



CLES

the national organisation
for local economies



SCOTTISH LAND COMMISSION
COIMISEAN FEARAINN NA H-ALBA

Natural Resource Governance - Case Studies

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Case studies



01	Australia, Yarra Yarra Biodiversity Corridor	04
02	Belgium, Eeklo Wind Turbines	07
03	Costa Rica, Payment for Environmental Services Programme	09
04	Denmark, Samsø Renewable Energy Island	11
05	Denmark, Hvide Sande Wind Turbines	13
06	England, Baywind Energy Coop	15
07	Finland, Metsähallitus	17
08	France, Eau de Paris	19
09	Germany, Stadtwerke Wolfhagen and BürgerEnergieGenossenschaft Wolfhagen eG	21
10	Norway, Government Pension Fund Global	23
11	Scotland, Crown Estate Scotland Offshore Wind	25
12	Scotland, Huntly Development Trust	27
13	Scotland, Shetland Charitable Trust	29
14	The Netherlands, Water Boards	31

Learning from international experiences with natural resources

Land is our most important natural resource. The emerging value associated with carbon and natural capital in Scotland's land is a key driver of change, raising new questions and presenting risks and opportunities. Understanding its implications for land ownership, management, use, wealth flows, and how the potential benefits can be harnessed in the public interest is a key focus for land policy and practice.

The principle set out by the Scottish Government that investment in natural capital and emerging value should benefit local communities and wider society is an important one. At this early stage of development, there is no one-size-fits-all approach, but there is plenty to learn from international experiences of natural resource management. From sovereign wealth funds at the national level, to community wealth building approaches at a regional scale, to governance structures enabling local democratic accountability and community agency.

The Scottish Land Commission is working with The Centre for Local Economic Strategies (CLES) to understand how different approaches to natural resource management can deliver public and community value, and what lessons and principles from international examples could underpin new approaches in Scotland. This report highlights a set of case studies from an ongoing piece of commissioned research conducted by CLES. Fourteen case studies were identified which secured public value as a result of natural resource management. The case studies were assessed using a matrix that identified the degree that the case studies create public/community/private value, with each of these values categorised against the four capitals identified in the Scottish Government's Interim Principles for Responsible Investment in Natural Capital; financial/economic, human, social and natural. More detail on the matrix can be found on page 34. All sources for case studies are included on page 36. These interim findings will be followed by a research report in autumn 2024.

About the Centre for Local Economic Strategies

The Centre for Local Economic Strategies 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 and are recognised as the curators of the movement in the UK.

01 Australia, Yarra Yarra Biodiversity Corridor



Summary

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 2,000-3,000 hectare parcels of land no longer of use for crop farming, but with possibilities for ecosystem restoration.

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.

Public financial and economic value

- The project is projected to generate up to \$30 million AUD in regional economic impact over its lifetime (100 years). Up to 2019/20 Carbon Neutral had invested \$12.8m AUD into the local economy (excluding land acquisition costs).
- Since the 2015/16 fiscal year Carbon Neutral has employed 43 FTEs on the project, and since the Corridor’s inception in 2008, Carbon Neutral has employed 427 staff exclusively for planting activities.
- Land in the Corridor owned by Carbon Neutral was sold by farmers as it was no longer viable for crop farming, but in many cases Carbon Neutral then employed the farmer, allowing families to stay on the land. From 2022 onwards, Carbon Neutral aimed to work in partnership with landowners to replant unused land, repaying them with a share of any carbon credits generated.





The first plantings from 2008 have now grown into 18,000 hectares of coverage in the Corridor, and the biosphere is beginning to recover.

Australia, Yarra Yarra Biodiversity Corridor © Carbon Neutral

Public social value

- Carbon Neutral established a working agreement with Midwest Employment and Economic Development Aboriginal Corporation (MEEDAC), an Indigenous organisation focused on finding work opportunities within the shires within which the Yarra Yarra Biodiversity Corridor is found.
- Of the 43 FTEs employed for planting activities since fiscal year 2015/16, nine identify as Indigenous.

Public natural value

- At least 967,695 tonnes of CO₂-e will be sequestered during the project's lifetime, as well as lowering the salinity in both ground and surface waters over the project's life.
- The Corridor project is calculated to contribute up to \$63 million AUD in biodiversity value over its lifetime, equating to \$2,305 - \$6,108 AUD in biodiversity value per hectare.
- The first plantings from 2008 have now grown into 18,000 hectares of coverage in the Corridor, and the biosphere is beginning to recover. A 2014-15 ecological study of the area identified around 54 bird species now resident; a more recent study identified more than 100 subspecies of ant.

Community human value

- The project is providing training and education opportunities for local communities by delivering induction and job-specific training sessions for the local employees. The project is also partnering with the Morawa (Regional) Agricultural College providing students with opportunities to undertake training on carbon farming, environmental management and greater awareness of climate change impacts.

Community social value

- As a project sited on land that has been managed by First Nations people for more than 40,000 years, it was acknowledged that cultural heritage values and community benefits would be difficult to quantify due to their complexity, and include cultural connection to Country, identity, spirituality, health and wellbeing – and also potentially inappropriate.

Private financial and economic value

- Generally the financial benefits derived from selling carbon credits, based on the information available, were due to go directly to Carbon Neutral or landowners they work in partnership with to replant unused land.
- The use of an independent study to quantify the values of different co-benefits (such as regional economic impact) allows clients of Carbon Neutral to place a premium price on carbon offsets which, in their words, “do more than just sequester carbon” – predicting that this premium pricing will enhance the project’s overall positive impact.

Private natural value

- The project generates Gold Standard Verified Emission Reductions (VERs) that are sold on the growing voluntary carbon market. Since 2015, the project has issued 166,940 carbon offsets, and is predicted to generate 967,965 over 50 years.



