Air pollution and social inequality in the European Union

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ABSTRACT

Commonly, air pollution is treated by the European Union (EU) and its member states as a structural problem with technical, one-size-fit-all solutions. The EU has the ambition to follow the United Nation's *Sustainable Development Goals*, *Agenda 2030*, in which, for example, gender equality is highlighted. Yet, the legislation on toxic air does not explicitly mention how they aim to achieve social equality. Neither has it a gender or intersectional perspective, as far as I could find. Instead, the *EU Sustainable Development Strategy* rather focus on resource efficiency and 'green' economic growth as a trickle-down-theory solution.

Since 2008 is clean air stated as a human right in the United Kingdom (UK), but tens of thousands living in UK die every year as a result of toxic air. The environmental law organisation ClientEarth has sued the UK government on their lack of action on this, and won a precedential case in the European Court of Justice in 2014.

This study compares how the EU and ClientEarth speak about air pollution and social equality, foremost in regards to health and sustainable transport. None of the actors go into greater detail on how social categories such as those with lower socioeconomic status are affected differently by ambient air, and what can be done about it.

The essay therefore concludes that legislation on toxic air needs to be contextualised to a greater extent, including a macro perspective keeping social inequalities in mind. In other words; environmental justice - for whom?

Keywords: air pollution, anthropology, environmental policy, European Union, sustainability.

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PART ONE

Background, theoretical and methodological framework

1. Introduction

1.1. Foreword

The concept 'sustainable development' has three pillars - the social, economic and environmental perspective - and has been included in European Union policies since the United Nation's Brundtland report in 1987. The starting point for this essay is: how do different actors in society deal with the social dimension of sustainable development in environmental matters?

To paint a wide picture I have chosen to look at the European Union (EU) and a civil society organisation, the environmental non-governmental organisation (NGO) ClientEarth. A comparative case study of these two actors illustrates how the actors relate to the social dimension of sustainable development concerning environmental jurisprudence within Europe. Specifically, how do the EU and an environmental NGO refer to social equality issues in regard to air pollution?

This thesis investigates the issue from the outlook of *anthropology of policy* and *discourse analysis*. The material I have analysed are their respective 'Handbook on Clean Air', press releases and web pages related to air pollution. Additionally, I analyse Eurostat's report on sustainable development in the EU (2015). The texts entail the EU directives on air quality, and ClientEarth's lawsuit against the government of the United Kingdom (UK) for illegal levels of toxic air.

Key perspectives I have searched for are how the actors directly and/or indirectly relate to the social dimension of sustainable development, and further, if the social perspective includes intersectionality - are different social groups mentioned? If so, do the actors mention how social groups are differently affected by air pollution? The wider purpose is to look at how environmental justice connects to social equality in discourses and in practice.

Research clearly shows that environmental issues, such as toxic air, affect people differently depending on their social position. Those living in suburbs with lower incomes are often

more affected and more vulnerable to diseases such as cancer, weakened hearts and respiratory problems.

1.2. Aim

The aim of the paper is twofold; *firstly*, the thesis aim to explore how air pollution affects social groups differently. *Secondly*, by doing this, the intention is to unveil how social equality issues regarding air pollution are, or are not, discussed by an environmental NGO and within the EU's legislation and information on air pollution and sustainable development.

1.3. Research questions

1. How can air pollution policy in Europe be understood in relation to environmental justice with an intersectional perspective?

- How does the EU in legislation, policies, and official information on air pollution relate to social equality issues? Do they relate to social categories such as socioeconomic status and gender?

- How does the NGO ClientEarth's formulation of and activism against air pollution issues relate to social equality? Do they relate to social categories such as socioeconomic status and gender?

2. How are the EU and ClientEarth relating to the social dimension of sustainable development in regards to air pollution?

1.4. Delimitations

As the field of research is enormous, the challenge is to delimit; to find a small 'site' or focus area that can show larger processes of political transformation. For example, to follow a flow of events, see policies as contested narratives and imaginaries. The ratifying of laws and when they are implemented in concrete situations, can illustrate when policy-making has succeeded to make a particular view authoritative and silencing other perspectives (Shore & Wright 2011:14-15).

The chosen ‘site’ for this paper is topics on air pollution as expressed by the NGO ClientEarth and the EU within a certain time frame. So, the delimitations are bound by time: the earliest dated document in the analysis is from 2008, the latest dated text is from spring 2016. However, the majority of the texts are from 2015-2016. Another limitation is scope: as the main point was to investigate how the actors do, or do not, tackle social inequality, I deemed it necessary to choose texts on similar topics. In other words, texts related to air pollution. Yet, although the texts sometimes overlap each other, they also differ in many aspects.

An important event to note is the EU referendum, held in June 23, 2016, when the citizens of the UK voted to leave the EU; Brexit. As of spring 2017, it is still unclear what the outcomes of Brexit will be, and it is too early to speculate further within the extent of this paper. I have therefore restricted the research subject area, and wrote about it as if the UK is a member of the EU and still subjected to the ECJ ruling.

2. Background

This chapter presents the main themes for the essay; 'environmental justice' and 'air pollution'. The themes are explained by providing a short overview of their background and notably characteristics.

2.1. Environmental justice

Environmental justice, both as a social movement and political approach, highlights the connection between environmental issues with social inequalities such as health disparities. As a concept, it was first written about academically in an US landmark study in 1987. It showed that communities of coloured people were subjected to a disproportionate risk from commercial toxic waste; environmental racism. Close to the Civil Rights movement it grew into the first paradigm to link environment, gender, class, race, and social justice concerns (Agyeman & Evans 2004:155-156).

At both an academic as well as a political level there is a fast-growing interest in the relationship between social equality and environmental quality. Already 15 years ago research illuminated unequal distribution of environmental pollution. For example, that disadvantaged people suffer from respiratory problems that derive from experiencing the highest levels of traffic and ambient air in the study (Chalmers & Colvin 2005:333-334).

Environmental justice research should thus focus on equity and social equality by looking at the health hazards, and the epidemiology that follows, for example, the effects of air pollution (Buzzelli 2007:5). Additionally, it should also consider gendered activity patterns, work, biological explanations, and so on (Clougherty 2010). That means to examine whether environmental effects are spread equally between different population groups, focusing on disadvantaged people as they might be more harmed environmentally. Increased air pollution for vulnerable populations most likely results in negative health effects and thence also increased medical costs and psychosocial stress (Kingham et al., 2007:254-255).

2.2. Air pollution

Air pollution is an important factor in climate change, and the single largest environmental health risk in Europe, as well as globally. Toxic air kills more people a year than HIV and malaria combined, in Europe 430 000 dies prematurely yearly, in China 4 000 people a day die of air pollution. Health impacts are shortened lifespans, heart disease, cancer, asthma. Subsequently the economic costs are significant (The Guardian, January 16, 2016).

Extreme air pollution events occurred in the early twentieth century in Meuse River Valley, France, in 1930, Donora, Pennsylvania, in October 1948; and in London 5-9th December 1952. The first to be harmed was the sick and old people, leading to the first construction of the connection between health and air pollution (Peled 2011: 1781).

The main air pollutant in Europe is emissions of nitrogen oxides (NOx), deriving mostly from road transport, further, 80% of the NOx emissions from vehicles originates from diesel vehicles. The key to achieve the nitrogen dioxide (NO2) limits is thus to regulate emissions from diesel vehicles as the road transport sector causes approximate 40% of Europe's NOx emissions. Moreover, the levels of emitted NOx are not meeting the air quality standards in many urban areas, although emissions have declined since 1990. On the contrary, the concentrations of NOx in ambient air is exceeding the EU legal limit in 19 out of 28 EU member states, as of 2013 (CE, 2015c:3-4).

The air quality in London is the worst in Europe. It took only one week into 2016 to breach the annual EU NO2 limits - for the fifth year in a row (The Guardian, January 8, 2016). Official monitoring stations on the most polluted streets in London show pollution levels three times higher than the legal limit[1] in the first three months in 2016 (CE, 30 April 2016[2]).

[1] An average up to 133µg/m3 of pollution levels, comparing to the legal level average of 40µg/m3.
[2] ClientEarth press release, hereinafter shortened to CE.

3. PREVIOUS RESEARCH

This chapter takes a closer look at air pollution and social inequality, focusing on health disparities. It shows how the outcome of air pollution is gendered; both from a biological and sociocultural perspective.

3.1. Environmental policies

I could not find any previous research within the field of anthropology and gender studies with the same vein in their studies as this one. Instead, I have drawn upon research from various disciplines. Most of them were within health epidemiology and environmental science, some from human geography, political ecology, political science or sociology, while others had a transdisciplinary background. The advantage with references from various fields of studies is that it forms a broad knowledge base that ties the subject area together and the different viewpoints complement each other. For this study, in particular, it makes sense as subjects range from jurisprudence and socioeconomic issues to health epidemiology to politics. In contrast, a disadvantage might be a too broad scope for a thesis.

The few findings of previous research using the same approach as my study does, illustrate a need for more research within anthropology with themes of environmental policy and justice, juxta positioned with social equality and intersectionality.

3.2. Air pollution and social inequality

An important area for the study is health disparities and air pollution epidemiology, as health impacts is one of the main reasons for undertaking environmental justice research, Buzzelli (2007) writes, adding that the lack of attention to this is remarkable (5). He argues that merging studies on population health, social structure, and air pollution epidemiology would be an opportunity for deeper knowledge on social justice and equality for environmental justice movements (10-11). Further, evaluating health effects associated with socioeconomic factors and air pollution is very important as it establishes the real costs of air pollution, both in terms of distribution of those costs in the society, and the costs of development and/or lack of proper policies on toxic air (Bell et. al. 2005:526).

An analysis of air quality in London and elsewhere is a question of health disparities that shows "...who belongs and who does not, who is deserving and who is not in a constellation of megacity inequality." (Adey 2013:294).

Buzzelli (2007) also emphasizes that social justice and equity are foundational when conducting environmental justice research. For example, it has been shown that individuals with low education are the most vulnerable to health effects of toxic air. Further, proximity to hazards is shaped by social processes such as discriminatory real estate prices and housing market dynamics. This results in disadvantaged communities usually living in the urban spaces with the highest risk of dangerous levels of toxic air. In other words, one needs to look beyond individual risk factors and see the broader social stratification and equality issues. Moreover, to ask: what is the social composition in the highest polluted spaces; does socio-spatial stratification influence how one is exposed to, and modifies, health hazards (5)?

One way to explore the patterns of social stratification and its health disparities can be done with the help of Bourdieu's theories and relational framework. Buzzelli (2007) illustrates how different forms of capital; economic, social, cultural, political, human and symbolic capital, cast individuals and communities into hierarchies. Because, as Bourdieu has demonstrated, one's position in the social hierarchy is related to almost every aspect of life (8).

Despite the eventual differences in definitions and methodology between research on social stratification and health impacts of air pollution, all studies clearly show that social inequality in connection to environmental issues exists.

For example, the most economically and socially disadvantaged people experience respiratory problems associated with being exposed to the highest traffic levels (Chalmers & Colvin 2005:334). In the UK, in amongst other places, London, Manchester and Liverpool, it was unveiled already in 2003 that deprived communities bear the greatest burden of poor air quality - including experiencing the highest concentrations of nitrogen dioxide (NO2), fine particulates (PM10), and benzene, to mention a few toxic chemicals. When it comes to NO2 were people in deprived areas exposed to 41% higher concentrations than those living in

wards of average deprivation (346). Yet, as of early 2000's, environmental inequalities were barely featured in government policy (336).

Possible explanations could be that deprived subgroups are more likely to have poorer nutrition and health care, as well as other increased health risks. Underlying biological mechanisms can be oxidative stress and immune system damage after both short- and long-term exposures to toxic air. Other suggestions are that people of lower socioeconomic status are more likely to live and work in places with higher degrees of air pollution, and the smoking prevalence is higher within these groups, further increasing the vulnerability (Peled 2011:1783).

Peled (2011) characterize a number of susceptible groups: newborn, young infants and children, the elderly, people who suffer from cardiovascular or respiratory diseases, or from allergies, those who are pregnant, and deprived populations (1781). Despite that studies, as those mentioned above, have pointed out susceptible groups, national guidelines on air quality standards are still the same for an entire population. Meaning that air pollution policy assume that the risks are uniform and applied to all individuals across large geographical areas. Consequently, that the baseline rates of mortality and health care use are expected to be the same everywhere nationally (Ibid.).

Ebbesson (2009) notes how concepts in environmental law might appear neutral, until they are applied into a certain context, revealing disproportionate burdening for certain groups, and how subjects might be demeaned or ignored. Partly so, as environmental laws and policies are goal-oriented, so are policies on sustainable development although it seeks to have a societal objective (1). Notably is also the main difference between environmental law and debate in Europe vis-a-vis in the USA, as the poverty arguments typical for the debate in the USA, that link environmental hazards to the social status of certain at-risk groups, is missing from the European jurisprudence. Correspondingly, an European lawyer who are not familiar with the American debate would probably interpret environmental justice as aiming towards doing justice to the environment itself, thereby omitting the social aspect of the perspective (17).

3.3. Air pollution and gender

Another aspect to take into account is how social dynamics such as gender and sex shape differences regarding air pollution. There is a need to decipher how biological sex and sociocultural gender influences the susceptibility to ambient air, as well as how different norms and behaviour add to the effects on and of toxic air.

Gender and sex can sometimes mistakenly be used interchangeable to simply differentiate women and men. For environmental health research that risk omitting, for example, how gender as a cultural construct are associated spatially and with daily activities, which in turn means limitations for air pollution health studies to exactly pinpoint the gendered effects. Resulting in that physiological systems are the most common sources of observed differences in effects of toxic air on males and females. All in all, most studies have reported stronger effects among women than among men (Oiamo & Luginaah 2013:3802).

