

Mapping barriers in improving ecological sustainability at music festivals

With Drift – Om te Dansen Festival as a case study



Figure 1: (Sander van de Ven, 2021)

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Summary

Context: The festival industry is a fast growing sector but the many transport movements, high use of energy and the need for many and heavy materials is having a negative impact on the environment. Festivals are creating a utopian sphere for visitors but they are struggling in becoming more ecological sustainable. Sustainability issues are not yet an integral part of organizing a festivals. This implies that the new sustainable practices that are necessary to reduce the industry's impact are not yet overrepresented in the industry. In this thesis, the barriers that Drift – Om te Dansen is facing when implementing sustainable measures will be analysed using the policy arrangement approach.

Aim: The aim of this thesis is to contribute to the scientific literature on the topic of ecological sustainability at festivals. There has been little written about this topic and few theories have been used to analyse this sectors sustainability output.

Methods: In this thesis, methods as interviews, a survey, analysis of web- and policy documents and an observation have been carried out to get a holistic view of the case study of Drift – Om te Dansen. Because little is written about this topic, a frame of reference is set up by analysing frontrunners in the field of ecological sustainability. Drift – Om te Dansen is compared with the frontrunners to evaluate their policy and a discourse analysis is done to see how the barriers influence the policy. After this, the organisational dimensions of the policy arrangement approach are used to see which and how barriers are obstructing policy to happen. The five pillar approach from DGTL has been used to structure the measures used to ensure ecological sustainability.

Results: It had been noticed that different actors are having different impacts on the policy field within Drift – Om te Dansen. The interplay between actors when trying to have more sustainable festival has found to be interesting, since actors can form a barrier or an opportunity for sustainable policy to succeed. Furthermore, multiple resources are barriers when implementing sustainable measures. Especially the resources identity, technology and money are forming significant barriers. Economic sustainability is too often prioritized over ecological sustainability and therefore the sustainable policy implementation is not far enough developed at Drift – Om te Dansen. There are hardly any rules that are forming a barrier in the sustainable policy context.

Discussion: However, these organisational dimensions of the policy arrangement approach are barriers at Drift – Om te Dansen, but with the notion of context dependency it is possible that these resources are no barriers at other organizations. This context dependency is formed through location and size of the festival, but the discourse that is present at festival organizations is also found to be a significant factor. Drift – Om te Dansen is aware of the sustainability issue, but the decisiveness stays behind. In this thesis, it is argued that less prioritization of economic sustainability and the use of a data-driven approach to measure the unsustainability of a festival are key ingredients to ensure a more ecological sustainable festival.

Keywords

Festival– Sustainability – Policy arrangement approach – Barriers – Context dependency

Colophon

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Linksvoor

Preface

Dear reader,

The past year has been life changing for me and it all started with this master thesis. The plan to write my master thesis about festivals and doing an internship at a festival organization brought me great insights, new job(s) and I got to meet nice people. The most important thing for me was to write my thesis about something that I liked and this was definitely the case.

I would like to thank everyone at Studio Linksvoor, but in particular Stef Steffens. He gave me the opportunity and freedom to sniff around in a professional organization. Furthermore, I got a lot of inspiration from Ylva Luijten for both activities at Studio Linksvoor as for my thesis. At last, Maria Kaufmann. I would like to thank you very much for your input and flexibility. Maria gave me the insights that I needed and I think we can both look back at very nice meetings.

What is next for me? First, I am about to travel solo to South-East Asia, starting in Vietnam. I will return to work as a self-employer at the next Drift festival and some other festivals. I liked the creativity at Drift so much that I have completed a pre-master Creative Industries while writing this thesis. Next academic year, I will start with the master Creative Industries. In other words, a future to look forward to.

Thank you for reading this and enjoy!

A handwritten signature in black ink, consisting of a large, stylized 'S' followed by a 'L' and a trailing flourish.

Sven Lamper

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1. Introduction

1.1 Research problem statement

The event sector has gained a lot of attention since the seventies, accelerated in the nineties and has become a sector that appeals to many people on a daily basis. Music festivals are not any longer only a key economic component of the wider music industries: they also carry a cultural legacy as sites where constituents of musical cultures gather to form temporary communities (Brennan *et al.*, 2019). McKay (2016, p. 9) stated that historically speaking, festivals have often been 'sites for social and political debate, and sometimes action. Festivals are or have been remarkable sites for experimenting with alternative lifestyles and practices.' For example, in the late 1960s, festivals like Woodstock in the USA had become ideologically aligned with countercultural movements and the feeling of getting back to the nature. Festivals are mostly commercial enterprises where companies are seeking to make a profit. Because of the competitiveness between festival companies, one must distinguish themselves from one another (McKay, 2016). The process of becoming a festival that clearly distinguishes itself from other festivals can include attracting promising music DJ's, creating a utopian physical sphere with a creative decor, contribute something to a social process or simply giving visitors a great experience.

Festivals are struggling to become so sustainable as possible. With the knowledge that festivals are only 'sustained' for one or multiple days, sustainability might not be the right term to use. Instead, festivals should not be labelled as sustainable, but as aware of their unsustainability (Zifkos, 2015). For example, the use of greenfields with temporary buildings and the travel movements of artists, employees and visitors are causing greenhouse gas emissions. Studies in The Netherlands have shown that in 2019, 21 million festival goers have generated 50 million kilogram of waste, which is equivalent to the waste coming from 23.000 households (Van de Voort, 2021). On top of that, studies in the UK have calculated those onsite emissions of festivals are around 19.778 tonnes CO₂ per year. The carbon footprint increases substantially to approximately 97.930 tonnes of CO₂ per year if audience travel is taken into consideration (Johnson, 2015; Brennan *et al.*, 2019). To put this in perspective, 48.965 gasoline driven cars that are driving for one year have the same carbon footprint of 97.930 tonnes of CO₂. Furthermore, 5 million litres of diesel consumption are generated which all by all implies that festivals entail many negative externalities, next to the positive cultural influence (Johnson, 2015).

The evidence is very clear that music festivals are having a negative environmental impact. The clash of a culturally ideologic representation with the deterioration of its environment can be seen as contradictory. Therefore, the question rises if festival organisations are also seeking to maximise this ideologic representation within their business operations. If so, focus will be laid upon ecological sustainability. Ecological sustainability refers to not being harmful to the environment (Elkington, 1998).

Because the importance of sustainability is increasingly recognized, it is interesting to see how this developments regarding sustainability play out in the festival world. Where are they at the moment, what problems are they facing and does it also create potential opportunities? There are many relevant but also interesting issues to consider when looking at ecological sustainability within festival organisations.

1.2 Research context

This master thesis will be executed under the accompaniment of Studio Linksvoor. Studio Linksvoor is a company that includes several event organisations and serves as a hub. This hub has the intention to join forces to come to the most efficient solution possible, in terms of materials, costs and time. Within this hub, knowledge and resources of multiple event organisations are coming together and they are trying to cooperate in the most efficient way. An example of this would be that for the 25 events that they are hosting, only one waste processor or only one sound engineer is contracted. This reduces costs and ensures mutual trust. *Table 1* gives an overview of all the event organisations that are falling under Studio Linksvoor.

| Studio Linksvoor | Organisation | Location |
|----------------------|--|---------------------|
| Drift – Om Te Dansen | House music festival organisation | Nijmegen |
| De Achtertuin | Terrace with music and dance venues | Nijmegen |
| Mout Bierfestival | Beer festival with live music and food trucks | 12 cities across NL |
| Iconic Festival | Music festival with tribute performances | Nijmegen |
| SMKMRKT | A pop-up festival at the Nijmeegse Vierdaagse | Nijmegen |
| Breakfast Club | House music concept where you can have breakfast | Amsterdam |
| Schemerlicht | Audio-visual route in nature with tech innovations | Nijmegen |
| Kelfkensbos Festival | City square in Nijmegen with dance music | Nijmegen |
| Café Van Ouds | Café in city centre of Nijmegen | Nijmegen |
| BCKYRD Festival | Urban, afro and house music festival | Nijmegen |
| Binnestebuiten XL | House and techno music festival | Nijmegen |

Table 1: Hosted events by Studio Linksvoor

Studio Linksvoor is a relatively new company and is willing to implement sustainability within its corporate culture. Studio Linksvoor not only wants to radiate sustainability, they also want all companies that fall under this to be actually sustainable in a way that can be monitored. In cooperation with Studio Linksvoor, my assignment will be to create a policy document that is suitable for all companies falling under Studio Linksvoor, which they can use as a handle to implement sustainability. However, the creation of this sustainable policy document will not be in the scope of this thesis. This master thesis will be an explorative research for this policy document where knowledge about sustainability in the festival scene is examined.

1.3 Research aim and research questions

This research aims to contribute to the scientific literature of sustainability at music festivals. Little is written about this topic, which will also be discussed in the scientific relevance. This master thesis tends to investigate the barriers that Drift – Om te Dansen is facing when trying to realise a more sustainable music festival. This will be the main focus of interest of this master thesis. Before determining this, the goal is to first discover what a sustainable festival actually is. This framing of a sustainable festival is explored through the analysis of frontrunners in the field of sustainability. Measures implemented by these frontrunners are then compared with measures that Drift – Om te Dansen is implementing. With this comparison, it will become evident where Drift – Om te Dansen lacks behind on certain measures. A policy arrangement approach (PAA) will be drafted to examine these barriers. With this research aim in mind, a research question supported by sub-questions could be set up:

Research question:

- Which barriers does Drift – Om te Dansen encounter when trying to improve ecological sustainability?

Theory-based sub-questions:

- How is sustainability framed within music festival organizations?
- What sustainability measures can be distinguished at music festivals?
- What is the current state of the implementation of measures regarding sustainability at Drift – Om te Dansen?

1.4 Scientific relevance

For this master thesis to be scientific relevant, an exploration of the literature on what is written about sustainability and discourses on music festivals will be given. Festivals have become one of the fastest-growing tourism attractions and research subjects for tourism researchers. With music festivals seen as hubs, it can connect individuals (artists and audiences), organisations (festival organisers, local authorities) and infrastructures (driven by policymakers and investors) for making progress on sustainability-related issues (Brennan *et al.*, 2019). Prior to 1993, when the research journal Festival Management and Event Tourism was established (which was later re-named to Event Management), there were only sporadic research-based papers dealing with event tourism and festival/event management research (Getz, 2010, p. 2). Formica (1998) found a total of four publications in the 1970s where festivals were discussed, with the main areas economic, marketing, profiles, sponsorship, management, trends and forecasts. Literature about festivals has not been present for long in the scientific playing field. Ultimately, only few researchers have focused specifically on sustainability at festivals (Duran, Hamarat, & Özkul, 2014, p. 175). In the past, the literature on tourism and events has been accused of lacking in advanced theory and sophisticated and multiple research methods (Formica, 1998; Quinn, 2009, p.3). According to Getz (2010), this is typical for any relatively new field of enquiry.

As stated in the introduction, Zifkos (2015) has a clear opinion on sustainability at festivals, or better to say: the awareness of not being sustainable. Zifkos (2015) argues that festivals are trying to incorporate sustainability, only to compensate for the negative externalities. However, this rather pessimistic view on sustainability at music festivals is a contribution to the framing of how festival organisers can look at sustainability. As Brennan *et al.* (2019, p. 272) suggests, 'there is an important role for the creation and dissemination of music within festival communities that makes audible the tensions between economic and environmental sustainability.' The field is known for its ambiguity, changeability, transience and ephemerality. However, a festival is thought to be distinguishable from other cultural programmes by for example the event frequency that would be considered unsustainable year-round, particularly when held across a range of venues (Ager, 2016, p. 104).

Research by Mair and Laing (2015) mapped driving forces behind sustainability in the cultural sector and examined whether these events could be a means in promoting sustainable behaviour. Where the research of Mair and Laing only looked at ecological sustainability, is the research of O'Rourke, Irwin and Straker (2011) having a broader view on sustainability by looking further than only the ecological component within the cultural sector. In addition, Laing (2018) stated that it can be of great importance to examine whether events can play a role in changing environmental behaviour.

So, there are some articles written about festivals combined with sustainability, but multiple researchers mention the fact that little is written about sustainable festivals (Brennan *et al.*, 2019; Getz, 2010; Formica, 1998; Quinn, 2009; Quinn, 2010). In other cases, sustainable festivals are

identified with other kind of festivals (Perry *et al.*, 2020; Werner *et al.*, 2019). In these cases, festivals are then seen as a means to sustainable development. For example in the article of Perry *et al* (2020, p. 608), where they argue that their study uses festivals as a lens to shine a light on cultural heritage entanglements in the context of wider sustainable urban development challenges. Furthermore, an article by Werner *et al* (2019, p. 128) uses festivals as a site for research where the valuation of co-creation is studied. For both studies, sustainable festivals are used in the research, but sustainable festivals are not the research object itself.

For this master thesis, the focus will be laid on which and how barriers are slowing down policy regarding ecological sustainability. Research of Mair and Laing (2011) examined drivers and barriers when greening festivals. 'There are limitations in the current study that require further research. The study involved interviewing festival organisers in Australia and the United Kingdom and only those associated with award-winning festivals. This study could be extended to other geographical contexts and to festivals that are not "green" award winners' (Mair & Laing, 2011, p. 697). This master thesis will do an exploration of which measures are out there with award-winning festivals, but the main case study is a festival that has not been awarded. Therefore, this master thesis will in some way build on the research of Mair and Lang (2011).

This policy arrangement approach will make the policy landscape clear for barriers when implementing sustainable measures, in the context of Drift – Om te Dansen. This has not been done before in the scientific literature and it will therefore provide some new insights. A structural overview is presented especially with the pillar approach retrieved from DGTL. This thesis therefore attempts to expand the scientific literature with the use of new methods.

1.5 Societal relevance

The Netherlands can be described as a real festival country. In 2019, 1444 festivals have been held, of which 1029 festivals were music festivals that attracted a total of 18,2 million visitors (EMCultuur, 2019). Festivals have a great economic value because of big money flows, people's consumption of food and drinks and because of the creation of many jobs. Festivals can extend the tourist seasons and have 'positive economic impacts on the local economy by generating income, supporting existing businesses and encouraging new start-ups (Mitchell & Wall, 1986, p. 140). However, the economic value that a festival contributes is not in question, while the negative environmental effects of these festivals are.

Festivals do not only try to be sustainable in the foreground, policymakers in organizations are also working in the background to implement sustainability in business operations as much as possible. This is also the case at Studio Linksvoor (personal communication, January 2022). They are willing to create a policy document that can be used as a handle to implement sustainability at the execution of music festivals. Furthermore, with the knowledge about different discourses on sustainability at festivals, Studio Linksvoor is also willing to monitor their executed sustainable practices. For example, if the festival is made as sustainable as possible but three DJs are flown over from the United States, it is questionable how sustainable you are as a festival. Studio Linksvoor is hosting 25 festivals in 2022 and therefore, a big impact can be made. Whenever these festival practices are made more sustainable, thousands of people are then participating in a more sustainable practice what otherwise might not have been the case.

Organisations such as Greenevents (Van de Voort, 2021) and Green Deal Circular Festival (Circular festivals, n.d.) are publishing manuals and guidelines for festival organisations to use as a handle to become more sustainable. The work of Brooks *et al.* (2007) is another example of a published guideline that guides a strategic process for making an event more sustainable, which is addressed to festival

organisers. An interesting insight from Brooks *et al.* (2007) is the fact that every festival is context dependent when realizing a more sustainable festival. This means that every festival has its own challenges and barriers. This conclusion corresponds with statements from the direction of Studio Linksvoor: *'Because every festival is its own festival within its own nature, there is almost no handbook that says how to be more sustainable now. As a result, more research is simply needed'* (Personal communication with a board member of Studio Linksvoor, Februari 2022).

1.6 Reading guide

In this first chapter of this master thesis, the research problem and research questions has become clear, together with the scientific and societal relevance. To answer the research questions, an exploration of the scientific literature is needed. Paragraph 2 provides the theoretical framework for the concepts used in this thesis. Paragraph 3 encompasses the methodology. Here it is discussed how, why and under what circumstances the research is executed. This section explains which research methods are used and how the case study was chosen. Since this research has a fragmented collection of data, it is important to clearly structure the way in which the research will be carried out. Paragraph 4 present the result section. In the result section, the first minor conclusions become clear. However in paragraph 5, the conclusion is completed and insights from the theoretical framework and result sections are combined. These conceptual conclusions will cover overarching concepts used in this master thesis and in the end, answer the main research questions. At last, paragraph 6 offers a reflection section where limitations of the research and recommendations for both research and Studio Linksvoor are discussed.

2. Literature review

2.1 Festivals in general

At first, it may be wise to get to know some core concepts about festivals and sustainability to provide more understanding of what festivals can undertake to become more sustainable. Festivals are described in the classical cultural-anthropological perspective as ‘sacred or profane time of celebration, marked by special observances’ (Falassi, 1987, p. 2). In other words, festivals are a means of celebrating community values, ideologies, identity and continuity (Getz, 2010). People are attracted to festivals because of the exotic culture that is presented during the event (Quinn, 2010). Furthermore, visitors want to attend events of unusual atmosphere, meet people of similar interests and learn more about the world (Cudny, 2013). Festivals generate tourist traffic, they influence the surrounding place and it is a site that is full of experience. Because of this extensive convergence of many sectors, music festivals are not only a cultural, but also a logistical and socially decisive covering event.

The term festival does have its limitations when it comes to scope and definition. Festival is a commonly used term when large-scale geopolitical spectacles occur, for example: ‘The Festival of Britain’, ‘Festival de Cannes’, ‘Trek Festival’ or ‘Lowlands Festival’. All these events are called festivals but do have other social structures, ranging from the film industry to food and music festivals. Festivals can refer to a day of outdoor activities in a single, damp field, or ‘Burning Man’ where participants build a temporary city in the Nevada desert, as well as metropolitan events such as the Venice Biennale and the Berlin Film Festival (Ager, 2016, p. 104).

Since the definition of festivals can take on many forms it is important to delineate this. In this thesis, the term festivals will be understood as a music festival. This music festival is researched in a Dutch context. It might therefore be wise to add some theoretical concepts about the Dutch festival landscape. The size of the audience as well as the number of music festivals have increased substantially in the Netherlands (Korangteng, 2004; Leenders *et al.*, 2005, p. 148). Leenders *et al.* (2005) stated that the competition of festivals intensifies since the market becomes more and more saturated. This competition can take on many forms, but Tinnish and Mangal (2012) discussed sustainable value creation to be a key driver in competitive advantages. In this case, sustainability at festivals is seen as an opportunity, instead as an obligation. It is noticeable that some of the biggest Dutch music festivals are prioritizing sustainability (DGTL, n.d.; Awakenings, n.d.), which might suggest a certain way of working in the Dutch festival landscape.

