

Community Benefits from Net Zero Energy Developments: Consultation

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Ministerial foreword

The importance of green energy to our future economy and environment has never been clearer. It will provide thousands of highly skilled jobs, decarbonise many of our industries, transport and heating systems and be the driver of huge economic growth for our country. But how will it impact our communities, particularly those who will have developments on their doorsteps? Our view is that those communities must see tangible and long lasting benefits, and that there must be improvements on how these are delivered and how those communities are involved in decision making.

With more and more projects coming into the pipeline now is the right time to review our Good Practice Principles for onshore and offshore renewable energy developments. I am proud to say that the current Good Practice Principles have enabled investment in community projects worth millions of pounds over the last decade. We want to continue this leadership in community benefits by publishing this consultation to ensure that our guidance is current and continues to be a best practice tool for the communities and developers it serves.

Communities are at the heart of our green energy transition, and we want to realise the opportunities for communities to share in the significant economic and social benefits created through developing Scotland's renewable energy resources – supporting a just transition to net zero. This means supporting jobs, supply chain businesses and wider growth, building on developers' commitments to invest an average of £1.5 billion in Scotland per project across the 20 ScotWind projects. It also means increasing access to cleaner, more sustainable energy, and delivering meaningful and long lasting benefits for people in communities. Embracing this opportunity will contribute towards achieving our mission to tackle poverty and support community wealth building. Our ambition for the future of community benefits needs to be commensurate with the scale of opportunity from Scotland's net zero energy transition.

We also need to work with the UK Government to ensure Clean Power 2030, the Strategic Spatial Energy Plan, GB Energy and wider UK energy policies deliver for the people of Scotland. Scotland's energy system exists within a UK framework of energy legislation, regulation and policy reserved to the UK Government. We look to the UK Government to accelerate reforms to the electricity grid, transmission charges and the wholesale electricity market, as critical enablers of our net zero goals. The people of a country producing high volumes of clean electricity should see direct benefits in terms of affordability of energy. We will continue to advocate for Scotland's communities to receive a just and equitable outcome from increased transmission infrastructure development and we will continue to call on the UK Government to consult on mandating benefits from onshore projects.

We want to use all levers available to ensure that Scotland's community benefit arrangements deliver sustainable, meaningful and impactful outcomes, informed by the voices of our diverse communities. Through this consultation, we want to hear from a wide range of community, industry, public and third sector stakeholders, as well as those with an interest in Scotland's climate, economy, energy security, fuel poverty and community wealth building. In 2025, the Scottish Government will be engaging across the country, both in person and online, to help shape the future of

this work. I am determined that Scotland's renewable energy resources should deliver even more significant benefits to our society and your welcomed engagement is the next step to ensure this.

This document includes information to help you formulate your views and see how benefits may be deployed, including case studies, but if you would like to go straight to the response page click [here](#).

Gillian Martin MSP, Acting Cabinet Secretary for Net Zero and Energy

1. Introduction

This consultation is part of a review of the Good Practice Principles for onshore and offshore renewable energy, which seeks to ensure that our guidance helps communities and developers get the best from community benefits.

Community benefits are additional benefits that developers provide to the “community”, which sit independently of the planning and consenting system. They provide an opportunity to share in the benefits of the energy resource and can have lasting social and economic impacts. Community benefits schemes are a well-established, integral part of renewable energy developments in Scotland, fostering a positive relationship between renewable energy businesses and local communities. These schemes saw over £30 million offered by renewables developers in community benefits in the last 12 months¹.

Since the publication of the updated Good Practice Principles for onshore renewables in 2019², Scotland’s – and the global – energy system and policy landscape have evolved significantly. Changes in domestic and international markets, regulation, and the emergence of technologies such as battery energy storage and hydrogen electrolyzers are shaping our future energy mix and will influence how we can maximise the benefits flowing into our communities.

The first Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments were published in 2015³ and were intended to apply to developers in the offshore wind industry, noting that other offshore renewable sectors such as wave and tidal stream are at an earlier stage of development. Since then, some projects in Scotland have created community benefit funds. However, the approach has not been wholly consistent across developments. In recognition of the evolving sectoral landscape, we committed to reviewing and updating the offshore Good Practice Principles. We expect that the refreshed Good Practice Principles will continue to be of interest to other offshore renewable sectors as they develop.

We recognise that renewable technologies are at different stages of maturity, existing in distinct physical, operational, and commercial environments. There is a need to support the growth of industry and ensure the substantial supply chain and workforce benefits are captured here in Scotland, whilst recognising the role that coastal, fishing, island, rural, and in some cases urban communities play in hosting projects, and the electricity network infrastructure required to connect them. There is an opportunity to ensure renewables play a role in securing a just transition to net zero.

Through this public consultation, the Scottish Government is seeking the views of all those with an interest in the social and economic benefits of renewable energy development for people and communities in Scotland. Specifically, it seeks views on community benefits from onshore technologies, such as onshore wind, solar, hydrogen and storage and community benefits from offshore technologies, such as

¹ [Projects overview Local Energy Scotland](#)

² [Community benefits from onshore renewable energy developments - gov.scot](#)

³ [Scottish Government Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments](#)

offshore wind. Alongside the online consultation, the Scottish Government will be engaging with key stakeholders, including communities, industry, and the public and third sectors to build as broad a picture as possible of the potential opportunities – and limits – of community benefits from renewable energy. The Scottish Government has commissioned research on the provision of community benefits across different renewable energy technologies. Together, the information and views gathered across this work will inform a refresh of our onshore and offshore Good Practice Principles in the latter part of 2025.

1.1 Background

The Scottish Government's vision is for Scotland to become a global leader in renewable energy, with investment in clean energy sectors forecast to reach £40 billion over the next decade⁴. This transition is one of Scotland's greatest economic opportunities, ensuring benefits to Scotland's communities, workers and businesses are maximised and fit for a net zero future.

Scotland's path to a net zero energy future must be one that not only addresses climate change but also prioritises the well-being of people and enhances the fabric of our communities. A just transition offers new opportunities, creates good jobs, reduces fuel poverty and improves the lives of people right across the country, ensuring no one is left behind on the journey.

This shift is expected to drive a significant increase in electricity consumption across sectors like heat, transport, and industry. Scenarios underpinning analysis commissioned by the Scottish Government suggest that electricity consumption could increase by up to 45% by 2030 compared to 2020 levels⁵. At the same time, the demand for fossil fuels will decrease substantially. To support this transition, Scotland will need to expand its capacity for energy generation.

Rural and island communities are often, although not always, those in proximity to offshore and onshore renewable energy developments. Whilst each community is unique, on average they generally experience higher living costs and more limited access to services than those in urban areas, depending on their geography, demographics and other factors. Community benefits have the potential to deliver meaningful and long-term benefits for these communities.

1.2 The UK landscape

The generation, distribution, transmission and supply of electricity are reserved matters and as such outwith the legislative competence of the Scottish Parliament, which does not have the power to legislate on community benefits so far as related to those reserved matters.

⁴ [Skills Development Scotland: Climate Emergency Skills Action Plan](#) - The analysis undertaken for Skills Development Scotland identified £42.1 billion of investment in the energy transition which is either already underway or with a high likelihood of proceeding. The Authors note that the investment figures represent a snapshot at the point at which the research was carried out (2022).

⁵ [Scottish whole energy system scenarios - Climate XChange](#)

To achieve the best outcomes for communities, the Scottish Government's guidance will continue to be developed with reference to the UK context, ensuring they complement each other.

The Welsh Government have published guidance on local and shared ownership of energy projects⁶. The onshore wind sector maintains its own voluntary industry protocol for onshore wind in England that the UK Government has committed to take ownership of and update in due course⁷. The UK Government currently has no guidance on the provision of community benefits from or shared ownership of offshore wind developments. It encourages developers to invest in projects that will benefit local communities in the regions in which they operate, for example through community benefit funds⁸.

In 2023, the UK Government also committed to produce new GB-wide guidance on Community Benefits for Electricity Transmission Network Infrastructure⁹, following a public consultation and associated research¹⁰. In these proposals, the UK Government committed to explore mandating community benefits from transmission projects, including local energy bill discounts for host communities. Following the change in UK Government, it has committed to developing guidance on community benefits for electricity transmission network infrastructure, which it will publish in due course.

Recent UK Government announcements on establishing GB Energy and a National Wealth Fund create additional opportunities for community energy schemes, however, policy development remains at an early stage.

The UK Government's new Clean Industry Bonus (CIB)¹¹ will apply to offshore wind projects bidding into the Contracts for Difference scheme from Allocation Round 7. The CIB will provide extra revenue support, with a budget set at £27 million per gigawatt, to developers who choose to invest in cleaner supply chains anywhere in the world and those in the UK's most deprived areas. This has the potential to drive further investment in Scotland's communities.

The Scottish Government will also continue to work closely with the UK Government to ensure Scotland's interests are fully considered in delivering the Clean Power 2030 Action Plan¹². Achieving Clean Power by 2030, and any electricity system reforms, must respect devolved powers, ambitions and policies, and secure investor and industry confidence. With the ambitious scale of action required, it is crucial that communities and consumers are involved at every stage of the process.

⁶ Welsh Government's [Guidance for developers, local communities and decision-makers](#).

⁷ [Developing local partnerships for onshore wind in England - GOV.UK](#)

⁸ UK Government [BEIS Offshore Wind Single Pages web optimised.pdf](#)

⁹ [Community benefits for electricity transmission network infrastructure - GOV.UK](#)

¹⁰ [Community benefits for electricity transmission network infrastructure - GOV.UK](#)

¹¹ [Contracts for Difference \(CfD\) Allocation Round 7: Clean Industry Bonus framework and guidance - GOV.UK](#)

¹² [Clean Power 2030 Action Plan - GOV.UK](#)

We welcome ongoing work by the UK Government to review its approach to community benefit. We look forward to seeing more detail. We will take account of the UK Government's approach in our assessment of options following this consultation.