02 Belgium, Eeklo Wind Turbines



Summary

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. 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.

Public human value


- The pre-financed shares offered by the city of Eeklo are aimed specifically at those in energy poverty, particularly if they are paying high prices for electricity. The upfront cost of €250 for shares may be prohibitive for those that need it the most, this offer of pre-financing allows citizens in poverty to benefit from the lower kWh price of electricity in the region of Flanders without having to foot the high upfront cost. The price of electricity is offered at cost, meaning that those who benefit from this scheme pay the lowest energy bills possible.

Community human value

- 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.
- Ecopower also delivers education and training regarding energy efficiency. They use part of the revenues from the Eeklo wind turbines to pay the wage of a local energy expert. In part, this expert works for the local community and provides free energy advice. This provision of assistance and technical expertise to residents allows them to improve the energy efficiency of their homes.

Public natural value

- As the energy is delivered through wind turbines, which is a clean and renewable energy source, there is an impact on both air quality and atmospheric carbon.
- Ecopower and Eeklo have agreed that, for each wind turbine, the operators pay €5,000 into a local fund for climate protection each year. They also pay the same amount into a community fund for other needs.



For each wind turbine, the operators pay €5,000 into a local climate protection fund each year, and the same again into a community fund.

03 Costa Rica, Payment for Environmental Services Programme



Summary

Costa Rica's Payments for Environmental Services Program (PES) is a financial mechanism that promotes forest ecosystem conservation and combats land degradation. In this program, landowners, who are predominantly public limited companies but also a significant number are small holders and indigenous communities, receive direct payments for the environmental services that their lands produce when adopting sustainable land-use and forest-management techniques. The program is funded through Costa Rica's fuel tax and water charge, as well as initiatives such as Certificates of Conservation of Biodiversity, carbon credits, and strategic alliances with the public and private sector.

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.

To date, more than 18,000 families have benefited from the program, with an investment of \$524 million in the PES projects and more than 1.3 million hectares under PES contracts.

Public natural value

- From 1997 to 2005, Costa Rica's Forest cover increased to 51% of total land area from 41%.

Private natural value

- Promoted conservation in private properties at an average of 60,000 hectares per year. This represents 961,000 hectares of forests, and nearly 4.4 million trees as part of its agroforestry scheme.

Community/private financial & economic value

- \$340 million distributed to landowners between 1997 and 2012. The greatest part of these funds went to legal entities – similar to public limited companies (49%), followed by individuals (31%), indigenous groups (13%) and cooperatives (7%). The beneficiaries use the money received by the PES Program to improve quality of life, such as access to schools, medicine, food, and to carry out important projects in their communities.

Community/private social value

- Forest Protection projects give a score to those farms that have female owners, with the objective of making visible the participation of women in the formalisation of contracts and enjoyment of the mechanism.
- More than 18,000 families have benefited from the PES Program from 1997 to 2019, including 2,788 women, 6,888 men, 19 indigenous communities (303 projects), and 8,712 family associations. Indigenous Territories are given priority to enter the Program and it promotes the participation of these communities in the protection of forests. Around 100,000 indigenous people in total benefit from the incentives received through the program.



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04 Denmark, Samsø Renewable Energy Island



Summary

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. To achieve this, they appointed a local energy advisor and they created Samsø Energy Company. Within three years, 11 onshore wind turbines were built and a further ten offshore turbines were added in 2002. To encourage community buy in, the local community were encouraged to buy shares in the wind turbines with five shares costing roughly \$2,000. Of the 11 onshore wind turbines, nine are owned privately by local farmers and two are owned by local cooperatives. Of the ten offshore turbines, five are owned by the municipality, three are privately owned and two are cooperatively owned by many small shareholders.

Public environmental value

- There has been a reduction in the use of fossil fuels, to 100% of electricity being renewably generated and 70% of heating.
- Ambition to be fully fossil fuel free by 2030, but challenges remain around farming and transport, specifically the ferry to the island and private vehicles.

Public/private financial & economic value

- Reduction in bills, imported energy was costing the island more than \$8million a year.
- Selling excess power back to the grid has allowed private owners to profit from wind generation.



