

## **ACCELERATING ONSHORE WIND**

Regen's priorities for the Onshore Wind Industry Taskforce

August 2024



## **EXECUTIVE SUMMARY**

# A FOCUS ON LOCAL COMMUNITIES AND PEOPLE

## **FOCUS AREA 1**

Improve community benefits

## **FOCUS AREA 2**

Get community engagement right

#### **FOCUS AREA 3**

Establish an offer of shared ownership as the norm

## **FOCUS AREA 4**

Support community-owned wind energy

## Click the actions above to read more

## **CONNECTING PROJECTS AT PACE**

#### **FOCUS AREA 1**

Reform grid connections and align with the Clean Power Plan

## **FOCUS AREA 2**

Support collaborative connections

## **REVENUE SUPPORT**

## **FOCUS AREA 1**

Create a stable market policy environment

## **FOCUS AREA 2**

Review revenue support mechanisms

## **REVENUE SUPPORT (cont.)**

#### **FOCUS AREA 3**

Introduce a targeted revenue support mechanism for community renewable energy projects

## **FOCUS AREA 4**

Improve access to long-term contracting and support the growth of the PPA market

## **FOCUS AREA 5**

**Encourage local energy supply** 

## **FOCUS AREA 6**

Reform network charging

Regen - August 2024

## REPOWERING AND LIFE EXTENSION

## **FOCUS AREA 1**

Establish a working group on repowering

## **FOCUS AREA 2**

**Ensure certainty on repowering** 

#### **FOCUS AREA 3**

Speed up life-extension

# FURTHER PLANNING REFORMS ON ONSHORE WIND

## **FOCUS AREA 1**

Implement spatial planning, regional planning and centralised data sharing

## **FOCUS AREA 2**

Address resourcing issues

## **FOCUS AREA 3**

Accelerate policy and provide greater certainty

## **FOCUS AREA 4**

**Encourage co-location** 

# CAPTURING THE BENEFITS AND SKILLS

#### **FOCUS AREA 1**

Provide greater certainty for the supply chain

## **FOCUS AREA 2**

Collaborate with industry, trade unions and workers to secure future green jobs for those in high-carbon sectors



## **CONTENTS**

The Onshore Wind Industry Taskforce	1
A focus on local communities and people	3
Connecting projects at pace	5
Revenue support	6
Repowering and life extension	9
Further planning reforms on onshore wind	11
Capturing the benefits and skills	13

## **ABOUT REGEN**

Regen provides independent, evidence-led insight and advice in support of our mission to transform the UK's energy system for a net-zero future.

We focus on analysing the systemic challenges of decarbonising power, heat and transport.

We know that a transformation of this scale will require engaging the whole of society in a just transition.



## **AIM OF THIS PAPER**

## This paper proposes key areas for the taskforce to address to accelerate onshore wind delivery.

We need another 16 GW of onshore wind to decarbonise the power system (based on the Holistic Transition Pathway from the ESO's 2024 Future Energy Scenarios). Generation at this scale will require projects across Great Britain, including English regions.

Developers and communities are responding to the removal of the effective ban on onshore wind by investigating potential onshore wind sites across England. We expect this to progress into grid connection requests and planning applications for a handful of large-scale wind farm proposals and many more small and community-based projects.

It remains the case, however, that English wind farm projects will be at a disadvantage because they will:

- Be at the back of a lengthy connection queue
- Have to rebuild a new pipeline of projects, gain community support and work through the planning system
- Have to reestablish supply chains, supply contracts and industry skills
- Still have to contend with a difficult planning environment,
   which will likely favour smaller, less cost-effective, projects.

Action is therefore needed to ensure that these projects can connect to the grid at pace. Electricity markets must be designed to attract investment and facilitate a renewables-based energy system. The planning regime must be updated to encourage deployment at new and existing sites. Revenue support models may need to be enhanced to achieve a faster and more consistent conversion of projects aligned with the new Strategic Spatial Energy Plan (SSEP) and Clean Power ambition. Perhaps most fundamentally, despite the need for speed, communities and people still need to be at the heart of developing onshore projects.