1.3 Key terms

Community benefits are additional benefits, that are currently voluntary, which developers provide to the community. The Scottish Government does not currently have the power to legislate for community benefits, which lies with the UK Government. A community benefit fund is considered to be a fundamental component of a community benefit package, though other measures may be considered such as in-kind works, direct funding of projects, or any other voluntary site-specific benefits. Community benefits are not compensation for impacts on communities or other interests, including commercial interests, arising from renewable installations and they are not taken into account in a decision over whether a consent for a development is granted.

Offshore wind refers to the generation of energy from floating and fixed bottom wind farms in a body of water, normally in the sea.

Offshore renewable energy refers to all renewable technologies that operate in the marine environment, including wind, wave, and tidal.

Onshore renewable energy refers to all renewable technologies that operate on land in Scotland, including wind, solar and hydro.

Onshore net zero energy refers to all onshore renewable and low carbon energy technologies that will comprise Scotland's energy system as set out in the Scottish Government's draft Energy Strategy and Just Transition Plan. This includes wind, solar, hydro, pumped hydro storage, battery storage, hydrogen, carbon capture, utilisation and storage (CCUS) and other negative emission technologies (NETs), and transmission infrastructure.

Shared ownership provides community groups the opportunity to make an investment in a commercially owned renewable energy project, defined as any structure which involves a community group as a financial partner benefitting over the lifetime of a renewable energy project. Shared ownership is distinct from community benefits.

Socio-economic benefits are the wider social and economic benefits delivered by renewable energy developments, such as employment opportunities, supply chain growth and infrastructure development. These are distinct from, but complementary to, 'community benefits'.

2. Consultation section 1: Offshore renewable energy developments

2.1 Scotland's offshore wind landscape

Offshore wind will play a critical role in Scotland's energy production over the coming decades, alongside onshore wind, hydro-power, and other developing renewable energy technologies.

The First Minister's Investor Panel, which was established to advise the Scottish Government on the investment and infrastructure we need to transition to net zero, identified offshore wind as the single most important opportunity for attracting capital to Scotland¹³. Scotland's expansive territorial waters are well suited to the generation of wind power and with the very strong market ambition of Scottish offshore wind, the growth of the sector over the last decade is set to continue. This will see the continued creation of new enterprises and sustainable industry on the back of our existing port infrastructure and offshore supply chain: supporting thousands of new and existing jobs across construction, planning, engineering, manufacturing and fabrication, procurement and supply chain management¹⁴; and delivering inclusive economic growth.

As a relatively new source of renewable energy, offshore wind technology is developing at pace. Floating wind, a technology where floating platforms are anchored to the seabed, offers opportunities for development in deeper waters with higher wind speeds – ultimately producing greater energy yields. Scotland's deep waters are attractive for floating technologies, which comprise a large part of our current reported potential pipeline of projects.

As a global early mover in offshore wind, Scotland saw its first commercial offshore wind farm, the 174 MW Robin Rigg in the Solway Firth, come online in 2010 producing enough electricity to power 137,000 homes¹⁵. Since then, the scale and ambition of offshore wind in Scotland has grown rapidly, with projects such as the 588 MW Beatrice project completed in 2019¹⁶, the 950 MW Moray East offshore wind farm located in the Moray Firth operating since 2021¹⁷, and the Seagreen offshore wind farm off the coast of Angus, which was completed in 2023 with capacity of nearly 1.1 GW¹⁸.

Our current pipeline of around 40GW of offshore wind capacity, on top of the 3GW currently installed in Scottish waters, will be transformational for our energy sector

¹³ First Minister's Investor Panel Report (2023): [Investor Panel: Mobilising international capital to finance the transition to Net zero - gov.scot \(www.gov.scot\)](https://www.gov.scot/resources/documents/2023/06/Investor-Panel-Mobilising-international-capital-to-finance-the-transition-to-Net-zero-2023.pdf)

¹⁴ Based on the evidence available across a number of individual studies, Scotland's burgeoning offshore wind sector could support as many as 10,400 – 54,000 jobs: [Footnotes - Offshore Wind Focus - gov.scot \(www.gov.scot\)](https://www.gov.scot/resources/documents/2023/06/Offshore-Wind-Focus-2023.pdf)

¹⁵ [Robin Rigg East and West offshore wind farm \(rwe.com\)](https://www.rwe.com/en/our-business/energy-renewables/offshore-wind/robin-rigg)

¹⁶ [Home | beatricewind](https://www.beatricewind.com/)

¹⁷ [Moray East Offshore Wind Farm](https://www.morayeastoffshorewindfarm.com/)

¹⁸ [Seagreen Wind Energy - Home](https://www.seagreenwindenergy.com/)

and our economic future¹⁹. The UK Government has set a target to deliver up to 50GW by 2030, including up to 5GW of innovative floating wind²⁰.

In 2022, the ScotWind offshore leasing round secured seabed lease option agreements for 20 projects, with ambitions to generate around 28GW of new offshore wind capacity for Scotland (subject to consents being awarded, securing a grid connection and a route to market). The 20 lease option agreements were awarded by Crown Estate Scotland (CES) within the spatial footprints of the 15 plan option areas identified through the Scottish Government's Sectoral Marine Plan for Offshore Wind Energy. We are currently undertaking an Iterative Plan Review (IPR) process that will update our Sectoral Marine Plan for Offshore Wind Energy (SMP-OWE) and deliver the planning framework for both the ScotWind and the Innovation and Targeted Oil & Gas Decarbonisation (INTOG) leasing rounds. CES will offer full seabed leases to projects following the attainment of the necessary consents and licenses, allowing construction to proceed.

Of the 20 projects, 14 are for floating (rather than fixed bottom) technology, making ScotWind the world's largest commercial round for floating offshore wind and putting Scotland at the forefront of offshore wind development globally. The ScotWind leasing round reflected very significant market ambition for offshore wind in Scottish waters and has already delivered over £750 million in revenues to the public purse in initial option fees.

As the projects become operational, there is a potential to deliver billions more in rental revenues to be invested for the benefit of the people of Scotland. Offshore wind developers have also committed to invest an average of £1.5 bn in Scotland per project across the 20 ScotWind projects²¹.

The Innovation and Targeted Oil and Gas (INTOG) leasing round, a 'first of its kind', offered potential options for up to 5 GW of offshore wind capacity targeting oil and gas decarbonisation, as well as up to 0.5 GW capacity for innovation projects in 2023. Exclusivity Agreements were offered by CES to five 'innovation' and seven 'targeted oil and gas' projects. The Scottish Government's Initial Plan Framework, set the planning framework and the areas of seabed that formed the spatial footprint for the INTOG leasing process. As outlined above, our updated SMP-OWE will deliver a planning framework for both the ScotWind and INTOG leasing rounds in 2025. Both the innovation and targeted oil and gas aspects will be critical for a just transition to net zero and nurturing the evolution of the developing offshore wind sector.

The outcomes of the ScotWind and INTOG leasing rounds have demonstrated a strong market appetite and contributed significantly to Scotland's potential project

¹⁹ Current, reported potential pipeline at end of September 2024 is 42.7 GW (13.4 GW from the renewable energy planning database REPD, this includes 6.3 GW of INTOG and ScotWind projects), 4.7 GW INTOG (excluding 663 MW that have reached the planning stage) and 24.5 GW ScotWind (excluding 5,600MW that have reached the planning stage).

²⁰ [British energy security strategy - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/british-energy-security-strategy)

²¹ [ScotWind developers set out multi-billion-pound supply chain commitments | Crown Estate Scotland](https://www.crownestate.co.uk/news/scotland/scotwind-developers-set-out-multi-billion-pound-supply-chain-commitments)

pipeline²². Together these leasing rounds provide a large boost to Scottish and UK wide green energy production and will contribute towards the Scottish economy for decades to come.

This potential will only be fully unlocked when the right market conditions and long-term investment certainty are in place and there are challenges to be addressed as the industry develops, particularly for floating offshore wind. Offshore wind farms require more complex infrastructure and are therefore significantly more expensive to develop, construct and maintain than onshore wind farms. Furthermore, the cost of building-out in Scotland's deep waters and connecting to the grid are relatively high. The UK Government's competitive Contracts for Difference (CfD) mechanism is essential for the delivery of renewables capacity in Scotland and across Great Britain. Challenges were reflected in the results of the Contracts for Difference Allocation Round 5 (2023), which saw no applications from offshore wind developers. Although several offshore wind projects were awarded contracts through Allocation Round 6 (2024), continued sufficient budget is needed in future years to provide long-term certainty for Scottish projects and to secure investment.

Grid constraints remain a major barrier for the development of renewable energy in Scotland, and across Great Britain. Delays to connecting offshore wind projects to the electricity network hinder bringing on new sources of electricity generation and further decarbonising our economy. Furthermore, developers face challenges in progressing projects to the investment stage without certainty around grid connection. The UK Government's mission to upgrade Britain's grid infrastructure and to reform the connections regime is critical or we risk jeopardising the full potential of projects, along with the associated socio-economic benefits for Scotland. We will continue to work collaboratively with the UK Government, including in relation to the Clean Power 2030 Action Plan, to ensure Scottish projects are at the forefront of delivery.

High and volatile Transmission Network Use of System (TNUoS) charges, which are paid to the National Energy System Operator (NESO) to recover the cost of installing and maintaining the transmission system, remain a key challenge for the renewables industry in Scotland. Urgent reforms are needed to deliver fair and predictable TNUoS costs and we therefore welcome Ofgem's proposal for the introduction of a cap and floor intervention for TNUoS charges and encourage NESO to engage closely with industry on the details of this intervention. We will continue to work collaboratively and constructively with Ofgem and the UK Government and push for a fairer methodology that recognises the renewable capability of Scotland.