In fact, scholars gave a reason of this ‘trend’ of sustainability at festivals. It is discussed that the commercialization of for instance sustainable practices may increase the tourist inflow and popularity of the festival (Zou *et al.*, 2021). In this case, cultural festivals are extending beyond solely entertainment to serve as a powerful tool to support national and cultural development (Zou *et al.*, 2021, p. 191).

2.2 Sustainability in general

This thesis conforms with the term sustainability with the definition that is given in the Brundtland report (WCED, 1987) as: ‘Development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. However, as stated earlier, a distinction is made between different types of sustainability. Elkington (1998) argues that there are three pillars of sustainability, economic, social and ecological sustainability. Whenever these three pillars are in harmony with each other, sustainability is reached. Elkington also calls this the Triple Bottom Line. He discusses the role of organisations in which they need to adopt a new vision on ecological quality, social justice and economic progress in order to realise sustainability (Elkington, 1999, p.70). This

theory of Elkington states that every organisation has to, in order to reach sustainability, focus on this Triple Bottom Line.

If one looked further into this theory of Elkington, it becomes clear that the economic bottom line for companies examines whether activities that an organisation hosts are economically sustainable and thus provide sufficient capital to be able to continue the business activities. Jonker *et al.* (2011) argues that if looked from an economic perspective and organisations want to become more sustainable, they must focus more on long term-costs and returns instead of chasing 'quick money'.

The ecological (or environmental) bottom line discusses the harmfulness of activities that a company carries out. Being ecological sustainable means doing no damage to the environment. This bottom line is most in line with sustainability definitions where the moderate use of natural resources ensures that future generations also have the certainty that there will be natural resources to use (Elkington, 1998). Elkington argues that the ecological bottom line will almost always come after ensuring the economic bottom line, because running a business that is not economic stable will not have the resources to ensure other forms of sustainability (1998).

At last, the social bottom line. This bottom line is hard to measure and this is maybe the reason why it does not get the attention it deserves. The social bottom line stems from the presence of trust in society and the ability of people to work together towards a common goal (Elkington, 1999, p. 72). Cases of this could be about working conditions, (social) safety within an organisation, balance between work and private life and mental well-being.

As Brennan *et al.* states, environmental sustainability is viewed as a priority by festival organisations but tends to be weighed up against other notions of (usually economic) sustainability, limiting the scope for radical re-imaginings of sector-wide change towards events that actively curtail carbon emissions (2019, p.8). In fact, this argues for festival organisations that they could not prioritize ecological over economic sustainability, because when there is no economic sustainability, there is no business to run and so, there is no ecological sustainability to improve. Environmental sustainability will be the main focus of improvement at festivals, but it has become clear that economic and social sustainability must be present in order to run sustainable businesses.

Still, ecological sustainability can be interpreted in many forms because of different discourses that are adopted by festivals organisations. The different way of working at organisations is interesting and it might be insightful to 'label' organisations in order to analyse them. Dobson (1996) presented a

framework with different concepts of environmental sustainability (Figure 2). The different concepts can be distinguished according to the possibility for natural resources that can be substituted. Column A is a neoclassical economic theory that supports the idea that man-made capital is almost a perfect substitute for natural capital.

| | A | B | C | D |
|---|--|---|--|-------------------------------------|
| what to sustain? | total capital (human-made and natural) | critical natural capital: e.g. 'ecological processes' | irreversible natural capital | 'units of significance' |
| why? | human welfare (material) | human welfare (material and aesthetic) | human welfare (material and aesthetic) and obligations to nature | obligations to nature |
| object(s) of concern | | | | |
| primary | 1,3,2,4 | 1,2,3,4 | (1,5),(2,6) | (5,1),(6,2) |
| secondary | | 5,6 | 3,4 | 3,4 |
| substitutability between human-made and natural capital | considerable | not between human-made capital and critical natural capital | not between human-made capital and irreversible natural capital | eschews the substitutability debate |

Key to numbers:
 1 = present generation human needs 3 = present generation human wants 5 = present generation non-human needs
 2 = future generation human needs 4 = future generation human wants 6 = future generation non-human needs

Figure 2: Conceptions of environmental sustainability (Dobson, 1996)

Column B acknowledges that some ecological assets are essential to human survival and human well-being. Column C is the first conception that focuses on natural capital with the notion of 'irreversibility' and the intrinsic value of nature. Last, column D acknowledges that the natural world is disappearing and this requires that we defend it, even when human interests seem not to be served by such an action (Dobson, 1996).

Next to these concepts of ecological sustainability, the debate on weak and strong sustainability is a relevant debate for the scope of this thesis. This debate has a link with the concepts of ecological sustainability presented by Dobson, where substitution plays a key role. According to Neumayer (2003, p.1), if you adopt the perspective of weak sustainability, it does not matter whether the current generation uses up non-renewable resources or dumps CO₂ in the atmosphere, as long as enough machineries, roads or other types of capital are retrieved in compensation. On the other side, proponents of strong sustainability argue that the total stock of natural capital is non-substitutable. In fact, it adopts points from the weak sustainability paradigm but it has some extra requirements since these proponents do think that a weak sustainability paradigm is not sufficient in reaching sustainable development. Actually, strong sustainability does not require never using non-renewable sources. It requires to keep the aggregate value of the total natural capital stock constant (Neumayer, 2003, p. 25). Nevertheless, there is some critical natural capital that cannot be substituted with anything, think for instance of endangered species where the process of losing this type of natural capital is irreversible (Neumayer, 2003).

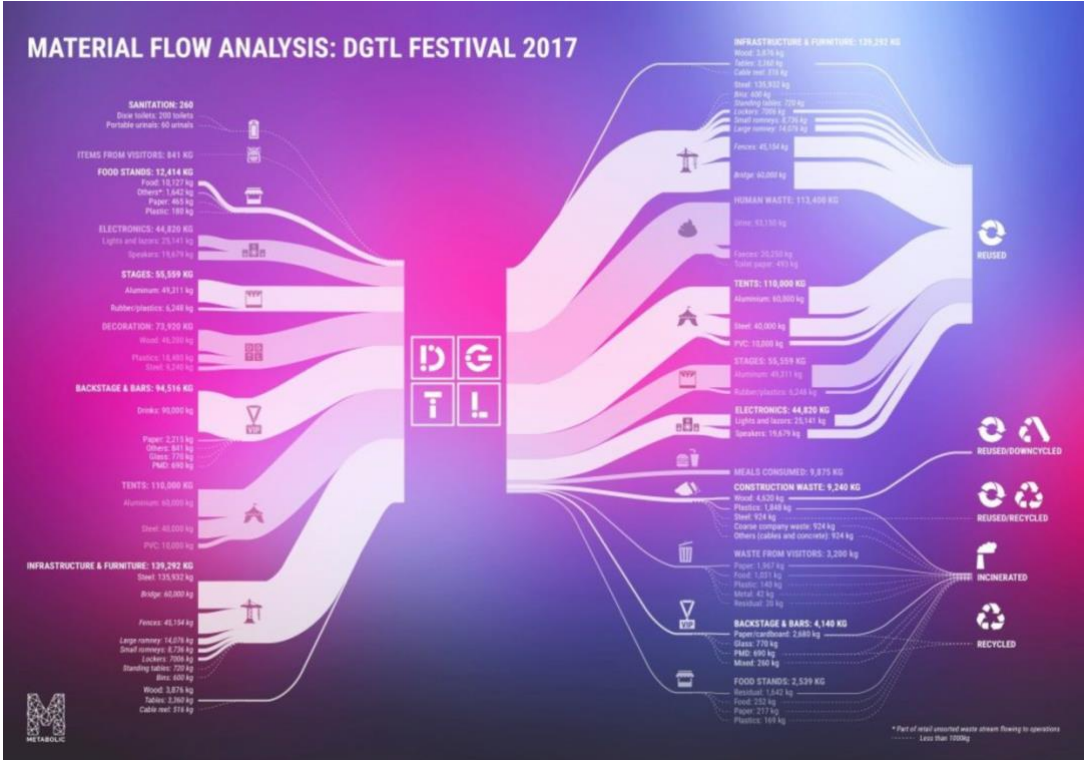
2.3 Sustainability at festivals

Since festivals are cultural events and in the Dutch context, sustainable practices are sought for, the term cultural sustainability might be relevant. However, the term cultural sustainability is relatively new and therefore, a suggestion for scholarly attention and research has been done (Farsani *et al.*, 2012; Suntikul, 2018). Nassauer (2004) proposed a general perspective on cultural sustainability, positing that the concept consists of cultural values and behaviours that support ecology. Kong (2021) defined cultural sustainability as cultural workers' ongoing ability to engage in their work and the preservation of conditions conducive to that work (Zou *et al.*, 2021, p.192). More definitions are given by scholars, but for this thesis the summary of above mentioned definitions of cultural sustainability is adopted, which is the notion of cultural events that contribute to sustainability.

Researchers examined perceptions of sustainability within festivals and noted that most festivals interpreted sustainability as a festival's ability to survive instead of considering environmental concerns (Zou *et al.*, 2021, p.192). This contradicts the statement by Brennan *et al.* (2019). In this case, the economic sustainability aspect is thus prioritized over ecological sustainability. Furthermore, scholars did an analysis on drivers to ensure 'green' elements on festivals, where it is shown that these festivals educate participants about sustainable behaviour, integrate the 'green' concept in their core values and promote environmental responsibility and sustainability (Zifkos, 2015; Zou *et al.*, 2021, p.192).

There is a distinction to be made within festival organisations that are contributing to ecological sustainability. There are some frontrunners on different aspects of ecological sustainability. Multiple festivals can be discussed (Awakenings, n.d.; DGTL, 2022; Lowlands, n.d.; Zwarte Cross, n.d.) but there is really one frontrunner on ecological sustainability: DGTL. DGTL is claiming to be world's first circular festival (Vermeij, 2020). This claim is performed through creating a zero-waste festival. Every organic leftover is turned into compost and distributed to city farmers that are growing crops for next year's edition of the festival. No single use plastics are used and pea is converted into tea. The fully vegetarian menu and the recyclable cup-systems is growing awareness to people (Vermeij, 2020). More in-depth research is needed when looking at the implemented sustainable measures.

Next to the fact that DGTL is implementing a lot of measures to ensure ecological sustainability, they are also having a structured data driven approach to support implemented measures with data. This approach manifests itself in the form of a Material Flow Analysis (MFA), which is shown in figure 3 (DGTL, 2017). The Material Flow Analysis is a systematic assessment of stocks and flows of materials and substances within a system that is defined in space and time (Brunner and Rechberger, 2003). This MFA shows how many materials are used for the festival and what is done with it afterwards. This gives an indication on where an impact can be made and where there are already some improvements regarding ecological sustainability.



DGTL has a more practical approach and drafted a shorter list of five sustainability pillars. These five pillars are resources, energy, mobility, sanitation and food (DGTL, 2022). According to DGTL, these pillars are the five key topics that form the building blocks in sustainability at a music festival (2022). These pillars will be used to structurally classify sustainable measures in the results.

2.4 Policy arrangement approach

The intrinsic motivation of festivals that are trying to contribute something to society on sustainable level originates from something. Here, the concept of corporate greening comes into play, that can be described as investments in sustainable products, practices and structures (Mair & Jago, 2010). The paper of Mair and Jago (2010) was then used by Mair and Lang (2012) to further identify which actors have an influence on the corporate greening process. They found that the influence of actors and their willingness to create a greener festival were positive on the process of corporate greening. However, the study of Mair and Lang (2012) also find that time and money were components that hindered festivals in their process of corporate greening. Here, the policy arrangement can be considered as relevant for this thesis.

The policy arrangement approach is an approach that links policy changes to larger structural societal and political changes. In addition, it offers a broad starting point in understanding policy practices (Veenman, Liefferink, & Arts, 2009). It pays attention to the institutional context in which the actors involved in policy are operating and what existing power relations are present (Wiering & Arts, 2006). When looking at companies with different philosophies, discourses and practices, the policy arrangement is a helpful analytical framework for getting a better understanding of the context in which these companies are creating policy on sustainability.

When looking at the context in which policy is made and using the policy arrangement approach as a tool for getting a better understanding, four dimensions are suggested (Arts, Leroy & van Tatenhove, 2006): discourse, rules of the game, actors and resources. A distinction in these four dimensions can be made between organisational aspects and substance aspects. Wiering and Arts (2006) stated that rules, actors and resources can be assigned to organisational aspects and discourse can be assigned to the substance aspect. However, Wiering and Arts (2006) added to this that rules of the game can also be assigned to the substance aspect, especially when these are informal rules, but in this thesis, it will fall under organisational aspects.

First, the organisational aspects are looked at, which are elaborated in the next three sections. Within these sections, barriers are discussed for every dimension of the organisational aspect. After this, the substance aspect of the PAA is discussed. *Figure 4* displays the interplay between all dimensions of the policy arrangement approach.

2.4.1 Actors

The dimension of actors consists out of stakeholders and coalitions that are in favour of or oppose to a certain policy. Actors within the same group have a common goal and shared beliefs. They interpret the rules of the game in the same way and are cooperating to use their resources in the most efficient and effective way (Wiering & Arts, 2006). Arts and van Tatenhove (2004) stated that this can result in some actors that are supporting the policy because of the main discourse, while others are more critical of the context wherein policy is created. An analysis of who is involved, how they are involved and why they are involved is crucial in understanding the policy process (Arts & Leroy, 2006).

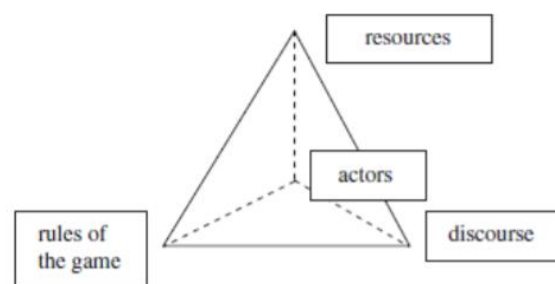


Figure 4: The four dimensions of the policy arrangement approach (Arts & Leroy, 2006)

To test the literature review in research, an operationalization scheme is drafted. The operationalization scheme provides abstract concepts to get more practical and provides indicators that can be distinguished more easily from each other. It furthermore gives a clear overview of the present actors in policy making of sustainable festivals. What is remarkable is that the execution of festivals can lead to a distinction of 3 different actors, which is in line with the distinction of Steurer (2013): the government, market and civil society. Every actor that is present at policymaking can be placed within a group defined by Steurer (2013).

| PAA Dimension | Classification | Actor examples |
|---------------|----------------|--|
| Actors | Market | Host organization, suppliers, artists, sponsors |
| | Civil Society | Visitors |
| | Government | Municipality, national and international government bodies |

Table 2: Actor dimension PAA

Organisations, festival site owners, visitors, artists, municipalities et cetera can be actors that are all having different views on policy making. Every actor has their own goals and beliefs and operates in a different way, which allows actors to differentiate from one another. Not only do different actors have different views on policy making, the output of every actor is also very different. Visitors consume drinks and create waste while municipalities are busy with noise complaints and a safe water infrastructure. It is therefore important to map every actor together with their tasks, interests and responsibilities. Van Berkel (2014) stated that active information, communication and willingness to negotiate between stakeholders is necessary in order to, in this case, realise a more sustainable festival.

Actors classified under market are all stakeholders that are contributing in the organisation of the festival. There is not a general rule that can be applied when organising a festival. Every festival has its own identity and an image that it wants to radiate. This own identity is very context depended on and it implies different outcomes in terms of policy. However, suppliers will have a different impact than artists. It is therefore important to look at the relations and influences actors are having on the policy outcome.

Secondly, actors classified under civil society are discussed. While the visitors are the actors that are paying for the festival, they will have almost none to zero influence on how the festival will be structured. For example, if one visitor is having a vegan lifestyle and the festival does not offer vegan dishes, there will be a clash in values and the visitor will then be disadvantaged. Whenever one visitor is really loving meat and the festival only offers vegetarian dishes, there will be again a disappointment for the visitor. Because visitors make up quantitatively the biggest share of the actors, it is important in making policy more sustainable resilient that the visitors continue to stay within the support base. In the end, the festival is organized for the visitors.

On top of that, visitors are the decisive factor when it comes to the effectiveness of policy on sustainability. When the behaviour of visitors is analysed, one could argue that the behaviour of visitors has a share on two sustainability issues: transport and materials (Glasset, 2014; Brennan *et al.*, 2019). They have to travel to the festival site, where the first sustainability issue comes into play. Local festivals that are community based will have a low carbon transport in total, but international festivals where different cultures are attending have way more high carbon transportation (Brennan *et al.*, 2019). In addition to transport, there is the material handling. Visitors create a huge amount of waste at a festival. People consume food and drinks for a day, they buy clothing and accessories that will only last for one day. Whenever these practices are made sustainable and the visitors comply with this, a big

impact can be made. However, due to the high consumption of alcohol and drugs, the effectiveness of policy on sustainability might fail (Glasset, 2014).

The last group of actors that can be distinguished are classified under government. Examples are municipalities, provinces, national government bodies and the international government bodies. For the organization of festivals, only municipalities are actively involved in policy making for festivals. Municipalities make agreements with a festival organization to ensure that life outside the festival continues in a normal way (Brennan *et al.*, 2019). This may concern issues like traffic, nuisance, logistical operations, safety et cetera. Other actors that fall under government do not have an active role in the execution of festivals. However, some government bodies does have an influence on festivals, for example due to jurisdiction and legislation. There are rules and laws drawn up by higher government bodies that an organization must adhere to. The content of this rules will be discussed in more detail in section 2.4.3 Rules of the game.

Whenever different actors are operating in a sector, collaborations might be relevant in creating an understanding of the policy process. However, not every actor is involved in policymaking in such a way that they can contribute something to the process. The people that are involved in such a way, can be called policy entrepreneurs. These policy entrepreneurs are the agents for policy change who possess the knowledge, power, tenacity and luck to be able to exploit key opportunities (Cairney, 2018, p. 201). Policy entrepreneurs know that the pursuit of ambitious aims such as 'evidence-based' policy making require framing a problem, having a solution ready, and exploiting the motive and opportunity of policymakers to select it (Cairney, 2018, p. 199). These policy entrepreneurs can also be formed through collaborations. If for example a company wants to do more with corporate social responsibility and makes an agreement with the festival organization to create more awareness on sustainability among visitors, than this agreement can lead for the two companies to be policy entrepreneurs.