A study from Sarnia, Canada, demonstrated that women were more prone to skin diseases (Oiamo & Luginaah 2013:3803). The women in the study also reported significantly higher rates of allergies, while the studied men exhibited a higher rate of heart diseases. The estimated exposure to air pollution was the same between the sexes (3807). Due to genetic differences are women more susceptible to allergy and eczema. But also, most female-dominated occupations are more likely to cause skin diseases as they require wet work (3812).

Many more women than ever before are spending their time in public space; travelling by trains, buses, bicycles or by foot. This is a result of increased female labour away from home, and that the number of female breadwinners has increased (Thynell 2016:72). Despite that urbanisation might entail increased opportunities for women, in their daily lives they still experience excessively disadvantages compared to men. This also colours the transport sector with prevailing masculine norms and it consists mostly of men (73).

Gendered mobility is a recurring theme, for example, the World Bank emphasizes the need for a gender analysis of women's mobile situation, needs, priorities, constraints, possibilities, and travel behaviour. This includes variables such as income and health - to gain deeper

knowledge contextually in order to establish 'transport equality' by designing effective policies on transport (Thynell 2016:73). However, gendered mobility is more complex than just socioeconomic status. Different masculine and feminine norms play a role as well, for example, women tend to choose public transport (if it is safe), and less polluting transport modes than men. An explanation is that motorised vehicles are associated with masculinity, autonomy and freedom; to be a modern man is to drive a motorised vehicle, like a car. Identity and mobility is thus connected (77).

In sum, women and men are often affected differently by the state of the environment, partly due to societal structures. In so, environmental laws should factor in the gender dynamic, but when it fails to do so, it contributes to gendered inequality, as well as making environmental laws less effective in protecting the environment (Ebbesson 2009:30). When it comes to gender and legislation, men can be viewed as gatekeepers, as the powerful globally influential lawyers often are men. However, Western norms of masculinity have started to loosen up into a more caring attitude - thereby changing societal norms and the view on the relation between man and the environment. A suggestion is that environmental virtues, such as sustainability and environmental justice, should not be understood too legalistically. Instead, environmental justice should encompass practices that look beyond norms, by avoiding being trapped in a 'traditional' dichotomy of national and international law (11).

4. Theory

The theoretical framework contains the following key themes: 'discourses', 'policy', 'anthropology of policy', 'intersectionality', and 'ecofeminism'. Together, theories on those themes can paint a picture of the field 'environmental justice' and 'air pollution', in order to better get an understanding of the EU's and ClientEarth's approaches to air pollution and social issues.

4.1. Discourse

While there is a myriad of definitions of 'discourse', Shore & Wright (2005) define discourses "...as configurations of ideas which provide the threads from which ideologies are woven." (14). Accentuating on language as socially constructed, 'politics of discursive practice', and the concern of who has the power to define (Ibid.). According to Smith (2005) is language coordinating people's consciousness or subjectivities (76). Language is therefore an activity that organises other activities, and is inseparable from people's' doings (79).

The discursive formulation of environmental problems shapes how a situation is understood, articulated and treated as environmental issues are intermeshed among other discourses. For example, climate change can be seen as a question of security, resource scarcity or a geopolitical issue. Environmental discourses compete with other discourses, such as development or economic discourses. Subsequently, environmental discourse is not homogenous, nor are concepts such as 'nature', 'sustainability' and 'progress' unanimously defined (Feindt & Oels 2005:162).

Having a discursive perspective could be to consider how everyday practice and environmental policy making are produced according to different discourses. Feindt & Oels (2005) pose the question whether environmental policy is about environment and nature at all, or just an excuse for reconfiguration of power and redistribution (163).

That is why Robbins (2012) underlines the differences between political and apolitical ecologies, where the former is an alternative approach towards the latter. The political ecology perspective emphasizes the broader systems that environmental issues are part of,

views ecological systems as politically power-laden, and opposites the idea of objectivity. Shortly, the transdisciplinary approach connects economics, politics and nature. In so, it challenges the apolitical view on ecologies that tends to dominate global discussions on environmental questions (13-14).

A widespread apolitical explanation is the rhetoric of modernisation; stating that environmental problems arise from inadequate adoptions of 'modern' economic techniques. Usually this view rests on commitment to economic efficiency. These explanations are examples of apolitical answers to political questions. Robbins (2012) argues that the underpinning influence is political economic forces (18-19).

4.2. Air pollution and discourses

Discourse is highly important to take into account in the field of environmental policy, as discourses frame what can and cannot be thought, thereby limiting the policy options and affecting policy outcomes. Meaning, discourses shapes policies, which in turn has practical consequences for people's everyday life. Particular discourses dominate how policy problems are conceptualised and what solutions certain policies will try to reach (Hajer & Versteeg 2005:178-179). Another effect of discourses on environmental topics is that the storyline of 'global nature' has disembedded the local context, resulting in a lack of coherent public response to environmental risks such as air pollution. When people in general feel that the environment and environmental risks do not concern their everyday lives, it has a disempowering effect (180).

Discourses are only temporary and the discursive field is always in a contest on which actor(s) view will be the prevailing one (Winther Jørgensen & Phillips 2000:36). This contested process of social practices by various actors, by extension everyone in a society, is what constitutes social reality and what could be labelled as 'politics' (43). No discourse can erase all other discourses. However, a certain discourse can overcome the conflict - or 'antagonism' as it is called within discourse analysis - and by force exclude other discourses. This is what discourse analysts describe when they say 'hegemonic intervention'; i.e. that a prevailing discourse is hegemonic (55). With hegemony, have discourses ideological effects which reproduce social inequality and contribute to power hierarchies (69).

An example of competing discourses concerning environmental and social equity, is from the UK in early 2000's, when a number of activists and scholars contributed to make the political narrative acknowledge the connection between human equality and sustainable development (Chalmers & Colvin 2005:335). Another example is the UN's discussion on 'sustainable transport' systems with low carbon emissions, thus focusing on economic, technical, and environmental problems - but omitting social factors. Instead, environmental well-being and human health should be dealt with in tandem (Thynell 2016:78). Leach et al (2015) go even further, arguing that the dominant approach of economic neoliberalism and market-led growth, instead of focusing on social equity, is the main reason for unsustainability, poverty and inequality (2).

4.3. Policy

The term 'policy' has no fixed definition, rather it contains many meanings. The term originates from the Greek words 'polis' ('city') and 'polites' ('citizens'), which together with the Latin 'politia' constructed two interconnected meanings: 'polity' (civil organisation, constitution of the state, form of government) and 'policy' (the art, tactics or method of governing and regulating internal order) (Shore & Wright 2005:14). Later on have these meanings shifted - and still do as they are fluid concepts.

'Policing' in the 18th century referred to the administration of internal order, separate from 'policy'. Policy as 'art of government' has changed from being connected with synonyms like 'cunning' and 'hypocrisy'. Instead it has been 'made respectable' "...in its contemporary guise as 'a course of action adopted and pursued by a government, party, ruler or individual' (Oxford English Dictionary 1961)." (Shore & Wright 2005:15).

Policies can be seen as a 'total social phenomena'; having important cultural, social, legal, economic and moral implications, in the steps of Mauss's concept from 1954. It can also be interpreted as 'dominant symbols' in line with Turner's concept from 1967, or, as 'core symbols'; analytical keys for understanding a cultural system, following Schneider, 1968. The main point is that policies are a political phenomenon that shapes social worlds and codifies social norms and values. Even so, policies are often presented as something

objective, neutral, an instrument for efficiency and effectiveness. In a Foucauldian sense, can power hide its own operation in what can be labelled as ‘political technologies’. For example, it can do so by taking a political problem, removing it from political discourse and into the realm of ‘neutral’ science. The institutional process is then handled by ‘experts’ (Shore & Wright 2005:6-7).

However, it is unclear what constitutes a policy. Issues involved are knowledge, power, institutions, norms, ideologies, discourses, meaning, global and local. Policies are like a ghost that maintains the government's bureaucracy. Objectification of policies tends to objectify the subjects of the policy; Foucault described it as ‘panopticon’ wherein the citizen is the object of information but never a subject in communication. A concern for anthropology of policy is thus how citizens are becoming alienated in policy-making processes that are increasingly commercialised and remote (Shore & Wright 2005:3-4).

As policies are enmeshed in social and cultural worlds, ‘domains of meanings’, anthropology of policy helps unveil larger processes of governance, social change and power that shapes the world. Policies both reflect and shape those domains; it is an ongoing performative process of production (Shore & Wright 2011:1). Following the terminology of Science and Technology Studies, policies are rather an ‘assemblages’ than concrete ‘things’ (20).

The goal of anthropology of policy is therefore to deconstruct these processes in order to see the underlying patterns in the organisation of power and governance in society (Shore & Wright 2011:4). It is a critical approach that questions the common view on policies as something linear, apolitical and best done by rational authoritative experts. Instead, an anthropological interpretative perspective seeks the meaning behind, as Geertz (1973) has suggested. This means unmasking the hierarchy, showing that policies are shaped by subjects, and see how it affects people’s everyday life and behaviour. Problematising policy; what work does policy do in a particular context, what does it mean, whose interests, what are the social effects - and how do they relate to other norms, institutions and concepts within that context (8)?

Anthropology of policy derives from 1970's political anthropology. Influences are Althusser and structural Marxism with their theories about modes of production, ideas about power and hegemony by Gramsci, and Wallerstein's 'modern world system'. One problem, both then and today, is how to avert macro/micro dualistic conceptualisation such as local/national, village/state. Rather, power structures are multiple, intersecting and conflicting - locally and globally. Successfully studies that combined macro/micro have for example located local sites of mining within international capitalist systems (Shore & Wright 2005:10).

4.4. Sustainable development

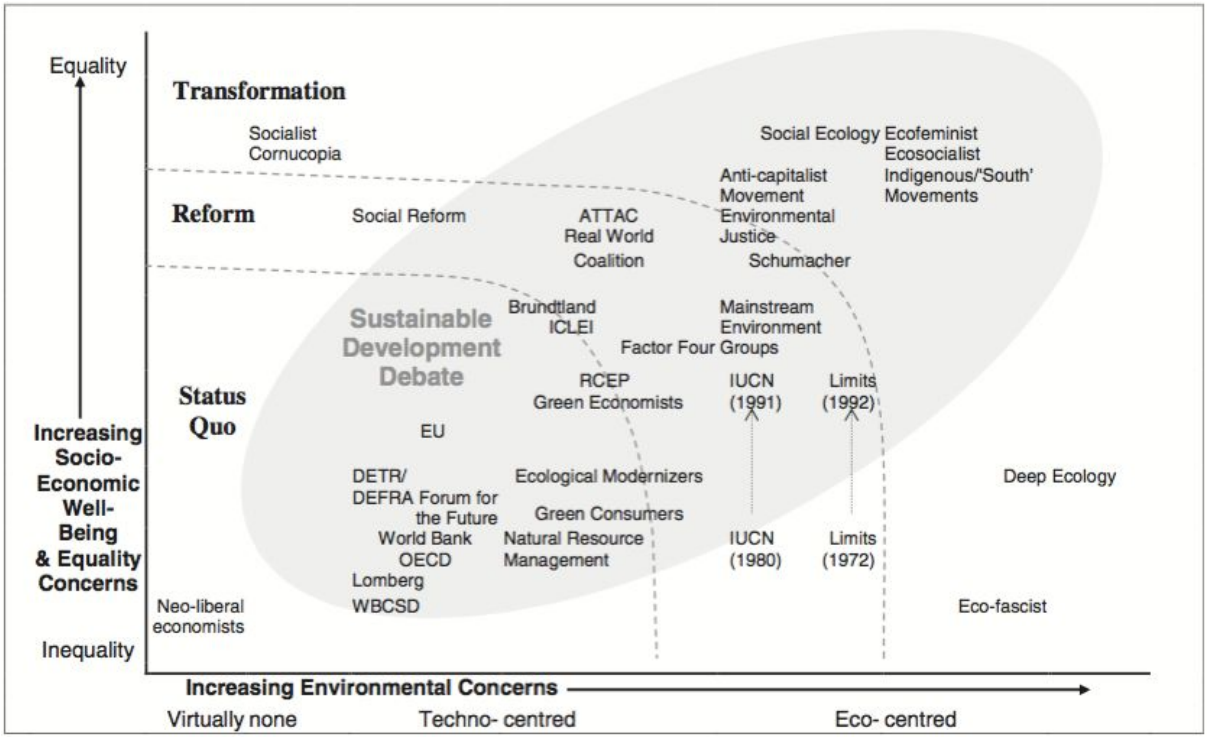
The concept 'sustainable development' is widely used as an idea and a phrase, but has no fixed definition. Although, in general it aims to combine growing concerns about environmental issues with socio-economic issues, such as poverty and inequality (Hopwood et. al. 2005:38-39). The term's first main definition was given in Brundtland's report 'Our Common Future' (1987), stating sustainable development as meeting 'the needs of the present without compromising the ability of future generations to meet their needs' (39).

Sustainable development is foremost an anthropocentric concept, also, it derives from the post-war idea that increased global trade and industry will eradicate poverty, entail better human well-being and international prosperity. Hopwood et. al. (2005) draw parallels to the trickle-down theory; suggesting that eventually all will benefit if the economy grows. This view still dominates mainstream economic policy, but arguments against is for example that the phrase 'sustainable growth' is an oxymoron as the ecosystem is not infinite and consequently is an economic growth with increasing use of resources and production of waste not sustainable. Instead, the term 'sustainable livelihoods' might be more suited to describe what Brundtland outlined in 'Our Common Future' (1987) (39-40).