"Top of my list would be onshore wind. Finding a route to market for the cheapest renewable electricity technology, it would seem to me, to be the most important step that government could take in the short term"

**Chris Stark** 

## THE ONSHORE WIND INDUSTRY TASKFORCE

Doubling onshore wind by 2030 is a key part of the government's Clean Power Mission.

The Onshore Wind Industry Taskforce has been established to identify and deliver the actions needed to accelerate onshore wind deployment to 2030 and beyond, bringing together key organisations from government, industry, regulatory and other relevant bodies. The objectives of the taskforce are to:

- Unlock the barriers to deployment facing onshore wind developers: the taskforce will identify the financial, regulatory or policy challenges preventing the construction and operation of onshore wind projects efficiently and cost-effectively
- Ensure sustainability: the taskforce will consider the potential impacts that onshore wind projects can have on the local environment and broader electricity system
- Capture the benefits: as the sector grows, the taskforce will identify opportunities to facilitate continued cost reductions and ensure investment in UK supply chains, jobs, skills and innovation
- Commit to action: The taskforce will bring together the relevant bodies from across the system to establish consensus and agree on the actions needed to remove the barriers, ensure sustainability and capture the benefits.

## Actions ticked off in first 30 days

- ✓ Removal of footnotes 57 and 58 of the National Planning Policy Framework (NPPF)
- ✓ Consult on bringing large onshore proposals into the Nationally Significant Infrastructure Project (NSIP) regime to support quick determination, followed by a revised National Policy Statement
- ✓ Committed to publishing an update to the Community Benefits Protocol for Onshore Wind in England.

# Stalled deployment of onshore wind in England





## **Under or awaiting construction**

The project pipeline in England is small and mainly consists of single turbine projects, extensions to existing sites or upgrades to larger turbines.

This totals around 50 MW across 16 projects – less than a tenth of the capacity under or awaiting construction in Scotland and Wales.



Since the start of 2020 just two onshore wind sites have become operational in England, totalling 4.2 MW of generation capacity.

By comparison, over 110 MW of capacity has become operational in Scotland and Wales over this timeframe.

## A FOCUS ON LOCAL COMMUNITIES AND PEOPLE

Community support for new onshore wind projects will enable them to progress at pace. The taskforce should support best practice in community engagement and benefits, including community-owned and shared-ownership wind projects.

#### **FOCUS AREA 1**

## Improve community benefits

Meaningful community benefits are essential to local support for onshore wind projects. While traditional community benefit funds have provided resources for local initiatives, they sometimes fail to respond to the diverse needs and preferences of communities.

The taskforce should focus on measures to ensure developers are following best practice by promoting a range of community benefit options and ensuring that communities know how to make decisions on the appropriate form of benefits for their local area. Actions could include:

- An online, publicly accessible community benefits register to share best practice, hold developers accountable and inspire communities
- Providing support to communities to help them engage with developers on choosing appropriate local benefits for example through the Local Energy Hubs.

## **FOCUS AREA 2**

## Get community engagement right

The taskforce should focus on promoting best practice in community engagement – ensuring developers engage early, meaningfully and with the whole community.

There will also be a need to ensure that high-quality local engagement is maintained if more onshore wind schemes go through the NSIP route.

Focus areas should include:

- Reviewing guidance on community engagement to ensure that it is still fit for purpose and reflecting the latest developments in best practice, as well as considering how to ensure that the industry is following best practice
- Developing clear messaging on the planned pace and scale of onshore wind deployment to address public concerns about rapid landscape changes.

# Establish an offer of shared ownership as the norm

In 2015, the coalition government set an objective that it should be the norm for communities to be offered the opportunity to have some level of ownership of new commercially developed onshore renewable projects.