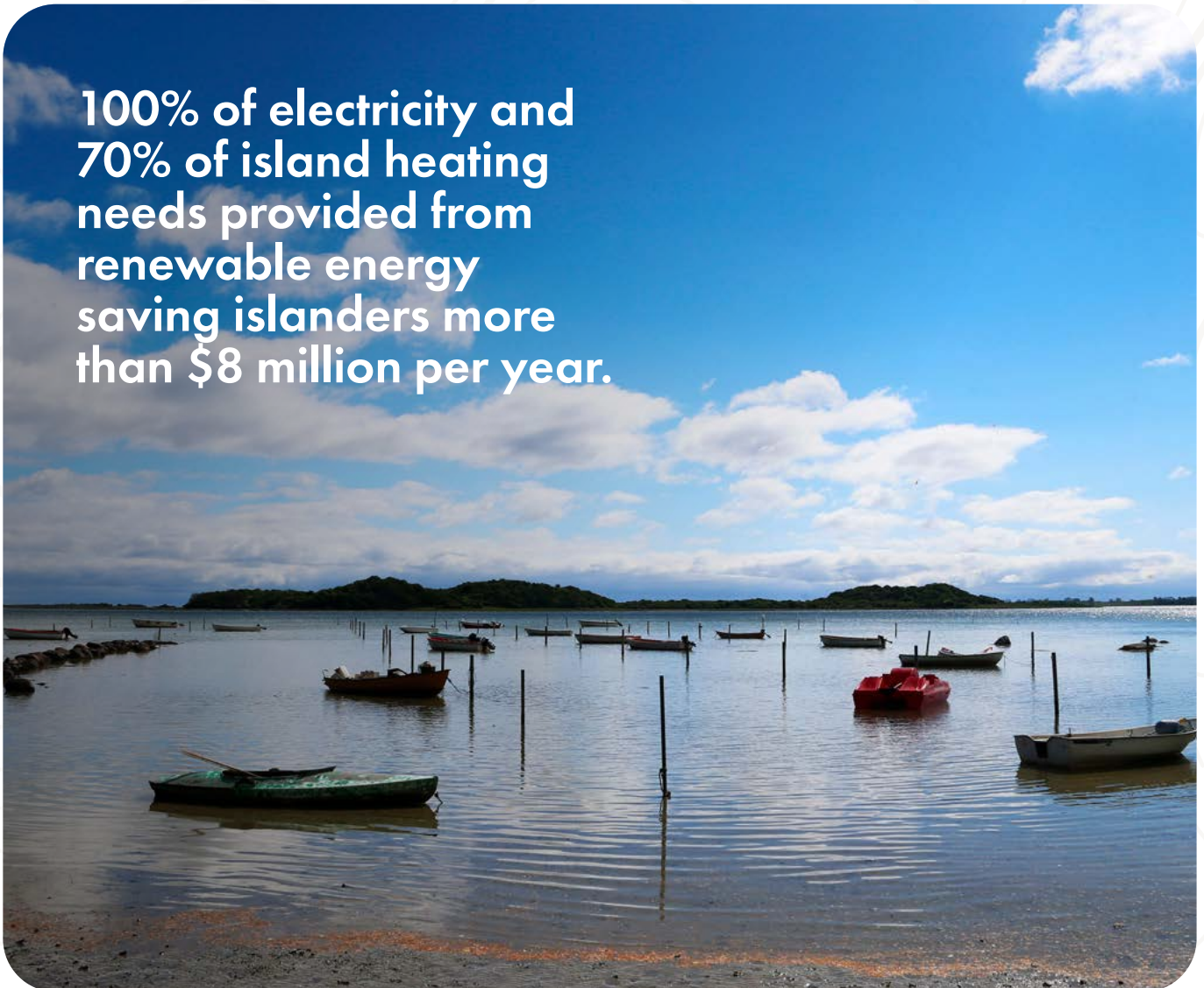
Public/private cultural value

- Samsø Energy Academy, which was set up after the success of the project, welcomes over 5,000 visitors a year to learn and develop understanding of how this can be replicated across the world.

Community cultural value

- The community feel like they have ownership of the process. From the very beginning, there was full disclosure of information. The masterplan was made public in the local library, and information on the process was shared through the local newspaper and discussed in great detail at regular community meetings. The consultation process built on the island's long tradition of agricultural cooperatives, which ensured strong local engagement. Generous timeframes were provided for discussions and decision making, which allowed for confidence in the project and a strong sense of collective ownership of the decisions taken.

**100% of electricity and
70% of island heating
needs provided from
renewable energy
saving islanders more
than \$8 million per year.**



05 Denmark, Hvide Sande Wind Turbines



Summary

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

In the early years of wind energy developments in Denmark, the majority of projects were owned by groups of local citizens. However, in the mid-2000s projects began to move away from this model towards larger scale projects delivered by private companies. In 2006, a large corporate development was proposed for the Hvide Sande area, with the local community actively opposing the development and planning permission subsequently rejected. Four years later, the community decided to develop their own wind turbines with community ownership, without protest.

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 cooperative model but instead chose to create a community trust, where 80% of profits are not 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.

Public environmental value

- The wind turbines are connected to the Hvide Sande district heating network and help produce 92.4% of the district heating, alongside a heat storage tank and a solar thermal plant.

Public/community economic and financial value

- As a small village reliant on tourism and the marine sector, organisations in Hvide Sande acknowledged the importance of the harbour. To deepen and expand the harbour, the different organisations decided to fund the project through wind turbines. They used funding from government and bank loans from local finance providers, with the wind turbines as the only bank guarantee. Having completed work on the harbour, it is already bringing in significant economic benefit, with an increase in ships, increased employment and increased tourism numbers.
- The wind turbines create an estimated €1.2 million per year to be spent on local development, held by the Hvide Sande Community Trust.

Investment through the Community Trust structure enabled harbour redevelopment, bringing significant economic benefit, with increases in ships, jobs, and tourists.



Denmark, Hvide Sande Wind Turbines © Hvide Sande Fjernvarme A.m.b.A.

Private economic and financial value

- As per Danish law that stipulates that 20% of an onshore wind 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.

Community cultural value

- Rejection of the larger private project in favour of the smaller community-led project highlights commitment to the Danish principles of welfare and common good.

06 England, Baywind Energy Coop



Summary

Baywind Energy Cooperative was the first cooperative to own wind turbines in the UK. The first share offer in 1996/97 raised £1.2 million to buy two turbines at the Harlock Hill wind farm. In 1998/99 the second share offer raised a further £670,000 to buy one turbine at the Haverigg II wind farm site, they were able to expand and eventually owned six turbines in Cumbria. 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.

As the wind turbines reached the end of their life in 2016 and 2018 and were looking to repowering, a new community benefit society was established which coop members could be transferred to called High Winds. During 2019, Baywind diversified into generating energy from solar PV. In total 218.52 kW has been installed and all the installations receive income through the Feed-in Tariff.

The legacy of Baywind is the successful operation of a community coop for over two decades and a thriving market for community energy coops in the UK.

Community financial and economic value

- After operating costs and servicing the depreciation fund, the profits derived from electricity generation were paid annually over 19 years to the shareholders. From the formation of Baywind in 1996, members got a competitive pre-tax return on their investment of 5-6.6%. Through the Enterprise Investment Scheme (EIS), eligible members could claim back 20% tax on their initial investment, increasing the return to between 7 and 8%. The coop had set a minimum shareholding of £300, thereby spreading local participation, to a maximum of £20,000. Baywind provided a model for new community energy coops in the UK.
- The coop used local contractors for site works, maintenance, and support services.



