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for local economies



SCOTTISH LAND COMMISSION
COIMISEAN FEARAINN NA H-ALBA

Analysis of mechanisms and governance approaches to securing public value from natural resources

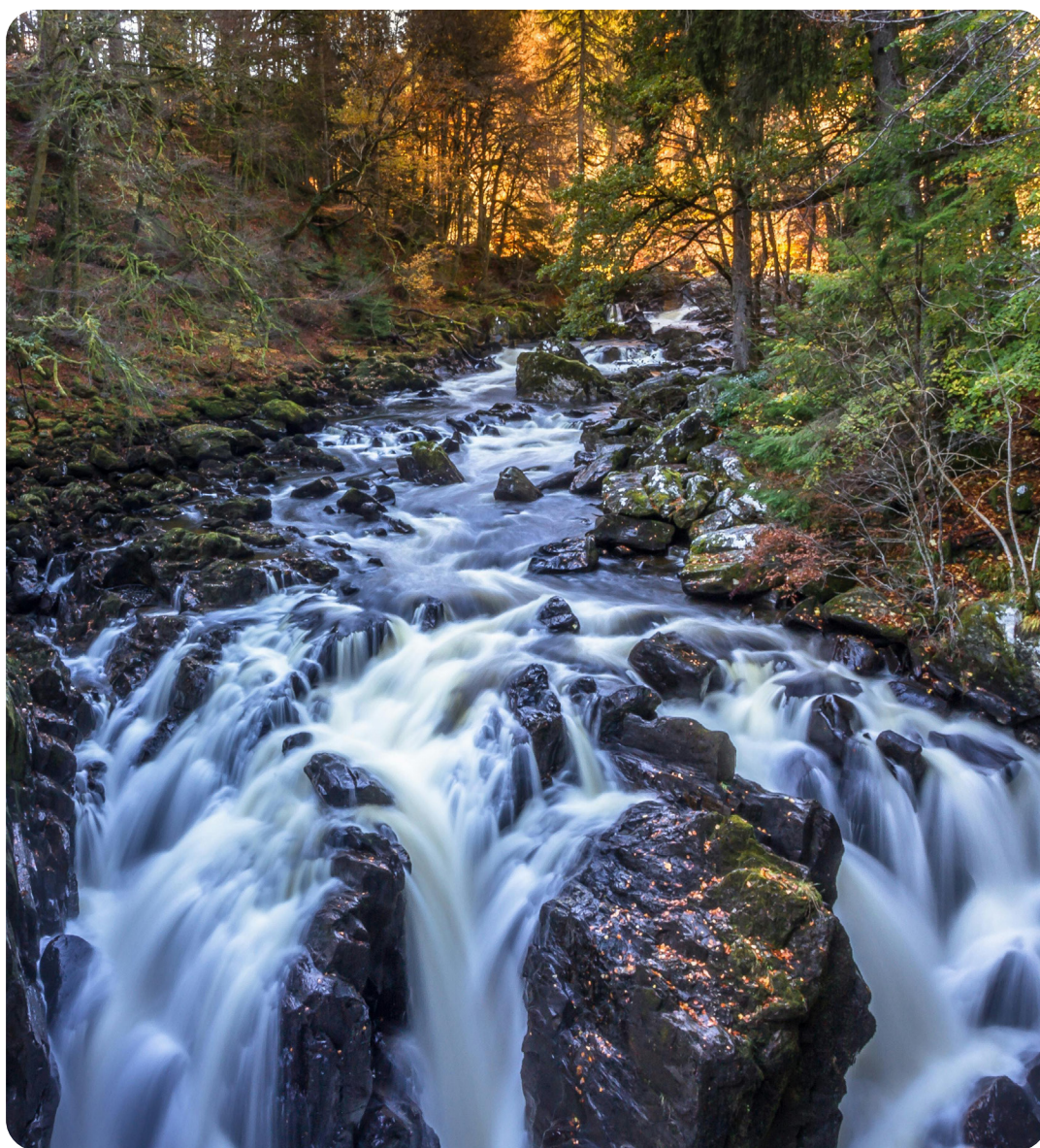
Report by the **Centre for Local
Economic Strategies** for the
Scottish Land Commission

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About the Centre for Local Economic Strategies

The Centre for Local Economic Strategies (CLES) is the national organisation for local economies - established in 1986, we are a Manchester based charity working towards a future where local economies benefit people, place and the planet.

This will happen when wealth and power serve local people, rather than the other way around, enabling communities to flourish. We have an international reputation for our pioneering work on community wealth building (CWB) and are recognised as the curators of the movement in the UK.

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Glossary

Term	Explanation
Carbon credits	"A carbon credit represents the reduction, removal or prevented release of greenhouse gases by natural or technological processes. Businesses and individuals can purchase credits on the voluntary carbon market and may use them to offset their own emissions". ¹
Ecosystem services	The benefits provided by ecosystems and the biological diversity contained within them to society and human activities. ²
Governance structures	"[G]overnance is about the framework of decision making; identifying who has the power to make and enforce decisions, and how that power should be exercised and accountable." ³
Just Transition	We take the Scottish Government's definition of Just Transition to be "the outcome – a fairer, greener future for all – and the process that must be undertaken in partnership with those impacted by the transition to net zero." ⁴
Market value	"Goods and services in a free market economy are sold for prices that reflect a balance between the costs of production and what people are willing to pay. Some environmental goods and services, such as fish and seaweed, are traded in markets, thus their value can be directly observed." ⁵
Mechanisms	An activity or means of intervention through which purposeful outcomes can be reached. This may include financial levers, policy, ownership structures and internal governance, among others.
Natural capital	"The habitats and ecosystems that provide social, environmental and economic benefits to people." ⁶
Natural capital markets	A mechanism for private investment in nature through the sale of units of ecosystem services for nature restoration or conservation.
Natural resources	"[N]atural assets (raw materials) occurring in nature that can be used for economic production or consumption." ⁷

Term	Explanation
Natural resource management	"Ways in which societies manage the supply of or access to the natural resources upon which they rely for their survival and development." ⁸
Net Zero	Reaching a zero or balancing point between the amount of greenhouse gas emissions emitted to the atmosphere and the amount taken out.
Non-market value	"A non-market good or service is something that is not bought or sold directly. Therefore, a non-market good does not have an observable monetary value. Examples of this include beach visits, wildlife viewing, or snorkelling at a coral reef." ⁹
Payment for Environmental Services (PES)	"The name given to a variety of arrangements through which the beneficiaries of environmental services, from watershed protection and forest conservation to carbon sequestration and landscape beauty, reward those whose lands provide these services with subsidies or market payments." ¹⁰

¹ UK Parliament: Post. (2024). Carbon Offsetting.

² Dickie, I., Royle, D. & Neupauer, S. (2019). Testing a natural capital approach on SNH land. Scottish Natural Heritage Research Report No. 1144.

³ Scottish Land Commission. Land Governance.

⁴ Scottish Government. Just transition.

⁵ Green Facts. Non-market value.

⁶ NatureScot. Guidance on natural finance opportunities for land managers in Scotland.

⁷ UNdata. A world of information.

⁸ Britannica Money. Natural resource management.

⁹ Green Facts. Non-market value.

¹⁰ World Wildlife Fund. Payment for ecosystem services.

1. Executive summary

The question of how we secure community and public value from natural resources is one which is at the fore of policy discussion in Scotland today. There are many mechanisms which can be utilised to secure value (whether public or community) through the management of natural resources. A mechanism can take many forms, but fundamentally it is a method of intervention through which purposeful outcomes can be reached. Mechanisms and their associated governance can act as enablers for the increased flow of wealth to local people and their places. In this report we analyse such mechanisms across a number of case studies, using the concept of community wealth building as a lens to offer new insight to securing value from natural resources. The utilisation of this lens offers the opportunity to develop the understanding of practice under the pillars of community wealth building, particularly relating to land. Alongside a deepening understanding of mechanisms and governance approaches to securing public value from natural resources, this research seeks to further the Scottish Land Commission's understanding of the implications of natural capital markets – with a specific focus on how the potential benefits of these markets (and natural resource management more broadly) can be harnessed in the public interest.

Research summary

The following report brings together two phases of work commissioned by the Scottish Land Commission which has sought to identify enablers and barriers in mechanisms for natural resource management. The initial phase saw a literature review interrogating how value can be captured from various natural resources and different mechanisms which ensure this is then distributed through public or community means. Case studies were identified and explored, with both desk-based research and semi-structured interviews. This allowed a deeper investigation of the specific mechanisms which enabled some of these organisations to develop, the challenges they have faced, and how they have evolved over time. An overview of the long list of case studies can be found in a recent Scottish Land Commission publication.¹¹ The second phase of the research saw a deeper dive into six of the case studies with in-depth interviews and research to understand at a greater level how these mechanisms function in their specific places and environments.

Key findings

The initial literature review highlighted that land, and the ownership of it, is fundamental to understanding the Scottish economy, and is an important topic of conversation in Scotland. Different resource types, at different scales and in different places have utilised a variety of mechanisms to capture and distribute value to a local, regional or national community. Value, whether that is public or community, can be secured through policy, ownership of resources, ownership of products which use these

¹¹ Scottish Land Commission. (2024) Natural Resource Governance – Case Studies.

resources (wind turbines etc), ownerships of supply chains and governance of finance associated with natural resource management. There are, therefore, many possible leverage points within the natural resource system where value can be extracted for wider benefits.

There are opportunities to learn from across the range of case studies and translate this into principles which can be applied to the Scottish context. Taking lessons from other natural resources and how they have been governed and value created is of timely importance, given the context of natural capital market development in Scotland.

Key principles

The interrogation of literature on the topic of natural resource management and mechanisms which seek to retain value from them, alongside the case studies examined within this report, offer different vantages of scale, resources and governance structures, but all point to principles which can underpin the development and consideration of how land and natural capital can be harnessed within the Scottish legal and policy context. The six principles we identify here are:



Organisational purpose - A clearly defined, well considered clarity of purpose for any mechanism is essential. This needs to consider the immediate function, the value it is trying to create and how this can be distributed.



Future proofing - Taking a long-term view, as well as building organisational dynamism to respond to changing circumstances, adds value to how mechanisms are able to develop, sustain and evolve over time.



Creative use of law and policy - Law and policy, especially when used creatively, are vital to realising opportunities for managing natural resources in the public interest.



Transparency - The type, role, rationale and purpose of the mechanism, and its governance should be transparent from the outset.



Internal democracy - Any mechanism should be devised with the aim for internal democratic functioning built in. There should be clear governance structures which enable accountability for decision making.



Local voice - Building in channels to enable, enhance and engage with local communities is essential to build mechanisms which respond to, and represent the interest of local people in local places. This means local voices and the needs of specific communities and interest groups should be meaningfully heard and involved in decision making.

2. Introduction

The Centre for Local Economic Strategies (CLES) was commissioned by the Scottish Land Commission to undertake an analysis of mechanisms and governance approaches to securing public value from natural resources. The aim of this research is to build an understanding of how different approaches to natural resource management can deliver public and community value, with a focus on governance structures which can retain and generate this value.

The research was originally broken into two phases, with this report providing a synthesis of the findings from across the work. The report builds an understanding of how the mechanisms and governance structures demonstrated across various case studies in natural resource management work, and how public and community value is generated or retained because of these mechanisms. Mechanisms may take various forms, and include, but are not limited to, governance, organisation type, as well as ownership structures. Many mechanisms will include an intersection of multiple factors, and, as examined in the case studies later in this report, this can strengthen or challenge their operation. These mechanisms operate within a broader landscape of influencing factors such as legislation and wider policy context. Community wealth building (CWB), as a progressive approach to economic development, offers a unique lens through which the analysis of these mechanisms has been conducted. Its utilisation has highlighted the opportunities for securing public and community value from different mechanisms governing natural resources, and advanced the knowledge and practice of CWB implementation.

The report structure is as follows:

- **Section 2** provides an introduction and background, including an introduction to, and critical analysis of, key concepts in this report. This section considers natural capital wealth flows using a community wealth building (CWB) lens, as well as the Scottish policy context and how this presents both an opportunity and a challenge for some of the case study governance structures.
- **Section 3**, the methodology section, provides details as to how the research was conducted across both phases.
- **Section 4**, the literature review, explores different governance structures, different resource types and the opportunities to enable public/community value to be embedded from each.
- **Section 5** presents six detailed case studies. Each case study explores who has power to make or enforce decisions and how much local accountability and control there is over decisions made about natural resource management. The case studies investigate the policy and governance conditions and the structures which shape the delivery of public/community value. Finally, they address the financial mechanisms which have enabled the case study examples to establish and how investment is/isn't reinvested into local/regional/national economies.
- **Section 6** is the discussion and synthesis of the findings from the entire project which could inform the ways in which mechanisms could be applied to natural resource

management within the Scottish context from across both reports. This includes information about the overarching barriers and enablers to delivering public/ community value from different approaches to natural resource management.

- **Section 7** provides a series of key lessons for policy, practice and future research based on the findings and critical analyses of the research conducted across the project.
- **Section 8** concludes with a summary of the findings.

2.1 Background

2.1.1 Scottish policy context

“Our economies are embedded within nature, not external to it”¹²

The way in which natural resources are managed is intrinsically linked to our collective relationship with the land. While land reform has taken many different shapes the world over, private sector ownership continues to be the world’s main solution for managing natural resources – with the assumption that it is best to enclose the commons into a private bundle of rights to be effectively managed rather than questioning who controls nature and the value it creates.¹³ Mainstream approaches to natural resource management have encouraged a growing concentration of ownership, wealth and power.¹⁴ This increasing concentration of ownership, wealth and power is fuelling public resistance to new technologies and markets which will be critical to tackling climate change.¹⁵ As such, addressing these concentrations in Scotland will be crucial in delivering the just transition the Scottish Government aspires to.

In Scotland this manifests as an unusually high concentration of land ownership – with 67% of private rural land being owned by just 0.025% of the population – and the ways in which the landscape is being shaped as a result.¹⁶ As such, Scotland faces a range of opportunities and challenges when considering how to manage its natural resources, and how they can deliver for its people.

In response to this, the Scottish Government has embedded the principles of a just transition into legislation, through the Climate Act 2019.¹⁷ This means that the government is minded to respond to a changing climate and emissions reduction in a way that “is fair and creates a better future for everyone – regardless of where they live, what they do, and who they are” and to “deliver an economy and society which is centred on people’s wellbeing”.¹⁸

¹² HM Treasury. (2021). The Economics of Biodiversity: The Dasgupta Review. Headline Messages.

¹³ Moses, J.W. and Brigham, A.M. (2023). The Natural Dividend. Newcastle-upon-Tyne: Agenda Publishing.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ MacLeod, C. (2023). Land Reform for the Common Good.

¹⁷ Scottish Government, Energy and Climate Directorate: Just transition.

¹⁸ Ibid.

2.1.2 Natural capital

More recently, it has become apparent that Scotland's land is seen as an ideal way to generate value through natural capital markets.¹⁹ These markets and their associated activity are becoming a key driver of change across Scotland's landscapes. In relation to these markets, there is a risk that decarbonisation and nature restoration will further exacerbate existing wealth inequalities. For example, in appealing to landowners, payments for environmental services (PES) may see the channelling of public money toward wealthy individuals.

This research seeks to further the Scottish Land Commission's understanding of the implications of natural capital markets – with a specific focus on how the potential benefits of these markets (and natural resource management more broadly) can be harnessed in the public interest.

Natural resource management covers anything from land use, planning and biodiversity conservation to management of natural resources by industries like agriculture, mining and tourism, and water management. It also encompasses energy generation – such as wind, solar or hydropower. This covers a huge range of activity, and the ways in which resources are managed vary greatly – delivering different outcomes in terms of environmental impact, market value, and non-market value.

2.1.3 Community Wealth Building in Scotland

This report should be situated within the context of the economic, social, and environmental ambitions of Scotland, specifically because this work speaks directly to the community wealth building (CWB) approach gaining ground across the country.

In March 2022, the Scottish Government released its National Strategy for Economic Transformation (NSET). The NSET outlined a vision to create a wellbeing economy that:

- Thrives socially, economically and environmentally;
- Delivers a just transition to net-zero;
- Is rooted in principles of equality, prosperity, and resilience.²⁰

¹⁹ Scottish Land Commission. (2023). Natural Capital and Land Reform: Next Steps for a Just Transition; Alma Economics. (2021). Understanding the Benefits of Diversification in Ownership, Tenure and Control; John Muir Trust. (2022). The rise of green lairds; McIntosh, Alastair. (2023). The Cheviot, the stag and the black black carbon.

²⁰ Scottish Government (2022) Wellbeing Economy Governments.

Community Wealth Building Pillars ²¹

Plural Ownership of the Economy

Increasing socially minded businesses and enterprises.

Land and Property

Increasing the ownership of local assets enables financial and social gains to be harnessed locally.

Financial Flows

Recirculating wealth in a local economy, rather than relying on external capital.

Fair Employment

Progressive employment practices can build local wealth and routes from poverty.

Procurement

Utilising local supply chains help to secure and embed wealth flows in a local area.

The Scottish Government has adopted a CWB approach as a key practical means to achieve the wellbeing economy objectives outlined in the NSET. CWB is an approach to economic development which looks to retain and embed more wealth locally for the benefit of local people.²² This is delivered through five principles or pillars, which are detailed in the text box below. CWB, does not sit on its own but as part of a web of integrated policies that support the delivery of a wellbeing economy and a just transition.

There has since been significant progress in implementing CWB across Scotland. With the Scottish Government having committed to the introduction of legislation on CWB and land reform, interrogating how natural resource management can build community wealth comes at an important time.²³ Furthermore, when defining land, as part of the CWB approach, the Scottish Government assert it is: *“Growing social, ecological, financial and economic value that local communities gain from land and property assets.”*²⁴ The need to make Scotland’s land work better, for people and places is clear.

While there has been some writing on the natural resources touched on within this report within the context of CWB – such as renewable energy generation,²⁵ water²⁶ and land use and ownership²⁷ – the broader links between natural resources and CWB have not been considered in such a holistic way. As such this is an exciting frontier in which to advance CWB approaches for the benefit of the people of Scotland, particularly examining the intersection of the land, finance and ownership pillars. There is undoubtedly already good practice happening within this space, but

²¹ Centre for Local Economic Strategies (2024) The Principles of Community Wealth Building.

²² Centre for Local Economic Strategies (2024) What Is Community Wealth Building?

²³ Scottish Government (2023) Land Reform in a Net Zero Nation.

²⁴ Scottish Government. Cities and Regions. Community Wealth Building.

²⁵ Radcliffe, E. Williams, L. (2021). A just energy transition through community wealth building.

²⁶ Upcoming publications from the Enabling Water Smart Communities project.

²⁷ CLES. (2021). Our Land: Final report of the Liverpool City Region Land Commission.

opportunities to explore the mechanisms which can retain public and community value at scale are rare, and this research represents the breaking of new ground.

Retaining and obtaining public and community value, which can otherwise be described as wealth, is a core component of CWB. Usually, the CWB approach to retaining wealth uses the powers available to anchor institutions within a place, however, this research has enabled the deeper exploration of the key factors which enable wealth to leak from our local, regional, and national economies in relation to natural resources – and enable the extraction of wealth in the private interest. As natural resource management is a huge subject, it was necessary to limit the focus to respond to the research questions which are outlined in the next section.

2.1.4 Wealth flows

When taking a CWB approach to understanding how natural resource value affects the flows of wealth within local economies, it is essential to locate where wealth can leak from a local economy. There was no specific literature exploring this in the context of natural resource management.

The factors identified through the literature review which shape how, and the degree to which, public value can be secured are:

- Government policy, regulation, law and tax regimes (including fiscal policy);
- Ownership and governance structures of those involved in natural resource management (e.g. landowners);
- Ownership and governance structures of organisations using natural resources to create products which can be sold (e.g. those who own wind turbines or oil rigs);
- Ownership structures of businesses within the supply chains of those generating value from natural resources (e.g. those contracted to carry out forestry);
- Governance structures of finance associated with natural resource management.

Delivering a just and democratically legitimate transition

While reducing these factors to bullet pointed lists is helpful in illustrating the component parts influencing the way wealth flows, the reality is that these factors have tangible impacts on the everyday lives of people living in places where natural resource management (and extraction) is happening. There were few accounts of communities' experiences in the literature, but where they were present (in the South of Scotland and Denmark) these have been incorporated within the literature review. Fundamentally CWB is concerned with placing people at the centre of the economy, and within the context of the research conducted it is clear that questions of natural resource management speak directly to concerns about how Scotland can deliver a just transition, in line with the aforementioned commitments by Scottish Government.

Within this context it is important to highlight that land ownership is a form of wealth. Wealth inequality is already, in many ways, driven by who does and does not own and have access to land – and the concentration of land ownership in Scotland creates conditions where applying the mechanisms identified through this research may run the risk of exacerbating wealth inequality.²⁸ There are currently few incentives – aside from building legitimacy for new approaches or developments – for landowners to redistribute the wealth they accrue as a product of ownership. Promotion and implementation of new governance approaches to natural resource management, with a view to securing public and community value, will need to ensure that the value secured does not exacerbate pre-existing inequalities.

Given the range of mechanisms identified and explored through the report, it is necessary to highlight that while they deliver public value to varying degrees, there was often a lack of evidence as to how this value is distributed across communities.

Most of the literature reviewed spoke directly to the nature of rural economies, and the fact that changes in natural resource management (i.e. land ownership and land management) have the potential to transform local economies – for better or worse. There are clear risks that changing land use will have significant socio-economic impacts if it is not well handled, and historic evidence of the impacts similar decisions have had for communities across the UK and globally. UK mine closures are a well-documented example of the impact of changing land use and privatisation on communities and the local economy.²⁹

Within the context of transition – of industries, of energy, to a more biodiverse landscape – this shift in our economies is inevitable. The degree to which communities and the public have both control over and benefit from changes to the landscape has a huge bearing on the perceived legitimacy of new technologies and interventions, which has a significant impact on the pace at which it will be possible to change Scotland's landscape to deliver on the Scottish Government's climate commitments and biodiversity aspirations.³⁰



²⁸ Scottish Land Commission. (2021) Legislative proposals to address the impact of Scotland's concentration of land ownership: a discussion paper from the Scottish Land Commission.

²⁹ Foden, M. et al. (2014). The state of the coalfields: economic and social conditions in the former mining communities of England, Scotland and Wales. Centre for Regional Economic and Social Research.

³⁰ Scottish Government. (2022). Biodiversity strategy to 2045: tackling the nature emergency – draft.

The role of finance

Within the factors outlined above, finance emerged as a crucial component shaping the ways in which value could be retained for the public and the community. Scottish Government has repeatedly pointed to the finance gap for funding required to meet a wide range of nature-related outcomes – using this as the reason for leveraging responsible private investment.³¹ The argument that levering in this investment is necessary has been contested, but one fundamental conclusion drawn by the research conducted for this paper is:

“It’s not just about who owns the land, it’s about who they are beholden to in how they manage the land.”³²

Where finance comes from, and returns to, is a core factor in obtaining public value from natural resource management, and where profits are made because of natural resources there is a very compelling case to ensure activity is sufficiently taxed or regulated to retain wealth for the public.

The creation of community benefit funds, particularly within the space of onshore wind, is one key mechanism enabling the distribution of value to communities. However, through the expert interviews these mechanisms were framed as “compensation”,³³ and less preferable than other means of delivering financial benefits to the public and communities.³⁴

The extent to which finance can both be generated for, and returned because of, natural resource management relies heavily on the nature of the resource being managed. Oil and gas differ from renewable energy due to their finite nature, which often shapes their market value and is what generates a super profit (which it is possible to tax). Onshore wind and other renewables also vary due to their status as renewables, and therefore lacking in the scarcity which will be a factor in driving oil and gas prices in coming years.

Natural capital projects differ again in that there is no direct product that can be sold to market (aside from carbon credits – an artificial product that lacks inherent value within a highly speculative market) and they deliver a limited return on investment without financialization as a result. Consequently, the commodification of nature through the creation of carbon credits has been used to generate an economic impetus for investment in nature restoration. This runs the risk of perverting activity in ways which

³¹ Scottish Parliament Chamber & Committees, Question Ref: S6W-18042. Referencing: Rayment, M. (2021). The Finance Gap for UK Nature: Appendix 2: Financial needs to meet Biodiversity related targets and policy commitments in the UK.