This objective was based on successful shared-ownership projects in the UK and examples from other countries. However, the Conservative government did not implement the suggested measures.

The Onshore Wind Taskforce should revisit the work of the 2014 Shared Ownership Taskforce that created a protocol as to how developers could make a genuine offer of an ownership share in large-scale renewable energy projects to the local community.

### **FOCUS AREA 4**

## **Support community-owned wind energy**

Community-owned wind projects empower local people, ensuring that they directly benefit from onshore wind development and help to increase public awareness of renewables and overall public support for onshore wind.

The taskforce should focus on how community-owned wind projects can be supported, looking to Scotland and Wales for learnings. Areas to consider could include:

- Continuing, expanding and easing access to the Community Energy Fund to fund community onshore wind project feasibility studies and early-stage development
- Providing additional policy support for community-owned projects, including updating Paragraph 161 of the NPPF to state that community-owned renewable energy applications should be given weight in planning
- Funding for a consistent and free pre-application advice service by local planning authorities to all community energy projects
- Providing access to low- or no-interest loans for community organisations constructing onshore wind projects.

## **CONNECTING PROJECTS AT PACE**

Critical to this challenge is ensuring that new projects can connect to the grid quickly and easily and at the capacity and volume needed to meet net zero.

## **FOCUS AREA 1**

# Reform grid connections and align with the Clean Power Plan

New onshore wind projects will join the back of the grid queue and may face a long wait to connect.

Ofgem and the National Energy System Operator (NESO) is leading a connections reform process with industry to move to a 'first ready, first ready' approach by early 2025, enabling ready-to-connect clean power projects to progress. Ofgem is also about to consult on an end-to-end review of connections.

The Onshore Wind Taskforce should work with Ofgem's Connections Delivery Board and NESO Connections Process Advisory Group, focusing on:

 Ensuring that the new connections process works effectively for distribution- and transmission-connected projects – engaging with ENA's Strategic Connections Group. This should include reforming how transmission reinforcement costs are passed down to distribution customers.

- Developing the next stage of connections reform aligning grid connections with the government's Clean Power Plan so that the right mix of technologies can access connections in due time and that onshore wind does not face long connection queues
- Engaging with Ofgem's end-to-end review of the connections process to ensure it sets clear standards for NESO and networks to meet in the connections process
- Developing proposals to bring forward connections for wind for example, through active network management, non-firm connection offers and shared connections.

## **FOCUS AREA 2**

## **Support collaborative connections**

There are significant opportunities for wind farms to collaborate across organisations and technologies, such as storage and solar PV, to share the cost and capacity of network connections. This can be done through co-location and shared connection agreements. Local supply models, with provisions for flexibility and demand response, could also encourage the development of energy clusters with generation, storage and demand.

## **REVENUE SUPPORT**

Evolving revenue support to bolster investment in onshore wind and reduce dependency on international gas prices is essential. This approach will help lower electricity bills and enhance energy security. By ensuring stable and predictable revenue for wind projects, we can attract more investment, drive innovation and accelerate the transition to a clean energy future.

## **FOCUS AREA 1**

## Create a stable market policy environment

Market reform is necessary to achieve the UK's net zero goals but also brings a risk for future investment. The taskforce should engage with the ongoing Review of Electricity Market Arrangements (REMA).

Regen's paper "A Progressive Market Reform Agenda" sets out our views on the next stage for market reform. A key recommendation from the paper is that the government could boost investor confidence and accelerate deployment by quickly ruling out the upheaval of moving to a radically different market design, such as a zonal market with centralised dispatch, which would create an unacceptable level of risk and hiatus for renewable projects.

Instead, the government should progress an agenda for progressive reforms within the existing decentralised national market. It should put greater emphasis on the use of flexibility, enhancing the balancing market, greater cross-border cooperation and the enhancement of

system and market operations through better forecasting and control room functions and investment in IT/digitalisation, automation and data transparency.

