that breeds innovation and hope for the future.

The film industry inspires, influences, motivates and entertains millions of people worldwide, but there’s an environmental cost to this; every feature film we make produces thousands of tonnes of carbon. It’s an impact we can no longer ignore, we have to act now. We need to build an industry that works more efficiently, creatively and collaboratively. We need to take that positive, transformational story that we so easily create in fiction and make it our reality. Will you join us? □



**Tim Snelson**  
Associate Director, Arup

Many people don’t think twice about the environmental impact of what we consume on our televisions, mobile devices or cinema screens. The connection between what we watch and the enormous effort that goes into its creation is too complex and well-hidden for most audiences to realise. This must change urgently, and Arup is proud to support albert, The National Lottery and BFI in their ongoing efforts to do so.

Our study highlights the complexity, urgency and importance of more sustainable and resource-efficient approaches to film production. When we think about the future of studios and film production we face a dilemma. What trends and innovations really matter to us? And how can we achieve change across an industry that is complex and highly-dependent on a set of trusted routines and practices? We argue this complexity is an opportunity, a chance to look at radical new ideas and to learn from innovation in other industries. Solving the sustainability challenge will be a competitive advantage that the UK production industry should pursue collectively and with a clear vision.

Innovation today is not just about making individual things faster and better. Climate change, globalisation, digital transformation, and environmental degradation are all systemic challenges. It is also the transformation of man-made systems where the answers to these challenges lie. Studios and film production are one of these complex systems, where the potential for change is huge. Yet to transform it will require all of us to work together as one. From the people providing the energy that runs sets, to those consuming content all over the world. Let’s try and transform together. □



**Harriet Finney**  
Director of External Affairs, BFI

This study arrives at what is an unparalleled moment for film and television production around the world. It was commissioned prior to the COVID-19 pandemic and the impact that is having on our industry and our lives, and is being published as we start to develop new ways of working on set and on location, at every step of production. We are grappling with an undeniable period of change in our industry but the impacts of climate emergency are right before all of us.

Our evidence review *Green matters - Environmental sustainability and film production: an overview of current practice* provided a snapshot of UK film production activity and the kinds of levers that could help change behaviour in production – if you haven’t looked at this yet, may I encourage you to do so. *A screen new deal: a route map to sustainable film production*, produced by built environment specialists Arup, takes that work further, providing a blueprint for the film ecosystem, mapping out design and operational recommendations, providing information about the new services, materials and knowledge required to achieve more sustainable production. Case studies reveal bold ideas, showing how change is happening.

Sharing innovation and knowledge to kick-start a more sustainable ecosystem is vital for all of our futures. □

Figure 4. Forewords (British Film Institute, *A Screen New Deal*, 3.)

*The Forewords*. The Forewords<sup>183</sup> is the first chapter of the document, which contains and introduction from a higher executive person of all three companies who worked on the document: Aaron Matthews, Head of Industry Sustainability (ALBERT); Tim Snelson, Associate Director (Arup); Harriet Finney, Director of External Affairs (BFI). It is worth spending a little more time discussing the message and attitude present in this chapter, since it sets up the tone for the rest of the document, as well as provides the most emotionally charged part of it. These brief letters to the reader highlight the “complexity, urgency and importance” of reforming the film industry to produce more sustainable entertainment, underlining that even

<sup>181</sup> British Film Institute, “Sustainability report proposes step-change for UK film production”.  
<sup>182</sup> Ibid; Arup, “A Screen New Deal: a route map to sustainable film production”.  
<sup>183</sup> British Film Institute, *A Screen New Deal*, 3.

though the industry “inspires, influences, motivates and entertains millions of people worldwide”, there is “an environmental cost to this”.<sup>184</sup> “Many people don’t think twice about the environmental impact of what we consume on our televisions, mobile devices or cinema screens”.<sup>185</sup>

In general, these forewords do not go into detail about what the environmental cost of a film production entails but Aaron Matthews specifically mentions the “thousands of tonnes of carbon” produced while making a feature film – which is probably not a surprising topic coming from ALBERT, which is an organisation primarily focusing on reducing the carbon footprint of the film industry. Another specific mention in the document is the COVID-19 pandemic that coincided with the making of *A Screen New Deal*, signalling both an “unparalleled moment” to “restart our industry” when there is a need to come up with “new ways of working on set and on location” and posing a challenge because “the idea of introducing complex changes might feel overwhelming”.<sup>186</sup>

The overall tone of the Forewords is positivity, it talks about an industry that could work “more efficiently, creatively and collaboratively”, a “film community” that has an “exciting opportunity” to “lead by example with a positive, impactful transformation that breeds innovation and hope for the future”<sup>187</sup>. While the text also admits that “we face a dilemma” when reforming a “complex” industry that is “highly-dependent on a set of trusted routines and practices”, it is also framed in a way of opportunity, a “chance to look at radical new ideas and to learn from innovation in other industries”.<sup>188</sup>

There is a duality present here with a desire for both learning from other industries but also to “lead by example” and inspire others “with a positive, impactful transformation that breeds innovation and hope for the future”.<sup>189</sup> This way sustainability efforts are contextualised as a cascading effect where the film industry can learn from those sectors who are more advanced in sustainability standards, but also lead the way for others who are still behind. But while earlier sustainability strategies coming from the BFI did not conceal their aim to become a global leader on the issue within the film industry and lay down the standards other countries can follow<sup>190</sup>, here it is not clear who is being “lead by example” by “the film community” – is

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<sup>184</sup> Ibid.

<sup>185</sup> Ibid.

<sup>186</sup> Ibid.

<sup>187</sup> Ibid.

<sup>188</sup> Ibid.

<sup>189</sup> Ibid.

<sup>190</sup> British Film Institute, *Green matters*, 52.

it the other countries and “we” means only the British or does this already assume that the entire film industry will line up behind this strategy and they intend to inspire other sectors?

The fact that this is a group effort is highlighted throughout all three of the forewords, some explicitly addressing the reader (“if you haven’t looked at this yet, may I encourage you to do so”<sup>191</sup>), while others talk in the first person plural about the action needed for change (“we can take advantage”, “we have to act now”, multiple uses of “we need to...”). The last sentence of two of the texts also directly address the reader: “Will you join us?” and “Let’s try and transform together.”<sup>192</sup> These all strengthen the idea that any change big enough to make an impact must come from collaboration and working together for a common goal. So far in the text there was no indication to who the intended audience of the document is, but we can probably safely assume that it is meant for industry professionals, because they can actually make these changes as opposed to the general public.

*Executive Summary.* The next chapter is titled Executive Summary.<sup>193</sup> This is a one-page long chapter that gives a brief overview of the main points of the entire document and specifies the five areas where changes could be made because there is an “opportunity for transformation” present. These are: production materials, energy and water, studio buildings and facilities, studio sites and locations, and production planning. Each of these areas have their own chapters in the document, and they all have the same structure (overview of the current status of the area, three suggestions for “opportunities”/changes, benefits of change, two case studies per suggestions, and critical implementation requirements for these opportunities to become a reality). This chapter is more explicit about the intended use of *A Screen New Deal*, claiming “this report sets out a route map to achieve this goal”<sup>194</sup> aka the needed systemic change. “The film production industry requires systemic change to become sustainable.”<sup>195</sup> The Executive Summary also cites details about the extent of the film industry’s effect on the environment, while the Forewords only had more general observations, here we find a list of numbers and percentages related to the carbon emission and gas and electricity use of a tentpole production. The text also sends a strong message by stating that there are recommendations in this document

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<sup>191</sup> British Film Institute, *A Screen New Deal*, 3.

<sup>192</sup> Ibid.

<sup>193</sup> Ibid, 4.

<sup>194</sup> Ibid.

<sup>195</sup> Ibid.

that are “cannot be ignored should any meaningful progress on environmental sustainability be desired”.<sup>196</sup>

The recurring expression of “systemic change” that shows up in the press release and in the Forewords is further emphasized in this chapter, as well as the statement that the document attempts to offer a “holistic look” of the current state of the industry and points out key challenges and interventions needed in the aforementioned various segments. In line with the holistic approach, the summary calls the film industry an “ecosystem”, where change is not possible “in isolation”, and calls the “radical co-operation and coordination” the “most vital recommendations of all”.<sup>197</sup> On the margin, set in bigger font, the chapter features a quote from the ALBERT Production Handbook which also fits into the idea of working together: “This transition is neither a story of sacrifice nor of duty. This is simply about building an industry that works more efficiently, creatively and collaboratively.”<sup>198</sup>

*Methodology and Data Analysis.* The methodology chapter<sup>199</sup> talks about how this report was conducted, and while the first paragraph only talks about generalities, such as that it combines “depth and breadth of insight” and integrates “industry-focused qualitative and quantitative data with global trends and best practices”.<sup>200</sup> Later on, we get more details about the process with a lot of research-related action words: identify, ascertain, understand, review, prioritize. There are also mentions of challenges, opportunities, barriers, and enablers, and there is a detailed description of the involvement of industry professionals in the process, that lends credibility to the findings of the report as something coming from the industry itself. The chapter describes the final product of the research as an “aspirational, yet actionable vision” to make the film industry more environmentally sustainable.

It is the first chapter that contains an infographic, this explains the three-stage method of making the document (research and interviews, workshops and site visits, synthesis and ideation), as well as visually showcasing some of the numbers linked to the process (Figure 5). And these numbers give us an idea about the scope of the research that went into the report: 44 papers reviewed, 19 data sets, 15 technical experts, 50 industry interviews, 37 workshop attendees, and 6 site visits. Reading the text, we also learn that these 50 interviews included “stakeholders from studios, productions, industry bodies, service providers, and buildings and infrastructure

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<sup>196</sup> Ibid.

<sup>197</sup> Ibid.

<sup>198</sup> Ibid.

<sup>199</sup> Ibid, 5.

<sup>200</sup> Ibid.

designers from across the UK and the USA”<sup>201</sup> and that the studio tours included England, Wales, and California<sup>202</sup>. The chapter claims that these interviews and visits “helped understand the shape of the film industry, the way it operates, and the drivers behind current practices and behaviours”<sup>203</sup>. While it might seem surprising that this company, working with a modestly sized research group for British customers included the USA in their scope, it is worth remembering that the Forewords discusses both learning from others and leading by example, therefore the American film industry could both serve as inspiration and a guarantee that the document will not end up being so UK specific that it cannot appeal to other countries.



Figure 5. Methodology (British Film Institute, *A Screen New Deal*, 5.)

It is worth discussing here a chapter appearing later on in the document, titled Data analysis<sup>204</sup>, because that is also an infographic-driven chapter that highlights some of the findings in numbers, and focuses primarily on the 19 tentpole productions labelled as “data sets” in the methodology chapter. The chart explains the different sources and percentages of carbon emission, while the page about resource consumption lists how much energy, fuel, plywood,

<sup>201</sup> Ibid.  
<sup>202</sup> Ibid.  
<sup>203</sup> Ibid.  
<sup>204</sup> Ibid, 11-12.

air miles, and waste “a typical tentpole production” consumes.<sup>205</sup> These numbers are presented in a way that is easy to imagine for non-professionals, such as one production’s “air miles equate to 11 one way trips from the Earth to the moon” or “waste generation equates to the weight of 313.5 blue whales”.<sup>206</sup>

*Introduction.* The Introduction contains two subchapters, ‘Setting the scene’ and ‘Planning for sustainability’. The first one is the longest, in four pages it discusses the environmental impact of film production, heavily relying on the findings of the 2006 UCLA report, claiming that the fact that there is not a more recent overview of the topic “indicates how little attention this issue receives across the industry and society in general”<sup>207</sup>. The chapter also criticizes the focus put on “issues that seem within reach and resonate with public interest” such as the amount of plastic bottles used on set, while ignoring other, more serious problems.<sup>208</sup> The text then provides facts and figures about the key contributing factors to the negative impact of the film industry on the environment, such as transportation, energy use, water, waste. It also contains a circular chart depicting the various film production spaces and they relationship to the key contributing factors mentioned above. So far, this chapter focuses the most on factual information related to the size of the film industry and the scope of its environmental impact, it also briefly mentions some of the sustainability initiatives already present in the industry, as well as their limitations. The language is very technical, and the text is full of numbers, but it also contains normative statements such as “The climate emergency is advancing at a relentless pace and surpassing all predictions.”<sup>209</sup> The text often refers to the urgency for action and repeats the need for a systemic change and holistic vision.<sup>210</sup> The aim of this report is described as helping “the industry achieve sustainable practices that support human wellbeing, environmental restoration and economic prosperity”.<sup>211</sup> The second, much shorter subchapter of the Introduction (‘Planning for sustainability’) focuses primarily on the COVID-19 pandemic, calling it “the most significant disruption to the film industry”.<sup>212</sup> The text draws parallel between film sets during social distancing and sustainability, arguing that both require more planning and more control about “materials and people who enter and leave spaces”.<sup>213</sup>

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<sup>205</sup> Ibid, 11.