³² Dr. Kai Heron. Lecturer in Political Ecology. Lancaster University

³³ SDr Kristian Borch. Senior Lecturer. Aalborg University. It should be noted that “compensation” has a specific legal meaning which is distinct from benefit-sharing. The two mechanisms sit alongside each other and can be applied in the same context. For example, a windfarm is built on an area previously used for grazing can pay compensation for the loss of grazing area, but project developers may also pay into a benefit-sharing fund for community projects.

³⁴ Such as effective taxation of companies profiting from natural resources (particularly those making a super-profit) and more democratic ownership of the infrastructure/means of generating profit from natural resources.

foreground and prioritise the delivery of carbon units and ignore the need to engage with, and benefit, the people who live as part of a landscape as well as meeting wider environmental needs (such as improving biodiversity). The potential generation of social, human and environmental value is not quantified as part of these mechanisms, so intentional consideration needs to be given to how non-market value is generated from investment in this space as well as ensuring investment benefits the people who live there (particularly if land use changes).



CWB at different scales

A point of interest for exploration within this research was how local and regional governments can shape wealth flows within the sphere of natural resource management. This is because CWB is concerned with the powers available to local and regional anchor institutions to shape flows of wealth. While there was no literature explicitly exploring this, it did reveal some detail as to how local governments can shape wealth flows within this space. The main ways local governments influenced wealth flows was through the planning system, shaping the delivery of community benefits or other redistributive mechanisms, and municipal ownership. Given the range of powers available to local governments, there is space to explore further how they, and other levels of government, could shape the ways in which value is retained for public and community benefit - particularly using CWB principles.³⁵

The identification of a range of interventions possible at different scales and levels of government has highlighted the potential ways in which the Scottish Government could implement changes in different places to enable the retention of public and community value through local, regional, and national mechanisms. Work in Denmark and Norway, as the case studies have highlighted, show the combination of state mechanisms (through tax and regulation) and the enabling of ownership at the local level can deliver benefits at differing scales. For Scotland, the question is how these interventions might be applied within the current policy, legal, political, social and economic context, and the blend of mechanisms which would be best suited.

³⁵ CLES. The principles of community wealth building.

3. Methodology

The following section details how the research was conducted across both phases and provides details of the specific research questions explored, as well as the contact information for the participants interviewed.

3.1 Phase 1

Phase 1 of the research comprised of a literature review which sought to identify the main issues in relation to retaining/obtaining public and community value through natural resource management, as well as producing a longlist of case studies for assessment, with the identification of six which would be further developed in Phase 2.

3.1.1 Research questions

The Phase 1 research focussed on the following research questions, developed in collaboration with the Scottish Land Commission:

- 1) How have past/do current mechanisms for capturing natural resource value effect the flow of wealth within local economies?
- 2) How do ownership and governance structures influence the ways in which citizens broadly control the wealth invested in/generated by natural resource value?
- 3) How do ownership and governance structures influence the non-market value that can be derived from natural resources, and how can this influence local communities and wider society?

3.1.2 Desk-based literature review

A high-level review of grey and academic literature exploring the historic and current experiences of deriving public/community value from investment in, and the use of, natural resources was undertaken.

Expert interviews (scoping)

Interviews were organised with experts to explore questions and challenges highlighted through the literature review, and to identify case studies or papers of importance for review. Interviews were semi-structured and focussed on drawing information from interviewees to answer the research questions outlined above, and to explore the nuance of the challenges within the space of natural resource management in relation to the retention of public and community value.

Experts were chosen due to their expertise in specific areas, including co-governance models, natural capital/carbon markets in Scotland, community wealth building, international land reform and international approaches to natural resource management which deliver significant public and community value.

The expert interviewees were:

Name	Role	Organisation
Dr. Kristian Borch	Senior Lecturer	Aalborg University
Dr. Kai Heron	Lecturer in Political Ecology	Lancaster University
Sylvia Kay	Project Officer	Transnational Institute
Neil McInroy	Community Wealth Building Global Lead	Democracy Collaborative
Prof. Mark Reed	Director, Thriving Natural Challenge Centre	Scotland's Rural College
Dr. Katrina Rønningen	Senior Researcher	Ruralis

A full interview schedule can be found in Appendix 9.2.

Case study identification and assessment

The literature review and expert interviews were used to identify a longlist of fourteen case studies demonstrating a range of examples which deliver different forms of value for the public, communities and private parties. The case studies were:

- Australia, Yarra Yarra Biodiversity Corridor
- Belgium, Eeklo Wind Turbines
- Costa Rica, Payment for Environmental Services Programme
- Denmark, Samsø Renewable Energy Island
- Denmark, Hvide Sande Wind Turbines
- England, Baywind Energy Coop
- Finland, Metsähallitus
- France, Eau de Paris
- Germany, Stadtwerke Wolfhagen and BürgerEnergieGenossenschaft Wolfhagen eG
- Norway, Government Pension Fund Global
- Scotland, Crown Estate Scotland Offshore Wind
- Scotland, Huntly Development Trust
- Scotland, Shetland Charitable Trust
- The Netherlands, Water Boards

A framework was developed to assess these case studies based on the different forms of value they generate for the public, communities and private parties. The assessment framework categorised impacts in line with the Scottish Government's Interim Principles for Responsible Investment in Natural Capital across four capitals: Financial/Economic, Social, Human and Natural. While this framework categorises specific outcomes, it should be recognised that different forms of value can benefit public/community and private parties simultaneously.

Assessment for shortlisting also took into consideration the case studies' applicability to the Scottish context, the availability of data for further case study development, and the timescales of value delivered (e.g. what is the potential for value delivery over time, and the longevity of the benefits observed in the case studies assessed).

Due to the range of potential case studies, it was not possible to "score" different case studies based on the value they delivered, but a qualitative assessment was used to rationalise the selection of the six shortlisted case studies for further exploration. This was based upon the extent to which mechanisms support or frustrate the retention of public/community value from natural resources.

3.2 Phase 2

Phase 2 of the research saw a deeper look at six of the case studies from Phase 1. These were:

- Denmark, Hvide Sande Wind Turbines;
- Finland, Metsähallitus;
- France, Eau de Paris;
- Germany, Stadtwerke Wolfhagen and BürgerEnergieGenossenschaft Wolfhagen eG;
- Norway, Government Pension Fund Global;
- Scotland, Shetland Charitable Trust.

Across the six case studies explored, the research identified common themes and insights which enabled conclusions to be drawn about the overarching barriers and enablers to delivering public/community value from investment in and use of natural resource value, with a focus on investment/reinvestment and governance structures.

3.2.1 Research questions

The second phase of the research focussed on the following questions, developed in collaboration with the Scottish Land Commission:

- How do the mechanism/s secure public/community value?
 - Is this due to a particular way the mechanisms interact, or do they secure a degree of public/community value independent of each other?
- What principles guide the mechanism/s?
- Were there any challenges that had to be addressed to ensure the mechanism could deliver public/community value?

- How were these overcome?
- Who has power to make or enforce decisions and how much local accountability and control there is over decisions made about natural resource management (democratic decision-making).
- What are the financial mechanisms which have enabled the case study examples to establish, and how investment is or isn't reinvested into local/regional/national economies?
- Policy and governance conditions and structures which are shaping the delivery of public/community value.

3.2.2 In depth case studies

An in-depth assessment of grey and academic literature and key documentation for each of the six case studies was undertaken. This was informed by the research questions agreed and enabled an exploration of the historic and current experiences of deriving public/community value from investment in and the use of natural resources across the specific case studies, and their governance arrangements. From each case study, the research sought to identify the enablers/barriers to delivering public/community value and the policy and practice mechanisms influencing this. The desk-based research also highlighted the gaps in available literature, which could then be further explored within the expert interviews.

3.2.3 Expert interviews (case studies)

Two interviews per case study were carried out, except Eau de Paris where only one was conducted, and Hvide Sande where one interviewee answered questions over email. These interviews were organised with staff associated with each of the six case studies, as well as key experts to explore how the particular case study operates and further our knowledge of how a mechanism functions and how it delivers public or community value. Interviews were semi-structured and focussed on gaining information from interviewees to answer the research questions outlined above and deepen our understanding of how each mechanism functions. A sample interview guide is located in Appendix 1, and an interview schedule in Appendix 2.

The expert interviewees were:

Country	Name	Role	Organisation
Denmark	Morten Rauhe (conducted through email exchange)	Operations Manager	(Hvide Sande Fjernvarme)
Finland	Johanna Leinonen	Development Manager	Metsähallitus
	Dr. Sanna Hast	Senior Adviser Land Use	Reindeer Herders Association

Country	Name	Role	Organisation
France	Benjamin Gestin	Chief Executive Officer	Eau de Paris
Germany	Dr. Franziska Paul	Lecturer in Political Economy	University of Glasgow
	Matthias Boos	Head of Corporate Communications	Stadtwerke Wolfhagen
	Iris Degenhardt-Meister	Board Member	BEG Wolfhagen
Norway	Dr. Jorstein Brobakk	Researcher	Norwegian University of Science and Technology
	Dr. Gui Deng Say	Assistant Professor	Singapore Management University
Scotland	Ann Black	Chief Executive Officer	Shetland Charitable Trust
	Fiona Stirling	Head of Enterprise Support	Highlands and Islands Enterprise
	Katrina Wiseman	Area Manager for Shetland	Highlands and Islands Enterprise



4. Literature review

The following section progresses from the initial scene setting of the introduction and methodology and sets out a literature review exploring specifically how value (both public and community) has been secured from different natural resource types, and through different types of mechanisms. It explores key issues in retaining/obtaining public and community value through natural resource management by answering three research questions:

4.1 How have past/do current mechanisms capturing natural resource value effect the flow of wealth within local economies?

Within this question, methods of securing value from different resource types are considered; specifically: Onshore wind, offshore wind, oil and gas, water and natural capital markets.

4.2 How do ownership and governance structures influence the ways in which citizens broadly control the wealth invested in/generated by natural resource value?

Research interrogated within this question explores the differences in governance structures which occurred under individual, collective and state control over natural resource value.

4.3 How do ownership and governance structures influence the non-market value that can be derived from natural resources, and how can this influence local communities and wider society?

The final question within the literature review explores 'non-market' value within the realm of natural resource management. The literature explores the democratic legitimacy of different forms of natural resource management, how environmental and social value is delivered from natural resource management and touches on how social value can be targeted and amplified.

The section also integrates findings from the longlist of case studies explored in the initial phase of the research. These findings collectively enable a broader understanding of the learnings which can be transferred into the natural capital landscape and helped orientate and direct the subsequent exploration of in-depth case studies.

4.1 How do past and current mechanisms capturing natural resource value affect the flow of wealth within local economies?

Due to the scale of natural resource management, this section of the literature review draws out information specifically about: renewable energy generation (particularly onshore and offshore wind), oil and gas, water, and natural capital/nature restoration. Across each of these areas, the mechanisms available to shape wealth flows varied due to the nature of the resource being managed and had different effects on flows of wealth within local economies.

4.1.1 Onshore wind

The first onshore wind farms in Scotland were developed in the mid-90s and, with an abundance of renewable energy resource and strengths in skills and innovation, they have and can play a significant role in the future of economic development in the country.³⁶ The following subsections explore the range of ownership models for onshore wind and the benefits that each provide.

Private ownership and monetary community benefits

Onshore wind in Scotland has been primarily driven by large scale private developer projects and smaller, community owned approaches. As part of the large-scale projects, private developers are encouraged to offer monetary community benefit packages to communities that are near or are affected by the development of a large wind farm. These packages are usually aligned with the needs and aspirations of local communities, often through a community action plan,³⁷ and they are usually delivered through a benefit-sharing fund. Although community benefits are voluntary the Scottish Government has set out its expectations of energy developers in delivering community benefits in their Good Practice Principles.³⁸ Within these principles it recommends that a package should have a value to the equivalent of at least £5000 per installed megawatt per annum and be index-linked for the operational lifetime of the project.³⁹ Between 2018 and 2022, over £106m has been committed to communities across Scotland from onshore wind projects.

Community ownership

Case Study: Greenmyres, Huntly Development Trust

Huntly Development Trust (HDT) work to deliver projects in the small market town of Huntly. It is a company limited by guarantee with charitable status, was established in 2009 and is overseen by a volunteer board of directors.⁴⁰

³⁶ Scottish Government. (2022). Onshore wind: policy statement 2022.

³⁷ Scottish Government (2019) Community benefits from onshore renewable energy developments.

³⁸ Ibid

³⁹ Local Energy Scotland. Community Benefit Agreement Template.

In 2014, a 63-acre farm site was purchased with funding support from the Scottish Land Fund. This site which is 4 miles south of Huntly was primarily bought to enable the Trust to develop a wind turbine project. The turbine was commissioned in December 2016.⁴¹

The Trust have utilised the regular and unrestricted income from the turbine to provide financial stability to their organisation and leverage in further funding for projects around transport, the environment and town centre regeneration.

The Scottish Government had a target of 2GW of community and locally owned energy by 2030.⁴² As of the end of December 2021 there was 896MW community owned energy capacity in operation and a further 1,328 MW in development.⁴³

Community ownership, as its name suggests, is a model of governance in which the community has full ownership of the renewable energy generation project and the revenues which come from this. In some cases, community owned wind farms generate income that is 34 times more than the new private industry benefit standard.⁴⁴ This sees the industry standard of £5000 per MW effectively increase to £170,000 per MW under community ownership. Unrestricted funding coming into communities can enable transformative action across economic, social, and environmental projects in the local area.⁴⁵ Furthermore, payments from benefit funds can be restricted in their usage, whereas income derived from asset ownership is not. Whilst this mechanism clearly offers the highest financial benefits flowing to communities, it also requires the highest initial financial outlay to develop and deliver the project either from grant or loan arrangements as well as expertise and capacity within the community to deliver.

Within the Danish context, research has demonstrated that when investment is being made in wind by an external party (not based in the municipality the wind development sits in), a third of that investment stays in the community and the municipality. In contrast, if a similar development is driven by the community with support from the municipality, then up to 100% of the investment stays with the community and the municipality.⁴⁶

Shared ownership

Shared ownership of community renewables enables a community group to be a financial partner over the lifetime of the renewable energy project. It offers an

⁴⁰ Huntly Development Trust. About us: background.

⁴¹ Huntly Development Trust. What we do: about us.

⁴² Scottish Government. (2022). Onshore wind: policy statement 2022.

⁴³ Energy Saving Trust. (2022). Community and locally owned energy in Scotland.

⁴⁴ Aquatera. (2021). A comparison of the financial benefits arising from private and community owned wind farms.

⁴⁵ Ibid

⁴⁶ Dr Kristian Borch. Senior Lecturer. Aalborg University.

instrument for communities to have a greater financial return from the revenue flowing from their local natural resources and the opportunity to build relationships with developers. This can be beneficial for communities in that it can deliver greater financial return than private ownership and a benefit-sharing fund but can also reduce the burden of community ownership which requires significant expertise, knowledge and capacity within communities to deliver projects. The Scottish Government's Good Practice Principles for Shared Ownership of Onshore Renewable Energy Generation sets out the guidance for both industry and communities in project creation and development.⁴⁷ There are many mechanisms for communities to have shared ownership in the renewables sector, from commercially led developments, where communities can be offered an investment stake, through to joint ventures and split ownership.

For many communities, accessing the initial finance to be able to invest in the renewables project can be a hurdle.

Case Study: Crown Estate Scotland Offshore Wind

Crown Estate Scotland (CES) is the self-financing public corporation of the Scottish Government responsible for the management of land and property in Scotland possessed by the monarch "in right of the Crown".⁴⁸ As part of this, they manage virtually all seabed out to 12 nautical miles and just under half the foreshore. As the owner of the seabed, CES is responsible for the development of the offshore wind sector and awards and manages the lease of seabed in Scotland.⁴⁹

The Scottish Government and CES obtain revenue from the lease of the seabed and they also receive a rent based on the number of megawatt hours of energy produced by the windfarms that are eventually built. Total income generated from operational offshore wind for public spending since 2017 is £59.6m.⁵⁰

Wider economic benefits of onshore wind

The wider benefits to local economies from the renewable energy developments in Scotland, regardless of ownership model are tangible. From one windfarm development in the South of Scotland it was concluded that during the farm's development it generated £1.7 million Gross Value Added (GVA) and supported 21 years of employment within the local area and £17.5 million GVA and 238 years of employment within Scotland.⁵¹

⁴⁷ Scottish Government. (2019). Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments.

⁴⁸ Crown Estate Scotland. Key information.

⁴⁹ Crown Estate Scotland. Our role in offshore wind.

⁵⁰ Crown Estate Scotland. Annual report and accounts to 31 March 2022.

⁵¹ BiGGAR Economics. (2021). Case Study of Crossdykes Wind Farm.

4.1.2 Offshore wind

The offshore wind sector in Scotland is of strategic importance to enable the net zero ambitions of the country to be met. The first offshore farm was operational in 2010 and Scotland hosts the world's first floating windfarm.⁵² It is a fast-growing industry with the opportunity to harness significant benefits for employment, skills and communities across the country through the sector deal. Learning from the experience of other countries, such as Denmark, could help ensure wealth flows into local economies from developments.

Scottish approaches to directing revenue profits

Crown Estate Scotland is a key example of a mechanism used to capture wealth from offshore wind development.

As of April 2023, there are currently 37 offshore wind projects in Scotland, eight of which are operational with 265 turbines.⁵³ Crown Estate Scotland have recently completed a leasing process on two significant offshore wind developments, ScotWind and INTOG. ScotWind generated over £750m in option fees which was then passed onto the Scottish treasury with a commitment to ensure this money was reinvested into the renewable energy sector, however, £350m has now been used to top up the Scottish Governments budget shortfall in 2024.⁵⁴

The revenue profits paid to the Scottish Government from offshore wind farms have resulted in a distribution of funding to local authorities to fund project benefitting coastal communities – with £39m distributed since 2019. Offshore wind farms and Crown Estate Scotland have partnerships with local authorities including Orkney, North Ayrshire, Angus, and Highland. These partnerships support economic regeneration and provide new jobs. The ScotWind and INTOG developments have the potential to provide significant economic benefits to local communities.

Case Study: Denmark, Samsø Renewable Energy Island.

Samsø is an island in Denmark that transitioned from being completely reliant on fossil fuels to 100% of the electricity on the island being produced through wind turbines and 70% of island heating needs provided through a biomass boiler burning local straw.

The Samsø project started after the island, in collaboration with the local municipality, won a Danish Government competition to develop a model renewable energy community.⁵⁵ To achieve this, they appointed a local energy advisor and they created Samsø Energy Company.

⁵² Scottish Government. Offshore Wind.

⁵³ Crown Estate Scotland. Annual Reports and Accounts 2022-2023.

⁵⁴ The Scottish Parliament. Net Zero, Energy and Transport Committee. Tuesday, January 23, 2024.

⁵⁵ United Nations Climate Change. Samsø: an island community pointing to the future: Denmark.

Within three years 11 onshore wind turbines were built and a further ten offshore turbines were added in 2002. To encourage community buy in, there were significant local consultations and the community were involved in all decision making. Furthermore, the local community were encouraged to buy shares in the wind turbines with five shares costing roughly \$2000.

Of the 11 onshore wind turbines, nine are owned privately by local farmers and two are owned by local cooperatives. Of the offshore turbines, five are owned by the municipality, three are privately owned and two are cooperatively owned by many smaller shareholders.⁵⁶

Danish approaches to legislating shared ownership

Another country that has an onshore and offshore wind sector that has played an important role in shaping local wealth flows is Denmark. Prior to the 1970s, Denmark was nearly 100% reliant on oil and was profoundly affected by the oil crisis. However, it has since diversified its energy supply with wind power now providing a relatively high percentage of Danish energy consumption.⁵⁷ Following the oil crisis there was a significant rise in the number of wind co-operatives, with over 2000 in the late 1990s, which were usually small, rural and owned by a mixture of farmers, private households and local investors.⁵⁸

However, in the early 2000s a shift towards market liberalisation resulted in many smaller, community and co-operatively run projects being sold off to larger investors.

To try and tackle this issue of large private developer dominance and growing disillusionment within local communities of wind farms, the Danish government introduced the Renewable Energy Act, which ensured 20% of the ownership of wind farms is available to communities that live within 4.5km of any development (among other monetary benefit sharing measures to tackle local resistance to wind farm development).⁵⁹ However, this approach has received criticism as private households and those who can afford to buy shares in developments are the ones that benefit, not the wider community,⁶⁰ with between 23-41% of existing installed capacity in 2016 owned by individuals and 11-30% collectively owned.⁶¹

⁵⁶ Rapid Transition Alliance (2019) The world's first renewable island – when a community embraces wind power.

⁵⁷ The British Academy (2016). Cultures of Community Energy.

⁵⁸ Oteman, M. et al. (2014). The institutional space of community initiatives for renewable energy: a comparative case study of the Netherlands, Germany and Denmark.

⁵⁹ Jørgensen, M.L. Anker, H.T. Lassen, J. (2020). Distributive fairness and local acceptance of wind turbines: The role of compensation schemes.

⁶⁰ Simcock, N. Willis, R. Capener, P. (2016). Cultures of Community Energy.

⁶¹ Gorrone-Albizu, L. et al. (2019). The past, present and uncertain future of community energy in Denmark: Critically reviewing and conceptualising citizen ownership.

4.1.3 Oil and gas

There have been different paths taken globally to capture value from the oil and gas industries. The UK and Norway have taken very different routes in relation to North Sea oil. Norway utilised its resource rent tax and established the Government Pension Fund Global (as well as state-owned company Equinor). In contrast, the UK-established state-owned British Petroleum (BP) was progressively privatised, and at least 40% of North Sea oil and gas licenses are now owned by foreign companies and investors (in comparison to 3.5% in Norway).⁶² State-owned oil companies have also been used to boost state internal revenue budgets at a national level but are not guaranteed to return wealth to local economies.

Case Study: Norway, Government Pension Fund Global.

The Government Pension Fund Global was established in 1990 after the discovery of North Sea oil. It provides a national financial reserve, as well as socialising the economic benefits from oil and gas sales. The fund is also supplied by money accrued by separate tax regimes, such as the resource rent tax. This tax now aims to socialise the profits made on common resources in different ways, stemming from hydropower and now being applied to wind power generation and fish farming. The fund's investments are guided by an ethical code, which establishes a criterion that must be considered before fund investments are made based on environmental and social concerns.⁶³

The fund owns almost 1.5 percent of all shares in the world's listed companies. Therefore, it has holdings in around 9,000 companies worldwide, entitling the Norwegian state to a share of their profits, which is socialised among the Norwegian population in the form of pensions.⁶⁴

Tax mechanisms

Resource rent is "an extra-ordinary value derived from the use of a natural resource" measured by subtracting all costs, as well as a "normal-sized profit",⁶⁵ from revenue. It is used to tackle the artificially high profits created by an effective monopoly on a natural resource which is limited and can generate value.⁶⁶ This rent is collected by the Norwegian state as a tax and used to finance the welfare state – returning most of the resource rent to the public.⁶⁷

⁶² Energy Monitor. (2024). Weekly data: at least 40% of North Sea oil and gas licenses are owned by foreign investors – new research.

⁶³ Norges Bank Investment Management. About the fund.

⁶⁴ Ibid.

⁶⁵ Brigham, A.L. Moses, J.W. trans. Doucet, L.A. (2021). The New Oil.

⁶⁶ Ibid.

⁶⁷ Scottish Land Commission (2024) Natural Resource Governance – case studies. Norway, Government Pension Fund Global.

Petroleum activities have contributed over NOK 22,000bn to Norway's GDP, and in 2023 NOK 903.1 bn in net government cash flow (roughly £68.5bn).⁶⁸

The impact of this on local economies is generally in the form of funding welfare, but with the introduction of the same mechanism within the space of the "new oil" in Norway (fish farming, onshore wind and bio-prospecting, for example) there is an opportunity to distribute the benefits differently. The Norwegian government is now proposing to introduce resource rent tax on onshore wind power from 2024, with at least half of the revenues accruing to municipalities.⁶⁹ Recent work exploring the "new oil" has proposed an alternative approach to returning resource rent to the community through a three-way split – with a share going to the local community, a share to the region, and a share to the state.⁷⁰

Case Study: Scotland, Shetland Charitable Trust

Shetland Charitable Trust (SCT) started life as Shetland Islands Council Charitable Trust (SICCT) in 1976. It was formed in response to the discovery of North Sea oil and the need for an oil terminal to be sited on the Shetland islands. The trust received and disbursed money paid by the oil industry to the local community as monetary benefit sharing for the new terminal operating in Shetland.⁷¹

Since that time, over £320m has been disbursed by the Trust on charitable activities, particularly around recreation and sports, local amenities, cultural activities and care homes and supported living payments.