Community human value

- A community trust funded by Baywind promoted energy conservation and educational projects in the local community. Baywind Energy Community Trust (BWECT) provides information and grants for efficiency measures within the Furness area to individual homes and community organisations, and responds to requests for donations. Local sports clubs, schools and community centres have been given grants to help complete refurbishment and insulation work, supporting the broader community infrastructure in the region.

Public financial and economic value

- 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. E4All has worked with CoopsUK to promote the cooperative model and to follow the principles of member control, education and mutual help.



The Trust provides information and grants for efficiency measures within the Furness area to individual homes and community organisations.

07 Finland, Metsähallitus



Summary

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. 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.

Community cultural value

- Metsähallitus coordinate the management, use and protection of natural resources in the indigenous Sámi Homeland whilst safeguarding Sámi culture.

Public cultural value

- 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. These events reached over 93,000 members of the public, influencing them to participate.

Public human value

- In 2022, national parks, state-owned hiking areas, historical sites, nature reserves significant for recreational use, and hiking destinations attracted around 7.4 million visits. 3.5 million of which were attracted to the state-owned national parks. Recreational hunting and fishing was a significant draw for people, with over half a million days spent in total in state-owned areas.

Public economic and financial value

- In 2022, the Metsähallitus Group had a turnover of €423.2 million and made a profit of €150.9 million. Their work had direct impacts on society through taxes, wages, purchases of materials and services, investments and revenue generated for the state, which amounted to over €500 million. The indirect economic impacts generated through procurement, value chains of outsourced work and enabling job creation amounted to approximately €3 billion.



Finland, Metsähallitus © Metsähallitus

Public natural value

- According to the National Forest Inventory, the carbon sink of state-owned forests in 2014–2018 was approximately 12 million tonnes of carbon dioxide equivalent. Multiple-use forests accounted for 63% and protected areas for 37% of the carbon sinks. During the same period, state-owned forests made up almost one half of the total carbon sink of Finnish forests, or approximately 48%. The carbon sink of trees on state-owned lands corresponded to just over one fifth of Finland's greenhouse gas emissions in 2018, at approximately 177 million tonnes.
- In 2022, the wind power capacity built in areas controlled by Metsähallitus amounted to 590 MW, increasing annually by 100 MW.
- In 2022, ecological restoration work was completed on more than 17,000 hectares of state-owned protected areas. This included the restoration of streams and fish habitats, re-establishing fish migration routes that were previously lost.

08 France, Eau de Paris



Summary

Established in 2009, Eau de Paris was France's first municipally-owned water company that aims to guarantee universal access to water, with responsibility over production, transport and distribution of water. The organisation is committed to environmental protection and social solidarity.

The board of Eau de Paris is made up of elected municipal officials and staff representatives, as well as representatives of non-governmental organisations (NGOs) advocating for water users and the environment. This open governance enables political and citizen oversight of the company's activities and decisions.

Community economic & financial value

- Eau de Paris' governance structure is designed in a way to establish accountability of the company 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 onto the company board, with voting rights in decision making processes.
- The public company 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.

Public natural value

- In 2020, an innovative partnership was formed with 49 farmers living in water catchment areas to enable their transition to organic farming and reduce harmful agricultural runoff. This initiative sought to combine groundwater protection with support for sustainable and organic agriculture with the farms pledging to reduce or even eliminate the use of fertilizers and pesticides, committing to sharing their practices and experience with their peers, and collectively support sustainable agriculture in the region.

Public cultural value

- Eau de Paris is the custodian of architectural heritage. The public company ensures the maintenance of historical buildings and structures, including aqueducts, factories and reservoirs.

**An innovative partnership
with 49 farmers living in
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organic farming, reducing
harmful agricultural runoff.**



**eau
de Paris**

09 Germany, Stadtwerke Wolfhagen and BürgerEnergieGenossenschaft Wolfhagen eG



Summary

In 2005, Wolfhagen decided to return energy distribution to municipal ownership, creating Stadtwerke Wolfhagen to take over the city's license agreement for the city's energy grid from E.ON. 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).

Once the 100% renewable energy target was achieved in 2014, Wolfhagen BEG invested in new projects to tackle future challenges while growing significantly both in terms of membership and electricity production. This model has had a huge impact in Germany, with approximately 284 municipalities – including Hamburg, Germany's second largest city – seeking to reclaim their energy systems since 2005.

Public financial and economic value

- Wolfhagen Stadtwerke is a mixed model of municipal and cooperative ownership, with 75% of shares originally held by the council and 25% held by the cooperative Wolfhagen BEG, as well as two of the nine seats on the board held by the cooperative. Now, the cooperative holds 39.7% of the shares and plays a significant role in shaping the utilities' strategic direction.
- The Stadtwerke has created jobs locally, more than doubling the number of staff employed in the local energy industry and bringing jobs to the area, contributing to overall wellbeing and improved public acceptable of renewable energy production locally.
- The city channels their profit from the Stadtwerke into public services such as kindergartens and a public swimming pool.



Public social value

- Wolfhagen BEG seeks to tackle different components of energy transition, including providing energy advice and finance solutions to its members. It also seeks to tackle energy poverty.
- To enable accessibility for lower-income households, the cooperative allows new members a two-year period to pay for their initial shares in €20 instalments.

Community financial and economic value

- Wolfhagen BEG has over 800 members and is worth more than €3.5m.
- Part of the proceeds go to members as dividends and the other part goes to the cooperative's energy savings fund.
- The cooperative's Energy Advisory Board develops targeted funding offers to increase energy efficiency among its members. This is funded by surplus revenue, and a share of the fund is allocated to grants for members' different interests and needs.
- Wolfhagen BEG has also invested directly into four wind power projects elsewhere within the region, amplifying the cooperative's impact.