<sup>206</sup> Ibid.

<sup>207</sup> Ibid, 6.

<sup>208</sup> Ibid.

<sup>209</sup> Ibid.

<sup>210</sup> Ibid, 9.

<sup>211</sup> Ibid.

<sup>212</sup> Ibid, 10.

<sup>213</sup> Ibid.

*The Vision, Opportunities, Recommendations.* The chapter titled *The Vision*<sup>214</sup> mostly functions as an introduction to the next chapter (*Opportunities*) which analyses in depth the five areas where change could be made (production materials, energy and water, studio buildings and facilities, studio sites and locations, and production planning), and describes them in a way as if the change has already happened: “an empowered film industry has adopted new physical infrastructure”, “studios know they have a critical role to play”, “production managers take ownership of delivering net zero carbon and zero waste productions”, “suppliers step up to the challenge”<sup>215</sup>, etc.

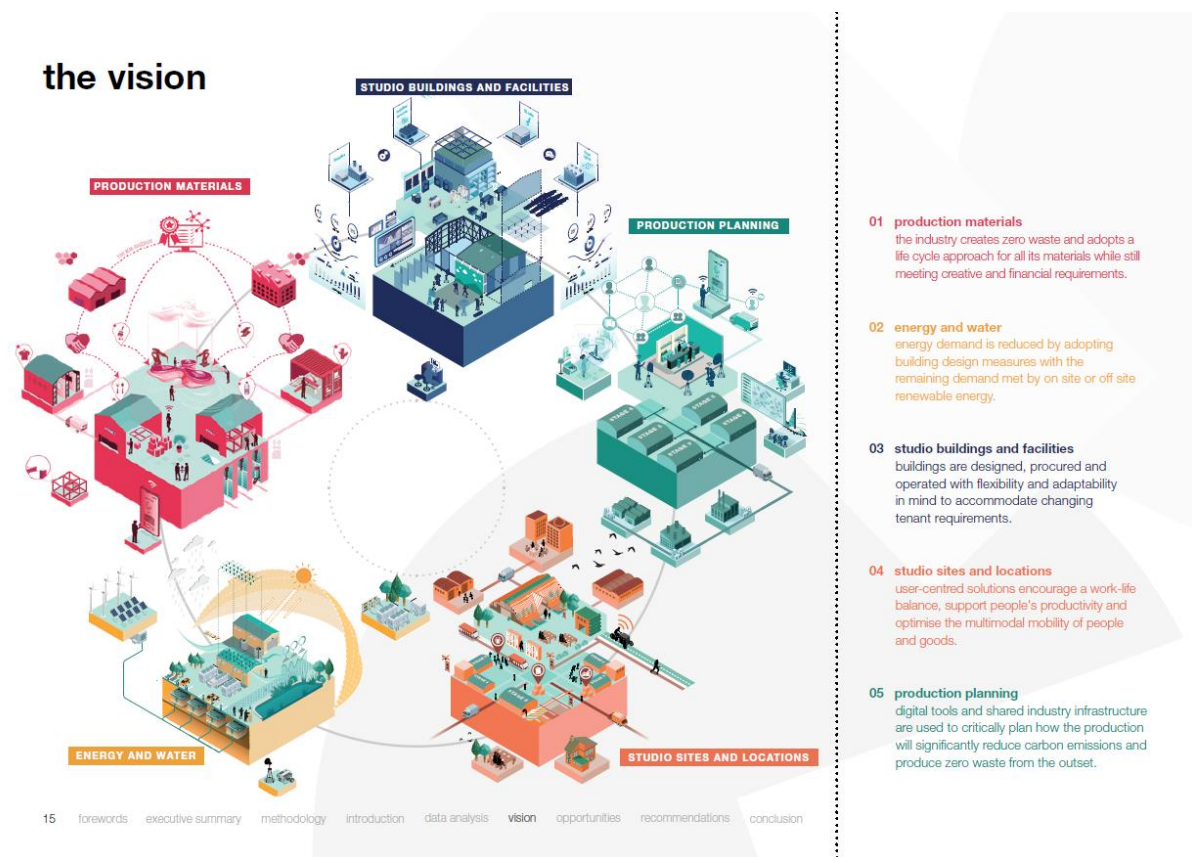


Figure 6. *The Vision* (British Film Institute, *A Screen New Deal*, 15.)

The chapter describes the various steps of a film production in an ideal world, where every phase of the process is done to make filming as environmentally sustainable as possible. It even reflects on the recurring complaint about time constraints in the industry by saying: “At the end of filming on set, production managers allocate a generous amount of time for dismantling and clearing out stages using the plans set out at the beginning to divert material to reuse networks,

<sup>214</sup> Ibid, 13-15.

<sup>215</sup> Ibid, 13.



donations or – as a final resort – recycling.”<sup>216</sup> The text closes by saying that with the help of digital infrastructure and studio support, “delivering sustainable film productions has become the industry norm”<sup>217</sup>.

The biggest chapter of *A Screen New Deal* that takes up half of the report is Opportunities<sup>218</sup>. The text dedicates a subchapter to all five “transformational opportunity areas” which all have the same structure: an overview of the current status, and detailed explanations of three opportunities for change accompanied by a list of benefits (financial, environmental, social), case studies, and critical implementation requirements. While these chapters provide a very in-depth consideration for technical details in filmmaking, such as warehouse logistics, material

### production materials recommendations

opportunities	interventions	readiness now, new, next	stakeholders art, styling, sound and lighting departments artistic departments	production department	direction department	studio management	third party service provider	key stakeholder
reuse of materials	sharing platforms	new	all departments use sharing platforms as first option when procuring materials	create a new function to ensure sets are dismantled at end of use and place materials back into reuse networks			offer reuse networks	
	warehouses	now	location department provide temporary spaces at unit bases to store materials before they enter reuse networks	utilise warehouses before and after production			provide storage space	
	material passports	new	arts department ensure material passports are used diligently when handling materials				ensure the use of material passports with all created, procured and leased materials	
buying virgin materials responsibly	responsible sourcing	now	all departments engage supply chain for greater transparency	put in place responsible sourcing policy to be followed across all departments			develop new sustainable material alternatives that achieve comparable performance to those traditionally used by the industry	
	sustainable materials	now	all departments procure sustainably and share supplier information with the industry	procure sustainably and measure impact				
	local sourcing	now	all departments procure locally and share supplier info with the industry	procure locally				
resource-efficient set construction	design for deconstruction	now	set design department always consider deconstruction when planning sets		crucial design choice in the creative planning process			
	parametric design	new	set design department utilise these design tools in collaboration with the director		utilise these tools to translate creative direction into optimised geometries		develop a more competitive market of parametric design tools specific to film production	
	digital fabrication	new	set design department set designers make use of parametric techniques	support set designers adopting new design for deconstruction approaches			develop a more competitive market of digital fabrication tools specific to film production	

Figure 7. Recommendations for one of the five areas. (British Film Institute, *A Screen New Deal*, 53.)

procurement, monitoring building component performance, the text is written in an accessible way accompanied by lots of colourful illustrations and graphics, and summarises the key information from each subchapter on the margin of the page. The text also frequently uses the passive voice and modal verbs (should, would, could) when describing the necessary steps towards sustainability: “props should be tagged”, “buildings should be flexible”, “the film

<sup>216</sup> Ibid, 14.  
<sup>217</sup> Ibid.  
<sup>218</sup> Ibid, 16-51.

industry should consider whether a sustainability fund would be helpful”, “this would allow”, “could be adopted”, “could help”, “could work”<sup>219</sup>.

After this part, the Recommendations<sup>220</sup> chapter organises the previously examined five areas into a table which gives the most important key words and stakeholders related to the change but also recommends a timeline for applying them (Figure 7). The document has three stages (now, new, and next), depending on whether the suggested intervention 1. could be implemented immediately, 2. it comes from a different industry therefore needs “tweaking” before implementation, or 3. radical new technologies that need systemic change to be implemented.<sup>221</sup> The introduction of this segment repeats that “changes need to be made across the whole ecosystem”<sup>222</sup>, and that the implementation of this change relies on “stakeholders within the industry to invest time and effort to make these a reality”<sup>223</sup>.

*Conclusion.* The concluding chapter<sup>224</sup> describes the report as a “a vision for sustainable film production”<sup>225</sup> that proposes a “a step change in the way the industry is organised and operated”<sup>226</sup>. The document then ends with a six-point list of principles (The Screen New Deal) that are essential for a more sustainable film industry.<sup>227</sup> The first and probably most quoted criteria is measuring the true impact of the film industry on the environment; there are still only rough estimates of the ramifications of a production’s carbon footprint, therefore it is recommended to align its measurement with globally recognised methods.<sup>228</sup> The other five principles include encouraging digital collaboration, planning for end-of-use from the beginning in various production departments, studios that support sustainability by providing physical and digital infrastructure for it, a leadership pushing for the net zero carbon and zero waste agenda, and last but not least a shared responsibility where all stakeholders need to do their part in their own field in order to make a difference.<sup>229</sup>

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<sup>219</sup> Ibid.

<sup>220</sup> Ibid, 52-57.

<sup>221</sup> Ibid, 52.

<sup>222</sup> Ibid.

<sup>223</sup> Ibid.

<sup>224</sup> Ibid, 58-59.

<sup>225</sup> Ibid, 58.

<sup>226</sup> Ibid.

<sup>227</sup> Ibid, 59.

<sup>228</sup> Ibid.

<sup>229</sup> Ibid.

## 4.4 Conclusion

In this chapter, I discussed the role and size of the United Kingdom's film industry in Europe and its environmental implication. I gave a brief overview of the history of environmental sustainability in the British film industry, focusing on the most relevant texts and initiatives for understanding the development of industry standards. Then I examined more in detail the 2020 *A Screen New Deal - A Route Map to Sustainable Film Production* report which was commissioned after the British government amended in 2019 the 2008 Climate Change Act to include the goal of becoming net zero by 2050, which meant that the film industry was expected to take a more active role in reducing their negative emissions.

The document balances between giving technically detailed, practical advice on changing industry procedures and creating a bold vision about an entirely environmentally sustainable film production process that could lead by example for others. It is difficult to ascertain who the report was intended for as in some places (Opportunities and Recommendations) it goes into such details that it is hard to imagine that it could be very useful for those who do not work on those specific filming areas, while at other parts the wording is overly simplistic and tries to affect emotions by talking about the “complexity, urgency and importance” of this “exciting opportunity” to reform the film industry. The most probable candidates are studio executives and stakeholders who are now presented with the big picture and benefits of change while also receiving practical advice and examples on how to implement this change.

The format of the document is very palatable, it uses various colours to differentiate between each subchapter and visually connect lines of thoughts throughout the document. It is also important to mention that the full document is available online for free on the websites of all three contributing organisations (BFI, ALBERT, Arup), making it an easy to read and easily accessible resource on sustainability in the industry.

## **5. “Showing strength and commitment together!” – Sustainability Discourse in Germany**

In the previous chapter I examined the case of the United Kingdom and how the British film industry conceptualises environmental sustainability issues in film production, what terms they use and what solutions they propose, by first giving an overview of the most outstanding aspects of the history of environmental sustainability in the British film industry, then discussed in detail the 2020 *A Screen New Deal - A Route Map to Sustainable Film Production* report. I argued that this document is easy to access and navigate for the general public as well as industry professionals, although the intended audience of the text is unclear. It goes into details about technicalities in some places, while in others it is simplistic and focuses more on affecting the emotions of the reader and calls for environmental action. Therefore, it is very likely that the primary audience of *A Screen New Deal* are stakeholders and studio executives, who need to be ‘moved’ to join the fight against climate change but also need to see where their money goes by providing concrete suggestions for making the British film industry more sustainable.