Another definition is offered by Agyeman & Evans (2004); sustainability is "the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems" (157). They underline that sustainability cannot simply be a 'green' concern. Rather, it should be a holistic perspective that integrates social needs and welfare with human ecology and economic opportunity within the environmental limits. The authors are thus proponents for 'just sustainability', in

contrast to the Brundtland report that focuses more on equity and justice in four main areas of concern; justice and equity in resource allocation, quality of life, living within ecological limits, and present and future generations (Ibid.).

O'Riordan (1989) has mapped out standpoints within the sustainable development debate in a conceptual framework (figure below), where environmental and socio-economic views along two axes indicate three broad perspectives; transformation, reform and status quo. The *transformist* view argue that a radical transformation is needed as the roots of the problems is society's economic and power structure, *reformists* agree upon a fundamental reform but within the existing systems, while the *status quo* perspective says sustainable development can be achieved within the present structures (Hopwood et. al. 2005:41-42).



(Hopwood et. al. 2005:41, *Figure 1. Mapping of views on sustainable development*)

Status quo is the dominant view among businesses, the EU and governments - those with power positions to make decisions, lending toward neo-liberal economic reasoning that economic growth is part of the solution to development, and business will generate sustainability. Tools in achieving sustainable development are improved management techniques, new technology, changing value and increased information - all operating via the

market. Status quo supporters recognise the need for change, but do not think that society or the environment face major problems (Hopwood et. al. 2005:42).

Many mainstream environmental groups, NGO experts and academics are more critical of current policies of most governments and businesses, naming the roots of the problems as imbalances and a lack of information and knowledge. As *reformists* they believe that major shifts in lifestyle and policies will happen over time within the present economic and social structure, thus reaching sustainability, for example by changing fossil fuels to renewable sources and increase the energy efficiency. The way to sustainability is technology, information and good science, reform of government and modifications to the market. Key themes for reformists are that governments will play a key role in pushing businesses, together with an increase in democracy and participation (Hopwood et. al. 2005:43-44). The Brundtland report is reformist, but in proposed details it leans towards the status quo approach (45).

Transformists argue that reform is not enough, a transformation of society and/or human relations with the environment is necessary to avoid a crisis or perhaps even a future collapse. Many of the problems stems from the contemporary power and economic structures of society because they do not focus on environmental sustainability or human well-being. Moreover, political and social actions need to include those outside the centers of power, such as the poor and working class, women and indigenous groups. Transformists could focus either on the environment - for example deep ecologists who put nature first, or focus on the socioeconomic - like ecosocialists who emphasise capitalism's exploitation of people and the environment. Others synthesize both angles, for example ecofeminists who connect the degradation of the environment with the subordination of women, some ecofeminists are close to ecosocialists' thinking as well (Hopwood et. al. 2005:45-46).

Starting from postcolonial ideas transformists pinpoints that poverty, lack of justice and the environmental degradation are not historical coincidences - on the contrary, in the combined and uneven development are some people and communities rich because others are poor and vice versa. Sustainable development, according to transformists, requires a massive redistribution of power and wealth, emphasizing justice and equity. But they are careful not

to blame ecological problems upon a common 'us' - as some deep ecologists do, thus masking divisions of class, gender and race. Further, holding all humanity equally responsible for environmental problems omit that in an unequal society do the least powerful suffer most from poverty and lack of access to resources, as well as bear the heaviest burden of war, ecological problems and ill-health. Transformative standpoints therefore encourage alliances between social justice and environmental movements (Hopwood et. al. 2005:49).

Ebbesson (2009) highlights that environmental policies and laws are predominantly goal-oriented, meaning that even though sustainable development aims at societal objectives with environmental connotations, it is not as neutral as it seems at first. To place environmental laws in a context might reveal restricting effects or disproportionate burdening for certain groups or categories, it may also show how certain subjects or interests are demeaned or ignored (1).

4.4. Intersectionality

Feminist research deals with gendered social existence, but as gender relations are intermeshed with other forms of power relations, social investigation need strategies to recognise the complexity of social categories, meanings and relationships (Ramazanoğlu & Holland 2002:112). 'Intersectionality' is one answer to this need, as it tries to map out the complexity of social categories and relationships by showing how multiple grounds of identity shape the social world.

Kimberly Crenshaw coined the term 'intersectionality' in her essay from 1989. The concept is rooted in Black feminism and Critical Race studies. Intersectionality is an ongoing always in-work-progress, a method, a heuristic and analytic tool (Carbado et al. 2013:303-304). It is important to interpret social categories politically rather than referentially, in order not to essentialise when conducting a study with an intersectional perspective (Smith 2005:9).

To apply intersectional theory, is to strive to deconstruct master categories in order to highlight inequalities and different experiences, identities, and social locations (McCall 2005:1777). It does not deny the importance of social categories, instead one should focus on how they are experienced, produced, reproduced and resisted (1783).

Socioeconomic status is a key concept when discussing health disparities, but it is vital to be clear on the choice and interpretation of socioeconomic indicators; such as income and education. Also, it is important to take into account that socioeconomic variables might have different meanings depending on the context; for example a certain geographical, economical, and/or political context. The purpose of characterizing populations in this study is to identify who is most vulnerable for air pollution, and who faces health danger and disproportionate burdens (Bell et. al. 2005:526-527).

4.5. Ecofeminism

In contrast to reformist approaches, ecofeminism campaigns for a radical change in order to address the deeply ingrained causes to environmental problems - not merely the symptoms, such as pollution. This means to investigate the social and human causes, to go to the root of the problems. The philosophy thus advocates for social change, as it argues that the degradation of nature arises from social patterns of hierarchy and domination - both over humans and nature (DesJardins 2013:206).

The term 'ecofeminism' was first used by Francoise d'Eaubonne in 1974. Since then has ecofeminism developed into many different viewpoints. All approaches make connections between social domination and the domination of nature (DesJardins 2013:221).

Elemental for ecofeminism is the goal of introducing alternative ways of thinking other than the classical Western dualistic view. Namely, hierarchical dualisms such as masculine over feminine, human over nature, mind over body, reason over emotion, and objectivity over subjectivity. According to feminist scholars, have women in culture been identified with nature, while science and technology have been identified with men. Evelyn Fox Keller quotes the early scientist Francis Bacon, who illustrates how metaphors of early science had an aggressive view on women and nature. Bacon compare science with a marriage, saying that science should make nature its slave, that science and technology have the "...power to conquer and subdue her [Nature], to shake her to her foundations." (DesJardins 2013:226).

Bacon associates nature with women, a woman who should be married to a man in a very

abusive relationship. This image lingers in modern science even today, for example, in the attitude of technologies that with the jargon of instrumental terms labels environmental science as objective and humans as superior, while striving to control natural phenomena. However, ecofeminism is a holistic perspective, underlining that humans are an inextricable part of their natural and social environments (DesJardins 2013:226-227). Rydhagen (2013) emphasizes that it is not reasonable to draw a line between man and culture versus non-humanity and nature. Those entities interact and interplay, for example, our bodies are affected by things such as chemicals and sunshine from outside (38).

Over-exploitation of natural resources, loss of biodiversity, pollution of land, water and air are all environmental problems that arises from humanity's dominant patterns of production, consumption and distribution. Vogel (2011) labels it as humans' 'anthropocentric arrogance'; alienation from nature wherein nature is only something one can control and domesticate (190). To put it in line with postcolonial ideas about hegemony and alienating; nature is the Other (Gunster 2011:206).

5. Method

This part of the essay describes how the study was conducted. The choice of research subject and methodological approach - discourse analysis and anthropology of policy - are discussed. Additionally, delimitations, considerations, and bias of the researcher are also included in the chapter.

5.1. Choice of research objects

This thesis explores policy-making processes in regard to environmental justice issues such as air pollution on both a local and international level. In greater detail, the EU's environmental policies on air quality will be compared with the NGO ClientEarth's work on clean air.

In November 2014, ClientEarth won a legal battle in the ECJ[3], over the UK government on toxic air. This makes the organisation an interesting choice for a case study. They are experts in their fields; environment and justice, but they are also lobbyists for social change. This might imply that the organisation therefore also participate in shaping discourses surrounding issues like environmental justice and policy-making in the UK and the EU.

With inspiration from Chalmers & Colvin's (2005) thoughts about action research, it is worth noting the ambition of building bridges between different disciplines and organisations. Moreover, to link the wider policy context with local experience and understanding of environmental inequalities - in other words, the key challenge of sustainable development (341). For this paper it means to correlate to different actors and perspectives, therefore the choice of comparing the EU (as they are responsible for major laws and policies on air pollution) and ClientEarth (as they are a grassroot organisation trying to lobby the EU). Both ClientEarth and the Commission have extensive information online on their respective web pages, a comparison between their materials is thus suitable.

[3] On 19 November 2014 the European Court of Justice (ECJ) ruled on case C-404/13 ClientEarth.

5.2. Choice of data

The chosen texts from ClientEarth are: 'Legality of the conformity factors in the RDE tests', 'Healthy Air Campaign', 'The Clean Air Handbook: A practical guide to EU air quality law', and 'The Right to Clean Air in the ClientEarth case'. Their documents are of various format; information pamphlets, and a campaign for policy call.

I have also analysed their press releases that they have tagged with #air: 19 pieces, ranging from July 15, 2015, to July 22, 2016[4]. The press releases are usually concise and written in a journalistic style; including interviews (mostly with employees at ClientEarth), have the structure of a news article, and are intended to engage and inform the reader on the issue at hand. The tone is from an activist, bottom-up-perspective; attention is placed upon the people's (particularly the citizens of the UK) health and well-being. Politicians and representatives from the government are seldom directly interviewed, but often referred to.

The chosen documents from the EU consists of the brochures 'EU focus on clean air' and 'Cleaner air for all', and the statistical report 'Sustainable development in the European Union: 2015 monitoring report of the EU Sustainable Development Strategy'.[5]

The seven press releases from the Commission are mainly from 2012-2013. Four of the press releases are in the forms of statements, remarks and speeches by the EU Commissioner for Environment, Janez Potočnik. The other three are informative news about cleaner air, such as informing that the EU will launch a public consultation on its current policy. The tone is scientific, bureaucratic descriptive; it states what has been done by the EU on air pollution issues, and what the next steps are.[6]

As the texts from the EU are more extensive than the ones from ClientEarth, I have read the texts from ClientEarth more thoroughly, while only picking relevant sections from the EU-texts.

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[4] Almost 30 press releases were analysed, but 19 is referred upon in the paper.
[5] Additionally was legal texts analysed, although not cited, for example: the 'Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe'.
[6] See the bibliography for a detailed list of the chosen texts from ClientEarth and the EU.

5.3. Method of analysis

The main methods of analysis have been anthropology of policy and discourse analysis. While the respective theories differ, they do intermesh at certain points as well.

Central for anthropology of policy are the governed, the governors and the technologies of governance; governmentality. For policy anthropologists, analysing discourses and policy language is fundamental to understand the structures of modern power relations, to see political systems as units within broader contexts (Shore & Wright 2005:10). It strives to 'study through' - explore how power creates institutions and relations between actors, as well as discourses across time and space. This means multi-site ethnographies that trace policy connections between actors that might not even know each other; different organisational and everyday worlds. It also includes the study of policy documents, preferably from the outlook of them as discursive 'cultural texts' (11).

To study environmental politics with a discourse analysis perspective could be to see how Foucauldian governmentality uses 'eco-speak' in an attempt to discipline society. Additionally, the perspective can help trace discursive power struggles within the field of environmental politics - demonstrating how politics are simultaneously a process of finding solutions to real world problems, while also being a site for conflicting discourses and actors (Hajer & Versteeg 2005:180-181).

Drawing upon 'deconstruction', a concept developed by Derrida (1970), the approach of discourse analysis is aiming to deconstruct the social structures that tends to be taken-for-granted, and decipher how everything is a result of political processes which has social consequences (Winther Jørgensen & Phillips 2000:56).

Hajer & Versteeg (2005) highlights what discourse analysis can bring to the table: it can illuminate how language is central in politics and practice. Different actors' interpretation of a storyline affects the outcomes, institutions and laws - meaning that discourses become the basis for a context in which environmental issues can be discussed. Already when it comes to understanding what environmental problems "really" are, the opinions are diverse, which

means that the proposed solutions and definitions differs as well. Actors themselves are therefore central in discourse analysis, as they actively 'position' themselves and others when trying to exercise power to impose a particular approach onto a discussion. Discourse analysis can explain how certain definitions and policies get more attention than others (177).

A simple, but powerful analytical tool is: problem - cause - solution, which means to look at how a certain problem is formulated, what the ontological belief behind the formulation is, and therefore what the suggested solutions could be. As setting up goals is imperative within politics, the formulation of a problem and thus the worldview behind the formulation is vital to investigate in order to understand different actors' discourses (Bergström & Boréus 2012:388). The question of 'what is the problem represented to be?' is particularly important in policy research, as every description of a problem is seen as a contestation of meaning, turning policies into discourses (405).

With inspiration from Laclau & Mouffe's discourse analysis, I have searched for a discursive integrality of the field environmental justice according to the EU and ClientEarth (Bergström & Boréus 2012:364). Deriving from semiotics and Saussure's distinction between the signifier (form of the sign) and the signified (its meaning), is Laclau & Mouffe's concept 'element' a sign that is always contested; for example, 'democracy'. Taken together can various signs construct a chain of 'logics of equivalence', wherein a 'nod' or a 'master signifier' is of particular interest (365-367).

