Carbon Credit Schemes & Landownership in Scotland: An Analysis of Policy Discourses

Imogen Cadwaladr-Rimmer

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Abstract

Carbon Credit Schemes have become an important feature of governance approaches to climate change in recent years and have been gaining prominence in the Global North. Scotland in particular has seen a rise in the development of carbon projects, with developers looking to sell carbon credits. Existing land debates around concentrated patterns of landownership in Scotland are an important aspect of carbon credit scheme development. Scotland's Land Rights and Responsibilities Statement, developed by the Government, aims to diversify landownership and include rural communities within decisions relating to land. However, within this context, rural responses have been largely critical towards the development carbon projects, and rural Scottish communities have expressed concern about the potential for land-grabbing.

This thesis examines the policy landscape surrounding the regulation of carbon credit schemes in Scotland. A poststructural lens is adopted to conduct a discourse policy analysis on relevant policies, with two main focuses. First, assessing how current policy on carbon credit schemes in Scotland relates to the goals of Land Rights and Responsibilities Statement. Second, enquiring as to the possible effects of how carbon credit policy and the goals of the statement speak to one another.

The analysis shows that the discursive practices underpinning carbon credit schemes are closely linked with capitalist logics and are furthering neoliberal approaches to environmental governance. As a result, environmental governance is tending towards state-market hybrids. One effect of the marketisation of environmental approaches is a loss of accountability for negative impacts resulting from the development of carbon projects. In addition, this analysis also shows that there is a dilution of community consultation processes. Therefore, this thesis demonstrates that current policy in Scotland on carbon credit schemes is not in line with the principles of the Land Rights and Responsibilities Statement and that, as a result, the concerns of rural communities are being sidelined.

Keywords: Carbon Credit Schemes, Discourse Policy Analysis, Environmental Governance, Landownership, Land Reform, Neoliberalisation, Rural Scotland, Sustainable Development.

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Abbreviations

CCPu	Update to the Climate Change Plan 2018-2032
CCS	Carbon Credit Scheme
LRRS	Land Rights and Responsibilities Statement
PC	Peatland Code
SEA	Strategic Environmental Assessment of the Update to the Climate Change Plan 2018-2032: Environmental Report
SLC	Scottish Land Commission
WCC	Woodland Carbon Code
WPR	What's the Problem Represented to Be?

1. Introduction

Carbon credit schemes (CCS) have become a topic of much discussion in the face of climate change. Following COP26, over 130 countries committed to achieving net-zero emissions by 2050, ushering in what Macfarlane (2021) has referred to as "the Age of Net Zero". CCSs have been identified as a mechanism for achieving net-zero targets, with the buying and selling of carbon offsets presented by its advocates as an easy and cheap way to achieve sustainable development and address climate concerns (Bumpus and Liverman, 2008). The UK has historically been "one of the world centres" (Bumpus and Liverman, 2008, p. 146) of carbon trading from carbon offset projects typically located in the Global South. However, it has recently proposed the development of more CCS projects within the UK itself (Scottish Government, 2017). These national projects are seen as a way of both reducing national carbon emissions and strengthening the UK's carbon market (IUCN, 2023a; Scottish Government, 2020).

There is a diverse range of discussions around the efficacy of carbon credits as a solution to the climate crisis, with some citing carbon accounting as a necessary pathway for funding nature restoration projects while others question whether selling carbon credits allows companies to deflect the responsibility of cutting carbon emissions at source and in production lines (c.f. Chausson et al., 2023; Dobson and Matijevic, 2022; Macfarlane, 2021). The carbon market is rapidly expanding despite these debates, and in addition to the above concerns the issue of land ownership presents another area of concern. Research on carbon offset schemes in the Global South has pointed to their exploitative effects, particularly in relation to land ownership and land rights (c.f. Haya et al., 2023; Lyons and Westoby, 2014).

Scotland has been identified as an attractive area with a high potential for natural capital markets in the UK due to its large amount of rural land (Dobson and Matijevic, 2022; McMorran et al., 2022; Macfarlane, 2021). Large-scale land acquisition has proliferated in Scotland, with the purchase of Scottish land for the development of emissions reductions projects continually growing. Consequently, there has been a rise in the number of buyers seeking land for woodland creation projects as well as peatlands to restore, which is thought to be increasing both the

demand and price for private estates coming onto the Scottish market (Carrell, 2022a; 2022b; Salter, 2022; Macfarlane, 2021).

Large-scale land acquisition in Scotland, however, has not been well received by local and rural populations. Currently, the dominant response from rural communities has been one of distrust, with many foreign and non-local investors being referred to as "green lairds", a colloquial term used to describe new absentee landlords perceived to pay little to no attention to local and rural needs (Marshall, 2022; Carrell, 2022a). Such a response needs to be contextualised in relation to recent land rights debates in Scotland and the newly introduced *Land Reform Act 2016*. The Act has led to the development of Scotland's Land Rights and Responsibilities Statement (LRRS) (Scottish Government, 2017). Scotland has one of the most concentrated patterns of land ownership in Europe, and both the *Land Reform Act 2016* and LRRS have tried to address this through promoting the diversification of land distribution in Scotland and the engagement of communities more directly in decisions relating to land (Ibid.). The changes resulting from the emerging interest in natural capital markets are thus being layered on top of existing systemic land market issues, such as land ownership concentration (McMorran et al., 2022, p. 6).

The current debates around land ownership and carbon credits are not just a Scottish phenomenon but reflect a wider trend within the domain of conservation and rewilding called 'green grabbing' – which is "the appropriation of land and resources for environmental ends" (Fairhead et al., 2012, p. 237; see also Apostolopoulou and Adams, 2015). Green grabbing can be seen as the environmental iteration of land grabbing, which is defined as the large-scale acquisition of land with negative effects such as disregard of social and environmental impacts, lack of regard for other affected land-users, untransparent contracts, or, in some cases, violations of human rights (D'Odorico and Rulli, 2019). Academic literature has been pointing to the prevalence of land grabbing in the name of environmental projects in the Global South for decades (c.f. Lyons and Westoby, 2014; Beymer-Farris and Bassett, 2012). However, while rural Scottish communities have been using the term 'land grabbing' in relation to large-scale land acquisition in Scotland as well (Salter, 2023; Macfarlane, 2021), there is currently very little evidence as to what the potential outcomes of CCSs will be for rural communities and economies in Scotland, and for Scotland's already concentrated pattern of private landownership (McMorran et al., 2022).

In order to ensure that the carbon credits arising from emissions reductions projects are valid, there has been a push in the UK to produce policy around voluntary CCSs. These have emerged in the form of the Woodland Carbon Code

(WCC) and the Peatland Code (PC), which are the only two standards provided for CCS development in the UK and Scotland. Their focus is on establishing land management standards which ensure the legitimate production of carbon credits from UK-based carbon credit projects so that those carbon credits can enter the global carbon market. They also outline community consultation processes for the development of voluntary CCS projects. However, the Codes are still voluntary standards, and carbon projects do not necessarily have to register under the Codes in order to sell carbon credits. Adding to this the fast-moving nature of the carbon market, current policy is constantly a few steps behind and struggling to keep up with the rate at which carbon markets are evolving. In this multi-layered context, CCSs and issues concerning land ownership in Scotland are at a crossroads. While the WCC and PC outline consultation processes with local communities that may be affected by the development of CCS projects, whether or not these guidelines embody the principles of the LRRS remains unclear. The main question that thus arises here is whether the growing prominence of carbon markets might exacerbate existing land problems in Scotland.

1.1   Research Aim & Research Questions

This thesis examines the intersection of land concerns surrounding the development of CCS projects in Scotland and the principles of the Scottish LRRS. To do this, and provide an answer to the question of whether and how CCS projects might impact land distribution problems in Scotland, the thesis analyses emerging CCS policies in Scotland and examines how they speak to the principles for land policies developed in the LRRS. The research is guided by the following two research questions:

1. How are land rights and responsibilities addressed within policy on carbon credit schemes in Scotland?
2. What are the possible effects of the way in which land rights and responsibilities are addressed in CCS policy?

The thesis takes a discourse analytical approach to the proposed research, paying attention to the discursive practices that contribute to carbon credits and how they appear within the domain of policy. The discursive underpinnings of CCSs are an important part of my theoretical approach, alongside a theoretical awareness of the effects of neoliberalisation on environmental governance (Chapter 3). In order to research these questions, I use Bacchi and Goodwin's (2016) What's the Problem Represented to Be (WPR) approach as the policy analysis method (Chapter 5). Throughout the research I employ a critical lens to consider if and how current policy around carbon credit schemes is addressing land rights and responsibilities

laid out by the Scottish Government, using current academic literature concerning both carbon credits and land rights (Chapter 3) as a resource to think critically about how these issues are formulated through policy (Chapter 6). Although my analysis specifically engages with the current political landscape surrounding land ownership in Scotland, the research is also relevant in the wider context of CCS project development throughout Europe and the potential implications it could have for environmental policy and rural communities.

2. Research Design

This chapter lays out the research design process. Section 2.1 introduces and examines the poststructural theoretical worldview that I have adopted throughout the research, describing how this informs my approach to discourses and their analysis. Section 2.2 demonstrates the ethical considerations of the research process and establishes my own researcher positionality in relation to the research topic. In light of this, the complexity and nuance associated with providing context to the research is briefly explored.

2.1 A Poststructural Approach to Discourse Studies

Throughout this research I adopt a Foucauldian approach to discourse, understanding discourses as "socially produced forms of knowledge that set limits upon what it is possible to think, write or speak about" (Bacchi and Goodwin, 2016, p. 35, emphasis in original). Discourses are composed of ensembles of "ideas, concepts and categories through which meaning is given to social and physical phenomena" (Hajer and Versteeg, 2005, p. 175). While traditionally discourse studies have been part of the so-called linguistic turn which pays specific attention to the use of language, a Foucauldian understanding of discourse centres on the production of knowledge through discursive practices. This approach exemplifies one of Foucault's central analytic points: that discourses are constituted by sets of practices which, in turn, define what is considered "within the true" (Bacchi and Bonham, 2014, p. 174). In adopting a discourse approach within my research the aim is to examine not only how policy represents carbon credit schemes but also to investigate the reasoning behind that representation, enquiring into the logics that position carbon credit schemes as a necessary climate approach. Doing so allows for a thorough engagement not only with CCS policy but also with how CCS policy speaks to the principles of the LRRS.

In addition to a Foucauldian understanding of discourse, I adopt a poststructuralist theoretical perspective throughout the research process. Before expanding on how a poststructuralist perspective has impacted my research approach however, it is important to state that while the theoretical practice of poststructuralism has guided my research, I do not assume that by simply

identifying a theoretical practice I have automatically guaranteed an identity for my research (Dillet, 2017). Rather, theoretical practice is understood as "a process in which operations are produced, inside which theory and practice take shape concurrently, against each other" (Macherey, 1998, p. 35, quoted in Dillet, 2017, p. 516). In other words, while a poststructuralist theoretical approach is a guiding framework for the research, the approach has also been developed alongside the research and analysis process. While I remain sensitive to a poststructuralist approach to discourse analysis, I also have allowed that approach to take shape through its interactions with and against the research material.

Poststructuralism is not a singular theory, but it can be broadly defined by its general "questioning of Enlightenment assumptions concerning reason, emancipation, science and progress, and disquiet regarding connections between this thinking and social inequality" (Bacchi and Goodwin, 2016, p. 4). It places an emphasis on recognising thought and practice "beyond the confinement of readymade categories" (Dillet, 2017, p. 522), and directs attention to the plurality of knowledges and practices that come together to form the realities in which we live. The WPR method adopted in this research (Section 5.2) exemplifies a poststructuralist approach to discourse analysis, where both theorists and practitioners are understood as subjects who are immersed in "taken-for-granted knowledges" that are constantly in process (Bacchi and Goodwin, 2016, p. 8). Within this context, policy is seen as an exercise in knowledge and, therefore, truth production (Ibid.). In other words, policy *is* discourse. As such, the focus of my research is both on how policy is made and how policy makes the world and the subjects within it.

Integrating poststructuralist theoretical practices into research requires not simply a study of discursive strategies, but a wider awareness of how and why certain things are thought and perceived as true knowledge (Dillet, 2017, p. 525). In utilising a Foucauldian approach to discourse analysis, discourses are understood as knowledges which are "forms of truth" (Bacchi and Goodwin, 2016, p. 21); i.e., they are comprised of general background knowledge, epistemological and ontological assumptions, and bounded social knowledges such as disciplines which all contribute to what is "sayable" as "true" (Ibid.). As such, the focus of the analysis is less on the linguistic content of the policies analysed and more on the way in which the "whole package of relationships, including symbolic and material elements" (Bacchi and Bonham, 2014, p. 178) operate within the policy to give legitimacy and meaning to the things that are said. Such an approach entails an "endless practice of grounding" (Dillet, 2017, p. 518), which is achieved through a continued awareness of the genealogy of discourses being discussed (Section 3.1.1)

on the one hand, and an awareness of both the specific context in Scotland and relevant academic literature on the other (Chapter 3).

2.2 Research Ethics: Positionality and Context

Positionality refers to the specific position adopted by the researcher within a study (Holmes, 2020, p. 2). Recognition of positionality is central to the development of research design as it reinforces an awareness "that researchers are part of the social world they are researching and that this world has already been interpreted by existing social actors" (Holmes, 2020, p. 3). Research is rarely value-free, and ontological and epistemological assumptions made by the researcher, as well as assumptions made about human nature and agency, all play a role in how research is conducted, its outcomes and its results (Ibid.). In order to conduct ethical research then, reflexivity has been identified as a necessary part of the research design and process (Holmes, 2020; Sultana, 2007). A reflexive approach to research requires that the researcher acknowledge themselves within the research process, remaining sensitive to the ways in which the "social-historical-political location" (Homles, 2020, p. 3) of the researcher, as well as their individual ethics and social values, may influence the entirety of the research process (Ibid.).

Reflexivity is particularly important within the field of discourse analysis as discourse analysis has been identified as being "necessarily a 'moralistic' approach to analysis" (Graham, 2018, p. 186) in that it makes critical evaluations of statements according to a standard decided upon within the bounds of a specific research problem. For this research I use Bacchi and Goodwin's (2016) 'What's the Problem Represented to Be?' (WPR). WPR analysis consists of a series of questions (expanded upon in Chapter 5), as well as a final step that asks the researcher to apply the WPR method to one's own research. This step reinforces a commitment to reflexivity and self-problematisation, recognising that "given one's location within historically and culturally entrenched forms of knowledge, we need ways to subject our own thinking to critical scrutiny" (Bacchi and Goodwin, 2016, p. 24).

In order to conduct an ethical and transparent policy analysis, I have paid continued attention to my own positionality throughout the research process. My identity as a British-born, Irish-raised individual has meant that I have occupied a space somewhere between 'insider' and 'outsider' in relation to the research topic. Traditionally it has been assumed that 'insiders' give a more subjective view of the field of study, and that they have the ability to provide a more authentic representation of the research topic, though the position does not come without concerns around bias (Merriam et al., 2001, p. 411). In opposition, 'outsiders' have

been assumed to provide a more objective view of a research field, given their distance from cultural specificities (Ibid.). However, such essentialist understandings have proven problematic in that they ignore a range of nuances (see McDougall and Henderson-Brooks, 2021; Merriam et al., 2001). Researchers have multiple identities which are fluid and context-situated (Bayeck, 2021, p. 1). Further, while contextualising oneself in relation to the research topic is necessary, it is also important to recognise that context itself is not a ready-made landscape. Context is situational, resting on "implicit information and underlying cultural systems that explain and inform the behaviours, actions, and interactions of people in a country or region" (Bayeck, 2022, p. 2). Placing oneself within this complex puzzle of relations, therefore, is not straightforward (Wilson, 2016).