In this part of the thesis, I discuss the second country chosen for a case study, Germany. Germany has a significant role in the film industry in Europe being one of the classic top five European production countries (the United Kingdom, France, Germany, Italy, and Spain) by both film presence and titles. Germany is also the biggest member of the European Film Academy and founded the Green Film Initiative and Green Film Shooting, as well as works on sustainability through the Berlin International Film Festival. Comparing these two countries is also interesting because of their different geopolitical situations; it is worth examining whether Germany’s founder status in the European Union, being a federal state, and not having the same close relationship to the USA as the United Kingdom influences in any way where the country gets its inspiration for its industry policies.

In this chapter, I discuss key facts about Germany’s film production (size, impact, funding) to provide a better understanding of why it is relevant and impactful what Germany does in terms of environmental sustainability in the film industry. Then I give a short overview of the environmental initiatives coming from the industry that are the most relevant for our investigation and are good to be familiar with in order to understand the German approach. As with the case of the United Kingdom, I am especially interested in the action taken since 2019, as this year marks an important point in global climate awareness where various movements

converged worldwide<sup>230</sup> and the United Nations held a Climate Action Summit<sup>231</sup>. Then I do a textual analysis of the label Green Motion's 13-page long document, titled *Minimum ecological standards for German cinema, TV and online/VoD productions (Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/ VoD-Produktionen)* discussing fifteen different areas where change should be made, published at the end of 2021.

I do all of this to answer the question of how the German film institutes, production companies, and other relevant organisations in the industry conceptualise environmental sustainability issues in their communication, what they identify as problem areas and what they suggest doing about them. And while in the case of the United Kingdom politics and the form of government played a marginal role in the film industry's endeavour for environmental sustainability, the fact that Germany is a federal state strongly shapes the history of green filming.

### **5.1 The German film industry – a special constellation**

Germany has a long history of filmmaking, the Babelsberg Studio near Berlin, founded in 1912 is the oldest large-scale film studio in the world that is still one of the leading locations in Europe.<sup>232</sup> The German film industry is considered to be one of the strongest in Europe<sup>233</sup>, besides being an attractive production location for both European and international productions, it is one of the "Big Five" countries that make up almost 80% of releases, industry turnover, and employed people on the continent.<sup>234</sup> Germany is also among the top ten filmmakers globally<sup>235</sup>, and there are more than 19,000 film industry-related companies in the country, and in 2018 employed 71,000 people.<sup>236</sup> In comparison, in the UK in 2018 approximately 91,000 people worked in the film industry: 69,000 in film and video production, 18,000 in film exhibition, and 4,000 in film and video distribution.<sup>237</sup> In terms of film production, in 2019 there were 157 films made in Germany, 38.9% of which were international co-productions involving non-German studios as well.<sup>238</sup> This is again not that far off from the United Kingdom's statistics for 2019, when 188 feature films went into production, however only 50%

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<sup>230</sup> Bennett, "2019, the year the world woke up to climate change".

<sup>231</sup> UN, "2019 Climate Action Summit".

<sup>232</sup> Studio Babelsberg, "About Us".

<sup>233</sup> Bomnüter and Schulze, "Governance of the German Film Industry", 54.

<sup>234</sup> European Parliament, *An overview of Europe's film industry*, 1.

<sup>235</sup> Bomnüter and Schulze, "Governance of the German Film Industry", 54.

<sup>236</sup> Germany Trade & Invest, "Film Industry".

<sup>237</sup> British Film Institute, *Film Education and Industry Employment*, 3.

<sup>238</sup> Ibid.

(94) of these were domestic UK films, implying that the ratio of international co-productions in the UK is higher than in Germany.<sup>239</sup>

When discussing revenues, 2015 is frequently brought up as an “exemplary”<sup>240</sup> year for the German film industry, with 139.2 million cinema admissions and gross box office revenues of €1.2 billion – of which the domestic market share (films produced by German companies fully or as a majority co-producer) was 27,5%, which was also a record for the industry and landed Germany on the fifth place in Europe.<sup>241</sup> According to Comscore, even before the pandemic, in 2018 there was a decline in both German cinema admissions (95.8 million, a 15.5% drop compared to the previous year) and in box office revenues (€839 million, 16% drop)<sup>242</sup>, but the industry as a whole still closed the year with a €18.9 billion recorded revenue.<sup>243</sup> Then in 2019, the industry saw an increase, the box office revenues reached €1 billion again after the “disaster year 2018”.<sup>244</sup> This number is not that far off from the British box office revenues for 2019, which exceeded £1.25 billion.<sup>245</sup>

In terms of differences, what makes the comparison with the United Kingdom interesting is that Germany has a federal system, which means that the country consists of sixteen states (Bundesland) which are partially autonomous with their own federal governments. This duality of the national and regional levels is also reflected in the production and funding of the German film industry. Traditionally, there are four big filming clusters in the country spread across various states: Berlin-Brandenburg (215 production companies), North Rhine-Westphalia (166 production companies), Bavaria (158 production companies), and Hamburg (84 production companies).<sup>246</sup>

The financing of German films is primarily through public sources with over 90% of feature films getting more than half of their filming budgets from public funding.<sup>247</sup> As mentioned earlier, the funding system is one of the two main areas where the federal structure of Germany plays a role, as there are national and regional sources for financial aid. On the national level, the most important institution is the German Federal Film Board (Filmförderungsanstalt, FFA)

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<sup>239</sup> British Film Institute, “BFI statistics for 2019 show film and high-end TV generates 30% uplift for UK economy”.

<sup>240</sup> Bomnüter and Schulze, “Governance of the German Film Industry”, 54.

<sup>241</sup> Ibid.

<sup>242</sup> Vivarelli, “German Box Office Plunges 16% in 2018”.

<sup>243</sup> Germany Trade & Invest, “Film Industry”.

<sup>244</sup> Spielfilm, “Kinojahr 2019”.

<sup>245</sup> Cinema UK, UK cinema admissions and box office.

<sup>246</sup> Germany Trade & Invest, “Film Industry”.

<sup>247</sup> Bomnüter and Schulze, “Governance of the German Film Industry”, 54.

which is “the central service structure for the German film industry”<sup>248</sup>, a national film funding institution that “supports all the interests of German cinema”<sup>249</sup>. The FFA provides funding for all phases of the film production process, such as script development, production, and distribution, as well as for promoting German films abroad, and the conservation of German film heritage.<sup>250</sup> The FFA also manages the Federal Government Commissioner for Culture & the Media’s (BKM) funding programs for films, such as the German Federal Film Fund (DFFF) and the German Motion Picture Fund (GMPF).<sup>251</sup> It is an independent organisation that is financed by a legally binding portion of the revenue from cinemas, video distributors, and broadcasters, being partially looked after by the federal ministries who receive funds and governed by the German Film Law (Filmförderungsgesetz, FFG).<sup>252</sup> On the regional level, the states are mainly responsible for the distribution of funding, and usually have the criteria for the film to reference the region that pays for it, by either shooting the film locally or spending some of the fundings in the region.<sup>253</sup> In 2015, the German film industry received €311 million in funding and almost half of that came from the different federal states.<sup>254</sup>

Even within Europe, but especially compared to the United States, there are vast differences between the amount of funding a film can get. The average budget for a film in the USA is around €12 million, and if it is a major production involving big studios and their affiliates, this amount can go up over €85 million.<sup>255</sup> In comparison, the average production budget in the pre-Brexit European Union is €11 million in the UK, €5 million in both Germany and France, and on the lower end €300,000 in Hungary and Estonia.<sup>256</sup> While it is impossible for European countries to compete with the financial resources of the United States, the film industry in both the United Kingdom and in Germany moves massive amounts of money and employs tens of thousands of people, having a huge economic, social and environmental impact on the continent.

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<sup>248</sup> Filmförderungsanstalt, “FFA in Brief”.

<sup>249</sup> Ibid.

<sup>250</sup> Ibid.

<sup>251</sup> Ibid.

<sup>252</sup> Bomnüter and Schulze, “Governance of the German Film Industry”, 60.

<sup>253</sup> Germany Trade & Invest, “Film Industry”.

<sup>254</sup> Bomnüter and Schulze, “Governance of the German Film Industry”, 54.

<sup>255</sup> European Parliament, *An overview of Europe's film industry*, 4.

<sup>256</sup> Ibid.

## 5.2 The brief history of sustainability in the German film industry

Even though Germany is often perceived as one of the leading countries in energy transition, the greening of the film industry has started off slowly in an international comparison.<sup>257</sup> The first, rudimentary attempt in this direction was Green Me GmbH, a film company from Berlin with a green focus that organised a panel event in 2008 during the Berlinale, called “Green Me Lounge” which was part of the line-up until 2013 when it became a separate festival called “Green Me Festival”.<sup>258</sup> In its later form, the event was a place for discussion among filmmakers, NGOs and stakeholders about environmental protection, as well as premiering films and giving out the “Green Me Award” for films about environmental topics.<sup>259</sup> It is important to point out that although this initiative is a very crucial first step towards environmentally sustainable film production in Germany and to increase environmental awareness, the focus was still on film as a storytelling device and the ecological topics the films explored, not how they were produced – which, as we have seen in the literature review in Chapter 2, was a common approach in the academic discourse as well in the early 2000s.

Another early example is Odeon Film AG’s (one of the largest independent production companies in Germany) initiative in 2010 to include sustainability in the company’s operations.<sup>260</sup> They created a sustainability report with the main focus on climate protection, and the objectives of reducing greenhouse gas emissions and supporting recognised climate protection projects.<sup>261</sup> One of the examples of this effort is the ZDF commissioned television production “Der Landarzt” (The Country Doctor), which was made by Odeon’s subsidiary Novafilm Fernsehproduktion GmbH that already applied green filmmaking solutions in 2011, and with the help of the climate protection consultancy ClimatePartner Deutschland GmbH, the CO<sub>2</sub>e emission of the 21<sup>st</sup> season of the series was offset.<sup>262</sup>

When talking about environmentally friendly film production in Germany, a common starting point is 2012 and the “Greening the Film Industry” panel at the Berlinale Talent Campus, which introduced the Green Film Initiative.<sup>263</sup> The program is supported by the Climate Media Factory (CMF) which consists of the Potsdam Institute for Climate Impact Research (PIK) and the Konrad Wolf Academy of Film and Television (HFF) and funded through the Federal Ministry

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<sup>257</sup> Meyer, “Green Production - The time has come”, 35.

<sup>258</sup> Ibid.

<sup>259</sup> Ibid.

<sup>260</sup> Muschol, “Umweltbewusst Filme produzieren”, 34.

<sup>261</sup> Ibid.

<sup>262</sup> Ibid, 34-35.

<sup>263</sup> Medienboard News, “Medienboard Goes Green”, 11.



for Education and Research. The main objective of the Green Film Initiative is to develop tools for green production processes and to popularize the topic among stakeholders in the German film industry.<sup>264</sup>

The first regional film funding body who addressed the issue of greening the film production however was the Filmförderung Hamburg Schleswig-Holstein (FFHSH).<sup>265</sup> The inspiration came in 2011 when Hamburg was awarded the European Green Capital title and was looking for ways to improve; resulting in a Best Practice Guide and an accompanying Green Shooting Pass (Grüne Drehpass) in 2012 with the motto “Avoid, Reduce, Recycle” (“Vermeiden, verringern, verwerten”).<sup>266</sup> CSR News, an online specialist medium on the topic of corporate social responsibility covered the launch of the Green Shooting Pass, pointing out that this is the first step towards standardising sustainable production in Germany, but the country is far behind others. “What has long been a tradition in the USA is still in its infancy in Europe. Great Britain is playing a pioneering role in Europe. In France, too, the film industry is further along in terms of sustainability.”<sup>267</sup> (Translated by me.) As we will see later, the comparisons to the USA, Great Britain and France are recurring when positioning the German film industry’s sustainability efforts on the world map and looking for examples on good industry practices.