In greater detail, it meant that I have looked for elements and master signifiers within the chosen texts from the EU and ClientEarth, in order to find chains of equivalences as many elements - like political, social, economical and psychological discourses - together can constitute a discourse (Bergström & Boréus 2012:369). That is also why the method of discourse analysis inspired by Laclau & Mouffe is well suited for studying political processes and discourses (370). In addition to their approach I was also inspired by the concept 'hermeneutics' by Gadamer on interpretation; that me as a researcher, you as a reader, and the actors and their contexts is biased due to our pre-understanding of an issue. What follows is the 'hermeneutic circle': that the parts of a text needs to be interpreted in reference to the

whole text, and the context wherein the text exists (31-32). For this study it implied to highlight the different actors, their respective field, and the context from where they speak.

Concretely, the course of action to find discourses has been: first I searched for key themes, elements, occurring in both actors' chosen material. Elements in the study were key themes such as 'health', 'justice', and 'sustainability', that both actors mentioned often, but they differed in their definition and usage of the signs. Then I searched for discursive patterns, and utilised the abovementioned analytical tool of 'problem - cause - solution' (Bergström & Boréus 2012:385-387).

5.4. Considerations

As this thesis derives mainly from various written documents, the ethical concerns differ from an interview-based research as there are no explicit informants. No particular person is thus directly affected by this work, nonetheless, it is important to emphasize that the essay is based on my understandings and interpretations of the issues and actors.

It is important to consider flaws in collecting data, relating to air pollution epidemiology, as the data from such studies is used in environmental justice discussions, as well as in the texts that I have analysed. One of the main challenges is that air pollution is most often measured by fixed monitoring stations, but these areas might not be the same areas as the subjects in a study reside in. Therefore, the data on ambient air do not adequately represent individuals' exposure (Peled 2011:1783).

5.5. Bias of the researcher

All research and researchers are biased; the question is therefore not *if*, but *how* knowledge is biased (DeWalt & DeWalt 2011:93). Social research is always a subjective experience (Clifford 1983:128). Haraway (1988) summarises this by saying that feminist objectivity means 'situated knowledges' (581), because subjectivity is multidimensional. Knowledge is therefore partial. Partial selves can join each other without claiming to be each other; the researcher seeks the subject's position to connect partially - herein lies the promise of objectivity (586).

In other words, it is a question of power positionality; of interpretative prerogative - who can define who is a/the subject and who is a/the object. Different power positions affect who is able to know what (Ramazanoğlu & Holland 2002:13). At the basis of knowledge production is power, emphasises Foucault, so also in social science's practices of classifying and labeling. This contributes to discourses on normality (Sprague 2005:37). Feminist researchers need to reflect on the (hegemonic) discourses and consider the consequences of working within certain discourses as a researcher operates within conceptual schemas and interpretations. Thus, one need to see how discourse is framing issues (Bacchi 2005:204).

Although the work is aiming at a somewhat macro-level perspective, the bottom-up-attitude is an underlying red thread. Further, my position may also entail a taken-for-granted ignorance regarding issues on democracy and justice. I am not an expert on EU policies and legal processes, nor am I an activist - although I strongly agree with ClientEarth in their fight for cleaner air and advocacy for environmental justice for the sake of people's health and well-being. Perhaps my position can be described as something in-between the expert, layperson and activist in this case.

Consequently, the positionality and bias of me as researcher and my ontological beliefs is important to note. For example, from a feminist perspective I am keen on highlighting different power positions; hence the choice of discourse analysis, anthropology of policy, and the focus on ClientEarth's point of view, rather than from the UK government's side.

PART TWO

Results

6. Case study: The EU's policies on air quality

Below is air pollution and sustainability presented from the EU's point of view. First off, a background on the EU as a political system and its environmental policy and legislation on air pollution. Thereafter how they approach their goal of healthy environment and access to justice for European citizens. Concluding is the *EU's Sustainable Development Strategy*, as it fuses environmental and social issues.

6.1. The EU as a political system

The EU can be summarised as a political system, as it is an interplay between various decision-making levels, and the influence the EU has on member states' own policies (Westberg 2008:133). The foundation for today's EU is the 1957 Rome Treaty that established the European Economic Community (EEC) with six member states. Since then it has grown to 28 member states, including over 500 million people[7].

The EU's authority has increased in the scope and numbers of policy issues, especially environmental policies, which today usually are formulated at an EU level rather than nationally (Selin & VanDeveer 2015:2). The EU is a complex system with multi-level governance covering political processes extending over several borders; territorial, hierarchical and traditional (Tallberg 2010:175).

The Treaty of Lisbon from 2009 is the contemporary constitutional basis for the EU. It separates EU policies into internal and external policies. Internal policies are usually supranational and aim to regulate, redistribute and stabilise the EU with its member states on a macroeconomic level. Key areas are the environment, social issues, the internal market, agriculture, competition, economy and justice. Several policies have been agreed upon on those topics. External policy areas are trade, development, foreign and security issues (Tallberg 2010:54-64).

[7] Including the UK as Brexit has not come into force yet.

With each new treaty have member states given up on sovereignty in favour of the institutional decision-making of the EU bodies.[8] The decision-making process is divided in three parts; *firstly*, exclusive competence when the EU alone has the right to decide - for example regarding customs union, monetary and trade policy. *Secondly*, shared competence to legislate, when both the EU and member states may take decisions; EU's role is foremost to coordinate and support measures. Environmental policy is part of this category, along with areas such as public health, social policy, justice and home affairs. *Thirdly*, different types of support or coordination from the EU to the member states; issues on culture, education and tourism is included in this category. So is the coordination of foreign, security and defense policy (Tallberg 2010:53-54).

Intergovernmental cooperation, where national ministers and officials negotiate on behalf of their country while retaining the right of veto, is the most common form of cooperation in the EU. However, it limits the democratic transparency and influence (Westberg 2008:147). With so many different actors, both formal and informal ones, involved in the political processes, the issue of responsibility is compartmentalized. Even more so, according to Warleigh (2003), as different institutions within the EU are holding each other responsible. This bureaucracy makes it difficult for civilians to influence or be held responsible - which leads to a democratic deficit (7-8).

Privatisation of democratic accountability and decreased transparency are serious matters that limit the agency for the individual (Sassen 2008:203). But Sassen also highlights how a variety of microprocesses give rise to the emergence of global laws and economy, as well as external non-state actors, and rise of new normative orders beyond the nation state (146). Another effect is that citizens can sue their government (413). Harvey (2005) refer to these heterogeneous groups ranging from NGOs to criminal cartels to social movements as people fill the void created in states by the democracy deficit (171).

[8] The seven institutions of the EU: the European Council, the Council of the European Union, the European Commission, the Court of Justice of the European Union, the European Central Bank, and the European Court of Auditors.

6.2. Environmental policy in the EU

Warleigh (2003) cites environmental policy as one of the EU's prime achievements, starting with environmental legislation already within the Treaty of Rome, 1957. A core reason for its entrepreneurial success is that member states wanted to protect their domestic industries and respond to their citizens' concerns about the EU's role and the environmental degradation. Environmental protection and sustainability, along with reducing disparities between the regions within Europe, is frequently rated by citizens as areas in which the EU should be active (93-95).

A story of success is that the main cause of acid rain, Sulphur dioxide emissions, has been cut by more than 80% thanks to policy actions and international cooperation, thereby contributing to that the air today is cleaner than it was in the previous two decades (EC, 2013:1). Acid rain was a serious problem in the EU in the 1980s, but is now almost solved. Other improvements are the reduction of emissions in large combustion plants, road vehicles and industrial installations (3). The achievement of cleaner air the past 10-20 years is one of the few areas with an (absolute) decoupling between economic growth and emissions. The former European Commissioner for Environment, Janez Potočnik[9], commented: "To me, this is resource efficiency put into practice. If we could achieve this kind of decoupling in other areas, we would eventually solve our environmental and health challenges." (EC, 24 September 2012[10]).

The EU environmental policy area has three main principles: the 'precautionary principle' (prevention of environmental damage is better than curing), the 'polluter pays principle' (in case of damage, the polluter pays the remedial action), and the 'sustainability principle' (sustainable development must be integrated into all EU policies). The last one came into force with the Amsterdam Treaty in 1997, aiming at making the first two principles effective, minimising environmental damage and make economic growth congruent with resource conservation (Selin & VanDeever 2015:8).

[9] He was the European Commissioner for Environment in 2010-2014, the current Commissioner is Karmenu Vella.
[10] European Commission press release, hereinafter shortened to EC.

Policy-making in the EU can be characterised by extensive effort to achieve consensus, and to be highly technocratic in content (Selin & VanDeveer 2015:8). Regarding environmental governance could the EU additionally be said to be attempting to use 'soft power' as a 'civilian' or 'normative' power (13).

However, environmental policy-making processes are complex and fragmented as the environmental policy area consists of many different approaches and rationales (Warleigh 2003:96). Even so as the EU is not the sole legitimate actor in the field; a wide range of non-state actors and structures are influential as well, resulting in less 'green' legislation than what the European Commission intended, because of the contested political nature of the policy-making process. Scientific data and environmental expertise compete with other actors' interests; involving bargains and compromises (97).

The environmental policy area focus on participation in the NGO sector and other social actors on different levels, by doing so it works as an advantage for the EU as it illustrate how they can work in lines with its citizens expressed wishes. In that way, the legitimacy for the EU increases as well. A disadvantage that arises is that the policy area has transformed into soft policy rather than regulations, meaning that it hinges on the different actors themselves to implement the actions needed to meet the requested environmental standards. Also, pollutions know no borders - the EU might be less effective in securing agreements to non-EU states (Warleigh 2003:93-95).

6.3. EU legislation and air pollution

EU law is a combination of primary legislation (the treaties) and secondary legislation (issue specific laws). Secondary legislation is divided into three types: regulations (which all member states must implement by a shared deadline); directives (allows member states certain flexibility); and decisions (binding, requires individuals or authorities in member states to act). Many air pollution laws are directives (Selin & VanDeveer 2015:8).

The EU policy on air pollution has grew the last 30 years and comprehensive reviews are regularly undertaken, such as when new rules on cleaner fuels for shipping was introduced, in order to benefit for people's health (EC, 17 December 2012). The EU welcomes the general

public, experts and practitioners to express their opinions on how to improve the air quality legislation in the EU. For example, by launching a web-based consultation in 2011 as part of a review of the EU's air policies for the long-term objectives beyond 2020 (EC, 30 June 2011).

The fundamental directive for cleaner air in Europe is the Air Quality Framework Directive (the 'Council Directive 96/62/EC on ambient air quality assessment and management'). It describes the basic principles for assessing and managing air quality within the EU, and lists the pollutants that are targeted in specific legislation that further sets their standards and objectives.[11] Listed pollutants are for example nitrogen dioxide (NO2), particulate matter (PM10), and benzene. Since 2008 with the new Directive 2008/50/EC, have most legislations been merged into a single directive (except for the four daughter directives).[12]

Despite the intentions in the Air Quality Directive, were illegal levels of PM10 registered in 22 member states, in 19 member states was the levels of NO2 higher than the legal limit, as of 2013. Yet, it is tricky for citizens to take legal action towards their states on those violations as national rules and procedures make it difficult (CE, 2015b:2-4).

The Commission admits difficulty in getting the member states to implement environmental laws, suggesting that part of the problem may lie in the coherence of the EU policies, naming the Euro standards for vehicle emissions to have failed in cutting down the real-world emissions of NO2 to meet the legal levels. The Commission work in various ways to help the member state achieve better air quality and meeting the directives, such as arranging an implementation network across Europe wherein cities can co-operate and exchange knowledge. As well as initiating 'partnership implementation agreements' with the member states to formalise and make publicly available the state's commitments in order to ensure stakeholders that their concerns are being addressed.

One of the main problems with member states not fulfilling the air quality objectives, is that the responsibility for air quality lies with local or regional authorities, however, less than half

[11] http://ec.europa.eu/environment/air/quality/legislation/existing_leg.htm
[12] http://ec.europa.eu/environment/air/quality/legislation/existing_leg.htm

of the observed PM2.5 concentrations derives from the cities own emissions, because of transboundary pollution. As a result, many local authorities have been forced to apply more expensive measures to pollution sources. The Commission hopes to improve this situation by helping member states to provide a better link between national and local or regional air quality management programmes (EC, 8 January 2013).

Further, to curb the transboundary pollution by ensuring full coherence with other policies, particularly climate change, and work for limiting the overall emissions both in the EU and internationally. Still, some serious localised pollution can only be dealt by national measures (EC, 8 January 2013). A major step to tackle transboundary pollution is the National Emissions Ceilings Directive (NEC Directive), which target long-distance pollutants by setting cost-effective national ceilings for what pollutants levels member states are allowed to export to other member states (EC, 18 January 2011).

6.4. Healthy environment for citizens

6.4.1. Healthy environment

Health is mentioned in every chosen text from the EU as a chief reason for action on air pollution, the European Commission's Air Quality Review states 'Protect our health' - reducing further exposure of citizens to air pollution - as the most important long-time goal of the EU air policy. The first step is to ensure that the EU standards are not to be exceeding anywhere. The second headline is to 'Protect our environment', protecting the ecosystem from stress caused by eutrophication or acidification (EC, 2013:4).

But more need to be done, and soon;

> We are still far from our objective to achieve levels of air quality that do not give rise to significant negative impacts on human health and the environment. The figures are simply not acceptable: Our latest analysis estimates 420.000 premature deaths from air pollution in the EU in 2010 (EC, 8 January 2013).

Already in 1999 did the EU recognise urban air quality as a main threat to human health;

> Problems like global warming, ozone depletion and acidification are very worrying, but can seem remote from our daily life. Of more direct concern for health experts, policy-makers and citizens is the link between poor air quality and human health. Polluted air is a problem, especially in our cities. /.../ huge increases in car traffic /.../ mean that poor air quality, caused by vehicle emissions to the air, still poses a serious danger to human health (EC, 1999:7-8).