Wider market conditions also create cost challenges for offshore wind development. As with other industries, recent high inflation and interest rates have increased the cost of construction. At the same time, the supply chain for offshore wind is still developing globally and the production of some components, such as turbines, and the availability of services, such as large jack-up vessels, are constrained. Continuing growth in the supply chain and advancements in technology will assist to bring down costs as the sector matures.

²² See CES [map of offshore wind in Scottish waters](#) as of May 2024.

2.2 Socio-economic impact of offshore wind

The development of offshore wind in Scotland will deliver significant value to our local, regional, and national economies through expanding the supply chain, stimulating infrastructure investment, and supporting thousands of high-quality green jobs. These benefits will continue throughout the 30 year operational lifespan of projects. The Scottish Government is committed to ensuring that these positive impacts are felt by the workforce, businesses and communities.

As part of the ScotWind bidding round, applicants were required to submit Supply Chain Development Statements (SCDS) to Crown Estate Scotland setting out commitments and ambitions for expenditure across the development, manufacture, installation, and operations and maintenance project phases, and across four geographical areas; Scotland, UK, EU, and Elsewhere²³. Failure by developers to deliver on their commitments can trigger remedies ranging from financial penalties to an inability to progress to a seabed lease.

Ports and harbours have a critical role in unlocking our offshore wind potential and attracting investment in the infrastructure, manufacturing and fabrication facilities essential to offshore wind construction and operation. We are now seeing major manufacturing for offshore wind projects in Scotland, demonstrating the potential for future industrial and supply chain growth.

Offshore wind is already delivering positive impacts to Scotland through supporting jobs and businesses across the value chain. Scotland's world-leading offshore supply chain, honed through decades of the production of North Sea oil and gas, is primed to participate in offshore wind build-out and operation. Indeed, many businesses are already turning their significant expertise to the renewables sector, offering a just transition for employees and their communities across areas that have a long association with the energy industry.

The economic impact of our offshore wind potential is very substantial. The sector has the potential to support thousands of high-skilled green jobs around the country, with the evidence available across a number of individual studies estimating Scotland's burgeoning offshore wind sector could support as many as 10,400 – 54,000 jobs²⁴. The transformative and long-lasting effects of these economic stimuli will create a positive legacy across communities in Scotland for decades to come.

²³ [SCDS Summary](#)

²⁴ [Annex - Offshore Wind Focus - gov.scot](#)

Case study: Ardersier Energy Transition Facility

The Scottish National Investment Bank and the UK Infrastructure Bank (now the UK National Wealth Fund) each invested £50 million into Ardersier Port, building on the £300m capital commitment from Quantum Energy Partners. This investment will underpin one of the largest regeneration projects in the Highlands for decades, enabling the creation of a nationally significant infrastructure facility to support industrial scale deployment of fixed and floating offshore wind. Not only will it considerably increase Scotland's offshore wind port capability, but it will also re-establish the port as a major local employer, with the potential to enable an estimated 3,000 jobs and reskilling opportunities at full capacity.

To underpin this, the Scottish Government has committed up to £500m strategic investment over five years to facilitate the development of the sector and invest in essential offshore wind infrastructure and supply chain. This will support market certainty and help to create a highly productive, competitive economy. Investment will be prioritised towards projects with the potential to catalyse further private sector investment, with a focus on strategic importance, critical dependencies, and the economic impacts for Scotland. We are taking a whole systems approach to building strong clusters of activity at key locations around the country consistent with industry recommendations and feedback²⁵. This investment supports the delivery of the Scottish Government's Green Industrial Strategy, a blueprint for realising the maximum possible economic benefit from the opportunities created by the global transition to net zero²⁶. Ultimately, realising this economic opportunity will drive social change through employment and reskilling opportunities, enhancing communities and contributing to the Scottish Government's aim of eradicating child poverty.

²⁵ As set out in 2024 paper [Offshore Wind Focus - gov.scot \(www.gov.scot\)](http://www.gov.scot)

²⁶ [Green industrial strategy - gov.scot](http://www.gov.scot)

2.3 Principles and key issues

2.3.1 Offshore wind communities

Unlocking Scotland's offshore wind potential will require coordinated efforts at national, international, and local levels. The pipeline of projects is mobilising businesses and the workforce across the country to support the delivery of potential projects, from the Solway Firth to the Shetland Islands and attracting foreign direct investment to Scotland's economy. At the same time, projects contain a hyper-local element with jobs and infrastructure created in multiple coastal, rural and island areas throughout their lifespan. We recognise that multiple communities will have a part to play in the development of offshore renewables and our understanding of 'the community' reflects this.

Identifying the community who will benefit is a key principle of designing and providing a community benefit package, as set out in our existing Good Practice Principles. The guidance notes that there is no single definition of community that can be applied for every project and that dialogue and site-specific characteristics should be used by the developer to identify the most relevant stakeholders. In advance of undertaking a public consultation, the developer is recommended to undertake an initial study to determine a proposal for what might be the geographical area to benefit and, within that area, the appropriate contacts and communities of interest for consultation. It is recommended that this process is undertaken at an early stage to allow communities the opportunity to contribute.

Defining the community

Offshore development involves multiple communities, often in multiple places, and at times with varying and competing interests. In some circumstances, a 'community of locality' based on geographical location will be key. In the case of onshore wind and other terrestrial renewable energy technologies, proximity to site is the primary indicator²⁷. Offshore wind development will be focused around strategically located port clusters with proximate communities. Other communities are based in areas where offshore energy transmission infrastructure comes ashore – although the construction of electricity transmission infrastructure is not limited to offshore wind developments. Legislation and regulations relating to electricity networks are reserved to the UK Government, which is currently considering its policy on the provision of community benefits from this infrastructure across Great Britain. However, much of the forthcoming development, particularly the floating wind projects which comprise the bulk of Scotland's potential pipeline, is located far from shore and coastal communities, and may fall across administrative boundaries²⁸. This increases the difficulty of communities self-defining based on existing boundaries.

²⁷ [Community benefits from onshore renewable energy developments - gov.scot \(www.gov.scot\)](http://www.gov.scot)

²⁸ The Sectoral Marine Plan for Offshore Wind Energy (2020) identified plan options for the future development of commercial-scale offshore wind energy in Scotland, including deep water wind technologies.

As set out in our existing Good Practice Principles, there is no set way to define the relevant community, and flexibility is key when considering the geographically dispersed footprint of an offshore wind project. As well as locational communities, offshore wind development has ‘communities of interest’; commercial, environmental, cultural and more. The views of these special interest groups, in particular other marine users including fishing communities, will be critical.

On ‘identification of the community’, our existing Good Practice Principles suggest starting discussions with relevant stakeholders such as: community groups; local or regional structures or organisations; wider national structures or organisations; and other organisations, individuals or groups which may not fit into the categories as listed.

Our existing Good Practice Principles set out that community benefits are not compensation for impacts on communities or other interests, including commercial interests, arising from renewable installations. It is also important to note that contributing to community benefit discussions does not affect an individual or organisation’s right to express a view on a project’s development proposals, and objecting to or supporting the development does not affect their right to discuss the community benefit proposals.

Case study: Vattenfall’s Unlock Our Future Fund

The Aberdeen Offshore Wind Farm, also known as the European Offshore Wind Deployment Centre, is a project made up of 11 8.8 MW wind turbines located off the coast of Aberdeen²⁹. The project includes a community benefit fund which supports projects focused on environmental sustainability.

The offshore wind developer, Vattenfall, contributes £150,000 per year to the fund (as at 2019) rising in line with the Retail Price Index for the life of the wind farm, which is expected to be at least 20 years.

The fund is distributed across Aberdeen City and Aberdeenshire, a larger area than for many other community benefit funds³⁰. 10% of the overall value of the fund is ringfenced for the communities of Blackdog and Belhevie, which host the onshore electricity infrastructure for the wind farm.

Between 2019 and 2023, 68 awards were made totalling £662,526. 51% of grants were for community buildings, 17% for vehicles and active travel, 12% for outdoor space, 12% for equipment and lighting, 5% for capacity building, and 3% for feasibility studies and research.

²⁹ [UOFF Review - Executive Summary 0.pdf](#)

³⁰ [Vattenfall Unlock our Future Fund - Local Energy Scotland](#)

Case study: Hornsea 3 Community Benefit Fund

The community benefit fund³¹ for Ørsted's 2.9 GW fixed-bottom Hornsea 3 Offshore Wind Farm³², located off the East Coast of England, was developed via a thorough consultation with the community it serves. The Main Fund focuses on small grants for community groups. In addition, there is a Skills Fund dedicated to supporting training in the area, and a Legacy Fund which will fund a single capital project delivering long-term improvements in the region. Monies are ringfenced for respective funds, with different application processes and criteria.

Hornsea 3 also includes a separate dedicated community benefits Fisheries Fund that supports projects which directly benefit the fishing industry operating in the same area as the project's Kittiwake artificial nesting structures³³. It funds, for example, port infrastructure, safety, and training. The fund aims to support good cooperation between the developer and fishing communities. Grants can be awarded to individual fishers for equipment and boat safety improvements, for example, but priority is given to projects that benefit the wider fishing community in the area.

Consultation questions: Offshore wind communities

Question 1: In the context of offshore wind development, what or who or where do you consider the relevant communities to be?

Question 2: When defining the relevant communities to receive benefits from offshore wind development, which factors should be considered, and by whom? Are there any factors which are most important, and why?