To sum up, as Arts and Leroy (2006) suggested, questions like who is involved, how are they involved and why they are involved are of great importance in the determination of these actors. By clarifying these questions the role of actors in policy making will become clearer.

2.4.2 Resources

When the relationship between actors and their resources are studied, one can give a better understanding of the impact that can be made (Arts & Leroy, 2006). For example, a visitor that is willing to spend a lot of money at a festival does have a different impact than a sustainable manager with the right knowledge about sustainability. It is therefore important for this research that all actors together with their resources are mapped to get a better understanding of the policymaking context. According to the literature, there are four recurring resources that are found to be relevant for the scope of this thesis: money, time, knowledge and willingness (Mair & Laing, 2012; Brennan *et al.*, 2019; Glasset, 2014; Smith, 2017; Li & Liu, 2019).

There are some resources that could be distinguished. First of all, the most evident resource that could form a barrier is money. Money as a barrier for greening initiatives is mentioned often in the literature (Mair & Laing, 2012; Brennan *et al.*, 2019; Glasset, 2014). Without this financial resource it becomes difficult to reduce the ecological impact. If there is no money, a festival organization will not be able to implement sustainable measures since these measures can be expensive (Brennan *et al.*, 2019; Glasset, 2014). Yet, Li and Liu (2019) contradict the assumption that implementing sustainability at festivals demands more money. They state that investments in green facilities and practices can save money and financial gains in the long run will be the result (Li & Liu, 2019, p. 11).

The next discussed resource is time. Sustainability issues are a trend for the last few years and this means that next to the regular business, sustainability issues now also must be dealt with during the implementation of a festival (Glasset, 2014). The implementation of sustainable measures is a new practice and is therefore not yet prioritized over other tasks. The Glastonbury festival took once a year off to let the festival site recover and to rethink green initiatives. Because of this extra time, they were able to organise a more sustainable festival (Smith, 2017). Not all festival organizations are that economic sustainable that a year of organizing could be skipped, so in this case the resources time and money have an interplay.

Further recourses that can influence sustainable practices are knowledge. Next to money and time, knowledge is often mentioned in the literature to be a barrier for making festival more sustainable (Brennan *et al.*, 2019; Glasset, 2014; Li & Liu, 2019; Dodds & Graci, 2012). Dodds and Graci (2012) give the example that the staff at Pride Toronto did not have the right knowledge to create a sustainable festival and therefore, the greening program failed. Brennan *et al.* (2019) adds to this that there is a lack of technical expertise despite interest in greening programs.

The last discussed resource is willingness. Willingness to become more sustainable is a resource that is formed through the corporate structure of a festival organisation (Dodds & Graci, 2012). Whenever a festival organization does not have the intention to implement sustainable measures, no ecological impact will be reduced. Dodds and Graci (2012) state that organizational motivation is crucial in the creation of sustainable practices. Another finding in the article of Dodds and Graci (2012) was that the only reason to adopt sustainable measures was to seek more attention for doing something socially accepted. There was no intrinsic motivation to tackle sustainability, it was all for publicity. Brennan *et al.* (2019) added to this that an organization can have the willingness to do something more sustainable, but that the resources money, time and knowledge formed an obstacle.

2.4.3 Rules of the game

The rules of the game can, as stated earlier, be divided into two characterizations: formal rules (legislation and regulation) and informal rules (agreements and codes of conduct). For policymaking, it is important to understand which rules to apply. Whenever an actor is fully aware of the formal and informal rules, this can lead to an advantage, just as with resources. These rules can therefore demarcate 'the room to manoeuvre' for policy actors (Veenman, Liefferink & Arts, 2009, p.203).

The difference between formal and informal rules is that formal rules are legally established. Informal rules, on the other hand, are not legally established and are thus pursued due to intrinsic motivation or verbal agreements. When is thought of informal rules, one can think of examples that festivals plant 10 trees for every visitor that is attending the festival (All, 2021). Another example could be that a festival tries to minimize his waste on a festival site. These informal rules are different for each type of festival, so no patterns can be recognized in the literature. Therefore, the informal rules are drawn up after the research has been carried out.

Formal rules can for example appear at festivals in form of a maximum number of visitors that are allowed on a site or a minimum amount of security guards that must be present. These formal rules differ with every festival due to differences in size, location etc. This means that the formal rules are thus very context depended. For the formal rules there is some literature to be found, but not much on sustainability issues in the festival sector. Only one example could be found that is relevant for the scope of this thesis, which is the ban on single use plastics in 2024 in the book published by the European Commission: Turn the tide on single use plastics (2020). This will ensure events and festivals to implement a high-quality recyclable drinking cup system from 2024 (Green Leisure Group, n.d.). There is furthermore hardly any literature on legislation for sustainable measures on festivals. As with

the informal rules, research should show to what extent the rules of the game influence policymaking since there is hardly any literature on these topics.

2.4.4 Discourse

The last dimension of the policy arrangement approach is discourse. With discourses as the main substance aspect and external to organisations, this dimension must be examined very precisely. Keeping in mind that every festival has got its own unique philosophy, there is a different discourse to notice at every organisation behind the festivals. Hajer (1995, p.44) argued that discourses are categorisations and concepts that give meaning to physical phenomena and social realities (Kaufmann & Wiering, 2021, p. 3). According to Foucault (1972), discourses can be thought of as packages of restrictive rules that determine what is meaningful and what can be said. Furthermore, knowledge and truth are being created within the discourse. This means that discourses determine who we are and therefore, identity is created. This allows actors to think differently about the concept of sustainability and realize a different implementation.

The question of how ideas and discourses can change things within an institutional setting is particularly important in the case of policy ideas (Schmidt, 2015, p. 1). Discursive institutionalism does suit this set of concepts. Schmidt (2015) argued that there was a new form of institutionalism where discourses are taken very seriously. Ideas and discourses serve to overcome obstacles that the older forms of institutionalism posit as insurmountable. Ideas are put into their 'meaning' context while they see discourse as following a 'logic' of communication.

With discursive institutionalism as the new leading form of institutionalism, discourses become of even more importance because every practice then becomes context unique. Different festivals are characterised by different discourses which means they have a different view on and implementation of sustainability at music festivals. This also implies that discourses can have influence on the organisational aspects. When a discourse is present within an organization where sustainability is not prioritized, it is possible that the resources money and time are not as widely available as is at other festival organisations that have prioritized sustainability. Therefore, festivals score different on sustainability and the different discourses behind the festivals become very interesting. Here, the conceptions of ecological sustainability from Dobson (1996) might be relevant.

In this thesis, discourses are operationalised in three layers: the ontological, normative and strategic layer (Wiering & Immink, 2006). Ontological discourses define reality and reflect actors' beliefs in the truth of certain propositions or the applicability of certain ideas. Discourses that express desirable situations are normative discourses and discourses that give options for getting to the desirable situation are strategic discourses (Wiering & Immink, 2006, p. 425). This operationalisation is useful in order to analyse the different discourses in a structured manner.

Whenever this operationalisation in discourses are made, it would be wise to give more practical meaning to these three layers of discourses. The above-mentioned comments on what the three layers consists of have to be more operationalised in order to get familiar with these layers within festival organisations and sustainability terms. The ontological layer gives meaning on what people believe what is out there. Thus, a translation to sustainability at festivals could be that a company describes what in their believes sustainability means for them. This first layer is therefore a real discovering layer about what thoughts are present on sustainability. The second layer, the normative layer, draws attention to what a desirable situation is. For example, a festival company has the wish to become fully circular before 2025. In other words, the wish and vision on sustainability for festival companies is of importance here. At last, the strategic layer is translated in a somewhat more practical concept. As discussed before, the strategic layer gives options for getting to the desirable situation (Wiering &

Immink, 2006, p. 425). For this thesis' subject, this layer corresponds with festival organisations that are discussing which measures are useful in trying to realise a more sustainable festival. *Table 3* provides an operationalisation scheme.

| Layer | Definition | Link to sustainability at festivals | Indicator questions |
|-------------|---|--|---|
| Ontological | Gives meaning on what people believe is out there | What do festival organisations think of sustainability? | What do you think of sustainability? |
| Normative | What is the desirable situation | What do festival organisations want for the near future? | What is your vision for this company on sustainability? What do you want to achieve? |
| Strategic | Options to realise the desirable situation | How are these festival organisations going to be more sustainable? | What does your company already do in order to become more sustainable? What means are you using to achieve the company's vision? |

Table 3: Operationalisation scheme discourses

2.5 Conceptual model

In this conceptual model, the dynamics between the four dimensions of the policy arrangement become clear, which together can ultimately lead to 'a temporary stabilization of the content and organization of a policy domain' (Arts & Leroy, 2006). The conceptual model shows that the policy arrangement is formed by the four dimensions and that this policy arrangement influences the implementation of sustainability at festivals. This policy arrangement approach is an analytical framework, but before it can be used as an analytical framework it has to be operationalised. This operationalisation is necessary to connect findings to the dimensions.

In the conceptual model, it can be seen that the variable 'Ecological sustainability at music festivals' is depended on the independent variable 'Policy arrangement approach'. The independent variable is made up through the four dimensions of the policy arrangement approach discussed in the theoretical framework. It became clear that discourses can have influence on the availability of organisational aspects and therefore discourses will be analysed first. The four dimensions together form a policy context that has influence on the measures implemented to ensure ecological sustainability, which is in this case the indicator for ecological sustainability.

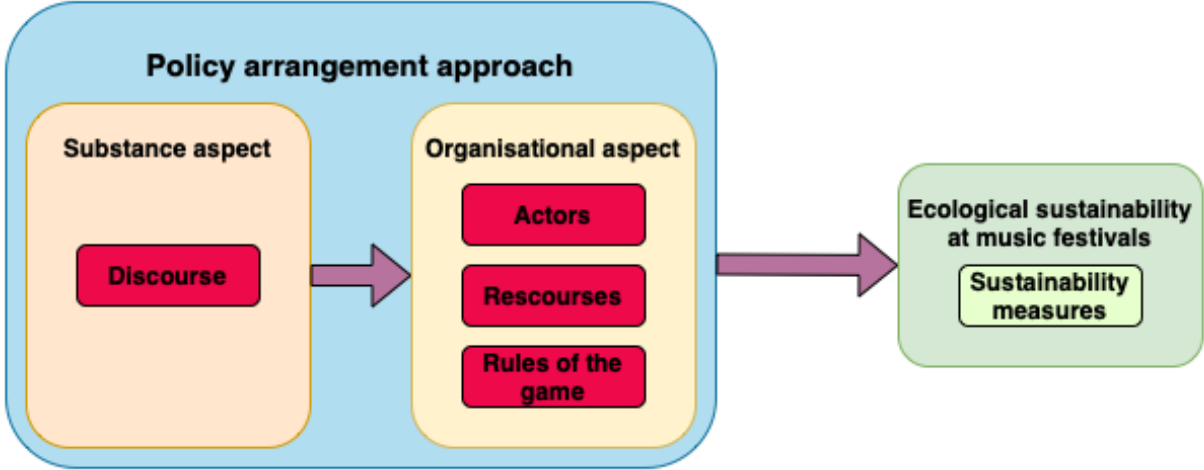


Figure 5: Conceptual model

3. Methodology

3.1 Research paradigm

Moon and Blackman (2014) came up with a social science research guide to assist natural scientists to understand the philosophical basis of the social sciences. This is because researchers need to understand and recognize the different principles and assumptions in these different disciplines, otherwise it can limit their interpretation of the results (Moon & Blackman, 2014). At first, a distinction can be made within the ontology. Ontology is about how certain scientists can be about the objects they are researching. On the lefthand side of the upper spectrum (*figure 6*), realists acknowledge that there is one single reality, and this reality exists independent of human experience. This observable reality is therefore the truth. On the righthand side of the spectrum, relativists acknowledge that no one true reality exists and therefore, the reality is constructed by human experience (Moon & Blackman, 2014).

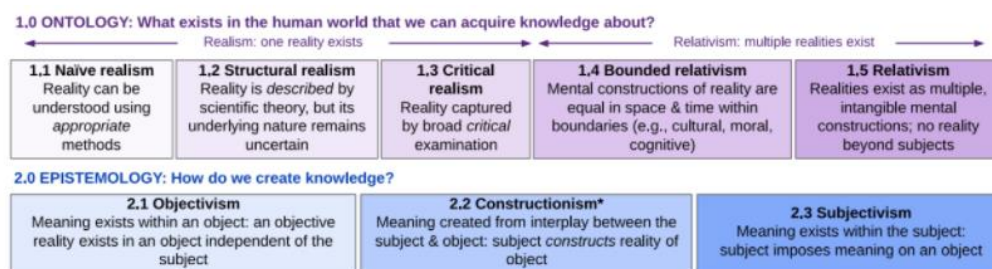


Figure 6: Research paradigm (Moon & Blackman, 2014)

For this research, it is argued that it finds itself somewhere around bounded relativism. The reason for this to be on the more relativist side is that by examining discourses, multiple realities become evident. However, as seen in *figure 3* where Dobson’s conception of ecological sustainability is displayed, it should be noted that there are some established ‘truths’ of sustainability. With the use of the policy arrangement approach, it might become evident that discourses are institutionalised in some of the organisational aspects. The presence of multiple discourses pleads for relativism, but because some organisational aspect might stay constant, there are some boundaries set within space and time. Therefore, this thesis is on the relativistic side, but not completely, and bounded relativism will therefore be suitable.

The second distinction that can be made is within epistemology. Epistemology is concerned with how knowledge is acquired. This acquiring of knowledge is important because it influences how researchers frame their research in their attempt to discover knowledge (Moon & Blackman, 2014). In the bottom spectrum of *figure 6*, a distinction is made between objectivism and subjectivism. Objectivism refers to the phenomenon that reality exists independently of the subject. On the contrary, subjectivism implies that knowledge can be created through the experience of the subject (Moon & Blackman, 2014). Constructionism is found to be in the middle. Constructivism proposes that each individual mentally constructs the world of experience through cognitive processes (Andrews, 2012, p. 39). People that are experiencing the world and reflect upon this world are building their own representations and incorporating new information into their knowledge (Young & Colin, 2004). Therefore, constructionism fits the best within the scope of this thesis. This thesis has neither an objectivist nor a subjectivist approach. There is some space, through cognitive processes, to reflect on for example discourses and to incorporate this into knowledge.

3.2 Research Design

3.2.1 Triangulation

This research will use triangulation as a method. Triangulation, by combining theories, methods or observers in a research study, can help ensure that fundamental biases arising from the use of a single method or a single observer are overcome (Noble & Heale, 2019, p. 67). This means that with triangulation a variety of methods are used to research a phenomenon, in this case ecological sustainability at festivals. Because there is little academic writing about this topic and the lack of used theories on sustainability at festivals, triangulation is necessary for doing valid and relevant research. Noble & Heale (2019, p. 67) stated that triangulation can increase credibility and validity of research findings. Credibility refers to how believable a study is and validity is concerned with how accurately research displays the research concepts (Noble & Heale, 2019).

For this research, triangulation will be appropriate since the policy arrangement approach is used. This PAA consists of several dimensions that cannot be retrieved with one universal research method. Discovering barriers within the substance aspect demands a different research method than discovering barriers within dimensions of the organisational aspect. On top of that, different aspects of sustainability at festivals are investigated, and not all of these can be solely discovered with, for example, an interview.

However, there are some limitations with triangulation as a method. It can offer richness and clarity to research but the complexity that is added can make it more time-consuming. Triangulation may not be achieved in a consistent manner and researchers may not adequately explain their techniques for blending results (Noble & Heale, 2019, p. 68). The use of triangulation can be complex and asks for research skills of a researcher. The data obtained in this thesis is very fragmented and it comes from different angles. Therefore, triangulation might cause the structure to be somewhat sloppy.

3.2.2 Explorative research: DGTL and Awakenings festival

An explorative research will be done first to gain insight about the subject of sustainability at festivals. Research will be done on how ecological sustainability is shaped within the festival sector. In the theoretical framework it emerged several times that improving ecological sustainability is very context dependent and that different kind of festivals have different social structures. Because only few articles have been written about this topic, it is hard to draw a frame of reference where Drift can be compared to. Since the case study, Drift, is a house music festival, similar cases are taken. This case study will be elaborated in the next chapter. For the explorative research, frontrunners in the field of ecological sustainability are examined to draw up this frame of reference. It would have been perfectly suitable to examine festivals that fall under Studio Linksvoor, because differences in sustainable output could have been easily compared with Drift. The context dependence would then be less of an issue since all measures implemented are from one organisation using the same infrastructure. However, the festivals that fall under Studio Linksvoor are not yet fully dedicated in becoming circular. Therefore, progressive festivals that are pioneering in the field of sustainability will be examined on how they think about ecological sustainability and what measures they are implementing to ensure ecological sustainability.

In the theoretical framework it became clear that DGTL is a frontrunner on ecological sustainability. Furthermore, the social structure of DGTL is comparable with Drift since it is a house music festival. However, DGTL differs in geographical location, date and type of visitors. Therefore, the issue of context dependency remains present and this could mean that the observations at DGTL could not be valid due to context dependent reasons. Therefore, Awakenings Festival is also examined to draw a more complete picture of what ecological sustainability means and how this can be implemented in

practice. Just like DGTL, Awakenings has a comparable social structure with Drift and it is a frontrunner on sustainability. The notion of being frontrunners in the field of ecological sustainability is based on communication through their websites and news articles. The working methods and sustainable output of these frontrunners will give an idealistic picture with which Drift eventually will be compared.

3.2.3 Case study: Drift – Om Te Dansen

Studio Linksvoor is host to multiple events (*table 1*), but nevertheless, a case selection will be made because investigating all underlying companies will be too time-consuming for this master thesis. On top of that, not all festivals that Studio Linksvoor is hosting have the same social structure as festivals discussed in the theoretical framework. Therefore, the organisation Drift – Om Te Dansen BV, further referred to as Drift, will be chosen as a case study. Drift is hosting Drift Festival the 11th of June in 2022 and this festival will be the main focus of this thesis. The reason for choosing Drift is because this is the only event hosted by Studio Linksvoor that is actively pursuing to become more sustainable (Personal communication with a board member of Studio Linksvoor, Februari 2022). On top of that, Drift Festival is held annually (except in COVID times) since 2002 and therefore, a clear corporate structure is present in organising festivals. The other festivals that Studio Linksvoor is hosting are mainly start-ups and have not stated an ambition in becoming more sustainable.



Figure 7: Drift - Om te Dansen logo (Drift, n.d.)