Still in 2013, over 80% of European urban citizens are exposed to PM levels above the recommendations by the World Health Organisation (WHO) Air Quality Guidelines. This leads to cardiovascular and respiratory deaths and increased sickness, depriving people of more than eight months of life on average. Since the 1970's has the EU taken action against toxic air, starting with the first European standards for exhaust emissions for cars in 1970, followed over time by standards for almost all pollutants (EC, 2013:3).

Although car engines are cleaner than before, what has been gained by reducing emissions per car, has at the same time been lost by more cars being used to cover more kilometers (EC, 1999:9). The brochure stresses that "Air pollution is a problem which affect every one of us. And we all have a role to play in finding the solutions." (10). A suggested solution, along with legislation at EU level, may therefore be to carefully consider the ways for travelling, transporting, and living. Arguments for individuals to use cars less often and instead chose other modes of transport is for example increased safety, better health and saved time and money. When driving is necessary, one could share a vehicle or join a carpool, additionally, when buying a new car choose a 'green' less polluting vehicle (14).

For employers would their businesses be helped by curbing the traffic jam, as congestion is costing an estimated EUR 120 billion (2% of European GDP) yearly in Europe. Recommended solutions is to move raw materials and end products in conjunction with other local firms, to encourage staff to use public transport by offering travel cards, and to abate the use and numbers of company cars. The EU advises local authorities to plan the concentration of development within the city so people do not need to travel so far or often, to restrict car access to certain areas, to invest in public transport, and provide safe cycle paths. Further, to

empower citizens and businesses to reduce their car usage by information campaigns, and exchange knowledge and experience with other European cities (EC, 1999:15-16).

As mentioned before, reducing emissions from diesel cars is crucial for make the air cleaner, it is also an issue where meeting the objectives has failed so far. Even so, a press release from the Commission reveals that it is possible to reduce health impacts by 100 000 premature deaths a year, and eliminate a third of the eutrophication impact on Natura 2000 sites. By doing all this can the EU achieve 75% of the gain for 20% of the overall cost. The proposed solution that would make this reality is to apply existing technology on the widest possible scale; "technical solutions driven by targeted smart regulation" (EC, 8 January 2013).

6.4.2. Citizen's rights to clean air

The Aarhus Convention[13] (2001) is a multilateral treaty aiming at improving environmental governance with increased transparency and public participation. Parties are the EU and each member state, plus 18 non-EU states. The Convention emphasizes the rights of the citizens of the EU to a healthy environment and responsibility to protect the environment, the Convention is thus unique in the field of the environment to ensure citizen's right. In detail, the Article 1 states that:

> ...in order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being, each party shall guarantee the rights of access to information, public participation in decision making and access to justice in environmental matters in accordance with the provisions of this Convention' (United Nations Economic Commission for Europe 1999, *cited in* Agyeman & Evans 2004:158).

Central in the Aarhus Convention is three 'procedural rights', pillars, in order to acquire the right to a healthy environment: access to information; public participation in the formulation of plans relating to the environment; access to justice in challenging breaches of environmental law.

[13] The Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.

In connection to public participation, is the involvement of citizens and stakeholders essential as part of the 'good governance' approach by the EU to reach 'just sustainability (Agyeman & Evans 2004:62). Good governance is presented in the Commission policy paper 'European governance - a White Paper' ('White Paper', 2001), identifying five principles: participation, openness, effectiveness, coherence and accountability - these principles should apply to all levels of government from local to global (161).

6.5. Sustainable development in the EU

As mentioned in chapter 4.3, is the broad goal of environmental sustainability to equally embrace social and economic dimensions, moreover, analyses of development should begin with the cause - social injustice, not with the symptoms - environmental or economic instability. This paradigm shift in thinking is the result of both micro-level 'bottom-up' and EU-level 'top-down' pressures, forming a 'policy architecture' that supports 'just sustainability'. The EU has in the past two decades increased their ambitions, stating that all decision making should take economic, social and environmental effects into account. The EU's Strategy for Sustainable Development (EU SDS) accent that all policies must have sustainable development as their core concern (Agyeman & Evans 2004:161).

The contemporary aims of sustainable development are an extension of the outlines in the 1987 Brundtland report, more precisely, the EU put it like this:

> Sustainable development policy aims to achieve a continuous improvement in citizens' quality of life and well-being. This involves the pursuit of economic progress while safeguarding the natural environment and promoting social justice. The economic, environmental and social dimensions are all part of the EU Sustainable Development Strategy (EU SDS) adopted in 2001 and renewed in 2006 (Eurostat 2015:8).

Additionally, the EU SDS promotes for a global partnership for worldwide sustainable development, and to adopt a good governance practice in the EU. In answer to the question whether the EU is moving towards sustainable development, the Eurostat report reply that the

overall picture is mixed over time and across different indicators, when they measure ten thematic areas. They name the indicator 'sustainable consumption and production' as an example of a successful improvement since 2002, thanks to an increase in GDP and an overall reduction in material consumption. Meaning, the value for each used unit of material has increased, however, this might be because of the economic crisis in 2008-2009 as the material consumption dropped then, such as less construction (Eurostat 2015:8).

The EU's sustainable development indicators (SDIs) emerge from the UN Conference on Environment and Development ('Rio Earth Summit', 1992), when the Eurostat started working with the UN Commission on Sustainable Development (UNCSD) on global indicators of sustainable development. The current sets are from 2005, revised in 2006, by the working group on SDIs which is composed of statisticians and policy representatives at national and EU level (Eurostat 2015:14). The areas in the framework is:

- Socioeconomic development
- Sustainable consumption and production
- Social inclusion
- Demographic changes
- Public health
- Climate change and energy
- Sustainable transport
- Natural resources
- Global partnership
- Good governance

The 2012 UN Conference on Sustainable Development, again in Rio 20 years later ('Rio+20'), further set a new global Agenda 2030 for development beyond 2015, focusing on sustainability and poverty reduction, in the Sustainable Development Goals (SDGs), which replaced the Millennium Development Goals (MDGs) (Eurostat 2015:24).

Already before the 2015 deadline the MDGs yearly report revealed that some goals have been achieved; the number of people living in extreme poverty has declined by more than half,

more have gained access to drinking water, malaria and tuberculosis has decreased, it is now gender parity in primary education and more women participate politically. Still, more need to be done in other areas, such as environmental sustainability, child and maternal mortality, primary school enrollment, and access to antiretroviral therapy. The economic development in Asia has accelerated progress, while Sub-Saharan Africa has lagged behind. But all in all, the MDGs are seen as a success (Eurostat 2015:26).

At an European level has the global SDGs been translated into the Europe 2020 strategy, adopted in 2010, targeting growth and jobs to "make Europe a smarter, more sustainable and more inclusive place to live" (Eurostat 2015:33). With three headlines will the strategy: steer towards 'smart growth' through an economy based on innovation, knowledge and research; 'sustainable growth' - promote more resource efficient, greener and competitive markets; and the 'inclusive growth' objective aiming at creating jobs and reducing poverty. Every priority strategy foresees one or more targets in five areas: climate change and energy, employment, research and development and innovation, education, poverty and social exclusion (Ibid.).

The EU SDS and the Europe 2020 strategy are complementary. The EU SDS is primarily concerned with intra- and inter-generational equity, quality of life and coherence between all policy areas, recognising economic development as way to a more sustainable society. The Europe 2020 can be understood as the practical implementation of the EU's sustainable development policy agenda, as it goes hand in hand with the long-term objectives of the EU SDS (Eurostat 201534).

The former Commissioner for Environment, remarked in 2012:

> So, the economic crisis is not only about interest rates, budget austerity and bank bailouts. It is fundamentally about sustainability. /.../ Let me be clear: there will be no growth in the future if it is not green growth. And the only way to achieve green growth is a concerted shift to resource efficiency – to use our natural resources much more efficiently (EC, 24 September 2012).

Even more so, air pollution imposes a greater cost on the economy than the measures to combat toxic air. Potočnik illustrate this by some statistics; there is over 8 months loss in statistical life expectancy in the EU due to emissions of particles to the air, this equivalence to 3,6 million life years lost every year, costing between €189 - €609 billion per year in 2020. In other words, to invest in clean air means investing in the future - "we cannot afford not to act" (EC, 24 September 2012). Additionally, strengthened air quality regime in the EU is an economic opportunity as, for example, the US and China is stepping up their emission controls and air quality monitoring requirements, creating higher demands for industrial processes and products that emit less (Ibid.).

6.6. Conclusion

The EU environmental policy area has three main principles; prevention rather than cure, that the polluter should pay, and sustainable development must be integrated into all of EU policies. The main EU instrument in dealing with air pollution is the **Air Quality Framework Directive** (2008). The directive tells the member states how to assess and manage air quality within the EU, yet, illegal levels of, for example PM, was registred in 22 member states. Most EU-states are thus in infringement processes.

The guidelines for sustainability can be found in the **EU's Strategy for Sustainable Development** (EU SDS, 2001, renewed in 2006). The social, economic and environmental dimensions should all be taken into accord in policies and decision making.

So, the Air Quality Directive and EU SDS build a framework on how to regulate toxic air and work toward sustainable development. The guidelines work well on a macro-level, setting ambitious objectives for the social, economic and environmental dimensions. It shows an awareness on environmental problems and answer what needs to be done. However, the EU's primarily solution is to focus on economic growth and technological innovations in a trickle-down-approach. **Green growth**, shifting to resource efficiency, and investing in clean air as an economic opportunity is emphasised by the EU. The question that arises is if economic discourses is more dominant than environmental discourses - or to put in line with Feindt & Oels (2005); whether environmental policy is about environment, or just an excuse for reconfiguration of power and redistribution (163)?

Directives on a macro-level is the EU's advantage, but the complex field of many actors and member states make it tricky to implement the objectives and get the citizens involved. The **Aarhus Convention** (2001) is a response to this in order to improve environmental governance with increased transparency and public participation. It emphasizes the right to a healthy environment for its citizens and responsibility to protect the environment.

Although citizens to some extent are welcome to join the policy-making process, a number of obstacles can be observed; for example, environmental matters such as emissions can be too scientific for the common citizen to have an understanding of. Likewise with the political decision-making process with all its various responsible instances and documents - illustrating policies as 'assemblages' rather than concrete 'things' (Shore & Wright 2011:20). All in all, this might lead to citizens becoming alienated in policy-making processes (Shore & Wright 2005:3-4), as the bureaucracy further contributes to making it difficult for civilians to influence or be held responsible - which leads to a democratic deficit (Warleigh 2003:7-8).

7. Case study: ClientEarth's campaign and lawsuit on air pollution

The previous chapter portrayed how the EU work on air pollution issues in line with the objectives in the EU SDS, this chapter will look at similar issues but from the perspective of an NGO - ClientEarth. I will introduce the organisation and its legal case against the UK government, and present how they speak about access to justice in the EU and its environmental policies. The chapter will also take a look at how the NGO campaign at home in the UK.

7.1. ClientEarth

The environmental law NGO ClientEarth was founded in 2008, it is London-based, with additional offices in Brussels and Warsaw. Their goal is justice for the planet; "We are activist lawyers committed to securing a healthy planet". Areas of focus are climate, oceans, health, forests, energy, wildlife, democracy and business.

7.2. The lawsuit against the UK government

The EU *Ambient Air Quality Directive*, article 13, declares that member states must reach the NO2 limits by 1 January 2010. This deadline can be postponed by a maximum of five years, according to article 22, if the state can establish a scheme wherein achieving compliance by 2015, and if the European Commission approves (CE, 2014). In 2009 ClientEarth lobbied the European Commission into declining the UK government's request for extending the deadline on air quality improvement.

Two years later, in July 2011, submitted ClientEarth a case against Department of Environment, Food, Agriculture and Rural Affairs (Defra) to the High Court. ClientEarth said Defra have failed to protect the UK citizens' health from toxic air, as the levels of NO2 emissions are exceeding the EU legal limit.

The High Court and the Court of Appeal declined, but the Supreme Court ruled in July 2013 to ClientEarth's favour. Concluding that the government was in breach of the law and that further process should be handled by the European Court of Justice (ECJ).

National courts can refer cases to the ECJ if they are unsure on how to interpret EU law; 'preliminary reference' procedure. In November 2014 did the ECJ judge the case 'C-404/13 ClientEarth'. The ruling is binding, which means that the UK Supreme Court must apply the decisions in the UK case. Moreover, the case is precedential; same decision goes for all EU member states' national courts (CE, 2014).

Following the legal actions by ClientEarth, the UK government was ordered in April 2015 by the Supreme Court to come up with an action plan on how to clean up the UK's air (The Guardian, January 8, 2016). But their promise on cleaner air until 2030 that they delivered as an answer in December is 15 years behind the EU guidelines. The NGO is thus going back to court (Bloomberg, March 18, 2016). In April 2016 were ClientEarth granted permission to take the case back to court. They asked the court to strike down the government's plans and order new ones, as these plans will not bring the UK within legal air pollution limits until 2025; the deadline passed in 2010 (CE, 10 May 2016).

In sum, the main point of the lawsuit lies within the expected goal of meeting the EU legal limits of NO2 emissions. However, the UK government blames their own failure on the European Commission's Euro standards (regulation for vehicles) failure (CE, 2015c).[14]

7.3. The right to clean air

The right to clean air derives from EU law and the Aarhus Convention. Of the three 'procedural pillars' in the Aarhus Convention[15], is the third one, access to justice, the trickiest one to utilize. This because it is up to each member state to decide on how to administer the access to justice advices of the Aarhus Convention[16]. The access to justice thence varies widely between EU member states.