The majority of the Trust's assets (£377.2m as of 31 March 2023) are invested on the world stock markets.

SCT also invest in subsidiary companies operating and delivering services on Shetland. These include Shetland Heat Energy and Power Limited (SHEAP), a wholly owned subsidiary of the Trust which operates the Lerwick District Heating Scheme.⁷²

⁶⁸ Norwegian Petroleum. The Government's Revenues. [Accessed 20/02/24].

⁶⁹ Norwegian Government. (2023). The Government will introduce a resource rent tax on onshore wind power from 2024.

⁷⁰ Dr Katrina Rønningen. Senior Researcher. Ruralis

⁷¹ Shetland Charitable Trust (2024) Who we are.

⁷² Shetland Charitable Trust (2024) What we do: our investments.

National oil companies

Within this space it is also important to note the role that state-owned companies have played in capturing the value of gas and oil – with a study from 2009 highlighting that state-owned companies controlled almost 80% of the world’s oil reserves.⁷³ While state ownership does not guarantee direct returns to local economies, it is one mechanism to capture public value from a natural resource, and for some countries forms a huge fiscal influence (e.g. in Suriname 79% of total government revenue relies on income from their national oil company).⁷⁴ Assets held by Equinor, Norway’s national oil company, accounted for almost 2% of the country’s national wealth as of 2014.

Distribution of disturbance payments through Trusts.

The UK’s approach to oil and gas has produced North Sea oil and gas receipts which have fluctuated in value over time, delivering £10.57bn in government revenues in 2022/23.⁷⁵ However, the UK’s approach has, on the whole, driven taxable profits in the private sector, with some benefits delivered to local communities through mechanisms such as the Shetland Charitable Trust.

4.1.4 Water

Water is distinct due to its status as both a natural resource and a service,⁷⁶ and there has been significant debate around the privatisation and, in many places globally, the remunicipalisation of water.⁷⁷ Models of water management tend to be based on specific geographies (whether municipal or regional) aligned with water catchment areas – and in England are “a series of regional monopolies”.⁷⁸ The private ownership of the water system in England has been the subject of much debate – namely around the debt model used which appears to have driven upward pressure on pricing (and similar findings around the increase in pricing as a result of privatisation in Germany and France). There is evidence that public ownership of water has resulted in impacts on the regional economy through investment in local small and medium-sized enterprises (SMEs), and Scottish Water has procurement goals around net zero and building in community and social value.

⁷³ Austin, A. (2009). State-Owned vs Multinational Oil.

⁷⁴ Heller, P.R.P. and Mihalyi, D. (2019). Massive and Misunderstood: Data-driven insights into National Oil Companies.

⁷⁵ Clark, D. (2023). Annual government revenues from offshore oil and gas activity on the North Sea I the United Kingdom from 2008/09 to 2022/23.

⁷⁶ Sylvia Kay. Project Officer. Transnational Institute

⁷⁷ Kishimoto, S. Lobina, E. Petitjean, O. (ed.) (2015) Our Public Water Future.

⁷⁸ Social Market Foundation. (2018). The cost of nationalising the water industry in England.

Case Study: France, Eau de Paris

Established in 2010, Eau de Paris is a municipally-owned water company that aims to guarantee universal access to water, with responsibility over production, transport and distribution of water.⁷⁹ The organisation is committed to environmental protection and social solidarity. Eau de Paris has an elected board made up of municipal officials, staff representatives, as well as representatives of non-governmental organisations (NGOs) advocating for water users and the environment.⁸⁰

All acts, reports and records of official proceedings related to water managements must be submitted to the Paris Water Observatory. While the observatory does not have decision-making powers, their views are taken into account and members are elected onto the company board, with voting rights in decision making processes.

The literature reviewed is just some of the vast amounts written on the comparative benefits/issues of different forms of ownership in the water sector relating to the increase/decrease of costs to consumers, the public purse, and the generation of non-market value.⁸¹ Little of the literature written directly addresses the question of how different models of water ownership affect local flows of wealth. The Transnational Institute's writing on the re-municipalisation of water speaks directly to municipal ownership of water (and associated innovative governance structures such as those used by Eau de Paris) but does not explore how this affects local wealth flows.⁸²

Private ownership and the cost of water bills

The literature suggests that one way mechanisms capturing value within the water sector demonstrably shape local flows of wealth is through water bills.

In England the privatisation of water was advocated to lever in investment from international markets. Helm, however, has highlighted that in the English water sector, dividends roughly equal profits since privatisation.⁸³ According to Bayliss and Hall the privatisation of water has also resulted in a debt model driving upward pressure on pricing, and a system of price controls that fails to deal with all the methods of value extraction – with £1.8bn of dividends being extracted to shareholders.⁸⁴ In Germany,

⁷⁹ Eau de Paris. The history of Paris water.

⁸⁰ Blavel, C. Transnational Institute: Paris Celebrates a Decade of Public Water Access.

⁸¹ CIWEM. Thirty years on, what has water privatisation achieved? ; CIWEM. Water companies – public ownership or public interest?; Bayliss, K. Hall, D. (2017). Bringing water into public ownership: costs and benefits.

⁸² Kishimoto, S. et al. (2015). Our public water future: The global experience with remunicipalisation.

⁸³ Helm, D. (2018). The Dividend Puzzle: what should utilities pay out?

⁸⁴ Bayliss, K. and Hall, D. (2017). Bringing water into public ownership: costs and benefits. Technical Report. Public Services International Research Unit.

where water was privatised prices generally increased,⁸⁵ and Chong, Huet and Saussier found that the price of water provided by private companies in France was 16.6% higher than in places where municipalities provided it.⁸⁶

Public ownership and procurement

In Scotland water is run by Scottish Water, a public corporation accountable to the Scottish Government. Despite calls for privatisation in the 1990s, it has remained in public control and is worth £3.7 billion to the Scottish Economy, providing almost 17,000 jobs.⁸⁷ Due to its public ownership, surplus is reinvested in improving its services. Scottish Water invested nearly 35% more per household in regulatory capital investments since 2002 (based on a 2018 study), and the efficiency and quality of Scotland's water is on par with England's, but English investment has been lower and costs to consumers have been higher.⁸⁸ It has procurement goals around net zero aspirations and building in community and social value.⁸⁹ Although it is in public ownership, the company has not been immune to criticism for spending significant amounts with private contractors and high levels of executive pay.⁹⁰

In Germany, it has been suggested that public water operators tend to be significant actors in the regional economy as they invest in local SMEs for infrastructure and maintenance work, in contrast with private operators who contract out work to their subsidiaries.⁹¹

4.1.5 Natural capital markets/nature restoration

Within the sphere of natural capital and nature restoration, local wealth flows are influenced by who owns the land activity takes place on (e.g. a farmer or other landowner), who owns the organisations doing the work on the land, and the finance shaping activity on the land.

Impact of land ownership concentration

Scotland has an unusually concentrated pattern of large-scale private rural land ownership, with 67% of land owned by 0.025% of the population.⁹² The Scottish Government Land Reform Review Group highlighted how this concentration of

⁸⁵ Ruester, S. and Zschille, M. (2010). The impact of governance structure on firm performance: An application to the German water distribution sector.

⁸⁶ Chong, E., Huet, F., & Saussier, S. (2006). Public-Private Partnerships and Prices: Evidence from Water Distribution in France.

⁸⁷ Scottish Government. (2022). Scotland: The Hydro Nation Annual Report 2022.

⁸⁸ Yearwood, K. (2018). The Privatised Water industry in the UK. An ATM for investors.

⁸⁹ Scottish Water. Procurement and Supply Chain Strategy 2022-2023.

⁹⁰ Rodger, H. (2024). Scottish water branded 'out of control' over near-£500m spend on private firms.; BBC. (2023). Scottish Water workers to strike as executive pay criticised.

⁹¹ Hecht, C. (2015). Chapter 3: German municipalities take back control of water. In Kishimoto, D. Lobina, E. Petitjean, O. (ed.) (2015) Our Public Water Future.

⁹² MacLeod, C. (2023). Land Reform for the Common Good.

ownership can influence the flow of wealth to local communities through the stifling of entrepreneurial ambition, local aspiration, and ability to address local community needs.⁹³ This concentrated pattern of land ownership has come into greater focus in recent years as the value of Scottish land continues to increase. One of the reasons for this substantial rise is the increased interest in green land investment. The Rural Land Market report highlighted that the value in farmland grew by 58% in the Northeast and by 42% in Southwest of Scotland.⁹⁴ This report was accompanied by the Rural Land Market Insights Report 2023 which highlighted how well-resourced parties are increasingly becoming the only parties able to afford rural land, including large-scale expansionist farmers, institutional and corporate investors building portfolios and three to four major commercial forest companies.⁹⁵ This is compounding concentrated land ownership issues in Scotland and restricts opportunities for communities and local people to access or acquire land.⁹⁶

According to research by the James Hutton Institute, those who invest in land for nature restoration (e.g.: afforestation, carbon sequestration schemes and fulfilling landholding objectives in relation to Environmental, Social and Governance (ESG) goals) are not always interested in increasing the flow of wealth within local economies.⁹⁷

Rather, they have a diversity of motivations of which the most dominant is environmental, as well as reputational, operational, financial returns and personal desire to be involved in nature restoration projects. Ultimately investor-owners prioritise financial and environmental returns above the social impact of their investments.

Case Study: Costa Rica, Payment for Environmental Services Programme.

Payments for Environmental Services Programs (PES) are a financial mechanism to promote forest ecosystem conservation and combat land degradation. In Costa Rica this program sees payments made to landowners, who are predominantly public limited companies but also to small holders and indigenous communities.

They receive direct payments for environmental services when adopting sustainable land-use and forest-management techniques. There are a variety of funding streams for the programme: Costa Rica's fuel tax and water charge, Certificates of Conservation of Biodiversity, carbon credits, as well as from alliances with the public and private sector.⁹⁸

⁹³ Land Reform Review Group. (2014). The Land of Scotland and the Common Good.

⁹⁴ Scottish Land Commission (2023). Rural Land Market Report.

⁹⁵ Merrell, I., Pate, L., Glendinning, J. and Thomson S. (2023) Rural Land Market Insights Report 2023. A report commissioned by the Scottish Land Commission.

⁹⁶ Ibid.

⁹⁷ McKee, A. et al. (2023). The Social and Economic Impacts of Green Land Investment in Rural Scotland.

⁹⁸ United Nations Climate Change: Global climate action (2020) Momentum for change: financing for climate friendly investment: payments for environmental services programme: Costa Rica.

This programme emerged as a response to one of the highest rates of deforestation in the world, with a quarter of all forest cover lost between 1950 and 1995. The PES was introduced in 1997.

More than 1.3 million hectares of land are under PES contracts and more than 18,000 families have benefited from the program, with an investment of \$524m.⁹⁹

The rising costs of land, coupled with historic ownership patterns increases the risk of communities being priced out of the market and as such effects the flow of wealth coming back to local economies.¹⁰⁰ Qualitative research exploring community perceptions in the South of Scotland found that communities perceive that little wealth has flowed back into their communities from extensive forest development. The reasons cited for how natural resource value has failed to flow to local communities are the creation of few jobs, changing land usage leading to depopulation and a lack of monetary benefit sharing.¹⁰¹

Financial mechanisms such as Payment for Environmental Services (PES) also impact flows of wealth within local economies.¹⁰² This has been, and is, shaped by the concentration and nature of land ownership in the area – as well as the broader political economy in which they are implemented.¹⁰³

These models are prevalent in the Global South, alongside mechanisms such as debt-for-nature swaps.¹⁰⁴ Debt for nature swaps are financial transactions where a portion of a “developing nation’s” foreign debt is forgiven in exchange for guaranteed finance for nature – but as highlighted by the Transnational Institute, these deals should be carefully interrogated with regards to who they stand to benefit.¹⁰⁵ The degree to which these mechanisms distribute benefits equitably within local economies is questionable.¹⁰⁶

Impacts of investor-owner choices on local economies

In Scotland, the lack of clear mechanisms ensuring natural resource value flows to the local economy means communities are often at the behest of the way investor-owners

⁹⁹ United Nations Climate Change: Global climate action (2020) Momentum for change: financing for climate friendly investment: payments for environmental services programme: Costa Rica.

¹⁰⁰ Glenn, S. (2021). Land & Climate Change – Exploiting our natural capital for the benefit of all.

¹⁰¹ Daniels-Creasey, A. et al (2022). Understanding the impact of scale and concentration of landownership: community perspectives from the south of Scotland.

¹⁰² Further information on PES can be found in Section 4.3.2.

¹⁰³ Friends of the Earth. (2020). Nature for sale: how corporations benefit from the financialisation of nature.

¹⁰⁴ Standing, A. (2022). The financialization of conservation: The case of debt swaps for the oceans.

¹⁰⁵ Ibid.

¹⁰⁶ Gockel, C.K. Gray, L.C. (2011). Debt-for-Nature Swaps in Action: Two Case Studies in Peru.; Ayaz, M.U. Javed, S.A. Aslam, H. (2022). Opportunities and Challenges of Debt-for-Nature Swaps (DNS); Nofyanza, S. et al. (2020). Revisiting the REDD+ experience in Indonesia: Lessons from national, subnational and local implementation.

choose to deliver natural capital projects. Shifts in land use and natural resource management practices have the potential to significantly reshape local economies and impact flows of wealth. For example, the ways in which investor-owners choose to deliver natural capital projects, such as capitalising on the non-market benefits of nature restoration through “eco-tourism” will shape the jobs market due to requiring different skills in comparison to more traditional approaches to land management.¹⁰⁷

As a consequence there are concerns in Scotland that while new ventures shifting land function could generate jobs (which would shape wealth flows locally), shifts will also decrease the availability of jobs for people with pre-existing land management skills which may not be required, and new ventures may also compete with locally owned businesses (for example in hospitality and tourism).¹⁰⁸ Within this new market, there is huge potential for job creation, but questions remain as to who benefits from these jobs and the longevity of different opportunities for employment in connection with natural capital works.¹⁰⁹

These shifts in the economy were also demonstrated among examples of REDD+.¹¹⁰ REDD+ (Reducing Emissions from Deforestation and Forest Degradation) are payments linked to measurement and regular monitoring of the volume of carbon stored in a forest which would have been released into the atmosphere without the payment. This can be exchanged for tradeable offset credits or carbon measurements, which can be used as an accounting unit linking levels of payment with a quantified promise of carbon stored. Literature states that “by shifting labour, capital and other inputs between sectors [...] REDD is likely to have broad economic impacts”.¹¹¹ However, across both domestic and international literature it was not clear how these shifts in the local economy built community wealth. The economic role of people within a locality may change due to shifting requirements for different skills and experience, but fundamentally wealth and power still sits with the landowners who make the decision about how to use their land to generate value.

Mechanisms for sharing monetary benefits with communities

Monetary community benefit mechanisms to return profit into communities are one of the mechanisms that are being explored within this space in Scotland (alongside the potential of lump sums paid to communities).¹¹² However, research (to be released) has demonstrated that there are problems both in communities and among landowners with the ethics of carbon markets and engaging with subsequent community benefits generated as a product of their activity.¹¹³ This is because people are not sure where

¹⁰⁷ McKee, A. et al. (2023). The Social and Economic Impacts of Green Land Investment in Rural Scotland.

¹⁰⁸ Ibid.

¹⁰⁹ Scottish Government. (2022). Understanding the local economic impacts of natural capital investment.

¹¹⁰ Malan, M. et al. (2024). Evaluating the impacts of a large-scale voluntary REDD+ project in Sierra Leone.

¹¹¹ Laing, T. Palmer, C. (2015). Economy-wide impacts of REDD when there is political influence.

¹¹² Scottish Land Commission. Delivering Community Benefits from Land; Scottish Land Commission. (2023). Community benefits from investment in natural capital: A discussion paper.

¹¹³ Reed, M.S. et al. (in press). Overcoming barriers to supply-side actors' engagement in Scotland's peatland natural capital markets – Annexes volume. Scottish Government.

the money they will be receiving originates from. Within the context of natural capital markets, if a community is receiving community benefits which are a proportion of profits coming from multiple buyers (and facilitated by intermediaries) they could be receiving money from negatively perceived organisations such as major oil companies. As such, current financial mechanisms are insufficiently transparent for communities to understand who they may be receiving investment from in exchange for carbon credits and associated community benefits – causing hesitancy in engaging with these markets. Proposals for intermediate arrangements, somewhere between full community ownership of land and resources at one side and private ownership at the other, such as a ‘thriving community partnership agreement’, could enable greater transparency and financial rewards for communities.¹¹⁴

4.2 How do ownership and governance structures influence the ways in which citizens control the wealth invested in/generated by natural resource value?

The following section explores literature which highlights a range of different governance structures in place which had varying impacts on how citizens could exercise control over natural resource value.

There was extensive literature highlighting governance structures which enabled varying degrees of citizen control over wealth. Literature which touched on private ownership of infrastructure and citizen control over wealth tended to focus on the delivery of community benefits, monetary benefit sharing, or “disturbance payments” as the main mechanism returning wealth to communities. These benefits are either delivered to individuals (as in Denmark and Costa Rica) or to communities (for example through Development Trusts in Scotland). Where literature explored community ownership or shared ownership, there were more collective opportunities to control wealth generated by natural resources and where it is directed (as in Hvide Sande, Wolfhagen, and Shetland).

4.2.1 Individual control

In Denmark, the Renewable Energy Act requires ownership of at least 20% of a project to be offered to those living within 4.5km of a development. This mechanism enables shared ownership, as local people are co-owners of energy generation infrastructure. However, there is a risk that the benefits are directed solely to higher income private individuals, who are more likely to invest for profit, rather than households in deprived communities, or a co-operative or collective organisation who share their wealth more equitably in the local community.

Well-used mechanisms such as Payment for Environmental Services (PES) directly channel money from a fund to landowners to enact more environmentally friendly practices/contribute to conservation – particularly within the Global South. PES offer

¹¹⁴ Community Land Scotland (2023) Beyond community benefit – a new deal for thriving communities.

“monetary incentives to communities or individuals to voluntarily adopt behaviours that are not legally obliged, improving the provision of [...] ecosystem services”.¹¹⁵ PES operates differently in different locales, and in Costa Rica there was a significant amount of citizen control over investment made in different areas as a result of PES due to the nature of land ownership. In Costa Rica, land is predominantly owned in small parcels by families or indigenous groups – meaning that PES directly impacted their income and meant money invested in shifting land use was directly within their control.

Reed et al. have explored the application of PES within a UK context, specifically in relation to natural capital markets and ecosystem services, but with adaptations to create a place-based approach. This approach has included the development of governance mechanisms with “horizontal” networks or stakeholders – seeking to govern the natural environment based on bottom-up, collective decision-making processes.¹¹⁶ This multi-level governance model helps the co-ordination, management and delivery of ecosystem services through the Peatland Code – but the model fundamentally does not shape where wealth is directed as a product of delivering ecosystem services. Within the UK these payments still go to the “seller” who is willing to adopt measures to provide an ecosystem service.¹¹⁷ This is typically the landowner.

Case Study: Denmark, Hvide Sande Wind Turbines

Hvide Sande is a small village on the West Coast of Denmark where three 3MW wind turbines deliver significant value to the local community.

The project at Hvide Sande is different from a number of other community energy developments in Denmark in that they did not adopt the common co-operative model but instead chose to create a community trust, where 80% of profits aren't returned to individual investors but are put towards collective projects in the area. The trust is made up of the local tourism association, local unions, industry and utilities.¹¹⁸ The wind turbines create an estimated €1.2 million per year to be spent on local development, held by the Hvide Sande Community Trust.¹¹⁹

As per Danish law that stipulates that 20% of a project must be owned locally by those who live within 4.5km of the development, 20% of the wind turbines are owned by individuals who bought shares in the development and now receive returns on their investment.¹²⁰

¹¹⁵ Reed, M.S. et al (2017). A place-based approach to payment for ecosystem services.

¹¹⁶ Ibid.

¹¹⁷ Department for Environment, Food and Rural Affairs. (2016). Defra's Payments for Ecosystem Services pilot Projects 2012-2015.

¹¹⁸ Folkecentre for Renewable Energy. Hvide Sande: winds of development.

¹¹⁹ Cultures of Community Energy: International Case studies. (2016)

¹²⁰ Ibid.

Mechanisms for direct investment also exist – for example community-municipal investments. These enable citizens to invest in activity coordinated by local authorities which will generate a return on investment – such as solar power. While this model risks maximising a rate of return for local investors and exacerbating issues of inequality as higher income residents invest, this mechanism also enables philanthropic individual investors to reinvest or donate their money once they have received their return, and one in six chose to do so in West Berkshire.¹²¹ This mechanism has been proven useful (where it has been applied) to fund habitat restoration and other nature-related activity which otherwise struggles to generate a return on investment.

4.2.2 Collective control

Community energy is one approach to natural resource management which delivers significant citizen control over wealth generated by natural resource value. Community energy is characterised by “local ownership, participation and benefit sharing”.¹²² A series of case studies developed by Simcock et al demonstrate the variety and scale of benefits delivered to communities as a result of retaining the wealth generated by natural resources.¹²³ For example, Hvide Sande in Denmark.

There are similar examples of shared ownership elsewhere in Europe, such as Wolfhagen (between the municipality and a co-operative).¹²⁴ This form of shared ownership enables the community, through a co-operative, to reinvest profits into further energy efficiency measures, and enables the municipality to invest in local services.

Case Study: Germany, Stadtwerke Wolfhagen and BürgerEnergieGenossenschaft Wolfhagen eG.

In 2005, Wolfhagen decided to return energy distribution to municipal ownership, creating Stadtwerke Wolfhagen to take over the city’s license agreement from the private sector. In 2008 a decision was made that all household electricity would be provided from local renewables by 2015. Wolfhagen pursued an innovative form of “cooperative participation” putting energy into the joint ownership of the municipality and a citizen-led cooperative - BürgerEnergieGenossenschaft Wolfhagen eG (Wolfhagen BEG).¹²⁵

This model has had a huge impact in Germany, with approximately 284 municipalities – including Hamburg, Germany’s second largest city – seeking to remunicipalise their energy systems since 2005.¹²⁶

¹²¹ UK100. (2022). West Berkshire: Climate Change Bond.

¹²² Simcock, N. Willis, R. Capener, P. (2016). Cultures of Community Energy.

¹²³ Ibid.

¹²⁴ Milburn, K. Russell, B. (2019). Public-Common Partnerships: Building New Circuits of Collective Ownership.

¹²⁵ Active Citizenship for Renewable Energy. Wolfhagen, Germany.

¹²⁶ Ibid.

A mechanism returning wealth via “disturbance payments” was used on Shetland. These payments were enabled by the Disturbance Agreement of July 1974, signed by the oil industry, which was a mechanism to help compensate Shetland for the pressure of intense industry, permanent social change and the threat that would occur to traditional industries in the area.¹²⁷

The main way wealth generated through this mechanism is distributed to the community is through the Shetland Charitable Trust, which manages these disturbance payments. The Trust was originally formed by the local authority as the Shetlands Islands Council Charitable Trust and has a volunteer board of 12 trustees (now with four local councillors) who take decisions as to how to disburse the Trust’s money.¹²⁸

With regards to how governance structures shape any wealth delivered to citizens by community benefits in Scotland, the creation of Community Action Plans and the alignment of community benefits to these plans is the main way in which citizens exercise control over wealth generated through associated schemes.¹²⁹ This approach has matured within the space of onshore renewable energy development.¹³⁰ Understanding of the application of both monetary and non-monetary community benefits within the context of natural capital projects is developing – as demonstrated by the Scottish Land Commission’s previous work in this space.¹³¹

4.2.3 State control

Where mechanisms returning wealth to the public are held by the state, such as the Norwegian Sovereign Wealth Fund, generally funds are controlled by the state and indirectly by elected representatives.¹³² The income as a result of Crown Estate Scotland’s approach to offshore wind is paid directly to the Scottish Consolidated Fund, but revenue profits are distributed in part to local authorities to fund project benefitting coastal communities.¹³³

The Netherlands’ Water Boards are directly accountable to citizens in water authority elections which take place every four years. This democratic mechanism is the main way citizens can exercise control over the way the Water Boards operate, and therefore the wealth they control.

State-owned enterprises are also limited with regards to the direct control citizens have over them. Metsähallitus, for example, is controlled by two government ministries and has a Board of Directors which steer and supervise its operations. As such, citizens do not directly control the wealth generated resulting from these operations – the state acts on their behalf.

¹²⁷ Morgan, G. (2009). Politics: What is the Shetland Charitable Trust?