The Best Practice Guide describe its aim as helping “film and television producers to explore environmentally sound and sustainable alternatives to current on-set practices and to incorporate them into their planning”<sup>268</sup>, and has recommendations for reducing waste, pollutants and the greenhouse effect.<sup>269</sup> The Green Shooting Pass can be understood as a moral incentive (it does not come with financial support) to actually implement the Best Practice Guide; the certificate is awarded for any production that can prove that it followed the green guide, including films, TV programs, short films, and commercials.<sup>270</sup> For the pass, at least four out of the six areas needs to be fulfilled: equipment, catering, production office/crew, transport, light/technology and preparation of a life cycle assessment (Ökobilanz), and is meant as a reward and encouragement for others to follow suit.<sup>271</sup> However, it was also made clear that without financial incentives not every film production can achieve these goals.<sup>272</sup>

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<sup>264</sup> Ibid.

<sup>265</sup> Bayer, “Green Filming in Deutschland”, 21.

<sup>266</sup> Meyer, “Green Production - The time has come”, 37.

<sup>267</sup> CSR News, “Klappe für die Nachhaltigkeit – der Grüne Drehpass in Hamburg”.

<sup>268</sup> Medienboard News, “Medienboard Goes Green”, 11.

<sup>269</sup> Bayer, “Green Filming in Deutschland”, 21.

<sup>270</sup> Meyer, “Green Production - The time has come”, 37.

<sup>271</sup> Ibid.

<sup>272</sup> Bayer, “Green Filming in Deutschland”, 23.

Also coming from a regional level, Germany can display another development that is progressive even on a global scale. In 2011, inspired by Hollywood, managing director Achim Rohnke started to modernize the Bavarian film studio in order to make it more environmentally friendly, and by 2013 the Bavaria Film GmbH located in Grünwald became the world's first climate-neutral film studio.<sup>273</sup> The total cost of modernisation is approximated around €30 million and included the removal of 162,000 tonnes of soil that was contaminated by the chemical processes of the film laboratory on the premises.<sup>274</sup> Bavaria also has its own list of recommendations for green filming on the website of the Bavarian Film Commission.<sup>275</sup> The texts opens with declaring that “Green is the colour of the future” (“Grün ist die Farbe der Zukunft”), then provides “practical advice, important tips and links” on various categories of film production in which changes can be made for a more environmentally friendly film production process.<sup>276</sup> These include lights, energy, electricity, generators, transportation, accommodation, catering, set and decorations, and a CO<sub>2</sub> calculator – and these are more or less the same categories we will later see in the Green Motion initiative operating on a more federal level. Since the website is being continuously updated, it is difficult to ascertain whether Bavaria came up with these advice on its own or implemented them from somewhere else, but there are some initiatives that are clearly local. Even though the subcategory “Green Consultant/Sustainability Officer” is also a recurring theme in the German sustainability recommendations, and there are organisations like Green Consultants<sup>277</sup> and The Federal Association of Green Film & TV Consultants Germany (BVGCD)<sup>278</sup> that help finding a green consultant for productions, we learn that since 2020 the Chamber of Industry and Commerce for Munich and Upper Bavaria has been offering courses to become a certified green consultant for film and television, and that the Bavarian Film Commission developed the curriculum and closely monitors the progression of the course.<sup>279</sup>

In 2013 for the 63<sup>rd</sup> Berlinale, Medienboard Berlin-Brandenburg published a special issue of their news magazine, which features a twelve-page long segment of articles and interviews about greening the German film industry, written in both English and German, with a special emphasis on the Berlin region. The article starts with defining the aim of the green initiative: “The Berlin Brandenburg Film Commission is striving to raise even more eco-awareness by

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<sup>273</sup> Meyer, “Green Production - The time has come”, 40.

<sup>274</sup> Ibid.

<sup>275</sup> FilmFernsehFonds Bayern, “Green Filming”.

<sup>276</sup> Ibid.

<sup>277</sup> <https://www.green-consultants.de/>

<sup>278</sup> Der Bundesverband Green Film & TV Consultants Deutschland e.V. (<https://bvgcd.de/>)

<sup>279</sup> FilmFernsehFonds Bayern, “Green Filming”.

expanding its already comprehensive capital region ‘Production Guide’ by a new category featuring a list of environmentally conscious film and media service providers.”<sup>280</sup> The text is a good overview of the first steps that the German film industry has made so far towards more environmentally sustainable production, but it also shows where Germany looks for inspiration. Not surprisingly, they start in 2006 with UCLA’s report on Hollywood’s role in increasing air pollution in Los Angeles, and then give brief overview of the US-based responses to it, such as the Producers Guild of America (PGA) Green Initiative, the Green Production Guide, the Motion Picture Association of America (MPAA) and NBC’s Best Practice Lists.<sup>281</sup> From a European perspective, France and the United Kingdom are considered to be exemplary in their green filming guides<sup>282</sup>, this document also spends some time on explaining the BBC’s ALBERT carbon footprint calculator developed for the film and TV industry, the British Academy of Film and Television Arts’ (BAFTA) efforts to make it more widespread, and British Film Institute’s Greening Film movement which is being compared to the previously mentioned Green Film Initiative, as in something that Germany already has.<sup>283</sup>

Alongside these initiatives, higher educational institutions in Germany also made steps to include environmentally sustainable filming practices in the curriculum of film programs. An example is Nicola Knoch, a consultant and sustainability officer for film projects who was invited by the Germany’s most prestigious film school, the University of Film and Television (Hochschule für Film und Fernsehen), to share her knowledge on integrating sustainability into a filming process.<sup>284</sup>

Up until this point, the most outstanding sustainability initiatives in the German film industry came either from individuals or from local governments and film associations trying to bring about change. However, at the beginning of 2020, five months after the 2019 UN Climate Action Summit, the federal government decided to make steps towards more climate action in the cultural and media sector. Led by Monika Grütters, the Federal Government Commissioner for Culture and the Media (Beauftragte der Bundesregierung für Kultur und Medien, BKM), high-ranking representatives of the German film and television industry signed a joint declaration for the sustainable production of films and television series (Gemeinsame Erklärung für eine nachhaltige Film- und Serienproduktion). The one-page document published both in

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<sup>280</sup> Medienboard News, “Medienboard Goes Green”, 4.

<sup>281</sup> Ibid, 9.

<sup>282</sup> Bayer, “Green Filming in Deutschland”, 21; Meyer, “Green Production - The time has come”, 47.

<sup>283</sup> Medienboard News, “Medienboard Goes Green”, 10.

<sup>284</sup> Bayer, “Green Filming in Deutschland”, 21.

German and English starts by stating that films and television series function as a mirror for society, therefore it should reflect on current problems of society. “Environmental protection and climate change are among the most urgent issues of our time. With all our actions, whether large or small, we are responsible for ensuring that the earth remains liveable for coming generations. We in the film and television industry must and will accept this responsibility, both nationally and internationally.”<sup>285</sup>

The document argues that sustainability is a high priority for the industry and that the “film and television industry deserves recognition for its commitment to protecting the environment and combating climate change”<sup>286</sup>, but also needs to take even more action, involving scientists and policy-makers “to develop and carry out specific, viable measures to efficiently and permanently reduce the negative environmental impacts of the production of films and television series, to the greatest degree possible”.<sup>287</sup> The document also indicates that Germany wants to lead by example, stating that the country’s “excellent system of federal and state support offers the opportunity for Germany to lead the way in sustainable film production”.<sup>288</sup> The signatories of the document includes: ARD, Deutsche Filmakademie, German Federal Film Board (FFA), Film Fund Hamburg Schleswig-Holstein, Medienboard Berlin-Brandenburg, RTL Media Group, and the Motion Picture Association, which includes Netflix Studios LLC, Walt Disney Studios Motion Pictures, Paramount Pictures Corporation, Sony Pictures Entertainment Inc., Universal City Studios LLC, Warner Bros. Entertainment Inc.<sup>289</sup>

While the Joint Declaration signals the direction in which the German film and television industry would like to go in order to produce content in a more environmentally friendly way, it is a letter of intent without any specific measures mentioned in the text. However, at the press conference where the Joint Declaration was signed, there were some concrete projects presented, and the Federal Government Commissioner introduced the idea of a voluntary certificate that would be awarded to film productions that are exemplary in their commitment to environmental protection and climate action, as well as there will be added compulsory sustainability criteria in the federal film funding guidelines.<sup>290</sup> In the press release for the event, the original starting date for the certificate project’s pilot phase was given as the summer of

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<sup>285</sup> Bundesregierung, “Joint Declaration for the sustainable production of films and television series”, 1.

<sup>286</sup> Ibid.

<sup>287</sup> Ibid.

<sup>288</sup> Ibid.

<sup>289</sup> Bundesregierung, “Gemeinsame Erklärung für nachhaltige Filmproduktion im Bundeskanzleramt unterzeichnet”.

<sup>290</sup> Ibid.

2020, prepared by the Green Shooting working group and carried out by FFA, on behalf of the Federal Government Commissioner for Culture and the Media.<sup>291</sup>

As of January 2022, there were not any public updates coming from the federal government about the project, which is possibly due to the COVID-19 pandemic that has changed the focus and priorities of the German state as well as created a unique situation with more pressing issues for the film industry to survive. However, the FFA website also discusses the joint declaration and the certificate when talking about their efforts towards sustainability in audiovisual production. According to them, the Federal Government Commissioner for Culture and the Media commissioned the Ökopol Institute and KlimAktiv to develop the voluntary certificate and the minimum standards (the aforementioned sustainability criteria) in the federal film funding guidelines, in close cooperation with Film Fund Hamburg Schleswig-Holstein and MFG Baden-Württemberg.<sup>292</sup> FFA also states that interesting parties in the film and TV industry have applied to take part in their living lab-style investigation for testing the sustainability criteria, and the test phase involving selected applicants has started on July 5th, 2021.<sup>293</sup> If everything goes according to plan, this phase is expected to be finished in February 2022, with the results scheduled to be presented in May 2022.<sup>294</sup>

The beginning of 2020 seems to be the date when greening the film industry became a political issue on the national level. In January the green party Alliance 90/The Greens parliamentary group (who are currently in the Scholz cabinet) in the German Bundestag adapted a group resolution titled “Strategies for environmentally friendly film productions and green cinema” (Strategien für umweltfreundliche Filmproduktionen und grünes Kino) with the tagline “It won't get greener by itself” (Grüner wird's nicht von allein).<sup>295</sup> The document considers the Paris Climate Agreement as a starting point and incentive to reduce the film industry's CO<sub>2</sub> emission, and uses the UCLA report as a source for illustrating the film industry's negative impact on the environment. The eight-page long document does not provide any novelties on how to make the film industry greener, it only briefly summarises best practices from the United Kingdom and France. It also praises the German film industry's own initiatives: “Close cooperation with the film industry is advisable, because in the film industry itself, ideas for resource-saving production methods have been developed, tested and implemented for several

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<sup>291</sup> Ibid.

<sup>292</sup> Filmförderungsanstalt, “Nachhaltigkeit in der audiovisuellen Produktion”.

<sup>293</sup> Ibid.

<sup>294</sup> Ibid.

<sup>295</sup> Bündnis 90/Die Grünen, Fraktionsbeschluss „Strategien für umweltfreundliche Filmproduktionen und grünes Kino“.

years.”<sup>296</sup> (Translated by me.) The group resolution is critical towards the federal government specifically for its “lack of awareness” towards the industry’s environmental impact, and the document ends with a list of “Demands on the Federal Government”<sup>297</sup>. Therefore, this is a political manifesto urging a common sustainability framework for the film industry on a federal level.

In October 2020 the Federal Government Commissioner for Culture and the Media also published a 36-page long sustainability report specifically focusing on how to make the cultural and media sector more sustainable.<sup>298</sup> The document uses the United Nation’s seventeen global Sustainable Development Goals (SDGs) as a starting point, seeing which ones can be applied to culture and media and what the Federal Government specifically does in order to achieve them in these areas. The film industry itself is mentioned under goal number 12 “Ensure sustainable consumption and production patterns”, the chapter discusses the ecological footprint of film production, and gives a brief summary of the environmental initiatives in the German film industry so far, including the Joint Declaration.<sup>299</sup> While some of the United Kingdom’s sustainable film initiatives also mentioned the SGDs, it seems like there is a bigger emphasis in Germany to align green productions guide in the audio-visual sector with the UN’s sustainability goals.

