

PUBLIC CONSULTATION ON WICKLOW DRAFT COUNTY DEVELOPMENT PLAN

SSE Submission

August 2021

SSE SUBMISSION ON WICKLOW DRAFT COUNTY DEVELOPMENT PLAN

Introduction

SSE wishes to make this submission for consideration as part of the *Draft Wicklow County Development Plan (CDP)* consultation. SSE welcomes the publication of this draft and supports the central role that County Development Plans will play in implementing the National Planning Framework (NPF).

SSE welcomes the recognition given to climate action in Wicklow's draft CDP and the declaration of a climate emergency by the Council in April 2019. While, tackling the Covid-19 pandemic will continue to be our national priority, the climate emergency has not gone away. Delivering on the commitments of Ireland's Climate Action Plan and ensuring we are able to meet our Paris Agreement obligations are critical priorities. As we seek to move beyond the Covid-19 crisis, there is a need to ensure our economy is cleaner and more resilient. Investing in a green recovery has the potential to create thousands of sustainable jobs in County Wicklow and contribute to ensuring a Just Transition.

The preparation of a new County Development Plan provides an opportunity to ensure Co. Wicklow plays a leading role in contributing to our national climate goals.

Who we are

At SSE we're proud to make a difference. From small beginnings we've grown to become one of Ireland's largest energy providers, supplying green electricity and natural gas to over 700,000 homes and businesses on the island. We are driven by our purpose: to provide energy needed today while building a better world of energy for tomorrow.

Since entering the Irish energy market in 2008 we have invested significantly to grow our business here, with a total economic contribution of €3.8bn to Ireland's economy over the past five years. We own and operate 890MW of onshore wind capacity across the island. Our portfolio includes Ireland's largest onshore wind farm, the 174MW Galway Wind Park, which was jointly developed with Coillte.

As a leading developer of offshore wind energy in Great Britain, we believe offshore wind has the potential to transform Ireland's response to climate change. SSE is currently progressing the development of a consented offshore windfarm off the coast of Co. Wicklow - Arklow Bank Wind Park Phase 2. We also have plans to progress offshore wind projects at Braymore Point off the coast of Co. Louth and in the Celtic Sea off the coast of Waterford.

SSE are proud to be a Principal Partner for COP26 – the 26th United Nations Climate Change Conference of the Parties – where world leaders will be seeking a more ambitious climate change agreement. We look

forward to continuing to work with the UK government and other stakeholders to support the delivery of a successful and impactful COP in Glasgow in November.

Executive Summary

The preparation of a new County Development Plan (CDP) provides an opportunity to re-evaluate County Wicklow's planning policies and ensure Wicklow is at the forefront of our national decarbonisation efforts throughout this decade. European, national and local policy alignment will be critical to ensuring Ireland can deliver on the objectives of the Climate Action Plan and realise the ambition to reach net zero emissions by 2050. Action at a local authority level will be needed to secure the delivery of Climate Action Plan targets to deliver 5GW of offshore wind, complete 500,000 building retrofits and put 840,000 Electric Vehicles on the road by 2030. Our increasingly decarbonised electricity system will enable the decarbonisation of both heat and transport.

SSE welcome the initiative taken by the Council to declare a Climate and Biodiversity Emergency in April 2019. As highlighted by Wicklow County Council, this emergency requires action on climate adaption and mitigation. We also welcome the designation of Arklow Town as County Wicklow's first decarbonisation zone. Wicklow County and Arklow Town have the opportunity to lead the way on climate mitigation with offshore wind and Arklow Bank Wind Park Phase 2 which will power almost 450,000 homes annually, reduce Ireland's annual carbon emissions by around 1% and offset over half a million tonnes of carbon emissions each year¹.

Our submission focuses mainly on specific opportunities in relation to wind energy, security of supply, the decarbonisation of heat and transport.