¹²⁸ Shetland Charitable Trust. Who We Are.

¹²⁹ Scottish Community Alliance. (2020). Community Action Plans: An Approach to Place Based Strategic Planning.

¹³⁰ Scottish Government. (2019). Community benefits from onshore renewable energy developments.

¹³¹ Scottish Land Commission. (2023). Community benefits from investment in natural capital.

¹³² Norwegian Government (2022). Council on Ethics for the Norwegian Government Pension Fund Global.

¹³³ Scottish Government. (2021). Supporting impact – Scottish Crown Estate net revenue: local authority use and insights.

Case Study: The Netherlands, Water Boards.

There are 21 Dutch water authorities which employ around 11,000 people directly. The regional water authorities' work centres on flood protection, water quality management and preventing droughts or water surpluses. The water authorities are an autonomous authority alongside the State and provincial and local governments.¹³⁴

Water authority elections take place every four years. Each water authority has an elected General Board, the majority of whose members are elected by local residents although there are non-elected seats for specific interests.¹³⁵

The water authority tax can include: a water purification levy, a pollution levy, a water system levy, a road levy. The regional water authority decides the amount of the tax for their region each year.

The water authority is almost entirely self-financing and highly decentralised. Their wide tax-raising powers, which generated about € 3.2 billion in revenue in 2022, strengthens their position to enact change and deliver projects.¹³⁶ Water authorities are also served by the Dutch Water Bank (NWB), which is both publicly owned and mandated to act in the public interest.

Case Study: Finland, Metsähallitus

Metsähallitus is a Finnish state-owned organisation that uses, manages and protects state owned land and water assets, while navigating the interests of different stakeholders involved, such as private landowners, indigenous communities, NGOs and the general public.

It acts as both an agency and an enterprise, protecting natural resources, whilst also generating revenue from its forestry activity.¹³⁷

Additionally, Metsähallitus provides environmental services for a range of clients, including for the private sector and individual landowners. These services include supporting landowners to fulfil social obligations laid out by the Finnish state, the promotion of biodiversity and the promotion of employment.

¹³⁴ Dutch Water Authorities. Leading in regional water management.

¹³⁵ Kiesraad. Elections of the Water authority.

¹³⁶ Havekes, H.J.M. (2023) Successful decentralisation? A critical review of Dutch water governance.

¹³⁷ Metsähallitus (2024) About us: purpose and values.

4.3 How do ownership and governance structures influence the non-market value that can be derived from natural resources, and how can this influence local communities and wider society?

The final research question answered within the literature review addresses the topic of market and non-market value. It is important to recognise that while land is an essential component to all economic activity, it is far more than that. Karl Polanyi stated that:

“The economic function is but one of many vital functions of land. It invests man’s life with stability; it is the site of his habitation; it is a condition of his physical safety; it is the landscape and the seasons. We might as well imagine his being born without hands and feet as carrying on his life without land.”¹³⁸

Within the sphere of natural resource management, valuing “ecosystem services” has been a particular focus and brings to the fore questions of what classifies as market or non-market value. Within this space, value is broken down into four categories: provisioning, regulating, cultural and supporting (see Fig.1).

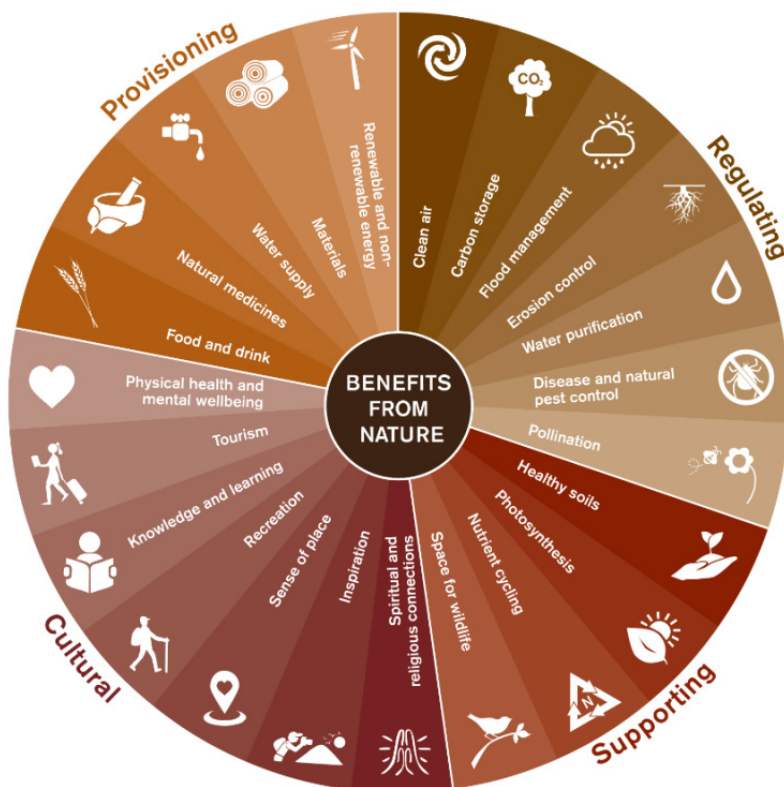


Fig. 1 – NatureScot, What are ecosystem services?

¹³⁸ Polanyi, K. (2001 [1944]) The Great Transformation: The Political and Economic Origins of Our Time, Boston: Beacon Press.

What is described as the “non-use value” or “non-market value” of nature as a whole is well documented.¹³⁹ However, the distinction between market and non-market value is often blurred, and these categories are mainly used for the purposes of natural capital accounting and valuing ecosystem services.¹⁴⁰

The concept of “co-benefits” is particularly dominant in this space and Australia’s Yarra Yarra biodiversity corridor has mapped these co-benefits against the UN’s Sustainable Development Goals to accredit the project as a Gold Standard biodiversity project.¹⁴¹

Additional non-market values are articulated in the framework used for case study development in Appendix 2. Some of these values are quantifiable, but many (such as cultural value, aesthetic value, value to indigenous peoples) are not possible to put a price to.¹⁴² Within this context there is significant debate as to whether it is right to quantify the value of nature - with some arguing that measuring the value of nature is enabling its “financialisation”.¹⁴³

Case Study: Australia, Yarra Yarra Biodiversity Corridor.

The Yarra Yarra Biodiversity Corridor is a project run by Carbon Neutral – one of Australia’s leading reforestation carbon project developers. The project began in 2007 when Auscarbon began buying 2000-3000 hectare parcels of land no longer of use for crop farming, but with possibilities for ecosystem restoration.¹⁴⁴

The Corridor was developed as a multi-species native reforestation project in Southwest Australia – one of only 36 internationally recognised global biodiversity hotspots. It is on degraded, semi-arid agricultural land that can no longer support viable farming practices, with more than 50 native tree and shrub species endemic to the region planted and protected. This is being done with 100 year carbon rights and carbon covenants registered on the land titles. It is the first project in Australia to be awarded Gold Standard certification for climate interventions – which has enabled Carbon Neutral to sell carbon credits on the international market. This accreditation takes into account the ‘co-benefits’ of their activity based on the UN’s Sustainable Development Goals.¹⁴⁵

¹³⁹ Rea, A.W. Munns, W.R. The Value of Nature: Economic, Intrinsic, or Both?; McKenna, T. et al (2019). Testing a natural capital approach on SNH land.

¹⁴⁰ European Environment Agency. Towards a Common International Classification of Ecosystem Services (CICES) for Integrated Environmental and Economic Accounting.

¹⁴¹ Eco-Business. 2015 Carbon Neutral project is first in Australia to receive prestigious Gold Standard certification.

¹⁴² Cassi, C. (2022). Non-monetary environmental values: toward diverse perspectives of the value of nature.

¹⁴³ Friends of the Earth (2015). Financialization of Nature; Friends of the Earth (2018). Biodiversity offsetting and net gain: licence to trash nature; Friends of the Earth. (2020). Nature for sale: how corporations benefit from the financialisation of nature.

¹⁴⁴ Carbon Neutral. Reforestation and habitat restoration.

¹⁴⁵ Carbon Market Institute. Yarra Yarra Biodiversity Corridor.

It is important to note that while different ownership and governance structures can positively influence the non-market value derived from natural resource management, the ways in which natural resources are managed can have negative non-market impacts. The benefits derived from oil and gas in Norway are clear in terms of economic return to the public, but the resource's extraction, processing and use have undoubtedly had negative environmental impacts. As such, when considering non-market value, it is also important to consider the damage (or potential value lost) delivered by taking a particular approach to natural resource management.

Different governance structures have a direct ability to generate non-market value in their own right, e.g. community ownership can build community confidence and generate further activity in a place as with Huntly Development Trust. Within the literature, different governance structures and finance mechanisms within the space of natural resource management had a direct bearing on:

- The democratic legitimacy of different forms of natural resource management (e.g. renewable energy projects).
- The delivery of social and environmental value from natural resource management.
- The targeting and amplification of social and environmental value.

4.3.1 The democratic legitimacy of different forms of natural resource management.

Literature within this space highlighted the significance of mechanisms which enabled communities to feel involved in or connected to decision-making and enabled them to benefit directly from natural resources as a key means of generating acceptance and democratic legitimacy for different forms of natural resource management.¹⁴⁶

This literature surfaced the concept of "energy acceptance theory". "Distributional justice" (how costs and benefits are shared) is described as a key element enabling community acceptance of renewables, alongside "procedural justice".⁵³

***"If you don't have procedural justice and decisions are not transparent, then you'll see resistance"*¹⁴⁷**

This concept speaks directly to the impact citizen control over wealth associated with natural resources can have in building local trust and acceptance of local energy schemes. Situating citizen control over the development of renewables, and subsequent wealth generated by renewables, within the context of democratic processes is significant when considering how different governance models build community wealth, as fundamentally CWB is concerned with delivering economic democracy.

¹⁴⁶ Arler, F. Sperling, K. Borch, K. (2023). Landscape Democracy and the Implementation of Renewable Energy Facilities; Wüstenhagen, R. Wolsink, M. Burer, M.J. (2007). Social Acceptance of Renewable Energy Innovation: An Introduction to the Concept.

¹⁴⁷ Kristian Borch. Senior Lecturer. Aalborg University.

Developing acceptance of different approaches to natural resource management does not just include different ownership structures and mechanisms such as the resource rent tax in Norway but is also shaped by who owns and is involved in natural resource management and their connection to place. This includes private business owners.

In Norway, a study was conducted across three coastal municipalities where aquaculture is important. It found that local ownership and local involvement, and high local employment in the sector, was interlinked with more positive perceptions of aquaculture's environmental, economic, and social contributions and efforts.¹⁴⁸

4.3.2 The delivery of social and environmental value from natural resource management.

Who owns land and infrastructure holds bearing over the delivery of social and environmental value from natural resource management, as the interests of these owners shape the ways in which the land is used and how non-market value is generated as a consequence. In Costa Rica, PES is used to deliver financial and economic value to fund community infrastructure. This was possible because landowners are predominantly small family farms and indigenous groups.¹⁴⁹

The environmental benefits accruing from the Yarra Yarra biodiversity corridor were a result of the large-scale nature of the project – enabled by the buying up of land by Carbon Neutral and also collaboration with local private landowners.¹⁵⁰ This was deemed necessary because a landscape-level shift is required to deliver meaningful changes to ecosystems and therefore biodiversity (as also discussed in the UK context),¹⁵¹ and achieving this scale of change in the landscape relied on Carbon Neutral's ability to leverage capital and generate buy-in from local people. However, it isn't clear in this case how the finance generated by carbon credits is socialised (aside from through jobs and "investment in the local economy").

Within the sphere of water, the literature demonstrated that it is perceived that publicly owned water is more effective in taking social and environmental concerns seriously in the planning of infrastructure.¹⁵² The Terrassa Water Observatory, a structure informing the decision-making of Taiguà, is described as promoting "community driven governance of water services", reclaiming "citizen control" and celebrating "non-market value of water" encapsulated in concepts such as a "water commons".¹⁵³

¹⁴⁸ Rønningen, K. (2024). Funding Future Welfare: Bioeconomy as the "New Oil" and the Sharing of Benefits from Natural Resources (Bioshare) – Final report to the Research Council of Norway. 31 January 2024.

¹⁴⁹ OECD. Environmental Performance Reviews: Costa Rica 2023.

¹⁵⁰ Carbon Neutral. (2022). Putting a value on co-benefits – Yarra Yarra Biodiversity Corridor.

¹⁵¹ Reed, M.S. et al (2017). A place-based approach to payment for ecosystem services.

¹⁵² Hecht, C. (2015). Chapter 3: German municipalities take back control of water. In Kishimoto, D. Lobina, E. Petitjean, O. (ed.) (2015) Our Public Water Future.

¹⁵³ Sartorras, M. et al. (2021). Chapter 4: Reinventing Public Water Amid Covid-19 in Terrassa. In McDonald, D.A. et al (eds.) (2021) Public Water and Covid-19: Dark Clouds and Silver Linings.

The Observatory played a significant role in shaping the water company's response to Covid-19 – delivering better outcomes for people experiencing the worst social and economic impacts of the pandemic and the related lockdown.¹⁵⁴

Case Study: England, Baywind Energy Coop

Baywind Energy Co-operative was the first co-operative to own wind turbines in the UK. The first share offer in 1996/97 raised £1.2 million to buy two turbines. In 1998/99 the second share offer raised a further £670,000 to buy one turbine. They were able to expand and eventually owned six turbines in Cumbria.¹⁵⁵

The Cooperative had over 1,400 members and was operational for over 20 years. Profits from the energy generation were returned to shareholders through annual payments, and reinvested in the local community through funding support for local initiatives.

In 2003 the Baywind directors took the decision to create Energy4All as a vehicle for promoting new community coops in the UK and managing other companies and build a portfolio. That year, the members agreed to fund the start-up of E4All, and this organisation has assisted the development of 32 energy coops in the UK.¹⁵⁶

In Scotland, literature demonstrated how social outcomes play a role in shaping the ways in which investor-owners decide to undertake green investment projects. For example, land managers and landowners within the James Hutton Institute study on green land investment were keen to ensure projects supported training and education opportunities.¹⁵⁷

While investors saw profit as a critical motivation for these projects, it was acknowledged that profits would be lower and that they were keen to direct them to impacts that are not just financial. The research identified varied impacts across different examples and investment types. Positive impacts included; increased accessibility and transparency of estate activities; support for education and training, community initiatives, and housing; and increased tourism activity and employment.¹⁵⁸ However, negative impacts were also identified, such as effects on local services, a decrease in some employment types, reduction in housing availability; as well as potential

¹⁵⁴ McDonald, D.A. et al (eds.) (2021) Public Water and Covid-19: Dark Clouds and Silver Linings.

¹⁵⁵ Baywind Energy Coop (2024) Home.

¹⁵⁶ Baywind Energy Coop (2024) Energy4All.

¹⁵⁷ McKee, A. et al. (2023). The Social and Economic Impacts of Green Land Investment in Rural Scotland.

¹⁵⁸ Ibid.

risks in land use change and management practices (e.g. perceived increased risk of wildfire).¹⁵⁹

Within the context of onshore wind, Kristian Borch shared how community involvement in onshore wind development can act as a mechanism for capacity building, enabling people to develop the skills they may need to pursue other opportunities either in a deeper understanding of governance and wider policy issues.¹⁶⁰

4.3.3 The targeting and amplification of social value.

While there was no literature directly addressing the ways different governance structures targeted and amplified social and environmental value, there were a number of examples exposed by the literature which demonstrated the role of community- or cooperatively owned structures in targeting and amplifying social value.

The amplification of social value has been delivered through the effects of sharing knowledge and being more broadly networked with other cooperatives and regional groups. Baywind Energy Coop and Wolfhagen BEG are both examples of organisations that are actively networking and knowledge sharing to support cooperative development.

Case Study: Belgium, Eeklo Wind Turbines.

Ecopower is a Belgian cooperative that invests in renewable energy projects primarily based in Belgium. They focus on various forms of renewable energy, including wind power, solar power, and hydropower. Ecopower has constructed wind turbines in Eeklo, offering 100% citizen participation in these projects.¹⁶¹

Despite 100% of Eeklo's electricity demand being covered by wind turbines, the Ecopower turbines are one of the few with a community ownership approach. As part of an EU project, PowerUp, the city of Eeklo offers pre-financed shares to those considered to be in energy poverty. This allows these citizens to join the cooperative with no up-front cost. This initiative has been transformative in offering energy at cost to those who need it the most. The energy infrastructure is localised, which not only makes the use of electricity more efficient through reduced transmission losses, but also improves the energy security of the local economy through increased self-sufficiency.¹⁶²

¹⁵⁹ McKee, A. et al. (2023). The Social and Economic Impacts of Green Land Investment in Rural Scotland.

¹⁶⁰ Dr Kristian Borch. Senior Lecturer. Aalborg University.

¹⁶¹ Centre for Local Economic Strategies. Eeklo, Belgium: Community ownership.

¹⁶² Energy Cities. How can a city bring vulnerable people closer to renewable energy?

Public-common partnerships are one governance structure that hasn't been explored within literature focussing on natural resource management, however it is worth noting. This governance structure is designed to amplify the benefits demonstrated above within a locality, while "removing the disciplinary effects of finance".¹⁶³ These structures are being explored within the Scottish context in relation to the intertidal commons, particularly on the Isles of Skye and Raasay with CLIMAVORE, which is seeking to develop a "low investment and cost-effective approach to transition from damaging forms of intensive aquaculture into regenerative forms of aquaculture".¹⁶⁴

The targeting of the social value generated as a product of natural resource management has been done in Eeklo, Belgium to tackle energy poverty. In Eeklo, the City takes a targeted approach to making the most of the social value it can generate as a result of holding shares in local wind turbines. The City offers pre-financed shares to those in energy poverty, allowing citizens to join the cooperative with no up-front costs and enabling them to lower their energy costs because of membership.¹⁶⁵



¹⁶³ Dr Kai Heron Lecturer in Political Ecology. Lancaster University.

¹⁶⁴ Abundance. Building the intertidal commons.

¹⁶⁵ RESCoop. Compile Best Practice Guide.

5. Case studies

As the previous literature review, and long-list of case studies demonstrates, there are multiple potential mechanisms which can secure both public and community value from different natural resources, and multiple considerations for how value can be retained and utilised within a community or country.

As discussed in the methodology section, a short list of six case studies were chosen from the initial fourteen to allow exploration into different scales of projects, different resource management types and different ownership and governance structures. These six case studies provide international context in how mechanisms covering water, wind, forests and oil and gas have been utilised for both public and community benefit and provide insight into the lessons which can be learned from their specific context. The in-depth case studies provide insight, which, in conjunction with the literature review, and learnings from the initial long list of case studies will help inform the report conclusions.

The following section contains the in-depth case studies and seeks to uncover the enablers/barriers to delivering public/community value and the mechanisms which have been utilised to influence these.

To develop these case studies the following questions were answered:

- What mechanisms are enabling the delivery of public/community value within each case study?
- How do the mechanism/s secure public/community value?
 - Is this due to a particular way the mechanisms interact, or do they secure a degree of public/community value independent of each other?
- What principles guide the mechanism/s?
- What policy and governance conditions and structures shape the delivery of public/community value.
- Who has the power to make or enforce decisions and how much local accountability and control there is over decisions made about natural resource management (democratic decision-making).
- What financial mechanisms have enabled the case study examples to establish, and how investment is or isn't reinvested into local/regional/national economies.
- Were there any challenges that had to be addressed to ensure the mechanism could deliver public/community value?
 - How were these overcome?

5.1 Denmark, Hvide Sande Wind Turbines.

Hvide Sande wind turbines are three wind turbines in the town of Hvide Sande in Western Denmark, which were initially built by a local community foundation and are now owned by the local district heat network.

5.1.1 History and policy/current external governance context

Wind power provides a relatively high percentage of Danish energy consumption and since the mid-1980s there has been a strong culture of wind-cooperatives made up of farmers, private households, and local investors.¹⁶⁶ However, in the early 2000s there was a shift away from this model towards a greater number of multi-national and private investors buying up smaller developments as well as building their own larger windfarms. This was due to the loosening and ultimate abolition of a 'residence criteria' which set a maximum distance between onshore wind turbines and the residence of the owners and the abolition of an 'ownership criteria' which limited the number of shares an individual could have. This resulted in an increase in both the size and the capital investment in projects.¹⁶⁷

In Hvide Sande, a small town on the west coast of Denmark, a large-scale private development was proposed for the local area, which the local community actively rejected. Instead, a number of local actors set about developing and building their own wind turbines, which research has shown would ensure greater public and community value for the area.¹⁶⁸

The key reason for developing the wind turbines was to create finance to expand and deepen the town's harbour, as it was too small for increasingly larger vessels, resulting in a decrease in the number of ships docking in the area and having a negative impact on the local economy.¹⁶⁹ Due to the considerable investment required for the expansion of the harbour, the harbour authority was unable to afford the redevelopment.

The harbour was important, not only for fishing and shipping but also tourism in the area. The local tourism board, Holmsland Klit Turistforeing (HKT), decided to establish a community foundation, similar to a trust, which would be the organisation leading on building the turbines on land owned by the harbour authority and pay an annual ground rent to fund the redevelopment of the harbour.

Government regulation meant that the Hvide Sande harbour authority was unable to build the wind turbines themselves and any development required a separate entity to be established.¹⁷⁰ The community foundation was a collaboration between several local actors including local industry groups, unions and utilities.

¹⁶⁶ Simcock, Willis and Capener (2016) *Cultures of Community Energy*. The British Academy.

¹⁶⁷ Gorroño-Albizu, Sperling and Djørup (2019) The past, present and uncertain future of community energy in Denmark: Critically reviewing and conceptualising citizen ownership. *Energy Research and Social Science* (57).

¹⁶⁸ Folkecenter for Renewable Energy, Hvide Sande.

¹⁶⁹ Albizu, Maegaard and Kruse (2015) *Community Wind Power for the World*.

¹⁷⁰ Green Transition Denmark (2023) *The wind turbines must be good for everyone*.

As per the Danish Renewable Energy Act, which stipulates that ownership of 20% of onshore wind developments must be offered to citizens living within 4.5km of the development, 20% of the project was paid for and was owned by a local community cooperative.¹⁷¹ Founded in 2010,¹⁷² the cooperative in this case, Hvide Sande Nordhavn Møllelaug I/S, had more than 400 shareholders who bought shares for €309 per share and subsequently received a return on their investment, ensuring that 20% of the wealth generated from the wind turbines was kept locally.¹⁷³

An initial investment of €12.2 million was required to purchase the turbines, which was financed by two local banks with a return on the loans being between 9% and 11% and with the three turbines serving as the collateral for the loan.¹⁷⁴ After the turbines were built, the annual rent paid to the local harbour of over €650,000 allowed for investment into the harbour.¹⁷⁵ This investment was used to leverage a further €19.5 million in bank loans, which was used to enable the harbour expansion and development to take place. As a result, larger ships could enter, providing diversification of goods and preservation of the local economic landscape.¹⁷⁶

In 2018, during a period of particularly low electricity prices, the community foundation and Hvide Sande Nordhaven Møllelaug I/S sold the wind turbines to Hvide Sande Fjernvarme a.m.b.a (the local district heating network).¹⁷⁷ Since ownership was transferred over to the local district heating network, the wind turbines, which are connected to the heat storage tank and a solar thermal plant, have helped produce 92.4% of the village's heating. This contributes considerably to a reduction in the cost of heating bills for residents and results in Hvide Sande having some of the lowest heating bills in Denmark. These wider environmental and community benefits demonstrate the additional value the project is providing to the local area.

5.1.2 The mechanism(s) and internal governance

The creation of a community foundation to utilise profit from wind power to funnel into local economic development is not a new mechanism. However, the unique opportunity the Hvide Sande turbines provided for the local area showcases how wider value can be obtained from natural resources. To ensure that value was delivered for the local community and the harbour could be expanded to aide local economic development, the rent monies from the wind turbine site were utilised to develop the harbour, thus creating jobs, increasing tourism and resulting in a hub for offshore wind.¹⁷⁸ After paying rent to the harbour and the repayment of the loan to the

¹⁷¹ International Energy Agency (2021) The Promotion of Renewable Energy Act.

¹⁷² Climate X Change (2014) Supporting Community Investment in Commercial Renewable Energy Schemes.

¹⁷³ INFORSE – Europe (2022) Renewable-Energy Cooperatives, Cases from Denmark, Germany, Poland & Turkey.

¹⁷⁴ Folkecenter for Renewable Energy, Hvide Sande.