### **5.3 Ökologische Mindeststandards (2021)**

One of the most comprehensive initiatives in Germany is the label Green Motion, which aims to promote “a more climate-friendly and resource-saving production method for cinema, TV and online/VoD productions in Germany by complying with the minimum ecological standards of the Green Shooting working group.”<sup>300</sup> The Green Shooting working group which is also involved in developing the Federal Government Commissioner for Culture and the Media’s green certificate and the minimum standards for film funding guidelines was established in 2017, it is managed by the Baden-Württemberg Film Fund (MFG), and includes production companies, such as ARD, Bavaria Fiction, RTL Media Group, Constantin, UFA, ZDF, Netflix,

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<sup>296</sup> Ibid, 1.

<sup>297</sup> Ibid, 7.

<sup>298</sup> Bundesregierung, *Nachhaltigkeitsbericht BKM*.

<sup>299</sup> Ibid, 23-26.

<sup>300</sup> Green Motion, “Das Label green motion”.

and the German Film Academy.<sup>301</sup> In other words, there is an overlap between the members of the Green Shooting working group and the signatories of the Joint Declaration for the sustainable production of films and television series.

The group has developed a criteria system that is the basis of the green motion label, a marker that shows for the public that a production is made following environmental considerations, titled *Minimum ecological standards for German cinema, TV and online/VoD productions (Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/ VoD-Produktionen)*. The participants of the Green Motion initiative agreed that starting on 1 January 2022, they will comply with the Green Shooting working group's minimum standards during all stages of production, it becomes part of the criteria for funding and the joining organisations will recommend their members to comply with the criteria as well.<sup>302</sup> The minimum standards, published in a 13-page long document (both in German and English) at the end of 2021 contains fifteen different areas where change should be made, these have both mandatory specifications (Muss-Vorgabe) and target specifications (Soll-Vorgabe). To be eligible for the green motion label, eighteen out of the twenty-one mandatory specifications need to be fulfilled.<sup>303</sup> According to the document, the program has converted 100 television and film productions to ecologically sustainable production methods in a pilot project in 2020/21.<sup>304</sup> The document states that the minimum standards should apply to all phases of all productions "that are realised in Germany, regardless of whether the production company is located in Germany or abroad".<sup>305</sup>

Before getting into details of the document itself, I would like to examine some of the texts on the Green Motion label website itself, since this is the first thing interested parties see when looking up the initiative. Although the minimum standards document is available both in German and in English, the website is in German only, and contains more emotionally charged phrasing than the document itself. The homepage starts with a brief explanation of what and why this Green Motion label does. In the first paragraph, the text states that film, TV and VoD productions cause high CO<sub>2</sub> emissions. "The industry is taking action - voluntarily." ("Die Branche handelt - freiwillig.")<sup>306</sup> This introduction only states the high CO<sub>2</sub> emissions as a fact, it does not elaborate on whether it is bad or why it is bad, the text takes it as a given that this has to change and that the film industry needs to take action to reduce this negative effect: "By

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<sup>301</sup> 100 Grüne Produktionen, "Der Arbeitskreis".

<sup>302</sup> Green Motion, "Beteiligte Institutionen".

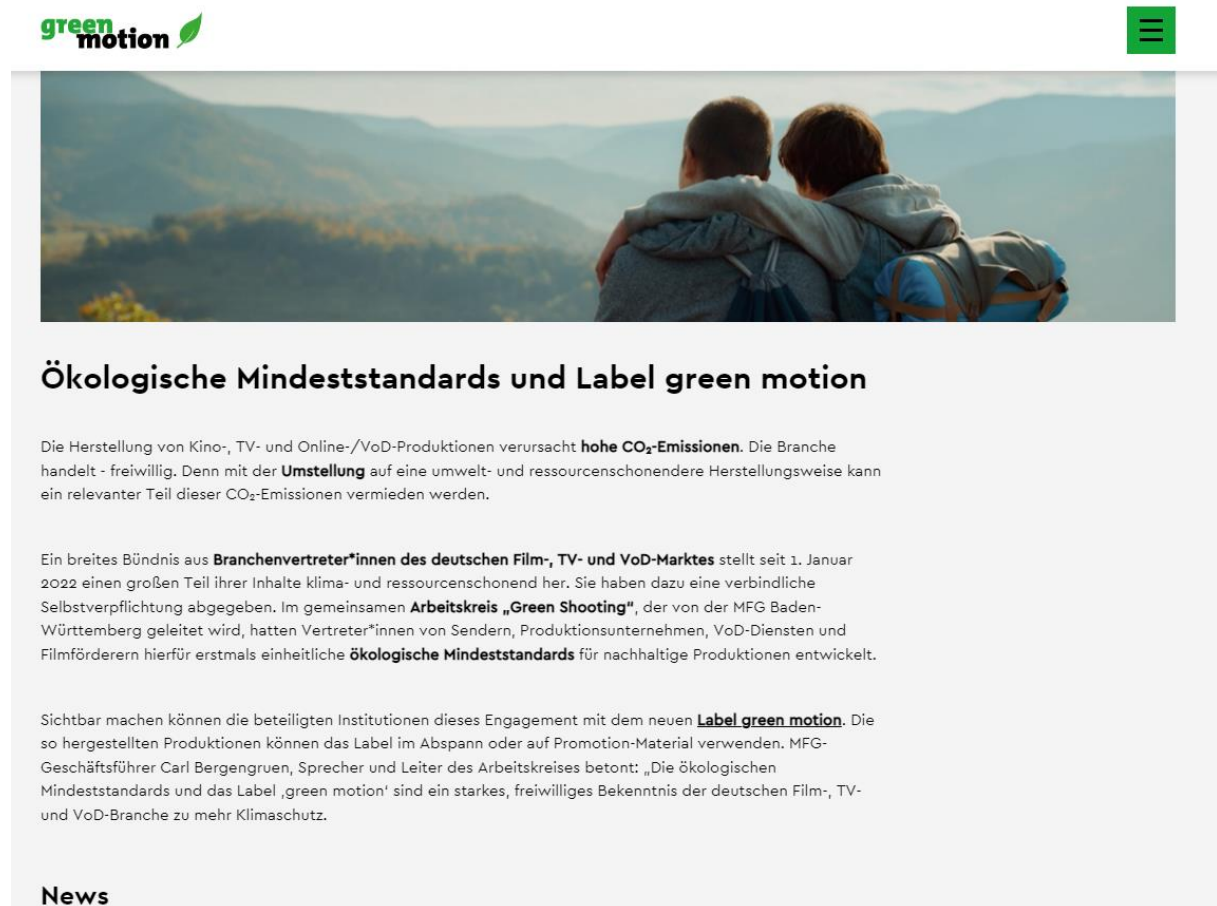
<sup>303</sup> Green Motion, "Ökologische Mindeststandards".

<sup>304</sup> Green Shooting, *Ökologische Mindeststandards*, 2.

<sup>305</sup> Ibid.

<sup>306</sup> Green Motion, "Homepage".

switching to a more environmentally friendly and resource-saving production method, a relevant part of these CO<sub>2</sub> emissions can be avoided.”<sup>307</sup> (Translated by me.) Then the introduction goes on to explain the alliance behind this initiative and states that participating productions can make their commitment visible by using this new green label in the film credits or on the promotional material.



**green motion**

## Ökologische Mindeststandards und Label green motion

Die Herstellung von Kino-, TV- und Online-/VoD-Produktionen verursacht **hohe CO<sub>2</sub>-Emissionen**. Die Branche handelt - freiwillig. Denn mit der **Umwstellung** auf eine umwelt- und ressourcenschonendere Herstellungsweise kann ein relevanter Teil dieser CO<sub>2</sub>-Emissionen vermieden werden.

Ein breites Bündnis aus **Branchenvertreter\*innen des deutschen Film-, TV- und VoD-Marktes** stellt seit 1. Januar 2022 einen großen Teil ihrer Inhalte klima- und ressourcenschonend her. Sie haben dazu eine verbindliche Selbstverpflichtung abgegeben. Im gemeinsamen **Arbeitskreis „Green Shooting“**, der von der MFG Baden-Württemberg geleitet wird, hatten Vertreter\*innen von Sendern, Produktionsunternehmen, VoD-Diensten und Filmförderern hierfür erstmals einheitliche **ökologische Mindeststandards** für nachhaltige Produktionen entwickelt.

Sichtbar machen können die beteiligten Institutionen dieses Engagement mit dem neuen **Label green motion**. Die so hergestellten Produktionen können das Label im Abspann oder auf Promotion-Material verwenden. MFG-Geschäftsführer Carl Bergengruen, Sprecher und Leiter des Arbeitskreises betont: „Die ökologischen Mindeststandards und das Label ‚green motion‘ sind ein starkes, freiwilliges Bekenntnis der deutschen Film-, TV- und VoD-Branche zu mehr Klimaschutz.“

**News**

Figure 8. Green Motion homepage (<https://www.oekologische-mindeststandards-greenmotion.de/>)

Even though these three short paragraphs are the first thing anyone visiting the website sees, yet it is not a hard sell of the initiative. It is brief and treats the topic as self-evident: it does not argue for why the film industry’s CO<sub>2</sub> emission needs reducing, or why they singled out this specific issue from the several other ways film production affects the environment. It implies that the target audience of this green label is industry professionals who already know that the film industry has a negative impact on climate change specifically, and who are willing to look into possible solutions. What is outstanding about this text however is its emphasis on the voluntary nature of the initiative, mentioning it three times: the industry is taking action

<sup>307</sup> Ibid.



voluntarily, it is a “binding voluntary commitment” (verbindliche Selbstverpflichtung), and that the minimum standards are a “strong, voluntary commitment” (ein starkes, freiwilliges Bekenntnis) of the German film industry.<sup>308</sup> As we saw earlier with the group resolution of the Alliance 90/The Greens, and the filming regulations of the various states, politics play a role in making the film industry more environmentally sustainable, therefore it would not be a surprise if this emphasis on the voluntary nature of the Green Motion would be a response to that. As opposed to the United Kingdom where the government’s role is limited to setting the general direction of becoming net zero for all affected industries, in Germany the political interest in greening the film industry seems bigger. Therefore, it might be important for the industry representatives involved in the Green Motion label to emphasise that this is coming from the industry itself, without any external pressure from policymakers, while also implying that since it is not compulsory, the decision to join is based on one’s conscience because it is the ‘right thing’ to do.

The subpage explaining the label (Das Label green motion)<sup>309</sup> displays more moods and emotions than the other texts on the website. It starts with an exclamation: “Showing strength and commitment together!” (“Gemeinsam Stärke und Engagement zeigen!”) before explaining that the Green Motion label produces ecologically sustainable films and TV shows.<sup>310</sup> While the urge to co-operate is understandable since as many productions as possible need to adapt environmentally friendly filming standards to make a difference, and they need to stay committed to see the long-term effects, strength seems like an odd word choice in this context. One could assume that this might also be in connection to the interest politicians show for regulating the film industry, and the industry professionals joining the Green Shooting group can demonstrate that they have the necessary power to regulate themselves.

Then the text states that “The dangers due to climate change are increasing.” (“Die Gefahren aufgrund des Klimawandels nehmen zu.”)<sup>311</sup> Although the previous introductory text on the homepage used the terms “climate and resource friendly” (klima- und ressourcenschonend) and “climate protection” (Klimaschutz), this is the only place on the entire website where climate change is explicitly mentioned. And it is not only mentioned but also paired with increasing dangers, making this sentence the most explicit about the Green Motion initiative’s take on climate change. And this also explains in retrospect why CO<sub>2</sub> emission is the issue being singled

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<sup>308</sup> Ibid.

<sup>309</sup> Green Motion, “Das Label green motion”.

<sup>310</sup> Ibid.