The taskforce could use its extensive investment and development expertise to work with the REMA team to robustly assess how market reforms could impact vital investor confidence as the pipeline for onshore wind in England starts to rebuild.

If the government did proceed with zonal pricing, the taskforce's role would be to maintain the momentum behind current and future investments. Existing projects would need 'grandfathered' connection, Power Purchase Agreement (PPA) and revenue support rights. New projects would need revenue protection, probably via deemed Contracts for Differences (CfDs) or a form of export guarantee. Smaller projects should be allowed to continue to have firm access rights and self-dispatch.

## Review revenue support mechanisms

The increase in the administrative strike price and budget allocation for CfD Allocation Round 6 (AR6) is welcome. It remains to be seen, however, whether onshore wind projects will receive the boost needed to accelerate deployment in line with the UK's clean power goals.

Using the results of AR6, the taskforce could launch a review of the CfD parameter setting for AR7 to AR9 and use this exercise to work with industry to fully understand the cost and non-financial barriers to onshore wind. The taskforce review could consider:

- A revision of budgets and administrative strike prices for future
   CfD allocation rounds
- Whether a regional CfD minima/pot is needed to encourage onshore wind projects in England and Wales in accordance with the SSEP
- The potential for shifting to a hurdle rate for CfDs a 'buy it now' price based on prices in AR6 to ensure value for money.

## **FOCUS AREA 3**

# Introduce a targeted revenue support mechanism for community renewable energy projects

Since the closure of the Feed-in-Tariff (FiT), community and local projects have struggled to access low-cost, long-term price support

like a CfD contract or PPAs. The Smart Export Guarantee (SEG), although similar to the FiT, is not set at a level, or for a long enough period, to raise finance or provide certainty of income.

The taskforce could seek to establish a community energy export guarantee or similar financial mechanism to provide a fixed price to community generators over a long period (>15 years).

## **FOCUS AREA 4**

# Improve access to long-term contracting and support the growth of the PPA market

PPAs are already widely used in the GB market and can provide the revenue security needed to enable developers to raise finance for investment in generation assets. However, their complexity and the need for long-term creditworthiness have limited their use to large corporations.

The taskforce could seek to encourage the use and development of long-term PPAs to support the financing of new onshore wind generation projects, as well as make it easier for local authorities and other sectors to access renewable energy. Encouraging corporations and public bodies to use PPAs more would provide greater market access for renewable energy projects.

This could be combined with a reform of the Renewable Energy Guarantees of Origin (REGO) accreditation and green tariff structure to incentivise energy supply companies to offer a range of PPAsupporting supply agreements and sleeving arrangements.

## **Encourage local energy supply**

Communities want to purchase local energy and should benefit from using more of that energy locally.

Enabling local energy supply models could not only increase community support and help unlock more economically viable projects but also provide valuable system benefits. Local supply and balancing models could help networks avoid reinforcement costs, manage network constraints and reduce transmission losses while allowing communities to benefit through the flexibility services they offer to the network operators.

There are now examples of successful local supply models, including the Local Energy Club model that has been trialled at several sites including Bethesda in North Wales, but a combination of commercial and regulatory challenges need to be addressed:

- Reforms to network charging that recognise the value of local energy supply
- Incentives to encourage energy supply companies to support local supply models
- Measures to support local and targeted 'Green Pools'/shared PPAs.

### **FOCUS AREA 6**

## **Reform network charging**

The taskforce should be a key stakeholder and evidence provider in the ongoing Ofgem-led programmes to reform upfront connection charges and ongoing transmission (TNUoS) and distribution (DUoS) network charging.

The delivery of charging reforms could significantly impact onshore wind developers. TNUoS charges already send very strong locational signals to encourage the development of projects in the south of England. Whether these charges will be effective as an investment signal remains uncertain. Previously developers have expressed concerns that TNUoS tariff forecasts are unreliable and that the TNUoS scheme and charging zones are subject to too much change and uncertainty to determine investment decisions.