The case study will look as follows: first a mapping of the measures implemented at Drift festival is given. These measures will be compared to the measures implemented by the frontrunners. Through the use of the PAA, it will be examined which and how these barriers causes Drift to implement a certain policy to ensure ecological sustainability. The mapping of these measures will be done according to the pillar approach that was retrieved from DGTL (2022). The pillar approach ensures a structural classification of sustainability measures.

Within this PAA, a distinction will be made for the substance and organisational aspects. The substance aspects covers the discourse dimension that is operationalised in the ontological, normative and strategic layer. In the conceptual model in *figure 5*, it is displayed that the discourse influences the organisational dimensions. Therefore, the analysis of the substance aspect is carried out first to examine if the absence or presence of measures originates from the dominant discourse that is present at Drift. This substance aspect is based on data retrieved from interviews, a survey and the analysis of web- and policy documents.

The implemented measures by Drift will be compared to the implemented measures at the frontrunners to examine the current state of sustainability at Drift. In this case, the PAA is not used to highlight the implemented measures, but to highlight the policy context of the measures. The analysis of the actors, recourses and rules of the game will give meaningful insights about the barriers in the implementation of sustainable measures. After this comparison, it will become evident where Drift lacks behind or is progressive in a sustainably policy context.

3.3 Research methods, data collection and data analysis

Qualitative methods will be well suited in discovering different realities that can be seen as truths. This, because qualitative methods leave some space for the researcher his own interpretations in comparison to quantitative methods. What one should pay attention to is that qualitative methods can too easily be influenced by the researcher their own philosophical beliefs and biases. As a result,

interpretations and results can be affected because of their own beliefs and biases (Tetnowski & Damico, 2001). Furthermore, qualitative methods are extremely labour intensive because of the time necessary for interviewing, transcribing, coding, analysing and interpreting (Tetnowski & Damico, 2001). However, because the researcher is spending a lot of hours looking at those results, new interpretations can come up while coding, transcribing et cetera, which can lead to new understandings.

As is stated before, the measures Drift is implementing are compared with the measures the frontrunners are implementing. Important to mention is the fact that it will not be a comparative case study. For the frontrunners, only an explorative research will be carried out to draw an idealistic picture measures that ensure an ecological sustainable festival. Exploratory interviews and analysis of policy- and web documents are carried out for drawing this idealistic picture, so no case study according with a PAA will be made for DGTL and Awakenings.

The Drift case study will be examined to gain more insight about the policy context of sustainability issues at a festival organisation. In order to do this case study, multiple qualitative methods will be used. Creswell (2012) argued that it is important to have more than at least one type of data to gain an in-depth understanding of a case. On top of that, since there is little written about this topic in this context, it is important to have a comprehensive data collection. Therefore, qualitative methods in the form of an observation, semi-structured interviews, a survey and the analysis of policy and web documents will be used to gain more insight about the policy context. Furthermore, the dimensions of the PAA will be examined by participating at Studio Linksvoor as an intern to get a feeling and experience of the work habits around sustainability issues. The use of these different methods might be fragmented but it is necessary to sketch a complete picture of the policy context. To overcome that this thesis will be fragmented and sloppy, tables are included that give a clearer overview on the data collection.

There is some criticism on the use of case studies. Abercrombie, Hill and Turner stated that the detailed examination of a single example of a class of phenomena, a case study cannot provide reliable information about the broader class, but it may be useful in the preliminary stages of an investigation since it provides hypotheses (1984, p. 34). Furthermore, Campbell and Stanley (1996, p. 6-7) argued that case studies have such a total absence of control as to be of almost no scientific value. In his paper, Flyvbjerg (2004, p. 241) rejects five misunderstandings about case studies, where the main conclusion states that case studies are essential for the development of social science, for example, in understanding the degree to which certain phenomena are present in each group or how they vary across cases.

3.3.1 Semi-structured interviews

In both explorative as in-depth research sections, semi-structured interviews are used. There has been made use of purposeful sampling. This is a sampling technique where participants are recruited that can provide in-depth information about the topic (Suri, 2011). The researcher determines the criteria the participant has to meet to be suited to participate in an interview. However, this makes the sampling strategy highly subjective to the own interpretations of the researcher.

For the interviews with the sustainability coordinators from DGTL and Awakenings, an interview guide has been made with the sustainability pillars as a guideline to discover the sustainable measures that they are implementing (*appendix 1*). These exploratory interviews will be held with the sustainability managers from DGTL and Awakenings, which are respectively Mitchell van Dooijeweerd (*MVD*) and Nikki Schuurs (*NS*). For DGTL, *MVD* is the sustainability coordinator and has control over which

sustainable measures are taken at DGTL. The same goes for Awakenings, where *NS* is the sustainability coordinator and she is in charge of the implemented sustainability measures.

The interview guide for the case study of Drift can be found in *appendix 2*. The Drift interview guide has more depth and is not only about sustainable measures that have been applied. Despite the setup of an interview guide, the researcher can respond to answers by asking new questions that were not set up beforehand. This makes it a very goal-oriented but also fluent way of doing research (Bryman, 2012).

For the case study of Drift Festival, the sustainability manager and the operational and creative directors will be interviewed. Ylva Luijten (*YL*) is the sustainability manager and responsible for setting up the sustainability measures that are implemented at Drift Festival. Next to that, Mauke Rodermond (*MD*) will be interviewed, who is the creative head-director of Drift. *MD* decides which sustainability measures are implemented since, in the end, he is the one that decides on what image Drift wants to radiate. Next to *MD* is Stef Steffens (*SS*), the other head-director. He is the operational director of Drift and is more about the practicalities of Drift. Just like *MD*, *SS* has the power to determine whether a sustainable measure will pass. With *YL* as a sustainability expert, *MD* as an identity and communication expert and *SS* for the operational side, every aspect that is relevant for organizing a more sustainable festival is covered. All of the interview participants are listed in *table 4* to have an overview of the participants and their characteristics.

| Interview participants | | | | |
|---|--------------|------------------------|-----------------------|--------------|
| Person | Organisation | Function | Content | When? |
| Mitchell van Dooijeweerd (<i>MVD</i>) | DGTL | Sustainability manager | Sustainable measures | June 2022 |
| Nikki Schuurs (<i>NS</i>) | Awakenings | Sustainability manager | Sustainable measures | January 2023 |
| Ylva Luijten (<i>YL</i>) | Drift | Sustainability manager | Measures and barriers | June 2022 |
| Stef Steffens (<i>SS</i>) | Drift | Operational director | Measures and barriers | June 2022 |
| Mauke Rodermond (<i>MD</i>) | Drift | Creative director | Measures and barriers | June 2022 |

Table 4: List of interview participants

3.3.2 Survey

In this thesis a survey will be used. This survey discusses the topic of sustainability and is filled in by the contractors of Drift. *Appendix 1* displays the survey guide. The survey is used to discover the dominant discourse. The use of survey in discourse analysis is not used often but for this thesis it will be well applicable. Some survey methodologists even understand surveys as analogous to conversations (Smyth *et al.*, 2009; Raclaw *et al.*, 2020), but this thesis remains critical on this discussion. Drift counts 24 people that have a permanent contract and there is not enough time to talk to every employee separately to discover aspects of the dominant discourse. The use of a survey is therefore chosen because of practical and time saving reasons. Another advantage of a survey is that the respondent is not pressured to answer and can therefore answer freely (Debois, 2017). A disadvantage can be that there are less thoughtful answers since the respondents filled in the survey in a hurry (Debois, 2017). After all, the survey remains an effective technique to gather a lot of data in a structured manner.

3.3.3 Observation

According to Cowie (2009), an observation is the detailed examination of participants' behaviour in a naturalistic setting. In this thesis, the participants are the involved actors discussed in paragraph 2.4.1. The naturalistic setting is Drift Festival at the 11th of June 2022. To see the interaction between actors and their resources might deliver new insights about the policy context. Spradley (1980) provides five

different types of observation, where in this thesis there is chosen for a complete observation. The researcher has become a member of the group in the preparation, the construction and dismantling of the festival. This method was chosen because with complete participation, the researcher would have access to everything relevant for this thesis, without the actors knowing that every information they would give was for research. Important is that the information that the researcher noted was not person sensitive, and the outcomes were only used for this thesis.

3.3.4 Web- and policy documents

The last method that has been used in this thesis to collect data is the analysis of web- and policy documents. Information about festivals whether they are busy implementing sustainable measures is only findable on their websites. Since there are only a few academic writings about this thesis' topic, some information is retrieved from the internet where knowledge presented about ecological sustainability. However, it is tried to have this type of data collection as low as possible. Furthermore, there is made use of the corporate structure of Drift where some non-public documents are analysed to gather information.

3.4 Validity and reliability of the research

To make this master thesis a true representation reality, one has to keep track of terms like validity, relevance and reliability. At first, the research must be structured in such a way that one can repeat the research methods and encounter the same observations (Drost, 2011). When this type of research is achieved, the reliability of the research will increase as a result.

Along with reliability, validity is of great importance in research for being a true representation of reality. Validity encompasses the phenomenon of whether what was attempted to measure has actually been measured (Drost, 2011). When looking at the validity of this master thesis, the operationalisation will be a key component in executing this research. If the operationalization is done correctly, appropriate questions could be asked to the actors about their resources. In this way questions can be asked in the most targeted way possible. This way, no wrong questions are asked of the wrong people

Ethical issues are present in any kind of research. The research process creates tension between the aims of research to make generalizations for the good of others, and the rights of participants to maintain privacy (Orb, Eisenhauer, & Wynaden, 2000, p. 93). Therefore, beforehand of the interviews, there will be discussed what the purpose of the research is and what will be done with the results. If one respondent has problems with the research goal or wants to stay anonymous, then this will be fully respected. As was already mentioned, the outcomes of the research will only be used for this thesis and for corporate improvements at Studio Linksvoor. No information will be passed on to thirds.

4. Results

Now that the methodology is clear and it has become evident that the data collection is somewhat fragmented, it is important to clearly structure the result section. The explorative research and the case study will be discussed in this result section. First of all, results of the explorative research will be discussed to get more insights about sustainability at festivals. An attempt is made to grasp how sustainability is framed within music festival organisations that are pioneering in the field of ecological sustainability. Sustainable pillars are distinguished to structurally map the sustainable measures that are out there. This, to draw up a frame of reference where Drift can be compared to.

Hereafter, the case study of Drift is examined. First, the sustainable measures undertaken at Drift are examined. After this, the three layers of discourse are analysed within the Drift organisation. Then, the measures at Drift festival are compared with the sustainable measures of the frontrunners. After this comparison, it will become clear to what extent Drift has implemented sustainable measures because the barriers will become clear since an analysis is done with the organisational aspects of the PAA.

4.1 Discovering the 'sustainable' festival

4.1.1 Pioneers that shape the sustainability norm

Organizing a sustainable festival entails all kinds of tasks and responsibilities, but what can actually be understood as a sustainable festival? Zifkos (2015) made a sharp statement discussing that festivals are not sustainable by nature, and limiting non-sustainable measures took precedence over implementing sustainable measures. However, there are some festivals that are far in implementing sustainable measures. One of these organizations that dares to claim this sustainable achievement is the organization DGTL. DGTL is doing some bold statements on their website about their sustainable goals, for example: *'We do want to show you why it is more sustainable to dance with us during DGTL rather than staying at home'* (DGTL, 2022). This statement is completely opposite to the statement of Zifkos (2015) and this makes a deeper investigation of DGTL their methods both interesting and relevant. Staying at home does not require trucks to transport heavy materials for the construction and dismantling of the festival. The same goes for the flight movements people have to make to get to the festival. It is important to remain critical on this statement, but this does mean that they should be taken seriously regarding sustainable implementations.

DGTL is adopting new methods and they are approaching the sustainability issue completely different than other companies. They are stating that it's entirely feasible to view a festival as a temporary miniature version of a community (DGTL, 2022). Arguments for this are that people work, consume, move and eat on the festival site. Much like in a community, there are all kinds of different flows such as money, energy, food, exchange of knowledge, water and creativity (DGTL, 2022). In *figure 8*, the roadmap of some sustainable achievements is displayed. The next goal of the organization is to become the first regenerative event organization on a global scale (DGTL, 2022). Together with this progressive goal and their achievements, DGTL has made themselves a pioneer on sustainability in the festival scene.

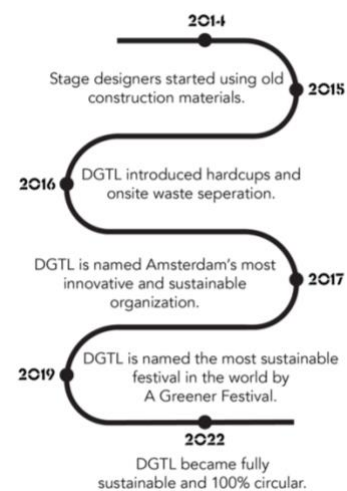


Figure 8: Roadmap towards circularity of DGTL (2022)

It has become clear that improving ecological sustainability is very context dependent. What for one organisation works, might not work for other organisations. DGTL might be a pioneer, but maybe the factors to implement sustainability measures are optimal. As discussed in the methodology, to have a more valid research, there is chosen to also look at Awakenings. Just like DGTL, Awakenings has a page

devoted to sustainability on their website. It states the following: *'We love to dance together on our beautiful planet for many more years. We are well aware of our environmental impact and we intend to make our festivals as sustainable as possible. We welcome more than 300.000 visitors this year, coming from more than 80 different countries. We are reaching a young and diverse audience that we hope to inspire to make conscious choices'* (Awakenings, n.d.).

Awakenings adopts a less radical approach to tackle sustainability issues. They do not have statements that it is better to come to the festival instead of staying at home. Awakenings does not have their policy around sustainability backed up with data, what DGTL does have (DGTL, 2022). However, they have a list on their website with all the sustainability measures they have implemented. Awakenings has created different topics in which matching measures are subdivided. The next topics are discussed on their website: deposit recycle system, materials, 100% vegetarian menu, smart energy plan, water, travel/CO₂ compensation, education, charity, share knowledge, leave no trace campsite, National Park Spaarnwoude, accessibility and extra care (Awakenings, n.d.). It is noticeable that Awakenings has some clear topics covering different aspects of sustainability. The topic National Park Spaarnwoude indicates again the notion of context dependency, since it is the location where the festival is held. Furthermore, there are multiple topics present that fall under social sustainability, such as education, charity, share knowledge and extra care. These social topics will not be further discussed since the focus is on ecological sustainability. The presence of difference topics is useful as a handle, but this long list will be to unclear in drawing a frame of reference where Drift can be compared to.

Figure 9 displays the pillars as they are shown on the website of DGTL, as discussed in the theoretical framework. A critical reader could argue that all relevant topics from Awakenings could be subdivided within the pillars of DGTL. In the next section, the implemented measures of the frontrunners will be discussed, where the pillar approach will be used as a handle to have more structure in the result section.

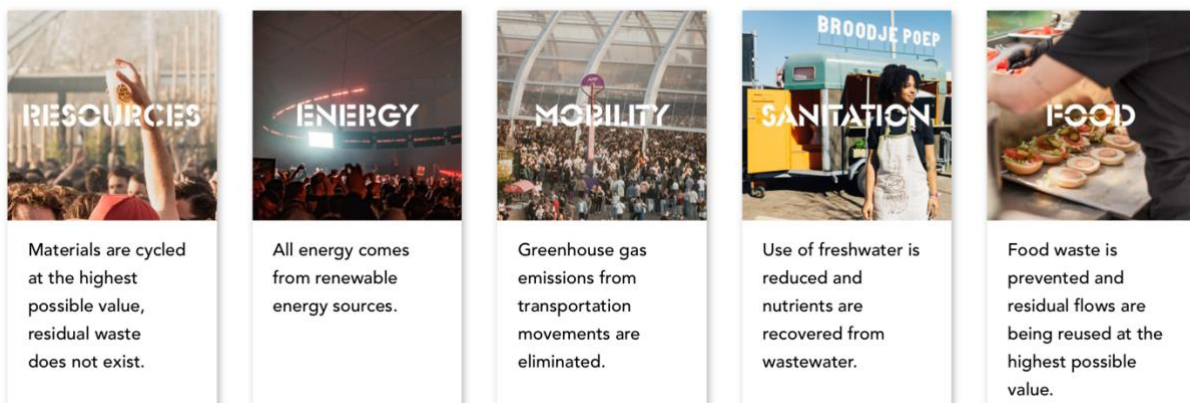


Figure 9: Overview of the pillars on DGTL's website (2022)

4.1.2 Frontrunners: Materials

In an in-depth interview with MVD and NS, measures falling within these pillars become clear. To avoid confusion of a similarly named concept in the policy arrangement approach and in the pillars, materials is used instead of resources at the pillar approach. The pillar materials stand for the use and handling of materials, where DGTL have stated that they made a transition from *'waste as a problem'*, to *'resources as a solution'* (DGTL, 2022). At DGTL, they have an extensive material management plan to prevent creating waste. *'It is a way of working where rethinking use of materials stands central'* (interview MVD, June 2022). They apply the frame that created waste is seen as a new material. With this notion, they have done the statement that zero grams of waste per visitor in 2022 was achieved (DGTL, 2022). DGTL stated to have a 100% separation rate: All resources are collected separately by using Recycle Stations and a well-thought-out bin plan for backstage areas (DGTL, 2022).

One way to get less waste from visitors is to implement a reusable hardcup system. With every consumption of a drink, waste in the form of a plastic cup is created where pollution of the environment can be a result. This hardcup system makes people pay extra for their first cup and after their first consumption, they receive a new cup for the cup they hand in. In this way, every cup is reused with the possible exception of the last cup, because people might take it home (interview MVD, June 2022). The economic transaction that is needed to buy a new cup when an old one is lost creates awareness among visitors since people do not want to pay extra. However, YL had some critics on the implementation of the hardcup system at DGTL: *'I did think that they had dropped a stitch last edition with those hard cups. At first, people had to pay for their cup but couldn't get a deposit back at the end. Furthermore, they said that you can take your cup home at the end of the festival, but then, they encourage people to bring a cup home and that is precisely not what you want from a sustainability point of view'* (interview YL, June 2022). Whenever thousands of people are taking the last cup home, then DGTL has to make new cups every time they organise a new festival. This will not contribute to ecological sustainability, because as a festival you want to make as few products as possible and reuse as much as possible. If the visitors that brought a cup home are using this cup daily, then it is arguable that it might enhance ecological sustainability. However, this thesis remains sceptical on this since no data could be found about whether this enhances ecological sustainability and because this way of working makes DGTL produce thousands of cups every new festival.