Community social value

- Wolfhagen BEG collaborates with other citizen energy cooperatives in the North of Hesse. They exchange experiences, support each other and bundle investments in wind parks in the North of Hesse.

Private financial and economic value

- Shareholders, who are mainly citizens of the area (7% of the local population) pay a normal tariff for their electricity consumption but receive dividends on their investment. This is between 3-5.5% each financial year.



10 Norway, Government Pension Fund Global



Summary

The Government Pension Fund Global, otherwise known as the Norwegian sovereign wealth fund, was established after the discovery of North Sea oil in order to provide a national financial reserve, as well as socialising the economic benefits from oil and gas sales. 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. 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.

Public financial & economic value

- The fund owns almost 1.5% of all shares in the world's listed companies. This means that 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.

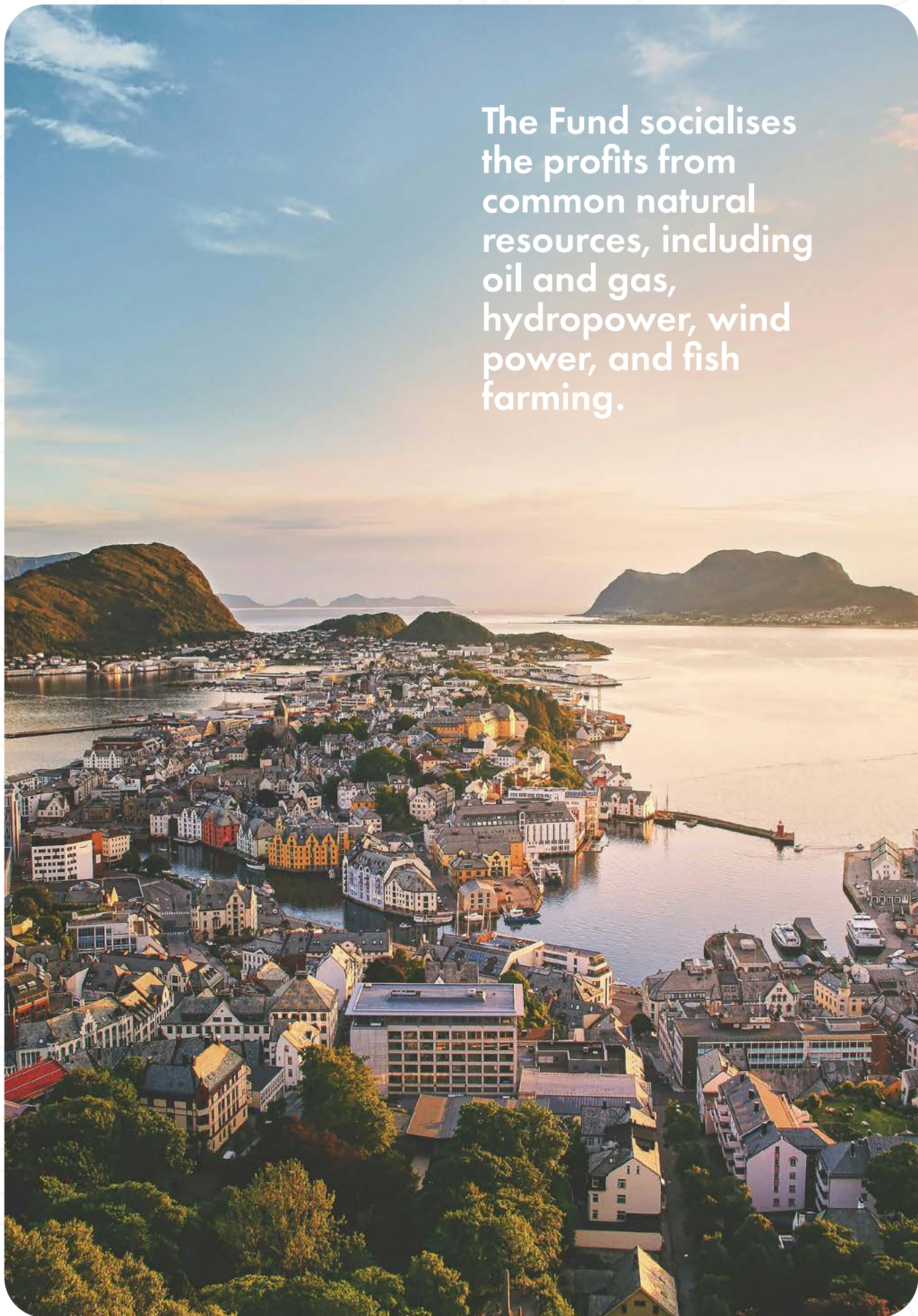
Public natural value

- The fund's ethical code prohibits and excludes investment in companies that do not adhere to environmental standards, and expects companies it invests in to establish annual targets to measure against a climate transition plan, disclose annual reports on progress of their net-zero strategy and show how executive pay aligns with progress made against transition plans.

Public social value

- The ethical code also prohibits investment on poor human rights and social grounds, recently excluding nine companies, and screening a further 65, based on concerns that their Environmental, Social and Governance (ESG) practices do not meet the mandated standards within the ethical code. This brings the potential that the ethical code can send market signals to businesses that seek investment from the fund to change business practices in line with the mandate and shape global markets according to social value concerns.

The Fund socialises the profits from common natural resources, including oil and gas, hydropower, wind power, and fish farming.





Summary

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". As part of this, CES manages 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.

As of April 2023, there are currently 37 offshore wind projects in Scotland, eight of which are operational with 265 turbines. CES have recently completed a leasing process on two significant offshore wind developments, ScotWind and INTOG.