³¹ [Hornsea 3 Community Fund - Grantscape Grantscape](#)

³² [Hornsea 3 Offshore Wind Farm | Ørsted](#)

³³ [Hornsea 3 Fisheries Fund - Grantscape Grantscape](#)

2.3.2 Maximising the impact of community benefits from offshore wind developments

Community benefits from offshore renewables have the potential to support a wide range of projects across Scotland, from infrastructure to culture and beyond³⁴. One of the guiding principles for community benefits is that funds should be directed for and by the community, in line with their needs and priorities. As set out above, the dispersed footprint and large scale of offshore wind projects often involves multiple communities and identifying appropriate decision makers and beneficiaries is key. However, there is also a need for collaboration, engagement and strategic thinking across communities and stakeholders to maximise the impact of community benefits.

Our current Good Practice Principles recommend that the “composition, delivery and structure of the [community benefits] package should be designed through dialogue with the local community”. A community benefit fund is considered a fundamental component of a community benefits package, though other components may also be considered. Decisions on the use of community benefit funding “should be led by the community and informed through identification of local needs, with guidance from the developer as necessary”.

Community benefits from offshore renewables is a relatively new area of focus in Scotland and as our national experience grows – amongst communities, developers, and public and third sector organisations – so too does our ambition. Options must enable and support communities to maximise outcomes, enhance their locality, and deliver long-lasting legacies from the opportunity offshore renewables presents for Scotland.

Understanding priorities, at both a local and regional-national level, is fundamental to making informed decisions about distributing and maximising the impact of funds. Our Good Practice Principles state that in considering effective implementation of community benefits, the following components should be optimised:

1. Focus on community benefits: developers should encourage community benefits which support sustainable development by complementing social, economic and environmental causes and building resilient, sustainable communities.
2. Delivery mechanism: benefits may take the form of direct funding of projects, financial payments or other benefits as deemed appropriate, designed through dialogue with the local community.

Community benefit arrangements in Scotland have typically followed a project specific application style fund, however other models have been put forward by local authorities and community stakeholders. These include proposals to use a portion of funds to support regional strategic funds, as well as for a nation-wide community wealth fund.

³⁴ Local Energy Scotland’s [Community Benefit Register](#) allows developers and communities to upload details of community benefit arrangements attached to renewable energy projects in Scotland. The Register is a guide to community benefit provisions rather than an exhaustive list of all projects.

Truly maximising the impact of funds requires more than appropriate models and our Good Practice Principles sets out that capacity building is fundamental to ensuring success. Our engagement with communities and those with experience of community benefit funds has highlighted that community capacity is a critical factor in achieving positive outcomes and increasing impact. This could include support and guidance for communities around negotiations, sharing best practice, networking and collaboration across multiple communities³⁵. The Scottish Government is committed to empowering communities and supporting capacity building to facilitate effective and impactful use of funds.

The identification of priorities, be those hyper-local or reflecting the wishes of multiple communities, along with decisions about the allocation and ongoing use of funds, should be reached through consensus. Good governance and transparency have therefore been highlighted as crucial components of any community benefits arrangements.

Our existing guidance suggests that community benefits could be used for the following areas:

- Apprenticeship schemes.
- Building capacity in the community;
- Contributing to charitable causes;
- Cultural assets;
- Development and support of natural capital, for example upgrades to areas of cultural or environmental interest;
- Educational support such as extra-curricular engagement with schools, colleges and universities;
- Environmental communities;
- Infrastructure upgrades;
- Local business support;
- Local electricity bill discounts;
- Local facilities or services to complement and not replace statutory provisions;
- Skills development programme;
- Support of local tourism such as creation or support of local facilities i.e. museums or visitor centres;
- Supporting local marine management issues;
- Supporting and developing women's empowerment networks.

Consultation questions: Maximising the impact of community benefits from offshore wind developments

Question 3: Who should decide how offshore wind community benefits are used (decision-makers)? Are there any groups, organisations or bodies you feel should have a formal role in this?

³⁵[Developing a new model to maximise local economic benefits from development in Moray and Highland](#), p. 52

Question 4: What are the best ways to ensure that decision-makers truly reflect and take into account the needs and wishes of communities when determining how community benefits are used?

Question 5: What could be done to help maximise the impact of community benefits from offshore wind? What does good look like?

Question 6: How do you think directing community benefits towards larger scale, longer term, or more complex projects would affect the potential impact of community benefits from offshore wind?

Question 7: The development of offshore wind is often geographically dispersed with multiple communities who could potentially benefit. To what extent do you agree or disagree that a regional and/or national approach to delivering community benefits would be an appropriate way to address geographical dispersal of development and multiple communities? Please explain your answer.

Question 8: Are you aware of any likely positive or negative impacts of the Good Practice Principles on any protected characteristics or on any other specific groups in Scotland, particularly: businesses; rural and island communities; or people on low-incomes or living in deprived areas. The Scottish Government is required to consider the impacts of proposed policies and strategic decisions in relation to equalities and particular societal groups and sectors. Please explain your answer and provide supporting evidence if available.

2.3.3 Determining appropriate levels of community benefits from offshore wind

A fundamental of community benefits, as set out in our existing Good Practice Principles, is that each package should be tailored to reflect the characteristics of the development. This allows communities and developers to agree an approach which delivers the best outcomes for the circumstances at hand. However, we have heard from some stakeholders that there is a need for clarity, transparency, and a degree of parity on the level of funding.

Our current guidance recommends that a community benefits package should be proposed by the developer and further developed in discussion with the community. Factors which should be taken into account when designing the package include the scale of project, the technology, the distance of the project from shore and the nature of project (e.g. research or trial site). Compensation for impacts arising from development is not a relevant factor.

The Scottish Government's Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments recommends a rate of benefit based on the generation capacity of the project³⁶. In Ireland, for onshore and offshore developments, the rate is based on the amount of electricity produced, with a national rate of €2 per Megawatt hour of generation³⁷. In addition, some have advocated for a 'floor and ramp' approach, where a defined level of benefit is provided based on installed capacity, along with a variable benefit based on energy output, with flexibility for different technology types. Under these approaches, projects which produce more electricity provide larger payments to communities. Defined levels of community benefits may reduce the burden on communities to negotiate with developers, with a focus on quality of engagement and outcomes³⁸.

Case study: Ireland

In Ireland, a government mandate applies for all wind generators to make minimum Community Benefit Fund (CBF) contributions set at €2 per MWh, approved under State-Aid provisions³⁹ ⁴⁰. Different CBF regimes apply to Onshore RESS and Offshore ORESS projects. Under ORESS, generators are required to procure a professional Fund Administrator to facilitate the local community in maximising the opportunity of the funding.

Based on anticipated levels of generation for ORESS, it is estimated that each ORESS CBF may amount to €4 million to a fund per annum from a 500 MW offshore wind project. Decisions on the use of the fund are to be taken by communities through the creation of a Community Benefit Fund Committee. The Committee must create a Development Delivery Plan in collaboration with the local community. The plan should identify key priorities and needs across the relevant local communities,

³⁶ £5,000 per MW of installed capacity per annum.

³⁷ [RESS | Community Benefit Fund | SEAI](#)

³⁸ [Power-to-the-People-Final-Final-Final.pdf \(ukonward.com\)](#), p. 42.

³⁹ [gov.ie - ORESS 1 Community Benefit Fund - Rulebook for Generators and Fund Administrators](#)

⁴⁰ [RESS | Community Benefit Fund | SEAI](#)

including medium and long-term priorities and multi-annual funding initiatives. Developers are also required to make early contribution payments prior to the operational phase of the project which can assist with building capacity and planning. RWE's Dublin Array project expects the community benefit fund could be worth up to €6.5 million per year in due course⁴¹.

Ireland is at an early stage of offshore wind deployment, with its own legal and policy frameworks and market conditions. It is therefore too early to draw direct comparisons with other markets, including Scotland.

A key condition for the provision of community benefits is the ability of renewable energy developers to finance them⁴². Offshore wind energy generation is a relatively new technology with relatively high costs, and the development and construction process can take up to a decade or more before projects begin generating revenue⁴³. The immaturity of the sector, particularly for floating offshore wind, and the difficulty of operating in the marine environment also mean that projects carry a significant risk profile. The economics of most projects are therefore challenging and uncertain, with costs higher than for the development of onshore wind.

The UK Government's competitive Contracts for Difference (CfD) subsidy mechanism remains the key route to market for offshore wind projects in Great Britain and provides a 15-year contract to electricity generators to buy electricity at a certain price (the strike price). Developers must compete with renewable energy projects across the UK to secure a contract through 'allocation rounds', with all project costs reflected in the bid. For floating offshore wind, which makes up around two thirds of the ScotWind leasing round and the majority of INTOG leasing round projects, the costs are significantly higher than for fixed bottom offshore wind projects and onshore renewables projects. These higher costs were reflected in Contracts for Difference Allocation Round 6 (AR6) where the administrative strike price for floating offshore wind projects was £176, compared to £73 for fixed bottom offshore wind projects, £64 for onshore wind and £61 for solar⁴⁴. Other offshore renewable energy technologies, such as wave and tidal, remain at an earlier stage of development.

We welcome indications that the UK Government is reviewing its approach to community benefits, including the work already underway in relation to exploring community benefits from transmission infrastructure, and we look forward to seeing more detail. Some Scottish projects already face higher construction and maintenance costs and higher Transmission Network Use of System (TNUoS) charges, all of which have an impact on a project's competitiveness and CfD bid. Placing additional costs on Scottish projects could put them at a disadvantage with projects elsewhere in the UK and in the long run the cost of any community benefit

⁴¹ [Community Benefit Fund - Dublin Array](#)

⁴² [Community Benefits from Offshore Renewables: Good Practice Review \(climatexchange.org.uk\)](#), p. 28

⁴³ [Construction of an offshore wind farm - Iberdrola](#)

⁴⁴ [Methodology used to set Administrative Strike Prices for CfD Allocation Round 6](#)

scheme may ultimately be borne by the consumer through higher strike prices in the project's Contract for Difference⁴⁵.

Community benefits should be delivered in a manner which is proportionate to the scale and impact of development, not inhibiting its commercial viability⁴⁶ and not disproportionately affecting consumer costs. A balanced approach is therefore needed.

