

# Enduring Connection Policy 2.3

## Solar and Wind Constraints Report: Results for Area E

Version 1.1

05/04/24



### Revision History

Revision	Date	Description
V1.1	05.04.2024	Results have been updated to reflect the modifications made to the installed capacity within the analysis.

COPYRIGHT © EirGrid

All rights reserved. No part of this work may be modified or reproduced or copied in any form or by means - graphic, electronic or mechanical, including photocopying, recording, taping or information and retrieval system, or used for any purpose other than its designated purpose, without the written permission of EirGrid.

# Disclaimer

EirGrid has followed accepted industry practice in the collection and analysis of data available. While all reasonable care has been taken in the preparation of this data, EirGrid is not responsible for any loss that may be attributed to the use of this information. Prior to taking business decisions, interested parties are advised to seek separate and independent opinion in relation to the matters covered by this report and should not rely solely upon data and information contained herein. Information in this document does not amount to a recommendation in respect of any possible investment. This document does not purport to contain all the information that a prospective investor or participant in the Single Electricity Market may need.

For queries relating to the document or to request a copy contact:

[info@eirgrid.com](mailto:info@eirgrid.com)

## Copyright Notice

All rights reserved. This entire publication is subject to the laws of copyright. This publication may not be reproduced or transmitted in any form or by any means, electronic or manual, including photocopying without the prior written permission of the TSOs.

©EirGrid Plc. 2024

The Oval, 160 Shelbourne Road, Ballsbridge, Dublin 4, D04 FW28, Ireland

# Table of Contents

Disclaimer	3
Document Structure	6
Important Note	7
<b>1 Results for Area E</b>	<b>8</b>
1.1 Introduction	8
1.2 Study Notes	8
1.2.1 Network Outages	8
1.2.2 Benefit of Capacity Factor	8
1.2.3 Notes on Surplus, Curtailment and Constraint Modelling	8
1.3 Generation Overview	10
1.4 Network Overview	12
1.5 Future Grid Sensitivity Scenario	13
1.6 Area E - Average Results	13
1.6.1 Offshore Wind Sensitivity Studies	13
1.6.2 Impact of Article 12 and 13	13
1.6.3 Future Grid Sensitivity Study	14
1.6.4 Area Subgroups	14
1.7 Conclusion - Results for Area E	23
<b>2 Area E Node Results</b>	<b>24</b>
2.1 Athea	25
2.2 Ballinknockane	28
2.3 Ballyvouskil 220 kV	30
2.4 Boggeragh	33
2.5 Charleville	37
2.6 Clahane	40
2.7 Cloghboola	43
2.8 Coomagearlahy	45
2.9 Coomataggart	48
2.10 Cordal	50
2.11 Dromada	52
2.12 Drombeg	54
2.13 Garrow	57
2.14 Glanlee	59

2.15	Glenlara	61
2.16	Glenlara 220kv side	63
2.17	Kilpaddoge	66
2.18	Knockacummer	68
2.19	Knockearagh	70
2.20	Limerick	73
2.21	Mallow	76
2.22	Moneypoint	78
2.23	Moneypoint 220 kV	80
2.24	Oughtragh	82
2.25	Rathkeale	85
2.26	Reamore	87
2.27	Tralee	90
2.28	Trien	93
2.29	Trien 220 kV side	95

# Document Structure

This document is for customers wishing to see the estimated Total Dispatch Down for Area E. For information on the study assumptions, methodology, abbreviations and terms used for the Constraint Analysis reports, please see the area non-specific Assumptions and Methodology report found on the ECP-2.3 webpage<sup>1</sup>.

This document contains two main sections:

**Section 1: Results for Area E:** outlines the area covered by this report. This section provides a network diagram of Area E and an overview of the results for Area E.

**Section 2: Area E Node Results:** provides a table of results for every node in the area. This table documents the installed capacity, available energy, surplus, curtailment and constraint for every node in Area E.

---

<sup>1</sup> <https://www.eirgridgroup.com/customer-and-industry/general-customer-information/ecp-2.3-constraint-report/index.xml>

# Important Note

This ECP-2.3 constraints report presents an estimate of the reduction in available solar and wind generation based on the study assumptions described. The reduction in available generation has been split into three categories for the purposes of this study: surplus, curtailment and constraint.

The treatment of renewable generation under these three categories of generation reduction will be determined by the implementation of Articles 12 and 13 of the EU Regulation 2019/943<sup>2</sup>.