Public financial & economic value

- Developers lease the land from Crown Estate Scotland for a fee. There was criticism that the Scottish Government and CES undersold the seabed value in the ScotWind auction but it still brought in more than £756 million in option fees to the Scottish Consolidated Fund. The Scottish Government committed to reinvesting the money into the energy sector, however, £350 million of this money has been used to top up the budget shortfall.
- The Scottish Government and Crown Estate Scotland will 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.
- Revenue profits are paid to the Scottish Government, with most of the funding being distributed to local authorities to fund projects benefiting coastal communities. Since 2019, £39m has been distributed.
- Crown Estate Scotland have developed partnerships with local authorities including Orkney, North Ayrshire, Angus and Highland. These partnerships support economic regeneration and provide new jobs.



Public environmental value

- Moray East windfarm has provided power for 1.43 million homes.
- Crown Estate Scotland's corporate plan is aligned with the Scottish Government's National Performance Framework and contributes to work on helping Scotland reach net zero.
- The recent INTOG leasing process allowed developers to apply for seabed rights to develop offshore wind projects that either reduce emissions from North Sea oil and gas or are small scale innovative projects.
- The proposed increase in using local supply chains could reduce carbon emissions of transportation of turbine and substation components.



**As of April 2023,
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12 Scotland, Huntly Development Trust



Summary

Huntly Development Trust (HDT) operate in Aberdeenshire and work to deliver projects in the small market town of Huntly. It is a company limited by guarantee with charitable status and was established in 2009 and is overseen by a volunteer board of directors. In 2014, a 63 acre farm site was purchased with funding support from the Scottish Land Fund. This site which is four miles south of Huntly was primarily bought to enable the Trust to develop a wind turbine project. The turbine was commissioned in December 2016, with a package of loans put together from the Scottish Government, Clydesdale Bank and Social Investment Scotland, allowing the project to meet the Feed in Tariff deadline and therefore be financially viable in the long term.

Community economic & financial value

- The Trust have utilised the regular and unrestricted income (around £120,000pa) from the turbine to provide financial stability to their organisation and leverage in further funding for projects. These are taking place not just on the farm site, but also in the town centre – acquiring and renovating a former department store as an events and retail space, developing a green transport hub with car club vehicles and an e-bike hire scheme as well as purchasing a former bank site for use by a community bookshop.

Community human value

- The farm site offers many other uses, including an eco-booth for events, activities and use by local groups. There are walking and cycling trails into the nearby Gartly Moor, a new path from Huntly to the site as well as opportunities for other modes of transport through the Trust's sustainable transport hub, supporting the health and wellbeing of the local community.





Scotland, Huntly Development Trust © Huntly Development Trust

Public natural value

- Since the site was purchased, the Trust have focussed on creating a biodiverse woodland and wetland – planting over 5,000 native species trees.
- There is also interest in exploring the use of the site for natural capital and ecosystem services purposes.

Public economic and financial value

- The Trust has collaborated with Aberdeenshire Council through the development of a Town Team and utilising Town Centre Funding for the redevelopment of the former department store. Since the Trust began investing money in the town square, another local community group has taken over and renovated an empty building, and a local private firm has invested in developing a restaurant.

13 Scotland, Shetland Charitable Trust



Summary

Shetland Charitable Trust (SCT) started life as Shetland Islands Council Charitable Trust (SICCT) in 1976 when Sullom Voe Terminal began operating. The Trust, which has a volunteer board of 12 trustees (four local councillors), and employees four staff, was set up to receive and disburse money paid by the oil industry to the local community as monetary benefit sharing for the new terminal operating in Shetland. Since then, the Trust has disbursed over £320m on charitable activities to a wide range of local charities, organisations and individuals. The Trust also has capital invested into external investments (shares and securities on the stock exchange) and local investments (subsidiary companies).