As for my own positionality, I have a proximity, on the one hand, to the broader cultural context of this research having grown up in the Republic of Ireland and having had family contact between the United Kingdom throughout my life. Further, given my academic background within the field of sustainable development I have a familiarity with environmental policy within Europe. However, on the other hand, such proximity does not make up for the fact that I am not Scottish and that I have not lived in Scotland for an extended period of my life. While the various sentiments and responses expressed by local and rural Scottish communities to the growth of CCS projects across Scotland resemble rural responses to environmental policy and environmental protection measures I have encountered in previous research I have conducted, they are also unique to Scotland and the Scottish experience – to which, I am an outsider. This status as outsider means that the direct voice of rural communities in Scotland is not and cannot be fully captured and presented through my research. In order to address this, throughout Chapter 3 – which I have named 'Contextualisation' – I focus on developing a nuanced perspective to the background of this research topic and give space to historical factors which have contributed to current rural concerns. This nuanced perspective is achieved in two ways. First, by maintaining a sensitivity to my own positionality and actively assessing and reassessing how I have formulated the research field. And second, through a continual awareness of academic literature relevant to the topics being discussed so that a broad and well-rounded perspective can be gained. Finally, the policy landscape of CCSs in Scotland and the way in which they are evolving and impacting local and rural communities is extremely current, meaning that the context is continually being made and remade. As such, the contextualisation developed is related to a shifting landscape which is changing and transforming even as I write this thesis.

3. Contextualisation

This chapter provides some background and contextualisation to the research topic and specific case. While the Chapter focuses mainly on contextualising the specific research topic, I also develop some key concepts and theoretical terms, and identify some prominent discourses throughout. These help to ground the current situation in Scotland, as well as speak to the wider relevance of the research.

First (Section 3.1), I discuss carbon credits, giving an explanation of what they are and a brief history of their use. Two sub-sections (Section 3.1.1 and Section 3.1.2) explore some of the discourses underpinning carbon credits and their development, as well as the relevance and definition of the term 'neoliberal'. Second (Section 3.2), the current pattern of landownership in Scotland is briefly explored in order to contextualise existing landownership problems. Third (Section 3.3), I describe the current landscape of carbon credit schemes in Scotland, illustrating their growing prominence, some key actors involved, and some of the main concerns of local rural communities surrounding their development.

3.1 Carbon Credits

Carbon credits are a market-based mechanism for addressing environmental problems which fall within what is referred to as Nature-based Solutions to the climate crisis (Chausson et al., 2023). The vision behind carbon markets is that market instruments can incentivise emissions reductions by pricing carbon (Bumpus and Liverman, 2008). There are predominantly two ways in which carbon credits function; Emissions Trading Schemes and Carbon Credit Schemes (CCS). Emissions Trading Schemes are mandatory, cap-and-trade style schemes which have become a key policy instrument within EU Environmental Action Programmes (Machin, 2019). CCS, on the other hand, are generally voluntary schemes that enable businesses, organisations and individuals to compensate for their greenhouse gas emissions through the purchasing of carbon credits, which are a standard unit of measurement equivalent to 1 tonne of carbon dioxide (World Bank, 2022; Bumpus and Liverman, 2008). These carbon credits are generated through emissions-reductions projects. Projects can be developed by organisations,

businesses or individuals and usually consist of the management of tree planting or, more recently, peatland restoration. Voluntary CCSs have arisen organically and grown in popularity due to a perceived gap in the market for carbon, as well as from a frustration with a perceived lack of action from governments (Bumpus and Liverman, 2008, p. 132-133). They allow businesses and organisations to purchase carbon credits which in turn enables them to reach voluntary emission targets.

Carbon offsets are often championed by their advocates as a cost-effective way of reducing carbon emissions and as an easy and cheap solution to emissions reduction (Bumpus and Liverman, 2008, p. 128). They also "represent an important mechanism for generating future income streams related to climate change mitigation" (McMorran et al., 2022, p. 22), and have come to be viewed by many governments as a mechanism through which to "unlock finance and bridge the funding gap between biodiversity and climate initiatives" (Chausson et al., 2023, p. 2). CCSs, however, have also been subject to a range of critiques. Some critics of CCSs have pointed to the strong potential for greenwashing, as carbon offsets allow companies to make net-zero claims while leaving carbon emissions both at source and in production lines unaddressed (Macfarlane, 2021). Further, the historical inequality associated with CCS development has been a major source of criticism. Traditionally, CCS projects have been located in the Global South, developed through the channelling of finance from the Global North into carbon sequestration projects in the Global South in exchange for carbon credits (Bumpus and Liverman, 2008, p. 130). The most prominent example of this is the REDD+ framework – the UN framework established as part of the Paris Agreement to support the reduction of deforestation in the Global South by funding forestry projects in developing countries and providing incentives through results-based payments (United Nations, 2023). While many view the private funds generated through REDD+ carbon crediting as necessary in the preservation of tropical forests, there are ongoing debates as to the efficacy of these projects (Haya et al., 2023). The additionality of CCS projects – i.e., that projects sequester more carbon than would otherwise have been sequestered had the project not been developed – remains difficult to determine, with research suggesting that the majority of carbon credits generated from REDD+ projects do not actually bring climate positive impacts (Haya et al., 2023; West et al., 2023). Further, despite safeguards against local exploitation, numerous REDD+ projects have also been shown to lead to the displacement of vulnerable local communities (Haya et al., 2023), and the costs and benefits associated with such CCS projects have been shown to be unfairly distributed (c.f. Streck, 2020; Lyons and Westoby, 2014).

3.1.1 Discursive Practices

In order for carbon credits to be exchangeable and profitable, it is necessary for carbon reduction itself to become a tradable commodity (Bumpus and Liverman, 2008, p. 134). For this to happen, carbon dioxide is abstracted from the practical world and reconceptualised as an asset, where it can then be valued in monetary terms. CCSs have developed within the 'natural capital' approach to conservation, an approach which neoliberalises environmental protection and conservation measures through the "prioritization of private-led initiatives over public investment for public goods" (Chausson et al., 2023, p. 2).

There are a number of discursive practices underpinning carbon credits, including green capitalism, ecological modernisation, and market environmentalism. Green capitalism can be broadly defined as "a set of responses to environmental change […] that relies on harnessing capital investment, individual choice, and entrepreneurial innovation to the green cause" (Prudham, 2009, p. 1595). The discourse pivots around a strong belief in the capacities of markets, private decision-making, technological innovation, and decentralised governance to generate climate solutions (Ibid.). These are closely associated with the discourse of ecological modernisation which promotes economic growth and environmental protection as mutually beneficial (Machin, 2019, p. 211), and draws on the assumption inherent in market environmentalism that environmental problems are the result of the market's historical inability to value ecological resources and place a cost on environmentally harmful behaviours (Bell, 2015, p. 2). Such beliefs that market mechanisms can both incentivise environmental innovation and create green economic growth (Baker, 2007) underpin the logic that the transformation, or reduction, of nature into tradable commodities within the marketplace is a primary solution to the climate crisis (Bell, 2015; Beymer-Farris and Bassett, 2012; Jonas and Bridge, 2003). This commodification of ecological resources is an increasing trend (Prudham, 2009) which has already become institutionalised into EU climate policy, most notably through the consolidation of Emissions Trading Schemes as a key environmental strategy (Machin, 2019). Although Emissions Trading Schemes are different from CCSs, the way in which CCSs frame market mechanisms as 'common sense' solutions to the climate crisis is much the same.

The marketisation of natural resources can be seen as symptomatic of the late-stage capitalist promotion of the exchange of capital through hyperderegulated financial services (Dillet, 2017, p. 524), with Wanner (2015) arguing that the popularity of green economy discourses arises from a reiteration of neoliberal capitalism in response to the environmental crisis. The neoliberal push for rapid privatisation and deregulated market systems (Chausson et al., 2023; King and

Sznajder, 2006) is certainly recognisable within the discursive underpinnings of carbon markets as discussed above. Further, in relation to its approach to conservation, green capitalism continues a long-held assumption that environmental and social issues are distinct (McAfee and Shapiro, 2010), and that social inequalities that persist alongside and despite environmental policy-making are separate issues which have little to do with the latter (Bell, 2015). Paying attention to the discursive underpinnings of carbon credits allows for a recognition of CCSs as grounded in a primarily neoliberal and economic approach to climate solutions. This is relevant to my research as I am analysing the intersection of CCS policies and land rights issues, enquiring as to the potential implications CCS policy may have for Scotland's LRRS principles.

3.1.2 Defining Neoliberalism

Neoliberalism is an important term within my research. As demonstrated above, neoliberal approaches to governance play an important role in the discursive practices surrounding CCSs. Further, in relation to the analysis of policy, an awareness of neoliberal influences on politics and economics is relevant. However, neoliberalism has become a "controversial keyword" (Chun, 2018, p. 423) within research due to its ideological nature and contested definition. It is often overused and ill-defined, meaning it has lost much of its analytical purchase. As such, this section is dedicated to expanding upon the definition of the term that I use within the context of this research.

In its broadest understanding, neoliberalisation "denotes a politically guided intensification of market rule and commodification" (Brenner et al., 2010, p. 184). Throughout this thesis, however, I use the term 'neoliberalism' in line with Wacquant's (2012) development of the definition. Wacquant (2012) defines neoliberalism as "an articulation of state, market, and citizenship that harnesses the first to impose the stamp of the second onto the third" (Wacquant, 2012, p. 71). To expand on the first part of Wacquant's quote – the state and the market – neoliberalism is understood as a political project that seeks to reengineer the state "so as to actively foster […] the market as an ongoing political creation" (Wacquant, 2012, p. 72) and skew the focus of the state towards the imposition of fiscal constraints and market discipline (Ibid.). Further, Chun (2018, p. 423) argues that neoliberalism is a "political state project that seeks to subvert democratic governance by the general populus" while at the same time conforming to corporate interests by "attempting to monetize all aspects of the public domain in pursuit of profits".

In terms of the second part of Wacquant's definition – the way in which state-market combinations are imposed upon citizenship – the growth of

community consultation processes within the domain of environmental governance is of particular relevance to my research. Environmental governance has been defined by Lemos and Agrawal (2006, p. 298) as "a set of regulatory processes, mechanisms and organizations through which political actors influence environmental actions and outcomes". This, too, has not escaped the influence of neoliberalisation, with new forms of environmental governance emerging as hybrids between the state, markets and communities, such as public-private partnerships between state agents and market actors (Lemos and Agrawal, 2006, p. 310-311). Community consultation processes have been widely perceived as a way of empowering communities to have a say in the implementation of large-scale infrastructural development projects – which are often spearheaded by such state-market hybrids – that would otherwise typically remain beyond their control. Levels of participation within these developments, however, can vary greatly; ranging from informative and tokenistic engagement processes to more collaborative and even transformative consultation processes (for example Arnstein (1969); Conrad and Hilchey (2011)).

Finally, when using the term neoliberalism it is important to note that I do not use the term to refer to a coherent formation of the state but rather to point to a pattern of regulatory transformation that is simultaneously local, contested and unstable (Brenner et al., 2010, p. 184). In discussing the effects of neoliberalisation, therefore, I am referring to the influence of a particular way of thinking and set of discursive practices, with my analysis (Chapter 6) and discussion (Chapter 7) focusing on developing a "description of thinking as practice" (Bacchi, 2012, p. 1) rather than diagnosing a specific mode of state. Such an approach is consistent with the poststructural approach to discourse I lay out in Section 2.1.

3.2 Landownership Patterns in Scotland

Scotland has an acutely concentrated pattern of landownership, a trend which dates back to the 17th century (Glenn et al., 2019). 98% of all Scottish land is considered rural land (Scottish Government, 2021, p. 8), and the dominant form of ownership over rural land is private ownership: 57.1% of rural land is owned in private estates[1], whereas only 3.1% is owned by communities (Glenn et

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[1] The term 'private estate' typically refers to large country homes which are found on landed estates. Landed estates are defined as large country homes surrounded by extensive areas of land. Estates typically cover farming and business interests, provide residential accommodation for the owner, and also often rent housing for tenants. They can also include woodland, parkland and heritage sites (Tolley, 2024). Traditionally, estates have been passed down through generations of the same family (Ibid.). There are some new estate owners, but the turnover of ownership for private estates is low and it is rare that they come onto the housing market (Glenn et al., 2019; Thomson et al., 2016).

al., 2019, p. 5). Further, just over 400 private owners - 0.008% of the population - own 50% of all privately owned land in Scotland (Ibid.). On top of this, the turnover of ownership within the estate market is extremely low (Glenn et al., 2019; Thomson et al., 2016).

The scale and pattern of landownership has been central to debates around Scottish land reform for decades, in particular disagreements as to whether it is the scale of landownership or the way in which land is managed that has a larger impact on rural development (Glenn et al., 2019). These debates continue today. Research by Thomson et al. (2016) demonstrates that the scale of landownership is one of many factors that influences the economic, social and environmental development of rural communities, and that such influences can be both positive and negative. Hindel et al. (2014) suggest that private estates can provide a number of economic benefits for local communities such as job creation, increased expenditure within local communities, the provision of tenancies for local farmers, and increased diversity in land activity and land management amongst others. The Scottish Government have also referred to large-scale landowners as "stewards of Scotland's land resource" (Scottish Government, 2017, p. 25).

However, negative impacts of large private estates are also cited. Private estates in Scotland have historically acted as local power bases and have had a large influence over rural communities and economies through the landowners' ability to control housing, employment and development opportunities (McMorran, 2016; Thomson et al., 2016). For example, Scotland's current pattern of landownership has been shown to have played a role in difficulties meeting local housing needs (Glenn et al., 2019), as well as contributing to the inflation of local house prices (McKee et al., 2023). Further, research by Fischer and McKee (2017) points to how large-scale landowners can gradually diminish community and other resources, leading to an overall depletion of community capacity. It is important to note though that research by Glenn et al. (2019) suggests it is not necessarily large-scale landholding that is the problem per se, but rather the *concentration* of landownership which can lead to detrimental effects on rural communities. This is because the largely unregulated system of landownership in the UK gives rise to the *ability* for landowners to misuse power in such a way that the socially corrosive effects are perhaps just as detrimental as if they were misusing power (Ibid.).

3.3 Carbon Credit Projects in Scotland

Although CCS projects have historically been developed mainly in the Global South, there are an increasing number taking place in the Global North, particularly in Scotland where they have been proliferating in recent years. This is

because of the large amount of rural land in Scotland, as well as the fact that one fifth of the country's landmass is considered peatland (Macfarlane, 2021), opening up major opportunities for peatland restoration. In December 2021, 638 carbon projects had been registered in Scotland under the WCC (Carrell, 2002a) and by August 2022 almost 560,000 carbon credits produced within Scotland had been sold (Dobson and Matijevic, 2022). Part of the reason for this growth in popularity of carbon sequestration projects comes from the Scottish Government itself, which is offering grants and funding supports for those undertaking woodland creation and peatland restoration projects (Scottish Government, 2017). This is part of their bid to reach the Climate Change Plan targets of increasing woodland creation to up to 18,000ha in 2024/25 and restoring 250,000ha of degraded peatland by 2030 (Scottish Government, 2020a, p. 169).