<sup>311</sup> Ibid.

out in this project: that is the most obvious indicator associated with climate change. The segment closes with stating that the productions that complied with the minimum standards requirements can use the Green Motion label and write “climate-friendly production” (klimaschonend produziert) in the credits.<sup>312</sup>

The minimum standards can be found as downloadable pdf-documents both in German and English on the Ecological minimum standards subpage of the website, with an introductory text that is a shortened version of the document’s preamble. When talking about the environmental unsustainability of the film industry, the Preamble of the minimum standards document – like the homepage of the initiative – also only mentions CO<sub>2</sub> emission as a specific problem related to the issue. “The production of cinema, TV and online/VOD productions causes high CO<sub>2</sub> emissions and resource consumption. A relevant part of these CO<sub>2</sub> emissions can be avoided by switching to a more environmentally friendly and resource-saving production method.”<sup>313</sup> (Translated by me). For example, there is no mention of biodiversity loss related to filming practices, only that the industry actors joining the initiative would like to produce content in a more resource- and climate-friendly way.<sup>314</sup>

The Preamble (Figure 9) emphasises that the minimum standards apply to all phases of the production, such as pre-production, post-production, and any other parts of the production that are realised in Germany, “regardless of whether the production company is located in Germany or abroad”. The text also adds that if “the conditions abroad permit” then it is “welcomed” if the minimum standards are also applied there.<sup>315</sup> The minimum standards include those areas where “high resource consumption and high greenhouse gas emissions are generated and relevant savings are possible at the same time”<sup>316</sup>, making the recommendations both urgent but also realistic, they are expected to be implemented “with reasonable expenses”<sup>317</sup>. The Preamble repeats several times that the recommended standards are easily implemented with minimal cost, and they can also help save money by enabling smarter resource management. This is a line of argument we already saw in the British case study, not surprisingly: the film industry is a business, and it can be expected that the first question of anyone considering joining the initiative will be “But how much will it cost me?”

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<sup>312</sup> Ibid.

<sup>313</sup> Green Shooting, *Ökologische Mindeststandards*, 2.

<sup>314</sup> Ibid.

<sup>315</sup> Ibid.

<sup>316</sup> Ibid.

<sup>317</sup> Ibid.



## Präambel

Die Herstellung von Kino-, TV- und Online-/VoD-Produktionen verursacht hohe CO<sub>2</sub>-Emissionen und Ressourcenverbräuche. Mit einer Umstellung auf eine umwelt- und ressourcenschonendere Herstellungsweise kann ein relevanter Teil dieser CO<sub>2</sub>-Emissionen vermieden werden. Daher hat sich ein breites Bündnis wesentlicher Branchenvertreter\*innen des deutschen Film-, TV- und VoD-Marktes entschlossen, einen großen Teil ihrer Inhalte klima- und ressourcenschonend herzustellen. Im von der MFG Baden-Württemberg geleiteten Arbeitskreis »Green Shooting« haben Sender, Produktionsunternehmen, VoD-Dienste und Filmförderer erstmals einheitliche ökologische Mindeststandards für nachhaltige Produktionen entwickelt und sich in einer Nachhaltigkeitsinitiative zu deren Einhaltung verpflichtet. Die so hergestellten Produktionen werden zukünftig mit dem eigens entwickelten Label green motion im Abspann oder auf Promotion-Material gekennzeichnet.

Der Arbeitskreis hat dazu gemeinsam mit dem Film- und TV- Nachhaltigkeitsexperten Philip Gassmann, der Filmschaffenden-Initiative Changemakers.film, dem Klimaforscher Prof. Dirk Notz, dem Umweltwissenschaftler Nils König und weiteren Branchenvertreter\*innen die nachfolgenden als verpflichtend intendierten ökologischen Mindeststandards für Kino-, TV- und Online-/VoD-Produktionen (im Folgenden Mindeststandards genannt) erarbeitet. Sie beziehen sich auf nonfiktionale und fiktio-


nale Medien-Produktionen, zum Beispiel Sportsendungen, Unterhaltungsshow, TV-Dokumentationen, Spielfilme oder Serien.

Hierbei sind auch Erfahrungen und Erkenntnisse aus der Nachhaltigkeitsinitiative des Arbeitskreises »100 grüne Produktionen« eingeflossen. Bei dieser Initiative wurden 2020/21 100 TV- und Filmproduktionen in einem Modellversuch auf eine ökologisch nachhaltige Herstellungsweise umgestellt.

Diese Mindeststandards gelten dabei für alle Produktions-Phasen von der Preproduction bis zur Postproduction und für diejenigen Produktions-Teile, die in Deutschland realisiert werden, unabhängig davon, ob das Produktionsunternehmen in Deutschland oder im Ausland angesiedelt ist. Sofern die Produktionsbedingungen im Ausland dies zulassen, ist es zu begrüßen, wenn die Mindeststandards auch für die dort hergestellten Produktions-Teile angewandt werden.

Die Mindeststandards beinhalten Maßnahmen aus verschiedenen Produktionsbereichen, bei denen jeweils hohe Ressourcenverbräuche erfolgen und hohe Treibhausgas-Emissionen erzeugt werden und zugleich relevante Einsparungen möglich sind. Alle Maßnahmen können mit vertretbarem Aufwand umgesetzt werden. Diese Mindeststandards einzuhalten ist damit für jede Produktion ein erster wichtiger und zugleich realistischer Schritt hin zu einer ökologisch nachhaltigen Produktionsweise.



 PRÄAMBEL Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/VoD-Produktionen



Die Mindeststandards sind in 15 Bereiche unterteilt. Diese Bereiche enthalten Muss- und Soll-Vorgaben. Die Muss-Vorgaben sind bei Produktionen, die nach diesen Mindeststandards hergestellt werden, zwingend einzuhalten. Sollte dies im begründeten Ausnahmefall nicht vollständig möglich sein, sind pro Produktion höchstens bei drei der insgesamt 21 Muss-Vorgaben Abweichungen zulässig (Die Anzahl soll in den kommenden Jahren reduziert werden). Die Abweichungen von der jeweiligen Muss-Vorgabe sollen dabei so gering wie möglich ausfallen.

Außerdem sind solche etwaigen Ausnahmen, bei denen eine Mussvorgabe nicht eingehalten werden konnte, im allgemeinen Abschlussbericht zu begründen, der nach jeder Produktion zu erstellen und bei dem zuständigen Sender/VoD-Dienst/Förderer einzureichen ist. Dieser prüft den Abschlussbericht und nimmt ihn ab, wenn u. a. mindestens 18 der 21 Muss-Vorgaben eingehalten wurden.

Mit der Abnahme erhält bei den in Deutschland realisierten Produktionsteilen die Produktion außerdem die Berechtigung, das Label green motion zu verwenden, sofern

- entweder die im Ausland anfallenden Herstellungskosten weniger als 25% der Gesamtherstellungskosten ausmachen
- oder auch bei den im Ausland realisierten Produktionsteilen mindestens 18 von 21 Mussvorgaben der Mindeststandards eingehalten wurden und dazu zusätzlich ein gesonderter Abschlussbericht Ausland erstellt und abgenommen wurde.

Die Abnahme des Abschlussberichts/der Abschlussberichte kann alternativ auch bei einer externen Prüfstelle erfolgen, mit deren Durchführung der Arbeitskreis das Wirtschaftsprüfungsunternehmen PwC beauftragt hat.

Die Soll-Vorgaben sind, anders als die Muss-Vorgaben, nicht als strikte Vorschrift, sondern als ein Appell für eine ökologisch nachhaltige Produktionsweise zu verstehen. Die Umsetzung der Soll-Vorgaben bewirkt genauso wie die der Muss-Vorgaben eine wirksame Reduzierung von Treibhausgas-Emissionen und ist deshalb erwünscht. Es wird aber nach dem heutigen Stand der technischen Möglichkeiten immer wieder Fülle geben, in denen diese Soll-Vorgaben mit vertretbarem Aufwand nicht eingehalten werden können.

Die Mindeststandards werden durch den Arbeitskreis »Green Shooting« jährlich aufgrund von Erfahrungen mit diesen Standards und von neuen technischen Entwicklungen und Möglichkeiten einer nachhaltigen Produktionsweise angepasst und angehoben.


 PRÄAMBEL Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/VoD-Produktionen

Figure 9. Preamble (Green Shooting, *Ökologische Mindeststandards*, 2-3.)

But unlike *A Screen New Deal*, this document puts way less emphasis on ‘selling’ the initiative to the interested parties. The Preamble is not signed, it is not a foreword from a CEO or president of an organisation, it does not try to resonate with the readers’ emotions to convince them that they should care about the environment or sustainable filming practices, it simply states what this document is for. Of course, no language is entirely neutral, and the Preamble frequently uses passive voice and auxiliary verbs to indicate modality, and their presence is even more pronounced in the official English translation. While the German text frequently uses “werden” (will, to become), the English translation alternates between will (standards will be marked, the number will be reduced, standards will be adjusted), should (deviations should be as small as possible), and must (must observe, must be justified, must be drawn up, must check).<sup>318</sup> In contrast to this, when discussing the target specifications that are not mandatory, both the German and the English text describes implementing them as “desirable” (erwünscht)

<sup>318</sup> Green Shooting, *Minimum ecological standards*, 2-3.

but understanding that there will always be situations where these cannot be implemented with “reasonable effort”.<sup>319</sup>

The rest of the *Ökologische Mindeststandards* document is a more detailed description of the fifteen minimum standards and their mandatory and target specifications: 1. Green Consultants, 2. Accounting, 3. Final Report, 4. Green Electricity, 5. Generators, 6. Rechargeable Batteries, 7. Lighting, 8. Travel and Transportation, 9. Accommodation, 10. Catering, 11. Paper, 12. Materials and Supplies, 13. Costumes, 14. Plastic, 15. Waste Sorting. The chapter is called “The minimum standards in detail” (Die Mindeststandards im Einzelnen)<sup>320</sup> but these details mean nine airy pages of text, where some of the points are dealt with in two to three sentences.



Figure 10. The first two pages of the minimum standards (Green Shooting, *Ökologische Mindeststandards*, 4-5.)

There are categories which require more information or seem to be more significant during a production than others, the longest segments are about (diesel) generators, travel and transportation, catering, and materials and supplies. The logic of these divisions is not always clear as there are separate points for paper, plastic, and costumes, even though they could all

<sup>319</sup> Green Shooting, *Ökologische Mindeststandards*, 3.

<sup>320</sup> Ibid, 4.

belong to materials and supplies. Some of the points only contain the mandatory and target specifications, while others get a short introduction. For example, Plastic only has one target specification, no mandatory, that states that disposable plastic “should generally be avoided” and that only those make-up products should be used that are without microplastics.<sup>321</sup> In contrast to this, Paper gets an introductory paragraph about its contribution to deforestation and that Germany has the highest per capita consumption of paper in Europe, and then has both a mandatory and a target specification about reducing paper documents and recycling.<sup>322</sup> This is an odd choice considering that reducing paper documents is a goal that is primarily important for administration, while recycling is something all phases of the production should aim for.

And this is where the weakness of this document comes out as opposed to the British one I examined in the previous chapter: it is very difficult to get an overview of what individual production departments need to do in order to meet the sustainability criteria. On the other hand, the first mandatory criterion of the entire system is to hire a green consultant, therefore this document can be interpreted as only a framework to show the interested production companies the scale of the commitment they are supposed to make when signing up for the Green Motion label. As opposed to this, *A Screen New Deal* was intended to be both a handy guide for industry professionals and a plea for executives to join the cause of greening the film industry.

It is also worth pointing out that the creation of the British document was outsourced to a sustainable development advisory group and contained an overview of the academic literature, several interviews with industry professionals, case studies based on film studio visits and assessment of sustainability reports of several film productions. The Green Motion standards on the other hand are the result of a collaboration between the Green Shooting working group, Changemakers.film, film sustainability expert Philip Gassmann, climate researcher Prof. Dirk Notz, and environmental scientist Nils König<sup>323</sup>, which indicates a less smaller scale project with different goals in mind as well.

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<sup>321</sup> Ibid, 12.

<sup>322</sup> Ibid, 11.

<sup>323</sup> Ibid, 2.