Public and community economic & financial value

External Investments

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

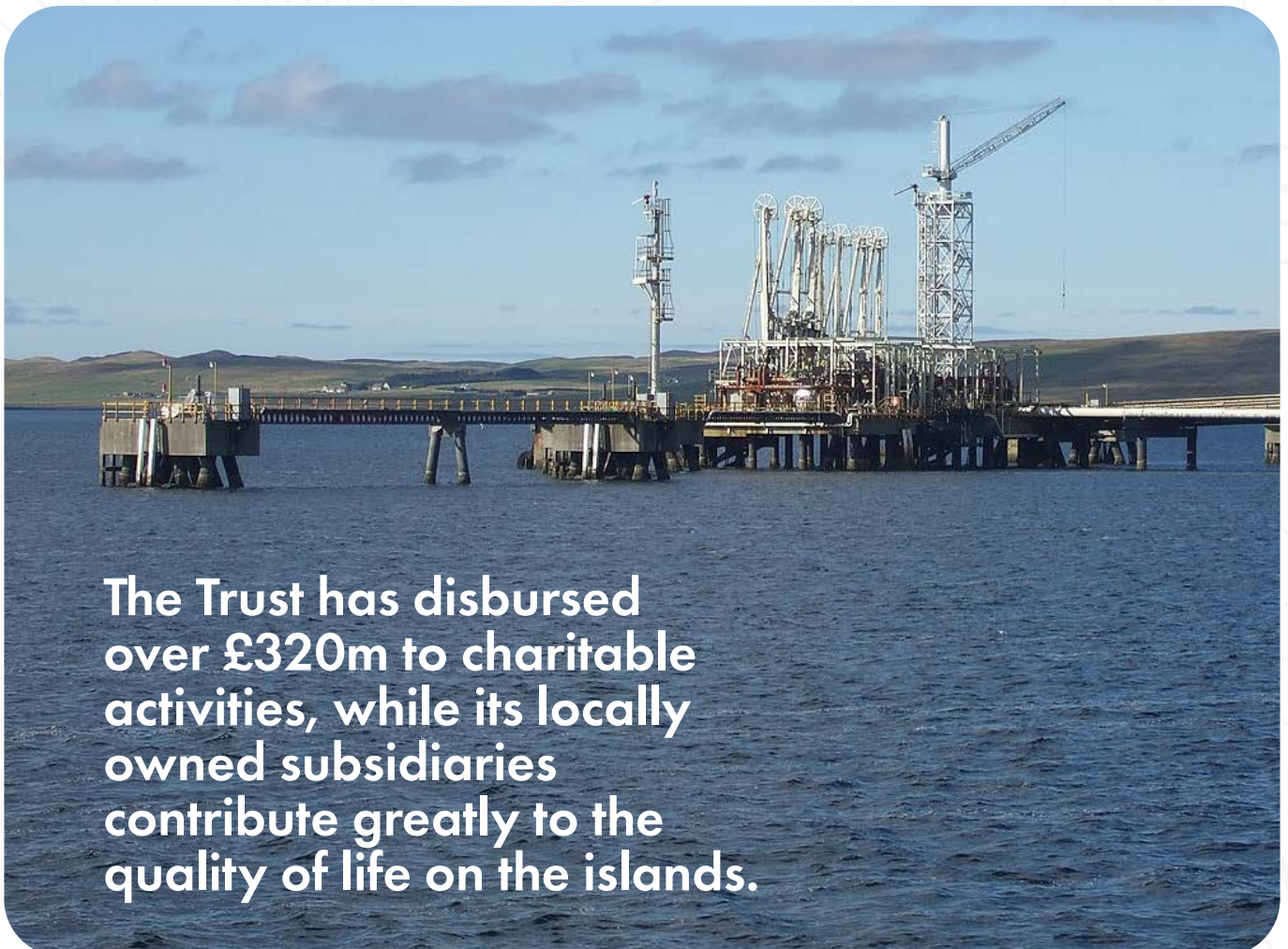
Local Investments

- The Trust's assets are also invested in subsidiary companies. Shetland Heat Energy and Power Limited (SHEAP) is a wholly owned subsidiary of the Trust, set up to operate the Lerwick District Heating Scheme. It is overseen by a board of five directors and employs ten staff. SHEAP has over 1,200 customers receiving heat. The scheme sees waste from Shetland and Orkney burned at the Energy Recovery Plant and the heat generated, in the form of hot water, used to heat homes and businesses in Lerwick at a greatly reduced rate for customers. The scheme is more efficient than localised boilers, and the waste plant is the most energy efficient in Scotland.

- SCT Renewables Limited is a 100% owned subsidiary of the Trust and has one director. It holds the Trust's investment in Viking Energy Shetland LLP (VES LLP) which is investigating a wind farm project in central Shetland, in partnership with a subsidiary of SSE plc. The Trust has approved an investment to date of £9.72m. VES LLP is a limited liability partnership, rather than a limited company, and is overseen by an independent board of directors. It is 90% owned by the Trust, the remaining 10% being owned by Viking Wind Limited.

Community human and social value

- SCT and its locally owned subsidiaries contribute greatly to the quality of life on the islands. Other third party organisations have developed to benefit from the funds from SCT. 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.



The Trust has disbursed over £320m to charitable activities, while its locally owned subsidiaries contribute greatly to the quality of life on the islands.

14 The Netherlands, Water Boards



Summary

The first Dutch regional water authority was set up in the 13th century. In 1950 there were 2,647 water authorities but after significant transformation and simplification the number has reduced to 21 as of 2018. These Authorities jointly 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. They do not undertake duties around sewage, which is the responsibility of the municipalities, although there is close collaboration between all layers of water interests in the Netherlands.

Water authority elections take place every four years at the same time as the provincial council elections. Each water authority has an elected General Board, the majority of whose members are elected by local residents. The exact composition of each board depends on the type of the area they cover (urban or rural), with the other non-elected seats represent the interests of local farmers, businesses and the natural environment (through public agencies).

Public economic & financial value

- The water authority tax can include: a water purification levy, a pollution levy, a water system levy, and a road levy. The regional water authority decides the amount of the tax for their region each year. The taxes accrued pay for the construction and maintenance of dikes, embankments, ditches and ponds. They also make sure the water level and water quality remain in good condition. The inclusion of a pollution levy allows for particularly high polluting businesses to be taxed a higher rate, therefore enacting a 'polluter pays' principle.
- The water authority is almost entirely self-financing and highly decentralised. They only receive state funding of around €200 million per year to cover part of the cost of reinforcing the primary flood defences. Their wide tax-raising powers, which generated about €3.2 billion in revenue in 2022, strengthens their position to enact change and deliver projects. Water authorities are also served by the Dutch Water Bank (NWB), which is both publicly owned and mandated to act in the public interest.





The Netherlands, Water Boards

Public human and social value

- The NWB has corporate social responsibility as an integral part of its general policy, for instance supporting water management projects in developing countries.
- There has been a growth of community initiatives in the Netherlands over recent years which has at times exposed some tensions with the Water Authorities, but when goals and standards align there has been some support towards these community projects.



Next steps

The Scottish Land Commission is working with The Centre for Local Economic Strategies on commissioned research to understand what lessons and principles can be drawn from elsewhere to develop new approaches to natural resource management in Scotland. The second phase of this work will focus on six of the case studies listed above to develop further understanding of how mechanisms and governance structures work, and how public and community value is generated and retained as a result. This research will be published in autumn 2024, and will feed into the Scottish Land Commission's work on governance and natural capital, both in terms of policy recommendations and good practice advice and guidelines.