¹⁷⁵ Folkecenter for Renewable Energy (2013) Wind Energy as a lever for local development in peripheral regions.

¹⁷⁶ Green Transition Denmark (2023) The wind turbines must be good for everyone.

¹⁷⁷ Private information sent by Hvide Sande Fjernvarme on 20/06/2024.

¹⁷⁸ Albizu, Maegaard and Kruse (2015) Community Wind Power for the World.

banks, profits were used to fund initiatives such as energy renovation of local buildings, local public e-mobility and other initiatives that support the local economy.¹⁷⁹

The creation of a community foundation meant that benefits from the project had to be redirected to supporting the local community. As per Danish law, the founders of community foundations cannot economically benefit from the foundation and must have a stated purpose that supports groups, associations and organisations that support community interests and enable local employment, income generation, culture and infrastructure.¹⁸⁰ Therefore, Holmsland Klit Turistforeing could not financially benefit from the project.

In the broader sense, the Hvide Sande wind turbines have contributed to tackling regional inequality. The remote and rural communities of West Denmark face the similar challenges to those in many other parts of Europe and beyond, with low per capita income, high fuel poverty and migration to larger towns and cities.¹⁸¹ By paying a ground rent to the harbour, the mechanism showcases an innovative financial mechanism and utilisation of government legislation, whilst continually building local economic activity. This highlighted that while traditional finance may not be easy to acquire for smaller organisations (although Hvide Sande community foundation were able to access local bank loans) the initial investment required local commitment to the project financially.

This case study highlights the intersection of the finance and ownership community wealth building pillars and the opportunity which local ownership can bring to retaining and redistributing value. The finance pillar of community wealth building is underpinned by using the wealth that exists in communities in innovative ways and challenging the traditional understanding of how money and finance is allocated and used.

Since the turbines have been owned by the Fjernvarme, value has been delivered in a slightly different way, through the reduction of bills and decreasing the reliance on fossil fuels, but it continues to support the community and make Hvide Sande a place where people want to live and work.¹⁸²

Hvide Sande offers insights into Denmark's broader approach to developing renewables, and how collective control over the value created by renewable energy generation may differ in delivering impact compared to the 20% of the wind farm owned locally (with returns going to private individuals). The journey the village has been on since 2006 demonstrates changes in the value generated over time – both market and non-market – and the impact this has had on the local economy.

¹⁷⁹ Folkecenter for Renewable Energy, Hvide Sande.

¹⁸⁰ Ibid

¹⁸¹ Winther and Haase Svendsen (2012) 'The Rotten Banana' fires back: The story of a Danish discourse of inclusive rurality in the making' *Journal of Rural Studies*.

¹⁸² Morten Rauhe. Operations Manager. Hvide Sande

The flexibility shown by the organisations in this case study highlight the importance of adaptability when working at a small scale and that strong local relationships between different actors is essential, particularly when, over time, there may need to be adaptations made to the organisation. Due to the initial decision to set up a community foundation and the creation of a governance structure that focused on the local community, the next stage of the wind turbine ownership, under a new organisation, could be kept within the community and could continue delivering local benefits.

5.1.3 Extent and process of community/public control

The governance structure of the community foundation included representatives from the different organisations involved in establishing the foundation, including the harbour authority, who were democratically elected on to the board. Within their position as representatives, they decided where profits should be spent and what the role of the foundation should be.¹⁸³ Although there was little direct community involvement on the board of the foundation, because Hvide Sande is a small town with relatively few inhabitants, representatives from the organisations could also be members of the community. Using a community foundation ensured that all activity would be focused on supporting community interests, enabling local employment, income generation, culture and infrastructure.

Since ownership of the turbines has been transferred to Hvide Sande Fjernvarme, community involvement has increased. Hvide Sande Fjernvarme is a company entirely owned by the consumers and the local community. Every year they have a general assembly with local community members invited to participate. During the general assembly, elections are held, issues are discussed, and resolutions passed to shape the direction of the organisational activity. This ensures that there is a strong community involvement in Hvide Sande Fjernvarme.¹⁸⁴

5.1.4 Key challenges, opportunities and future directions

One of the key challenges for small renewable energy projects is vulnerability to the open market. This was highlighted in 2018 when, during a period of low electricity prices, the community foundation sold the wind turbines to Hvide Sande Fjernvarme. While a large-scale wind farm can weather market fluctuations, a small-scale project does not have the capital to tide them over until prices rise. This demonstrates the importance of having the right ownership and governance structure in place to ensure that if projects enter a period of difficulty, they can be adapted as required. By creating a community foundation in the first instance, it ensured that when they did encounter a challenge the foundation was in a stronger position to ensure that the best option for the wider community was taken.

¹⁸³ Folkecenter for Renewable Energy, Hvide Sande.

¹⁸⁴ Ibid.

5.2 Finland, Metsähallitus.

Metsähallitus is a Finnish state-owned organisation that has, for over 160 years, managed, protected and generated revenue from state forests in Finland.

5.2.1 History and policy/current external governance context

Since the 1540s the ‘uninhabited wildernesses’ of Finland have been the property of “God, the King and the Crown.”¹⁸⁵ The current land use area (and some waterways and coastline) covered by Metsähallitus is around a third of the area of Finland, or 12.6 million hectares, predominantly this land is in the north of the country, which interacts directly with the traditional home of the Sámi peoples, tourism activities and traditional reindeer herding activities.¹⁸⁶ This land is managed by the Finnish state with a focus on responsibility towards the current land and its management, the people of Finland both now and in the future, and long-term sustainability. There is a tension inherent within the organisation, given it exists both as a ‘for profit’ and ‘not for profit’, balancing the need to generate revenue for the state from forestry, alongside meeting wider objectives around climate change, indigenous rights and tourism.

The national policy context influences the operations of Metsähallitus, with Finland having ambitious climate targets¹⁸⁷ and a national Climate Change Plan for the Land Use Sector which focuses on the reduction of emissions in alignment with the Sustainable Development Goals (SDGs).¹⁸⁸ In line with the SDGs, the value creation model for Metsähallitus recognises the intersection of economy, culture, biodiversity, climate and health and wellbeing and measures impact under to these themes.¹⁸⁹

Between 2014-2018, the Finnish National Forest Inventory estimate that the carbon sink potential of state-owned forests was around 12 million tonnes of carbon dioxide equivalent. The carbon sink potential of trees on state-owned lands corresponded to just over one fifth of Finland’s greenhouse gas emissions in 2018, at approximately 177million tonnes.¹⁹⁰ The potential of the forests to offset Metsähallitus’ and Finland’s carbon emissions is therefore, large.

Finland recognises the UN Declaration on Indigenous People. For Finnish policy this translates into a constitutional requirement for the Sámi as an indigenous people, to have the right to maintain and develop their own language and culture.¹⁹¹ Their traditional lands, and the cultural practices which are embedded with them, are still managed by Metsähallitus as the major owner of these lands, and this can

¹⁸⁵ Metsähallitus: About Us. Organisation. History.

¹⁸⁶ Johanna Leinonen. Development Manager. Metsähallitus

¹⁸⁷ Metsähallitus: Nature and Heritage: Mitigating Climate Change: Climate Programme.

¹⁸⁸ Government Report on the Climate Plan for the Land Use Sector. 2023. Ministry of Agriculture and Forestry Finland.

¹⁸⁹ Metsähallitus: Value Creation Model.

¹⁹⁰ Metsähallitus: Nature and heritage: Metsähallitus plays a key role in Finland’s transition to a carbon-neutral society: Metsähallitus’ Climate Programme.

¹⁹¹ Ministry of Justice safeguards the rights of the Sámi people. Rights of the Sámi people. Ministry of Justice: Finland.

cause tension.¹⁹² Metsähallitus aims to deliver community and cultural value through its interaction with, and use and protection of natural resources in the indigenous Sámi Homeland whilst attempting to safeguard Sámi culture. It has adopted specific practices and processes to manage its interactions in these areas which are explored in more detail under the following sections.

5.2.2 The mechanism(s) and internal governance

Metsähallitus has a trading subsidiary Metsähallitus Forestry Ltd, which has been diversified over the years to also include water assets, national parks, renewable energy and tourism. Money generated from these assets has helped fund the Finnish welfare state and is reinvested into nature and biodiversity schemes to protect the natural environment. The main principle is to ensure the overall enterprise is profitable and can return a share of profits back to the Finnish State, whilst balancing the need to preserve, protect land and assets and support the needs of local, diverse communities. As the organisation has been operating for a significant length of time, the focus on the long-term and ensuring sustainability – both financial and environmental is woven through the organisational operation and aims.

Metsähallitus derives financial value both from the timber industry and logging activity, which makes up the bulk of its financial trading, but also from rents from other enterprises who are making use of its land – for instance, mining, renewable energy generation and tourism providers.¹⁹³ Metsähallitus receives state support towards its climate aims, which funds the non-commercial activities of national parks and nature restoration, in 2023 this amounted to €69.2 million.¹⁹⁴ In 2022, Metsähallitus recorded 1.7 million visits to cultural heritage sites and visitor centres, and provided guided tours and events addressed to young people.

In 2023, Metsähallitus Group had a turnover of over €435 million and contributed €120 million to Finnish state revenue.¹⁹⁵ It therefore makes a substantial contribution to the welfare of Finnish citizens. There is no local, or organisational control over where or how the revenue generated goes, once it is transferred back to the State. Metsähallitus employs around 1,125 people across Finland. The organisation navigates the interests of different stakeholders, such as private landowners, the indigenous Sámi community, NGOs and the public.¹⁹⁶ Additionally, Metsähallitus provides environmental services for a range of clients, including the private sector and individual landowners. These services include supporting landowners to fulfil social obligations laid out by the Finnish state, the promotion of biodiversity and the promotion of employment in more rural locations.¹⁹⁷

¹⁹² Dr Sanna Hast. Senior Adviser Land Use. Reindeer Herders Association

¹⁹³ Johanna Leinonen. Development Manager. Metsähallitus

¹⁹⁴ Ibid.

¹⁹⁵ Metsähallitus: About Us. Organisation. Key Figures.

¹⁹⁶ Johanna Leinonen. Development Manager. Metsähallitus

¹⁹⁷ Metsähallitus: About Us.

As each new government comes into place in Finland, a new 'ownership policy' is developed which sets longer-term strategic targets (generally five years). The annual operational targets which Metsähallitus has to reach around logging and climate change measures, (within the scope of the broader 5-year plan) are set by the two government ministries which have direct relationships with the organisation (The Ministry of Agriculture and Forestry, and The Ministry of Environment). There can, at times, be tension between these competing areas of government, with one focussed on economic output, and the other on non-financial activities.

The overall operating strategy of Metsähallitus is developed with guidance and steer from the national government and the two departments which have oversight of the agency's work but does not involve any local input or direction. Metsähallitus is overseen by a Board of Directors, they provide strategic direction for the organisation and contain representatives from both government ministries which oversee the target setting as well as academia. The Board also contains a staff representative to ensure their voice is heard and recognised in decision-making, but there are no dedicated seats for specific interests or industries external to the organisation – e.g. tourism or the Sámi community.

5.2.3 Extent and process of community/public control

Metsähallitus seeks to balance the needs of many different actors over the land and forests of Finland through various processes which involve stakeholders in the organisation's activities.

The broader planning of how land is used and managed in Finland takes place over three levels, national, regional and local land use plans. The adoption of international conventions around indigenous rights (self-determination on political, social and economic matters¹⁹⁸), climate and biodiversity has meant international shaping of local level decision making.

Nationally, the Finnish Parliament in 1995 adopted an Act on the Sámi Parliament which gives them rights over their language and culture, within their homeland, and an obligation from Finnish authorities to negotiate with them over decisions which impact their status as an indigenous people.¹⁹⁹ It is worth noting the legal context excludes specific provision for land use and ownership,²⁰⁰ instead there is a requirement to negotiate with the Sámi over land management and usage.²⁰¹

Regional plans, or natural resource plans are developed by Metsähallitus in collaboration with stakeholders (municipalities, indigenous representatives, forestry and other industry, tourism interests) and try to ensure cooperation and commitment to the

¹⁹⁸ Ministry of Justice safeguards the rights of the Sámi people. Rights of the Sámi people. Ministry of Justice: Finland.

¹⁹⁹ Josefsen, E. The Saami and national parliaments: channels for political influence. United Nations Development Programme.

²⁰⁰ Sami in Finland. Minority Rights Group.

²⁰¹ Ministry of Justice: Finland. Act on the Sámi Parliament.

plan's implementation.^{202,203} The approach sees stakeholder meetings take place, to discuss draft proposals and take onboard concerns and feedback. This collaboration is a relatively new approach, after significant conflict between the indigenous Sámi community and their reindeer grazing rights and the forestry operation in the 2000s.²⁰⁴

Following on from this conflict and the international attention it generated, Metsähallitus developed a participatory approach with collaboration and co-management of all activities built into the design of resource plans. A recent resource use plan for the Sámi area was developed to cover the period 2022-2027, it involved local reindeer herders, representatives from the Sámi parliament as well as other interested parties. The process involved collective meetings over the course of a year to discuss and shape the plan, with direct negotiation between the interested stakeholders.

In 2023, Metsähallitus and the Sámi Parliament developed a voluntary operating model to aide decision making as part of the regional planning process.²⁰⁵ However, as the overall targets for logging and carbon reduction are set and managed from the nation state level. There is an argument to be made over how truly participative this regional planning process can be - whether the compromises that are garnered are representative of all sides compromising if the overall targets are set without local involvement or discussion. Furthermore, representation of local and indigenous needs in the stakeholder sessions is often far less than that of commercial or forestry, meaning local voices and local needs can be given less heed.²⁰⁶

At a local level, municipalities also create local land use plans. Metsähallitus sits as a stakeholder as part of this process alongside other indigenous, industry and activities such as private enterprise and tourism.

Given the degree of planning and number of stakeholders involved, there can be tensions between each layer of plans and how different resource needs and targets can be met.²⁰⁷ How these tensions have been resolved at a local level vary, with some situations involving compromises, others off-table resolution payments.²⁰⁸

There is a clear desire from within Metsähallitus to have a participatory process for decision making and ensure that local voices are heard and represented. However, there are challenges over implementation given the size of the organisation, the many needs it is trying to manage and the top-down nature of the targets which skew the ability to have a truly participatory governance approach.

²⁰² Johanna Leinonen. Development Manager. Metsähallitus

²⁰³ Akwé: Kon operating model's application in the cooperation between Metsähallitus and the Sámi Parliament (2023) Metsähallitus, Sámi Parliament.

²⁰⁴ Whose forest? A two-level collective action perspective on struggles to reach polycentric governance. Lorenzini, S & von Jacobi, N. 2024. Forest Policy and Economics.

²⁰⁵ Akwé: Kon operating model's application in the cooperation between Metsähallitus and the Sámi Parliament (2023) Metsähallitus, Sámi Parliament.

²⁰⁶ Dr Sanna Hast. Senior Adviser Land Use. Reindeer Herders Association

²⁰⁷ Ibid.

²⁰⁸ Ibid.

Metsähallitus offers an insight into the tension of a state-led organisation balancing a need for profit creation to be reinvested in the public purse, against conservation of natural resources; an organisation which is at once an authority and also a commercial enterprise.²⁰⁹

In 2023, Metsähallitus made a profit of €142 million and increased its broader societal benefits, including fostering biodiversity and promoting recreational use of nature and reindeer husbandry, to €110 million.²¹⁰ Since 2020, as the Finnish government imposed greater targets around carbon offsetting, and an increase in forestry cover, it reduced the requirement of Metsähallitus to contribute to the state by €18 million.²¹¹ This reduction is in part to enable the organisation to diversify and focus more intensely on meeting climate change targets and managing land in accordance with indigenous cultures.

The forestry arm of Metsähallitus' operates as any other business in Finland, also contributing taxes to the state, as well as through its land rents. There are therefore different financial mechanisms at work which are capturing revenue for the state. The impact of Metsähallitus on the Finnish economy goes beyond national revenue, in 2023, the indirect impacts of Metsähallitus' operations on regional economies totalled approximately €3.7 billion.²¹² Metsähallitus itself owns no equipment, sourcing instead from local contractors and the local supply chain, thereby ensuring employment throughout Finland, particularly in the northern regions where the majority of state land is owned.²¹³

5.2.4 Key challenges, opportunities and future directions

Over time there has been an evolution in terms of how the organisation interacts with and heeds the different communities and interests which overlap with its operations. Furthermore, the nature of the mechanism itself has evolved as targets have shaped how it delivers its operations and where it places its priorities. Despite these changes, Metsähallitus' key mission to create, retain and redistribute wealth from the natural resources of Finland has remained consistent, with public and community acceptance of the need for the organisation to exist and deliver benefits for the wider Finnish society. There is a clear interaction between the land and finance pillar of CWB in evidence through this mechanism and an opportunity to understand the benefits which can derive from public ownership of land and natural resources.

In addition to the challenges noted above, the current international context is causing further tension for Finland and Metsähallitus. Previously, to help reduce pressure on Finnish forests, Metsähallitus imported timber from Russia. Since the Russian war with Ukraine began, these imports have ceased. This is increasing pressure on Finnish forests

²⁰⁹ The Well-being effects of localized multi-level environmental governance: Case of Kilpisjärvi. Jokinen et al. 2016. Nordia Geographical Publications.

²¹⁰ Metsähallitus: Press releases.

²¹¹ Finnish Government. 2020. New ownership policy decisions concerning Metsähallitus.

²¹² Metsähallitus: Press releases.

²¹³ Johanna Leinonen. Development Manager. Metsähallitus

to continue to generate revenue both for Metsähallitus itself, but also the wider Finnish welfare state, while continuing to meet its ambitious climate targets and balance the needs of the indigenous community. This tension is simmering, and it could increase over time as the needs of different interests and communities continue to compete for a diminishing resource.²¹⁴ For Metsähallitus, the need to continually evolve and work to build in participative governance practices to strengthen decision making is likely to continue.

5.3 France, Eau de Paris.

Eau de Paris is a public owned company that is responsible for the public water supply for the city of Paris.

5.3.1 History and policy/current external governance context

Water, and its management in France is fully devolved to a local level and is the responsibility of local government. Through the research it was indicated that there may be future changes in legislation allowing for 'groupings' of municipalities to collectively collaborate in the delivery of water services across their areas.²¹⁵

Prior to the 1980s, water in Paris had been publicly owned for over 100 years, however, in 1986 the then mayor, Jacques Chirac, decided to pursue privatisation due to a perceived lack of expertise in water management, lack of investment and a lack of innovation.²¹⁶ This political choice aligned with a wider move to increased private sector involvement across much of Europe in different resources and services and linked to Chirac's own political leanings. As a result of this move, a 25 year contract was awarded to Suez and Veolia, organisations with headquarters in Paris.²¹⁷ Despite this move towards privatisation, physical assets were never transferred into private ownership and the private companies were instead 'trusted' to deliver the service for a set period of time through a lease arrangement.²¹⁸ At the time this contract was signed, inflation was high and water prices were subsequently aligned with this higher price. Over the time of the service contract in private hands, water prices continued to rise despite a significant decrease in the number of employees (through technological advancements), and reduction in overall costs and at a time when inflation was also falling. There was, furthermore, a lack of the promised investment and renewal in assets across the entire network as profits were filtered back to shareholders.

²¹⁴ Dr Sanna Hast. Senior Adviser Land Use. Reindeer Herders Association

²¹⁵ Benjamin Gestin. Director General. Eau de Paris

²¹⁶ Ibid.

²¹⁷ European Network of Corporate Observatories. 2020 Leaving water privatisation behind.

²¹⁸ Benjamin Gestin. Director General. Eau de Paris

In 1993, the 'Loi Sapin', a national transparency law, was introduced which forced mayors and other politicians to conduct a 'transparent assessment' before renewing or issuing any public service contracts.²¹⁹ When a coalition of left leaning parties took office at the Town Hall in Paris in 2001, it was highlighted there was a lack of control over delegation of public sector services and provision of services, a lack of financial transparency and no control over maintenance and development work that was carried out.²²⁰ After renegotiating contracts, which included requesting companies involved in provision of services carry out improvements, the Town Hall realised that they had little scope to influence the activity of the companies while they were still delegating services. As a result, of this, and the continued rise in water prices, it was deemed 'unjustifiable' to continue with private company leasing. Following the 2008 mayoral elections the coalition of parties began the process of re-municipalisation, with the whole system restructured over an eighteen-month period, and the water services of Paris being operated by a single public operator, Eau de Paris, since 1st of January 2010.²²¹

The process of remunicipalisation involved some initial set-up costs; from migrating IT systems, to financing worker transition from one employer to another (including salary increases), to external consultancy requirements. These costs were met from within the service, as the historically high water bills meant there was additional money to ease the transition to a municipally run organisation, and then bills could reduce.²²²

Since remunicipalisation, Eau de Paris have estimated that at their time of takeover, water bills in Paris were around 30-40% higher than required.²²³ After the initial re-municipalisation the price of water was cut by 8% due to savings made through no longer having to pay out to Suez and Veolia shareholders, or having water tied to the price of inflation.²²⁴ As Eau de Paris is the only provider, it has cut out the expenditure and overlap that resulted from having multiple providers, with greater efficiency and traceability.²²⁵ This is demonstrated by the amount of money which has been saved, by residents through bill reductions, and reinvested across the system through programmes of development.

5.3.2 The mechanism(s) and internal governance

By remunicipalising their water supply, the Town Hall of Paris and Eau de Paris have been able to create a more democratically accountable water system while also ensuring citizens get value for money. The underlying principle is that water pays for water (as per the 1964 Water Act) with any profit being reinvested into infrastructure and future planning, and no subsidies being provided to support any operation of

²¹⁹ European Network of Corporate Observatories. 2020 Leaving water privatisation behind.

²²⁰ Transnational Institute (2010) Paris: local authorities regain control of water management.

²²¹ Benjamin Gestin. Director General. Eau de Paris

²²² Ibid.

²²³ Ibid.

²²⁴ European Network of Corporate Observatories (2020) Leaving Water Privatization Behind.

²²⁵ Transnational Institute (2010) Paris: local authorities regain control of water management.

water services.²²⁶ The Paris Water Observatory, established at the same time as Eau de Paris acts as an external structure that holds the board and the wider company accountable to the people of Paris.

As shown above through the role of the Observatory, Eau de Paris has an open governance structure. In addition to this it has tried to embed transparency in the core of its operation. Benjamin Gestin the Director General of Eau de Paris noted *“Transparency in an essential service such as water, is something that is absolutely key, and I do think it’s a building stone, which you can preserve and foster trust in public services and public institutions.”*²²⁷ They do this through their reporting, their collaboration with the Water Observatory and other agencies and their commitment to involving local people in water decision making.²²⁸ This perspective highlights an organisational belief that striving for open governance and transparency helps pave the way towards recognition of water’s place as a ‘collective good’ as well as a public good.

Eau de Paris’ governance structure is designed in a way to establish accountability of the company to citizens, and to build trust in the organisation and the service they provide. The Eau de Paris board is made up of twenty officials, thirteen of whom are elected officials from the city council (with ten being appointed by the political parties forming the majority so decisions can be made with collective backing, and the final three from the opposition party(ies)), two staff representatives, three representatives of non-governmental organisations (NGOs) advocating for water users and the environment (including the Paris Water Observatory), and two experts who do not have a deliberative vote but act as advisors.²²⁹ This open governance enables political and citizen oversight of the company’s activities and decisions.²³⁰

5.3.3 Extent and process of community/public control

The Paris Water Observatory is a commission of citizens and civil society representatives, providing oversight and information (through their expertise) and they hold the board members of Eau De Paris accountable to citizens. All acts, reports and records of official proceedings related to water managements must be submitted to the Paris Water Observatory. While the observatory does not have decision-making powers, their views are taken into account and members are elected on to the company board, with a deliberative voice in the decision-making processes.²³¹

Much of the public value has been secured through the mechanism shifting from being privately operated to being publicly owned, which has led to increased transparency

²²⁶ Transnational Institute (2010) Paris: local authorities regain control of water management.

²²⁷ Benjamin Gestin. Director General. Eau de Paris.

²²⁸ Ibid.

²²⁹ Ibid.

²³⁰ Blauel, C. Transnational Institute: Paris Celebrates a Decade of Public Water Access.