ClientEarth describes four major obstacles: standing (who has the right to go to court); prohibitively expense (is it affordable); the scope of review (does national rules make it

[14] See chapter 6.3. on Euro standards.
[15] Three 'procedural rights', pillars, are named as necessary in order to acquire the right to a healthy environment: access to information; public participation in the formulation of plans relating to the environment; access to justice in challenging breaches of environmental law.
[16] As the two other pillars are covered at EU level in the right to access to environmental information, and right to participate on issues on environmental impact assessment or industrial permits.

possible to challenge the decision); and delay (how many years until a conclusion) (CE, 2015b:29-30).

The rules on standing vary greatly between EU member states; in many countries it is almost impossible for NGOs to enforce environmental laws because of standing requirements on a directly concerned claimant. It wasn't until the Janecek case in 2007 it was clarified that an individual could go to court. A resident of a highly polluted road in Munich, Germany, went to court because of breaches of the limit values for PM10. The ECJ stated that 'natural or legal persons directly concerned' must be able to require the authorities to draw up an action plan, as well as bring lawsuits (CE, 2015b:10).

The Janecek case is one of the most important environmental cases; it established the right of standing in environmental matters for citizens, the right to legal remedy and a substantive review of the required plan (CE, 2015b:10). The downside was that in order to be a 'concerned citizen' with 'direct interest', the claimant Dieter Janecek had to continue living next to the polluted street - otherwise he would no longer have a direct interest and hence no right of standing. The standing consequently referred only to individuals, omitting environmental NGOs to have a 'direct interest'. Yet, breaches of environmental laws often affect many people - air pollution being an explicit example of this.

Environmental NGOs and other groups are generally best suited to bring legal challenges due to their expertise, financial and time resources - according to ClientEarth. Recently has the ECJ improved the right of standing also for such groups. Notably in the ongoing ClientEarth case when the ECJ assured that both NGOs and individuals have the right to bring public authorities to court on breaking the Air Quality Directives. As the ruling on the case that ClientEarth won is precedential, it means that NGOs in all 28 EU member states can overturn national rules and go to court.

Another common problem is that national rules make it possible only to challenge the procedure, not the substance of the decision itself. This makes it implausible to challenge the content of an air quality plan even if it is obviously inadequate. In the ClientEarth case at the ECJ it was confirmed that the adoption of a plan is not enough, national courts must also

scrutinise the content of the plan, assuring the included measures will be sufficient in reaching legal levels of emissions - in the shortest time possible (CE, 2015b:34).

Although it is problematic that national legal action can take several years (it varies across the member states), it is still faster than a Commission infringement procedure. Infringement procedures typically take four years until a first judgement. Despite this, ClientEarth argue that the infringement processes should be in tandem with national litigation, as complementary - not substitutional processes.

7.4. Environmental directives and public participation in the EU

ClientEarth underlines the importance of the Aarhus Convention in order to achieve proper environmental information, suggesting 'the public' to raise awareness, inform the Commission on national environmental issues, and bring legal action before national courts (CE, 2015b:16-18). Requesting environmental information is a powerful tool for instance for air quality campaigners and journalists, as media coverage can have a political impact (19-20).

The Commission will take into account data from NGOs and citizens that contradict the state's official data when considering illegal levels of emissions. But ultimately can the Commission only bring states to court based on the state's own official data. ClientEarth compare this to the unlikely situation of a police officer being able to prosecute a criminal only if s/he has made a signed confession - even if there were many eyewitnesses to the crime. One reason for this situation is that the Commission has limited resources and no power to inspect the monitoring data (CE, 2015b:16-18). Anyhow, as the Commission has limited resources and depends on the state's own information on breaches, citizens and NGOs can keep the Commission informed of developments. This is a vital role, according to ClientEarth, to be the "eyes and ears" on the ground (CE, 2015b:41-42).

However, they argue that the Commission has politically chosen to favour the commercial interests of car manufacturers over European citizens' health. Resulting in worse human health and environmental damage (CE, 2015c).

7.5. Air pollution in the UK

ClientEarth often criticizes the UK government for its bad track record of upholding environmental laws, pointing out that the UK was known as the 'dirty man of Europe' due to its deficiency in protecting the air, land and water. Additionally, that the UK has "...lobbied hard against several key EU environmental protection schemes…" (CE, 11 May 2016c). Further, ClientEarth writes that the Prime Minister has been strongly criticised for putting the car industry's interests above the citizens' health, and that the UK has secretly lobbied in Brussels for relaxed pollution limits (CE, 21 April 2016a).

According to ClientEarth is the UK government ignoring the Supreme Court ruling on cleaner air, and the dangers of air pollution (CE, 11 Sept 2015). When the UK government missed another deadline on reporting how they intend to take action on air pollution, ClientEarth's Healthy Air Campaigner, Andrea Lee, said that missing the deadline is:

> ...further testimony to the government's disregard for our health. /.../ Air pollution is one of the biggest threats to public health in this country. The government has been complacently ignoring deadlines for years. What will it take for them to start listening? (CE, 22 July 2016).

The NGO exemplifies the plans for a new runway at Heathrow and diesel vehicles and buses as environmental threats that the UK government should tackle on a local level in London (CE, 20 April 2016).

In December 2015 did the Department for Transport approved the idea on an extension of the existing runway at Heathrow. ClientEarth Chief Executive James Thornton commented that before any decisions on going ahead should be made, the problem of air pollution should first be addressed. That it "...would be economic madness to begin any construction before resolving the crucial issue of air quality which is damaging the health of people living and working around Heathrow and further afield." (CE, 4 May 2016).

ClientEarth also condemn what they argue is wrongly choices of action, such as when Defra commissioned a study into whether a paint could reduce NO2 emissions from diesel vehicles.

ClientEarth labelled this as a 'gimmick', saying that ministers should try to find 'real solutions' instead. Technological innovations are welcome, but, as ClientEarth lawyer, Alan Andrews, put it:

> ...we should be focusing on the root cause of the problem: our addiction to dirty diesel /.../ not on gimmicks which seek to treat the symptoms but not the causes of Britain's air pollution crisis. The government is desperately trying to avoid tackling dirty diesel vehicles, which is why we're taking them back to court over their failure to clean up our air (CE, 9 May 2016).

7.6. Conclusion

ClientEarth is an environmental law NGO that submitted a case against the UK government in 2011, because of illegal levels of NO2 emissions and failure to protect the UK citizens' health from toxic air. Two years later did the Supreme Court confirmed that **the UK government was in breach of the law**, demanding the government to come up with an action plan on how to clean up the air in the UK. However, the objectives in the plan is 15 years behind the EU guidelines, ClientEarth will therefore continue their legal actions. The UK government blames their local failure on failures at an European level.

The ClientEarth case at the ECJ became precedential - applying to all EU member states. Meaning that member states will no longer be allowed to extend the deadline as flexible as before. Moreover, the ruling is a landmark judgement as it states that groups, such as NGOs, along with individuals also have the right of standing at the ECJ. This was a victory for ClientEarth, but the problem remains that national rules make it possible only to challenge the procedure, not the substance of a decision itself.

The bottom line in ClientEarth's activism is that wider access to justice for citizens and NGOs will help make the EU more democratic and at the same time ensure better enforcement and implementation of environmental law - thereby resulting in **stronger protection for people's health and the environment**. On a micro-level do ClientEarth encourage citizens and NGOs to help the Commission in being the "eyes and ears" on the ground. However, as ClientEarth's activism lies in their legal processes, is their chief goal to

get the UK government to adjust to the EU air quality directives. Although ClientEarth is an NGO which seeks to represent the UK citizens, often referring to the reader as "you", is their activism rather focused on changing laws and policies on a macro-level. Consequently, they might talk *about*, instead of *with*, the citizens - contributing to 'panopticon' (Shore & Wright 2005:3-4).

ClientEarth further express dismay with the Commission and the UK, saying they put the car industry's interests above the citizens' health. Moreover, **the UK government disregards its citizens health and dangers of air pollution**, which shows in the repeated missing of the deadline set by the Supreme Court ruling. As well as in the ignorance of the increased pollutions that the old diesel buses in London and plans for a new runway at Heathrow entails. ClientEarth welcome technological solutions, but underline that the root cause of the problem - 'addiction to dirty diesel' - should be in the limelight, not just the symptoms.

Even so, ClientEarth do not propose for major social change or criticizes the current social and economic structure of (the UK) society, as transformists might argue is needed. Instead, by forcing the UK government to fulfill the EU laws and take more responsibility on cleaning up the air, ClientEarth seems to put their hopes on the overarching structures of the EU and the UK in reaching better air and sustainability. Key themes for ClientEarth, as well as for reformists, is the government, technology, democracy and public participation (Hopwood et. al. 2005:43-44).

PART THREE

Discussion, analysis and conclusion

8. Discussion

The NGO ClientEarth's activism on clean air center on the following topics (presented in chapter 7): their ongoing lawsuit against the UK government for their lack of action to tackle illegal levels of toxic air, access to justice and the Aarhus Convention.

The central themes in the material from the EU circles around environmental law and policies: the Air Quality Framework Directive, the Aarhus Convention, and the EU's Strategy for Sustainable Development and green growth.

In line with the approach from discourse analysis, "problem - cause - solution", this chapter highlights key themes and links them together in the analysis. Key themes I have searched for were, for example, health and socioeconomic status in order to search for the social justice perspective. Specifically, the study sought to find out: 1) how air pollution policy in the EU can be understood in relation to environmental justice with an intersectional perspective, and 2) how the EU and ClientEarth relate to the social dimension of sustainable development in regards to air pollution.

8.1. Health disparities

8.1.1. ClientEarth

The concern for citizen's health is one of ClientEarth's main reasons for their work against toxic air. In almost every press release and document do they mention 'death' and/or 'made seriously ill'. For example:

> ...new figures which reveal the shocking toll of air pollution on the lives of Londoners. /.../ As shocking as they are, these deaths are really only the tip of the iceberg. For every person who dies early from air pollution, many more are made seriously ill, have to visit hospital or take time off work (CE, 15 July 2015).

Noteworthy is ClientEarth's critique directed towards the UK government's lack of action that they argue worsen the situation for the citizens:

> Most importantly, it isn't good enough for the tens of thousands of people who this Government is prepared to let die or be made seriously ill by being forced to breathe polluted air (CE, 14 September 2015).

> Scientific evidence has shown that merely complying with EU standards is not enough to protect human health – as air pollution causes illness and death at levels well below current EU standards (CE, 12 May 2016).

In other words, the number of deaths and high degree of illness due to air pollution are alarming and should be a top priority for the UK government, according to ClientEarth. Environmental justice highlights the connection between environmental issues and social inequalities such as health disparities (Agyeman & Evans 2004:155-156), which can be seen in the quotations above.

However, they seldom go into deeper detail on *who* is made 'seriously ill', more than stating that:

> Short term exposure to high levels of air pollution can pose a threat to the health of the general population as well as markedly exacerbate symptoms for those with conditions such as asthma, COPD and heart disease. Children and older people are particularly vulnerable… (CE, 2015a:5).

Bell et. al. (2005) have pointed out the importance of evaluating health effects associated with socioeconomic factors (526). They argue that one must consider the social composition and stratification in the highest polluted spaces, for example, what are the levels of education, income, types of housing, and socio-cultural capital in a certain area (Buzzelli 2007:5, 8)? Yet, in the material analysed, the only vulnerable subgroups that ClientEarth mentions are 'children' and 'older people', and those with 'conditions such as asthma, COPD and heart disease'. But the organisation does not elaborate on where those groups resides, what socioeconomic status they might have, and so on. Thence, one might wonder when they mention a "...report that showed more than 400 primary schools in London were in areas with

illegal air pollution." (CE, 17 May 2016); in which spatial socio-economic contexts are these schools located in?

Why does ClientEarth not go into further detail on different social groups? As demonstrated in chapter 3.1., the deprived communities are bearing the greatest burden of toxic air (Chalmers & Colvin 2005:346). The only specific spatial area that ClientEarth is remarking on is central London (in connection to advocating for more than one Low Emission Zone) and the area around Heathrow (in regard to the new Heathrow runway). Even so, they do not say anything about the social composition of these areas - or comparing these areas with other areas. For example, they do not pinpoint spatial differences in socioeconomic positions, connecting that information with mobility patterns and susceptibility to air pollution. Why do ClientEarth mostly focus on central London but never mention the suburbs? Adey (2013) points out that an analysis of air quality in London and elsewhere is a question of health disparities that shows megacity inequalities (294), this notion can be worth to follow up on if ClientEarth wish to highlight air pollution and social equality on a macro-level.

8.1.2. The EU

Health is also of major concern for the EU. It is stated as the most important goal of EU air policy, next to protecting the environment, foremost from stress caused by eutrophication and acidification. In every chosen text from the EU health is mentioned. For example has the former Environment Commissioner said:

> Looking back at Europe's record in improving air quality, we have much to be proud of. But with 500 000 premature deaths associated with high air pollution from particulate matter, there is clearly much work still to be done (EC, 30 June 2011).
>
> Improving air quality is a long-standing environmental challenge. It has taken some time but now the maritime sector is engaged. The big winners are the European citizens who will breathe cleaner air and enjoy a healthier life and industry supplying clean fuels and technology." (EC, 17 December 2012).

While ClientEarth criticises the UK government, arguing that its insufficient action to clean up the air is an explanation for the subsequent health crisis, the EU rather speak about the effect on the economy that public illness due to toxic air has. The Commission writes:

> Air quality is an important public health and environmental issue. Air pollution continues to cause damage to people and environment: premature deaths, shorter life expectancy, as well as substantial damage to ecosystems, crops and buildings. These are real losses for our economy, productivity of our workforce and our nature (EC, 18 January 2011).