The increase in the development of carbon projects, especially by foreign and non-local investors, has been met with largely negative responses from rural Scottish communities. The term "green laird" has frequently been used to refer to wealthy foreign investors who are seen to be buying up large amounts of Scottish land and deciding how that land should be managed without adequate knowledge of or consultation with local communities (Segal, 2023; Salter, 2022). Local concerns around land grabbing, or green grabbing, have been raised, with local populations concerned as to how large-scale land acquisition might impact the rural housing crisis, farming, and access to land (Salter, 2022). Resistance from rural communities stems from a fear of negative impacts such as loss of employment, decreased housing availability, and lack of community involvement in decision-making processes (McKee et al., 2023, p. 29). Uncertainty is an important factor to consider when addressing rural communities concerns around CCS development. As stated previously, research by both Glenn et al. (2019) and McKee et al. (2023) illustrates that the *potential* for negative impacts from concentrated landownership is enough to undermine rural trust in government and large-scale landowners. In their research, McKee et al. (2023) found that some rural community members feel uninformed about the goals of landowners pursuing green land investments, with the power of landowners to affect the development of rural communities an important area of concern. Previous research has also shown that community engagement has not historically been prioritised by new landlords or by those embarking on projects which result in large-scale land use change (McKee et al., 2023, p. 23). Consequently, critics have raised concerns around *who* this green transition will benefit, citing the risk that "the carbon-offsetting boom will amount to little more than landlord plundering dressed up in eco-friendly clothing" (Macfarlane, 2021).

Currently, there are 790 carbon projects registered in Scotland under either the WCC or PC, and they make up 63,453ha of land which is being developed for carbon credits[2] (Mann and Matijevic, 2022a). The largest developer of carbon credits in Scotland to have listed itself under the WCC and PC is Scottish Woodlands. Scottish Woodlands is an Edinburgh-based company that is currently developing 9,075ha of woodland and 252ha for peatland restoration (Mann and Matijevic, 2022b). The second largest developer registered under the Codes is Forest Carbon, a Durham-based company developing just over 6,000ha of woodland and 1,620ha of peatland (Ibid.). Both Scottish Woodlands and Forest Carbon are UK-based companies, but Forest Carbon is not local to Scotland. Wildland, the third largest developer of carbon credit projects in Scotland, is also not a locally owned company as it is owned by Danish billionaire Anders Holch Povlsen. Wildland is currently developing 6,789ha of land for carbon credit projects (Dobson and Matijevic, 2022). The company calls itself a conservation organisation, and champions its "200-year vision of landscape-scale conservation in the Scottish Highlands", which it aims to achieve through the "custodianship" of three significant Scottish estates in the Cairngorms (Wildland, 2023). Nature tourism and conservation are the two main facets of the organisation, with Wildland offering high-end lodges for tourists and overseeing the regeneration of woodland and the restoration of peatland across its holdings (Segal, 2023; Wildland, 2023). However, although Wildland itself is not the largest developer of carbon projects currently registered under the codes, it is important to note that the owner of Wildland, Anders Holch Povlsen, is the single largest landowner in Scotland, owning 221,000 acres (approx. 89,450ha) of Scottish land (Marshall, 2022).

In a crude simplification, journalist David Segal (2023) has remarked that the push from the Scottish government to support CCS, in particular through grants, effectively translates as "bill us [the government] for the digging, and keep all the gold you can mine [profits from the sale of carbon credits]", which has in turn sparked a land rush amongst investors. However, it is not so easily reducible a situation as Segal suggests. Land prices in Scotland have risen in recent years, with purchase prices for Scottish estates rising by 199% between 2020 and 2021 (SLC, 2022, p. 2). Plantable forestry land has also seen a 54% increase in value in 2020, and over the last five years 40% of farms in Scotland were purchased by non-farming buyers for the development of projects such as lifestyle and forestry

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[2] These figures refer to carbon projects that are specifically registered under one or both of the Codes in Scotland. However, because the Codes are voluntary standards, there are other carbon projects being developed in Scotland which are not registered under the Codes. One example of an unregistered project is the Scottish brewery company BrewDog, who purchased a 9,308-acre plot on Kinara estate and are developing a project called 'Lost Forest', which plans to reforest and restore peatlands (BrewDog, 2023; Carrell 2022a). The carbon credits generated from this project are intended to offset the company's own emissions elsewhere in their production lines (Ibid.).

projects (Ibid.). Yet, while it has been suggested that the growing potential for profit from CCSs has resulted in a race for land in Scotland (Salter, 2022; Macfarlane, 2021), the extent of the impact CCS projects may be having on increased demand for land is not easily quantifiable given the wide range of factors that play into land purchase decisions (c.f. McKee et al., 2023; McMorran et al., 2022). Despite the difficulty in estimating how much of an impact CCS development is having on demand for land, McKee et al. (2023, p. 3) anticipate that "landownership and management for environmental goals will interact with existing and traditional land use practices", as well as having the potential to price new farmers out of the land market as land access and ownership becomes more concentrated (Ibid.).

3.3.1 A Note on the Use of the Term 'Land Grabbing'

When discussing the concerns of rural communities in Scotland in relation to CCSs, the term land-grabbing has often been used (see Salter, 2022; Macfarlane, 2021). Land-grabbing is a politically contested term (Franco and Borras, 2019), but the use of the term by rural communities in Scotland needs to be framed in relation to the Highland Clearances during the 18th and 19th centuries. The Highland Clearances saw tens of thousands of people evacuated from their homes in the Scottish Highlands, often by absentee landlords, in order to make space for sheep which were more profitable at the time (c.f. Richards, 2016; Parry, 1980). The clearances were linked to the idea of the 'improvement' of the land, a term which has historically been used as a euphemism for privatisation based on the idea that unowned land is a waste of potential profit and that society at large will benefit from its private regulation (Hayes, 2020, p. 35). Today, many rural concerns around the potential for CCSs to lead to land-grabbing can be traced back to the history of the Highland Clearances, which remain a low-point in the history of rural Scotland.

However, while the term land-grabbing has been used in relation to the development of carbon projects in Scotland by foreign and non-local investors, it cannot be used uncritically. As stated in Section 3.1, carbon projects located in the Global South have long been associated with land-grabbing, with impacts for rural and vulnerable communities ranging from displacement, dispossession and deprivation of livelihoods (Haya et al., 2023). However, large-scale land acquisition in the Global North has not been seen to result in the same extent of rights abuses as has taken place in the Global South (McMorran et al., 2022, p. 13), making the use of the term land-grabbing in the context of the Global North complex (Bunkus and Theesfeld, 2018). As described above, large-scale land acquisition for the development of carbon projects *is* taking place in Scotland, and there are absentee and non-local investors engaging in this development. However, Bunkus and Theesfeld (2018) point out that the large-scale purchase of land by foreign investors

in the Global North does not, in and of itself, indicate that there is land grabbing taking place.

While this does not mean that large-scale land acquisition will not have negative impacts on rural communities, it is important to note that although rural communities make use of the term land-grabbing, throughout my thesis I avoid using the term unless referring specifically to those concerns. Currently, there is very little research as to the actual impacts CCS development will have on rural communities in Scotland (McMorran et al., 2022). As such, while there could be negative impacts for rural communities, whether or not such impacts constitute land-grabbing remains an area of further research. Consequently, although my thesis examines the potential impacts of CCS policy on land rights issues in Scotland, I maintain an awareness of the complexity associated with the use of the term land grabbing in a Global North context.

4. Policy Landscape

In order to address the research questions I outlined in Section 1.2 it is important to understand the policy landscape surrounding the above issues around landownership in Scotland and current policy surrounding CCSs. Therefore, this Chapter gives an overview of the main policy documents that are relevant to the research. Section 4.1 describes the two policy documents which provide guidance for the development of CCS projects in the UK; the Woodland Carbon Code (WCC) and the Peatland Code (PC). These two documents are also the main focus of the analysis. Section 4.2 outlines in more detail the principles laid out in the Scottish Government's Land Rights and Responsibilities Statement (LRRS). These principles are the main standard against which the CCS policies are analysed in relation to the research questions (Section 1.2).

4.1 The Woodland Carbon Code & The Peatland Code

In Scotland and the UK, there are only two policy documents which provide guidance on the development of CCS projects: The Woodland Carbon Code (WCC) (Scottish Forestry, 2022) and The Peatland Code (PC) (IUCN, 2023a). The WCC is overseen by Scottish Forestry and acts as a quality assurance standard for woodland creation projects in the UK (Scottish Forestry, 2022). Its purpose is to generate integrity through the independent verification of carbon units for emissions reductions projects, which can then be sold on the global carbon market (Ibid.). It is backed by the UK Government and endorsed by International Carbon Reduction and Offset Alliance, the global umbrella body for carbon reduction and offset providers in the voluntary global carbon market (WCC, 2019). The PC was developed by the IUCN (International Union for the Conservation of Nature) as part of the UK Peatland Programme which promotes the restoration of peatlands across the UK (IUCN, 2023b). The PC is newer than the WCC and, given the complexity of peatland restoration in comparison to woodland creation, is also more technical. The PC acts as a voluntary standard for emissions reductions projects on UK peatlands which wish to market the climate benefit of peatland restoration. Like the WCC, it verifies peatland restoration projects in order to provide assurance to businesses and other investors of the validity of the carbon credits being traded (IUCN, 2023a; 2023c).

In order for carbon projects to be verified under the Codes, landowners must register their project with the UK land registry and an independent third-party verifier assesses whether the project management plans comply with the Codes (IUCN, 2023a; Scottish Forestry, 2022). Once the plans have been verified, the project can go ahead. In the case of the WCC, projects must be verified by an independent verification body within three years of project registration where projects will receive Pending Issuance Units. These Pending Issuance Units may become carbon units following further assessments for their verification which can only take place five years after the start of the project (Scottish Forestry, 2022). For peatland restoration projects, these get reassessed by the independent verifier after five years to see whether intended plans have materialised. The PC specifies that no Pending Issuance Units will be received for peatland projects until the independent verifier deems that the baseline condition of the peatland has improved, something which can take years to achieve and, in some cases, may never be reached (IUCN, 2023a, p. 3). Once the landowner is issued the relevant carbon credits, these can then be traded on the carbon market (IUCN, 2023a; Segal, 2023; Scottish Forestry, 2022). The Codes are an important part of the development of CCS projects as they are the sole way of legitimising carbon projects and the carbon credits arising out of them in the UK. Without project approval under the Codes, carbon credits remain unverified.

4.2 The Scottish Land Rights and Responsibilities Statement

Concerns around the concentrated patterns of landownership in Scotland have been at the centre of the land reform debate in Scotland for decades, and were central to the *Land Reform Act 2016* (Glenn et al., 2019, p.1). The *Land Reform Act 2016* has had a wide range of impacts and implications for land in Scotland. However, for the purposes of this research there is one main outcome of the Bill which will be detailed; the development of the Land Rights and Responsibilities Statement (LRRS) (*Land Reform Act 2016*, Part 1). The LRRS was produced in 2017 and has two main aims (Scottish Government, 2017, p. 3):

1. To inform government policy and action in relation to land.
2. To encourage and support those with significant responsibilities over land, such as local authorities and private landowners, to consider how their decision-making powers can contribute to the realisation of the vision of the LRRS.

In view of this, the LRRS statement outlines six key principles which seek to guide ongoing land reform in Scotland. These principles are shown in *Figure 1*.

Figure 1. Principles of the Scottish Government's Land Rights and Responsibilities Statement (Scottish Government, 2017). Author's own figure.

It is clear from principles two and three that the diversification of landownership in Scotland is an express goal of the Scottish Government going forward. The diversification of the pattern of landownership in line with principle two is cited by the government as having the potential to "empower greater numbers of people", which will "ensure a greater diversity of ownership, greater diversity of investment and greater sustainable development" (Scottish Government, 2017, p. 17). Further, the increased ownership of land by local communities as outlined in principle three is identified as a way for communities to gain more control over land which can "help contribute to increased community resilience" (Scottish Government, 2017, p. 20).

Principle six stresses the importance of increased collaboration and community engagement in decisions relating to land. This goal is in line with the *Land Reform Act 2016* Part 4, which calls on Scottish ministers to issue guidance on how to engage communities in decisions relating to land which might affect them. This guidance was published by the Scottish Government in 2018 in their "Guidance on Engaging Communities in Decisions Relating to Land". It expresses support for more community collaboration and provides guidance on engaging communities about general land decisions which is intended to be applicable to a wide variety of circumstances (Scottish Government, 2018, p. 4).

While this research intends to conduct an analysis of government policy, it is not within the scope of my thesis to extend the analysis to the *Land Reform Act 2016* or the LRRS themselves. As such, for the purposes of the research, the goals for ongoing land reform laid out in the LRRS (*Figure 1*) are taken at face value. My analysis of CCS policy will therefore maintain a continued awareness of these goals, assessing how CCS policies in Scotland speak to them.

5. Methods

To examine CCS policies in Scotland I chose a discourse approach to policy analysis as my main method. This is because we live in societies that are "saturated" (Brown, 1998, quoted in Bacchi and Goodwin, 2016) with policy. Given that policy plays such an important role in shaping public life, there is a need for critical approaches which unpack both the assumptions of policy and its effects. Sustainability problems exist within a complex web involving economic growth, environmental systems, and social vulnerabilities, and climate science is increasingly becoming an object of much political contestation (Feindt and Netherwood, 2011). My research focuses on the tensions between governance approaches to addressing climate change on the one hand, and how such approaches may impact on land rights and ownership on the other. As a result of growing political contestation surrounding climate issues, important questions arise such as: Why are certain issues addressed in climate policy and others not? What are the discourses underpinning climate change politics? How do such discourses become institutionalised? Whose voices do they legitimise, and whose do they ignore? (Feidt and Netherwood, 2011, p. 160).

In the context of my own research there are competing narratives on CCSs in Scotland; on the one hand they are growing in popularity and the Scottish Government seems to be promoting this growth, while on the other, rural communities express increasing concern about land rights issues (Chapter 3). In line with the poststructuralist approach taken to this research (Section 2.1), realities are understood as "contingent, [and] open to challenge and change" (Bacchi and Goodwin, 2016, p. 4). As such, in deciding on a research approach around this issue, it felt important to examine the policies which are actively shaping the particular social arrangements in Scotland. The Scottish LRRS is part of a long history of land reform debates in Scotland, whereas recent policy on CCS development is very new. Yet given the overlap in issues concerning land and landownership, I felt that examining how these two emerging policies spoke to one another represented an important and relatively under-researched subject area.

In the remainder of this Chapter I present the methods utilised in my research. Section 5.1 describes the collection of documents for the analysis and describes

how those documents are used for my research. Section 5.2 describes in detail the analytical process of my chosen method, 'What's the Problem Represented to Be?' (WPR) by Bacchi and Goodwin (2016).

5.1 Document Collection

There are three main documents chosen as the focus of the analysis. The first two are the Woodland Carbon Code (WCC) and Peatland Code (PC). These were chosen as they are the only two policy documents which set a standard for the development of CCS projects in the UK and Scotland. These documents give an insight into how carbon projects are developed, indicating key focuses and important concerns surrounding their legitimisation. However, while the Codes give an important insight into the development of carbon projects themselves, they do not give much insight into the stance of the Scottish Government in relation to CCSs as they are not produced by the Scottish Government, only endorsed by them. Further, the Codes are mainly focused on setting out the standards that carbon projects must meet in order to be verified. As such, in order to gain further insight into how the Scottish Government itself perceives CCSs I decided to also include the Scottish Government's 'Update to the Climate Change Plan 2018-2032' (hereafter CCPu) within the analysis. In doing so, the stance of the Scottish Government in relation to CCS development can be more clearly discerned, as the CCPu includes references to CCSs and their role in Scotland's approach to climate change. Given the length of the CCPu report, it is not analysed in its entirety as not all of it was relevant to the research. Rather, focus is placed on the 'Land Use, Land Use Change and Forestry' section.