²³¹ Lime, C. (2015). Turning the page on water privatisation in France. In: Kishimoto, S. Our Water Future: The global experience with remunicipalisation.

and public participation in governance through the board structure and the oversight role of the observatory. Furthermore, the organisation can take a longer-term view of their role and development as they are not focussed on short-term profit for shareholders. They plan now for 10 years ahead and can undertake strategic work with farmers upstream around chemical reduction which both benefits their long-term planning, and also supports biodiversity initiatives.²³²

A focus on public value instead of profits has also allowed a greater focus on wider value creation. Organisationally they are identifying cross benefits between their work and other public policies, such as sustainable farming, ecological transition, education, rural and urban partnerships, and social inclusion.²³³ By prioritising the wider impact of the water service, they have fostered a broader collaboration with other agencies and organisations across the watershed (from formal arrangements with the Gesat and Paris Job Centre for procurement and employment,²³⁴ to funding development for farmers²³⁵).²³⁶ Furthermore, Eau de Paris also contributes €500,000 annually to the Fonds de solidarité pour le logement de Paris, a fund that helps households struggling to meet their housing expenses, including recurring costs such as energy and water.²³⁷

Eau de Paris take their responsibility around public participation and engagement seriously, continually innovating and trying to reach new audiences. They deliver education initiatives, support events and activities and provide opportunities for engagement through social media. In 2023 they piloted a small participatory budgeting exercise to encourage more community involvement in strategic and financial decision making and plan to expand on this in the coming years.²³⁸

5.3.4 Key challenges, opportunities and future directions

The success of Eau de Paris can clearly be demonstrated in their delivery of public value from their work. Furthermore, there is a collective sense in that water is a public good and should not be run for private benefit,²³⁹ tying very strongly into the ownership pillar of CWB. However, the political tide could once again sweep publicly owned water to the side in favour of private interests. Particularly given the individual figures who have been involved in the water privatisation, and re-municipalisation journey, and the power of the lobbying presence that private companies can action, it is worth noting that political policies can both come and go.

²³² Benjamin Gestin. Director General. Eau de Paris

²³³ Ibid

²³⁴ Eau de Paris (2024) The Paris water purchasing policy.

²³⁵ Channel Payments for Ecosystem Services (2020) Protection of the resource: Eau de Paris launches its own agricultural aid scheme.

²³⁶ Ibid

²³⁷ Lime, C. (2015). Turning the page on water privatisation in France. In: Kishimoto, S. Our Water Future: The global experience with remunicipalisation.

²³⁸ Benjamin Gestin. Director General. Eau de Paris

²³⁹ European Network of Corporate Observatories (2020) Leaving Water Privatization Behind.

Eau de Paris take a long-term view of their role, and responsibility for providing an essential service for Parisian residents. Unlike private water companies, they are focusing on preventative solutions to water treatment (education and working with farmers) rather than technological solutions, which helps them focus on their key area of work – water – and build relationships across different sectors.²⁴⁰ It is through this wider work that they can demonstrate their value to the community, public and environmental space, by reinvesting all monies into their operation, they can more easily help to meet other societal and environmental targets as part of their daily operations.

5.4 Germany, Stadtwerke Wolfhagen and BürgerEnergieGenossenschaft Wolfhagen

Stadtwerke Wolfhagen is a municipal energy utility based in Wolfhagen Germany and is co-owned between the municipality (Stadtwerke) and a consumer cooperative, called BürgerEnergieGenossenschaft.

5.4.1 History and policy/current external governance context

Germany is Europe's largest electricity market and has, for decades, been a global pioneer in applying renewable energy technologies.²⁴¹ Central to the country's energy policies is the "Energiewende" (energy transition), which focuses predominantly on renewable energy sources and energy efficiency. Critical policies enabling this are the Erneuerbare-Energien-Gesetz (Renewable Energy Source Act, regulating the renewable electricity sector)²⁴² and the EEWÄrmeG (Renewable Energies Heat Act, promoting the increase of heat generated from renewable energy in new buildings).²⁴³ The Energiewende goes back to the 1960s/70s in Germany and is widely anchored across the country – lending transition projects public support.²⁴⁴

Within this context, it is important to note that Germany has a strong environmental movement, with a history spanning several decades and an embedded cultural idea of the energy transition and its necessity.²⁴⁵ This is connected to religion and churches which are linked to environmental policy – meaning these approaches to energy transition can have cross-party and cross-cultural appeal.²⁴⁶

Germany's power grid is also one of the most reliable in the world.²⁴⁷ This is important given the increasing share of fluctuating renewable energy sources it has to contend with – enabling it to take on renewable energy sources and distribute energy

²⁴⁰ Benjamin Gestin. Director General. Eau de Paris

²⁴¹ International Trade Administration. (2021). Energy Resource Guide: Germany Renewable Energy.

²⁴² German Federal Ministry for Economic Affairs and Climate Action. (2024). The next step towards expanding renewable energy.

²⁴³ United Nations: Renewable Energies Heat Act.

²⁴⁴ Evans, S. (2026). The History of the EnergieWende. CarbonBrief.

²⁴⁵ Ibid.

²⁴⁶ Dr Franziska Paul. Lecturer in Political Economy. University of Glasgow

²⁴⁷ Amelang, S. et al. (2021). Germany's Electricity Grid Stable Amid Energy Transition. Clean Energy Wire.

effectively in a context where the power generation structure is changing. Favourable feed in tariffs also worked to the Stadtwerke's advantage – enabling them to make the most of investments in the construction of wind and solar power in 2012 and 2014, further supporting their transition to renewables.²⁴⁸

Wolfhagen started the journey to take back control of its energy grid in 2003, after the Council decided to take over the license from E.On and use the city's Stadtwerke to deliver energy services.²⁴⁹ After taking over the grid in 2006, in 2008 the Council decided that all household electricity would be provided from local renewables by 2015 – and the Stadtwerke was the vehicle they used to deliver on this commitment.²⁵⁰

The Stadtwerke needed to develop more local renewables in response to this and initially made plans for a 10MW solar park and a wind farm with four turbines to be built in a nearby forest (Rödeser Berg). Simultaneously, the city's leaders had an ambition to use an innovative form of "cooperative participation" to co-govern and derive benefits for local people from the municipally-owned energy system, exploring different models of how to involve local people.²⁵¹ The solution they developed to raise funds for the solar park and develop a co-governance model was a cooperative - BürgerEnergieGenossenschaft Wolfhagen e.G (BEG Wolfhagen). The function of the cooperative was to sit alongside the Council in co-owning and co-governing the Stadtwerke, placing the energy system into joint ownership.²⁵² The coop owns nearly a 40% stake in the utility company.²⁵³ This has grown from a quarter since the co-operative's inception.

5.4.2 The mechanism(s) and internal governance

The value created by Wolfhagen's approach to energy is a consequence of municipal ownership of the energy system (both distribution and generation), cooperative involvement in the governance of the municipal company delivering energy services and energy generation, and the associated returns delivered to the City of Wolfhagen and BEG Wolfhagen.

This model drives benefits to the people of Wolfhagen through returning investments to the municipality and local cooperative members and giving local people a say in their energy transition. It enabled Wolfhagen to reach its 100% renewable energy target by 2014, and since then the Stadtwerke has changed shape and adapted to new opportunities. In choosing to establish a consumer cooperative which co-owns the energy utility, the leadership of the town chose to actively create an additional vehicle which redirects wealth towards, and shapes decisions about, the energy future of the town with local people at its heart.

²⁴⁸ Matthias Boos. Head of Corporate Communications. Stadtwerke Wolfhagen

²⁴⁹ Chakraborty, A. How a small town reclaimed its grid and sparked a community revolution.

²⁵⁰ Matthias Boos. Head of Corporate Communications. Stadtwerke Wolfhagen

²⁵¹ Ibid.

²⁵² Chakraborty, A. How a small town reclaimed its grid and sparked a community revolution.

²⁵³ Stadtwerke Wolfhagen: About. Energy customers become energy producers, energy generators, energy suppliers...

Stadtwerke are a long-standing form of municipal utility in Germany. They were originally established to manage the water supply, treat waste-water, and provide public transport and energy. When the German energy sector was “liberalised” in 1998, it was predicted that the Stadtwerke would fail due to being too small, lacking access to capital markets, and being uncompetitive.²⁵⁴ However, the Stadtwerke continue to play an important role in Germany’s utility sector – with a combined market share of 46% in electricity, 59% in gas and 65% in heat distribution.²⁵⁵ The Stadtwerke deliver not just direct financial returns, but also employ significant numbers in Germany – nearly 250,000 people in 2013.²⁵⁶ Stadtwerke are popular – many people trust them and welcome the fact that the profits they generate stay in the local area – and larger Stadtwerke are profitable, often cross-subsidising unprofitable local activities such as public transport.²⁵⁷

BEG Wolfhagen is a consumer cooperative which co-owns Stadtwerke Wolfhagen alongside the City of Wolfhagen. This is what has been described as a “public-common partnership” where the municipal utility is co-owned and co-governed by a cooperation between the public authority and a citizen/consumer cooperative. The cooperative and the Council function together to govern and develop Wolfhagen’s green energy system and reinvest profits (after dividends are paid to members of the co-operative) in a way that benefits the local area – both enabling the delivery of services and energy justice.²⁵⁸

The cooperative’s principles are laid out in their statutes, which inform how they can invest money. This includes requirements for regional investment (within 60km of Wolfhagen), no competition with the Stadtwerke, and broadly equates to cautious investment, investing in “education”, supporting members in energy saving and making them aware of energy consumption through energy efficiency measures, donating to cultural/arts events and investing in the Energy Efficiency Reserve Fund.^{259,260}

The ability for Stadtwerke Wolfhagen to take on the grid was contingent on reaching a settlement with E.On, as well as hitting a point where the concession contract was coming to an end. Under German law, the Stadtwerke had the right to take control of the grid, and the ability to take on a range of different municipal loans from public banks (Regionalbanken). It took the Council three years to agree an amount with E.On, relying on using neutral third parties to project the income E.On would miss out on and entering extensive negotiations – making it a long, technical and costly process (which was a challenge).²⁶¹

²⁵⁴ Schlandt, J. (2015). Small, but powerful – Germany’s municipal utilities. Clean Energy Wire.

²⁵⁵ Ibid.

²⁵⁶ Ibid.

²⁵⁷ Ibid.

²⁵⁸ Milburn, K. Russel, B. (2019). Public Commons Partnerships: Building New Circuits of Collective Ownership. Common Wealth.

²⁵⁹ BEG Wolfhagen. About us.

²⁶⁰ Iris Degenhardt-Meister. Board Member. BEG Wolfhagen

²⁶¹ Dr Franziska Paul. Lecturer in Political Economy. University of Glasgow

Initially, the Stadtwerke's ability to raise funds for new energy infrastructure was based on the community share offer which helped to form the cooperative. Funds for the Stadtwerke's initial solar park were raised through a community share offer, raising €1.47 million.²⁶² As of May 2024, membership is no longer advertised as there are no further projects to invest in.²⁶³

The cooperative is responsible for a significant amount of money, and it is their role to invest it to make a dividend, making investment attractive to members. BEG Wolfhagen's statutes dictate how they can invest money, and investment in the region (defined as within 60km of Wolfhagen) is a priority. The dividend is agreed in general assemblies based on the profit made for the year, with 6% as the maximum percentage allowed. In more recent years the cooperatives investments have become more cautious with less appetite for risky investments which could advance transition – as BEG Wolfhagen board member Iris Degenhardt-Meister noted; members are “not necessarily interested in doing something new”.²⁶⁴

The cooperative, alongside being a shareholder of Stadtwerke Wolfhagen, is also a shareholder of other wind farms in the region in cooperation with other cooperatives. StadtwerkeUnion Nordhessen (SUN) is a group of Stadtwerke (including Stadtwerke Wolfhagen) which develops wind farms, obtains a building permit, and when they are sure of completion they offer shares to cooperatives to gain a level of citizen participation.²⁶⁵ As of 2020, BEG Wolfhagen is a partial owner of four wind parks.²⁶⁶

5.4.3 Extent and process of community/public control

The Stadtwerke is managed by paid directors and has an advisory board chaired by Wolfhagen's mayor. The advisory board consists of eleven representatives: four individuals from BEG Wolfhagen, six from the City of Wolfhagen (the mayor who is chair, a citizen representative, and four representatives chosen by the Council who represent the four largest parties), and one representative of the Stadtwerke's work council (effectively Union representation).²⁶⁷ While BEG Wolfhagen has a minority number of representatives, when they were founded, they negotiated with the Stadtwerke to determine that the cooperative would have enhanced voting rights – meaning that if decisions are being taken about taking over a new branch of the Stadtwerke, or selling the Stadtwerke, the cooperative must vote in favour, or the proposed action cannot be taken.²⁶⁸

BEG Wolfhagen is wholly shaped by its members – and only customers of Stadtwerke

²⁶² Municipal Power. Building energy communities: A guide to inspiring democratically owned and financed energy projects.

²⁶³ Iris Degenhardt-Meister. Board Member. BEG Wolfhagen

²⁶⁴ Ibid.

²⁶⁵ Ibid.

²⁶⁶ Rural Energy Community Advisory Hub. Empowering Municipalities to Develop and Support Rural Energy Communities.

²⁶⁷ Matthias Boos. Head of Corporate Communications. Stadtwerke Wolfhagen

²⁶⁸ Ibid.

Wolfhagen can become members of the cooperative. Members can hold up to five shares worth €500 each, but each member has one vote regardless of the number of shares they own.²⁶⁹ The cooperative is managed by the Supervisory Board which consists of three members of the cooperative who are appointed every three years, elected by members at the AGM. This Board appoints the Board of Directors and the BEG representatives who sit on the Stadtwerke advisory board. The Board of Directors decides on investments up to a certain amount – beyond that point the Supervisory Board has to agree with decisions.

BEG Wolfhagen also has an Energy Efficiency Advisory Board which manages the Energy Efficiency Reserve Fund (which all members can apply to for energy efficiency technology/improvements for their homes). The Board consists of six to nine members appointed every two years who are elected by members at the AGM and supplemented with representation from Energie 2000 e.V and the City of Wolfhagen.²⁷⁰

It's important to note that the membership of the cooperative is still fairly homogenous, despite the offer to pay in instalments of €20/month (with access to member benefits at the start of these payments) to make membership more accessible – only two people have used this mechanism in twelve years.²⁷¹

5.4.4 Key challenges, opportunities and future directions

The membership of the cooperative has grown from 264 in 2012 to 970 members in 2024,²⁷² however, despite efforts to increase diversity in membership, it remains the prevail of the more affluent. The cooperative delivers value to the community because, although members pay a normal tariff for their electricity consumption, they receive dividends on their investment of between 3-5.5% each financial year.²⁷³ The cooperative also provides energy advice and has an Energy Efficiency Fund. This is funded by the surplus revenues of the cooperative. A share of this fund is allocated to grants for different interests and needs of the members – helping households to purchase energy-saving appliances and updating energy-saving equipment. The cooperative is unable to grow its membership base without the development of new energy projects, which hampers its expansion.

The mechanisms at play within this example showcase different types of ownership, governance structures, and how collaborative arrangements can be reached. Building in the processes for democracy, with democratic accountability and ownership, have been acknowledged to be a long and evolutionary journey- which is neither quick, nor easy to replicate. A strong commitment to core principles of economic democracy is a necessity to reproduce this model elsewhere.²⁷⁴

²⁶⁹ Dr Franziska Paul. Lecturer in Political Economy. University of Glasgow

²⁷⁰ Iris Degenhardt-Meister. Board Member. BEG Wolfhagen

²⁷¹ Dr Franziska Paul. Lecturer in Political Economy. University of Glasgow

²⁷² Iris Degenhardt-Meister. Board Member. BEG Wolfhagen

²⁷³ BEG Wolfhagen. Frequently asked questions.

²⁷⁴ Dr Franziska Paul. Lecturer in Political Economy. University of Glasgow

5.5 Norway, Government Pension Fund Global

Norway's Government Pension Fund Global is the world's largest sovereign wealth fund, managing over \$1.4trillion in assets derived primarily from revenues accrued from Norway's oil and gas.

5.5.1 History and policy/current external governance context

Formally known as the 'Government Pension Fund Global' (GPFG), the Norwegian sovereign wealth fund was established in the 1990s to provide a national financial reserve, as well as nationally distribute the economic benefits from surplus revenues from oil and gas. This was done in recognition that the profitability of the oil and gas industry comes from shared natural resources. In recognising that oil and gas are finite resources that we must divest from with the demands of global decarbonisation, the fund currently reinvests revenue into other profit-making activity rather than full reinvestment into carbon heavy industry, while providing a rate of return. The fund's investments are guided by an ethical code, which establishes a criterion that much be considered before fund investments are made.²⁷⁵

The fund has evolved from the principles that the state should maintain strong control over long-term petroleum resource management, following the discovery of oil in the North Sea in the 1960s. While the state invited international oil companies with resources and experience to search for oil, the Norwegian state-maintained control through a licensing system.²⁷⁶ In the 1990s, the fund was set up to serve as a tool to manage the financial challenges of expected falls in oil prices, as well as emerging challenges from an ageing population – allowing the state to draw on oil revenue in the long term and to fund state pensions.²⁷⁷ The fund is designed to ensure long-term economic stability and intergenerational equity by investing globally in a diverse portfolio including stocks, bonds, real estate, and renewable energy projects.

The fund has invested in government bonds and a growing percentage of the fund has been invested in equities, all of which are outside of Norway, including all emerging markets globally. It can be argued that this reinvestment has assisted Norway to avoid the 'resource curse' and avoid economic downturn with downturns in oil prices. These investments were providing a growing rate of return up until the international financial crisis in 2008, which led to a negative return for the fund which has since bounced back through an effort to increase the diversity of investments.

Today, the fund owns 1.5% of all shares in the world's listed companies – with around 9,000 companies included within the fund's investment portfolio. The profits accrued from these investments amounts to almost 20% of the Norwegian government's budget.²⁷⁸ These investments ensure a consistently positive financial rate of return for the Norwegian public.

²⁷⁵ Norges Bank Investment Management. About the Fund.

²⁷⁶ Ibid.

²⁷⁷ Nunez, S. P. (2024). Sustaining wealth for future generations through Norway's oil surplus (1990 – ongoing). Inequality Solutions Portal.

²⁷⁸ Ibid.

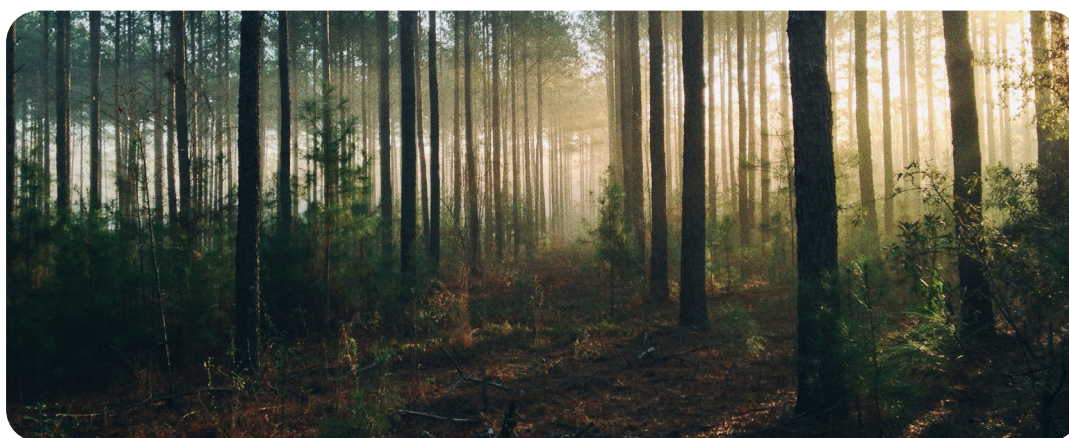
5.5.2 The mechanism(s) and internal governance

Initially directly governed and controlled by the Norwegian Ministry of Finance, today the fund is managed by the Norwegian Bank Investment Management (NBIM) – a branch of the Norwegian central bank. The NBIM are governed by an executive board, a supervisory council and a monetary policy and financial stability committee.²⁷⁹ The bank's legislative basis is decided by the Storting (Norwegian Parliament), who are required to make decisions on decisive changes to the fund. Meanwhile the Ministry of Finance issues the mandate to the bank in the general financial principles of the fund but does not issue instructions in relation to individual investments.²⁸⁰

Today, the fund is guided by an ethical framework, which has two guiding principles:

- 1) "The management of the fund shall be managed in ways that seek to secure lasting value creation for current and future generations of Norwegians.
- 2) The fund shall avoid investments in companies that cause or contribute to serious violations of ethical norms."²⁸¹

The purpose of the second guiding principle is to ensure that the fund's financial investments support human rights, workers' rights, and international environmental conventions and was implemented in response to public pressure, when citizens were campaigning for divestment from weapons manufacturers.²⁸² In following the ethical guidance, the fund can send market signals to companies seeking fund investment to model their business practices according to those ethical concerns, bolstering their commitments to human rights, workers' rights, and decarbonisation efforts in return for investment. In this way, the fund can operate as an 'institutional activist' and shape markets, whereby businesses seeking investment reform their ESG commitments in line with the ethical guidance.²⁸³



²⁷⁹ Norges Bank. Organisation.

²⁸⁰ Norges Bank. Government Pension Fund Global: Experiences & Organization.

²⁸¹ Norwegian Government. (2022). Ethical guidelines on responsible investing.

²⁸² Cummine, A. (2013). Sovereign Wealth Funds: Can they be community funds? OpenDemocracy.

²⁸³ Dr Gui Deng Say. Assistant Professor. Singapore Management University.

The ethical guidelines are currently mandated by the Ministry of Finance and endorsed by the Storting,²⁸⁴ ensuring the fund's ethical guidelines can be aligned with Norwegian state policy. However, the ethical guidelines themselves are formally enforced by an independent Council on Ethics, consisting of a group of academics alongside legal and financial professionals, appointed by the Ministry of Finance, which submits recommendations to the NBIM on the exclusion and observation of companies in which the fund invests – the decision-making authority rests with the NBIM executive.²⁸⁵ However, as will be explored below, the Ministry of Finance has recently directed some enforcement decisions.

There is an obvious relationship to the finance pillar of CWB but, interestingly, the example also provides evidence of how this can be utilised to both build national wealth from natural resources, alongside beginning to shape international financial markets.

5.5.3 Extent and process of community/public control

The GPF is highly technocratic in governance structure. Beyond state and central bank governance, there is limited opportunity for citizens to affect the decision making and processes of the fund beyond the electoral ballot, whereupon citizens can vote for political parties who may or may not commit to changes in the legislative status of the fund. Somewhat paradoxically to the existence of the ethical code, the fund also operates on a “values free” policy, noting that financial investments should be made based on high profitability and low risk, free of values-based concerns.²⁸⁶

Despite this, the fund does show responsiveness to pressure from civil society including a 2018 divestment from agri-business involved in palm oil production, in response to environmental campaigns related to palm oil production and business practices effecting indigenous peoples.²⁸⁷ These campaigns pointed to how environmental destruction can impact longer-term views of profitability. Additionally, somewhat paradoxically to the formal governance structure of the fund, the Ministry of Finance recently ordered the fund to divest tens of billions crowns worth of government bonds and equities from Russian investments, following Russia's invasion of Ukraine, based on ethical concerns of conduct.²⁸⁸

5.5.4 Key challenges, opportunities and future directions

A key challenge for the fund can be seen in the tensions between the mandated pursuit of maximum rate of return and the negative externalities that result from profit seeking economic activity, especially in the context of investment requirements being “values free”.

²⁸⁴ Norway Government. (2022). The Government Pension Fund: Responsible Investing, ethical guidelines.

²⁸⁵ Ibid.

²⁸⁶ Dr Jostein Brobekk. Researcher. Norwegian University of Science and Technology

²⁸⁷ Ibid. GPFG divested from direct investments only. The fund still has investments in banks that invest in the same palm oil production.

²⁸⁸ Ibid. However, it can be argued that this was also a financial decision rooted in concerns for low-risk investment.