Case study: The Beatrice Community Fund

Beatrice Offshore Wind Farm Ltd established a community benefit fund during construction of the 588 MW project in 2016/17 to support the coastal communities of Caithness, Sutherland and Moray⁴⁷. The wind farm, which comprises 84 fixed-bottom turbines located approximately 13 km from the Caithness coast, became fully operational in 2019, following seven years of development and three years of construction. The fund had two components:

- Regional fund: worth a total of £3m which supported larger projects aimed at providing a lasting impact, identified following consultation with stakeholders.
- Local funds: worth up to £3m over five years, which focused on community councils in parts of Moray and Caithness closest to onshore infrastructure, and supported capacity building in local communities.

The Fund closed for applications in June 2023 having provided £6 million across 361 projects, including supporting 73 rural jobs and the enhancement of 64 community assets. Social impact research has shown that for every £1 invested by the Beatrice Partnership Fund, £3.21 in wider value was generated⁴⁸.

Examples of projects supported include improvements to the ferry slipway at Nigg and the new East Beach Bridge at Lossiemouth.

Consultation questions: Determining appropriate levels of community benefits from offshore wind

Question 9: In your view, what would just and proportionate community benefits from offshore wind developments look like in practice?

Question 10: What processes and guidance would assist communities and offshore wind developers in agreeing appropriate community benefits packages?

⁴⁵ [Delivering-local-benefit-from-offshore-renewables.pdf \(regen.co.uk\)](#), p. 19

⁴⁶ [Delivering Community Benefits from Land \(landcommission.gov.scot\)](#)

⁴⁷ [Funds | beatricewind](#)

⁴⁸ [beatrice-impact-report-2023-002.pdf](#)

2.3.4 Shared ownership of offshore wind developments

Shared ownership is distinct from community benefits, however opportunities for shared ownership of offshore wind developments have the potential to deliver long-term economic and social benefits. Shared ownership is not included in our existing good practice principles, however, there is an increasing interest from both communities and industry in how shared ownership could increase the distribution of wealth generated through offshore wind assets. Shared ownership projects can support community development aims by encouraging local partnerships and have the potential to increase community power through establishing defined rights over aspects of a development⁴⁹.

The Scottish Government has published Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments, which sets out our ambition for 2GW of shared ownership of onshore renewable energy capacity by 2030⁵⁰. The Good Practice Principles guide interaction between communities and developers with a view to creating a lasting legacy, building community capacity and strengthening corporate social responsibility. The Scottish Government's Community and Renewable Energy Scheme (CARES), managed by Local Energy Scotland, supports local and community ownership of renewable energy assets through loan finance, grant funding and specialist advice⁵¹.

Shared ownership models have been implemented for commercial scale onshore wind projects in Scotland. However, the relative immaturity of offshore wind along with the immense scale of many projects result in high costs associated with their development, construction, and operation. Access to finance to meet these costs presents a considerable barrier to communities who might be interested in the shared ownership of offshore wind assets. In addition, community capacity has also been found to be a significant barrier to shared ownership, with the resource and expertise of community organisations seen as critical to the success of projects⁵².

Whilst recognising these challenges, the Scottish Government is committed to exploring all options available to us of maximising the benefits of offshore renewable energy generation for Scotland's communities. This consultation seeks to test the views of stakeholders on the potential for shared ownership opportunities across Scotland's offshore wind pipeline, as well as the appetite for developing models amongst communities and energy developers.

⁴⁹ [Understanding community benefit payments from renewable energy development \(sciencedirectassets.com\)](https://www.sciencedirectassets.com), p.209.

⁵⁰ [Shared Ownership of Onshore Renewable Energy Developments - gov.scot](https://www.gov.scot)

⁵¹ [Funding advice for renewable energy projects in Scotland](https://www.gov.scot)

⁵² [Scottish-Community-Coalition-on-Energy-Community-Shared-Ownership-Paper-FINAL-1.pdf \(communityenergyscotland.org.uk\)](https://www.communityenergyscotland.org.uk), p. 2.

Case study: Denmark

An early global developer of offshore wind, Denmark has legislated for local citizens to have the option to purchase shares in wind turbines. Through the 2008 Promotion of Renewable Energy Act, at least 20% of a development's ownership shares must be offered to residents less than 4.5km from the nearest turbine, or residents of the relevant municipality⁵³. A 2016 study estimated that 52% of installed wind capacity in Denmark contained a citizen ownership model⁵⁴.

However, this approach has drawn criticism around transparency, lack of investment returns, and the financial capability of citizens to partake in the scheme⁵⁵.

Offshore wind development in Denmark has its own legal and policy frameworks and market conditions and it is therefore difficult to draw direct comparisons with other markets, including Scotland. Note, for example, Denmark's recent offshore wind farm tender, which failed to attract any bids from developers⁵⁶.

Consultation questions: Shared ownership of offshore wind developments

Question 11: What do you see as the potential of shared ownership opportunities for communities from offshore wind developments? Please explain your answer.

Question 12: Thinking about the potential barriers to shared ownership of offshore wind projects, what support could be offered to communities and developers to create opportunities and potential models, and for communities to take up those opportunities? Potential barriers include high costs of offshore wind development, community access to finance and community capacity.

⁵³ [Microsoft Word - Promotion of Renewable Energy Act - extract](#)

⁵⁴ [The past, present and uncertain future of community energy in Denmark: Critically reviewing and conceptualising citizen ownership - ScienceDirect](#)

⁵⁵ [Delivering-local-benefit-from-offshore-renewables.pdf \(regen.co.uk\)](#)

⁵⁶ [Denmark disappointed after offshore wind tender draws no bids | Reuters](#)

2.4 Summary of offshore consultation questions

Offshore wind communities

Question 1: In the context of offshore wind development, what or who or where do you consider the relevant communities to be?

Question 2: When defining the relevant communities to receive benefits from offshore wind development, which factors should be considered, and by whom? Are there any factors which are most important, and why?

Maximising the impact of community benefits from offshore wind developments

Question 3: Who should decide how offshore wind community benefits are used (decision-makers)? Are there any groups, organisations or bodies you feel should have a formal role in this?

Question 4: What are the best ways to ensure that decision-makers truly reflect and take into account the needs and wishes of communities when determining how community benefits are used?

Question 5: What could be done to help maximise the impact of community benefits from offshore wind? What does good look like?

Question 6: How do you think directing community benefits towards larger scale, longer term, or more complex projects would affect the potential impact of community benefits from offshore wind?

Question 7: The development of offshore wind is often geographically dispersed with multiple communities who could potentially benefit. To what extent do you agree or disagree that a regional and/or national approach to delivering community benefits would be an appropriate way to address geographical dispersal of development and multiple communities? Please explain your answer.

Question 8: Are you aware of any likely positive or negative impacts of the Good Practice Principles on any protected characteristics or on any other specific groups in Scotland, particularly: businesses; rural and island communities; or people on low-incomes or living in deprived areas? The Scottish Government is required to consider the impacts of proposed policies and strategic decisions in relation to equalities and particular societal groups and sectors. Please explain your answer and provide supporting evidence if available.

Determining appropriate levels of community benefits from offshore wind

Question 9: In your view, what would just and proportionate community benefits from offshore wind developments look like in practice?

Question 10: What processes and guidance would assist communities and offshore wind developers in agreeing appropriate community benefits packages?

Shared ownership of offshore wind developments

Question 11: What do you see as the potential of shared ownership opportunities for communities from offshore wind developments? Please explain your answer.

Question 12: Thinking about the potential barriers to shared ownership of offshore wind projects, what support could be offered to communities and developers to create opportunities and potential models, and for communities to take up those opportunities? Potential barriers include high costs of offshore wind development, community access to finance and community capacity.

3. Consultation section 2: Onshore net zero energy developments

3.1 Scotland's onshore net zero energy landscape

Scotland is rich in net zero energy resources, supported by a well-established onshore wind sector, a growing solar industry, a strong emerging renewable hydrogen sector, a pipeline of battery energy storage projects and notable progress and innovation across our other low carbon technologies.

In the past decade, Scotland has nearly doubled its onshore renewable electricity capacity⁵⁷. By July 2024, we had 12.1 GW of onshore renewable capacity installed, capable of generating around 28 TWh annually⁵⁸—enough to power approximately 12 million homes each year. These figures highlight how essential clean electricity will be to the future of our energy system.

The economic contribution of the onshore renewables sector is equally substantial and wide-reaching.⁵⁹ According to estimates by the Fraser of Allander Institute (FAI), the onshore renewables sector supported more than 28,700 FTE (Full Time Equivalent) and £2.8 billion GVA (Gross Value Added) across the Scottish economy in 2021⁶⁰.

Independent analysis commissioned by the Scottish Government indicates there could be significant future economic and employment benefits from renewables and suggests that with the right support, the onshore wind sector alone could support around 6600 FTE and £1.1 billion in GVA by 2030⁶¹.

While it is clear that net zero energy developments will bring significant socio-economic impacts and benefits to Scotland, these figures also show why we need to ensure that national guidance on community benefits from onshore developments enables greater outcomes and collaboration with the local and wider communities that host them.

⁵⁷ This includes onshore wind; solar photovoltaic (PV); large- and small-scale hydro; and anaerobic digestion. [Energy Trends: UK renewables - GOV.UK](#)

⁵⁸ [Energy Trends: UK renewables - GOV.UK](#)

⁵⁹ [The Economic Impact of Scotland's Renewable Energy Sector - 2023 Update | FAI \(fraserofallander.org\)](#) FAI estimates rely on data from the ONS Low Carbon and Renewable Energy Economy survey. There is significant uncertainty in this underlying ONS survey data, particularly at the individual technology level. The results are therefore accompanied by a moderately large margin of error.