In addition to these main documents being analysed and the LRRS, which constitutes the backdrop for my study (Section 4.2), I also make references to other documents throughout the analysis, despite the fact that they are not being analysed themselves. The reason for this is that the main policies analysed often make reference to supporting documents such as Government guidance documents and helpful protocols developed by the Scottish Land Commission (SLC). At times, I draw quotes from them to aid the development of the analysis. It is important to note here that while the SLC has produced guidance documents and is a committee established by the Scottish Government, the SLC does not have the regulatory powers of the Government. Therefore, the guidance published by the SLC remains only guidance, with no further power to influence landowner conduct outside of pre-existing governmental regulation.

Table 1 gives an overview of all documents used within the analysis. First, the three main analysis documents are shown. Then, there is a list of important supporting documents used to aid the analysis process.

Table 1. An overview of the documents used in the analysis.

Main Documents Analysed		
Document	**Author**	**Relevance of Documents for Analysis**
Woodland Carbon Code (WCC)	Scottish Forestry (2022)	A quality assurance standard for woodland creation projects that are being developed for the trading of carbon credits.
Peatland Code (PC)	IUCN (2023a)	A voluntary regulatory standard for peatland projects intending to trade carbon credits.
Update to the Climate Change Plan 2018-2032: Securing a Green Recovery on the Path to Net Zero (CCPu)	Scottish Government (2020a)	A strategic document which updates the Scottish Government's Climate Change Plan 2018-2032 in light of the recovery from COVID-19. It outlines the Government's intended pathway for achieving its climate targets.
Supporting Documents		
Document	**Author**	**Relevance of Documents for Analysis**
Strategic Environmental Assessment of the Update to the Climate Change Plan 2018-2032: Environmental Report (SEA)	Scottish Government (2020b)	A supporting document of the CCPu which provides an environmental assessment of the potential effects of the CCPu. I use this document within the analysis in order to expand on some of the potential impacts of CCS development suggested within the CCPu.
Guidance on Engaging Communities in Decisions Relating to Land	Scottish Government (2018)	Guidance issued by the Scottish Government on engaging local communities in relation to decisions about land, in line with principle six (see Figure 1) of the LRRS. I use this document to provide clarity on the definition of community engagement given by the Scottish Government.
Responsible Natural Capital and Carbon Management	Scottish Land Commission (2023a)	A protocol developed by the SLC as part of their 'Good Practice Programme'. It is referred to within the WCC and PC as a supporting document, providing guidance on the voluntary expectations set out in the LRRS in relation to the development of CCS projects.
Community Engagement in Decisions Relating to Land	Scottish Land Commission (2023b)	A protocol developed by the SLC as part of their 'Good Practice Programme'. It is referred to within the WCC and PC as a supporting document, providing guidance on how landowners and managers can engage with and involve communities in decisions relating to land, as outlined in the LRRS.

5.2 What's the Problem Represented to Be?

The method of document analysis that I use for this thesis work is 'What's the Problem Represented to Be' (WPR) as described in Bacchi and Goodwin (2016). The approach is designed "to identify and problematise problem representations implicitly articulated through policies or policy proposals, where policy is broadly understood as prescriptive texts or guides to practice" (Olsson and Pettersson, 2020, p. 685). WPR is a poststructural approach to policy analysis (see Section 2.2) which relies on the identification of discursive practices and veers away from the linguistic turn within discourse analysis studies. Rather than focusing on language use, WPR takes as its emphasis 'problematisation', where problematisation is the process of describing "thinking as a practice" and attempting to understand how that thinking constitutes current conditions and accepted truths (Bacchi, 2012, p. 1). Analysing problematisations makes it possible to identify the presuppositions and limits associated with how problems are conceived, and also what is being left out, or silenced, by a certain problematisation (Bacchi and Goodwin, 2016, p. 19). The WPR analysis consists of a series of six questions as well as a final seventh step; these are illustrated in *Figure 2*.

The WPR Approach to Policy Analysis

Question 1 — What is the "problem" represented to be in a specific policy or policies?

Question 2 — What deep-seated presuppositions or assumptions underlie this representation of the "problem"?

Question 3 — How has this representation of the "problem" come about?

Question 4 — What is left unproblematic in this "problem" representation? What are the silences? Can the "problem" be conceptualised differently?

Question 5 — What effects are produced by this representation of the "problem"?

Question 6 — How and where has this representation of the "problem" been produced, disseminated and defended? How has it been and/or how can it be disrupted or replaced?

Step 7 — Apply this list of questions to your own problem representations.
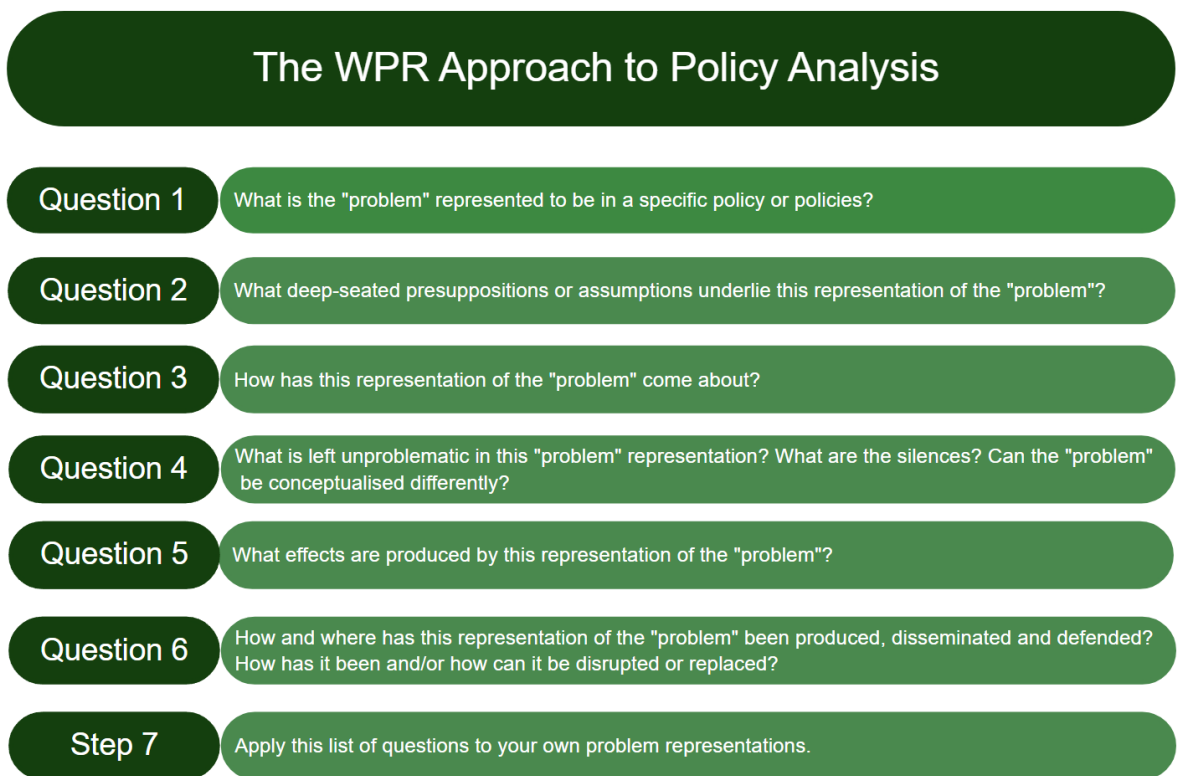
Figure 2. The WPR approach to policy analysis (Bacchi and Goodwin, 2016). Author's own figure.

The first question identifies the starting point of the analysis by pinpointing something that appears natural or obvious in a problem representation and opening it up for further questioning (Bacchi and Goodwin, 2016, p. 20). Problem representations are identified by working backwards from the proposed solution and enquiring into the problems that they imply, making the first question a lever into the rest of the analysis (Ibid.). All problematisations are built upon a series of assumptions, presuppositions and knowledges/discourses[3] that need "to be in place in order for [them] to make sense" (Bacchi and Goodwin, 2016, p. 21). This is where the second question comes in, which focuses on how a specific problem representation becomes possible. This is done by examining the concepts, binaries and patterns of thought that operate within the policy. Not only are these the building blocks that make a certain problem representation make sense, but they can also signal wider political rationalities at play within the policy, the identification of which aids the analysis process (Ibid.). Questions one and two direct their attention specifically on the policies being analysed. Question three, however, widens the gaze to investigate the myriad discursive practices which may have contributed to the problem representation (Bacchi and Goodwin, 2016, p. 22). Within my analysis (Chapter 6), questions one, two and three are answered together (Section 6.1). I have done this for two reasons. First, the answers to questions one and two are tightly intertwined, making a separation between them difficult without losing the intelligibility of the analysis and generating analytical abstraction in answering the first question. Second, question three is largely answered in Section 3.2 of the thesis where the discursive practices underlying carbon credits are described, and I wanted to avoid unnecessary repetition in the analysis.

The main focus of the analysis for this research are WPR questions four and five as these questions relate most directly to the research questions and address the research aim of understanding whether CCS policy could impact land rights in Scotland (Section 1.2). Question four of the WPR analysis directs its attention to drawing out the silences of the problem representation and identifying those things which are left unproblematic. The aim here is to employ a process of critical thinking, destabilising the ground (the assumptions and presuppositions) upon which the problem representation is built (Bacchi and Goodwin, 2016, p. 22). In combination with the answers to questions one, two and three (Section 6.1), question four aids in answering the first research question: how are land rights and responsibilities addressed within policy on carbon credits in Scotland? Question five, then, turns the analytical focus to considering the effects of the identified problem representation, where effects are conceptualised as "political implications rather than as measurable outcomes" (Bacchi and Goodwin, 2016, p. 23). Bacchi

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[3] To reiterate the definition developed in Section 2.2, a poststructural approach to discourse analysis understands discourses as knowledges that are forms of accepted truth.

and Goodwin (2016, p. 23) state that these effects manifest in three ways: 1) Discursive effects, which "show how the terms of reference established by a particular problem representation set limits on what can be thought and said", 2) Subjectification effects, which examines how subjects are produced through policy and the roles assigned to them, and 3) Lived effects, which examines the way in which the previous two effects translate into people's lives. By reflecting on the potential impacts that certain problem representations foreshadow, a clearer view of the consequences of a policy can be gained. This helps to provide an answer to the second research question: what are the possible effects of the way in which land rights and responsibilities are addressed in CCS policy?

Given the scope of the thesis there was not sufficient space to answer question six within my analysis. However, the second part of question six – how has or can the problem representation be disrupted or replaced – is addressed in the Discussion (Chapter 7). The possibility of other ways of knowing are an important aspect of the WPR method as it aims to "destabilize taken-for-granted "truths"" (Bacchi and Goodwin, 2016, pp. 23-34). Step seven of the WPR method emphasises the importance of a commitment to self-problematisation, calling on researchers to remember that problem representations are often nested within one another and to recognise our own historical and cultural locations in relation to the research (Bacchi and Goodwin, 2016, p. 24). This step is central to the design of my research through the maintained awareness of researcher positionality, which is discussed in Section 2.1.

6. Analysis

This chapter contains the WPR analysis of the specified policy documents. Section 6.1 "The Problem & it's Assumptions" answers questions one, two and three of the WPR method, focusing on what the specific problem is that CCSs are identified to be solving within the policies, as well as highlighting both the explicit and implicit assumptions that such a problematisation entails. Section 6.2 "The Impacts" directs its focus to WPR question four, highlighting three main silences within the policy documents. Finally, Section 6.3 demonstrates some of the potential effects that may result from the problem representation and the silences found within the policy documents in line with WPR question five.

6.1 The Problem & Its Assumptions

The Woodland Carbon Code (WCC) lays out the purpose of the policy in its introduction, stating that it "sets out robust requirements for voluntary carbon sequestration projects that incorporate core principles of good carbon management as part of sustainable forest management" (Scottish Forestry, 2022, p. 1). The aim is to encourage high standards of forestry management and to establish best practices in woodland carbon accounting so that carbon measurements are reliable and independently verifiable. The Peatland Code (PC) is similar. Though it does not lay out so clear a purpose in its introduction, the document itself sets a standard for the development of peatland restoration projects that aim to sell carbon credits. The Codes, therefore, seek to provide part of the solution to the problem of net carbon emissions, and in order to do so, they seek to address the problem of land use.

The Codes make clear that both woodland creation and peatland restoration are important solutions to the climate crisis due to their ability to sequester carbon. The WCC states that carbon sequestration from woodland contributes "directly to the UK/Scotland's national greenhouse gas emissions reductions targets" (Scottish Forestry, 2022, p. 3). This focus on carbon emissions makes sense given the Scottish Government's Update to the Climate Change Plan 2018-2032 (CCPu) (Scottish Government, 2020a), which reiterates the Government's goal of reducing net carbon emissions in line with emissions reductions targets. However, another

essential problem that both the Codes and the CCPu point to is the current pattern of land use in Scotland.

CCS appear in the CCPu specifically under the 'Land Use, Land Use Change and Forestry' section of the document, where forestry and peatlands are identified as two key land use solutions which can generate positive benefits in relation to climate change (Scottish Government, 2020a p. 166). Given that reducing carbon emissions is the main climate goal of the Scottish Government, the carbon sequestering abilities of woodlands and peatlands are notable, with the CCPu highlighting the capacity of Scottish land to "deliver nature-based solutions to climate change, including through increased tree cover and restoration of degraded peatland" (Scottish Government, 2020a, p. 167). However, the government recognises that the cost of woodland creation and peatland restoration at the scale required is an expensive undertaking, one which the government "cannot fund on its own" (Scottish Government, 2020a, p. 171). As such, CCS also represent a way in which to attract private investment because they translate carbon sequestration into tradable commodities, reinforcing the capitalisation of nature in order to protect it. Such a construction of the problem speaks to the discursive practices underpinning carbon credits described in Section 3.1.1 The Codes, then, act as government-supported standards, with the aim of verifying carbon units from carbon projects as coming from land management practices that are of a high standard and retain environmental integrity. As the CCPu (Scottish Government, 2020a, p. 170) states: "The Code [Woodland Carbon Code] underpins trust in the woodland carbon market in order to attract additional investment into woodland creation by verifying that woodland carbon projects are responsibly and sustainably managed to national standards".

One quote from the CCPu which succinctly demonstrates both the problem representation and points to the assumptions underlying that representation is as follows:

> Scotland's land and the natural capital it supports will play a fundamental role not only in our response to the climate crisis, but also in our green recovery from COVID-19. Land use change at the required scale will provide green economic and employment opportunities, offer public health benefits, help address rural depopulation and provide social benefits to communities across Scotland. This will in turn help secure a just transition to our economic and environmentally sustainable future (Scottish Government, 2020a, p. 171).

The above quote from the CCPu demonstrates a large part of the problem representation and the assumptions which underlie it, with a number of important things taking place. The CCPu makes a direct link made between natural capital – a central strategy of which is carbon credits – and land use change. The Scottish Government therefore assumes here that CCSs will not only bring about land use

change, but also that land use change will be positive for both environmental reasons and also in providing wider social benefits. Another important assumption here is that natural capital is a public good. Not only are the carbon sequestration abilities of woodlands and peatlands a way of reaching emissions reductions targets, but through their translation into carbon credits they are argued to have the capability of generating wider social benefits and even a more equitable future. These wider benefits are also referred to in the WCC (Scottish Forestry, 2022, p. 1), where it states: "woodland creation can also provide many co-benefits in addition to carbon sequestration". These two developments within the CCPu, as demonstrated in the quote above, point to an understanding within the policy documents that carbon credits and land use change equate to the same thing, as well as an assumption that they will both bring about the same wider social benefits and, therefore, automatically lead to green recovery and a just transition.