Awakenings has a different approach regarding cups. NS indicated that they have a similar system, but at Awakenings they use softcups and cans (interview NS, January 2022). Visitors also have to pay for their first cup and hand it in after consumption, but no hardcups are present at the festival. The difference between hardcups and softcups can be found in the material. Soft cups are less firm so they can be used less often than hard cups (interview NS, January 2022). Cans are used as much as possible to overcome the extra need for plastics: *'It is a shame to pour the contents of a can into a soft cup. After all, the drinking pleasure remains the same in a can and the sponsor gains more visibility'* (interview NS, January 2023). However, it remains unclear which system is better in terms of reducing the ecological impact.

The next measure DGTL applies is the use of cashless payments. The implementation of this system ensures that on site, people could only pay digitally. DGTL was the first European festival to introduce this system (DGTL, 2022). Prior to this festival, plastic tokens were used to buy consumptions on site. With an average of 7-10 tokens per visitors, valid for thousands of visitors, an impact can be made in reduction of use of plastics and no pollution can occur since the tokens are no longer in circulation on site (interview MVD, June 2022). NS stated that they do not trust the cashless payment systems enough. *'Whenever these systems fail, thousands of people will no longer be able to spend and we will miss out on a lot of income'* (interview NS, January 2022). NS indicated that their location is quite remote in a forest and they find that the technology is not yet optimised to be secure enough to implement a cashless system. *'If this system fails, then 40.000 people cannot buy consumptions and we miss a lot of income'*. This is the reason they still work with a tokensystem (Interview NS, January 2023). In this case, the context dependency becomes evident. The difference of geographical location leads to different outcomes, since DGTL is located in an urban area in Amsterdam and does not have problems with the technology because of their remoteness.

Other material flows that generate 'waste' on site is the food court. Here, an advantage can be made for the disposables used at the consumption of food. Napkins, cutlery, food scraps and other disposables make up the total of 'waste' that is created at the food court. *'In consultation with the food trucks, we re-examined what kind of disposables are actually needed. You don't need a plate, napkin and sheet of paper for a hamburger, a napkin is enough'* (interview NS, January 2023). Rethinking the

use of materials has also taken care of the shift from plastic disposables to biodegradable disposables. This use of biodegradable disposables benefits in two ways. Plastic usage is reduced and the biodegradable disposables are suitable for downcycling (interview MVD, June 2022).

As mentioned before, DGTL works in a data-driven way that provides insights into how effective these measures are. This data-driven way manifests itself in the form of a Material Flow Analysis (MFA). This analysis is an environmental management tool that maps incoming and outgoing material and energy flows, provides insight into the use of raw materials and exposes hotspots (DGTL, 2022). This MFA was already discussed in the theoretical framework (figure 3), but more insights have been gained after investigation. MVD states that they are mainly busy doing a baseline measurement and calculating the ecological footprints of their event (interview MVD, June 2022). Because they have measured where they are sustainable and where not, they can focus on what measures they are willing to implement.

| Materials | |
|-----------------------------------|---|
| Measure | Method |
| Cupsystem: Hardcup or softcup/can | A system ensures visitors to hand in their empty cup for a new one, otherwise a payment is required |
| Cashless payments | Shift from tokens to a cashless payments |
| Recycle station | Well-thought-out bin plan on festival site |
| Rethinking use of materials | Removing unnecessary products and replacing plastics disposables with biodegradable materials that can be composted |
| Material flow analysis | Using data to visualise the in- and output of materials |

Table 5: Summary sustainable measures materials by frontrunners

4.1.3 Frontrunners: Energy

The second pillar to be discussed is energy. DGTL calls it a well thought-out energy plan and Awakenings a smart energy plan, but they both are looking for the most efficient and effective way to use their energy (DGTL, 2022; Awakenings, n.d.). What became clear is that looking at energy from a sustainable point of view, there are two major things that could be done to be more sustainable within this pillar. One the one side you can reduce the energy that is used and on the other side, more sustainable energy sources could be used. One could for example look at the usage of renewable energy instead of non-renewable energy or use less demanding electronic devices.

DGTL made a transition in 2022 to have all energy sources 100% renewable (DGTL, 2022). Most of DGTL’s energy is acquired from the existing electricity grid, which was constructed by the municipality of Amsterdam. DGTL does have a renewable energy contract but MVD stays sceptical about whether this is actually renewable energy, because he does not have the ability to validate this (interview MVD, June 2022). However, the capacity of the existing grid is sometimes not enough for peak hours, and so the grid is supplemented with a battery that is filled with sustainable energy sources. Both DGTL and Awakenings have a step-by-step approach when it comes to the energy plan (Awakenings, n.d.; DGTL, 2022). First there is looked at the availability of the existing electricity grid, because this is the most sustainable option. No new infrastructure has to be constructed for using the grid. Whenever there is no existing grid is present, or the capacity is not high enough, there is looked at an option of batteries filled with green energy sources. At DGTL, they use for 70% the existing grid and the other 30% are supplemented with energy from green filled batteries, ensuring 100% renewable energy sources (DGTL, 2022). Awakenings organises a lot of events at different places during the year. The problem of context dependency arises at every new location. They try to use the grid where possible, otherwise they use batteries. In some cases, aggregates are unavoidable. However, they use biofuels when they have to use generators (interview NS, January 2023).

DGTL also mentioned a more practical solution to save energy which is about the mapping of the festival terrain. Because of smart mapping, food caterers have to stand together and have to use a shared cooling. This ensures that not every food truck has its own cooling and this saves up to 60% of energy (interview MVD, June 2022).

| Energy | |
|------------------|--|
| Measure | Method |
| Renewable energy | Draw power from the existing electricity grid that delivers green energy |
| Battery use | If the capacity of the grid is too low, switch to a battery filled with green energy |
| Biofuel use | Biofuels are used when an aggregate is needed. |
| Smart mapping | Ensuring food caterers to use only one cooling |

Table 6: Summary sustainable measures for energy by frontrunners

4.1.4 Frontrunners: Mobility

One thing that became clear is that there are a lot of travel movements in the execution of a festival. Suppliers, visitors and artists all have to travel one or multiple times to the festival site, and the bigger the festival, the more transport movements there are. For the measures regarding mobility, a distinction is made on the basis of actors. Visitors are looked at first.

Both DGTL and Awakenings has visitors from over the whole world and therefore, car journeys, train movements and flights are the result. Both organisations encourage these international visitors but also local visitors to travel to the festival as sustainable as possible (Interview MVD, June 2023; Awakenings, n.d.). This means encouraging walking or cycling to the festival site, or otherwise use public transport. MVD stated that DGTL has a deal with the Dutch train company to provide cheaper train tickets (interview MVD, June 2023). Furthermore, DGTL offers no parking lots at the festival site which stimulates visitors even more to travel more sustainable (interview MVD, June 2022). However, a critical reader would argue that both festival companies should prevent international visitors to attend the festival. DGTL is having 45.000 and Awakenings 70.000 visitors a day (DGTL, 2022; Awakenings, n.d.), and a small percentage of international visitors are already a lot of people. This implies that a lot of impact can be made in the reduction of international visitors, because then significant less flight movements are needed. But, this might lead to less economic sustainability and it arguable if Awakenings and DGTL wants to get rid of their international visitors since it provides global attention. Yet, DGTL implemented a measure for their visitors where they offer a Carbon Footprint Calculator on their website (DGTL, 2022). This calculator offers insights about the CO₂ that is emitted in travelling to the festival site. It gives visitors the possibility to pay money that is necessary to offset the emissions that were created due to travel movements (DGTL, 2022).

The second group that is addressed are the artists. DGTL has calculated that on average, one artist is responsible for 196kg of CO₂ emissions, where most of the emissions come from short-haul flights (DGTL, 2022). All artists that DGTL is driving to the festival is done with electric cars (interview MVD, June 2022). Furthermore, a measure that they are applying is to book as many local artists as possible. In addition, the emissions that are coming from artists that are flying to the festival are being compensated. This compensation is done by the replacement of fossil fuels with Sustainable Aviation Fuel (SAF) (Interview MVD, June 2022). However, if one looked at the line-up of artists at DGTL festival 2022, it can be seen that they have mainly international artists (DGTL, 2022). It is therefore important to stay critical on the statement that try to book as many local artists as possible.

Furthermore, artists are staying in a circular hotel and transportations from the airport to the hotel and festival site are done with emission-free electric cars (interview MVD, June 2022; DGTL, 2022). NS indicated that they also calculate the emissions that artists are having from flight movements and that

they compensate this by planting trees (interview NS, January 2023). However, it remains unclear how effective these offsetting initiatives are and it is arguable in how far this type of compensating has a direct effect on ecological sustainability.

The last group of actors is the production group. The construction and dismantling of the festival evokes different types of emissions. A lot of heavy machinery is used to pick up heavy materials and to navigate easier on the terrain. Both DGTL and Awakenings have made the switch to only use electric vehicles and bicycles to navigate on the terrain (DGTL, 2022; Awakenings, n.d.). Awakenings asks to their suppliers to carpool and to use biodiesel where possible (Awakenings, n.d.) Some machinery cannot be replaced with electric vehicles and in these cases, biodiesel is used, which already leads to an 89% reduction of CO₂ emissions (DGTL, 2022). DGTL buys local food and works with local suppliers which reduces transport movements (interview MVD, June 2022).

| Mobility | |
|--------------------------------|---|
| Measure | Method |
| Communication towards visitors | Communicate to travel as sustainable as possible |
| Stimulation public transport | Deal with NS and no parking lots |
| Offer compensation tool | Incorporating of Carbon Footprint Calculator on their website |
| Compensate artists movements | Buying SAF for every kilometre of artist movements |
| Circular accommodation artists | Let artists spend the night in a circular hotel |
| Using electric cars | All taxi services are with electric cars |
| Reducing impact machinery | Electrifying machinery where possible, otherwise biodiesel. |
| Buy local | Cooperate with local suppliers |

Table 7: Summary sustainable measures for mobility by frontrunners

4.1.5 Frontrunners: Sanitation

The pillar sanitation covers water usage and the infrastructures around toilets. DGTL (2022) stated it this way: *‘30% of the daily human water usage is for flushing the toilet. This water is used for flushing materials packed with valuable nutrients. So precious drinking water is used to wash away precious nutrients’*. DGTL has a whole different way of looking at this process. They are having a different ontological view in the beginning which results in different strategic measures in the end. DGTL is working to an end of the ‘waste’ status, or taboo, of urine and feces (DGTL, 2022).

Together with researchers, toilet suppliers and processors, they realized a circular sanitary system at their festival edition (DGTL, 2022). Through this circular sanitary system, nutrients and fertilizers are extracted. Urine is turned into grey water and feces are turned into compost (DGTL, 2022). DGTL also use dry toilets, which use no water for flushing. Next to the dry toilets, they have an alternative to flush toilets. They use flush toilets that save up to 10 liter per toilet visit. Instead of processed drinking water, they use water directly from the IJ. By doing this, they do not have to use drinkable water for flushing. With avoiding this waste of drinkable water, less processing of drinkable water takes place and therefore less emissions are emitted (DGTL, 2022). Awakenings uses flush toilets that are flushed with grey water. The use of this method ensures Awakenings to save 3kg of CO₂ at every flush (Awakenings, n.d.; interview NS, January 2023).

MVD indicated that the regulations on this subject are lagging behind and they have not yet taken the steps they want to take. It is technical possible to turn this urine into drinkable water, but it is not yet legally possible to do this. They have done what they could through innovation, but there is now a stop due to government regulations (interview MVD, June 2022).

| Sanitation | |
|--------------------------|---|
| Measure | Method |
| Circular sanitary system | Extracting nutrients and fertilizers |
| Dry toilets | Offer toilets that do not have to flush |
| Grey water for flushing | Using non-drinkable water for flushing. |

Table 8: Summary sustainable measures for sanitation by frontrunners

4.1.6 Frontrunners: Food

The last pillar to be distinguished is food. What is remarkable in offering food on site is the presence of a circular food court at DGTL. *'This circular food court is made possible through some various adjustments in the cycle of food'* (interview MVD, June 2022). As is stated before, DGTL used biodegradable disposables. Together with food scraps, these biodegradable disposables can be put in a composting machine to make compost. DGTL invested in a composting machine on site which offers the possibility to make compost instead of having waste. This compost is used for local city farmers that grow crops for next DGTL editions (DGTL, 2022). Through the acquisition of a compost machine, DGTL is able to make their food court circular. On top of that, food is bought locally and sourced organic (interview MVD, June 2022).

DGTL offers a fully vegan menu for visitors (DGTL, 2022). MVD stated: *'We also offer a vegetarian menu at the things you do not see at the festival, so for the crew and at the office. In the beginning there was some nagging about this, but we now have such a good menu that most people like it'* (interview MVD, June 2022). The implementation of vegetarian food at a festival organization while the festival is not happening is a measure people might forget about. Awakenings stated they do offer meat backstage, because meat contains good nutritional values that are useful for heavy work. *'On Mondays we always have a vegetarian day and people are slowly getting used to that'* (interview NS, January 2023). For the frontstage, so for the visitors, Awakenings does offer a 100% vegetarian menu (interview NS, January 2023).

DGTL partnered up with a plant-based meat substitute company to offer a more varied vegan menu. *'The partnership with a company is a strategic way of ensuring more sustainable options'* (interview MVD, June 2022). On the one hand, money and knowledge is brought in and on the other hand, the quality gets better. No data was collected where the impact of vegan/vegetarian options was showed in comparison with meat options. If certain products from the vegan menu has to be imported and therefore flights movements are made, it is questionable what is better in terms of ecological sustainability.

| Food | |
|---------------------------|---|
| Measure | Method |
| Change menu | Offer plant-based food, otherwise a vegetarian menu |
| Biodegradable disposables | Replace plastics for food consumption |
| Composting machine | All leftovers are composted and gifted to local farmers to grow crops |

Table 9: Summary sustainable measures for food by frontrunners

4.2 Ecological sustainability within Drift

Becoming sustainable does not happen overnight. SS stated that they have been offering vegetarian food options for their employees since 2016 (interview SS, June 2023). Also the use of batteries in the past, the conversations happening in the office and the room for scholars to do research about Drift and sustainability indicates that within Drift, the topic of sustainability is considered to be important. In this section, the sustainable measures implemented by Drift are discussed.

For this mapping of measures, the five pillar approach of DGTL will be used as a handle, since this approach ensures a clearly structured division of measures. Again, the pillar resources is replaced by materials to prevent confusion. At the end of the section of each discussed pillar, a table is presented with a summary of the implemented measures.

4.2.1 Drift: Materials

If one looked at materials, some measures could be distinguished. First of all, the implementation of a softcup system. Both YL and SS expressed the wish to acquire hardcups, but due to high costs and uncertainty whether it turned out to be more sustainable, the softcupsystem was implemented (interview SS, June 2022; interview YL, June 2022). This softcupsystem ensured that visitors had to hand in their cup to get a new one. This allows separate r-PET streams to be collected and recycled. On top of that, the softcup system had already been present at Drift for years, so no new knowledge had to be obtained for its implementation.

In the past, Drift has had some activations where people could hand in materials that would be recycled. One time, Drift offered visitors to hand in their old jeans on site. Kuyichi, a jeans brand would then recycle the jeans in order to reduce jeans waste (interview SS, June 2022). In addition, Drift had an activation to reduce waste from electronic devices. People could hand in electronic devices and Drift would then ensure that they ended up with someone who processed them in a responsible manner (interview SS, June 2022). These activations did not ensure sustainability on site, but if Drift had not taken place, these materials would not have been reused/recycled. It is important to have a critical view on this. As mentioned before, it remains unclear how effective these offsetting initiatives are and it is arguable in how far this type of compensating has a direct effect on ecological sustainability for Drift.

The handling of materials in general is discussed by SS. *'In terms of decor, we try to store as much as possible'* (interview SS, June 2022). Because Drift uses Studio Linksvoor as a hub, materials can be used multiple times at different festivals. Containers have been purchased to store materials properly so that it can be reused on multiple festivals. Respondent 8 from the survey stated that *'where possible, the reuse of items is considered first before purchasing new products'*. For example, decoration on site for Drift festival is also used at Mout Bierfestival and Smaakmarkt Festival, but it is also used for the next Drift Festival. The establishment of Studio Linksvoor ensures Drift to be more sustainable because there is an infrastructure present which Drift can easily access, whether it be for material aspects or knowledge. However, respondent 24 states: *'A lot is still thrown away. Building materials, festival material (e.g. glasses) etc., and I don't know to what extent that can be prevented.'*

At last, Drift is trying to separate waste as much as possible. Multiple bins have been placed in the office to secure multiple waste streams. Since 2022, Drift has partnered up with a new



Figure 10: Waste performance Drift Festival (personal communication with SS, September 2022)

waste processor called Renewi. Renewi had been replaced for a small waste processor in order to ensure waste to be recycled properly (interview SS, June 2022). During the observation it became clear that waste streams on site consisted of r-PET from the cups, paper/cardboard, glass and residual waste (personal communication, June 2022). In *figure 10* the processing of the waste is displayed. With a total of 4040 kg waste, only 17% is considered as a residue. This means that the other 83% is used as a new source, either as raw material or as energy (personal communication with SS, September 2022).

| Materials | |
|-----------------------------------|---|
| Measure | Outcome |
| Softcup system | Separate r-PET stream |
| Responsible handling of materials | Includes storage, separation and reusing of materials |
| New waste processor | New destination of 83% of the waste |
| Activations | Compensate for impact of festival |

Table 10: Summary sustainable measures **materials** at Drift

4.2.2 Drift: Energy

If one looked at energy measures applied at Drift, there are not a lot of measures to note. For years, Drift tried to choose the most sustainable option regarding energy. In the past, batteries have been used to facilitate the power supply. These batteries were filled with green energy. Because of the use of batteries, no aggregates had to be used, and therefore a more sustainable solution was chosen (interview SS, June 2022). However, YL indicated that since this year they are using the existing power grid from the Vasim, the location where Drift Festival is held. The Vasim has a green power contract with the municipality (interview YL, June 2022). Therefore, the batteries become unnecessary and the most sustainable option is chosen.

| Energy | |
|---------------------|---|
| Measure | Outcome |
| Using existing grid | Use of green power and no battery or aggregate needed |

Table 11: Summary sustainable measures **energy** at Drift

4.2.3 Drift: Mobility

Mobility covers the transport movements that are happening in order to realize the festival. Suppliers, visitors and artists all have to travel to the festival site, and therefore a lot of transport movements are taking place. Drift offers free shuttle busses to give the possibility for train passengers to transport to the site (interview MR, June 2022). MR indicated that most of the visitors are from Nijmegen (interview MR, June 2022). Drift offers way more bicycles parking spots than car parking spots, which can also be seen as a measure (interview SS, June 2022). Through the whole city of Nijmegen, road signs are placed to indicate the location of Drift festival (Personal communication, June 2022). These road signs make it more accessible for cyclers to navigate to the terrain, and the sustainable practice of cycling is then stimulated. On top of that, Drift is communicating via various media to travel to the festival as sustainable as possible (personal communication, June 2022).