## 5.4 Conclusion

In this chapter, I gave a brief overview of the German film industry, its size and position in Europe, and also discussed the special situation that the federal political system creates for film funding, production, and regulations. I also discussed the short history of environmental sustainability in the German film industry, focusing on the most relevant texts and initiatives for understanding the direction in which the industry standards have been developed, as well as the increasing interest political actors show in greening the film industry. Then I examined the Green Motion initiative's *Minimum ecological standards for German cinema, TV and online/VoD productions (Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/VoD-Produktionen)* document from a discursive perspective.

The document, compared to *A Screen New Deal* is much shorter and less technical. It does not get into a level of detail that would render it unreadable for someone who does not work in the specific filming areas the document addresses, but this also means that the recommendations it gives feel as surface-level solutions. The text is also less emotionally charged than its British counterpart, it does not intend to convince the reader that fighting climate change is the morally right thing to do, as if it assumes that if someone is looking up industry standards for environmental sustainability then they do not need to be convinced that something needs to be done.

But there are two circumstances worth pointing out when comparing this document to any other. Firstly, the German film industry considers itself to be way behind of other countries, namely the United States of America, the United Kingdom, and France when it comes to greening the film industry. Whether this is factually true or not (as we have seen, Germany had some initiatives that were unique on a global scale), the German film industry is at a different stage of organising itself by trying to build a common framework that synthesises all the various individual efforts and regional regulations into a standard that can be used as a common starting point for all productions. This is something the United Kingdom did not have to be concerned with as their standards and initiatives were much more centralised.

The other thing to consider is politics. This is partially connected to the aforementioned federal state system, as in local governments and their regional film funding bodies created their own best practice guides and could make the financing of certain productions dependent on their implementation. The other channel where politics gets involved is the federal level. As we saw in this chapter, the green party Alliance 90/The Greens parliamentary group in the German Bundestag adapted a group resolution urging the federal government to become more involved

in greening the German film industry. And as I also discussed in this chapter, at the beginning of 2020, the Federal Government Commissioner for Culture and the Media and high-ranking representatives of the German film and television industry signed a joint declaration for the sustainable production of films and television series, making the federal government involved in the issue.

Although the British film industry gets funding from the state therefore obliged to adhere to certain rules and regulations, the German industry has a more complex relationship to state and government. Therefore, I argue that when the German film industry communicates its sustainability efforts towards the public, it is done not just to attract more production companies to be green and to show moviegoers how environmentally conscious the industry is, but also needs to convince politicians that the situation is under control and the film industry does not need external intervention to sort itself out.

## 6. Discussion and Conclusion

In this thesis, I focused on the United Kingdom and Germany as case studies to see how the European film industry discusses environmentally sustainable production practices. I used discourse analysis on one selected document from each country published after 2019 to see which issues and with what language are being discussed. From the United Kingdom, I chose *A Screen New Deal - A Route Map to Sustainable Film Production*<sup>324</sup> (2020), which is a collaborative, 60-page long report between the British Film Institute (BFI), ALBERT Sustainable Production, and a sustainable development advisory firm Arup. In the case of Germany, I examined the label Green Motion's document *Minimum ecological standards for German cinema, TV and online/VoD productions*<sup>325</sup> (*Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/ VoD-Produktionen*). This 13-page long document was published at the end of 2021 both in German and English and received a significant amount of public attention as it is a collaboration several important actors in the industry.

In this chapter I will discuss the main findings of my research in a comparative way, based on Chapter 4 and 5 which contain the individual case studies, and the implications of these results. Then I will also address the limitations of this project and make recommendations for further research.

### 6.1 Summary of findings

Both *A Screen New Deal* and the *Ökologische Mindeststandards* are important documents in their own way, they both reflect on the current state of a national film industry's sustainability efforts and problem-solving methods – or at least the parts of it that were meant for a wider audience. There are some similarities between the documents but also significant differences, coming from the different geo-political infrastructures, the history of the industry, but also from the fact that these two countries are at different stages of developing standards for green filming

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<sup>324</sup> British Film Institute, *A Screen New Deal. A Route Map to Sustainable Film Production*, 2020

<sup>325</sup> Green Shooting, *Ökologische Mindeststandards für deutsche Kino-, TV- und Online-/ VoD-Produktionen*, 2021



practices. In the following, I will examine the findings of this research focusing on various aspects.

### 6.1.1 Format and tone

The first thing that is immediately noticeable about the two documents is their differing lengths and appearances. Both of them are available as pdf files on their respective websites but *A Screen New Deal* feels like a handbook while the *Ökologische Mindeststandards* is essentially a pamphlet.

Even though *A Screen New Deal* is 60 pages long, it is heavily illustrated and uses various colours to differentiate between each subchapter and visually connect lines of thoughts throughout the document, which makes it very palatable even for non-professional eyes. The colours are used consistently throughout the documents indicating the same production area (production materials – red, production planning – green, energy and water – yellow, etc.), therefore if someone is interested in production materials, they only need to look out for the red coloured pages in the Vision, Opportunities, and Recommendations chapters.

As for the tone, the document strikes a balance between providing concrete, technical solutions and practical advice on how to make the film production process more environmentally sustainable, but also creates a vision of the UK leading the world by example. The Forewords<sup>326</sup>, which contains an introduction from a higher executive person of all three companies who worked on the document, is tonally different from the other parts of *A Screen New Deal* as it is the chapter that tries to ‘sell’ the whole initiative to the readers. The three short texts mention the “complexity, urgency and importance” of reforming the film industry, stating that the industry “inspires, influences, motivates and entertains millions of people worldwide” but there is also “an environmental cost to this”.<sup>327</sup> In general, the Forewords’ tone is positivity, highlighting the film industry’s ability to work “more efficiently, creatively and collaboratively”, calling it a “film community” that has an “exciting opportunity” to “lead by example with a positive, impactful transformation that breeds innovation and hope for the future”.<sup>328</sup> While the text also admits that “we face a dilemma” when reforming a “complex” industry that is “highly-dependent on a set of trusted routines and practices” and mentions the COVID-19 pandemic as an “unparalleled moment”, it is also framed in a way of opportunity, a

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<sup>326</sup> British Film Institute, *A Screen New Deal*, 3.

<sup>327</sup> Ibid.

<sup>328</sup> Ibid.

“chance to look at radical new ideas and to learn from innovation in other industries”.<sup>329</sup> Another chapter that sets the tone of the document is the Executive Summary<sup>330</sup> which talks about an “opportunity for transformation” and that “The film production industry requires systemic change to become sustainable.”<sup>331</sup> The need for systemic change comes up several times in *A Screen New Deal* as well as in the accompanying press releases, making it one of the key concepts of the document. There is a tonal difference between these introductory chapters and the more technical ones (Vision, Opportunities, Recommendations) that provide factual, practical information and recommendations.

Compared to its British counterpart, the *Ökologische Mindeststandards* is 13 pages long and consist of a Preamble and a 15-point list of the areas to which the minimum ecological standards must/should be applied to. The document has a minimalist design, and uses black, white, and green throughout its pages. Compared to *A Screen New Deal* which looks like a full report, the minimum standards document is more like a summary of the areas in which changes need to be made, as to give a reader an estimate of the effort (or sacrifice) needed to make film productions greener. The *Ökologische Mindeststandards* is available on the Green Motion website in both the German original and its English translation. The English version is just that, a translation, it is not adapted or localised in any way for an international audience or market, it does not contain additional information about the German film industry that might help a non-German industry professional to get more context.

Interestingly, the most subjective tone (conveying emotions) linked to this initiative is not from the document itself, but from the introductory texts on the website. The subpage explaining the label (Das Label green motion)<sup>332</sup> starts by exclaiming: “Showing strength and commitment together!” (“Gemeinsam Stärke und Engagement zeigen!”). While the need for commitment and cooperation can be expected in an industry that is an intricate network of various production stages that needs to be sustainable in the long run, strength seems like a surprising choice of word, which might be a message to the politicians showing interest in regulating the film industry, demonstrating that the industry has the power to regulate itself. Then the text goes on saying that “The dangers due to climate change are increasing.” (“Die Gefahren aufgrund des Klimawandels nehmen zu.”)<sup>333</sup>, which is the only place on the entire website where climate

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<sup>329</sup> Ibid.

<sup>330</sup> British Film Institute, *A Screen New Deal*, 4.

<sup>331</sup> Ibid.

<sup>332</sup> Green Motion, “Das Label green motion”.

<sup>333</sup> Ibid.

change is explicitly mentioned, and here it is framed as having dangerous consequences. As opposed to *A Screen New Deal*, the *Ökologische Mindeststandards* does not focus on convincing the reader that this is a worthy initiative; the Preamble is not signed, it is simply an introduction to what the document is. It does not try to resonate with the readers' emotions to convince them that they should care about the environment, and the Preamble frequently uses passive voice and auxiliary verbs to indicate modality (should, must, will). The rest of the *Ökologische Mindeststandards* is a more detailed description of the fifteen minimum standards (Die Mindeststandards im Einzelnen)<sup>334</sup> which does not get into a level of detail that would render it unreadable for someone who does not work in these specific filming areas, but this also means that the recommendations are more surface-level solutions.

### 6.1.2 Audience and the presence of politics

Based on the format of the documents and the tone they set, we can already start wondering who the intended audience is. It is especially tricky with *A Screen New Deal* since the technical chapters (Vision, Opportunities, Recommendations) go into such level of details that it does not seem very useful for an outsider; these parts of the document are intended for those who work in the five production areas *A Screen New Deal* discusses. At the same time, the Forewords, Executive Summary, and the introductory texts for the other chapters are overly simplistic in their wording and attempt to affect emotions by talking about the “complexity, urgency and importance” of this “exciting opportunity” to reform the film industry. This balancing act between outlining a wonderful, innovative future for the British film industry but also providing concrete examples on what to change makes the people in power positions the most likely target audience for this report. Studio executives and stakeholders need to see the big picture, the opportunity to become competitive on an international market but also need to see tangible, realistic steps to achieve this. At some places the Forewords explicitly address the reader (“if you haven’t looked at this yet, may I encourage you to do so”, “Will you join us?”, “Let’s try and transform together.”), while others talk in the first person plural about the action needed for change (“we can take advantage”, “we have to act now”, multiple uses of “we need to...”)<sup>335</sup>. There is no indication to who the intended audience of the document is, but we can probably safely assume that these invitations are meant for industry professionals.

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<sup>334</sup>Green Shooting, *Ökologische Mindeststandards*, 4.

<sup>335</sup> British Film Institute, *A Screen New Deal*, 3.

*A Screen New Deal* also considers other countries as the potential audience, the text is very explicit about its wish to “lead by example”<sup>336</sup> and inspire others “with a positive, impactful transformation that breeds innovation and hope for the future”<sup>337</sup>. This is not new since the British Film Institute’s earlier sustainability proposals also talked about becoming a global leader and providing standards other countries can follow<sup>338</sup>, here it is not clear who is being “lead by example” by “the film community” and who is this “we” that is doing the leading.

In the case of the German case study, it is a bit more difficult to deduce who the audience is. The *Ökologische Mindeststandards* was created by the Green Shooting working group consisting of production companies, broadcasters, VoD services and film funds involved in the German film industry, therefore is primarily a guide from the industry to the industry to adapt green filming practices. As mentioned earlier, the document does not argue for the importance of change in the industry, it does not outline a grand vision for the future of German filmmaking, it simply states how things should be changed for a more positive impact on the environment. It does not feel like the document is trying to entertain an invisible audience or convince anyone to join the initiative. But it does not mean that the initiative itself does not intend to send a message.

What is more present in the case of Germany than in the UK is the level in which politicians or governmental bodies are involved in greening the film industry. This is partially connected to Germany’s federal state system, several local governments and regional film funding bodies have their own best practice guides and oftentimes the financing of certain productions depend on the successful implementation of these standards. Political actors on the federal level are also getting involved in checking up on how the film industry’s sustainability efforts are going. For example, in early 2020 the green party Alliance 90/The Greens parliamentary group in the German Bundestag adapted a group resolution urging the federal government to become more involved in greening the German film industry. And later that year, the Federal Government Commissioner for Culture and the Media and high-ranking representatives of the German film and television industry signed a joint declaration for the sustainable production of films and television series, making the federal government involved in the issue.<sup>339</sup>

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<sup>336</sup> British Film Institute, *A Screen New Deal*, 3 and 59.