6.2 The Silences

This section answers the fourth question of the WPR method; what is left unproblematic in the problem representation, and where are the silences? Within the policies analysed there are three main silences which will be examined here. The first area in which there are silences is around the processes of consultation outlined for CCS projects (Section 6.2.1). These will be discussed specifically in relation to the six principles of the LRRS (*Figure 1*). The second area of silence is the potential impacts, both positive and negative, of CCS projects (Section 6.2.2). Finally, the third silence, which is much broader than the first two but inextricably linked to these, is the way in which capitalism as a guiding worldview is left unproblematised throughout the policies (Section 6.2.3).

6.2.1 Consultation Processes

Within the CCPu, the government recognises that the scale of land use change required in order to meet emissions targets will result in vast changes to the Scottish landscape. In light of this they state:

> We need to ensure that the people of Scotland understand and support these changes [land use changes], particularly those individuals and communities likely to be most impacted. To do that will require early engagement, consistent communication, and genuine dialogue between different groups and communities. We must take people with us in understanding why the look of Scotland and key parts of our landscape are changing (Scottish Government, 2020a, p. 167-168).

It is clear here that there is a recognition that land use change may impact local communities, as well as an assertion that consultation is an important part of the

process of land use change. The government outlines communication as part of this process and indicates that they wish to "take people with them" through these changes.

Similarly, both the WCC and PC have sections within them dedicated to consultation requirements. The WCC requires projects to "provide an opportunity for, and take account of, inputs from stakeholders and feedback from local communities during both the project design and over the life-span of the project" (Scottish Forestry, 2022, p. 12). In order to verify this, projects need to provide consultation details either in their Environmental Impact Assessment report, within their grant application, and/or provide other relevant evidence of the "approach taken to achieve meaningful stakeholder consultation, along with a summary of the feedback and actions taken" (Ibid.). The PC also describes consultation as a part of the planning process of CCS projects. It has some more detailed specifications than the WCC in that it requires projects to identify and protect both designated and undesignated historic environment features, engage in scoping work to identify heritage assets, and "proactively engage with local communities, neighbouring properties and any other important but potentially marginalised groups" (IUCN, 2023a, p. 5). The PC further goes on to outline that "as a minimum, individuals, organisations and groups […] deemed to have a material interest in the project shall be contacted", and that "[e]very effort shall be made to reach representatives of these groups, using alternative means of communication if initial contact is unsuccessful" (Ibid.). The Scottish Land Commission (SLC) (SLC, 2023a) also echoes this need for consultation in their protocol, 'Responsible Natural Capital and Carbon Management', which advises that all landowners should act in relation to the responsibilities associated with land ownership outlined in the LRRS by the Scottish Government. The sixth principle of that statement states there should be greater collaboration and community engagement in decisions relating to land (Scottish Government, 2017 and see *Figure 1*).

The WCC, PC and CCPu all use strong language regarding consultation processes. Terms such as "consistent communication", "genuine dialogue", and "meaningful stakeholder consultation" are employed in the policies. However, on further investigation these terms have little substance within the policies themselves. The WCC and PC provide no specific information as to what a meaningful stakeholder consultation is, and in terms of guidance on conducting consultation processes both defer readers to the SLC's (2023b) 'Protocol on Community Engagement in Decisions Relating to Land'. While the protocol is developed around the principles of the LRRS, the protocol itself is only a guidance protocol developed with the intention to "encourage and enable those with an

interest in land to recognise and fulfil their rights and responsibilities" (SLC, 2023c). The same could be said about the LRRS itself. Although the LRRS outlines six key principles, the principles are not regulatory in any way but rather act as an illustration of the ethical perspective that is meant to be brought to land policy. The SLC's (2023b) Community Engagement Protocol advises that landowners engage local communities in the development of carbon credit projects. The SLC establishes that landowners 'should' engage communities in development processes, where the word 'should' indicates an expectation of "everyone involved to follow the approach described, unless it conflicts with their legal duties" (SLC, 2023b, p. 2). However, given that the SLC have no regulatory capacities this guidance remains only guidance; there is no legal requirement for landowners to follow this advice. Therefore, lack of clarity given to terms relating to community engagement, as well as a lack of any follow ups or requirements that these guidelines are followed, represent a clear silence within the policies. Although the CCPu, WCC and PC use the language of the LSSR's principle six, they do not back it up or attempt to fully implement it.

A clearer definition of engagement is outlined in the Scottish Government's 'Guidance on Engaging Communities in Decisions Relating to Land' (Scottish Government, 2018). This document states that in cases where there *is* a legal requirement for community engagement under environmental regulations on decisions relating to land management, "engagement would mean *informing* the community of the decision and activity taking place" (Scottish Government, 2018, emphasis added). As such, regardless of statements which advise or encourage further consultation measures, the legal requirement itself is only to inform communities; there is no requirement for prior consent, community input and involvement before, during or after the project development. Nor is there a requirement for any adaptation in response to community requests. The disconnect between the use of terms such as "meaningful engagement" and the actual legal requirements for community engagement represents a large silence within CCS policy and its distance from the LRRS principles. Though it should also be noted here that the legal requirement for consultation as it is defined within the Scottish Government's (2018) own guidance also falls short of the language used within the Government's LRRS principles. By maintaining a vagueness around what is meant by terms such as meaningful consultation and community engagement in the policies, the policies thus do not need to address the fact that CCS projects have a limited community consultation process and that the consent of local residents is not a requirement.

6.2.2 The Impacts

The CCPu, as well as the WCC and PC, make references to the potential for land use change as a result of the development of CCS projects to provide not only environmental benefits but also wider social and economic benefits. For example, the CCPu states that woodland creation and enhanced restoration of peatlands will expand "opportunities to support public health and wellbeing outcomes through recreation and increased interaction with nature" as well as "provide green economic and employment opportunities, offer public health benefits, help to address rural depopulation and provide social benefits to communities across Scotland" (Scottish Government, 2020a, p. 171). However, despite some references to the potential for job creation through forestry, there is little expansion within any of the policies on what is meant by these wider social benefits, or how the suggested benefits may come about.

The CCPu has a supporting document called the 'Strategic Environmental Assessment of the Update to the Climate Change Plan 2018-2032: Environmental Report' (hereafter SEA) (Scottish Government, 2020b) which lists in more detail than the CCPu a range of potential impacts of the land use change resulting from CCSs. The positives of these include; creation of new woodland/peatland habitats; biodiversity net gain; improving degraded landscapes; increasing Scotland's carbon sinks; and the opportunity to grow both Scotland's timber market and carbon market (Scottish Government, 2020b, p. 61). Similarly, the WCC (Scottish Forestry, 2022, p. 1) remarks that woodland creation has the potential to provide social benefits such as "opportunities for community engagement, staff volunteering, education and development as well as rural business development and diversification". However, while there is reference to wider benefits associated with carbon offsetting projects, the policies never explain or expand upon how such benefits might come about. For example; improved biodiversity is an assumed benefit of woodland creation, but this is dependent on the type of woodland being created. The policies here make an assumption that *any* woodland created within CCS projects will be diverse woodland, despite the fact that this is not actually a requirement of CCS projects. Following the UK Forestry Standard's (Forestry Commission, 2017) definition of forestry, the WCC considers a wide range of forestry types as woodland. As such, forestry types ranging from native broadleaf to commercial conifer forestry can be considered valid for woodland carbon schemes, with management ranging from minimum intervention and continuous cover forestry, to clear-fell and restocking (Ibid.). Another example is the assumption that woodland creation through CCS projects will lead to rural business development. The policies state that woodland creation projects developed under the CCS framework will contribute to the growth of the carbon market and the timber market, indicating that there will be a growth in revenue in both areas.

However, there is no clear link which states that these benefits will reach rural communities, with questions remaining around the distribution of benefits from natural capital for local economies (McMorran et al., 2022, p. 8). These unspecified references to potential benefits without a clear expansion of how such benefits could come about, and with no clear pathway to ensure that they do, constitute a problematic silence within the policies.

The potential negative outcomes of CCS projects are also listed with this same vagueness. Potential negative impacts identified within the SEA include; the cost implications of both woodland creation and peatland restoration; land availability; trade-offs with other land uses such as agriculture; and the timescales for the approval of projects (Scottish Government, 2020b, p. 61). Two of these listed negatives represent an important barrier for rural communities to access CCS projects: the high costs of undertaking such projects and the time commitment required to see carbon sequestration projects through. These negatives are significant in relation to the aforementioned potential for CCS projects to improve rural businesses and economies. Woodland projects must demonstrate either landownership or a written agreement between tenant and landowner for the entire duration of the project; a long-term land management plan for the project duration; commitment to monitor and maintain project verification procedures; and inform future landowners/tenants of the commitment to the WCC amongst many other specifications in order for a project to be considered valid under the WCC (Scottish Forestry, 2022). Under the PC, peatland restoration projects must also demonstrate landownership or landowner/tenant agreement; show that they can finance 85% of the restoration project for its duration outside of the income that will be generated from carbon credits; and have a minimum project duration of 30 years (IUCN, 2023a). On top of this, carbon sequestration projects are slow on the return they provide as carbon credits cannot be sold until they have been fully verified according to the Codes, a process which takes around five years (Section 4.1). As such, the policies' claims that there is a way for local rural communities to benefit from these projects is undermined by the fact that there is a huge barrier to entry for small-scale rural actors to develop these projects themselves. This barrier, however, is only briefly mentioned and never expanded upon.

Another underexplored negative impact is that of land availability. Carbon sequestration projects require land in order to be developed, and the promotion of CCS projects has been cited as one of many factors that have contributed to the demand for land in Scotland (McMorran et al., 2022; Macfarlane, 2021). This increased demand is layered on top of an already strained Scottish land market where land availability is limited, land prices are continually rising and turnover in the ownership of large estates is low (Section 3.2). Given that CCSs within the

policies are understood as being one and the same with land use change, there is little comment within the WCC or PC on potential clashes in the requirements for land. A report by McMorran et al. (2022, p. 8) raises concerns around potential trade-offs that may need to be made between the development of carbon sequestration projects on the one hand, and food security, community involvement with land-use decisions, land access, enterprise, and farming contracts on the other. The report also suggests that environmental motivations for buying land are increasing competition within the farmland market, which is likely to result in the pricing out of farmers as forestry investors increase the demand for plantable land (McMorran et al., 2022, p. 19-20). As such, without specific and pre-emptive attention paid to these issues, CCS policy runs the risk of reinforcing existing wealth gaps and further limiting rural access to land.

6.2.3 Neoliberal & Capitalist Logics

Within each of the policy documents analysed, capitalism as a guiding worldview is left unproblematised. The discursive practices of neoliberal capitalism underlying CCSs as outlined in Section 3.1.1 are also present and go unquestioned within the policy documents. The CCPu, WCC and PC all present carbon credits as a central solution to the climate crisis, citing their ability to attract investment to Scotland, change land use practices for the better by promoting increased woodland creation and peatland restoration, as well as strengthen the UK's carbon market. The CCPu states, "The transition to net zero presents a considerable opportunity to position Scotland to benefit from increased, global private investment, as well as an opportunity for investors themselves" (Scottish Government, 2020a, p. 46). The promotion of CCS development is predominantly guided by a neoliberal faith in economics, in particular the fantasy of a self-sustaining economy, whereby economic dynamics and political processes are perceived as separate from one another (Swyngedouw, 2011, p. 372). The CCPu argues that land use change is necessary in Scotland's approach to climate change but notes that the government cannot fund the scale of land-use change required. CCSs, therefore, are presented as a way of supplementing the cost of land use change in that they 'translate' carbon into a tradable commodity within the carbon marketplace, thus incentivising the creation of carbon sequestration projects. However, the intensity of focus on the solutions provided by market mechanisms leaves silent the possibilities and potential of other forms of environmental governance such as cross-scale environmental governance, or even shifts towards comanagement and community-based natural resource management (c.f. Lemos and Agrawal, 2006). The assumption seems to be, however, that other forms of environmental governance are either unfeasible or insufficient by themselves in addressing climate change.

Market mechanisms are played out within the policies as a win-win solution to climate change in their ability to both reach emissions reductions targets and solidify Scotland's position within the global marketplace (Section 6.1). Such reasoning demonstrates a belief in trickle-down economics and reinforces a profoundly neoliberal aspiration to construct the market as "the preferred social institution of resource mobilization and allocation" (Swyngedouw, 2011, p. 372). However, given that carbon markets are still emerging and policy remains relatively underdeveloped, McMorran et al. (2022, p. 8) point out that achieving a balance that would see win-wins for biodiversity, food security and rural communities while at the same time providing high returns to investors *and* the development of a competitive UK carbon market remains a critical challenge for policy makers. In putting forward only a positive perspective on how carbon markets might bring about wider social benefits, and assuming that intended economic benefits will benefit everyone equally, there is a silencing of the possibility that the supposed social benefits may not come about and that any benefits that do arise may not be equally distributed.

Something which is important to note here is that policy makers are not necessarily "consciously utilising a deliberate rhetorical strategy" (Machin, 2019, p. 213); there is no large-scale conspiracy at work here. The process of problematisation is "more a description of thinking as practice than a diagnosis of ideological manipulation" (Bacchi, 2012, p. 1). As such, rather than implying that there are malicious motives necessarily at work, the focus is on illustrating how discursive practices such as ecological modernisation, green capitalism and market environmentalism have "powerfully constructed a social reality that [is] attractive, useful and therefore accepted, rearticulated and sedimented as 'common sense'" (Machin, 2019, p. 213). However, although the reinforcement of market mechanisms may be well intended and carbon markets may be perceived to be a win-win solution for both environmental protection and economic growth, they still work to maintain the status quo and silence other alternatives. As argued by Bell (2015, p. 2), from the perspective of market logics, "alternative means of addressing environmental and social issues, such as redistribution of wealth, reducing consumptions, or banning harmful activities, are seen as naive or detrimental to the goal of winning over support for environmentalism".

The WCC does mention that carbon credits should not be used as a replacement for other environmental actions, stating that "woodland carbon projects contribute just one of a hierarchy of actions that can help to combat the effects of climate change" (Scottish Forestry, 2022, p. 2). This is echoed in the SLC's Natural Capital Protocol:

investment in carbon management to offset emissions should not be a replacement for other actions to avoid, reduce or mitigate emissions. It should always be made in addition to action to reduce emissions at source as close to net zero as possible (SLC, 2023a, p.1).

However, there is no follow up on this within the policy documents. While the WCC (Scottish Forestry, 2022) advises that businesses and organisations review their carbon footprints in line with the UK's environmental reporting guidelines and set their own emissions reductions targets, they are not required to address carbon emissions in any other way alongside development of CCS projects or the purchase of carbon credits. As such, this could play into the concerns voiced around the greenwashing capacity of CCS (Macfarlane, 2021).

6.3 The Effects

This section addresses the fifth question of the WPR method – what effects are reproduced by this representation of the problem? Bacchi and Goodwin (2016) state that there are three main ways in which the effects of problem representations can occur: discursive effects, which impact what can be thought and said in light of a certain problem representation; subjectification effects, which is how subjects are created and produced through policy documents; and lived effects, which are how the previous effects might translate into people's lives. This section is divided into two sub-sections, the first looking at discursive effects and the second at subjectification effects. In order to avoid abstraction in each section, the lived effects of each is developed alongside the discursive and subjectification effects in each section respectively.

6.3.1 Discursive Effects

Discursive effects refer to the impacts policies can have on what can be thought and what can be said in light of a certain problem representation (Bacchi and Goodwin, 2016), drawing from Foucault's conception of what can be understood as being "true". As such, this section will extrapolate how the problem formulation and the various assumptions it relies upon create a landscape where certain ways of thinking become common sense while others become 'irrational' or impossible to consider.