Our recommendations can be summarised as follows:

Renewable electricity

- Offshore wind presents significant opportunities for County Wicklow. Integrated land and marine planning is essential to its development. Alignment between national, regional and local planning policies is of critical importance to all those involved in infrastructure development.
- SSE welcome the initiative taken by WCC to appoint consultants to assist the Council in delivering a Maritime Strategic Review for County Wicklow including establishing a strong offshore wind offering to ensure that County Wicklow takes maximum advantage of this emerging sector. We would welcome the opportunity to assist with this review.
- The consistent implementation of the Wind Energy Development Guidelines (WEDG) – a key piece of national policy currently under review - is of crucial importance to onshore wind. We would urge the Council to consistently implement the WEDG to ensure adherence with national policy.
- We recommend the SEAI Wind Atlas, or any similar general wind resource data, is not used as a constraint when identifying suitable areas for onshore wind in Wicklow's revised WES. We also recommend that existing grid constraints are not considered hard constraints.

¹ 33,829 homes powered based on projected capacity, typical projected wind load factor of 40%, and typical annual consumption (4,200kWh). Quoted 530,225 tonnes of carbon emissions abated based on projected annual MWh output and latest average CO2 Emissions (0.291t/MWh) in the All-Island Single Electricity Market, and published by the CRU in its Fuel Mix Disclosure and CO2 Emissions for 2018, September 2019.

Security of supply

- SSE would encourage Wicklow County Council to recognise the ongoing importance of security of supply in the CDP and the continued need for flexible, low carbon generation capacity.
- We also encourage the Council to recognise the importance of ensuring the continued use, reuse or repowering of existing infrastructure where appropriate to enable Ireland to meet its energy needs.
- Opportunities for shared CCS and hydrogen infrastructure to decarbonise conventional generation, industry and transport should also be supported.

Heat and transport

- Energy efficiency needs to be considered as an infrastructure priority. We recommend Wicklow's County Development Plan reflect Action 64 in the Climate Action Plan which seeks to increase the energy efficiency of Local Authority social housing stock.
- Spatial planning at a local authority level will be critical to drive the electrification of transport. Wicklow's CDP should go further than the policies currently outlined to identify areas where EV charge points could be installed and competitively tender for these assets.

We elaborate on these recommendations and provide supporting information in our representation below.

Renewable electricity – potential for offshore wind in Co. Wicklow

Offshore wind presents significant opportunities for County Wicklow, as acknowledged the draft CDP. The Programme for Government has set a 5GW offshore wind target by 2030. Projects along the East Coast will be critical to reaching this target and County Wicklow has the opportunity to lead the way with Arklow Bank Wind Park Phase 2. Wicklow has already established itself as a location for offshore wind and has an opportunity to build on this and reap significant economic rewards.

SSE welcome the initiative taken by WCC to appoint consultants to assist the Council in delivering a Maritime Strategic Review for County Wicklow including establishing a strong offshore wind offering to ensure that County Wicklow takes maximum advantage of this emerging sector. We would welcome the opportunity to assist with this review. There is significant potential to develop a thriving marine economy in County Wicklow.

The sustainable development of offshore wind can provide significant socio-economic opportunities for coastal communities like those in Co. Wicklow. The transformative impact of offshore wind is evident in the experience of our nearest neighbour. The UK's offshore renewable industry is fuelling vital investment in the domestic supply chain, building vibrant economies and supporting thousands of skilled jobs. While Ireland is a smaller and less mature market, we believe the potential benefits for Ireland's economic development are significant. According to the SEAI's Wind Energy Roadmap, onshore and offshore wind could create thousands of operation and maintenance jobs by 2040².

² SEAI Wind Energy Roadmap 2015: https://www.seai.ie/publications/Wind_Energy_Roadmap_2011-2050.pdf

Arklow Bank Wind Park Phase 2

Arklow Bank Wind Park Phase 2 will be located 6km to 13km off the coast of Arklow, Co. Wicklow. The 520MW project is the next phase of wind energy development at Arklow Bank which will power almost 450,000 homes annually, reduce Ireland's annual carbon emissions by around 1% and offset over half a million tonnes of carbon emissions each year. Subject to a RESS auction in 2021, SSE Renewables intends to commence construction on the Arklow Bank Wind Park Phase 2 in late 2022, in order to deliver the operational wind farm by 2025. In doing so it will kick start the offshore wind industry in Ireland, supporting the delivery of a green recovery for Ireland.