While these tensions can be navigated through the ethical code, by excluding investments that are linked to abuses of human rights, workers' rights and environmental standards, the fund is also beginning to take a longer-term view of profitability to navigate these tensions. For example, the fund has justified the divestment from companies involved in palm oil production due to the risks that deforestation has on long term investments, accepting the arguments made by environmental campaigns.²⁸⁹ Taking account of this long-term liability, the fund is actively working with soy and beef traders in which it invests to put an end to deforestation throughout their supply chains.²⁹⁰

There are currently ongoing debates about the fund's future governance structure, with the new head of the fund rhetorically supporting greater democratic accountability and investment transparency, but this has so far failed to materialise into changes in governance.²⁹¹

Beyond oil and gas, the principle that value accrued from natural resources should benefit society as a whole is now being applied to socialise the benefits of wind power and aquaculture through a new resource rent tax.²⁹² This is enabled by a strong social democratic consensus within Norwegian society.²⁹³ While the capital raised through this resource rent tax will not be transferred to the GPF specifically, it will still contribute to the national and municipal state budgets. However, despite the broad consensus on the need to socialise the benefits of natural resources, there has been opposition to its application to specific aquafarming industries such as Salmon farming.²⁹⁴ Industry leaders noted that the new tax *"is being implemented without the involvement of stakeholders and broad political consensus that traditionally characterize major changes in the tax system"*.²⁹⁵ This opposition prompted the Storting, who continued to implement the new tax, to reduce the proposed rate of tax on aquaculture maintaining the principle that *"that local communities along the coast and society as a whole receive a greater share of the value that is created by the fish farming industry... [through] increased [municipal] revenues to invest more in schools, elderly care and other important welfare services for citizens"*.²⁹⁶

²⁸⁹ Taylor, M. (2019). Norway's wealth fund ditches 33 palm oil firms over deforestation. Reuters.

²⁹⁰ Rainforest Foundation Norway. (2019). Press Release: Norway's Government Pension Fund acts against deforestation: divests major agricultural companies.

²⁹¹ Ibid.

²⁹² Norway Government. (2023). The Government will introduce a resource rent tax on onshore wind power from 2024.

²⁹³ Dr Gui Deng Say. Assistant Professor. Singapore Management University.

²⁹⁴ Arellano, N. (2023). Norwegian parliament passes new aquaculture tax. Rastech.

²⁹⁵ Ibid.

²⁹⁶ Norwegian Government. (2023). Press Release: The Norwegian Government's proposed resource rent tax on aquaculture.

5.6 Scotland, Shetland Charitable Trust

The Shetland Charitable Trust (SCT) is a charitable body formed to receive and distribute 'disturbance payments' from the oil industry to the communities of Shetland.

5.6.1 History and policy/current external governance context

Oil was discovered in the North Sea in 1969, and off the coast of Shetland in 1971. Between 1971 and when the Sullom Voe Terminal began operating in 1976, there was much political wrangling over how, or if, any financial revenue should flow into the local, or national economy.²⁹⁷ The formation of the SCT was unique in the UK as an opportunity to unlock and redistribute financial benefits from the newly developing oil industry.

At the time of oil discovery, the Shetland Isles were in a time of reasonable prosperity, with traditional industries flourishing and there was local fear that the oil boom would disrupt traditional ways of life and community cohesion.²⁹⁸ Through political will and determination, led by the then leader of Zetland County Council (as Shetland Islands Council was known), Ian Clark, an Act of Parliament was developed into a private bill which gave the Council special powers to protect Shetland's interests – cultural, social and financial.^{299,300}

A Disturbance Agreement was signed in 1974 by the oil industry which was designed to "compensate Shetland for the pressure of such intense industry, permanent social changes and threat to traditional industries".³⁰¹ Specific policies were developed by the council to support traditional industries through payments, support and planning of oil activity.³⁰² Monies were paid per barrel of oil landing on Shetland (throughput), and the council shared the ownership of the planned terminal (land and site) at Sullom Voe alongside private companies.

Disturbance monies were only paid until 2000, due to a clause in the initial agreement, which assumed the oil industry would have left the area by that time and further renegotiation was thwarted. The total money paid to the trust in 2000 was around £81 million.³⁰³ However, revenue from the land ownership at Sullom Voe continues to flow as the oil industry continues to utilise the terminal. This money originally went to the council, but now flows directly to the trust.³⁰⁴

²⁹⁷ Hill, A. E., Seyfrit, Dr C. L & Danner, Dr M. J. E. (1998) Oil development and social change in the Shetland Islands 1971 – 1991, Impact assessment and project appraisal.

²⁹⁸ Hill, Archie, E et al (1998) Oil development and social change in the Shetland Islands 1971-1991. Impact Assessment and project appraisal.

²⁹⁹ Morgan. G. (2009) Politics: What is the Shetland Charitable Trust? The Shetland Times.

³⁰⁰ Hill, Archie, E et al (1998) Oil development and social change in the Shetland Islands 1971-1991. Impact Assessment and project appraisal.

³⁰¹ Morgan. G. (2009) Politics: What is the Shetland Charitable Trust? The Shetland Times.

³⁰² Hill, Archie, E et al (1998) Oil development and social change in the Shetland Islands 1971-1991. Impact Assessment and project appraisal.

³⁰³ Ann Black. Chief Executive Officer. Shetland Charitable Trust

³⁰⁴ Ibid.

Energy, fiscal, economic and monetary policy remain reserved to the UK government, rather than sitting with the Scottish Parliament, limiting the power of Holyrood to establish other examples of SCT, although the Local Government (Scotland) Acts could enable other local authorities to take an approach similar to Shetland. However, given that it took an Act of Parliament to enable Shetland Council to enter into an arrangement with the oil and gas developers in the 1970s, it is clear there was not a supportive national policy around the creation of a wealth fund at the time. They remain the only local authority in the UK to have a Charitable Trust of this type (although Orkney Council does have Special Reserve Fund built up from oil monies from production at the Flotta terminal³⁰⁵), and this is in no small part the proactivity and perseverance of the then leader of the local authority to create, and realise the opportunity North Sea oil could bring, as well as the islands then MP, to support the ambitions of Shetland and Orkney.

5.6.2 The mechanism(s) and internal governance

Shetland Charitable Trust (SCT) started life as Shetland Islands Council Charitable Trust (SICCT) in 1976 as a democratically run organisation operating in the Shetland Isles. It invests money accrued as 'disturbance payments' or compensation, from the oil and gas industry into external investments on the stock exchange, and local investments into subsidiary companies in Shetland, whilst providing grant funding support to third sector organisations in Shetland which boost the amenities of the islands.

The SCT currently has a volunteer Board of 12 Trustees and employs four staff. The Trust has evolved since its inception, in name change, governance structures and its policies. It initially had close ties to the local authority, with many of the board appointments being councillors with the Council, but this was reduced over time and now all board members are elected independently.³⁰⁶

There are no set or reserved seats on the Board for specific needs or interests. These changes were instigated after the charity was placed under special monitoring by the Office of the Scottish Charity Regulator (OSCR), due to its close ties with the council. European Union (EU) law also restricted the charity's ability to fund and promote local industries, such as fishing and farming.³⁰⁷

The Trust itself is currently guided by a 5-year strategy 2020-2025 which sets out the ambition to:

- "To improve the quality of life for all the people of Shetland;
- To achieve a positive impact against the Trust Strategic Objectives through its disbursement decisions;

³⁰⁵ Orkney County Council Act 1974, A talk by Howie Firth. www.orkneyheritagesociety.org.uk. (accessed on 20/05/2024).

³⁰⁶ Shetland Charitable Trust. A history of Shetland Charitable Trust.

³⁰⁷ Official Journal of the European Union (2006) Commission Decision of 7th December 2005: Investments of Shetland Leasing and Property Developments Ltd in the Shetland Islands (United Kingdom).

- To promote inclusion and reduce inequalities in Shetland;
- To demonstrate the impact and outcomes of Trust funding.”³⁰⁸

The strategy development involved input from the local Community Planning Partnership (which features, among others, council staff, the National Health Service (NHS), education representatives, the arts and the Third Sector Interface, but no direct input from local communities³⁰⁹) however, there was no wider community input to its development or priorities.³¹⁰ Given that the Trust has the aim of improving quality of life for the people of Shetland, some arguments could be made for the community to have a say in the setting of the strategic aims and how money is spent across the Islands.

There is no ethical framework guiding the investment of the Trust’s external funds other than ensuring a high return on investment. There has been some move towards ethical investing, through ensuring the fund manager and the asset class has a high ESG rating and that they have voting rights, but this is not the primary objective. The Trust’s main goal is ensuring its longevity and ability to continue to fund organisations on the islands.³¹¹

The SCT has enabled significant investment into amenities and capital assets in Shetland, however it is locked into supporting the third sector agencies which deliver these amenity services on the islands.³¹² Furthermore, in contrast to the Norwegian approach to a wealth fund (where they had to ensure their investments didn’t escalate inflation), the local council has kept council tax low and investments were historically heavily skewed to supporting local needs.³¹³ Over time this approach to investment has changed to favour external investments.

Now, most of the Trust’s assets are invested on the world markets. “As of 31 March 2023, four fund managers manage the Trust’s external investment portfolio valued at £377.2m. This includes:

- Blackrock Global Investors manage around £94.0m invested in equities (shares)
- Baillie Gifford & Co. manage around £163.1m invested in equities (shares)
- Insight Investment Management Ltd manage around £45.4m in a diversified fund assets
- Schroders Real Estate Investment Management manage around £74.7m in commercial property funds.”³¹⁴

The Trust has also invested in local subsidiary companies. Shetland Heat Energy and Power Limited (SHEAP), was set up to operate the Lerwick District Heating Scheme. It has over 1,200 customers receiving heat in Lerwick and is a wholly owned subsidiary.

³⁰⁸ Shetland Charitable Trust Strategy 2020-2025.

³⁰⁹ Shetland Partnership. About: Who are the community planning partners in Shetland?

³¹⁰ Ibid.

³¹¹ Ann Black. Chief Executive Officer. Shetland Charitable Trust

³¹² The Shetland Dividend. 2014. BBC News: Scotland.

³¹³ Ibid.

³¹⁴ Shetland Charitable Trust. Our Investments.

SHEAP is overseen by a Board of five Directors and employs ten staff.³¹⁵

SCT Renewables Limited is also a completely owned subsidiary of the Trust with one director. It holds the Trust's investment in Viking Energy Shetland LLP (VES LLP). This project is seeing the development of a wind farm in central Shetland, in partnership with a subsidiary of SSE plc.³¹⁶ The Trust has approved an investment to date of £9.72m, which saw it buy-out the investment the local council had made at the speculative phase of project development. Revenue from the Viking project will begin to flow imminently; however, it has garnered much local criticism for the impact it has had on island landscape and the speculative nature of the project, and initial investment itself. The trust will receive a regular income from the scheme in an arrangement resembling that of their land leasing agreement at Sullom Voe.³¹⁷

The SCT is caught between a dichotomy of requiring making a significant return on their financial assets to enable money to flow into the local community and maintain the high standard of amenities on the islands, but to do this, requiring limiting local investment, and instead relying on external investments on the stock market. It has had to distance itself from a desire to support local jobs and industry, and instead pivot towards high return on investment as the guiding principle to ensure its continued existence and ability to support third sector organisations on the islands. This perhaps explains its distance from the local community and the lack of community involvement in shaping the organisations strategy and funding distribution.

5.6.3 Extent and process of community/public control

It can be argued that there was more local community control over the SCT when the organisation had board members who had been elected locally at island wide elections as councillors, rather than independently elected.³¹⁸ However, the previous close ties to Shetland Islands Council (SIC) can also be viewed in a negative light of delivering projects for the public sector, public and third sector conflicts of interest and lacking generally accepted good governance standards.³¹⁹

The SCT, through its financial support of local charities helps secure community and social value and contributes greatly to the quality of life on the islands. The Shetland Recreation Trust have delivered eight sports and leisure facilities for the islands, supporting health and wellbeing as well as community infrastructure and social cohesion. The Shetland Amenity Trust has delivered museums and beach and roadside clean-ups. Shetland Arts have delivered festivals and arts related projects and activities, building the cultural capital of the islands, and the Shetland Welfare Trust (now defunct) has delivered care homes and supported living payments for those in need.³²⁰

³¹⁵ Shetland Charitable Trust. Our Investments.

³¹⁶ Ibid.

³¹⁷ Ann Black. Chief Executive Officer. Shetland Charitable Trust

³¹⁸ Adam Grydehøj (2016) *Toward Subnational Democracies of Scale: Tensions between Democratic Legitimacy, Legality, and Effective Governance.*

³¹⁹ Adam Grydehøj (2012): *Making the most of smallness: economic policy in microstates and subnational jurisdictions, Space and Polity.*

5.6.4 Key challenges and future directions

The SCT has faced numerous challenges over the years, particularly over its own internal governance and meeting standards set by Office of the Scottish Charity Regulator (OSCR) and the EU. These have been resolved through multiple changes to its internal structure and how it is governed, whilst continuing to maintain its original purpose of benefiting the lives of Shetlanders through its activities.

The wider international and national economic climate has also impacted on SCT's model of wealth creation and redistribution. The expenditure the SCT was previously making to other charities in Shetland has reduced to ensure it can provide long-term supports.³²¹ This focus on organisational longevity, and financial maximisation has resulted in a further distancing of the SCT from the community of the islands.

The organisation demonstrates how the land and finance pillar of community wealth building can be realised – with the ownership of the oil terminal providing financial benefit for the local community. The SCT has been responsive to external challenges and found ways to adjust and refine its operations, whilst maintaining a long-term view to ensure it will remain as an organisation for many years to come.



³²⁰ Shetland Charitable Trust (2024) Who we fund.

³²¹ Adam Grydehøj (2012): Making the most of smallness: economic policy in microstates and subnational jurisdictions, Space and Polity.

6. Discussion and Synthesis

Each of the above case studies offers a perspective into how different places and contexts are generating and retaining public/community value from the management of different natural resources. The broadly international context of the case studies offers an opportunity to explore different mechanism types and their associated governance in varying circumstances.

Whilst ranging in scale, resource type and governance structure, there are key shared characteristics and principles between the case studies. Furthermore, the range of case studies has allowed the identification of enablers and barriers which are apparent across the examples, and which should be further explored for their application within the context of the developing natural capital market in Scotland. Synthesising this learning, this section focusses on how the mechanisms have been supported, developed, and how they affect wealth flows – drawing out the commonalities that exist and the principles that should be considered for successful mechanisms to be designed in Scotland. This sample is not representative of all the different potential types of governance structures that exist, nor all the possible natural resource contexts that they can govern and manage.

This section explores commonalities between case studies and provides analysis of key considerations from this. We break the discussion down under the following headings:

- Mechanisms for securing value from natural resource management: we examine how ownership, fiscal mechanisms and governance structures intersect within each of the case studies.
- Organisational purpose: we explore how organisational drivers such as financial return on investment and democratisation impact on a mechanism's internal functionality, and how external factors such as purpose beyond profit, negative externalities and wider economic also shape their functionality.
- Dynamism and pragmatism
- Ecosystem of democratically owned mechanisms
- Legal and policy context
- Political and cultural consensus

6.1 Mechanisms for securing value from natural resource management

The case studies explored in this research have developed different mechanisms to secure value from natural resources. Whilst there was variation in how each was delivered and demonstrated, ownership and fiscal mechanisms were the main broad categories through which value was secured. In addition to these, governance

structures play an important role in how mechanisms are managed and deliver public and/or community value.

6.1.1 Ownership

Ownership can confer significant rights to make decisions about a resource, playing a significant role in how value can be generated from it. Throughout the case studies, different models of ownership were identified as the key mechanism that enabled the generation/retention of public value from natural resources. This varied from local community to municipal (Hvide Sande, Wolfhagen, Eau de Paris and the Shetland Charitable Trust (SCT)) and national state scale (Metsähallitus and Government Pension Fund Global (GPF)) and, for some of the case studies, there was a blend of different ownership models. In Wolfhagen the research identified a blend of community and public; in Eau de Paris there is municipal ownership with external governance and a connection to representative democracy; SCT began as closely affiliated to the council, but now operates as a charity; the GPF is a highly technocratic state-managed mechanism managed by an independent central bank, with a mandate from the ministry of finance. Altogether, these are all direct forms of ownership, which enable control, and accountability, over how resources are managed, and how the benefits from this management can be distributed.

6.1.2 Fiscal mechanisms

Fiscal mechanisms can take many forms, in the case studies examined it was evidenced through payments for services, for example water (Eau de Paris), energy (Wolfhagen and Hvide Sande), fossil fuels (GPF) and land rent (SCT, GPF and Metsähallitus). Each of these enable finance to flow from users (sometimes consumers, other times natural resource users/owners) to the organisation, which were used to maintain or develop its assets. The flow of finance from these mechanisms was then utilised in various ways to generate broader public or community value.

6.1.3 Governance structures

For each of the above case studies there were varying degrees of local and community involvement in the governance structures. All had strategic governance arrangements – whether an overseeing board of directors (SCT, Metsähallitus, Eau de Paris, Hvide Sande, Wolfhagen), or external control from the wider government (Metsähallitus and GPF). It was observable from the case studies that the degree of local accountability and opportunities for local voice generally declined as the mechanism and the monetary value of the asset grew in size. Both the Hvide Sande community foundation and the Hvide Sande Fjernvarme and Wolfhagen demonstrate a greater degree of local involvement and accountability. There were clearly attempts to build in local accountability to strategic decision making, as evidenced by Eau de Paris and Metsähallitus through their engagement with the communities they interact with, but both acknowledged this was a challenge to achieve successfully. Eau de Paris' work with participatory budgeting, alongside engagement and education demonstrates a strong desire to create a meaningful interaction with the residents of Paris and to encourage their participation in how the organisation functions.

6.2 Organisational purpose

Clarity of purpose is essential for any organisation. Whilst all the case studies we investigated had a distinct core aim, mechanisms were established to meet other objectives, which often created tensions. The key drivers and tensions, particularly those relating to financial return, and how mechanisms have sought to navigate them, are explored in the following section. It is worth noting that each case study may not represent the best practice in delivering goals or outcomes, or additional benefits (as we have termed purpose beyond profit). Instead, they provide an opportunity for learning through an analysis of the opportunity and challenges different resources and contexts have provided.

6.2.1 Organisational drivers

The mechanisms within the case studies have all been established with clear organisational principles and objectives. Those objectives ranged from safeguarding and building financial wealth for future generations (GPFG), to developing sustainable forestry practices which support the Finnish state as well as regional economies (Metsähallitus), and to ensuring affordable water while securing investment in water system development (Eau de Paris).

Many of these principles and objectives were also established in direct response to wider economic opportunities and challenges. Hvide Sande community foundation, for example, was established as a response to the changing local circumstances with the need for investment into local infrastructure, and an opportunity to enable this through the development of a renewables project. The SCT and GPFG in response to the finding of North Sea oil, with GPFG acknowledging the forthcoming challenges of an aging population more reliant on state welfare and building the financial resources to support this challenge.

Financial return on investment for public and community benefit

Each case study had an underlying aim to secure some form of a financial return on investment to either a nation state, regional bodies or to local investors and members. This was often alongside aims of preserving natural resources, developing communities and to pursue environmental goals. Efforts to mitigate against extractive capital from shareholders or corporations was significant across the case studies. Whilst private ownership can enable local and regional investment, this must be balanced against their need to extract wealth through profits. The case studies explored previously demonstrate how a non-extractivist approach can result in reinvestment into the community/region/state. Eau de Paris exemplified the opportunity that can come from ending a service contract which removes external shareholders, resulting in lower bills for residents, greater investment in the water infrastructure and delivery of broader educational programmes.

Capital investment (or reinvestment) was also a driving force behind some of the mechanisms. For some, this was invested in the global stock in the form of shares and

equity, (GPFG and SCT) to ensure positive financial rate of return to be reinvested, at minimum risk, for the benefit of the residents of those places.

For others, there was an upfront requirement of capital for physical infrastructure to generate local wealth through the mechanism (Wolfhagen and Hvide Sande), with returns then being fed back into the local community. In Hvide Sande, they used local banks to secure a €12.2 million loan to fund the construction of the wind turbines, with the wind turbines being the only guarantee. With the annual return of the loans being between 9% and 11% which provided a good return on investment for the banks but was payable by the value being generated from the turbines themselves. For Eau de Paris, there was significant investment into the water network, but also looking beyond the water infrastructure to initiatives which support farmers along the river tributaries to adapt their land management practices, which in turn would aid the aims of Eau de Paris in the long-term. Metsähallitus exists as both an enterprise, and agency, operating both as a not-for-profit and for-profit entity which returns revenue funding to the State and also reinvests into climate change programmes and biodiversity initiatives.

Questions arise over how communities without the upfront capital to invest in infrastructure can develop mechanisms to retain value from natural resources, and what role the state can play in supporting this. For individual investors, having the initial capital to buy shares in a community initiative (Hvide Sande or Wolfhagen) can compound wealth development and maintain inequality, rather than enabling wealth to flow. Wolfhagen attempted to remedy this challenge by reducing the financial commitment for individuals to invest in its shares.

Through the examination of the case studies it was possible to draw out how mechanisms can deliver a collective ROI. The case studies demonstrate how mechanisms can deliver greater value and social benefit to a greater number of people, rather than individual investors. This can help to redress inequalities through circulating wealth more broadly within local place, municipality or nation. In Hvide Sande, for example, using the wind turbines as a means to raise the funds for redevelopment of the harbour resulted in an increase in the number of boats coming to the area, more jobs and sustained levels of tourism. This meant more sustainable local economic development for the town and a way of addressing regional inequality. Wolfhagen, operating at a municipal scale, demonstrates how renewable energy generation can deliver financial benefit to direct consumers and the municipality as a whole. Norway's GPFG show how a mechanism delivered and facilitated by the state can deliver collective returns through national welfare.

Democratisation

Many of the mechanisms in the case studies strive for democratisation, in some form, through their ownership structures or internal governance arrangements. Looking at different ownership models is crucial for ensuring equitable wealth flows and wider benefits are broadly received. There can be a clear link drawn between a collective and equitable financial returns and democratisation, with the democratic structures being used to channel the wealth into local and/or public hands (Wolfhagen, Hvide

Sande, Eau de Paris, Eau de Paris and SCT). As others have noted,³²² moving away from extractive models of private ownership and toward collective models which encapsulate the principle of the commons could form part of the thinking about land governance in Scotland in the future.

The case studies demonstrate a diverse range of democratic governance models. Here, democratic governance and oversight can include local involvement and participation in decision making (Hvide Sande, Wolfhagen, Eau de Paris), through to elected board members (Metsähallitus, Eau de Paris, Wolfhagen, Hvide Sande, SCT). Oversight from other agencies or the state provide accountability, rather than a democratic structure per se (GPFG, Metsähallitus) and these may be more centralised and state-technocratic in nature. The scale of these mechanisms plays a key role in determining the governance model. For those smaller-scale organisations there is a greater degree of involvement and local voice in organisational strategy (Hvide Sande and Wolfhagen).

As the scale increases this local participation, control and accountability is reduced. However, larger scale mechanisms with state-technocratic governance models can still be responsive to popular demands. This can be seen in GPFG and the divestment from Russian industries and a move to more ethical, climate friendly investments. As Benjamin Gestin the Director General for Eau de Paris noted when working at a larger scale, there needs to be a concerted effort to engage and involve people into decision making:

“Open governance and public participation are not a given... we have to keep inventing new ways of involving citizens and people...we should always work harder towards public participation”³²³

Eau de Paris and Metsähallitus were striving to bring in local voices to their strategic planning. The SCT instead had reduced local accountability for their investment focus and actions by removing locally elected members from their Board. However, this created greater transparency and better governance standards in accordance with OSCR and charitable rules.

6.2.2 Purpose beyond profit

The mechanisms all have the potential to create additional value beyond a solely profit driven motive. Many offer non-market benefits to their local areas and communities. However, some case studies point to unanticipated consequences which can occur through their activities and the routes which have been undertaken to manage these.

³²² Land governance futures: Scottish Land Commission and Dark Matter Labs. (2023)

³²³ Benjamin Gestin. Director General. Eau de Paris

Negative externalities

It has been evident through the GPFG and SCT that there can be tensions when prioritising (re)investment of capital from natural assets. These tensions can become more acute when maximising the rate of return to beneficiaries, who may be the collective population, through state welfare, which then produces negative externalities.

In Norway, for example, the GPFG has a mandate to pursue profitable returns for the state in a way that is considered “values free”. The pursuit of maximum rate of return led to the fund making unethical investments into palm oil production in the global south, with deforestation³²⁴ and mistreatment of indigenous populations noted as clear negative externalities and clear contradictions to Norwegian state policy to support global efforts to reduce deforestation.³²⁵

The fund acknowledged these tensions and responded by adopting anti-deforestation into its ethical code, acknowledging that “deforestation reduces long term returns on investment”.³²⁶

There could be an opportunity to align the ethical code with community wealth building ambitions. If the ethical code for investment were to be guided by social value principles, this could ensure that businesses align ESG goals with social value objectives, such as payment of the real living wage, local procurement and provision of employment and upskilling opportunities for local workforces.