The promotion of private market mechanisms as a common-sense response to the climate crisis potentiates a range of discursive effects, predominantly the potential to alter the environmental policy landscape and change the boundaries of environmental governance. As has been explored in Section 3.1.1, voluntary CCSs are founded on discursive practices which embody the neoliberal "economisation of politics" (Morgan, 2003). The CCPu demonstrates a growing reliance on market

mechanisms as a way of addressing environmental problems, with the promotion of CCSs a prime example of this. However, Machin (2019) has suggested that the growing reliance upon market mechanisms as a way of addressing the climate crisis has led to: 1) the externalisation of decision-making processes for important climate decisions away from the domain of government and instead towards the global market, and 2) placed an increased focus on encouraging individual behaviour change, thus reducing the perceived need for political decision making. As seen in Section 6.2.2, the CCPu lists numerous potential negative impacts which may result from voluntary CCS development but never expand upon these impacts or comment on any measures taken to address them. However, potential problems such as land availability and trade-offs in land use represent very political issues which, as a result of this expanding neoliberal logic, have a reduced space in which to be debated due to the fact that they ultimately become externalities of a private market system. Such processes of externalisation speak to wider discussions around our post-political condition (Mouffe, 2020) with Swyngedouw (2011, p. 372) arguing that the erosion of political control and accountability indicates a "re-ordering of the state-civil society nexus, whereby the state operates increasingly at a distance".

In this context, not only are important political discussions sidelined, but their removal from the domain of government and reconceptualisation as externalities of the global market system means that there is a loss of accountability. So, not only is there a reduced space in which to engage in political debates, but the location of such debates is shifted into the domain of the market system. Such a shift in important to note because the market-system itself has no obligation to address such problems. As a result, should the proposed win-win outcomes of carbon marketisation fail to come to fruition it becomes difficult to pinpoint who bears responsibility or to hold anyone accountable.

6.3.2 Subjectification Effects

Prudham (2009) has argued that there is a distinct aspect of social performativity related to green capitalism. For him, green capitalism is a "political agenda whose viability turns on whether or not capitalism and environmentalism are seen – subjectively – to be compatible" (Prudham, 2009, p. 1596). A central facet of this culminates in the "'performance' of the entrepreneurial subject as environmental crusader" (Ibid.). While Prudham is talking specifically about individual entrepreneurs within his research, the same can be said in relation to businesses and organisations. Carbon offsetting gives businesses, organisations, and also individuals, an avenue to promote themselves as 'doing something for the climate'. The point here is not to negate the potential effectiveness of carbon offsets, but rather to highlight the fact that there is a distinctly performative aspect to carbon credit schemes through their close affinity to the green capitalist discourse. The

WCC and PC, as stated, work to create a legitimate carbon offset market which is argued to be one of the necessary solutions to the climate crisis. This problem formulation establishes businesses and organisations as subjects who have the capacity to solve environmental problems through the buying of carbon credits, ultimately making businesses and organisations central figures in climate policy.

This subjectification of businesses and organisations has numerous implications. Through the lens of CCS, those who buy large amounts of land for the development of carbon sequestration projects are framed as protecting the environment. Whether this is the case or not, the framing has important implications in that people who may object to large-scale land acquisition for CCS projects have the potential to be perceived as being against environmental protection. The beginnings of this sentiment can be seen in the CCPu, where it is argued:

> we need to ensure that the people of Scotland understand and support these changes, particularly those individuals and communities likely to be most impacted. [...] We must take people with us in understanding why Scotland and key parts of our landscape are changing (Scottish Government, 2020a, p.167-168).

The framing here is important. The government are not stating that there needs to be community engagement in order to reach a mutually desirable outcome. Rather, it is argued that rural communities need to understand the currently proposed changes being made to land-use by highlighting the importance of increased education – the idea being that increased education will lead to local people not only understanding but *agreeing* with the current proposed solutions. However, although there is research which indicates that community involvement with environmental regulation and policy leads to the development of environmental subjects, i.e., people who care about the environment (Agrawal, 2005), there is a lack of attention paid here to the complexity of how people relate to and care for their local environments (c.f. Cortez-Vazquez and Ruiz-Ballesteros, 2018; Nightingale, 2011). In refusing to give validity to the nuanced ways in which local rural communities already relate to and protect their local landscapes and resources, there is a risk of reducing the complexity of rural lived experiences and rendering their concerns illegitimate. Consequently, there is a reduction of space for rural people – who are already in lesser positions of power and influence – to resist land management changes which are likely to affect them based on a simplified view of their position as "anti-environmental protection".

7. Discussion

This chapter expands upon three main discussion points which result from the analysis. The first of these draws attention to the ways in which current consultation processes developed within Scottish CCS policy are lacking (Section 7.1). The second discussion point centres around the effects of neoliberalisation which can be seen to influence CCS policy (Section 7.2). The third discussion point is on the lack of space given to the negative impacts of CCS development in Scotland (Section 7.3). A final section identifies some key areas of further research and also some of the limitations of my own research (Section 7.4).

7.1 The Dilution of Consultation Processes

The aim of this thesis was to examine how CCS policy in Scotland speaks to the principles laid out in the LRRS. The LRRS principles place a focus on the importance of the diversification of landownership and promote increased inclusion of local and rural communities within decisions relating to land (*Figure 1*). However, although the LRRS principles are supposed to be central guiding principles to policy developed in relation to land, they remain relatively unaccounted for throughout the CCS policies analysed. My analysis shows that although current policies around CCS development employ the language of the LRRS principles and do state that community consultation is a necessary part of the development of carbon projects, the definition of consultation is unclear and the specifics of what community engagement should entail remains relatively vague in the WCC and PC themselves (Section 6.2.2). Despite the use of terms such as "meaningful stakeholder consultation" and "genuine dialogue", the terms remain surface level as seen by the fact that the Scottish Government's own guidance only legally requires community engagement processes to *inform* communities about a development project (Section 6.2.2).

A wealth of academic literature has engaged with community consultation processes, seeking to investigate the various levels of community consultation and their effects (c.f. Arnstein, 1969; Conrad and Hilchey, 2011). However, there is a discrepancy between the use of terms within the policies analysed and the legal requirements of consultation as outlined above. Such a discrepancy can be related

to a general watering down of community consultation processes. For example, research by Townsend and Townsend (2020) on the inclusion of indigenous peoples in decisions about their land illustrates that although there has been a growing recognition of rights to consultation and consent throughout international law, the interpretation and implementation of these rights varies and the routine silencing of indigenous peoples is still commonplace within decision-making processes.

The sidelining of rural communities and their concerns has been a growing and contentious issue within the realm of environmental policy, which speaks to a number of factors. First, Swyngedouw (2011) has argued that neoliberal approaches to environmental policy which foreground marketisation have arisen alongside a tendency to represent climate change in a post-political way by claiming it is too complex for ordinary people to understand. As a result, climate policy is perceived to be best left in the hands of experts (such as policy-makers and scientists), who are appealed to to legitimise decisions. Second, research by Nightingale (2011) illustrates how rural populations often feel that their voices are not listened to by policy-makers. Rural populations develop specific understandings and relationships with their local environments, with practicalities, lived-experience, local knowledge and history, and emotion playing important roles in that process (c.f. Flood et al., 2022; Cortes-Vazquez and Ruid-Ballesteros, 2018; Nightingale, 2011). While it is important not to romanticise a singular rural worldview, it is also necessary to state that the perspectives of rural populations generally are routinely undervalued within environmental policy-making processes (Tovey, 2016). Third, research by Martin et al. (2023, p. 88) in relation to rewilding in Scotland has pointed out that "community participation in decision-making, community benefit, as well as public interest in land also sit uneasily with property rights and common drivers for private land ownership". In relation to my own research, these same problems around landownership and property rights are also present.

The above perceptions of rural communities and their role within environmental governance impacts the way in which consultation processes are developed within policy. Rural communities have their own views on land use and their own goals in relation to the future of land use. These are likely to sit at odds with the goals of state-market hybrids and large-scale landowners who see voluntary CCSs as a lucrative business venture. However, while the LRRS states that rural concerns should be taken into account within land policy, such a goal is not actively addressed within CCS policies – policies which directly relate to land and land use change. Rather than attempt to incorporate rural concerns around land use and the potential for land grabbing, current CCS policies rest on an assumption that the positive outcomes of CCS development will trickle down to rural populations, delivering rural economic development. In the face of potential rural

resistance, the policies reinforce the idea that increased education will lead to local rural populations understanding the necessity of Government-proposed land use change through CCS development. However, as seen in my analysis, this promotion of education to "bring people along" with government reasoning opens up a pathway for the subjectification of rural communities as being against environmental protection if they are resistant to CCS development (Section 6.3.2). As a result, once again the role of communities within consultation processes is limited, reducing their agency and soliciting their agreement to a predefined approach to land use change. In not giving voice to the specific concerns of rural populations, a gap remains in the policy and space opens up for speculation and further rural distrust of government policy approaches. This links with research by McKee et al. (2023) that indicates that the *potential* for negative rural impacts as a result of large-scale land acquisition is fuelling rural concerns and fears around CCS development.

7.2 The Expansion Neoliberal Capitalist Approaches to Governance

A major theme which comes through in the analysis is the pervasiveness of neoliberal capitalism. As discussed in Chapter 3, CCSs are an inherently capitalistic solution to climate change given their focus on utilising market mechanisms to incentivise environmentally positive behaviour. This logic remains not only unquestioned but is actively promoted by the Scottish Government in relation to the development of CCS projects. Increased private investment is identified by the Scottish Government as a requirement in order to fund environmental protection goals, and in order to attract such investment the protection of the environment is portrayed as profitable through the transformation of sequestered carbon into carbon credits. Then, as an extension of this logic, the profits generated through the privatisation of environmental protection are assumed to be able to provide wider social benefits through a trickle-down effect. The circularity of this logic of neoliberal capitalism is made clear through my use of a poststructuralist approach to discourse analysis. By adopting a poststructural discourse approach, as outlined in Section 2.1, it has been possible to draw out the various strands of underlying capitalist discourses which shape the logics of CCSs and also to relate these to growing neoliberal influences on environmental governance approaches.

Defining nature, natural resources and land purely in terms of capital, as the logic shaping CCSs do, has been widely criticised. In relation to carbon credits specifically, Chausson et al. (2023) have argued:

While natural capital accounting can provide a powerful tool to constrain economies within biophysical boundaries and support environmental management, the financialization of natural capital can also reinforce the values (market-based and instrumental), social relations, and human-environment relations that sit at the core of the biodiversity and climate crisis, while reinforcing existing power and wealth inequalities (Chausson et al., 2023, p. 3).

It is clear here that the problem is not necessarily carbon credits in and of themselves, but rather a CCS system which is based on unchecked assumptions. Currently, there is a lack of attention paid to the underlying logics of carbon markets and the risks to local and rural communities associated with the development of carbon projects. The work of Bruno Latour (1993) bears relevance here, in particular his criticism of the understanding of the economy as a value-free and objective arena; a view which perpetuates a separation between nature and society. Breaking down this perception of the economy as neutral and objective opens up a necessary space to question the enchantment of number generated through neoliberal capitalist logics and their attempts to define nature within an ever-expanding accounting system. Given the multi-layered and complex contexts in which rural communities relate to their local environments, as well as existing imbalances in landownership across both Scotland and the world, it therefore becomes unfeasible to imagine that such complexity could be captured through purely economic definitions of land and nature championed by neoliberal approaches to environmental governance.

Neoliberalism has proven to be a double-edged sword in terms of community responses to governance. On the one hand, neoliberal forms of governance open up avenues for rural communities to access resources, build resilience (MacKinnon and Derickson, 2012) and achieve some form of autonomy vis-à-vis capital and the state (Böhm et al., 2010). In this sense, the decentralisation of governance fits with the growing recognition of the importance of including community voices within environmental governance mechanisms. Neoliberal governance approaches compel rural communities to build resilience and act autonomously, regarding these as distinctly positive attributes. However, this has had ambivalent effects on rural communities in practice. MacKinnon and Derrickson (2012) have argued that the concept of resilience has historically been accompanied by an increased onus being placed on communities to take responsibility for adapting to external threat without adequate acknowledgement of the role of the state, politics and capitalist systems in the generation of this threat (MacKinnon and Dickson, 2012). Further, Böhm et al. (2010) posit that the practice of autonomy has become increasingly bound up with a new spirit of capitalism that demands flexible forms of economic organisation, making autonomy "part of the hegemonic system of capital and the state" (Böhm et al., 2010, p. 18). One effect of this is that rural communities are increasingly being co-opted to legitimise state-

market developments. Consultation processes, therefore, have the potential to be transformed into mechanism for soliciting agreement to a predefined set of solutions rather than a meaningful engagement with their needs (c.f. Martin, 2023).

My analysis indicates that this transformation is also taking place in consultation processes for CCS development. Consultation processes for the development of large-scale carbon projects are only legally required to *inform* rural communities of planned developments, and there is no requirement within the Codes for landowners to seek prior consent for CCS development despite the use of the language of LRRS principles which promote more meaningful processes of community consultation (Section 6.2.1). Therefore, consultation processes for the development of CCS projects in Scotland are likely to remain divorced from existing land inequalities and the unequal power relations that precede and underpin them. This current construction of CCSs, with its underlying neoliberal logics and consistent sidelining of rural concerns, does not correspond with the Scottish Government's hopes that CCSs can contribute to Scotland's green recovery and just transition (Scottish Government, 2020a).

7.3 An Uncertain Future

Rural concerns in Scotland around the potential for land-grabbing in the name of CCS development were an important starting point for my research. As explored in Section 3.2, these concerns have arisen within the context of Scotland's already concentrated pattern of landownership and have been partly fuelled by the ongoing resonances in the present of Scotland's Highland Clearances. Because of these dynamics, rural communities are concerned that increased interest from foreign and non-local investors in Scottish land for the development of carbon projects will cause a land rush (Salter, 2022), in turn making it even more difficult for them to access and purchase land (Macfarlane, 2021). My analysis shows that not only do these concerns remain unaddressed within current CCS policy, but there is also a lack of expansion on any of the potential impacts of CCS development, positive or negative. In terms of the proposed positive impacts, it is largely assumed that wider social and economic benefits will trickle-down to rural communities, while the potential negative impacts – such as land availability and trade-offs in land use – remain backgrounded.

Land availability is a key concern for carbon credit projects, and its omission from current CCS policy in Scotland is problematic given that the development of CCSs are associated with a long history of land rights abuses in the Global South. Green grabbing (land grabbing in the name of green environmental causes) has been identified by Fairhead et al. (2012) as a process which restructures authority and

social-economic relations, often in the interest of large-scale economic actors and the furthering of the global market. Natural capital approaches to conservation in the Global South which rely on private investment have also been argued to constitute a neoliberal land grab which is justified through their affiliation with green economic development (Lyons and Westoby, 2014; Fairhead et al., 2012). Time and again such projects have been shown to have adverse effects on local populations and have been linked to forced relocation of local populations, the violation of human rights, and the weakening of established land tenure systems (Haya et al., 2023). Further, Lyons and Westoby (2014) have argued that green private investment in development projects in the Global South is part of the continued colonisation of land.