In the field of artists, some measures could be noticed. MR indicated that the location where artists will be the moment prior of the festival is considered. Preferably, artists are booked so that they could travel by train, ‘so that we could reduce flight movements’ (interview MR, June 2022). However, during the observation it became clear that 18 artists were flown in and 6 came with an international train from a total of 41 artists (personal communication, June 2022). The other artists travelled by car, by bicycle or on foot to the terrain. It remains a grey area whether the impact of the flight path on the return route should be attributed to Drift. When these artists go back home, then it can be attribute

to Drift, because they went up and down especially for Drift. When they fly on to the next festival, then the impact may be attributed to the next festival.

For the group of suppliers, it can be noticed that a lot of suppliers are from the region Gelderland. SS gives two reasons for this: *'1, because it is more sustainable, 2, because we simply enjoy working with local parties'* (interview SS, June 2022). Furthermore, respondent 14 stated the following: *'If a festival is far away for the crew, we let them drive together or arrange an overnight stay'*. This is done to reduce travel movements but also to overcome employers to drive home after a long day of intensive work.

On site, a lot of heavy machinery was spotted during the observation, all running on diesel (personal communication, June 2022). There were some electric vehicles present, but no comments had been made about whether these were hired because of their sustainability. Still, there were a lot of vehicles present that were not electric.

| Mobility | |
|-------------------------------------|---|
| Measure | Outcome |
| Free shuttle busses | More people take public transport |
| Communicating to travel sustainable | Promoting walking or cycling |
| Parking spots and road signs | Improve cycling infrastructure to stimulate cycling |
| Consider artists location | Reduce flight movements and encourage train movements |
| Partner up with local suppliers | Reduce transport movements |
| Offer overnight stays | Reduce transport movements |

Table 12: Summary sustainable measures **mobility** at Drift

4.2.4 Drift: Sanitation

Sanitation refers in this context to the provision of clean drinking water and adequate sewage disposal. Only few measures could be distinguished within this pillar to reach ecological sustainability. Drift uses dixies that meet people's needs. Dixies do not use water for flushing, so for water use on site it does contribute to a more sustainable festival (interview SS, June 2022). However, these dixies are very smelly and they have to be industrially cleaned at the end of the festival, which is done by a third party (personal communication, June 2022). No data was retrieved about this industrial cleaning and its impact. Furthermore, water was used to fill a water tank that functioned as ballast for a stage design. This water was retrieved from the Waal, so no new and fresh water had to be acquainted. In the end, the water was again restored into the Waal (personal communication, June 2022).

| Sanitation | |
|--------------------------------|---------------------------------|
| Measure | Outcome |
| Dixies | No water necessary for flushing |
| Retrieving water from the Waal | No waste of potable water |

Table 13: Summary sustainable measures **sanitation** at Drift

4.2.5 Drift: Food

The last pillar wherein measures are undertaken is food. For food, multiple measures could be noticed. First of all, Drift has been offering a vegetarian menu for their crew since 2016. Since 2022, Drift also offered a fully vegetarian menu on site for visitors (interview SS, June 2022; interview Ylva, June 2022). Respondent 5 argued that *'for employers, the biggest possible bottles with drinks are bought instead of small bottles to reduce plastic use. Furthermore, unpacked food is being sent back to the supplier to prevent waste'*. For the crew catering, decent cutlery is used instead of disposable cutlery. This might involve some extra actions, but less waste is created for every person that has to eat. On the festival day, around 400 people are eating lunch and dinner, so reusing cutlery reduces the ecological impact here (personal communication, June 2022).

| Food | |
|--------------------|---|
| Measure | Outcome |
| Vegetarian menu | Both crew as visitors only eat vegetarian on site and in the office |
| Smart acquaintance | Decent cutlery, option to return food and minimal use of materials |

Table 14: Summary sustainable measures food at Drift

4.3 Substance aspect of the policy context

The measures Drift has implemented at Drift Festival have now been placed in context. Some tentative conclusions have already been drawn. However, these tentative conclusions mainly cover barriers within the organisational aspect. In the conceptual model it became clear that the substance aspect has influence on the organisational aspect, and therefore the substance aspect will be discussed first.

In the following paragraph, it is investigated how Drift sees and deals with sustainability. The three dimension layer of discourses is used. In section 4.4.1, first the conception what Drift thinks about sustainability (ontological layer) is discussed. In 4.4.2, the desired state regarding sustainability is discussed (normative layer). At last, in section 4.4.3, the justification for certain measures are discussed (strategic layer).

4.3.1 Ontological layer

Drift has a sustainability department that handles sustainability issues. Multiple festival organisations that were approached for an interview gave the answer that the things they did concerning sustainability were no coordinated sustainability projects. Drift therefore may be called progressive with presence of their sustainability department. YL functioned as a sustainability manager and she was accompanied by a sustainability intern (interview YL, June 2022). This department was created in January 2022. Before this, just like other approached festival organizations, Drift incorporated sustainability issues interdisciplinary (interview SS, June 2022). The fact that budget is made available for this issue indicates the priority given to sustainability. However, the notion of the creation of a department for sustainability can already be placed under the normative layer within this discourse. Therefore, first the conception of sustainability within Drift will be examined, which covers the ontological layer. The survey (*appendix 1*) will be well suited to help to discover the ontological layer of the dominant discourse at Drift.

The ontological layer tries to discover what sustainability is and therefore, question 4 of the survey distributed among employers is an appropriate question to discover this. Question 4 states: What definition do you give to the word sustainability? As stated in the theoretical framework, this thesis holds on to the definition from the Brundtland report (WCED, 1987): ‘Development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. On top of that, the Three Bottom Line of Elkington (1999) is considered relevant, since the term sustainability can imply different meanings. Question 4 offers a range of answers, but it was noticeable that having a responsible attitude was a recurring theme. Having a responsible attitude can be somewhat vague to interpret, so further investigation is needed. Within this responsible attitude, employees made leaps towards environmental friendliness, product lifespan extension and social sustainability. This tripartite division of answers corresponds to themes from the Triple Bottom Line from Elkington (1999). Environmental friendliness corresponds with ecological sustainability, product lifespan with economic sustainability and social sustainability speaks for itself.

Environmental friendliness is the most recurring theme in the survey among employees. Nineteen out of twenty four answers of question 4 contained the notion of being friendly to the environment. This

indicates that most employees of Drift link sustainability to the protection of the environment. YL gave a definition of sustainability in the interview that looked like the definition retrieved from the Brundtland report: *'Dealing with the world in a way that you can provide for all your needs, but that you don't get in the way of another generation that comes after you so that they can also meet their needs'* (interview YL, June 2022).

A leap to the product lifespan extension in the survey is made nine times out of twenty four answers, and this has two implications. On the one hand it implies the fact that it is more ecological sustainable to use a product as long as possible. The term reuse and recycle are used repeatedly in those 9 answers on question 4. Also SS and YL refer multiple times to the terms reuse and recycle (interview YL, June 2022; interview SS, June 2022). On the other hand, there is the fact that extending the lifespan of a product is better in terms of economic sustainability. Using products multiple times requires less new purchases. YL stated that since COVID times, financial management became more important and scarcity became bigger, in every aspect of organizing events (interview YL, June 2022).

Social sustainability is a concept that is not discussed extensively in this thesis, since the focus was primarily on ecological sustainability. However, social sustainability is an evident recurring theme in the answers of the survey. In ten out of the twenty four answers, concepts associated with social sustainability are mentioned. Examples of this are the sustainable management of a relationship or *'dealing responsibly with nature and people'* (respondent 22). Not only in the survey did social sustainability return, both MR as SS indicated that social sustainability had a high priority. MR says that because of *'the progressive nature of the festivals and now that social sustainability and inclusiveness are on the political agenda, this will become an increasingly emphatic topic'* (interview MR, June 2022). He mentioned the death of George Floyd as one of the causing events of this trend of social sustainability and inclusivity. MR regrets the fact that this prioritisation on the agenda for these topics are sometimes activist, *'but this does make people realise more the urgency of these issues'* (interview MR, June 2022). SS has a somewhat more practical view to social sustainability. He refers to the relation Drift has with suppliers and local residents. For SS, social sustainability is created in maintaining a lasting relationship with stake- and shareholders, whether it are influential groups or the disadvantaged. An example that SS mentioned is that fact that Drift is working very accurately to cause as little nuisance as possible for local residents nearby the Vasim. Furthermore, SS mentioned that they also offer people who cannot regularly go to the festival a chance to visit Drift (interview SS, June 2022)

All in all, the ontological layer of discourse regarding how sustainability is perceived within a festival organisation can be divided into three subjects: Ecological, economic and social sustainability. It is seen that the ecological and economic component of sustainability are interrelated the most, especially when it comes to the economic feasibility of sustainable measures. Another example, the wish was expressed to implement a hardcupsystem but due to mainly financial reasons, Drift had to choose for the softcupsystem (interview SS, June 2022; interview, YL June 2022). The social sustainability component is regarded important at Drift, but it has little influence on the other two components in this context.

4.3.2 Normative layer

The normative layer of discourse has more a focus on what things ought to be. In the case of festivals and specifically Drift, the desired state regarding the degree of sustainability is investigated. Questions 5 and 9 provide interesting insights about the normative layer. Question 5 states: Who do you think should bear the primary responsibility for transitioning to a more sustainable society: the government, citizens or the business community? Eleven answers out of twenty four state that solely the government should take responsibility for making this transition, in which the companies and civil society will eventually follow. Nine answers out of twenty four contained the notion that business,

solely or in combination with the government/citizens, should take responsibility. Both SS and YL stated that there are no rules imposed by the government that stimulate the implementation of sustainable measures (interview SS, June 2022; interview YL, June 2022). This might suggest that the employees feel the urge to work on sustainability issues from an intrinsic motivation

Question 9 is helpful in continuing on this matter: To what extent do you think sustainability is alive at Drift? More than half of the respondents indicate that the topic about sustainability is really alive in the office, where there are multiple references to the conversations about sustainability and the importation of a sustainability department to work things out more project oriented. However, there are still some respondents that are claiming that it is really person and asset dependent. Examples of reasons are: *'purely due to time/lack of manpower'* (respondent 23) and *'sometimes the will is greater than the actual actions'* (respondent 11). However, since the implementation of a sustainability department is quite recent, the issue of it being person dependent and the lack of time and manpower might become less predominant.

SS and MR had a clear opinion about the probability to organise a completely sustainable festival. Both mention the DGTL festival but both are critically reflecting on it. They acknowledge the effort and achievements to become circular but they remain sceptical (interview SS, June 2022; interview MR, June 2022). For instance, SS stated: *'I don't know which values are measured that are showing that they are completely sustainable. A festival is by definition not sustainable. You just can't tell me that'* (interview SS, June 2022).

If one looked at the normative layer of discourses regarding sustainability issues at Drift, then one might argue that Drift is aware of the impact it can make but the sustainable output stays somewhat behind. The implementation of a sustainability department might change things, but employees seem to be sceptical. There is a desired state in becoming sustainable but Drift is not decisive enough yet to realise this as soon as possible.

4.3.3 Strategic layer

The strategic layer builds upon the normative layer, but it looks more to the means necessary to get to the desired situation: realizing a sustainable festival. In the ontological and normative layer it became clear that the awareness of sustainability is present, but the decisive power to implement measures lacks behind. What turned out to be crucial for the realisation of a circular festival at DGTL may be the missing link at Drift. The five pillar approach with all its data ensures DGTL to have a good overview where its impact can be made. SS and YL indicated multiple times that they have the wish to have data where it is showed how sustainable they are, and where they can make more impact (interview SS, June 2022; interview YL, June 2022).

'At the moment we simply do not know how sustainable we are, so where the bottlenecks are and how we can solve them. Imagine, we are very committed to making the food court more sustainable, but we don't have a major impact there, then it would be a shame to put energy into it. With a tool that is currently under development, we hope to be able to map our impact. By mapping this out, we can see from the baseline measurement where we can take steps in the field of sustainability' (interview SS, June 2022). MR added to this: *'I would really like to be able to see our footprint, what is the ecological footprint of a Drift festival and where is the most pressure? What is the impact of a program?'* (Interview MR, June 2022).

Furthermore, MR discussed the following: *'The technology is not there yet and we actually have no idea what we are actually doing. How sustainable are we actually, and what exactly is sustainability? This is going to be a really long time before we answer those questions. When are you no longer*

polluting? If you compensate, is your festival more sustainable or are you just shifting the externalities? MR keeps repeating the urgency for data in order to know when you are sustainable, or at least know on what aspects to work to become more sustainable (interview MR, June 2022).

The implementation of the softcupsystem is a good representation of the policy process for other measures. YL mentioned the willingness to implement a hardcupsystem instead of the softcupsystem, because hardcups are in the long run more sustainable due to its longer lifetime. However, *'in the end it turned out to be financially impossible to implement such a hardcupsystem'* (interview YL, June 2022). On top of the financial impossibility, SS also indicated that the *'Hardcup/softcup discussion is still open. It's not that one of the two is really better in the end'* (interview SS, June 2022). YL added: *'It is still not that we can say with 100% certainty that soft cups are better or with 100% certainty that hard cups are better and of course, it always depends on the situation'* (interview YL, June 2022). Because the resources are not optimally available, they do not know for sure if they have the most sustainable outcome.

In the case of the softcupsystem the recourses are mainly the barrier. At the pillar mobility, there is a difference in sustainable output per actor. For the visitors, the implemented measures are partly corresponding to the frontrunners, but measures for the artists stay far behind. This is because the involvement of the actor artists is completely different than the visitors. Artists are coming with a different purpose to the festival than visitors. Another example where actors are a barrier in the policy process is with the supplier from the dixies. Drift does not have the knowledge of what is happening at this supplier, while the actions of this supplier do form the policy process around sanitation. In this case, Drift does not have the agency in their own policy process.

The organization of Drift knew already for some years that the impact of vegetarian food was better in terms of ecological sustainability, they had been eating vegetarian since 2016. However, the application of this for visitors lacks a few years behind. There was a dominant discourse inside the organisation that the visitors were not ready to abandon meat consumption on a festival day. This had also to do with the type of people that are attending the festivals. SS argued that before COVID, *'we are still aware that we organize events in the east of Netherlands and that people therefore wanted to eat a hamburger'* (interview SS, June 2022).

From this discourse analysis it became clear that Drift is aware of their impact to be made but that the decisiveness lacks behind. However, the fact that Drift is not decisive enough in realising a sustainable festival can be explained by the presence of barriers. It can be seen that Drift has well thought out plans about the desired state regarding sustainability, but there are a few barriers that are counterworking the implementation of measures. Although the plans are there, some resources, actors or rules of the game are not optimized or absent and are therefore obstructing the feasibility. Further investigation of how these barriers influence the feasibility for the realisation of a sustainable festival will be interesting.

4.4 Evaluation of policy context - Materials

To evaluate the measures implemented at Drift, it is important to make a comparison with the measures of the frontrunners. With the mapping of the sustainable measures of the frontrunners, it is attempted to draw the most idealistic situation regarding ecological sustainability in this particular context. With the creation of the tables that summarizes both frontrunners as Drift's measures, it becomes more clear where differences are between the two groups. These differences may be barriers, but it could also happen that Drift has taken some measures that the frontrunners do not. Therefore, the tables of the measures will be merged into a new table to indicate the differences. There will only be an analysis of Drift's measures. The frontrunners are not tested for the presence or absence of certain measures. The structure of the five pillars will be used in this paragraph.

In the first column, measures retrieved from the frontrunners are given. In the second column the status of the measures in the context of Drift is discussed. For the last column, a motivation is presented that explains the absence or presence of certain rules. In this last column, keywords might be marked that play a role in the effectiveness of the measures, whether this be in the presence or absence of measures. On measures where Drift lags behind, the marked words are often barriers. The marked words can also be the key ingredients that ensure the policy context to be thriving regarding ecological sustainability at Drift.

The outcome of this paragraph is to identify barriers that will then be discussed with the use of the organisational dimensions of the PAA. After each evaluation of the policy context per pillar, an overview of the organisational dimensions will be given where the barriers will be discussed. The barriers are retrieved from the comparison made with the frontrunners, statements made in the interviews and survey and from suggestions from the substance aspect. However, if there are remarkable things to be noticed in the implemented policy, then this will be discussed. What falls under remarkable is if they excel in certain areas where the frontrunners do not.

Table 15 presents the comparison between measures for the pillar materials. It is noticeable that Drift does not fully comply with the measures of the frontrunners, but for every measure, Drift is either willing to implement certain measures or they have implemented things that partly correspond with measures of the frontrunners.

| Materials | | |
|-----------------------------|--------------------------------------|---|
| Measure | Drift | Motivation |
| Hardcupsystem | No, but softcupsystem and greenteams | Hardcups to expensive and not enough knowledge to justify hardcups (SS and YL); Greenteam as an extra actor (YL) |
| Cashless payment system | No, but willingness is present | Resistance in changing habits (YL) |
| Rethinking use of materials | Yes | The infrastructure of Studio Linksvoor ensures responsible material use (SS) |
| Material Flow Analysis | No, but willingness is present | Technology is not yet developed far enough (SS and MR). |

Table 15: Evaluation of measures materials

4.4.1 Actors

The most visible measure at Drift festival was the softcupsystem in combination with the greenteams (personal communication, June 2022). The softcupsystem is essentially the same as a hardcupsystem, only a different type of materials is used (interview SS, June 2022). However, Drift excelled on this softcupsystem since they created an extra actor to make this measure more effective: the greenteams. The greenteams had the task of interacting with visitors to relieve them of the actions that had to be taken for the system to succeed. YL stated that Drift is very depended on the behaviour of the visitors (interview YL, June 2022), but with the entrance of the greenteams Drift had more agency on the outcome of this measure.

The greenteams wore remarkable clothing, which can be seen in *figure 11* and *figure 12*. The intention of the greenteam was to collect as much as possible softcups for the recycling process and to be a point of contact for social sustainability issues (personal communication, June 2022). Social sustainability issues could be seen as hateful behaviour, sexual harassment or a feeling of not belonging. With the point of contact for social sustainability, Drift is combining different interpretations of sustainability. With the greenteams walking around and collecting softcups in return for a cup coin for the visitor, a sphere was created where visitors did not have to carry an empty cup, but only a cup coin that went easily into a pocket (personal communication, June 2022). Furthermore, it stimulated people to hand in their cup that they would have otherwise may be thrown on the ground.