⁶⁰ Estimates are for 2021, based on direct, indirect and induced activity and employment. [The Economic Impact of Scotland's Renewable Energy Sector - 2023 Update | FAI \(fraserofallander.org\)](#) It is assumed here that the "onshore renewables" sector is composed of the following sectors: onshore wind, solar pv, hydropower, renewable heat, bioenergy and renewable combined heat and power.

⁶¹ [Scottish Government EY Independent Analysis](#) These figures are based on the central Balanced Options Pathway (BOP) scenario in the EY Independent Analysis. As Chapter 3 of that analysis shows, this is one among many possible future outcomes, which will vary depending on a wide variety of factors. Estimates include direct and indirect impacts

3.2 Community benefits from onshore net zero technologies

The Scottish Government's Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments⁶², which were published in 2019, were developed in close collaboration with industry and communities, putting communities at the forefront of Scotland's renewable energy ambitions. These principles encourage developers to offer community benefit packages as standard for all onshore renewable energy projects, ensuring that the benefits of wind, solar, and other renewable energy projects are shared with local communities. They stress the importance of transparent, fair, and meaningful engagement, with communities actively involved throughout the project lifecycle.

Central to this is the expectation that communities play a leading role in shaping the benefits they receive, ensuring that the packages are tailored to local needs and sustained over the long term. The principles also act as an invaluable tool for communities with little or no experience of engaging with renewable energy developers.

However, since the Good Practice Principles were last updated in 2019, Scotland's - and the global - energy system and policy landscape have evolved significantly. Changes in domestic and international markets, regulation, and the rise of technologies such as energy storage and hydrogen electrolysers are shaping our future energy mix and will influence how we can maximise the benefits flowing into our communities. This consultation seeks views on what the Good Practice Principles for onshore net zero technologies should look like in future and will be used to inform a refresh of the current version.

The following section sets out the different onshore net zero energy technologies which exist or are emerging in Scotland. These are at different stages of maturity and have different experiences of the use of community benefits.

3.2.1 Wind

As of Q2 2024, Scotland has 9.8 GW of onshore wind in operation⁶³. The Scottish Government's position of support for onshore wind is long-standing, clear, and unambiguous – onshore wind offers a relatively low cost of electricity compared to other technologies. Scotland's onshore wind sector has also led the way in provision of community benefits, contributing the majority of the reported £30 million flowing to communities in the last year⁶⁴.

Our Onshore Wind Policy Statement⁶⁵ introduced a new ambition for a minimum installed capacity of 20 GW of onshore wind in Scotland by 2030. To support this goal, the Scottish Government worked with industry to develop the Onshore Wind Sector Deal⁶⁶. The Sector Deal is a shared commitment between government and industry to grow onshore wind in a way that supports a just transition.

⁶² [Community benefits from onshore renewable energy developments - gov.scot](#)

⁶³ [Energy Trends: UK renewables - GOV.UK](#): As at end Q2 2024.

⁶⁴ [Projects overview · Local Energy Scotland](#): Figure correct as of December 2024.

⁶⁵ [Onshore wind: policy statement 2022 - gov.scot](#)

⁶⁶ [Onshore wind sector deal - gov.scot](#)

Onshore Wind Sector Deal: Community commitments

Recognising the importance of ensuring communities across Scotland feel the benefits of the energy transition, the Onshore Wind Sector Deal contained a range of commitments including:

- The sector committed to engage communities earlier in the development process, and to meet or exceed our Good Practice Principles for community benefits;
- The sector committed to ensure community benefit agreements become binding at the point of Financial Investment Decision, and ensure community benefit and shared ownership agreements are maintained as a condition of sale or transfer of a wind farm;
- A joint commitment to establish a standard approach to the management of community benefits funds, to ensure transparency and effective reporting on the impacts in Scotland's communities; and,
- A joint commitment to develop practical approaches to support and encourage community shared ownership models to assist developers, funders, local government and communities to engage in these opportunities.

The Sector Deal also led to the new Community Benefits and Shared Ownership Register⁶⁷, launched on 5 November 2024, which provides easy to access information about how these funds support communities.

3.2.2 Solar

Solar power is an established renewable technology in Scotland and will play an important role in the net zero energy transition. Currently, Scotland has 653 MW⁶⁸ of operational solar capacity, with a further 2,117 MW of estimated pipeline capacity⁶⁹.

The Scottish Government is clear on the importance of solar in contributing to the decarbonisation of Scotland's energy supply, and on the potential of solar to help deliver flexibility and resilience for the electricity system. Solar power spans two main technologies; solar thermal (primarily used to heat water) and solar PV (used to generate electricity). Both forms of solar are traditionally roof mounted, with options for ground mounted solar for larger arrays and unsuitable roof constructions. Large scale, ground mounted solar arrays provide a scalable solution for renewable energy generation.

The Scottish Government is keen to see the number of solar installations offering community benefits increase and we are working with the sector to consider an approach that is reflective of the sector position and delivers a lasting legacy for communities.

⁶⁷ [Map · Local Energy Scotland](#)

⁶⁸ [Energy Trends: UK renewables - GOV.UK](#): As at end Q2 2024

⁶⁹ [Renewable Energy Planning Database: quarterly extract - GOV.UK](#): As at end Q3 2024

3.2.3 Hydro power

Hydro power has the potential to play a significantly greater role in the energy transition – both at small-scale in co-operation with local communities, and at larger scale, providing flexible services to the grid and helping to ensure a continued resilient and secure electricity supply. There is currently 1.67 GW of installed hydro power capacity operational in Scotland⁷⁰.

Pumped hydro storage (PHS) is also a well-established technology with a long lifespan, and is a critical contributor to enabling security of supply and providing flexibility. There is currently 0.74 GW of installed PHS operational in Scotland with a further 3 GW of PHS projects awaiting construction⁷¹. According to a Biggar Economics report commissioned by Scottish Renewables⁷², six PHS projects currently in development in Scotland could potentially add 4.9 GW to the UK's pumped hydro storage capacity⁷³.

Projects like these can bring significant advantages to nearby communities. For example, SSE recently launched a new £10 million hydro community benefit fund⁷⁴, aimed at supporting projects within areas that host its existing hydro power infrastructure across Scotland.

3.2.4 Hydrogen

Alongside renewable electricity and low and zero emission heat networks, hydrogen will play an extremely important role in contributing to the decarbonisation of key parts of Scotland's domestic economy and energy system. Our ambition is to produce 5 GW of renewable and low carbon hydrogen by 2030, and 25 GW by 2045⁷⁵. We expect the majority of our 5 GW ambition by 2030 to come from renewables.

Establishing hydrogen production from onshore wind, and the development of regional hydrogen production hubs linked to offshore wind, will support achieving our ambitions. The opportunity for Scotland within the developing hydrogen market surpasses our borders and Scotland can play a role in exporting green hydrogen and hydrogen products to the rest of the UK and Europe.

The production and use of clean hydrogen is a new and emerging sector, and the Scottish Government is committed to ensuring that lessons learned, and best practise principles established, by mature energy sectors are applied as appropriate to this sector as it continues to develop.

⁷⁰ [Scottish Energy Statistics Hub: As at Q2 2024.](#)

⁷¹ [Renewable Energy Planning Database: quarterly extract - GOV.UK.](#)As at Q3 2024.

⁷² [Report: The Economic Impact of Pumped Storage Hydro \(scottishrenewables.com\)](#)

⁷³ [Microsoft Word - Economic Impact of Pumped Storage Hydro in the UK 5May23.docx \(scottishrenewables.com\)](#)

⁷⁴ [Hydro Community Fund | SSE Renewables](#)

⁷⁵ [Hydrogen action plan - gov.scot](#)

As an emerging sector, hydrogen projects are not explicitly mentioned in the current Good Practice Principles for onshore renewable energy developments. There are also no current examples of community benefits practice by the sector in Scotland.

3.2.5 Battery storage

Scotland currently has 453 MW of operational battery electricity storage systems (BESS) and 1.6 GW under construction with 7.4 GW awaiting construction⁷⁶.

As we move towards a net zero energy system, Scotland will need increasing levels of storage and flexibility to support greater diversity of demand and greater proportions of renewable and geographically distributed electricity generation. The National Electricity System Operator (NESO) Future Energy Scenarios (2024)⁷⁷ estimates that Scotland could need storage capacity in the range of 7.5 - 10 GW by 2030 and 11.2 - 17.5 GW by 2045. The modelling suggests that of this overall level, between 5.9 - 6.4 GW of (short duration) non-domestic battery storage could be required in Scotland by 2030, and between 6.4 - 7.6 GW by 2045.

Although BESS projects are not explicitly mentioned in the current Good Practice Principles for onshore renewable energy developments, there is currently a strong pipeline of BESS projects in Scotland with emerging proposals for community benefits⁷⁸.

Case study: The 9CC Group community benefit fund

The 9CC Group is a consortium comprising nine community councils in the Cumnock and Doon Valley area, established to become a dedicated single trust to manage, administer and distribute community benefits from newly consented and future wind farm developments in the area. The group also wanted to strengthen community participation.

The group believes that communities should have full control over the payments of community benefits to deliver long-term regeneration.

To date, the group has completed a Community Action Plan, managed a pilot funding round and awarded significant funding to transformative community projects across the nine areas.

3.2.6 Heat networks

The Scottish Government has a statutory target to see that heat networks⁷⁹ supply 7 TWh of Scotland's heat (and cooling) demand by 2035. The deployment of heat networks in Scotland is supported through our Heat Networks Support Unit, capital support through Scotland's Heat Network Fund and by resourcing local authorities to

⁷⁶ [Renewable Energy Planning Database: quarterly extract - GOV.UK](#)

⁷⁷ [Future Energy Scenarios \(FES\) | National Energy System Operator \(neso.energy\)](#)

⁷⁸ [Statkraft UK Greener Grid Parks community benefit funding](#)

⁷⁹ [Heat Networks \(Scotland\) Act 2021 \(legislation.gov.uk\)](#)

identify opportunities as part of their Local Heat and Energy Efficiency Strategies (LHEES).