Arklow Bank Wind Park Phase 2 will also contribute significantly to Ireland's green economic recovery, delivering much needed jobs and investment. It will deliver €860 million gross value-added (GVA) to the island of Ireland, €430 million of which will be delivered to Wicklow and north Wexford directly. The project will create 10,500 FTE years nationally, 4,800 of which will be local. These figures are substantial, considering the project is being developed in a jurisdiction with limited experience in offshore wind, or any established supply chain. Indeed, Arklow Bank Wind Park as a front-runner project in the Irish Sea will act as an offshore wind test case for the State, for the grid and for Ireland's indigenous supply chain in the first half of this decade.

During construction and operation, we plan to support local businesses across South Wicklow and North Wexford, including companies in the supply chain in Wicklow Port and Arklow Harbour. We also plan to create around 80 full-time jobs to support the lifetime operation of the new offshore wind farm. These local jobs will be sustained over the lifespan of the wind farm and will be based out of a new purpose-built Operations Base at Arklow Harbour's South Dock.

Port infrastructure

Offshore wind will also provide opportunities in terms of onshore infrastructure and ports. We welcome CPO 9:22 which seeks to encourage and facilitate the development of offshore wind operation and maintenance bases which will create new opportunities for employment and skills development. As the East and South Coast of Ireland, is soon to be the heartland of offshore wind, we believe this area is ideally positioned for the development of a Centre of Excellence for training and development of crew and technicians to support the further development of the industry and associated supply chain.

SSE believes that offshore wind energy can act as an enabler to unlock new infrastructure investment in ports. Ireland's proposed Operations and Maintenance Facility (OMF) at Arklow Harbour will support the Council's plans to enable the renewal of the area and redefine the role of the harbour to deliver a mix of uses.

To realise these opportunities, integrated land and marine planning is essential. Alignment between national, regional and local planning policies is of critical importance to all those involved in infrastructure development. We welcome the inclusion of a CPO19.1 which states that WCC will work with the Department for Housing, Heritage and Local Government to implement the National Marine Planning Framework and the Marine Area Planning Bill once enacted.

Arklow Bank Operations and Maintenance Facility (OMF)

SSE Renewables is proposing to develop the facility at a disused site known as The Old Shipyard. Approximately 60 construction roles will be created during the delivery phase of the Operations and Maintenance Facility alone, and additional indirect supply chain roles are expected. Delivery of the planned OMF at Arklow Harbour's South Dock will require an expected investment of around €15 million.

Once complete, the building will accommodate around 80 full-time employees who will 'support the operation of the wind farm. These direct jobs will include site managers, supervisors, technicians, control room operators, engineers, vessel crew, stores and administration staff. The wider wind park project will also support thousands of indirect and induced jobs over the project's lifetime.

The purpose built, four-storey development for Arklow's South Dock has been designed to be a 'Nearly Zero Energy Building' (NZEB), meaning the building will operate to a very high energy performance. The facility will accommodate warehousing for wind turbine components, office and meeting space and staff welfare facilities.

Plans are also in place to provide a Sustainable Development Centre on the top floor overlooking the Harbour which will anchor the facility in the community and welcome visitors for educational tours, exhibitions and sustainability-themed events. Urban realm improvements are also planned for the site including landscaping and improved public lighting. These plans will complement Arklow's status as a decarbonisation zone.

SSE Renewables will lodge a planning application with Wicklow County Council later this Summer for the proposed development.

Grid

As the draft CDP highlights, in order to facilitate the expansion in electricity generation, particularly wind farms, the grid itself will require development and expansion. SSE support the inclusion of CPO 16.14, 16:15 and 16:19 which seek to support the development and expansion of the electricity transmission and distribution grid and facilitate the development of landing locations for offshore generated wind energy and for any cross channel power interconnectors.