Regen has recommended that TNUoS be reformed to provide greater forecast certainty and a forward-looking charge that is aligned with the SSEP.

## REPOWERING AND LIFE EXTENSION

Over 150 sites, totalling over 3 GW of capacity and more than 1,500 individual turbines, are expected to make repowering decisions by 2030. Getting repowering right is essential for ensuring that our overall onshore wind energy output does not decrease, and for maintaining the industry's reputation when developing new sites.

## **FOCUS AREA 1**

## Establish a working group on repowering

While repowering provides a significant opportunity for onshore wind, these sites face unique challenges. These can include the need for larger turbines due to turbine availability, viability concerns and changes in site conditions over time, including altered site access. Moreover, some sites have faced challenges with community opposition as communities were initially assured that wind farms would be dismantled after 25 years. A specialised working group can facilitate dialogue between developers, communities and policymakers to navigate these challenges, ensuring that repowering efforts are carried out quickly, transparently and with community support.

This working group should include representatives from the community sector and should explore the following:

- Lessons from projects that have been repowered
- How repowering can enhance community and environmental impacts. This should include consideration of how repowering can increase shared ownership, as <u>research</u> shows.
- Best practice in reusing and recycling turbines (to minimise any waste going to landfill)
- Getting the public messaging right on repowering.

## **FOCUS AREA 2**

## **Ensure certainty on repowering**

To date, local authority planners have faced challenges in making decisions on repowering due to the lack of policy detail and guidance for planners in England. There is also a need to explore if any financial incentives are needed for repowering.

The taskforce should work with DESNZ, DLUHC and local authority planners to ensure the following:

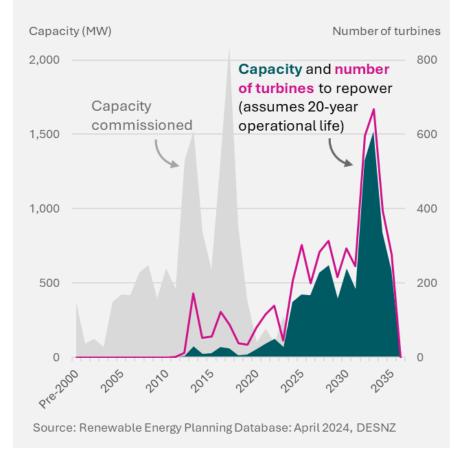
- The development of a more detailed repowering policy, including confirmation of the aspects that need to be given material consideration and detailed guidance on how local authorities should assess the change in visual impacts created by larger turbines. This should involve confirming the baseline on which repowering applications should be assessed.
- A supportive policy for repowering needs to provide details regarding what should be considered part of applications, including greater environmental enhancements and the option for different community benefits
- There should also be consideration of whether financial incentives are needed for repowering, such as a separate pot within the CfD mechanism.

## **FOCUS AREA 3**

## **Speed up life-extension**

Most of the oldest wind farms have 25-year planning consents, but infrastructure can often last longer. There should be a quick and certain consenting route for extending planning consents to keep the same infrastructure operational for longer (known as asset life extension). Cases such as blade length extensions or partial repowering, where parts of the infrastructure are being replaced, need to be considered. The taskforce should explore these issues to ensure that the consenting process is timely and appropriate.

# Over 400 MW of onshore wind capacity could be up for repowering each year between now and 2030 across the UK



ACCELERATING ONSHORE WIND

Regen – August 2024 10

## FURTHER PLANNING REFORMS ON ONSHORE WIND

Recent changes to England's onshore wind planning policy have been a positive step forward. However, further improvements to the planning system are necessary to fully realise the potential of onshore wind.

#### **FOCUS AREA 1**

# Implement spatial planning, regional planning and centralised data sharing

The creation of a national SSEP and Regional Energy System Plan (RESP) presents an opportunity (and a possible risk) for onshore wind.