We are also working with the UK Government to implement a new regulatory regime for heat networks, building on the powers within the Heat Networks (Scotland) Act 2021 and exploring the potential for new laws to encourage connections to heat networks where feasible.

There are a wide range of existing and potential ownership structures for heat networks in Scotland⁸⁰. This includes those owned by not-for-profit organisations where the profits must benefit the people within the local authority area.

The majority of large low and zero carbon district heating networks built in recent years have received funding from the Scotland Heat Network Fund and Low Carbon Infrastructure Transition Programme⁸¹, or the Renewable Heat Incentive (which closed to new applicants in March 2021). Due to the capital-intensive nature of these developments, it can take many years before profits arise from any project. This alongside the wide range of ownership models and a developing regulatory regime in Scotland and wider GB⁸² make a consistent expectation of heat networks in relation to community benefit, or shared ownership, difficult at this point. However, it is important for the benefit to the local community to be considered.

Heat networks are not covered by the current Good Practice Principles for onshore renewable energy developments.

3.2.7 Bioenergy

When using sustainably sourced material, bioenergy can convert organic material into a renewable energy source. The organic material, often referred to as biomass feedstock, can be processed to give a direct energy output, such as producing heat from combustion, or refined to produce a liquid biofuel or biogas.

The bioenergy sector is currently a vital part of Scotland's circular economy, generating value from waste and by-products. In 2023, bioenergy was responsible for 4,913 GWh of renewable heat generation, which was almost 88% of the renewable heat output⁸³. There was 2,124 GWh of renewable electricity generated from bioenergy and waste, around 6% of Scottish renewable electricity generation⁸⁴. The pipeline for bioenergy and waste projects has 486 MW of renewable electricity capacity in development⁸⁵.

The Scottish Government recognises that the use of, and demand for, bioenergy will evolve as new technologies, market opportunities and evidence develop. In our draft

⁸⁰ [Supporting documents - Heat Networks Delivery Models - gov.scot](#)

⁸¹ [Quarterly Heat Network Projects Reports list](#)

⁸² See UK Government consultations on regulatory regime to be introduced in April 2025 and expected consultations on Scottish regulations.

⁸³ [Scottish Energy Statistics Hub](#)

⁸⁴ [Energy Trends: UK renewables - GOV.UK](#): As of end Q2 2024

⁸⁵ [Renewable Energy Planning Database: quarterly extract - GOV.UK](#): As of end Q3 2024

Bioenergy Policy Statement⁸⁶, we have set out an expectation that in the longer term the bioenergy sector will transition away from unabated use, where possible, and Bioenergy with Carbon Capture and Storage (BECCS) will become the priority role. Bioenergy is not covered by the current Good Practice Principles for onshore renewable energy developments and there are no current examples of community benefits practised by the sector in Scotland.

3.2.8 Carbon Capture, Utilisation and Storage (CCUS) and Negative Emissions Technologies (NETs)

The Scottish Government views carbon capture, utilisation and storage as essential for capturing residual emissions in our energy system⁸⁷. CCUS will play a role in reducing emissions in industrial and other sectors that do not have an alternative decarbonisation pathway. CCUS is also a key enabler for Negative Emissions Technologies (NETs), which are critical for reaching net zero.

The Scottish Government remains supportive of these technologies as part of the energy transition and international efforts to decarbonise. We are committed to supporting the delivery of the Acorn Transport and Storage project⁸⁸ and the Scottish Cluster⁸⁹ which includes a range of CO₂ emitter sources.

CCUS is mostly reserved to the UK Government, with the Acorn project being part of the UK Government's Cluster Sequencing Programme⁹⁰. While there will be significant employment created and retained for the construction and operating phases of the Scottish Cluster (including Acorn), a significant proportion of the cost will be met from the public purse. Both of these points will need to be considered in the potential for community benefits.

At present there are no substantial Negative Emissions Technologies projects planned in Scotland that will drive the scale and pace needed for meeting net zero by 2045. NETs are dependent on suitable storage and so the market is not expected to develop until Acorn has been given some certainty by the UK Government. Again, NETs will need considerable support from the public purse, which would need to be considered in the potential for community benefits.

3.2.9 Electricity transmission

Development and expansion of the electricity grid will play a crucial role in delivering our energy ambitions, and grid capacity is needed to bring on renewable sources of electricity generation and further decarbonise our economy by transporting electricity to where it is needed.

The Scottish Government is clear that improvements to our electricity transmission networks must deliver lasting benefits for the people of Scotland, and we are working with the UK Government on plans for new guidance and funding framework for

⁸⁶ [Draft Bioenergy Policy Statement \(www.gov.scot\)](http://www.gov.scot)

⁸⁷ [Scottish whole energy system scenarios: context document - gov.scot \(www.gov.scot\)](http://www.gov.scot)

⁸⁸ [Acorn Projects | Carbon Capture, Transport & Storage, Hydrogen - The Acorn Project](#)

⁸⁹ [Scottish Cluster - The Acorn Project](#)

⁹⁰ [CCUS Cluster Sequencing Track-2: Market update December 2023 - GOV.UK](#)

community benefits from different types of transmission network infrastructure, such as overhead lines and substations.

Electricity transmission is not covered by the current Good Practice Principles for onshore renewable energy developments. Regulation and legislation relating to electricity networks is reserved to the UK Government and the regulator Ofgem.

The refresh of the Scottish Government's Good Practice Principles provides an opportunity to explore community benefits practice for transmission networks in Scotland, aligned with the forthcoming UK Government guidance.

3.3 Onshore consultation questions

3.3.1 Extending the scope of the Good Practice Principles

1. a) Which of the following onshore technologies should be in scope for the Good Practice Principles? Select all that apply.

Wind

Solar

Hydro power (including pumped hydro storage)

Hydrogen

Battery storage

Heat networks

Bioenergy

Carbon Capture, Utilisation and Storage (CCUS)

Negative Emissions Technologies (NETs)

Electricity transmission

Other – please specify in question 1b

1. b) Please explain your reasons for the technologies you have selected or not selected and provide evidence where available.
2. Should the same Good Practice Principles apply in a standard way across all the technologies selected, or should the Good Practice Principles be different for different technologies? Please explain the reasons for your answer and provide evidence where available.

3.3.2 Improving the Good Practice Principles

3. Do improvements need to be made to how eligible communities are identified? For example, changes to how communities are defined at a local level, and whether communities at a regional and/or national level could be eligible. Please explain your answer and provide supporting evidence if available.
4. Should more direction be provided on how and when to engage communities in community benefit opportunities, and when arrangements should take effect? Please explain your answer and provide evidence/examples of good practice where available.
5. How could the Good Practice Principles help ensure that community benefits schemes are governed well? For example, what is important for effective decision-making, management and delivery of community benefit arrangements? Please explain your answer and provide evidence/examples of good practice where available.
6. How could the Good Practice Principles better ensure that community benefits are used in ways that meet the needs and wishes of the community? For example, more direction on how community benefits should or should not be

used, including supporting local, regional or national priorities and development plans. Please explain your answer and provide evidence/examples of good practice where available.

7. What should the Good Practice Principles include on community benefit arrangements when the status of a new or operational energy project changes? For example, reviewing arrangements when a site is repowered or an extension is planned, or when a new project is developed or sold.
8. Should the Good Practice Principles provide direction on coordinating community benefit arrangements from multiple developments in the same or overlapping geographic area? If so, what could this include? Please explain your answer and provide evidence/examples of good practice where available.
9. What improvements could be made to how the delivery and outcomes of community benefit arrangements are measured and reported? For example, the Good Practice Principles encourage developers to record and report on their community benefit schemes in Scotland's Community Benefits and Shared Ownership Register. The register showcases community benefits provision across Scotland using a searchable map.
10. In addition to the Good Practice Principles, what further support could be provided to communities and onshore developers to get the most from community benefits? For example, what challenges do communities and onshore developers face when designing and implementing community benefits and how could these challenges be overcome? Please explain your answer and provide evidence/examples of good practice where available.

3.3.3 Setting a funding benchmark

11. Do you think that the Good Practice Principles should continue to recommend a benchmark value for community benefit funding? The current guidance recommends £5,000 per installed megawatt per year, index-linked (Consumer Price Index) for the operational lifetime of the energy project.

Yes

No

Don't know

12. a) Should the benchmark value be the same or different for different onshore technologies? Please explain your answer.
12. b) How could we ensure a benchmark value was fair and proportionate for different technologies? For example, the current benchmark for onshore is based on installed generation capacity but are there other measures that could be used? Please provide any evidence or data to support your preferred approach.

3.3.4 Assessing impacts of the Good Practice Principles

13. Are you aware of any likely positive or negative impacts of the Good Practice Principles on any protected characteristics or on any specific groups in Scotland, particularly: businesses; rural and island communities; or people on low-incomes or living in deprived areas? The Scottish Government is required to consider the impacts of proposed policies and strategic decisions in relation to equalities and particular societal groups and sectors. Please explain your answer and provide supporting evidence if available.

4. Responding to this Consultation

We are inviting responses to this consultation by 11 April 2025.

Please respond to this consultation using the Scottish Government's consultation hub, Citizen Space (<http://consult.gov.scot>). Access and respond to this consultation online at <https://consult.gov.scot/offshore-wind-directorate/community-benefits-net-zero-energy-developments>. You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of 11 April 2025.

If you are unable to respond using our consultation hub, please complete the Respondent Information Form to:

Email address:

communitybenefitsconsultation@gov.scot

Postal address:

Community Benefits
Offshore Wind Directorate
Scottish Government
5th Floor
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Handling your response

If you respond using the consultation hub, you will be directed to the About You page before submitting your response. Please indicate how you wish your response to be handled and, in particular, whether you are content for your response to be published. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under the Act for information relating to responses made to this consultation exercise.