Thus far, large-scale land acquisition in the Global North has not been seen to result in the same extent of rights abuses as seen in the Global South (McMorran et al., 2022, p. 13) and, as highlighted in Section 3.3.1, the use of the term land grabbing in a Global North context requires different parameters for assessment than those established for research within the Global South (Bunkus and Theesfeld, 2018). However, there is currently very little evidence as to what the potential outcomes of CCS development will be for rural communities in Scotland (McMorran et al., 2022), leaving the question of whether land grabbing is taking place or could take place in the future in Scotland open to further investigation. Such uncertainty, though, is an important factor playing into rural concerns. Recent research has pointed to the fact that a large proportion of rural concern around CCS development arises from the fact that they *do not know* how such developments will play out in the future and this uncertainty is fuelling rural resistance to such developments (c.f. McKee et al., 2023). CCSs represent unfamiliar territory for rural communities, and given the history of landownership concentration in Scotland, coupled with historical events such as the Highland Clearances, rural communities remain wary of large-scale land use change (Chapter 3). While there are some who hope that green developments such as CCS projects will lead to increased community engagement, recreational access, and improved employment opportunities, the uncertainty around landowner goals and future management plans is also fuelling the anxiety of rural communities with fears that CCS development could also just exacerbate existing power imbalances, reduce access to land and limit rural development (McKee et al., 2023, p. 54).

Given the neoliberal approaches to governance identified through my research as a guiding feature of current CCS policy in Scotland, the potential for CCS policy to negatively influence current landownership problems in Scotland remains highly possible. As such, the absence of engagement over land issues from Scottish CCS policy and the lack of regulation around both community consultation processes

and property rights more generally, seems problematic. In line with McMorran et al. (2022), it seems clear that the government need to take a pre-emptive approach to the development of policy around CCSs if the potential negative impacts of CCS development are to be avoided. In direct relation to policy around green land investment in Scotland, McKee et al. (2023, p. 67) suggest: 1) there should be greater regulation of the natural capital market in order to ensure transparency, 2) policy-makers should consider introducing requirements that profits generated through green land investments be distributed in some way to rural communities, 3) removing both actual and perceived barriers of access to natural capital markets so that there is equal access to green land investment and ownership, and finally 4) consideration around how best to support rural communities towards a just transition by focusing on communication, financial support schemes, and providing reskilling opportunities.

However, given the underlying capitalist and neoliberal logic of CCS development, it may also be necessary to reframe the goals of carbon projects themselves. Research by Chausson et al. (2023) outlines four key recommendations for the future of Nature-based Solutions. First, they call for Nature-based Solutions such as CCSs to be reconceptualised as place-based partnerships between people and nature which reflect regenerative relationships between people and the natural world. In addition to this, they also argue that indigenous peoples and local communities should be *active leaders* of such projects, ensuring that their "knowledges, values, needs and aspirations" (Chausson et al., 2023, p. 8) are upheld throughout the development process. Third, they argue for alternative, and innovative, modes of finance which move beyond purely market-based mechanisms and include options such as repurposing harmful government subsidies, directly funding nature, and establishing decolonial finance mechanisms (for example unconditional cash transfers or debt relief schemes). Finally, Chausson et al. (2023, p. 10) argue that the imperative for economic growth inherent to Nature-based Solutions needs to be dropped and that natural capital should not be "used as a tool to promote an agenda for perpetual growth". These recommendations would ultimately require a complete transformation of the Scottish Government's current approach to CCSs. However, if the Scottish Government wish to develop land policies which align with the principles of their LRRS, such transformation seems like a necessary part of that process.

7.4 Limitations & Areas of Further Study

While I have endeavoured to create as full a picture of my research topic as possible, there are areas which remain unaddressed due to the fact that they either fell outside the scope of my research or they developed as areas of further research

during the research process. Here, I identify some of the limitations of my research and outline some key areas for further research in the future.

To return briefly to my own positionality, it is important to highlight that while I have represented an overview of rural concerns within my research, this representation cannot substitute for the fact that I am, and remain, an outsider to rural life in Scotland. Such a position as outsider means that the direct voice of rural communities is missing from my research, and though I have tried to give space to rural concerns, this remains a limitation of my research. As such, an important area of further research in this context would be an active engagement with rural communities on the ground to gain further insight into their experiences and perceptions of CCS development. This would give direct voice to the rural communities expressing concerns around CCS development and would also address my lack of direct experience with Scottish rural perspectives.

A second limitation of my approach to researching this topic is that I take the aims of the Scottish LRRS at face value. I chose to do this because it was beyond the bounds of my thesis to provide an analysis of these alongside my analysis of current CCS policy. However, throughout my research it became increasingly clear that the problems surrounding the definition of what community consultation is are not limited to CCS policy. For example, while current CCS policy falls short of LRRS principle six, which promotes increased community engagement in decisions relating to land, the Scottish Government's own definition on community consultation as found in their 'Guidance on Engaging Communities in Decisions Relating to Land' (Scottish Government, 2018) establishes a legal definition of consultation which also does not directly reflect LRRS principle six and the language it employs. As such, a discourse analysis of the LRRS itself and how it constructs the six land principles represents an important area of further research. This would provide a broader exploration of the discursive practices surrounding current land problems in Scotland and could add to my discussion on how the effects of neoliberalisation impact the role of communities within environmental governance.

A final limitation of my research is its focus on policy. While policy represents an important area of study given that our lives are often saturated with policy and its impacts, it would be a mistake to assume in this context that the generation of more policy is an automatic solution. The reason for this is twofold. First, rural communities develop specific and context-based relations with their local environments which are routinely undervalued within policy (Tovey, 2016). While there can and should be increased awareness of community perspectives and their complexities within the realm of policy, there is and remains a gap between

how policymakers, scientists and government officials conceptualise and perceive environmental concerns on the one hand, and how rural communities relate to and experience them on the other (c.f. Flood et al., 2022; Nightingale, 2011). Second, as my analysis has demonstrated, the problems arising from CCSs do not just arise from policy, but from the discursive practices which underpin them. As such, more research is required on how carbon markets and their underlying logics can be reconceptualised and transformed so that the problems currently playing out in Scotland do not remain an inherent part of the development of carbon credit schemes across the world.

8. Conclusion

This research began with two research questions: 1) how are land rights and responsibilities addressed within policy on carbon credit schemes in Scotland, and 2) what are the likely effects of the way in which land rights and responsibilities are addressed in CCS policy? My analysis shows that current Scottish policy on CCS development assumes a direct link between natural capital and land use change, with an accompanied assumption that this land use change will provide both environmental and social benefits that will in turn trickle down through society. However, despite the fact that CCSs are an instrument directly related to land, consultation processes outlined in surrounding policy remain a relatively underdeveloped part of the process for CCS development. Consultation is reduced to a legal requirement of informing communities of planned developments, a definition that seems disconnected from the sixth principle of the LRRS which encourages all policies developed in relation to land to promote "greater collaboration and community engagement in decisions about land" (Scottish Government, 2017, p. 9). This dilution of consultation processes can be seen to be part of a larger trend in environmental governance whereby rural concerns are continually being sidelined. Further, in terms of the LRRS's promotion of more diverse landownership in Scotland, both my analysis and wider research indicates that this is unlikely to be an outcome of carbon projects developed in Scotland following current CCS policy. Instead, given the lack of attention paid to land availability within the Codes and the CCPu, there is a risk that the growing prominence of CCS projects could exacerbate existing land problems in Scotland, for example by pricing rural and local communities out of the land market.

In terms of my second research question – the effects of how CCS policy addresses the LRRS principles – my analysis shows two main political implications. First, the marketisation of the environment that is promoted by CCS development is part of a wider discussion on the neoliberalisation of environmental governance. This is exemplified by the development of hybrid modes of governance between the state and the market, as well as the co-opting of rural communities as a way of legitimising such governance structures. Alongside this, increased marketisation is leading to a loss of accountability for negative impacts arising from project development. Second, the policies around CCSs position businesses and

organisations as central figures in climate policy and rural communities as in need of further education to understand the necessity of land-use change through CCS development. This narrative contributes to an undermining of rural concerns and ignores existing power imbalances which stem from a long history of concentrated landownership in Scotland. Failure to account for this within CCS policy means that rural concerns are likely to remain unaddressed and rural resistance and distrust of government are likely to continue into the future.

Overall, my analysis also shows that current CCS policies – and the discursive practices underpinning them – have the capacity to negatively impact existing landownership problems in Scotland. The current approach to voluntary CCS development in Scotland integrates a range of neoliberal approaches to governance which are likely to continue favouring state-market hybrids at the expense of rural communities, and the analysed policies fall short of the principles laid out in the LRRS. As government-backed standards which relate directly to land use change, the WCC and PC need to pay more attention to the principles laid out in the LRRS if they want CCSs to be a central part of Scotland's green recovery and just transition. In addition, if the LRRS principles are intended to support the transformation of landownership patterns in Scotland, there also needs to be a transformation of the underlying logics and principles of CCSs themselves.

References

Agrawal, A. (2005) *Environmentality: Technologies of Government and the Making of Subjects*. Durham: London: Duke University Press.

Apostolopoulou, E. and Adams, W. M. (2015) "Neoliberal Capitalism and Conservation in the Post-crisis Era: The Dialectics of "Green" and "Un-green" Grabbing in Greece and the UK." *Antipode*, vol. 47, no. 1, pp. 15-35.

Arnstein, S. (1969) "A Ladder of Citizen Participation." *Journal of the American Institute of Planners,* vol. 35, no. 4, pp. 216-224.

Bacchi, C.L. (2012) "Why Study Problematizations? Making Politics Visible." *Open Journal of Political Science*, vol. 2, no. 8, pp. 1-8.

Bacchi, C.L. & Bonham, J. (2014) "Reclaiming discursive practices as an analytic focus: Political implications." *Foucault Studies*, no. 17, pp. 173-192.

Bacchi, C.L. & Goodwin, S. (2016) *Poststructural policy analysis: a guide to practice*. New York: Palgrave Macmillan.

Baker, S. (2007) "Sustainable development as symbolic commitment: Declaratory politics and the seductive appeal of ecological modernisation in the European Union." *Environmental politics*, vol. 16, no. 2, pp. 297–317.

Bayeck, R. (2022) "Positionality: The Interplay of Space, Context and Identity." *International Journal of Qualitative Methods,* vol. 21, pp. 1-9.

Bell, K. (2015) "Can the capitalist economic system deliver environmental justice?" *Environmental research letters*, vol. 10, no. 12, pp. 1-9.

Beymer-Farris, B. A. & Bassett, T. J. (2012) "The REDD menace: Resurgent protectionism in Tanzania's mangrove forests." *Global environmental change*, vol. 22, no. 2, pp. 332–341.

Böhm, S., Dinerstein, A. C, and Spicer, A. (2010) "(Im)possibilities of Autonomy: Social Movements in and beyond Capital, the State and Development." *Social Movement Studies*, vol. 9, no. 1, pp. 17-32.

Brenner, N., Peck, J. and Theodore, N. (2010) "Variegated neoliberalisation: geographies, modalities, pathways." *Global Networks*, vol. 10, no. 2, pp. 182-222.

BrewDog (2023) "Planet" *BrewDog* [online] Available at: < https://www.brewdog.com/eu_en/brewdogplanet> [Accessed 13 October 2023].

Bumpus, A. G. & Liverman, D. M. (2008) Accumulation by Decarbonization and the Governance of Carbon Offsets. *Economic geography*, vol. 84, no. 2, pp. 127–155.

Bunkus, R. & Theesfeld, I. (2018) "Land Grabbing in Europe? Socio-Cultural Externalities of Large-Scale Land Acquisitions in East Germany." *Land (Basel)*, vol. 7, no. 3, pp. 1-21.

Carrell, S. (2022a) "Lost Forest: why is BrewDog's green scheme causing controversy?" *The Guardian*, [online] 5 March. Available at: <https://www.theguardian.com/environment/2022/mar/05/lost-forest-why-is-brewdog-green-scheme-causing-controversy> [Accessed 17 October 2023].

Carrell, S. (2022b) "Corporate tree-planting drive in Scotland 'risks widening inequality'" *The Guardian*, [online] 5 March. Available at: <https://www.theguardian.com/uk-news/2022/mar/05/tree-planting-drive-scottish-highlands-risks-widening-inequality> [Accessed 17 October 2023].

Chausson, A., Welden, E. A., Melanidis, M. S., Gray, E., Hirons, M. and Seddon, N. (2023) "Going beyond market-based mechanisms to finance nature-based solutions and foster sustainable futures." *PLOS climate*, vol. 2, no. 4, pp. 1-17.

Chun, C. W. (2018) "Neoliberalism, globalization and critical discourse studies." In: J. Flowerdew and E. Richardson (eds) *The Routledge Handbook of Critical Discourse Studies*. New York: Routledge, pp. 421-433.

Conrad, C. C., and Hilchey, K. G. (2011) "A review of citizen science and community-based environmental monitoring: issues and opportunities." *Environmental monitoring and assessment*, vol. 176, no. 1, pp. 273-291.

Cortes-Vazquez, J. and Ruiz-Ballesteros, E. (2018) "Practising Nature: A Phenomenological Rethinking of Environmentality in Natural Protected Areas in Ecuador and Spain." *Conservation and Society*, vol. 16, no. 3, pp. 232-242.

Dillet, B. (2017) "What is Poststructuralism?" *Political Studies Review*, vol. 15, no. 4, pp. 516-527.

Dobson, P. and Matijevic, P. (2022) "Revealed: The big firms snapping up Scottish carbon credits." *The Ferret*, [online] 22 August. Available at: <https://theferret.scot/major-firms-snapping-up-scotlands-carbon-credits/> [Accessed 29 September 2023].

D'Odorico, P. and Rulli, M. (2019) "International Land Grabbing." *Oxford Bibliographies* [online] Available at: <https://www.oxfordbibliographies.com/display/document/obo-9780199363445/obo-9780199363445-0013.xml> [Accessed 1 December 2023].

Fairhead, J., Leach, M. and Scoones, I. (2012) "Green Grabbing: a new appropriation of nature?" *The Journal of Peasant Studies*, vol. 39, no. 2, pp. 237-261.

Feindt, P. and Netherwood, A. (2010) "Making Sense of Climate Change: Notes on Interpretive Policy Analysis and Discourse Analysis in Sustainability Research." In: Franklin, A. and Blyton, P. (eds) *Researching Sustainability: A Guide to Social Science Methods, Practice and Engagement*. London: Taylor & Francis Group. pp. 159-174.

Fischer, A., and McKee, A. (2017) "A question of capacities? Community resilience and empowerment between assets, abilities and relationships" *Journal of Rural Studies*, vol. 54, pp. 187-197.

Flood, K., Mahon, M. and McDonagh, J. (2022) "Everyday Resilience: Rural communities as agents of change in peatland social-ecological systems." *Journal of Rural Studies*, vol. 96, pp. 316-331.

Forestry Commission (2017) *The UK Forestry Standard*. [pdf] *Forestry Commission*. Available at: <https://www.gov.uk/government/publications/the-uk-forestry-standard> [Accessed 15 October 2023].

Franco, J. C. and Borras, S. M. (2019) "Grey areas in green grabbing: subtle and indirect interconnections between climate change politics and land grabs and their implications for research." *Land Use Policy*, vol. 84, pp. 192-199.

Glenn, S., MacKessack-Leitch, J., Pollard, K., Glass, J. and McMorran, R. (2019) *Investigation into the Issues Associated with Large scale & Concentrated Landownership in Scotland*. [pdf] Inverness: Scotland Land Commission. Available at: <https://www.landcommission.gov.scot/downloads/5dd7d6fd9128e_Investigation-Issues-Large-Scale-and-Concentrated-Landownership-20190320.pdf> [Accessed 28 September 2023].

Graham, P. (2018) "Ethics in critical discourse analysis." *Critical Discourse Studies*, vol. 15, no. 2, pp. 186-203.