In Shetland, the need to maximise the legacy from the oil revenue and continue the operation and legacy from the SCT, has pivoted the focus from local investments, and instead to external investments where a higher return on investment can be achieved. The reduction in local investments has resulted in some local job losses, and contraction of operations from the charities the SCT supports on the islands. This links back to earlier considerations about what value is, and whether financial return, or other opportunities for wealth creation and generation are of most significance.

For Metsähallitus, it is apparent that there is a tension between a rate of return to the Finnish state and the management of natural restoration alongside wider climate commitments. Coupled with the negative externalities these activities can create for the indigenous population through reducing land available for reindeer herding, there is a likelihood these tensions will exacerbate as ancient forest resources are reduced and demand for natural resources increases.

6.3 Dynamism and pragmatism

For each of the case studies, there is clear evidence of dynamic thinking and pragmatism, either in terms of internal governance, priorities or focus. This reflects

³²⁴ Taylor, M. (2029). Norway’s Wealth fund ditches 33 palm oil firms over deforestation. Reuters.

³²⁵ Dr Jorstein Brobakk. Researcher. Norwegian University of Science and Technology

³²⁶ Taylor, M. (2029). Norway’s Wealth fund ditches 33 palm oil firms over deforestation. Reuters.

an already discussed (see 6.2.1) responsiveness to changing local, national and international conditions, and a re-evaluation of priorities against changing circumstances. It also signifies organisational flexibility and dynamism based on a desire to sustain the mechanism and its activities in the long-term for the benefit of public and community.

Whether the need to sell the mechanism to another local organisation (Hvide Sande), reduce the financial obligation to the national budget (Metsähallitus), remunicipalise (Eau de Paris), reevaluate where investments are made (GPF), or reduce local expenditure and focus on increasing return on investment (SCT), the research demonstrates how different changes have been enacted, but all maintain the integrity of the longer-term approach to secure value from natural resources. However, some of the structural changes made work against secondary aims of the mechanisms. The SCT case study exemplifies this. The aim of the trust is to support the lives of people in Shetland, but a change in focus on external investment and increasing financial return on investment, has caused some localised job losses.

This long-term thinking is imperative for organisations as they consider how to operate in the context of a continually evolving economy and climate.³²⁷ We see clear evidence of external context changes which the case studies have responded to – climate change (Eau de Paris, Wolfhagen and Metsähallitus) energy market fluctuations (Hvide Sande) and conflict (Metsähallitus). Given the volatile nature of the global economic system, and the local ramifications this can have, ensuring there is flexibility to respond through different governance mechanisms is vital.

We can see the setting of strategic priorities and development of organisational goals as a way of future planning and locking in the core values of the mechanism to continue to deliver its strategic aims. It was noted that Eau de Paris is planning a decade in advance for their work and development, which is something its previous private owners, had not done due to their focus on short term profit seeking. Both Metsähallitus and the SCT have strategic plans running for five years which provide direction and some accountability for their activities, and Wolfhagen's approach to transition had set ambitions which were acted on by the Stadtwerke to reach locally produced, green energy in advance of their target of 2015.

Wider economic influence

Each of the mechanisms within the case studies has taken an approach to delivering public or community value from a natural resource and taken decision making away from market forces and placed greater control into the hands of local communities, municipalities or the state. However, they are still subject to the wider consequences of the markets with which they interact and can be impacted by fluctuations in global prices.

Smaller scale projects, (Hvide Sande), are particularly vulnerable to fluctuations in market prices. In 2018, a drop in electricity prices resulted in the Hvide Sande

³²⁷ The Carbon Trust (2017) Can long term thinking transform an uncertain future into a sustainable one?

community foundation selling the turbines to the local district heating network. However, despite this change, value continued to be delivered to the local community as the district heating networks has strong community involvement and the wind turbines contribute significantly to lowering bills for the town's residents. Larger organisations can de-risk and diversify their activity, which can safeguard their value generation from fluctuating commodity prices. The shielding of smaller local projects, or those from less economically secure places can secure their return on investment from global market fluctuations needs to be considered – this is further explored in the following section on ecosystems of democratic structures. Furthermore, the question arises over whether the smaller scale mechanisms should be able to diversify their investments into external activity, and how this could, or should, be managed.

6.4 Ecosystem of democratically owned mechanisms

Each mechanism operates in a broader ecosystem of community or publicly owned enterprises or agencies. Each mechanism supports, grows or facilitates the development of others around it in a mutually reinforcing system, which often enable greater amplification of public/community value.

In Germany, Wolfhagen would not have been able to develop without the existence of the Stadwerke providing municipal services and offering a stable partner to develop a partnership with. There is also evidence that Stadwerkes across Germany are collaborating and learning from each other's activities, and other cooperatives are similarly partnering on projects. Furthermore, the two entities complement the development and trust in each other.

This landscape of mutually supportive mechanisms at a local scale can also be seen in the activities of the SCT. The SCT have the Lerwick district heating scheme as a subsidiary, the Trust further supports a network of local charities through core funding which collectively deliver a high quality of life on the islands in terms of amenities. The SCT are removed from overlap with the role of the council, but there is still a strong relationship through their shared goal of bettering and supporting the life of Shetlanders. The Trust further works closely with the regional enterprise agency Highlands and Islands Enterprise and the Third Sector Interface.

Paris is part of a chain of cities across France re-municipalising water services and creating an ecosystem that highlights it is possible to reverse the privatisation of water services. This process was started by Grenoble who remunicipalised their water in 2001 after years of mismanagement, increased bills and corruption.³²⁸ This process inspired Paris to remunicipalise and Paris then subsequently inspired other cities such as Rouen, Saint Malo, Brest and Nice.³²⁹

At Hvide Sande, we see local organisations aligning to support the expansion of the harbour, and when the local district heating network stepped in to take ownership

³²⁸ Open Democracy (2018) How did Grenoble start a French water revolution? It made its water management public.

³²⁹ Reuters (2014) Paris's return to public water supplies makes waves beyond France.

of the turbines when external circumstances (falling electricity prices) meant the community trust model was no longer financially viable. In smaller localities therefore, as found by others,³³⁰ it is easier to point to the interactions of different mechanisms which provide mutual support in the maintenance and growth of different governance mechanisms.

6.5 Legal and policy context

The ecosystems of other organisations as discussed in the previous section, could not exist without the landscape of international and national legislation and laws which define the space any mechanism operates within. These provide the structure within which a mechanism can develop. Alongside this legal context, there is the broader government strategy or policy landscape which contextualise how each case study has developed to deliver broader value, and, at times may have acted as a challenge to their development. This policy landscape may provide a framework for the mechanisms to develop within. The ecosystem of laws and policies within and surrounding each country shaping each case study are too numerous to unpick entirely. However, it is possible to point to some which have specific influence on the development of, or unintended consequences for, the case studies.

Considering how legal and policy frameworks can strategically enable or frustrate the development of mechanisms are important when looking to design new mechanisms in new contexts – for example, the Community Wealth Building Bill in Scotland, alongside Scottish Government Net Zero ambitions, could actively promote approaches to ensure communities have greater ownership over wealth and assets, including natural capital.

At a national level, the Renewable Energy Act in Denmark provided clarity as to how local communities will financially benefit from new renewables. In Germany their Renewable Energy Act instead facilitated the development of increased renewable energy generation. This has translated into a plethora of projects within the respective countries, some of which deliver local projects coupled with local control and governance – with financial returns reaching local communities or people. The encouragement of local investment into projects, can, however, exacerbate wealth inequality, with only those able to invest initially and then able to make returns on this investment. Wolfhagen recognised this and have taken steps to encourage participation from those on lower incomes, but even with measures put in place it is rare for this opportunity to be used. This raises important questions as to how different levers can exacerbate or challenge pre-existing wealth inequality as a product of alternative approaches to natural resource management – particularly where mechanisms to distribute financial benefits are introduced to incentivise the development of new renewables.

As a legal context develops and responds to new priorities and challenges, this can have a bearing on the ways in which the examples explored have developed. In

³³⁰ Simcock, N. Willis, R. Capener, P. (2016). Cultures of Community Energy.

Finland the development of ambitious climate targets has impacted on Metsähallitus' operations, putting the need to make financial return on timber felling and pulping in direct competition with ambitious climate change targets. Furthermore, in response to the Ukraine invasion and Russian war, Metsähallitus has increased national logging targets, again, in contention with its climate targets and its obligations to work with the Sámi and support their cultural practices. Where innovative mechanisms around natural resource management have been pursued, in some cases legislative changes were required. The establishment of the SCT took an Act of Parliament to enable a mechanism of this type to be created. Its uniqueness in the UK, despite the oil industry's presence in other local authorities, demonstrates the challenge the wider national legal context created to the establishment of a trust of this kind in Scotland.

International law has a direct impact, at both local and national level and can destabilise and alter how different organisations function. For Shetland, the SCT's investment into the local farming and fishing industries were deemed to contravene EU law and be shaping the local market, which forced them to change their investment pattern. In Finland the adoption of the Declaration on the Rights of Indigenous Peoples, alongside national law and policy that aims to ensure that Sámi voices are heard during negotiations and planning (although there are some questions over how meaningfully this is managed) shapes how consultation and land management is undertaken.

The legal and policy context can also drive whether benefit from a mechanism is individual or collective, and whether this is financial or a non-monetary form. From the case studies investigated, both within the longlist and the six in depth studies, it is possible to conclude that governance forms which work on a collective scale are more easily able to return other, non-monetary forms of value. These include, for example, education initiatives through Eau de Paris, greater local amenities through the SCT and walking trails and national parks from Metsähallitus. We see this demonstrated from within the longer-list of case studies as well, with the Dutch Water Boards providing international expertise for water management, and Baywind Energy Coop developing Energy4All as a vehicle to support other cooperative energy projects.

Norway's GPFG can also be seen as an executor of Norwegian state policy abroad, investing in businesses that contribute to the ethical policy aims of the Norwegian state such as those contributing to decarbonisation, workers' rights and human rights.

6.6 Political and cultural consensus

Many of the countries in which these mechanisms operate have a political sphere which has been built around coalition and consensus politics, or strong state involvement at either local/municipal or national level and a broader understanding of ownership of resources beyond private interests. There is often a greater devolution of power to a more local level, which has supported many of the mechanisms to develop.

As we know from other research,³³¹ the diversity of ownership models in relation to

³³¹ Alma Economics. (2021). Understanding the Benefits of Diversification in Ownership, Tenure and Control.

land can have a range of economic, social and environmental benefits and we can see this demonstrated in the case studies for other natural resources as well.

This political landscape can then feed down into how different mechanisms are viewed and supported. Germany has a broadly agreed approach to “regional wealth building” which is accepted across political parties. This concept is enabled with the devolved powers available at the municipal level and it makes co-governance models like the one seen in Wolfhagen attractive based on the idea that wealth is retained and reinvested in the local and regional economy. In Paris, the political leadership, and political landscape’s amenability to remunicipalisation, enabled the development of Eau de Paris and the support of wider municipalisation across France. Nationally, we see the broader political consensus to support state institutions and mechanisms in both Norway and Finland where there is greater state intervention. It is likely that wider cultural consensus is driving this political agenda and creating a reinforcing system of support over how assets can and should be managed. What is important to note, is that there are cultural norms which can reinforce political ideas around ownership, democracy, and governance and we see this demonstrated through the case studies. In Shetland, a recognition of the ‘disruption’ the oil industry could bring to the island way of life was a motivating factor behind the development of the SCT. There was a sense throughout the research that whilst ownership can very simply mean who has control over an asset, there was also a less tangible, but equally as integral sense of ownership through pride, culture and support of the values a mechanism may exemplify. Whilst this is harder to quantify, or demonstrate, given the tangible connection to and with land, it is useful to articulate as part of the broader findings.

In Norway, there is broad political consensus on the fund’s central role in the Norwegian economy as a whole.³³² In Finland, the forests and their management are seen as part of the Finnish identity, and Finnish people take pride in what their resources are able to provide for them. Metsähallitus feeds into the maintenance of this through its organisational messaging and sharing of the historical legacy and current modernisation of the operation.

In Shetland, whilst there is some local criticism of the SCT, there is also a sense of pride in what it has enabled to develop on the Shetland Isles with a high standard of living and level of public amenities. This feeling of pride is also replicated in Hvide Sande, where the local community’s ownership of the turbines creates a sense of acceptance of what can often be imposing infrastructure in area of natural beauty and has been shown in others research around community energy projects.³³³ Given the importance of land to our sense of culture and identity, when thinking of translating learnings from other natural resources over to natural capital, it is imperative to recognise there is broader sense of connection to land and how different forms of ownership, be it community, municipal or private may heighten this. Further exploration of the links between land and identity, and how it can be fostered and developed through different governance mechanisms, and ownership models will be needed.

³³² Norges Bank Investment Management. About the fund.

³³³ Simcock, N. Willis, R. Capener, P. (2016). Cultures of Community Energy.

7. Key principles arising from analysis

The previous literature review, case studies and the discussion have led towards the identification of six key principles which could inform the development of mechanisms and governance structures in relation to securing value from natural resources in Scotland. These principles provide a synthesis of the most important factors which emerged as the analysis was being undertaken. The intention of these principles is to draw out the key guiding lessons which could be applied to the growing natural capital conversation. Each has been taken directly from the findings of the case studies and honed to flesh out the essence of what the principle can offer in the broadest sense for natural resource management practices.

Organisational purpose

As any organisation is being set up, in any field, there needs to be a clear understanding of the basic questions:



- Who?** This is an immediate question, who will be the beneficiary, who is the target audience, who should be consulted and who should be partnered with?
- What?** What is the goal that is trying to be achieved? What is the function of the mechanism being considered?
- Where?** Where is the area of operation? Where is the community (of any size) of interest? Where will benefits flow to?
- Why?** These questions may take longer to answer, why should an organisation be established? Why here, and why now?
- How?** How can value be secured? How can learnings be taken from other areas? How will structures be established to govern and manage?

This is certainly true for any mechanism which is seeking to grow, retain and redistribute value from natural resources. From the case studies within this report, we can see that Hvide Sande, Wolfhagen, Eau de Paris, SCT and GPFG were formed from pressure of external events, at specific moments in time and all have adapted and morphed as they have developed. Starting with a clearly defined, well considered clarity of purpose is essential.

The time taken to plan, and strategically think through how it will operate, before a mechanism develops, will pay off in the long-term. The organisational purpose can be refreshed and honed through the creation of organisational strategies, as evident from the SCT, Metsähallitus, Wolfhagen and Eau de Paris case studies. The process for how these strategies are developed and who contributes to them, would need to be specific to each mechanism but good democratic and accountable practices should be built in.

Future proofing



Recognising that circumstances, both locally, nationally and internationally can change is essential for the longevity of any mechanism under development. Whilst it is impossible to plan for every eventuality, ensuring internal dynamism and building relationships with other organisations can help manage changing needs over time. External factors may well require an internal response. Taking a long-term view over what the purpose of the mechanism is, and what it can be in the future, as well as tying into strategic development will allow some certainty over the longevity of the organisation. The case studies illustrate the types of internal changes that can occur over time, often in response to external events, relating to internal governance (SCT due to challenges over their charitable aims), ownership (Hvide Sande in response to economic conditions, Eau de Paris as a result of changed political priorities) and diversification of investments (GPFPG in response to public pressure) or alternative activities (Metsähallitus responding to climate change).

Furthermore, the ecosystem of other organisations, whether locally, regionally or nationally help to sustain the case studies in various ways. Whether to take over running of the mechanism (Hvide Sande), a support network working towards the broader organisational aim (SCT), a wider cooperative and Stadtwerke network (Wolfhagen), other municipal water companies, and local enterprises with a geographic shared aim (Eau de Paris) or the State and financial institutions (GPFPG). Building these relationships will cement the specific mechanism within the landscape it operates within – whatever scale that happens to be and ensure that wider benefits through integration with other policy agendas can be identified and developed.

Creative use of law and policy



The wider legislative and policy landscape can play a significant role in both the creation of, but also the maintenance and development of mechanisms in relation to natural resources. Whilst it may not be possible to change this broader context, what the case studies in this research demonstrate is a creative lens with which to make the best use of the legal and policy landscape within which they are operating.

Many of the case studies offer insight into development of unique structures to maximise the opportunity the wider legal and policy context provides. Wolfhagen utilising the legal Stadtwerke structure to build cooperative collaboration to increase local involvement and support, Hvide Sande taking the Danish renewable energy context to ensure local economic benefits could flow to a community and SCT being developed to ensure the benefits from the oil and gas industry would flow to the people of Shetland, and that their way of life would not be disrupted.

Transparency



The type, role, rationale and purpose of the mechanism should be transparent from the outset. This leads not only to building a sense of trust in the mechanism itself and its aims, but also aides its future development and opportunity to evolve over time.

Establishing how this transparency will be managed should be initiated at the formation of any mechanism, alongside effective communication strategies which ensure the wider public and local community are also clear about how the mechanism functions.

Many of the case studies showcase examples of how to develop transparent practices with Eau de Paris in particular exemplifying this through their aims and objectives, reporting, staff involvement in strategy shaping, and local involvement in decision-making.

Internal democracy



The mechanisms should be built with an aim for democratic functioning built in. This could be achieved in a variety of ways: through a board made up of specific representatives featuring interests and local voice, other oversight agencies, delivering opportunities for collaboration in strategy setting and development, and building in ways to hear from and engage with local people in decision making processes.

There should be clear governance structures which enable accountability for decision making. This will ensure any mechanism will be robust in nature and foster trust. This will be a continuous and iterative process. As demonstrated by the case studies, there is no 'one' way for this to occur, and many are evolving their practices to encourage new and innovative ways of developing democratic engagement. The technocratic approach of the GPFG does not allow for democratic arrangements of governance, whereas many of the more local case studies offered insight into ways this could be developed. This ranged from Eau de Paris' elected board and overseeing Water Observatory, or Hvide Sande, SCT and Wolfhagen and the opportunity for board elections and accountability. Metsähallitus had a more mixed approach, attempting to introduce regional democratic shaping of strategies, but still being directed from the State.

Local voice



How local communities can meaningfully contribute to the shaping and delivery of any mechanism must be established from the outset. There are clear examples from within the research which show that building in channels to enable, enhance and engage with local communities is essential to build mechanisms which respond to and represent the interest of local people in local places. This means local voices and the interests of specific interests and communities should be heard and involved in decision making.

Scale will impact how well this can occur, and it is clear from the case studies that those smaller in scale organisations have, on the whole, been able to deliver opportunities for engagement in a more meaningful way with direct access to their local communities (Hvide Sande, Wolfhagen) with Eau de Paris being exceptional as a larger public sector organisation striving to increase local accountability and control through participatory budgeting and educational awareness programmes. It is clear that mechanisms from within the public sector show an overall commitment to developing more responsive and involved processes, which can be learned from and developed within a Scottish context (Eau de Paris and Metsähallitus).

8. Conclusion

Land is one of our most precious assets. In Scotland, land is an asset which is often held in the hands of the few, rather than the many. The significance of land in community wealth building is well established, with ownership of land being one of the central pillars of community wealth building. And for good reason. It can hold wealth, it can grow wealth, or it can encourage wealth to flow through the economy, and be shared among local communities.

As the climate emergency escalates, and the urgency to manage land in a more sustainable way grows, we are seeing the development of natural capital markets and escalating land prices. Learning lessons from how other natural resources have been managed, or governed, in Scotland and across the world, is of ever-increasing importance, and understanding how different mechanisms operate will enable a more nuanced conversation in Scotland over how we want this most precious of assets to be managed.

This report has sought to uncover different mechanisms and governance approaches to securing public value from natural resources. Through the literature review which provided a detailed exploration of different resource types, different ownership and governance structures, this report provides insight into how value has been extracted in other contexts. Through long and short lists of case studies, it has unpicked enablers and barriers which have allowed different mechanisms to operate and it has offered lessons for future consideration.

There is no one 'right' answer for how any mechanism could or should develop in Scotland. Instead, there are key lessons which this report has highlighted, which the Scottish Land Commission, and others, can learn from and use as they continue to explore this topic. We have identified six key principles which could be used to guide the future development of natural capital mechanisms. The principles have furthered the understanding of the intersectionality of the land, finance and ownership pillars of community wealth building. The principles, therefore, hold potential to expand the frontier of possibility for how CWB can underpin any natural resource management practices in relation to natural capital market development in Scotland.

Future research will be required, not only to explore at a deeper level a comparative analysis of certain similar mechanisms, and their governance structures, but also to establish how their operating conditions could relate to that of the Scottish policy landscape.

As the conversation around land reform develops in Scotland, there is an opportunity to challenge the prevailing assumption that the private sector provides the main solution for managing natural resources. There are clearly other options available, which may spread benefits more widely and offer greater opportunities for local involvement. Bucking the trend of the concentration of ownership, wealth and power, and the unequal distribution of benefits to those living on, or near these resources, ought to

be a key consideration when taking forward the conversation of securing value from natural resources.

Instead, looking to diversify ownership and governance of natural resources could support a range of wider benefits for local communities across Scotland. Natural resources, of any kind, do not exist in isolation, and therefore, when thinking of natural capital, it is essential to recognise the interconnection of relationships which exist around it. There are clearly a range of potential mechanisms, scales and governance structures which could be adopted, but all will require political support, and collective imagination to ensure they build the greatest value for our local people and places.



9. Appendices

9.1 Sample interview guide

General questions:

- Can you give us an overview of how you are involved with the organisation?
- How does the organisation create value for the public and community?
- How are decisions made about the activity of the organisation(s)?
 - Who has the power to make and enforce these decisions?
- How are local communities involved in decision making and can you tell us about the process?
- Does the organisation(s) have any guiding principles which shapes their activity?
 - How are local actors involved in the development of these principles?
- How is the profit generated reinvested?
 - Are there guiding principles for this reinvestment?
- Has the organisational approach changed over time?

A sample of specific questions:

- Has Eau de Paris improved water services since taking over Paris' water? Do you have any stats about this?
- How is Eau de Paris connected to the local government?
- How was the re-municipalisation funded? Was a buy-out required?
- Have bills remained affordable? Is there a percentage they have increased?
- Did you receive any challenges or support from the national government?
- How can the average Paris citizen influence the Water Observatory?
- Why was the Observatory founded and how does it interact with Eau de Paris?
- How are decisions made about how money is spent by Eau de Paris? E.g do you spend with local businesses/employ local people?
- How has Eau de Paris delivered environmental outcomes through its work?
- Environmental protection and social solidarity – how/if these principles are part of their work? Why they think they're important? Why public ownership of water rather than private?
 - How/does this influence the projects you pursue? E.g agriculture work with farmers.
- How has this influenced the way people relate to the services you deliver? Has public ownership changed peoples' relationship with water?

9.2 Interview schedule

Phase 1

Name	Role	Organisation	Interview Date
Dr. Kristian Borch	Senior Lecturer	Aalborg University	21/02/2024
Dr. Kai Heron	Lecturer in Political Ecology	Lancaster University	31/01/2024
Sylvia Kay	Project Officer	Transnational Institute	14/02/2024
Neil McInroy	Community Wealth Building Global Lead	Democracy Collaborative	06/02/2024
Prof. Mark Reed	Director, Thriving Natural Challenge Centre	Scotland's Rural College	06/02/2024
Dr. Katrina Rønningen	Senior Researcher	Ruralis	21/02/2024

Phase 2

Country	Name	Role	Organisation	Interview Date
Denmark	Morten Rauhe (conducted through email exchange)	Operations Manager	(Hvide Sande Fjernvarme)	02/05/2024
Finland	Johanna Leinonen	Development Manager	Metsähallitus	03/05/2024
	Dr. Sanna Hast	Senior Adviser Land Use	Reindeer Herders Association	08/05/2024
France	Benjamin Gestin	Chief Executive Officer	Eau de Paris	07/05/2024
Germany	Dr. Franziska Paul	Lecturer in Political Economy	University of Glasgow	07/05/2024
	Matthias Boos	Head of Corporate Communications	Stadtwerke Wolfhagen	30/04/2024
	Iris Degenhardt- Meister	Board Member	BEG Wolfhagen	08/05/2024
Norway	Dr. Jorstein Brobakk	Researcher	Norwegian University of Science and Technology	02/05/2024
	Dr. Gui Deng Say	Assistant Professor	Singapore Management University	09/05/2024
Scotland	Ann Black	Chief Executive Officer	Shetland Charitable Trust	09/05/2024
	Fiona Stirling	Head of Enterprise Support	Highlands and Islands Enterprise	09/05/2024
	Katrina Wiseman	Area Manager for Shetland	Highlands and Islands Enterprise	09/05/2024

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