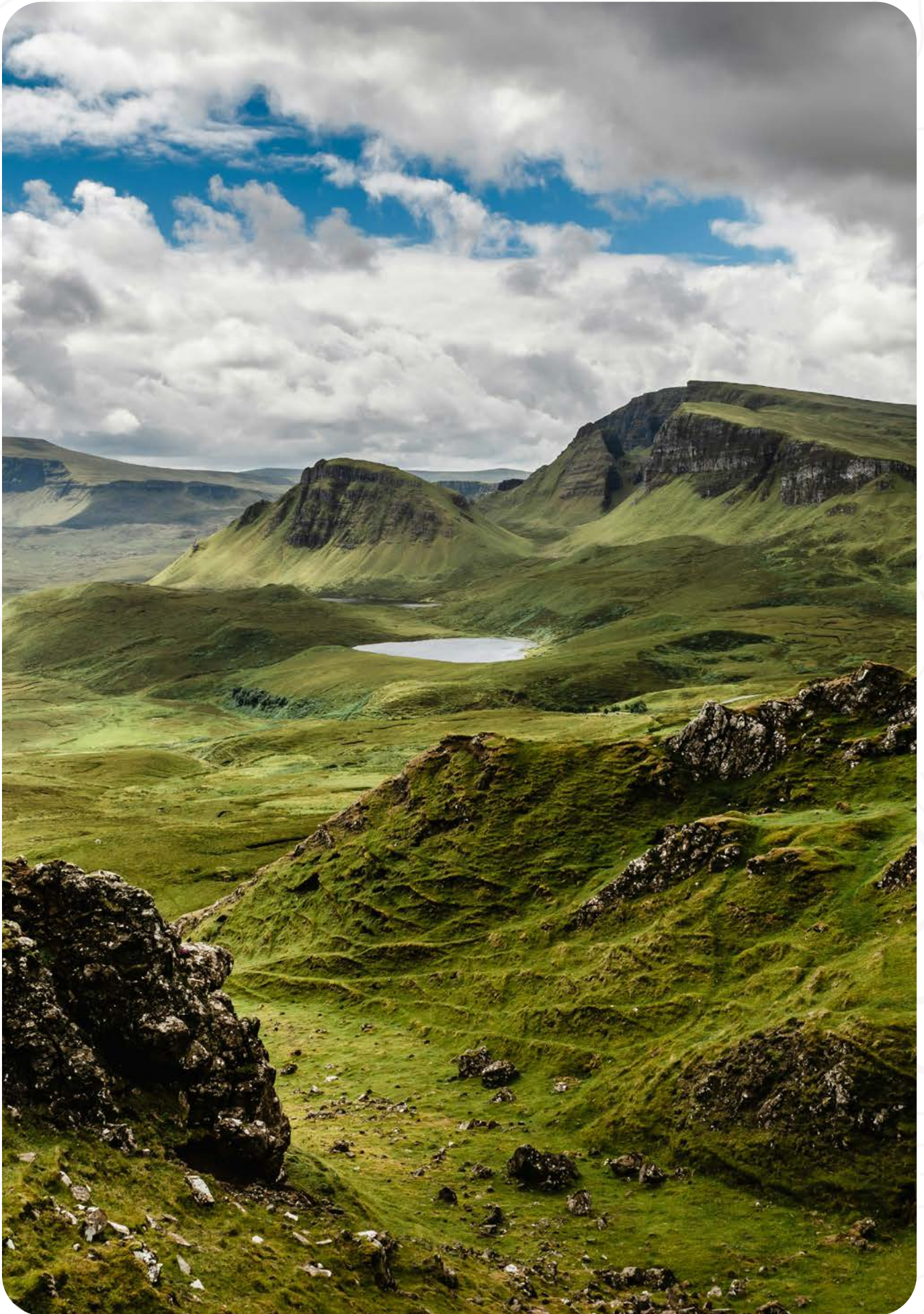


Devorgilla Bridge, Dumfries

Case Studies Matrix

Below is a simplified analysis of the case studies listed above, based on ongoing research. It offers ease of visual representation of how different case studies meet the degree of public/community/private value and at what scale.

			Australia Yarra Yarra biodiversity corridor	Belgium Eeklo wind turbines	Costa Rica PES programme	Denmark Samsø renewable energy island	Hvide Sande wind turbines	England Baywind Energy Coop	Finland Metsähallitus	France Eau de Paris	Germany Stadwerke Wolfsburg	Norway Government Pension Fund Global	Scotland Crown Estate Scotland	Scotland Huntly Development Trust	Scotland Shelland Charitable Trust	The Netherlands Water Boards	
Finance and Economic	Public Value	GVA/GDP	●						●			●	●	●	●		
		Jobs	●					●	●	●	●	●	●	●	●	●	●
		Diversity of ownership	●	●			●	●			●	●	●		●	●	●
		Economic stability	●		●	●				●	●	●	●	●			●
	Community Value	Wealth generated within the community	●	●	●		●	●				●	●		●	●	
		Control of community over wealth generated/decision making					●	●			●	●	●		●	●	●
	Private Value	Financial ROI	●			●	●						●				
		Dividends											●				
Human	Public Value	Impact on inequality/poverty		●							●	●			●	●	
		Impact on health and wellbeing of communities at scale (regional/national)							●			●					
	Community Value	Impact on health and wellbeing of communities													●	●	
		Impact on community infrastructure		●	●			●							●	●	
		Education and skills development	●	●	●			●							●	●	
	Private Value	Impact on wealth of those outside the geography from the example						●				●					
Social	Public Value	Benefits to a diverse population	●			●			●		●		●			●	
	Community Value	Cultural value	●			●	●		●	●					●		
		Creation of social cohesion/connectivity within the community	●		●	●						●	●		●		
	Private Value	Social value/ESG commitments	●		●							●			●	●	
Natural	Public Value	Impact on atmospheric carbon	●	●		●	●	●	●		●	●	●	●	●		
		Impact on water resources	●						●	●							●
		Impact on biodiversity	●		●					●	●		●		●		
	Community Value	Impact on air quality		●						●							
		Quality of lived environment		●												●	
	Private Value	Offsetting of other activities	●		●					●				●			



Quiraing, Isle of Skye

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