SSE have submitted a planning application to An Bord Pleanála in relation to the proposed Onshore Grid Infrastructure. The application outlines proposals for a landfall point at Johnstown North as well as an underground cable route and 220kv substation at Avoca River Park. Both an Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in respect of the proposed development. A seven week public consultation closed on 24 June 2021. We await a decision from An Bord Pleanála.

Renewable electricity – onshore wind

With over 4,000MW installed, onshore wind is an Irish success story and an area of climate action where, as a country, we can claim to be a world leader. While Ireland ultimately achieved its 2020 renewable energy targets for electricity, we urgently need to continue our decarbonisation efforts if we are to meet the Climate Action Plan target of delivering 70% renewable electricity by 2030. The deployment of offshore wind and doubling Ireland's onshore wind capacity to 8.2GW are crucial to this. The decarbonisation of Ireland's electricity system will in turn decarbonise the built environment and transport through electrification and help put us on a pathway to reaching net zero emissions by 2050.

The benefits of onshore wind energy go beyond climate action. Wind energy generates economic benefits during construction and throughout the operational life of the development through rents payable to landowners, community benefit schemes, job creation and commercial rates payable to Local Authorities. We strongly believe in playing our part in contributing to the social, environmental and economic well-being of the communities surrounding all of our wind farms. One of the most important aspects of developing and operating wind farms is working with local people to deliver real benefits for their communities. SSE have awarded over €9 million to communities since we entered the Irish market in 2008 with €1.1m awarded in 2020/21.

A) Ensuring consistency with national policy

SSE would urge Council to ensure Wicklow's approach is consistent with the Wind Energy Development Guidelines. The consistent implementation of the Wind Energy Development Guidelines – a key piece of national policy currently under review - is of crucial importance to ensure the development of onshore wind in the county is not unnecessarily restricted. As a responsible developer, SSE is committed to best practice in developing our projects. The clear and consistent application of standards enable us to progress projects with confidence and will enable Co Wicklow to realise the investment benefits associated with renewables on a par with the rest of the country; unclear standards discourage investment and can result in protracted planning processes.

B) Wicklow's Wind Energy Strategy

SSE would highlight the following issues for consideration when Wicklow's Wind Energy Strategy is reviewed and updated.

Turbine technologies have advanced significantly in the past decade and this trend is set to continue. For this reason, we suggest the SEAI Wind Atlas, or any similar general wind resource data, is not used as a constraint when identifying suitable areas for onshore wind in Wicklow's future WES. Wind farm developers will carry out wind assessment studies before progressing an application to planning to ensure that a site is technically and commercially viable.

In addition, we recommend that existing grid constraints are not considered hard constraints when preparing WESs. Grid capacity is a technical and electrical engineering constraint that is managed by the

Eirgrid/ESB Networks and new infrastructure is generally provided on the basis of there being a need to connect permitted wind energy developments to the electricity grid; it is rarely proactively built out in anticipation of unpermitted projects. Both of these issues represent commercial and technical challenges for the wind farm developer to navigate and will stymie development if factored into the next iteration of Co. Wicklow's WES.

Developments in wind turbine technology are also relevant to the issuing of planning permissions. New turbine technologies can operate longer than those initially developed in the 1990s and 2000s. In addition, turbines are often outliving what was initially considered to be their projected lifespans. It is therefore necessary that new consents allow for 30-35 years operation at a minimum so as not to unnecessarily limit the operation of the development.

C) Repowering

Repowering will begin to emerge as a trend during the course of the next decade. Ireland has almost 4000MW of onshore wind generation currently. As highlighted above, wind turbines installed during the 1990s and 2000s were typically designed to operate for 20-25 years though many have been able to exceed this. As turbines near end-of-life, repowering or life extension provide an alternative to decommissioning that can provide a host of benefits. Installing modern technology on these sites can reduce the number of turbines, utilise existing connection infrastructure where possible, result in lower energy costs and prices, and increase our energy security.