The taskforce must ensure that national and regional spatial plans strike the right balance between determining the appropriate locations for onshore wind while allowing developers sufficient flexibility to optimise their siting decisions. Well-developed spatial plans, backed by regional stakeholders and with appropriate granularity, should provide a clear steer to wind developers and speed up planning applications.

The taskforce should also explore opportunities for spatial planning and centralised data sharing that would help to increase certainty in the planning process for onshore wind. This could include exploring ideas for priority areas for onshore wind comprising low-conflict

land, potentially with faster consenting routes. This could also involve exploring the potential for environmental data sharing at the national level or between projects to reduce the level of assessment needed for each project.

## **FOCUS AREA 2**

## Address resourcing issues

To ensure that any planning reform is impactful, the resourcing challenges facing the planning system must be addressed.

Challenges with recruiting and retaining planners in local planning authorities are significantly impacting the planning system across England, Wales and Scotland. The Onshore Wind Taskforce should undertake the following actions:

 Push to increase the target of hiring 300 new local authority planners to 1000 infrastructure-focused planners in England, with additional targets for Wales and Scotland

- Explore the potential for creating specialist renewable energy planner roles across local authorities, perhaps within Net Zero Hubs
- Develop a strategy for ensuring the appropriate resourcing of consultee bodies, whose input is vital for informed decisionmaking
- Work with government and industry to develop up-to-date guidance and training for decision-makers, as many will not have reviewed onshore wind projects for some time.

# Accelerate policy and provide greater certainty

At the time of writing, the government is consulting on introducing a threshold of 100 MW for onshore wind projects in England to go through the NSIP regime. The taskforce should ensure that any transitional arrangements are clear and that if changes to the threshold are made, they are reviewed. The taskforce should also explore opportunities for the planning systems across the UK to fast-track onshore wind applications.

## **FOCUS AREA 4**

## **Encourage co-location**

Co-location of onshore wind with complementary technologies such as battery storage or solar power can help to make the best use of available land, allow for better management of intermittent energy supply and increase the viability of projects. Planning policy could play an essential role in encouraging co-location. The taskforce should work with DLUHC on the following:

- Establishing a clear planning policy that supports project colocation and a simplified process to facilitate adding new technology to existing sites, e.g. adding battery storage to an existing wind farm
- Developing clear guidance for local authority planners on how to assess such applications.

## **CAPTURING THE BENEFITS AND SKILLS**

The transition is occurring amid fierce global competition for investment, materials and supply chains, intensifying delivery challenges and raising investment risks due to inherent uncertainties. However, it also creates a significant opportunity for investment, growth in green jobs and increased domestic capacity.

#### **FOCUS ACTION 1**

# Provide greater certainty for the supply chain

Greater certainty for the supply chain can lead to more investment, growth in green jobs and increased domestic capacity. A significant barrier to local supply chain development is the heavy reliance on imports for components like turbine blades, nacelles, towers, foundations and cables. Countries like Denmark, with established manufacturing capabilities, have lower import dependence, producing key components domestically. We encourage the taskforce to have specific supply chain working groups, ensure tier 1, 2 and 3 contractors use local suppliers and share good news stories, looking across the wider sector for examples.

## **FOCUS ACTION 2**

# Collaborate with industry, trade unions and workers to secure future green jobs for those in high-carbon sectors

The examples of Port Talbot in Wales and Grangemouth in Scotland show that action is required to enable a just transition for workers in high-carbon industries, including North Sea oil and gas. These workers and their communities need to be protected through the green transition, learning from previous unjust transitions, e.g. with coal in the 1980s and 90s.

We welcome the government's establishment of the Office for Clean Energy Jobs and ask the taskforce to expand on its remit by committing a proportion of the National Wealth Fund resource to a 'jobs guarantee', prioritising the transition of those in high-carbon industries to new green jobs and maximising supply chains in the UK.



## **OUR RECENT INSIGHT PAPERS**