From the material produced by ClientEarth, it is shown above that although the organisation advocates for environmental justice, they seldom specify *who* is made ill by toxic air, or what socioeconomic status susceptible persons might have. Let us look at how the EU approaches these issues.

In addition to what has been referred to in chapter 6.4.1., the EU also tells that:

> There is a very large body of evidence on the health significance of air pollution. /.../ 81% of EU citizens are exposed to levels higher than the limits recommended by the World Health Organisation (EC, 24 September 2012).

The yearly statistical report on sustainable development in the EU (Eurostat 2015) has chapters devoted to 'socioeconomic development', 'social inclusion', and 'public health'.

One out of four Europeans in the EU, 122,9 million people, were at risk of poverty or social exclusion in 2013. The three dimensions of poverty sub-indicators are monetary poverty (the most widespread form), material deprivation and very low work intensity (Eurostat 2015:117, 119). People are considered at risk of poverty or social exclusion if they have an equivalised disposable income below the threshold of 60% of the national median equivalised disposable income (after social transfer from the state). Severe material deprivation refers to when people cannot afford at least four out of nine items: I) to pay rent or utility bills, II) to keep their home adequately warm, III) to face unexpected expenses, IV) to eat meat, fish or a

protein equivalent every second day, V) a week-long holiday away from home, VI) a car, VII) a washing machine, VIII) a colour TV, or IX) a telephone (122).

In all countries except for Portugal and Spain were women worse off. The EU-wide gender gap is 1.8 percentage points. Also, contrary to men, women are more likely to be at risk of poverty or social exclusion in all age groups, in the age group of 65+ was the gender gap 5.2 percentage points (Eurostat 2015:119). Other vulnerable social groups are single parents - almost half of all single parents with one or more dependent children are at risk of poverty and social exclusion, and people with low educational attainment - the least educated people are approximately three times more likely to be at risk compared to those with the highest education levels (120). Another vulnerable group is people with long-standing health problems or disability, that often have fewer financial resources; 12% below the average national income in OECD countries (186).

Health inequalities in the EU can be seen in all indicators or socioeconomic status; education, income or material deprivation. The report underlines that people that are poor or at risk of social exclusion also have less access to medical care. Many are thus living with bad health (Eurostat 2015:179). People with the lowest income were more than eight times as likely as those with the highest income to report unmet needs for medical care due to monetary reasons (183). But the section on exposure to air pollution does not mention any specific affected social group, other than stating that particulate matter takes a higher toll on urban zones compared to rural areas. In 2012, 21% of Europeans lived in areas wherein the daily limits for PM was exceeded, PM10 was exceeded at 27% in urban sites, 7% of rural sites (190).

When taken together the chapters mentioned above, a picture of an ambitious strive towards sustainable development is shown. With an intersectional lens it can be noted that many of the common social divisions - gender, socioeconomic status, age, disability - are mentioned and taken into consideration. Although the report does not connect air pollution, health issues and cultural geography directly; the report makes a strong correlation that between poor health and poverty.

Cancer and cardiovascular diseases were the most common chronic disease causing premature death. Air pollution is labelled as a risk factor, along with smoking, lack of physical activity, poor diet, alcohol consumption and obesity. As many of the cases are preventable, the EU and its member states have taken awareness initiatives and increased the efforts to implement disease management programmes in primary care (Eurostat 2015:182). In other words, the EU is knowledgeable about both the causes and effects of unequal health and expresses intentions to combat this. For example, the EU has shown awareness of that better health can be achieved by improved living conditions by reducing inequalities (176). Socioeconomic development, to reduce economic and social disparities, is central in tackling health inequalities (186).

8.1.3. Conclusion

'Health' is a key theme and concern for both actors, but they speak about it slightly different and for different purposes. For ClientEarth it is a reason for their activism, their outspoken goal is better health for the citizens. If we should utilise the discourse analytic tool of 'problem-cause-solution', the messages from ClientEarth could be translated as:

> *Problem:* The UK government is not taking care enough of its citizens' health.
> *Cause:* Conflicting interests at the UK government level, putting financial interests above the health of the UK citizens. The same goes for the EU.
> *Solution:* Bring the UK in front of the ECJ in order to make them admit they are putting financial interests above the health of the citizens and this way, they are correcting the mistake by forcing the UK to abide by the demands of the legal case.

Noteworthy is how ClientEarth positions themselves together with 'citizens' as an 'us' versus the UK government and sometimes also the EU.

For the EU, in the SDS and texts on air pollution, health is also a major motivation and concern. However, it is mostly connected to wider economic issues. Yet, in the EU SDS it is more outspoken that people at risk of poverty also are at more risk of illness, as the EU SDS discuss social groups to a greater extent than the Commission does - according to the sample

texts. None of the instances specifically mention exactly how much more pollution people at risk endure. An application of the 'problem-cause-solution'-tool could look like:

> *Problem:* Many people get sick and die prematurely, which means a heavy toll for the overall socioeconomic situation for whole of the EU.
> *Cause:* A combination of factors at both an individual lifestyle level (e.g. smoking) together with structural reasons (e.g. emissions from industries).
> *Solution:* To gradually improve socioeconomic equality, foremost with the help of policies which focus on green economic growth.

As both ClientEarth and the EU express macro-perspectives; for example 'citizens' are referred to homogeneously, both actors might fell into the trap that Ebbesson (2009) warns for. Namely that concepts in environmental law (and policies, I would add,) might appear neutral until applied in a context. When they are applied in a context, a disproportionate burdening for certain social groups is revealed (1). A greater extent of contextualising in both the actors' work could therefore be helpful when striving towards environmental social justice. Additionally, they could follow Buzzelli (2007) and ask 'what is the social composition in the highest polluted spaces?' (5), as people of lower socioeconomic status is more likely to live and work in places with higher degrees of toxic air (Peled 2011:1783).

8.2. Sustainable transport

8.2.1. ClientEarth

Again and again does ClientEarth express disappointment in the UK government:

> This is a public health crisis; it's time for the government to act in the interests of our health. Instead, ministers are championing weaker emissions standards for cars and trying to get major air pollutants from agriculture dropped from European laws." (CE, 27 April 2016).

> ...exchanging the city's old diesel buses to cleaner electric and hybrid models /.../ the technology is ready, what is missing is political will (CE, 8 May 2016)

ClientEarth emphasizes the negative impact diesel vehicles have on the environment and people's health, and that 'Londoners' are concerned about this:

> Diesel vehicles are the dirtiest vehicles that cause the most harm to people's health. They are a major source of nitrogen dioxide (NO2) which is linked to respiratory and heart disease and thousands of premature deaths in the capital every year. /.../ A survey carried out for ClientEarth shows over half of all Londoners want dirty diesel vehicles banned from central London in order to clean up London's illegal and toxic air. Less than a third of Londoners would actually oppose this policy (CE, 13 April 2016).

Yet, ClientEarth does no not discuss the social composition of mobility. For example, how gender norms affect outcomes and effects of air pollution, for instance, that women tend to choose public transport to a greater extent than men do (Thynell 2016:77). While women in general compared to men in general, omit less pollution than men, women are more susceptible to toxic air. Also, ClientEarth does not mention class differences in modes of transport.

> Increased levels of walking, cycling and public transport are widely accepted as a cost efficient way to achieve multiple benefits to society, and this needs to be meaningfully taken on board in policy decisions (CE, 2015a:4).

Note how generalised they are - not any comment on *who* is already today using those modes of transport for the greatest part, or *who* is supposed to increase their levels of cycling, walking and going by public transport. That is to say, what - or who - should the policy decision target? It seems like ClientEarth falls into the same trap as many national guidelines tend to do as well - to apprehend the issue of air pollution and health hazards as uniform and applied to all individuals across large geographical spaces (Peled 2011:1781). In comparison to the American debate on environmental issues, ClientEarth neglects to discuss the poverty dimension of the societal outcome of air pollution (Ebbesson 2009:17).

8.2.2. The EU

The EU also highlights the negative impact of transport, such as diesel vehicles, on the environment and human health. However, their tone is more pragmatic than rhetoric, often with a dense language - reminding of what Shore and Wright (2005) described as 'political technologies'; when a political problem is removed from political discourse and instead presented as 'neutral' science (6-7). In other words, the pragmatic language used to present technological and economic solutions points towards a discursive view of environmental matters as solely a scientific problem with scientific answers (Hajer & Versteeg 2005: 177-179).

In the chapter on 'sustainable transport', it is noted that emissions of particulate matter from transport in both long and short term evaluations are clearly favourable in relation to the SDS objectives (Eurostat 2015:229). In the short term freight transport has shifted a bit towards more environmentally friendly transport modes - but not passenger transport, which are undertaken by car at 83,2% (230). Moreover, freight transport is more affected than passenger transport by economic changes, notably the economic crisis in 2008 and 2009 (244). Altogether, the transport sector bears trade-offs between its advantages (e.g. job creation) and negative impact (environmental pressures), with increasing amounts of energy needed, therefore the focus on economic growth and new technologies as solutions (232).

> EU air quality policy, above all in the transport sector, is used as a reference model for air pollution strategies in many other parts of the world. As well as a responsibility, this also represents a huge opportunity /.../ advanced technology for further emission reductions is already available, for most if not all economic sectors (EC, 7 June 2013).
>
> Sustaining air quality is therefore not only an environmental objective, but also as an economic opportunity. /.../ to invest in clean technologies for clean air (EC, 8 January 2013).

What can be observed here is what Robbins (2012) labels as an apolitical explanation and rhetoric of modernisation; that inadequate adoption of 'modern' economic techniques causes

environmental problems. Behind the rhetoric is a commitment to economic efficiency as an apolitical answer to a political question (18-19). EU's focus on economic growth mirror the 'trickle-down-theory', stating that eventually will everyone benefit if the economy grows, which is a dominating view within mainstream economic policy. However, the phrase 'sustainable growth' is an oxymoron as the ecosystem is not infinite. Consequently, an ever increasing use of resources is not sustainable (Hopwood et. al. 2005:39-40). This could be interpreted as a competing discourse; low carbon emissions with its repercussions on economic, technical and environmental problems - but the risk is to omit social factors if not environmental well-being and human health is dealt with in tandem (Thynell 2016:78).

So how does the EU speak about the social perspective in relation to sustainable transport? As described in chapter 6.4.1., the increased use of cars affects "...every one of us. And we all have a role to play in finding the solutions." (EC, 1999:10). Examples of solutions could be to choose other modes of transport other than a car, or to buy a 'greener' car when purchasing a new one. Also:

> Some of the solutions to air quality problems lies in new technology. But in itself technology is not enough. We must all consider the options available to us for the way we plan, travel and live. We can all make a difference! (14).

According to the Eurostat (2015) report is 16,8% of total transport movement by public transport, trains covered 7,6%, buses and coaches 9,2% (242). But the report does not mention a single word on *who* is already using public transport, *who* is causing most emissions, or *who* can afford to buy a new 'greener' car - not from a socioeconomic class perspective nor from a norms and gender perspective. Again, we can see the trap of apprehending air pollution and health hazards as uniform, applied to all persons across large geographical spaces (Peled 2011:1781). The risk then is to miss the social patterns of transport mobility and its wider causes and consequences.

8.2.3. Conclusion

Both ClientEarth and the EU give examples on possible solutions for toxic air; technological innovation and that people should drive less and instead go by public transport. Technological and economic solutions will be discussed further on.

Both actors suggest increased public transport and urge 'us' to do more. Firstly, this means that the responsibility lies with the individual citizen - but who has the means for doing this, and who does not? Already today are the patterns remarkably different for how people utilise the different transport modes; more men than women drive their own cars, more women use the public transport, and so on. The standpoint of transformists underlines the importance of not blaming ecological problems upon a common 'us' or hold all humanity equally responsible, because it tends to mask social divisions and omit that in an unequal society do the least powerful suffer most from ecological problems (Hopwood et. al. 2005:49). How then, could the EU and ClientEarth better use this information in their respective works?

It seems as both actors (especially the EU), identify who is at most risk; lowest socioeconomic status for example, but seldom who is causing most emissions, leading to actions directed to remediate - rather than forestall in line with the 'precautionary principle' (Selin & VanDeever 2015: 8). Moreover, both actors have an anthropocentric viewpoint (Vogel 2011:190).

Below is the problem-cause-solution presented for each actor, summarising their approaches. First, ClientEarth:

> *Problem:* The UK government have not banned diesel cars in central London or exchanged the old diesel buses with better, greener technology. The EU has put car industry's interest above the health of Europeans, and the Euro 6 regulation has failed.
> *Cause:* Again, conflicting interests at the UK government and EU level, putting financial interests above the health of its citizens.
> *Solution:* To make the legal framework effective, raise awareness.

Next, the EU:

Problem: Economic instability and ineffective technologies worsen the ecosystem with negative socioeconomic consequences. Difficulty to get member states to implement the air quality directives. Failure of the Euro 6 regulation.

Cause: The economic crisis in 2008-2009 caused a heavy toll on sustainability and its achievements. Part of the problem for member states to meet the air quality directives may lie in the coherence of the EU policies, and the responsibility for air quality lies with local or regional authorities, resulting in expensive short-term measures.

Solution: Resource efficiency, innovative clean technologies, decoupling economic growth. Foster better coherence in EU policies, provide better links between national, regional and local air quality management.

8.3. Government's lack of action and access to justice

8.3.1. ClientEarth

In September 2015, when the lawsuit between ClientEarth and the UK government had been going on for five years (CE, 14 September 2015), ClientEarth states that:

> Government ministers are ignoring a Supreme Court ruling to take immediate action to cut air pollution in the UK, new research has revealed. /.../ Alan Andrews, Clean Air Lawyer at ClientEarth, said: "This reveals a worrying disregard for the decision of the Supreme Court and a shocking lack of joined-up thinking in government." (CE, 11 September 2015).