<sup>337</sup> Ibid, 3.

<sup>338</sup> British Film Institute, *Green matters*, 52.

<sup>339</sup> Bundesregierung, *Nachhaltigkeitsbericht BKM*.

Although the British film industry gets funding from the state (BFI is funded through the National Lottery for example) therefore obliged to adhere to certain rules and regulations, the German industry has a more complex relationship to state and government. I argue that when the *Ökologische Mindeststandards* communicates its sustainability efforts towards the public, it is directed at the politicians as well, to show that the industry is capable of regulating itself without state intervention. The document's webpage emphasizes the voluntary nature of the initiative, mentioning it several times (the industry is taking action voluntarily, it is a "binding voluntary commitment", and a "strong, voluntary commitment").<sup>340</sup>

### 6.1.3 Climate change and society

When I conducted my research, I was not just interested in how these industry documents talk about greening the film industry but also how they fit into a wider socio-political discussion about environmental sustainability. Therefore, I leaned towards critical discourse analysis as a method, to see whether the language of these documents recreate existing sustainability discussions, or if there are any forms of power dynamics or beliefs present when arguing for the importance of sustainable filmmaking, and if they call out systemic issues or advocate for systemic changes, either in the industry or in society.

In this regard, there is a significant difference between the British and the German case study. *A Screen New Deal* mentions "climate change" nine times in the document, calling it a "shared problem"<sup>341</sup>, and listing it as a "systemic challenge" alongside globalisation, digital transformation, and environmental degradation<sup>342</sup>. It also explicitly states that "Evidence from the past two decades links the exacerbation of climate change to human activity."<sup>343</sup> Here, in *A Screen New Deal* there are several mentions of climate change, how it is linked to human activity and that it is a systemic challenge that needs to be overcome through systemic change.

As opposed to this, the German *Ökologische Mindeststandards* document does not mention climate change at all. It only states in the Preamble that this alliance of German filmmakers "decided to produce a large part of their content in a climate- and resource friendly manner" (klima- und ressourcenschonend)<sup>344</sup>. The word "climate" only shows up two more times in the

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<sup>340</sup> Green Motion, "Homepage".

<sup>341</sup> British Film Institute, *A Screen New Deal*, 59.

<sup>342</sup> Ibid, 3.

<sup>343</sup> Ibid, 6.

<sup>344</sup> Green Shooting, *Ökologische Mindeststandards*, 2.

text, once when talking about energy saving measures when looking for accommodation<sup>345</sup> (the German “Klima” became “air conditioning” in the English version) and when introducing climate researcher Prof. Dirk Notz as one of the experts working on the minimum standards. This implies that climate change was taken into consideration when developing these recommendations but the document itself never mentions it explicitly.

The website of the minimum standards is more direct about the issue, the subpage explaining the label (Das Label green motion) states that “The dangers due to climate change are increasing.” (“Die Gefahren aufgrund des Klimawandels nehmen zu.”)<sup>346</sup>, and the homepage repeats “climate and resource friendly” (klima- und ressourcenschonend) film production as a goal and mentions “climate protection” (Klimaschutz) as well.<sup>347</sup> These are the most direct (and only) references to climate change on the website, although the reduction of CO<sub>2</sub> emission as a goal frequently pops up in the minimum standards. And since that is a very straightforward indicator of climate change, and the Green Motion label is awarded to productions that are made in a climate-friendly way (klimaschonend produziert) in the credits<sup>348</sup>, it can be deduced that while the document avoids explicitly addressing it, the minimum standards were made with climate change in mind. Neither of the two examined case studies mention global warming.

At first glance it might seem that climate change is a more sensitive topic in Germany than in the United Kingdom and this is why the German document avoids to directly address the issue. But the public perception of climate change is not that different in the two countries. In a survey from October 2021, 75% of British adults said that they are either very worried or somewhat worried about climate change, and 81% of adults reported making changes in their lifestyles to tackle climate change.<sup>349</sup> In Germany a survey commissioned by the heating technology company Stiebel Eltron in August 2021 shows that 74% of Germans are “prepared to make changes to their lifestyle to prevent global warming”<sup>350</sup>, and 43% percent of the respondents mentioned climate change as the most important issue facing the country<sup>351</sup>. Therefore, this in itself does not explain why one document avoided naming climate change while the other did not; but since the whole Green Motion label revolves around promoting climate-friendly

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<sup>345</sup> Ibid, 9.

<sup>346</sup> Green Motion, “Das Label green motion”.

<sup>347</sup> Ibid.

<sup>348</sup> Ibid.

<sup>349</sup> Office for National Statistics, “Three-quarters of adults in Great Britain worry about climate change”.

<sup>350</sup> Appunn, “Majority of Germans believe scientists’ climate change warnings are correct”.

<sup>351</sup> The Economist, “The climate has overtaken covid-19 as German voters’ top concern”.

productions, they might find it redundant to explicitly mention climate change in the minimum standards as well.

## **6.2 What the results can tell us**

The main research question of this thesis was: How do the British and German film industries conceptualise environmental sustainability issues in film production? Based on the two case studies I examined, we can observe that when these two countries discuss environmental sustainability or the effects of filming on the environment, they are primarily concerned with climate change. As we saw earlier, this might not be explicitly mentioned in the case of Germany, but the issues brought up and the recommendations given revolve around CO<sub>2</sub> emission and the carbon footprint, which is an indicator related to climate change.

In terms of the first sub-question (What do these selected documents identify as problem areas and what do they suggest doing about them; are there any recurring elements?), it can be said that these texts are getting more and more technical. A few decades ago, sustainability discourse in the film industry was more theoretical, the point was to set the general direction of approaching the topic of sustainability itself and to draw attention to the fact that the film industry does in fact have a negative effect on the environment. Now, with *A Screen New Deal* and the *Ökologische Mindeststandards* the aim is not so much to raise awareness but to give practical advice – based on empirical evidence, case studies and best practice guides – to the industry professionals in the various segments of the film production process.

In terms of problem areas, the two documents are very similar, since most film productions have similar needs: electricity, lighting, the problem of replacing diesel generators, water usage, transportation, catering, accommodation. What differs in the two case studies is the amount of details given and the way the information is organised. *A Screen New Deal* for example dedicates several pages to an issue, gives alternative solutions, cites case studies where the problem was solved in a way that can be an example for others, and also lists the benefits of the changes. The document also groups problems together into five areas of production which makes it easier to get an overview of what needs to be done in each one of those sectors. As opposed to this, *Ökologische Mindeststandards* is a much shorter document therefore it does not go into details about how the sustainability problems could be solved based on case studies, the document gives a list of shoulds and musts with an approximate target (e.g. costumes should

be reusable<sup>352</sup>). The text also does not group the issues in a systematic way. But what is positive about both documents is that they focus on reducing harmful effects and swapping technologies for greener solutions, not just offsetting the effect by planting trees for example.

The last question of the thesis was “How does the language of these texts work in terms of word choice, structuring, intended audience, and persuasion?” I gave an overview of the tone and wording of the two case studies earlier in this chapter but to summarise it briefly: the document from the UK uses both technical details in the opportunities and recommendations chapters but also uses more emotionally charged language in the forewords and summaries which are intended to convince the reader about the importance of sustainability in the film industry. In contrast, the German case study is tonally more neutral, it is limited to giving information and recommendations, the only instance where more emotional phrases were present was on the website of the document.

Another thing that became noticeable through these documents is how Germany and the United Kingdom perceives themselves when it comes to what stage of development they are at regarding environmental sustainability in the film industry. The United Kingdom explicitly states that it wishes to lead by example and become the sample and the industry standard for other countries, while also admits that there is still more to learn, especially from good practices coming from outside the film industry.<sup>353</sup>

Germany on the other hand feels way behind of other countries, and usually the United States of America, the United Kingdom, and France are looked upon as advanced countries who can serve as an example in the industry.<sup>354</sup> This self-criticism can be a positive force to propel the German sustainability efforts, but at the same time it neglects the fact that no two countries are alike and the different geographical, political, or cultural differences result in different trajectories for development. Even though the German national regulations seem less advanced than their British counterpart, for example the fact that the Bavaria Film GmbH became the world's first climate-neutral film studio<sup>355</sup> is an impressive accomplishment on its own, so there are areas in which Germany outdid the United Kingdom.

It might also come as a surprise that the US serves as an example for both countries. This is primarily due to the fact that the first thorough examination of sustainability in the film industry

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<sup>352</sup> Green Shooting, *Ökologische Mindeststandards*, 12.

<sup>353</sup> British Film Institute, *A Screen New Deal*, 3.

<sup>354</sup> Bayer, “Green Filming in Deutschland”, 21.

<sup>355</sup> Meyer, “Green Production - The time has come”, 40.



was conducted by UCLA in 2006 about Hollywood's impact on the environment. The document was a novelty at that time, and it is still now, as there is no another comprehensive assessment of the industry like that, therefore it is a very natural starting point for everyone who needs to argue for green filming practices.

### **6.3 Limitations**

After discussing what the results of my research mean, I briefly address the things the results cannot tell us. The thesis is a critical discourse analysis of two documents (and to an extent their accompanying websites and press releases) from the past two years, coming from two Western European countries, the United Kingdom and Germany. This means that the research focused on a specific time, in a specific geographical region, therefore it is not suitable to have generalised conclusions about environmentally sustainable filming practices in Europe; I might have received completely different results by focusing on different European countries. I would argue that the results would have also been different if I focused on other documents from these two countries or from different times. What this thesis provides with these two case studies is just that: two examples of how the topic can be approached and using discourse analysis to poke at the language in which environmental sustainability is addressed in public in the film industry.

As I mentioned it in both the *Introduction* and the *Theory and Methodology* chapter, choosing critical discourse analysis to conduct my examinations also had its own limitations. Critical discourse analysis helps with paying close attention to the language and hidden meanings of a chosen text, while also addresses its societal implications and puts it in a wider context. It is an explanatory, qualitative tool, it is not suitable for drawing general conclusions or quantifying the findings by detecting recurring themes or assumptions. This textual analysis also means that I can only draw conclusions based on what is explicitly or implicitly present in the text, I cannot guess the intentions behind these documents.

Another limitation of the project is that by focusing on the discourse, it cannot assess the applicability of the proposed changes in the film production processes. In the light of my findings, I am unable to tell whether these minimum standards and recommendations are realistic and can reach their desired goal to make the film industry more sustainable. I also cannot say which one of the two examined proposals are "better", because neither are better or worse, they are different. They fit into a different national and industry culture that are at

different stages of greening film productions, and both texts have their own strengths and limitations.

#### **6.4 Recommendations for future research**

My thesis is a contribution to better understand environmental sustainability in the film industry in Europe, a somewhat neglected research area in comparison to the literature available on Hollywood. By using critical discourse theory as a method, I could assess how the film industries in Germany and the United Kingdom conceptualise sustainability concerns in film production, what kind of language they use to talk about these things and how they approach finding solutions for them. My research also revealed which countries are considered as leading examples in the industry when it comes to sustainability practices and how these countries assess themselves in comparison to others.

There are two possible ways of further research that lead directly from the limitations of the project. One would be to conduct a follow up research after a certain amount of time has passed and see in practice what *A Screen New Deal* and the *Ökologische Mindeststandards* recommended. It would be interesting to know how many productions chose to join the initiatives; which of these recommendations were easily implemented, which ones are the more challenging ones; whether the recommendations have lived up to their expectations in making a difference in overcoming the negative environmental effects of film production; or just in general whether this enthusiasm and commitment the documents pledged to the cause has been also applied in practice.

The other trajectory could be to expand on the textual analysis aspect of the thesis. This could be done by adding more countries to the mix and see whether there are any recurring themes or on the contrary, sharp differences between how countries from various regions of Europe (or all over the world) talk about environmental sustainability in the film industry, even with a quantitative approach such as content analysis to determine how Europe addresses the issue in general. The other possibility would be to stick with Germany and the UK but widening the time frame and the documents examined and create a historical overview of how the sustainability discourse has evolved over the years in these two countries.

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