Analysis by WEI in 2019 shows that by 2025, 422 MW (8% of today's installed capacity) will be 20 years or older. Looking ahead to 2030 and almost 1,400 MW (25% of today's installed capacity) will reach this age bracket. Ireland cannot afford to lose any MW from the system. Not facilitating repowering would be a missed opportunity for Ireland and would make the Government's ambitious target of 70 per cent renewable electricity by 2030 all the more challenging. Projects seeking to LTE or to repower in the mid to late 2020s will be considering options and will need to enter into the planning system in the coming years.

We recommend the Council include a policy to consider favourably the repowering and extension of existing windfarm developments where equipment is upgraded and/or replaced with the best available technology subject to development management standards and environmental considerations.

Recommendations – summary:

- Integrated land and marine planning is essential to the development of offshore wind. Alignment between national, regional and local planning policies is of critical importance to all those involved in infrastructure development.
- SSE welcome the initiative taken by WCC to appoint consultants to assist the Council in delivering a Maritime Strategic Review for County Wicklow including establishing a strong offshore wind offering to ensure that County Wicklow takes maximum advantage of this emerging sector. We would welcome the opportunity to assist with this review.

- The consistent implementation of the Wind Energy Development Guidelines – a key piece of national policy currently under review - is of crucial importance. We would urge the council to not go beyond what is required by the WEDG to ensure compliance with national policy.
- SSE recommend the SEAI Wind Atlas, or any similar general wind resource data, is not used as a constraint when identifying suitable areas for onshore wind in Wicklow’s revised WES. We also recommend that existing grid constraints are not considered hard constraints.
- New consents need to allow for 30-35 years operation at a minimum so as not to unnecessarily limit operations and ensure developers are able to build a strong business case at the outset.
- We recommend the Council include a policy to favourably consider the repowering and extension of existing windfarm developments where equipment is upgraded to the best available technology subject to development management standards and environmental considerations.

Security of supply

European environmental policies including the Industrial Emissions Directive are necessitating a move away from traditional fossil fuel powered stations. As Ireland’s largest renewable energy developer with 29 onshore wind farms in Ireland and plans to develop Ireland’s first large-scale offshore wind farm, we are leading the way in seeking to help grow Ireland’s renewable energy share. While the increase in renewables is necessary and to be strongly welcomed, flexible, thermal generation which can provide low carbon, efficient baseload power will continue to be required. It is needed to provide system stability and to support a renewables-led transition, for example when demand is high and wind or solar generation is low. Ireland’s Single Electricity Market has signals to ensure renewable generation is dispatched first and ensure sufficient volume of capacity is procured to meet security of supply through the Capacity Market.

EirGrid’s Generation Capacity Statement 2020-2029 examines electricity demand and supply over this decade. In the 2020s, electricity demand in Ireland is forecast to increase significantly (between 17-50%), due to the expected expansion of many large energy users. Even with the delivery of the new North-South Interconnector - a crucial piece of infrastructure - the All-Island system is forecast to start to see deficits (i.e. more demand than generation) from 2026 in certain scenarios. From 2028 there are deficits in six of the eight scenarios modelled³. While the study only goes as far as 2029, it highlights the potential challenges Ireland’s electricity system may face in the 2030s and the importance of efficient, low-carbon dispatchable generation to ensure security of supply.

It remains to be seen how policy and market signals for thermal generation in Ireland will develop. We may see opportunities for Carbon Capture and Storage (CCS) or Hydrogen emerge over time to decarbonise new and existing thermal stations. The Programme for Government commits to investing in research and development in “green” hydrogen as a fuel for power generation, manufacturing, energy storage and transport. Although plans are at an early stage, shared CCS and Hydrogen infrastructure could be an enabler for decarbonising power, industry and transport (including the maritime sector) and is an opportunity to consider including in Wicklow’s CDP.