Haya, B. K., Alford-Jones, K., Anderegg, W. R. L., Beymer-Farris, B., Blanchard, L., Bomfim, B., Chin, D., Evans, S., Hogan, M., Holm, J. A., McAfee, K., So, I. S., West, T. A. P., & Withey, L. (2023) *Quality assessment of REDD+ carbon credit projects: Executive Summary*. [pdf] Berkeley Carbon Trading Project. Available at: <https://gspp.berkeley.edu/assets/uploads/page/Quality-Assessment-of-REDD+-Carbon-Crediting-EXECUTIVE-SUMMARY.pdf> [Accessed 14 December 2023].

Hayes, N. (2020) *The Book of Trespass*. London: Bloomsbury.

Hajer, M. & Versteeg, W. (2005) "A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives." *Journal of environmental policy & planning*, vol. 7, no. 3, pp. 175-184.

Hindel, R., Thomson, S. G., Skerratt, S., McMorran, R., and Onea, P. (2014) *Economic Contribution of Estates in Scotland: An Economic Assessment for Scottish Land & Estates* [pdf] Scottish Land and Estates. Available at: <https://pure.sruc.ac.uk/en/publications/economic-contribution-of-estates-in-scotland-an-economic-assessme> [Accessed 7 November 2023].

Holmes, A. (2020) "Researcher Positionality – A Consideration of Its Influence and Place in Qualitative Research - A New Researcher Guide." *International Journal of Education*, vol. 8, no. 4, pp. 1-10.

IUCN (2023a) *The Peatland Code* [pdf] The National Trust of Scotland. Available at: < https://www.iucn-uk-peatlandprogramme.org/sites/default/files/2023-03/Peatland%20Code%20V2%20-%20FINAL%20-%20WEB_2.pdf> [Accessed 18 September 2023].

IUCN (2023b) "Our Vision." *IUCN National Committee United Kingdom*. [online] Available at: <https://www.iucn-uk-peatlandprogramme.org/peatland-code-0> [Accessed 18 September 2023].

IUCN (2023c) "Peatland Code" *IUCN National Committee United Kingdom*. [online] Available at: <https://www.iucn-uk-peatlandprogramme.org/> [Accessed 18 September 2023].

Jonas, A. E. G. & Bridge, G. (2003) "Governing Nature: The Re-Regulation of Resources, Land-Use Planning, and Nature Conservation: Governing Nature." *Social science quarterly*, vol. 84, no. 4, pp. 958–962.

King, L. P., and Sznajder, A. (2006) "The State-Led Transition to Liberal Capitalism: Neoliberal, Organizational, World-Systems, and Social Structural Explanations of Poland's Economic Success." *American Journal of Sociology*, vol. 112, no. 3, pp. 751-801.

Land Reform Act 2016. [online] Available at: <https://www.legislation.gov.uk/asp/2016/18/contents> [Accessed 10 November 2023].

Latour, B. (1993) *We Have Never Been Modern*. United Kingdom: Harvard University Press.

Lemos, M.C. and Agrawal, A. (2006) "Environmental Governance", *Annual Review of Environment and Resources*, vol. 31, no. 1, pp. 297–325.

Lyons, K., and Westoby, P. (2014) "Carbon colonialism and the new land grab: Plantation forestry in Uganda and its livelihood impacts" *Journal of Rural Studies*, vol. 36, pp. 13-21.

Macfarlane, L. (2021) "Scotland is on the global frontlines of The Great Net-Zero Land Grab." *Open Democracy*, [online] 26 November. Available at: < https://www.opendemocracy.net/en/oureconomy/scotland-is-on-the-global-frontlines-of-the-great-net-zero-land-grab/> [Accessed 15 October 2023].

MacKinnon, D. and Derickson, K. D. (2012) "From resilience to resourcefulness: A critique of resilience policy and activism." *Progress in Human Geography*, vol. 37, no. 2, pp. 253-270.

Machin, A. (2019) "Changing the story? The discourse of ecological modernisation in the European Union." *Environmental politics*, vol. 28, no. 2, pp. 208–227.

Mann, J. and Matijevic, P. (2022a) "Mapping the green rush: Scotland's carbon credit sites." *The Ferret*, [online] 23 August. Available at: <https://theferret.scot/mapping-the-green-rush-scotland-carbon-credit-sites/> [Accessed 1 October 2023].

Mann, J. and Matijevic, P. (2022b) "Revealed: The developers behind Scotland's carbon credit 'green rush'." *The Ferret*, [online] 18 August. Available at: <https://theferret.scot/developers-behind-scotland-carbon-credit-green-rush/> [Accessed 1 October 2023].

Marshall, A. (2022) "Who Owns Scotland? The rise of the green lairds" *Reuters*, [online] 27 January. Available at: <https://www.reuters.com/investigates/special-report/scotland-environment-green-lairds/> [Accessed 29 September 2023].

Martin, A, Fischer, A. and McMorran, R. (2023) "Who decides? The governance of rewilding in Scotland 'between the cracks': community participation, public engagement, and partnerships." *Journal of Rural Studies*, pp. 80-91.

McAfee, K. & Shapiro, E. N. (2010) "Payments for Ecosystem Services in Mexico: Nature, Neoliberalism, Social Movements, and the State." *Annals of the Association of American Geographers*, vol. 100, no. 3, pp. 579–599.

McDougall, J. and Henderson-Brooks, C. (2021) "Lessons Learnt: Reflections on the 'Insider-Outsider Divide' in Working With Culturally and Linguistically Diverse Students in a Participatory Action Research Project." *International Journal of Qualitative Methods*, vol. 20, pp. 1-11.

McKee, A., Beingessner, N., Pinker, A., Marshall A., Currie, M and Hopkins, J. (2023) *The Social and Economic Impacts of Green Land Investment in Rural Scotland*. [pdf] The James Hutton Institute. Available at: <https://www.gov.scot/publications/social-economic-impacts-green-land-investment-rural-scotland/documents/> [Accessed 19 December 2023].

McMorran, R, Reed, MSR, Glass, J, Bauer, AB, Glendinning, JPG, Macaulay, B, McKee, AJ, Peskett, L, Rothenberg, L, Rudman, H & Williams, AW. (2022) *Large-scale land acquisition for carbon: opportunities and risks: A SEFARI Special Advisory Group Final Report*. [pdf] Scotland's Rural College (SRUC). Availabe at: < https://pure.sruc.ac.uk/en/publications/large-scale-land-acquisition-for-carbon-opportunities-and-risks-a> [Accessed 27 September 2023].

McMorran, R. (2016) "Socio-economic and environmental outcomes from different landownership modals in rural Scotland." In: Skerratt, S. et al. (2016) *Rural Scotland in Focus 2016.* [pdf] Scotland's Rural College (SRUC), pp. 65-94.

Merriam, S. B, Johnson-Bailey, J., Lee, M-Y., Kee, Y., Ntseane, G. and Muhamad, M. (2001) "Power and positionality: negotiating insider/outsider status within and across cultures." *International Journal of Lifelong Education*, vol. 20, no. 5, pp. 405-416.

Morgan, B. (2003) "The economization of politics: meta-regulation as a form of nonjudicial legality." *Social Legal Studies*, vol. 12, pp. 489-523.

Mouffe, C. (2020) *The Return of the Political*. London: Verso.

Nightingale, A.J. (2011) 'Beyond Design Principles: Subjectivity, Emotion, and the (Ir)Rational Commons', *Society & Natural Resources*, vol. 24, no. 2, pp. 119–132.

Olsson, D. and Öjehag-Pettersson, A. (2020) Buying a sustainable society: the case of public procurement in Sweden. *Local environment*, vol. 25, no. 9, pp. 681–696.

Parry, M. L. (1980) "Changes in the extent of improved farmland." In: M.L. Parry and T. R. Slater (eds) *The Making of the Scottish Countryside*. Montreal: McGill-Queen's University Press. pp. 177-202.

Prudham, S. (2009) "Pimping Climate Change: Richard Branson, Global Warming, and the Performance of Green Capitalism." *Environment and planning. A*, vol. 41, no. 7, pp. 1594–1613.

Richards, E. (2016) *The Highland Clearances: People, Landlords and Rural Turmoil*. Edinburgh: Birlinn.

Salter, E. (2022) "Rewilding, or just a greenwashed land grab? It all depends on who benefits." *The Guardian,* [online] 28 May. Available at: < https://www.theguardian.com/commentisfree/2022/may/28/rewilding-greenwash-land-schemes> [Accessed 10 November 2023].

Scottish Forestry (2022) *The Woodland Carbon Code* [pdf] Scottish Forestry. Available at: <https://woodlandcarboncode.org.uk/> [Accessed 18 September 2023].

Scottish Government (2021) "Rural Scotland Key Facts 2021" [pdf] *The Scottish Government*. Available at: <https://www.gov.scot/publications/rural-scotland-key-facts-2021/> [Accessed 13 November 2023].

Scottish Government (2020a) *Update to the Climate Change Plan 2018-2032: Securing a Green Recovery on a Path to Net Zero*. [pdf] Edinburgh: The Scottish Government. Available at: < https://www.gov.scot/publications/securing-green-recovery-path-net-zero-update-climate-change-plan-20182032/documents/> [Accessed: 10 October 2023].

Scottish Government (2020b) *Strategic Environmental Assessment of the Update to the Climate Change Plan 2018-2032: Environmental Report*. [pdf] Edinburgh: The Scottish Government. Available at: < https://www.gov.scot/publications/update-climate-change-plan-2018-2032-draft-strategic-environmental-assessment/documents/> [Accessed: 10 October 2023].

Scottish Government (2018) *Guidance on Engaging Communities in Decisions Relating to Land*. [pdf] Edinburgh: The Scottish Government. Available at: <https://www.gov.scot/publications/guidance-engaging-communities-decisions-relating-land/documents/> [Accessed: 10 October 2023].

Scottish Government (2017) *Scottish Land Rights and Responsibilities Statement*. [pdf] Edinburgh: The Scottish Government. Available at: <https://www.gov.scot/publications/scottish-land-rights-responsibilities-statement/pages/2/> [Accessed 10 October 2023].

Segal, D. (2023) "The Climate Profit Buries in Scotland's Bogs." *The New York Times*, [online] Available at: <https://www.nytimes.com/interactive/2022/05/05/headway/scotland-peatlands-climate-change.html> [Accessed 16 October 2023].

SLC (2022) *Scotland's Rural Land Market and Natural Capital: Summary Report* [pdf] Scottish Land Commission. Available at: < https://www.landcommission.gov.scot/downloads/62546512f4179_Land%20Market%20Summary_FINAL.pdf> [Accessed 16 November 2023].

SLC (2023a) *Responsible Natural Capital and Carbon Management* [pdf] The Scottish Land Commission. Available at: < https://www.landcommission.gov.scot/downloads/62eb846b28bdb_Responsible%20Natural%20Capital%20and%20Carbon%20Management%20Protocol.pdf> [Accessed: 20 September 2023].

SLC (2023b) *Community Engagement in Decisions Relating to Land* [pdf] The Scottish Land Commission. Available at: < https://www.landcommission.gov.scot/downloads/628e17641fd5d_Comm%20Engagement%20Protocol%202021.pdf> [Accessed: 18 September 2023].

SLC (2023c) "Good Practice" *The Scottish Land Commission*. [online] Available at: <https://www.landcommission.gov.scot/our-work/good-practice> [Accessed 1 November 2023].

Streck, C. (2020) "Who Owns REDD+? Carbon Markets, Carbon Rights and Entitlements to REDD+ Finance" *Forests*, vol. 11, no. 939, pp. 1-15.

Sultana, F. (2007) "Reflexivity, Positionality and Participatory Ethics: Negotiating Fieldwork Dilemmas in International Research." *ACME: An International E-Journal for Critical Geographies*, vol. 6, no. 3, pp. 374-385.

Swyngedouw, E. (2011) "Interrogating post-democratization: Reclaiming egalitarian political spaces." *Political Geography*, vol. 30, pp. 370-380.

World Bank (2022) *State and Trends of Carbon Pricing 2022.* [pdf] The World Bank. Available at: <https://openknowledge.worldbank.org/entities/publication/a1abead2-de91-5992-bb7a-73d8aaaf767f> [Accessed 17 October 2023].

Thomson, S., Moxey, A., Wightman, A., McKee, A., Miller, D., Brodie, E., Glass, J., Hopkins, J., Mathews, K., Thomson, K., McMorran, R., and Bryce, R. (2016) *The impact of diversity of ownership scale on social, economic and environmental outcomes*. [pdf] Scottish Government. Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/research-and-analysis/2016/07/impact-diversity-ownership-scale-social-economic-environmental-outcomes/documents/00502355-pdf/00502355-pdf/govscot%3Adocument/00502355.pdf> [Accessed 13 November 2023].

Tolley (2024). Landed Estates. *Tolley*. [online] Available at: <https://www.lexisnexis.co.uk/tolley/tax/guidance/landed-estates> [Accessed 9 January 2024].

Tovey, H. (2016) 'Managing Rural Nature: Regulation, Translations and Governance in the Republic of Ireland and Northern Ireland'. In: J. McDonagh, T. Varley, and S. Shortall (eds) *A Living Countryside? The Politics of Sustainable Development in Rural Ireland*. New York: Routledge, pp. 107–120.

Townsend, L., and Townsend D. L. (2020) "Consultation, Consent, and the Silencing of Indigenous Communities." *Journal of Applied Philosophy*, vol. 37, no. 5, pp. 781-798.

United Nations (2023) "What is REDD+?" *United Nations Climate Change* [online] Available at: < https://unfccc.int/topics/land-use/workstreams/redd/what-is-redd> [Accessed 17 November 2023].

Wacquant, L. (2012) "Three steps to a historical anthropology of actually existing neoliberalism." *Social Anthropology*, vol. 20, no. 1, pp. 66-79.

Wanner, T. (2015) "The New 'Passive Revolution' of the Green Economy and Growth Discourse: Maintaining the 'Sustainable Development' of Neoliberal Capitalism." *New Political Economy*, vol. 20, no. 1, pp. 21-41.

WCC (2019) "UK Woodland Carbon Code." *The Woodland Carbon Code*. [online] Available at: < https://woodlandcarboncode.org.uk/> [Accessed 18 September 2023].

West, T. A. P., Wunder, S., Sills, E. O., B, Börner, J., Rifai, S. W., Neidermeier, A. N. and Kontoleon A. (2023) "Action needed to make carbon offsets from tropical forest conservation work for climate change mitigation." *Cornell University* [online] Available at: <https://arxiv.org/ftp/arxiv/papers/2301/2301.03354.pdf> [Accessed 14 December 2023].

Wildland (2023) "Mission and Vision" *Wildland* [online] Available at: <
https://wildland.scot/mission-and-vision> [Accessed 27 October 2023].

Wilson, R. A. (2016) "Thinking about relations: Strathern, Sahlins, and Locke on
anthropological knowledge." *Anthropological Theory*, vol. 16, no. 4, pp. 327-349.

Popular science summary

Carbon Credit Schemes have been identified as a mechanism for achieving net-zero emissions targets, with the Scottish Government citing them as an essential part of their plans for addressing climate change. Carbon Credit Schemes have proliferated in Scotland. However, increasing demand for land is meeting with already concentrated patterns of landownership in Scotland. As a result, rural communities have expressed resistance to Carbon Credit Schemes, with fears that new absentee landlords will make it harder to access land and negatively impact rural development.

The Scottish Government's Land Rights and Responsibilities Statement calls for more diverse patterns of landownership across Scotland and for increased engagement with rural communities in decisions relating to land. This thesis examines current policy surrounding the development of carbon credit schemes in Scotland in light of the principles laid out in the Land Rights and Responsibilities Statement.

The analysis illustrates that current policy in Scotland on carbon credit schemes is heavily influenced by capitalist influences, with environmental governance increasing being neoliberalised. Consequently, the concerns of rural communities are being sidelined, and carbon credit policy in Scotland is not in line with the principles of the Land Rights and Responsibilities Statement.

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