If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form included in this document.

To find out how we handle your personal data, please see our privacy policy: <https://www.gov.scot/privacy/>

Next steps in the process

Where respondents have given permission for their response to be made public, and after we have checked that they contain no potentially defamatory material,

responses will be made available to the public at <http://consult.gov.scot>. If you use the consultation hub to respond, you will receive a copy of your response via email.

Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so. An analysis report will also be made available.

Comments and complaints

If you have any comments about how this consultation exercise has been conducted, please send them to the contact address above or at communitybenefitsconsultation@gov.scot

Scottish Government consultation process

Consultation is an essential part of the policymaking process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all our consultations online: <http://consult.gov.scot>. Each consultation details the issues under consideration, as well as a way for you to give us your views, either online, by email or by post.

Responses will be analysed and used as part of the decision making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review
- inform the development of a particular policy
- help decisions to be made between alternative policy proposals
- be used to finalise legislation before it is implemented

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

5. Glossary

Developer: A person or entity engaged in the design, construction and/or operation of newly developed renewable or low-carbon energy resources.

Community energy is the delivery of community-led energy projects, whether wholly owned and/or controlled by communities, or through partnerships with commercial or public sector partners.

Local energy is wide ranging, involving a range of different organisations (public, private, and community sector), who are delivering an energy service/project for the benefit of local people operating within a defined geographical area.

Community Wealth Building (CWB) is a people-centred approach to local economic development, which redirects wealth back into the local economy, and places control and benefits into the hands of local people.

Battery Energy Storage Systems (BESS): are rechargeable batteries that can store energy from different sources and discharge it when needed. BESS consists of one or more batteries and can be used to balance the electrical grid, provide backup power, and improve grid stability.

Bioenergy Carbon Capture and Storage (BECCS): BECCS is a Negative Emissions Technology (NETs) and, if proven at scale, would help achieve Scotland's net zero targets, compensating for residual emissions in hard-to-decarbonise sectors.

Carbon Capture, Utilisation and Storage (CCUS): CCUS encompasses the methods and technologies used to capture the carbon dioxide generated by large-scale energy intensive processes, such as power generation and industrial processes, and the transportation of the captured carbon dioxide for safe and permanent storage deep underground in a geological formation.

Constraints: When the electricity transmission system is unable to transmit power to match the location of demand, due to congestion at one or more parts of the transmission network, constraint management is needed.

Contract for Difference: Contractual agreement offered to a low carbon electricity generator by the UK Government owned Low Carbon Contracts Company (LCCC) through auction, which guarantees a set price for the electricity generated known as the strike price. Movements in the wholesale price of electricity see generators either paid a subsidy to match the higher price, or pay back surplus when the market falls below the strike price.

Electricity storage: Electricity can be stored in many ways. Several technologies are already utilised in our electricity system which balance out the intermittent nature of renewables, including grid scale battery storage, as well as pumped hydro storage.

Energy Generation: The production of electricity, heat, or usable fuel through the conversion of renewable sources, extraction and processing of fossil fuels or conversion of other primary sources of energy.

Energy Networks: A system of connected cables or pipes for transporting electricity or gas from the points of generation to the points of demand.

Grid-scale storage: Technologies connected to the power grid that can store energy and then supply it back to the grid at a more advantageous time – for example, at night, when no solar power is available, or during a weather event that disrupts electricity generation.

Heat Networks: Heat networks distribute heat or cooling from a central source or sources and deliver it to a variety of different customers such as public buildings, shops, offices, hospitals, universities and homes. By supplying multiple buildings, they avoid the need for individual boilers or electric heaters in every building.

Local Heat and Energy Efficiency Strategies (LHEES): These local strategies will underpin an area-based approach to heat and energy efficiency planning and delivery.

Long Duration Energy Storage (LDES): Technology which has the capacity to convert electricity to another form of energy and convert it back to electricity, supplying the grid with continuous power over several hours or longer. LDES Technologies include pumped hydro storage, liquid air energy storage, compressed air energy storage and hydrogen.

Low carbon / blue hydrogen: Hydrogen produced by reforming natural gas or biogas in conjunction with carbon capture and storage with high capture rates.

Negative Emissions Technologies (NETs): NETs are an emerging field of technologies that remove greenhouse gases from the atmosphere and, utilising carbon capture and storage, sequester them permanently. NETs can include forms of Direct Air Capture with Carbon Storage (DACCS), Bioenergy with Carbon Capture and Storage (BECCS) or other more experimental means such as enhanced weathering or biochar.

Net zero: Scotland has set a target to become ‘net zero’ by 2045. This means the amount of greenhouse gas emissions we put into the atmosphere and the amount we take out will balance, resulting in zero new emissions.

Pipeline: Electricity generation capacity, which is under construction, awaiting construction, or in planning.

Potential pipeline: Electricity generation capacity that is not yet in the official planning pipeline (in the Renewable Energy Planning Database), but where information is available, for example from renewable energy developers.

Pumped hydro storage (PHS): This is a well-established technology with a long lifespan and is a critical contributor to enabling security of supply and providing flexibility.

Renewable energy: Energy derived from replenishable sources such as solar or wind power, or sustainably sourced biomass.

Renewable / green hydrogen: Hydrogen produced using electrolysis of water, powered by renewable electricity. This is zero carbon.

Scottish Offshore Wind Energy Council (SOWEC): SOWEC is a partnership between the Scottish public sector and the offshore wind industry.

Short duration electricity storage: This describes technologies that can deploy electricity for one to four hours.

Solar PV: Solar PV (photovoltaics) are solar panels which capture the sun's energy and convert it into electricity.

Solar thermal: Solar thermal energy uses the sun's energy to heat primarily water.

Supply chain: A network between a company and its suppliers to produce and distribute a specific product to the final buyer. This network includes different activities, people, entities, information and resources. The supply chain also represents the steps it takes to get the product or service from its original state to the customer. 'Supply chain benefits' will refer to positive impacts arising from such a network.

Watts: Watts are a unit of power used to quantify the rate of energy transfer. A Kilowatt (KW) is equal to one thousand Watts. A Megawatt (MW) is equal to one million Watts. A Gigawatt (GW) is equal to one billion Watts. A Terawatt is equal to one trillion watts.

Watt hours: A Watt-hour is a unit of work or energy equivalent to the power of one watt operating for one hour. A kilowatt-hour is equal to one thousand watt-hours. A Megawatt-hour is equal to one million watt-hours. A Gigawatt-hour is equal to one billion watt-hours. A Terawatt-hour is equal to one trillion watt-hours.

Annex A – Key reports and sources

[A Fair Energy Deal for Scotland: Increasing Uptake of Community Shared Ownership Opportunities](#), Scottish Community Coalition on Energy, 2024

[An Evidence Based Approach to Supporting the Transition to Net Zero](#), Skills Development Scotland, 2023

[British Energy Security Strategy](#), UK Government, 2022

[Community Benefits for Electricity Transmission Network Infrastructure: Consultation](#), UK Government, 2023

[Community Benefits from Offshore Renewables: Good Practice Review](#), ClimateXChange, 2014

[Community benefits from onshore renewable energy developments](#), Scottish Government, 2019

[Contracts for Difference \(CfD\) Allocation Round 7: Clean Industry Bonus framework and guidance](#), UK Government, 2024

[Contracts for Difference Methodology used to set Administrative Strike Prices for CfD Allocation Round 6](#), UK Government, 2023

[Delivering Community Benefits from Land](#), Scottish Land Commission, 2023

[Delivering local benefit from offshore renewables](#), Regen, 2022

[Developing a new model to maximise local economic benefits from development in Moray and Highland Report](#), BiGGAR Economics, 2024

[Developing local partnerships for onshore wind in England: Consultation](#), UK Government, 2023

[Draft Bioenergy Policy Statement](#), Scottish Government, 2024

[Energy system and Just Transition: independent analysis](#), Scottish Government, 2023

[Future Energy Scenarios: ESO Pathways to Net Zero](#), National Energy System Operator, 2024

[Green Industrial Strategy](#), Scottish Government, 2024

[Guidance for developers, local communities & decision-makers: Local and shared ownership of energy projects in Wales](#), Welsh Government, 2022

[Heat Networks Delivery Models](#), Scottish Government, 2024

[Hydrogen action plan](#), Scottish Government, 2022

[Investor Panel: Mobilising international capital to finance the transition to Net Zero](#), Scottish Government, 2023

[Offshore Wind Focus](#), Scottish Government, 2024

[Offshore Wind Sector Deal](#), UK Government, 2020

[Onshore wind sector deal](#), Scottish Government, 2024

[Onshore wind: policy statement 2022](#), Scottish Government, 2022

[ORESS 1 Community Benefit Fund - Rulebook for Generators and Fund Administrators](#), Irish Government, 2023

[Power to the People: How to unlock energy infrastructure by securing community support](#), Onward, 2023

[Scottish Government Good Practice Principles for Community Benefits from Offshore Renewable Energy Developments](#), Scottish Government, 2018

[Scottish whole energy system scenarios](#), ClimateXChange, 2022

[Sectoral marine plan for offshore wind energy](#), Scottish Government, 2020

[Shared Ownership of Onshore Renewable Energy Developments](#), Scottish Government, 2019

[Supply Chain Development Statement – Summary](#), Crown Estate Scotland

[The Economic Impact of Pumped Storage Hydro, Scottish Renewables](#), BiGGAR Economics, 2023

[The Economic Impact of Scotland's Renewable Energy Sector](#), Fraser of Allander Institute, 2023

[Vattenfall Unlock Our Future Fund: Fund Evaluation and Review](#), Foundation Scotland, 2023



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