Remarking on the costs of the lawsuit, ClientEarth argues that "The £100,000 incurred by the government in legal costs could have been much better spent retro-fitting 10 heavily-polluting old diesel buses with new cleaner technology." (CE, 11 May 2016). Further, they point out that "40,000 people die prematurely every year because of the government's continuing inaction..." (ibid). So, ClientEarth thinks that the UK government has spent the last five years avoiding its obligation to meet the EU air quality standards, while also lobbying in Brussels for weaker air pollution laws (CE, 5 May 2016).

According to ClientEarth, the UK government has a short-sighted infrastructure policy and it takes backward steps on climate. The NGO further voices concern on the planned £15 billion on new roads, while bus services are cut (CE, 20 April 2016).

ClientEarth calls for an updated strategy on air pollution in the UK, as the current one dates back to 2007. The policy call further problematizes that separate departments are responsible for different areas; Department for Environment, Food & Rural affairs, Department for Health, Department for Transport, Department of Energy & Climate Change. The first one is responsible for air quality, but as issues on toxic air is relevant in many sectors, ClientEarth says each department should be ascertained and share responsibility (CE, 2015a:2).

Another aspect that is barely featured in UK government policy is environmental inequalities (Chalmers & Colvin 2005:336). ClientEarth could have included this in their policy call to further advocate for healthier air for socially disadvantaged people.

In recent years has several landmark judgments at the ECJ improved the rights for citizens and NGOs to access justice at national courts regarding environmental laws. Chapter 7.3. mention the Janacek case in 2007 as a groundbreaking environmental case, along with the lawsuit that ClientEarth won in the ECJ. ClientEarth says: "So together EU law and the Aarhus Convention have started to overcome the various obstacles that national laws have placed in the way of their citizens." (CE, 2015b:30).

In sum, ClientEarth advocates for wider access to justice in the EU, because:

> Allowing NGOs and citizens to bring cases in the EU Court will not only make the EU more democratic but ensure better implementation and enforcement of environmental law. This would result in stronger protection for people's health and the environment (CE, 6 July 2016).

8.3.2. The EU

The EU, via the Commission, also expresses dissatisfaction in getting member states to meet air quality directives, as more than two thirds of the EU countries are breaking the legal limits

and are therefore subjected to infringement processes. Chapter 6.3. in this essay explains some reasons for this problem and how the EU works with member states to improve the situation. But in the end, "...the main issue remains with Member States. They have insisted on flexibility in applying air quality legislation. This has, unfortunately, not led to better implementation. Too often, the response has been too late." (EC, 24 September 2012).

This illustrate what Warleigh (2003) has pointed out; with more actors included in policy making processes, policy areas have turned into soft policy rather than regulations, meaning that it hinges on the actors themselves, such as governments, to implement the directives (93-95). The complex field of the many actors and their respective and sometimes diverse interests lead to a less 'green' legislation than what the Commission intended (97). On the other hand, the inclusion of the NGO sector and other social actors in policy making processes is also an advantage in increasing the legitimacy for the EU and democratic access (93-95).

At the same time, the many actors can cause a democratic deficit as the responsibility is compartmentalized - even more so as different institutions within the EU are holding each other responsible (Warleigh 2003:7-8). This seems to be the case when it comes to air quality and sustainability; the objectives in the EU SDS are very ambitious and take the three necessary dimensions - societal, economic and environmental - into account. However, in the texts from the Commission (which is responsible for air quality), the social dimension - aside from health in general - is barely mentioned. Instead, as has been shown earlier in this essay, the focus seems to lean towards economic efficiency. How then, does access for (environmental) justice fit into the picture? What role/possibility has the common citizen?

Similarly to ClientEarth, the former Environmental Commissioner propound for wider access to justice in the EU, via public participation and awareness:

> ...air quality is about much more than just legislation, it's also about the economy and how it impacts on the environment and on our health. /.../ We have learned that public awareness is of key importance for the implementation of existing air policy, as well as for the success of any future air pollution strategy (EC, 7 June 2013).

8.3.3. Conclusion

ClientEarth

Problem: The UK government avoids meeting the EU air quality standards, and has a short sighted infrastructure policy.

Cause: Wrong priorities, for example the £15 billion on new roads, while bus services are cut. Separate departments are responsible for different areas.

Solution: The UK government should invest in 'green' technology, update the air pollution strategy, and each department should be ascertained and share responsibility. At the EU level NGOs and citizens should be encouraged to bring cases to the ECJ, EU law and the Aarhus Convention are helpful for this purpose.

The EU

Problem: The flexibility member states have insisted on results in missed deadlines when implementing air quality directives.[17]

Cause: Complex field of many actors with different interests in the policy making process, soft policy instead of regulation.

Solution: Economic resource efficiency, public awareness - inclusion of the NGO sector and other social actors in policy making processes.

So, the actors agree on that member states are ineffective in meeting air quality standards. Both actors also vote for greater attendance of NGOs in policy making processes.

This raises the question of 'panopticon', wherein the citizen is the object of information but never a subject in communication, making citizens alienated in policy making processes (Shore & Wright 2005:3-4). ClientEarth speak to the reader, 'you', exemplifying what 'you' can do about air pollution and environmental justice, being the 'eyes and ears' to the Commission. Yet, who is that 'you'? Their handbook (and other documents) is sometimes dense in style, not every layperson know the jurisprudence lingo, not every person has the

[17] See chapter 6.3.

time, resources and social, cultural and educational capital to understand and/or be able to take action against toxic air. Similar problems arise in connection to the Aarhus and the EU public participation principle.

In other words, what are the underlying norms and whose interests are taken care of (Shore & Wright 2011:8)? Both ClientEarth and the EU view themselves as representatives for the general 'us' they both refer to. Still, none goes into deeper detail on the social composition of who is most likely to participate, or not participate, in policy making processes as 'concerned citizens'.

Additionally, the standpoint of both actors seems to be 'status quo', endorsing the interests of technological neo-liberal solutions; viewing humans as superior, environmental science as objective and striving to control natural phenomena (DesJardins 2013:226-227). Not surprisingly as status quo is the dominant view of the EU, governments and business, with arguments that economic growth is part of the solution to development and sustainability (Hopwood et. al. 2005:42).

However, ClientEarth might be somewhere between the 'status quo' and 'reformist' view, as they criticizes the UK government policies, campaign for more information, energy efficiency and improved technology. The approach believes in governmental action and increased public participation as instruments for achieving sustainability (Hopwood et. al. 2005:43-44).

9. Concluding analysis

9.1. Environmental justice - for whom?

The bottom line in ClientEarth's activism is that wider access to justice for citizens and NGOs, such as bringing cases to the ECJ, will contribute to make the EU more democratic and at the same time ensure better enforcement and implementation of environmental law - thereby resulting in stronger protection for people's health and the environment.

The EU works towards cleaner air with the help of policies such as the EU SDS and the Air Quality Directive, with stronger protection for people's health and the environment, green growth and economic opportunities as goals.

ClientEarth focus on environmental justice and the EU on green economic growth, but both actors speak in line with the status quo or reformist perspective - meaning that they believe that solutions to environmental issues can be achieved within the current system. This is, for example, shown in their arguments on sustainable transport in that they push for greener technologies and increase use of public transport. But none of the actors elaborate on who is able to afford a 'greener' car or who is already going by public transport. While both actors point out susceptible subgroups such as children and people with respiratory problems, none of them discuss the social composition of who is most burdened by air pollution - although the EU connect poverty and low socioeconomic status with poorer health.

This raises the question, environmental justice for whom? Both actors campaign for improved health measures (the EU do so with focus on green growth and getting governments to comply with air quality standards) and wider access to justice (ClientEarth do so via the precedential case at the ECJ and rising public awareness). They do so foremost from a macro-perspective, apprehending environmental injustice as homogenous and uniform across large geographical areas. But air pollution is spread unevenly and affects social groups differently, as the thesis has shown in previous chapters.

Ways forward towards a more 'just sustainability' that better takes social diversity into consideration could be to include the societal structure, with an intersectional perspective, to

a greater extent. Perhaps ecofeminism could work as an inspiration when doing so, as the philosophy highlights certain normative attitudes and behaviors that shape the society and the environment.

The discussion on sustainable transport exemplifies how the EU and ClientEarth advocate for technological innovation and increased use of public transports - but none of the actors refer to social normative structures on socioeconomic and gendered patterns of car usage. An ecofeminist perspective with an intersectional analysis could further contextualise and map out existing norms and patterns, thereby contributing to an analysis on how to make the transport sector more equal. Bottom line is that there is a need for transformative changes of the current social structure - as natural resources are not infinite, the contemporary way of doing things is not sustainable in the long run. Resource efficiency and 'greener' technology, that the EU and ClientEarth propose, is indeed needed, but it is not enough in itself in order to achieve a more socially equal society with sustainable livelihoods. The question is who benefit most, and less, from such actions?

More research on air pollution and sustainability with an intersectional perspective would be welcome to better take into account that the social reality is diverse and unequal, particularly studies that combine both the micro and macro perspective. For example, to connect the existing health epidemiology research which illuminates health disparities, with field studies on differences in emissions and human demography - to see who is most susceptible to toxic air and their patterns of residence, work, travel, and so on. Starting from the insight that this kind of studies can gain, further research could tie together that information practically with policies and legislation on a wider level. For example, further research is needed that problematizes that EU directives on air quality are uniform across all member states and a diverse European population.

9.2. Answers to the research questions

1. How can air pollution policy in Europe be understood in relation to environmental justice with an intersectional perspective?

- How does the EU in legislation, policies, and official information on air pollution relate to social equality issues? Do they relate to social categories such as socioeconomic status and gender?

- How does the NGO ClientEarth's formulation of and activism against air pollution issues relate to social equality? Do they relate to social categories such as socioeconomic status and gender?

For the actors in this study is health of major concern, as for many researchers on the subject of air pollution. The essay has demonstrated that people with lower socioeconomic status, children and people with respiratory diseases - among other social groups - are most susceptible to ambient air. Further, the study underlines the importance of looking at the social composition of an area when evaluating the burden of air pollution.

The EU does not explicitly relate to social equality issues in their studied texts on air pollution, however, the objectives in the EU SDS and the Eurostat's report on sustainability in the EU relate to social categories. A major issue is poverty and people-at-risk, the goal is therefore to overcome socioeconomic disparities and thereby improving the health for citizens. **ClientEarth never mentions socioeconomic status or gender and their take on social equality is the whole UK population**, the common 'us', versus the governors (in the UK government and the EU).

None of the actors relates directly to intersectionality, the chosen empirical material in this study therefore proved to be insufficient in order to find out the social perspective of environmental justice from an intersectional point of view. Mostly because the EU's role is to govern and initiate regulations on a macro level, while ClientEarth's role as law activists is to get the UK (and other member states) to comply with the legislation and policies on air quality. However, the essay can highlight that actors like the EU and environmental NGOs

are driven by certain discourses - what the environmental problem is presented to be and suggested solutions - that influence their respective actions in lobbyism and policy-making processes. This thesis demonstrates a need for a more intersectional and transformative view.

2. How are the EU and ClientEarth relating to the social dimension of sustainable development in regards to air pollution?

Between the lines, **the EU is reasoning that eradicating poverty with the help of resource efficiency and green growth will simultaneously improve citizens' health**. However, they do not specify on who is the most affected by air pollution hazards, neither who will benefit the most from green growth. So, the EU's policies on environmental justice and sustainability tend to be uniform, applied homogeneously across all member states. Thereby they risk putting greater effort into economic growth, rather than transforming society into a more equal one. Yet, the EU do consider asymmetrical norms and structures, for example, by giving social benefits to people at risk of poverty and proposing for affordable public transport. This implies that the EU to some extent relates to how social groups are differently exposed by toxic air.

The social dimension in the EU SDS constitute a big part of the objectives, for example in areas like public health and social inclusion, but the only clear distinction of who is most affected of ambient air is urban versus rural population. Despite the intentions of including the social dimension of sustainable development in all policy areas, does the EC press releases and web content not explicitly relate to the SDS or a social dimension other than citizens health in general. Then, who will benefit from sustainable development?

The EU has set goals that can lead to an improved situation for citizens, but it is up to the member states and other actors if the goals will be put into practice. For example, the high number of infringement processes towards member states due to their failure in complying with the air quality standards, illustrates the need for cooperation and shared responsibility.

Both the EU and ClientEarth argue that member states should improve their activity on tackling air pollution, which was the subject for ClientEarth's lawsuit. Their victory at the

ECJ set a precedential, contributing to greater access to justice in environmental matters in the EU for NGO's - and in the long run for citizens.

The lawsuit and ClientEarth's activism have pointed out the need for a micro perspective, as their focus is London and the UK. However, **ClientEarth does not specify the dimension of social inequalities in relation to ambient air**. For example, they label children and older people as vulnerable, but they do not go into greater detail on the social composition on who is most affected by toxic air. Moreover, the 'you' they speak to is assumed to have the social and educational capital to engage in public participation and be the 'eyes and ears'. While the NGO does not mention sustainability or the EU SDS, they do strive for intergenerational equity as they highlight children and the importance of tackling toxic air now for the future of the next generation. In a similar vein as the EU do they implicitly use the trickle-down-narrative as a way to a just sustainability.

In conclusion, to use the metaphor of a puzzle, the lawsuit and campaign by ClientEarth can be seen as pieces that along with similar social actors are needed in shaping the landscape of environmental policy in the EU.

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