³ EirGrid, Generation Capacity Statement 2020-2029: <https://www.eirgridgroup.com/site-files/library/EirGrid/All-Island-Generation-Capacity-Statement-2020-2029.pdf>

Recommendation:

- SSE would encourage Wicklow County Council to recognise the ongoing importance of security of supply in the County Development Plan and the continued need for flexible, low carbon generation capacity on the Irish grid.
- We would also encourage Wicklow County Council to recognise the importance of ensuring the continued use, reuse or repowering of existing infrastructure where appropriate to allow Ireland to enable Ireland to meet its energy needs.
- Opportunities for shared CCS and hydrogen infrastructure to decarbonise conventional generation, industry and transport should also be supported.

Energy efficiency and the electrification of heat

SSE believes that energy efficiency should be seen as an infrastructure priority in Wicklow's County Development Plan. Energy efficiency not only helps Ireland achieve its climate action objectives, it also reduces energy bills and improves health and social inclusion. It can also help create jobs and drive a green recovery as emphasised in the Programme for Government. The Climate Action Plan contains ambitious plans to improve energy efficiency and drive the electrification of Ireland's housing stock with 500,000 deep retrofits planned. SSE believes that energy efficiency in combination with the electrification of heat will lead the way in realising Ireland's decarbonisation potential. We welcome the ambitious plans for heat pump installation in the Climate Action Plan.

A partnership approach and continued collaboration between energy suppliers, the SEAI and local authorities will be vital given the scale of energy savings required in the next decade. SSE participate in the SEAI's Energy Efficiency Obligation Scheme and can assist Wicklow County Council in delivering energy efficiency improvements. We are proud of the work we have undertaken to date and look forward to continuing this as part our 'one-stop-shop' for energy efficiency which we recently launched in partnership with An Post⁴. We believe our 'one-stop-shop' solution can lead the way in achieving the national retrofit programme ambition to deliver 500,000 deep retrofits by 2030. Our aim is to provide a solution that addresses key barriers to retrofit such as complexity, consumer hesitance and access to finance. SSE believe our new partnership with An Post can unlock demand for energy efficiency measures and kickstart activity this year and next.

SSE recommend Wicklow's County Development Plan reflect Action 64 in the Climate Action Plan which seeks to increase the energy efficiency of Local Authority social housing stock. We would encourage the Council to work with SEAI and obligated energy suppliers to target local authority housing stock and competitively tender for the delivery of deep retrofit works to ensure high quality and cost-effective outcomes.

⁴ <https://www.anpost.com/Green-Hub/Home-Energy-Upgrade-Service>

Recommendation:

- Energy efficiency needs to be considered as an infrastructure priority. We recommend Wicklow's County Development Plan reflect Action 64 in the Climate Action Plan which seeks to increase the energy efficiency of Local Authority social housing stock.

Electrification of transport

Transport as a sector is the most significant contributor to our national Green House Gas (GHG) emissions. Sustainable transport policies are of particular importance given the predominance of private cars. Encouraging a modal shift towards public transport and cycling is key alongside the electrification of transport. The Government's Climate Action Plan aims to develop the EV charging network necessary to support the growth of EVs to at least 800,000 by 2030 and sets a target for the supply of infrastructure to stay sufficiently ahead of demand.

We welcome the inclusion of CPO 16.26 in Wicklow's draft CDP which supports the growth in the use of EVs and EV charging infrastructure. The deployment of targeted electric vehicle charging infrastructure across the county will be vital to meet the changing needs of commuters.

Recommendation:

- Spatial planning at a local authority level will be critical to drive the electrification of transport. Wicklow's CDP should go further than the policies currently outlined to identify areas where EV charge points could be installed and competitively tender for these assets.

Conclusion

As the country begins to realign its focus with the European Green Deal, and the 2050 target of achieving net-zero greenhouse gas emissions, the preparation of a new County Development Plan provides a unique opportunity to consider the potential of Co. Wicklow into the future and its role in supporting overarching national goals. The Wicklow CDP is an opportunity to define the focus of future investments in the County and to ensure that employment opportunities and the services needed to support them will be delivered. The implementation of Project Ireland 2040 and the Climate Action Plan can deliver a long-term strategic planning and economic framework for the development of the County.

SSE is available to discuss any aspect of our response if that would be helpful to Wicklow County Council.