Figure 12: Greenteam employees



Figure 11: Greenteam employees

For the softcupsystem, the creation of an extra actor ensured a more effective policy. However, there are also some cases where actors are a barrier for improving policy. YL mentioned that there was a barrier in implementing a cashless system at Drift festival. The knowledge is present that a cashless system demands less plastics on site, but the habits of people at Drift keep it from happening. As a reason, YL states: *'It's because we've been doing that for years, there's just resistance to change that'* (interview YL, June 2022).

Furthermore, the infrastructure that Studio Linksvoor provides ensures Drift to be more sustainable. YL stated that she is hired as sustainability manager for Studio Linksvoor, but because Drift is the only festival ready to become more sustainable, the focus is mainly on Drift. *'The goal is to create a blueprint for all festivals that fall under Studio Linksvoor'* (interview YL, June 2022). This indicates that Drift is used as a testing ground to arrive at further measures, but then for Studio Linksvoor. An interplay between Drift and Studio Linksvoor is happening here, because Studio Linksvoor uses the knowledge acquired at Drift to implement this at other festivals. Besides, Drift is using the infrastructure that is present because Studio Linksvoor is a hub for multiple festivals. In this way, Drift is able to use materials multiple times. Studio Linksvoor has invested in storage places and Drift is able to use them (interview SS, June 2022). Without the presence of the actor Studio Linksvoor, this had not been the case.

4.4.2 Resources

SS referred to an LCA study where two cups are compared: the softcup and the hardcup. The difference between a hardcup and softcup is the type of material, the process of making, transporting and the recycling process (interview SS, June 2022; Campbell *et al.*, 2020). Hardcups can be reused properly while softcups cannot (interview SS, June 2022). The available softcups for Drift is made from rPET and the available hardcups of polypropylene. The outcome of the LCA states that a hardcup is more ecologically sustainable when it has been used more than six times, when compared to a softcup (Campbell *et al.*, 2020). However, SS argued that *'if your hard cups are thrown away, lost or damaged then you already fail at the first use of te cup'* (interview SS, June 2022). On top of that, YL mentioned that the pricing of hardcups is twenty times as high as the pricing of softcups (interview YL, June 2022). All in all, the intention for Drift festival was to implement hardcups, but due to the high prices and the relative unknown (dis)advantages of hardcups the festival decided to implement the softcupsystem.

Missing the right knowledge and having not enough financial capital to implement measures are not the only barriers to be found in the resource dimension. MR often mentioned the fact that the technology is not far enough developed to become more sustainable. He even questions the fact if organising a sustainable festival is even possible (interview MR, June 2022). SS and YL added to this that the wish for a more data-driven approach is there, but that the technology does not allow it yet (interview SS, June 2022; interview YL, June 2022). It can thus be seen that the barriers money, knowledge are the most present within the policy field of materials.

4.4.3 Rules of the game

When looked at formal rules of the games, jurisdiction within this field is investigated. The implementation of the softcup system is not only to become more sustainable, national regulations will also prohibit the use of single-use plastics from 2024, unless high-quality recycling is achieved (Ministerie van Infrastructuur en Waterstaat, 2022). This new regulation requires festivals to either switch to hardcups or comply with high-quality recycling standards, living up to a high quality recycling rate of 90% in 2027 (Ministerie van Infrastructuur en Waterstaat, 2022). This means that Drift has to live up to a recycle rate of 90% in 2027. However, while the single-use plastics are not forbidden yet, Drift is already implementing measures in this field. If all goes well, they stay ahead of the regulations and this will not be seen as a barrier. But, it has yet to be proven in practice so time will tell.

If one looked at informal rules of the game, the following could be discussed. For the softcupsystem, the festival visitors had to do some extra actions to buy a drink at the festival. At entrance, the visitors received one cup coin. With this cup coin in combination with a token, the visitors could buy a drink. When they have finished their drink, the visitors could trade the empty cup for a cup coin or trade the empty cup for a filled cup where they had to pay with a token. Whenever a cup coin or a cup was lost, the visitors had to pay a half token in order to receive a new cup coin (personal communication, June 2022). *Figure 13* displays the softcupsystem in the way it was communicated to the visitors. The communication of this informal rule went through a last information mail and *figure 13* was visible on the site, which can be seen at *figure 11* (personal communication, June 2022).



Figure 13: Rules of the softcupsystem (Drift – Om te Dansen, n.d.)

Whenever a cup coin or a cup was lost, the visitors had to pay a half token in order to receive a new cup coin (personal communication, June 2022). *Figure 13* displays the softcupsystem in the way it was communicated to the visitors. The communication of this informal rule went through a last information mail and *figure 13* was visible on the site, which can be seen at *figure 11* (personal communication, June 2022).

However, there was no incentive for the visitors to keep the last cup. In addition, there was no communication towards visitors what they could do with their last cup. The only incentive visitors could have had was the intrinsic motivation to create a better environment. Besides, from the observation it became clear that a lot of visitors were too intoxicated to behave according to Drift’s policy (personal communication, June 2022). However, at the end of the festival the terrain was quite clean of cups. *Figure 14* displays the terrain after the festival, prior to the cleaning of the festival. It can be seen that most areas were quite clean, except for the lower middle stage. Employees of the greenteam indicated that this stage was too crowded for collecting cups, which indicates the effectiveness of the greenteam at other stages (personal communication, June 2022).



Figure 14: Overview of areas after Drift festival

4.5 Evaluation of policy context - Energy

The evaluation of Drift’s energy policy context regarding measures is presented in *table 16*. When looking at the frontrunners, a dichotomy could be made in how the impact could be reduced in the field of energy: a reduction of the energy use and the use of more sustainable energy sources. It is seen that Drift is having the most sustainable outcome for their energy supply, because they are using the existing grid (interview SS, June 2022). The other two measures of a battery use and biofuel use are not relevant for Drift, since Drift its needs are 100% supplied from the electricity grid.

| Energy | | |
|---------------------|--------------|--|
| Measure | Drift | Motivation |
| Using existing grid | Yes | Electricity grid constructed by municipality (SS) |
| Battery use | Not relevant | Capacity of the grid is sufficient |
| Biofuel use | Not relevant | Capacity of the grid is sufficient |
| Smart mapping | No | Not mentioned |

Table 16: Evaluation of measures energy

4.5.1 Actors

For years, Drift have been reducing their ecological impact with the use of batteries instead of using aggregates (interview SS, June 2022). Nowadays, Drift uses the electricity grid, which is the most sustainable option especially because the electricity is generated from sustainable resources (interview YL, June 2022). The municipality of Nijmegen has chosen to realize an event connection that provides sufficient capacity, even during peak hours. Drift is hosted at the Vasim in Nijmegen, and since there are more events than only Drift Festival, the municipality of Nijmegen has decided to realize such a power cabinet for events (interview YL, June 2022). In this case, an actor does not form a barrier, but it provides an opportunity for Drift to be more sustainable.

It became clear that the smart mapping can be a measure to reduce the energy use (interview MVD, June 2022). This provides more coordination between actors since the food caterers have to comply with this measure. No data was retrieved about whether Drift would implement such a measure. However, this is indicated to put the first measure in perspective. The measure that included the construction of the electricity grid involved only one actor, the municipality of Nijmegen. For the measure about smart mapping, multiple actors are involved so it could very well be that this measure will meet with more resistance.

4.5.2 Resources

In the first place, Drift is having the knowledge that using the grid is more sustainable, but they do not have the knowledge how much electricity they actually use. SS indicated that the supplier that is handling energy does have the technology to measure this, but this would in turn lead to higher costs (interview SS, June 2022). Money is thus forming a barrier in this case.

It is location depended on whether Drift can use the existing grid. However, this existing grid is relatively new and in the past Drift had a different method for using energy. SS states: *'In recent years we have always done the festival with a battery that was charged by green electricity, so at least we make sure that we do not use generators, so we do not burn diesel'* (interview SS, June 2022). This implies that whenever the recourses where not optimal, still the most sustainable option was chosen.

4.5.3 Rules of the game

There are no formal rules imposed by any government body when making the pillar energy more sustainable. However, according to SS, there is an unwritten rule that festival organizers use the existing grid if possible. But, this has nothing to with sustainability according to SS, it is risk-technical much smarter to use the grid, machines can break down faster. In addition, it is operationally easier to use the grid instead of an object that provides power (interview SS, June 2022).

4.6 Evaluation of policy context - Mobility

For the pillar mobility, it can be seen that the first measures implemented by the frontrunners are also implemented by Drift (table 17). Three groups of actors can be distinguished here: the visitors, artists and the production group. It can be seen that for the visitors a lot of measures are implemented, while for the artists and production group, this is less the case. In comparison to the pillar's materials and energy, measures for mobility are more visible. Not so much that they are physically visible, but it manifests itself more in communication and behavioural change. On top of that, there are quite a few measures that can reduce the ecological impact on mobility.

| Mobility | | |
|--------------------------------------|-----------------|--|
| Measure | Drift | Motivation |
| Communication towards visitors | Yes | Communication towards visitors to travel as sustainable as possible (Respondent 24) |
| Stimulation public transport | Yes | Shuttle busses, no parking lots, road signs for navigation (SS) |
| Offer compensation tool for visitors | No | Not mentioned |
| Compensate artists movements | No | Technology not far enough developed (MR) |
| Circular accommodation artists | Not for artists | For employees, overnight stays are arranged to reduce travel movements in the week before and after Drift (<i>respondent 14</i>) |
| Using electric cars | No | No, too dependent on actors |
| Reducing impact machinery | No | No, too dependent on actors |

Table 17: Evaluation of measures **mobility**

4.6.1 Actors

All actors have to come to the festival in one way or another, which means that they are transporting and this can evoke an ecological impact. First, the most visible group is discussed: the visitors. For this Drift festival edition, 13.000 tickets were sold and about 95% showed up to the festival (Personal communication, June 2022). MR stated the following: *‘Fortunately, the majority of our visitors come from Nijmegen, so either by bike or on foot. The people who come from outside Nijmegen almost all come by train, and from there by shuttle busses’* (interview MR, June 2022). This can be seen in table 20, where a total of 669 respondents is asked how they travelled to the festival site (personal communication, July 2022). It can be seen that 70% came by bike or on foot, which is the best way to travel to the site if looked from an ecological sustainability perspective. It is questionable in how far these results are generalizable since only 669 out of 95% of 13.000 have responded, but for the actors visitors, it could be stated that Drift is on the right track in terms of ecological sustainability when compared to the frontrunners.

| Mobility visitors | | |
|--------------------|-------------|------------|
| Type of vehicle | % | Visitors |
| Car | 8% | 54 |
| Public transport | 12% | 80 |
| Paid car service | 5% | 33 |
| Kiss & Ride | 5% | 33 |
| Bicycle or walking | 70% | 469 |
| Other | 0% | 0 |
| Total | 100% | 669 |

Table 18: Transport movements of visitors

The second group to be discussed are the artists. Because artists are more often international, you also have to deal with more travel distances. The artists are the actors that are having the most impact because of their flight movements, but MR stated that this group of actors is actually very aware of their impact. *‘The artists are very strict and careful about that. Some artists you just can't book if they have to come by plane. That awareness among some artists is really present’* (interview MR, June 2022). The barrier that is present to still have an impact is therefore not to be found in the actor dimension.

According to SS, Drift is having a lot of local suppliers from Gelderland which reduces the travel movements. However, a lot of suppliers bring their own equipment. Drift may have the wish to become more sustainable but if suppliers lack this vision, no progress will be made. In addition, YL stated that *‘sometimes only one supplier has the capacity to deliver the items you want. If this supplier does not*

prioritize sustainability, then it becomes difficult to reduce your impact' (interview YL, June 2022). This suggests that Drift is very dependent on actors in executing their sustainable policy.

4.6.2 Resources

What became clear is that 70% of the visitors already had a low impact travel movement to the festival site. Drift is actively pursuing this percentage to become higher. Drift sends a final information e-mail to all visitors where they communicate and encourage visitors to travel as sustainable as possible (personal communication, June 2022). This measure requires low effort but does reach most of the people, since this e-mail contains some important and practical information for visiting the festival. However, respondent 24 states that the communication towards sustainable travel options should be stimulated more, especially the public transport tickets. This may suggest that the employees of Drift would like to do more, but that the possibility is somehow not there.

If one looked at artists, there are some things to be noticed. First of all, *MR* stated the following about the impact about artists: *'Of course we consider that artists are already in Europe and can travel by train, so there we reduce flying where possible. But you just make your choices if an artist can't come otherwise. Then you just book those artists and fly them in. I think on the one hand we are sometimes forced to do that. On the other hand, we are also insufficiently aware of what that impact actually entails, and that is a great need of mine'* (interview *MR*, June 2022). What can be noticed from this statement is that there is a trade-off with the booking of artists. According to *MR*, there are some artists that contribute to the festival so much. A balance is made between the identity of the festival and the ecological impact (interview *MR*, June 2022). Sometimes identity is chosen over ecological impact, sometimes the other way around. In fact, this statement suggests that the booking of an artist can have more priority than improving ecological sustainability. Nevertheless, *MR* also mentions the fact that the knowledge for booking artists regarding ecological impact still lacks. As *MR* suggests, he does not know the ecological impact that it entails (interview *MR*, June 2022). So, at Drift, there is the willingness to be more sustainable, but the knowledge what actually more sustainable is lacks. Nevertheless, Drift is implementing measures in this field. *YL* stated that whenever the programmer books artists from for example Berlin, the programmer indicates that *'as Drift, we have the preference if you travel by train'* (interview *YL*, June 2022). All in all, the wish is there to be more sustainable, but the decisiveness is not. Identity is sometimes chosen over sustainability and this may be the result of the lack of knowledge on what the actual ecological impact is of the travel movements of artists.

For the production group, a lot of impact can be made when more measures are implemented. *SS* argued that most of the suppliers have the wish to work more sustainable, *'but most suppliers are quite small, and they argue that is too expensive to be more sustainable. However, they are sympathetic and they will offer what they already do in terms of sustainability. But again, you will get a price increase'* (interview *SS*, June 2022). In this case, money is forming a barrier. It turns out that sustainability is not yet a fixed item within the festival industry. This means that the contemporary products and services are not based on the most sustainable outcome. For the suppliers making the shift towards sustainable products and services, a lot of money is needed and it looks like the suppliers do not want to invest themselves in it.

4.6.3 Rules of the game

If the rules of the game on measures reducing impact regarding transport movements is discussed, there is a remarkable thing to be noticed. *MR* argued that *'An artist was in Berlin for 2 months recently, and in the meantime, you can book that artist in Europe, but he is not planning to travel up and down for just one show in America, for example'* (interview *MR*, June 2022). Informal rules can be noticed here from the artists perspective. Most of the time, artists have the most impact because of their flight

movements, so this trend among artists might have some significant ecological impact. However, it is not clear in how far all the artists are having this thought about sustainability.

What also can be placed under rules of the game is the usage of stimulants at the festival. During the day, it became clear that a lot of people were consuming alcohol and drugs (personal communication, June 2022). This ensures that people are no longer allowed to drive and this may be a reason why the car usage among visitors was low at Drift.

4.7 Evaluation of policy context - Sanitation

Only a few measures could be distinguished within the pillar sanitation. Sanitation refers in this context to the provision of clean drinking water and adequate sewage disposal. Drift does only comply with one measure in comparison with the frontrunners. Drift has dry toilets in the form of dixies. These dixies do not need water for flushing, but they have to be industrially cleaned (interview SS, June 2022).

| Sanitation | | |
|--------------------------|--------------------------------|---|
| Measure | Drift | Motivation |
| Circular sanitary system | No, but willingness is present | Do an activation to entertain and inform visitors (YL) |
| Dry toilets | Yes | No water use on site and they are practical |
| Grey water for flushing | No | Not relevant |

Table 19: Evaluation of measures sanitation

4.7.1 Actors

As stated before, the dixies have to be industrially cleaned, but this is done outside the scope of Drift (personal communication, June 2022). This means that Drift has no decisive power about the impact this cleaning has. As mentioned before, the supplier has the agency in the policy context of Drift. A suggestion would be for Drift to actively pursue suppliers to be transparent and to have sustainability prioritized. This, to be sure that whenever Drift passes on the product or service, this product or service is handled with responsibility according to the predetermined agreements that are in line with the lowest possible ecological impact. In this way, Drift regains agency and control on what actors are doing for them.

4.7.2 Recourses

At Drift festival, dixies are used, both backstage and frontstage. Dixies use no water for flushing but it uses chemicals. This reduces water usage but for the chemicals, Drift had no idea about the impact of the chemicals (interview SS, June 2022). In this case knowledge forms a barrier in ensuring a more sustainable policy.

During the construction the festival, a supplier did not show up and the construction of a stage had to be adjusted (personal communication, June 2022). For this adjustment, about ten thousand liter water had to be used as ballast for safety. During the observation, SS expressed the wish to in the end recycle the water in some way, but the infrastructure and knowledge to execute this was not sufficient. In the end, the water was discharged in the Waal, where it was also retrieved from. Again knowledge forms a barrier, but in this case also infrastructure forms a barrier. As was the case at DGTL and Awakenings, the water could have been used as grey water but because the infrastructure was not present, it was not possible to choose the most sustainable option.

Furthermore, YL stated the wish to implement a circular sanitary system. *‘For example, circular toilets where a kind of experience is created and then visitors can be stimulated around the theme of sustainability which can then have an effect in their private lives’* (interview YL, June 2022). The

knowledge and willingness is present, but YL mentions that there is a financial barrier to implement this.

4.7.3 Rules of the game

MVD indicated that at DGTL they cannot innovate further because this is not yet legally possible (interview MVD, June 2022). In this case, regulation is a barrier. However, Drift is not implementing measures where they run into this barrier. Therefore, no (in)formal rules are there to be spotted that influence the policy context at Drift.

4.8 Evaluation of policy context - Food

The last pillar where an evaluation of Drifts measures can be done is food. If one looked at the frontrunners, it is noticeable that DGTL offers a plant-based menu, which is the most sustainable option (interview MVD, June 2022). Awakenings offers a vegetarian menu because they do not know in how far a vegan menu is significantly more sustainable (interview NS, January 2023). In the following chapters, Drift will be discussed using the organisational aspects of the PAA.

| Food | | |
|---------------------------|--|---|
| Measure | Drift | Motivation |
| Change menu | Yes, but vegetarian instead of plant-based | Habits and geographical location |
| Biodegradable disposables | Partly | Not biodegradable but responsible disposables |
| Composting machine | No | Not relevant |

Table 20: Evaluation of measures food

4.8.1 Actors

If the pillar food is examined, then the visitors can be discussed again first. Same as with sanitation, visitors are the one that are experiencing these measures the most. At Drift, a vegetarian instead of a plant-based menu is offered. YL stated: *‘We are completely vegetarian, which was a big step, because there was quite a bit of discussion from the organization about whether or not we were going to do that’* (interview YL, June 2022). SS argued that due to Drift’s geographical location in the east, the switch to a vegetarian menu was delayed, which has already been discussed in the discourse analysis. However, SS also mentioned the fact that people more and more accepted the vegetarian options and therefore the support has increased (interview SS, June 2022). At the office of Drift, the employees have been eating vegetarian for years and in the survey, there was no data to be found that indicated that the employees resisted this measure.

4.8.2 Recourses

As is mentioned before, the food trucks must have the possibility and capacity to switch to a vegetarian menu. From the observation it became clear that food trucks were well prepared to this switch and the food caterers made clear that already many festivals have made this switch to a vegetarian menu (personal communication, June 2022). On top of that, SS praises the technology that makes the meat substitutes tastes like actual meat and that therefore, *‘people are thinking that vegetarian food is getting better’* (interview SS, June 2022).

At the frontrunners, it was not clear how much better a vegan instead of a vegetarian menu was in terms of sustainability (interview NS, January 2023). In this case knowledge would be a barrier, but Drift has explicitly chosen for a vegetarian menu and therefore this barrier is not relevant (interview SS, June 2022; interview YL, June 2022).

YL argued that at Drift Festival, they make use of responsible disposables. These disposables are not biodegradable, but they are also not the worst possible disposables for the environment (interview YL, June 2022). Because no biodegradables are used, the use of the composting machine will become irrelevant, since this can only be used whenever biodegradables are used (interview MVD, June 2022). In the interviews it did not become clear if Drift was willing to use a composting machine.

4.8.3 Rules of the game

There are no formal nor informal rules to be noticed in this policy programme. YL stated that the implementation of the vegetarian menu for all employers was something that happened due to the intrinsic motivation to become vegetarian as an organization (interview YL, June 2022).

5. Conclusion

This thesis has tried to conceptualise the policy context of the implemented sustainable measures at Drift. The gap in the literature but the need for more sustainable measures in the festival industry made this investigation both relevant and interesting. Based on the frontrunners, a frame of reference has been outlined in which the sustainable measures have been mapped out. The measures that Drift implements are compared to the ideal situation retrieved from the frontrunners. Next to that, a policy arrangement approach has been set up to map the barriers that Drift is experiencing when working on their sustainable policy context. On top of that, measures were also found that could not be identified from the literature or spotted at the frontrunners. In this conclusion, the sub-questions will first be answered to ultimately, provide an answer on the main research question.

Sub-question one states: *How is sustainability framed within music festival organizations?* This first sub-question opens the discussion on what festival organizations think of sustainability in general. For this question, Drift has been used as case study to examine this topic. The way how sustainability is framed was examined through a discourse analysis, where the use of the ontological, normative and strategic layer outlined the way Drift framed sustainability. What stands out is the fact that the triple bottom line approach of Elkington (1998) can be linked to the results. This triple bottom line approach stresses the presence of ecological, economic and social sustainability. The survey among employees showed that the answers could be divided into the three forms of sustainability according to the triple bottom line approach of Elkington. The focus of this thesis was on ecological sustainability and the survey showed that the employees were understanding sustainability most of the times as ecological sustainability. This contradicts Zou *et al.* (2021, p.192), where it was argued that most festivals interpreted sustainability as a festival's ability to survive instead of ecological concerns. At Drift festival, the ecological component of sustainability is prioritized above the economic component. However, from the results it became clear that the economic and ecological component are highly interrelated, since multiple measures are not implemented due to high costs. This is in line with Brennan *et al.* (2019), where it is stated that the prioritization of ecological sustainability tends to be outweighed by other forms of sustainability which can lead to a lower sustainable output.

Zifkos (2015) discussed the notion that festivals on its own are not sustainable, and that they could only be aware of their unsustainability. This is in line with the results from the Drift case study, since multiple results showed that Drift acknowledges the fact that a festival is per definition not sustainable. However, the statement of Zifkos (2015) is only partly applicable to the Drift case study. Drift is aware of the fact that they are unsustainable, but they are not aware on how unsustainable they actually are. The Material Flow Analysis implemented by DGTL gives a structural overview of how sustainable a festival is (DGTL, 2022). It provides the in- and output of all resources used at the festival and how these resources are handled afterwards. All Drift's interview respondents have expressed the wish to implement such a data-driven approach. The main reason for this was the fact that whenever it is known how sustainable a festival is, it is also known on what areas a festival is unsustainable. This provides a handle to implement sustainable measures where needed, because otherwise measures would have been implemented where it would not have significant impact reduction.

The second sub-question examines what can be done to improve ecological sustainability at festivals: *What sustainability measures can be distinguished at music festivals?* In this thesis, the pillar approach of DGTL is used as a handle since this gives a structural grouping of various measures. The five pillars used in this thesis are materials, energy, mobility, sanitation and food (DGTL, 2022). In the results, the measures implemented by Awakenings, DGTL and Drift are mapped and presented in tables. Something remarkable was the fact that these measures are often context depended. Awakenings and DGTL have both been classified as frontrunners in implementing measures that ensure ecological

sustainability. However, even between these two frontrunners, many differences could be spotted. For every festival, the date, location, influence of actors, size and many more factors are different. This context dependency may be a reason for the few scientific articles to be found. Each festival is an object in itself where some things work and some do not. Similarities can be identified but it is difficult to make generalizations for every aspect of ecological sustainability. Even though Awakenings and DGTL are classified as frontrunners, Drift implements certain measures that the frontrunners do not.

The fact that context dependency plays a big role makes it interesting to analyse the case study and this leads to the third sub-question: *What is the current state of the implementation of measures regarding sustainability at Drift – Om te Dansen?* By placing Drift next to the frontrunners, it becomes clear where they deviate from the implementation of measures. Within each pillar there are measures where Drift lags behind. The context dependency remains important, but there are also measures for which Drift is not decisive enough to realize them. Multiple reasons will be discussed for this implementation gap.

First of all, it could be noticed that the frontrunners adopts a strong sustainability perspective while Drift is having a weak sustainability perspective. Especially at DGTL, where it is stated that it is more sustainable to come to the festival than to stay at home (DGTL, 2022). It is arguable whether this statement is correct and this thesis remains critical on this, but it does indicate that DGTL has adopted a strong sustainability perspective. Drift acknowledged the importance of sustainability but they let themselves be held back too much by the barriers. This thesis argues therefore that Drift is having a weak sustainability perspective unlike the frontrunners.

Furthermore, if one considers the conceptualisations of ecological sustainability of Dobson (1996), then it becomes clear that Drift differs from the frontrunners. The frontrunners will not be found in column D, because there are still a lot of transport movements, many material flows and the impact of compensation stays too unclear. However, they are both decisive and acknowledging the importance of implementation of measures. There is a balanced trade-off between human welfare and the obligations to nature which put the frontrunners in column C. Drift, on the other hand, cannot be placed in column C. Drift acknowledges the importance of ecological sustainability, but the decisiveness in implementing measures lacks behind. Therefore, Drift fits better in column B. It became clear from the results that the willingness is present at Drift but the decisiveness is not.

The three sub-questions has provided the foundation for the main research question: *Which barriers does Drift – Om te Dansen encounter when trying to improve ecological sustainability?* Through the comparison with the frontrunners and the use of the policy arrangement approach, barriers could be identified that Drift encounters when implementing sustainable measures. The substance aspect has already largely been covered in the sub-questions. The organisational aspects are forming the biggest barriers in Drifts sustainability policy context.

It can be seen that for the organisational dimension actors, some similarities across the pillars were to be spotted. In implementing sustainable measures it became clear that a different type of actor does have different impact on the policy context. The visitors must be approached very differently than for example the artists or the production group. In some cases, actors might form a barrier but in other cases actors are ensuring the sustainable policy context to be thriving. For example, the municipality ensured the most sustainable outcome with the construction of an electricity grid for festivals or the presence of Studio Linksvoor ensured Drift to make use of some infrastructures. On top of that, the creation of a new actor in the form of a greenteam ensured Drift to make the best out of the context. Through the creation of this green team, Drift can be seen as a policy entrepreneur in the field of ecological sustainability. However, habits of actors and the lack of decisiveness of actors slowed

down the policy context regarding sustainable measures. Furthermore, Drift has created a context where they are too dependent on certain actors. This causes that Drift does not have the agency in their own sustainable policy context. This happens for example within the pillar sanitation, because Drift has no insights at what is happening at suppliers. At the pillar mobility, the artists are causing significant impact due to travel movements but Drift still chooses to book those artists to radiate a certain identity. In this case, Drift in itself is the actor that is preventing sustainable measures to be implemented because of their identity.

Identity already calls for the next dimension of the organisational aspects: resources. In this thesis it is found that the most barriers can be identified within the dimensions resources. The theoretical framework provided insights about the resources time, money, knowledge and the availability of technology. All of these resources are found to be barriers, but the results showed that there were more resources forming a barrier. As mentioned before, identity forms a barrier but this is implied by Drift in itself. In the trade-off between identity and ecological sustainability, identity is sometimes chosen and therefore, sustainable measures are not implemented. Identity as a barrier mainly occurred in the mobility pillar, since the presence of artists did have a big effect on the identity of Drift.

The resource infrastructure led to a sustainable outcome at the pillar materials and energy, but at the pillar sanitation, infrastructure did form a barrier. Not the most sustainable outcome could be guaranteed since the infrastructure was not present to ensure this. In this case, it can be seen that a resource can form both a barrier and an opportunity for sustainable policy.

Money, time, knowledge and the availability of technology had been discussed in the theoretical framework. All of these resources are found to be barriers in the sustainable policy context. The resource time is only mentioned a few times in the survey. This was not found to be significant enough to include it extensively in the results. On top of that, the creation of a sustainability department might exclude time as a barrier. On the contrary, the other resources were found to be significant barriers in implementing measures. The biggest barrier was money, where it already had been discussed that economic sustainability is often prioritized above ecological sustainability (Brennan *et al.* 2019; Zou *et al.*, 2021). At the trade-off how much money is made available to implement certain measures, it is often chosen to secure economic sustainability. In no cases, ecological sustainability was prioritized above economic sustainability. All measures implemented were implemented because the context allowed it. Especially within the pillar materials and mobility did money form a barrier.

It was found that the resource knowledge and availability of technology were interrelated. Multiple results showed that Drift did not know how sustainable they were because of the absence of the right technology to measure this. The need for a data-driven approach to measure this sustainability, the unsustainability as Zifkos (2015) would describe it, would be in much favour for Drift. This data-driven approach, which was notable at for example DGTL, ensures to know where measures could have the maximum impact when implemented.

At last, the dimension rules of the game was discussed to see if it did form a barrier. There were no formal rules that were serving as a barrier for Drift. The formal rules that were present at for example the pillar materials were sharpening the policy context rather than preventing measures to be implemented. Furthermore, formal rules could be spotted at the pillar sanitation, but Drift has not the policy context where it can be a barrier, perhaps in the future. Many informal rules were spotted in the policy context, but none of them are found significant enough to form an obstructing barrier.

To conclude, the notion of ensuring ecological sustainability is present at Drift, but the decisiveness lacks to implement measures that have significant impact reduction. Too many barriers were spotted at Drift that obstructed in the policy context. Drift has not prioritized sustainability that much that they

are doing everything they can to overcome these barriers. Many times, the barriers they are facing can be analysed with a policy arrangement approach on itself. With the creation of a festival there are so many structures and actors present that different policy fields are to be found within other policy fields and this impacts the feasibility. However, Drift is implementing certain measures that provides 13.000 people to participate in a sustainable practice. Drift is having some measures implemented that can be classified as the most sustainable option or close to it. Nevertheless, it stays difficult to classify Drift on how sustainable they are, especially because the technology and scientific literature to measure the unsustainability of a festival is not there yet.

6. Reflection

6.1 Limitations

In this master thesis, an investigation has been carried out to sustainability at festivals. This topic is little discussed in academic writings and only a few companies are both actively pursuing and communicating about sustainability topics. DGTL is an established name in this particular field in the festival industry and finding a respondent such as DGTL has therefore been very valuable for this research. However, as mentioned before in this thesis, making festivals more sustainable is very context dependent. This means that measures at DGTL can have completely other outcomes at Drift. Therefore, Awakenings was used to, together with DGTL, draw up a frame of reference. The use of two festival to draw up this frame of reference was rather low, but since only few festivals communicated content about sustainability it was hard to find more festivals that had prioritized sustainability so much. The best case scenario would have been to draw up a frame of reference and use theories from the academic writings. Unfortunately, sustainability has not been present in the festival sector for long and only few relevant writings have been published about this topic.

Furthermore, the number of interviews at Drift is rather low, but the three interviewed were the only employees that had a relevant opinion about the sustainability topics that were discussed. The answers from the survey covers more opinion from the other employees at Drift, but these employees were not daily busy with sustainability topics, while the three interview respondents were.

Because of the fact that little scientific knowledge was present about this topic, this thesis had to cover many elements to get a holistic view. Multiple methods had been used to retrieve data about all relevant objects, but the different types of data may cause the structure to be somewhat sloppy.

6.2 Recommendations

What stood out the most in this thesis was the need for a data-driven approach. The way of working at DGTL provided clear measurements about their current state. The knowledge of how sustainable a festival is can give an organisation a baseline. From this baseline, organisations can see where they are sustainable and where not to eventually, implement measures. At Drift, the willingness to become more sustainable was clearly present, but too many barriers were spotted to implement more measures. However, a data-driven approach will not reduce all barriers, but it can point an organisation in the right direction.

Next to that, if Drift is willing to implement more sustainable measures, they must prioritize sustainability more than they do now. Many times, economic sustainability is chosen over ecological sustainability. However, what could be spotted at DGTL, if you prioritize ecological sustainability than new opportunities will arise and new business will be prepared to work together. Implementing sustainable measures is a trend and it is interesting how this trend will develop.

This thesis suggests for new research where this data-driven approach is used in order to become more sustainable. Looking at how recourses change when more knowledge is acquired would be a field of investigation that might be relevant after this master thesis. Examining whether this data driven approach is also not context dependent would be interesting. In the end, every festival organization has to become more sustainable so measures must eventually be undertaken.

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Appendix

1. Survey guide

Translated from Dutch

Hi!! Thank you for your time and for your contribution to my research. For the people who don't know exactly what I do yet: I'm Sven, 22 years old and working on my graduation internship at Studio Linksvoor. I am doing the Master Corporate Sustainability at Radboud University and for my Master's thesis I am doing research into ecological sustainability at festivals. It takes about 5-10 minutes to complete and is completely anonymous. Thanks in advance!

Personal questions:

Q1: What is your gender?

- Man
- Women
- Other

Q2: What is your age?

Q3: What is your highest prior education?

- MBO
- HBO
- WO
- Other:

Q4: What definition do you give to the word sustainability?

Q5: Who do you think should bear the primary responsibility for transitioning to a more sustainable society: the government, citizens or the business community? Can you explain why?

Studio Linksvoor related questions:

Q6: For which department(s) do you work at Studio Linksvoor?

- Marketing
- Production
- People & operations
- Sustainability
- Catering industry
- Managing board
- Finance
- Other:

Q7: Which BV(s) do you work for?

- Drift - Om te Dansen
- SMKMRKT
- De Achtertuin
- Café Van Ouds
- Mout Bierfestival
- Iconic Festival

- Breakfast Club
- Schemerlicht
- Other:

Q8: How would you describe your position within Drift?

Q9: To what extent do you think sustainability is alive at Drift? Can you justify this with an example?

Q10: What is already happening in your department about sustainability? Try to describe this with examples

Q11: Which obstacle(s) do you encounter most when making events more sustainable and circular?

Q12: Are there things at work that motivate and encourage you to choose the most sustainable option? Can you give an example of that?

Q13: How would you like to work with colleagues on the topics from this questionnaire in a 2-hour trial session at the office?

- I am interested
- I am interested, but:
- I am not interested

Finally, do you have any suggestions/tips when it comes to sustainability within Studio Linksvoor?

Thank you for your time!

2. Interview guide Awakenings and DGTL

Translated from Dutch

Interview MVD (DGTL) and NS (Awakenings)

Can you introduce yourself and introduce the work that you do?

How does the data-driven approach work at DGTL?

Which measures do you apply to ensure ecological sustainability within the pillar materials?

Which measures do you apply to ensure ecological sustainability within the pillar energy?

Which measures do you apply to ensure ecological sustainability within the pillar mobility?

Which measures do you apply to ensure ecological sustainability within the pillar sanitation?

Which measures do you apply to ensure ecological sustainability within the pillar food?

Do you think the technology is far enough developed to realise a sustainable festival?

Are there rules that are preventing DGTL to become more sustainable?

Do the suppliers agree with your sustainability policy?

Are you facing barriers when implementing sustainable measures?

Do you also see opportunities when implementing sustainable measures?

3. Interview guide Drift

Interview YL and SS (Drift)

Can you tell something about yourself, your position within Studio Linksvoor and the Drift Festival?

What does sustainability mean to you?

What does sustainability mean to Studio Linksvoor/Drift?

What is the reason that sustainability is suddenly on the agenda of Drift?

What kind of sustainable measures have been implemented in the past/present/future? Can you give an evaluation on this measures? Why did it (not) work? → Food, Transport, Energy, Water and Material

When you want to implement sustainable measures on festival, what kind of barriers are you facing?
→ Suppliers, visitors, municipality, departments, money, time, measure instruments

When you want to implement sustainable measures on festival, what kind of possibilities do you see?
→ Suppliers, visitors, municipality, departments, money, time, measure instruments

Who plays an active role when more sustainable festivals are realised?

Can you tell something about the legislation and jurisdiction regarding sustainable measures?

Do you think organising a completely sustainable festival is possible? Will this be profitable?

Do you promote sustainability?

Are there some developments that you see that will be a trend for the next 10 years?

Who do you think has the responsibility for creating a sphere where festivals will be more sustainable?

Interview MR (Drift)

Additional questions for interview 2

What identity does Drift have according to you?

How does this identity go hand in hand with sustainability?

Can you tell something about the creative aspect of Drift?

What feedback do you get from visitors about the identity of Drift?

What feedback do you get from visitors about sustainability at Drift?

Are there some things that are special to Drift, things you can not find in other festivals

What is characteristic for the corporate structure of Drift?