The SEMC decision on the 22<sup>nd</sup> of March 2022<sup>3</sup> (SEM-22-009 Decision Paper on Dispatch, Redispatch and Compensation Pursuant to Regulation EU 2019/943) has been successfully challenged in the High Court ([2023] IEHC 629). Therefore, the detailed design of the implementation of Articles 12 and 13 has yet to be finalised, and may differ from the implementation for constraints used in this study. Therefore, an assumed interpretation has been included in this study, as detailed in this report.

This report uses the term “Total Dispatch Down” to refer to the total reduction in available solar and wind generation i.e. the sum of surplus, curtailment and constraint, and is considered the key indicator for the results. However, it is important to note that the term “dispatch down” is more correctly applicable only to TSO instructions to reduce generation output from a market position, as is the case for curtailment and constraint, and is not necessarily applicable to a generator reducing its own output from its availability to a market position so that supply and demand are balanced, as is the case for surplus.

The term “non-priority” and “not-priority” generators are used synonymously in the report.

The results presented in this report are based on the simulation and modelling assumptions described. The findings are indicative only and this report should in no way be read as a guarantee as to future levels of surplus, curtailment and constraint.

For wind and solar generation, values of Total Dispatch Down that are less than 5% are rounded up to 5% by adjusting the constraints for that generator. This is consistent with the approach used in the ECP-2.1 and ECP-2.2 constraints reports. However, in the ECP-2.3 constraints report, this adjustment to constraints is applied only to non-priority generation and not to priority generation.

---

<sup>2</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0943&from=NL>

<sup>3</sup> <https://www.semcommittee.com/publications/sem-22-009-decision-paper-dispatch-redispatch-and-compensation-pursuant-regulation-eu>

# 1 Results for Area E

## 1.1 Introduction

This section provides the surplus, curtailment and constraint results for Area E that are estimated by this analysis. There is a total of eight core ECP-2.3 studies and seven sensitivity studies (including without maintenance) presented in this report. The study scenarios and the associated assumptions can be found in the Assumptions and Methodology report. An overview and discussion of the results is provided in this Section. The surplus, curtailment and constraint results for each node in Area E are provided in Section 2 of this report.

## 1.2 Study Notes

A list of the major study assumptions is provided in the Assumptions and Methodology report. For Area E, there are a number of key assumptions which drive the results, including network outages and capacity factors. These are thus reiterated here. Similarly, it is worth highlighting again the differences between the various components of Total Dispatch Down.

### 1.2.1 Network Outages

The scenarios in this report are intended to give a view of average long-term levels of surplus, curtailment and constraint, subject to installed generation, demand, interconnection, operational constraints and reinforcement delivery.

The ECP-2.3 constraints forecast analysis applies a similar transmission outage schedule to the ECP-2.2 constraints analysis. This was kept consistent with last year's schedule following positive feedback from industry. This schedule allows a representation of outage impact in each geographical area to be included in the studies.

This representative transmission outage schedule is given in Appendix A of the Assumptions and Methodology report. However, at times, longer duration outages may be required for certain connections, reinforcement works or forced outages, these are not considered in this analysis and may result in higher wind and solar constraints.

### 1.2.2 Benefit of Capacity Factor

In practice, a specific windfarm may be located at a site with higher wind speeds or may have a better performing type of wind turbine; the result is a higher capacity factor than neighbouring windfarms. This report does not reflect this localised diversity between windfarm sites. In reality, a windfarm with a higher capacity factor may see lower percentage surplus, curtailment or constraint levels than an adjacent windfarm with a lower capacity factor. This is because at times of medium or low wind speed, the high-capacity factor windfarm can generate power when the low-capacity factor windfarm cannot.

### 1.2.3 Notes on Surplus, Curtailment and Constraint Modelling

#### 1.2.3.1 Surplus

During generation reduction for surplus, a distinction is made between the treatment of priority and non-priority renewable generators, with non-priority generators being dispatched down ahead of priority generators. Within these two categories of generation, surplus is applied pro-rata across the all-island system for all renewable generators in the category.

For any hour of the study, the surplus level will depend on system demand and interconnector flow capacity. In general, surplus is expected to increase with increasing installed renewable capacity.



It is expected that the further interconnection of the all-Ireland network with mainland UK and Europe will decrease the frequency of surplus conditions occurring.

In general, increased interconnector capacity with mainland UK through the EWIC & LirIC projects will not necessarily eliminate surplus generation as solar and wind profiles in mainland UK will largely be in line with those in Ireland. In the Future Grid study year however, when both the Celtic and 2<sup>nd</sup> Ireland-France interconnectors are connected, there will be a greater export capacity during times of abundant renewable generation to mainland Europe where similar wind and solar generation in Ireland and mainland Europe is not expected.

Therefore, dispatch down due to surplus generation is not expected to occur as frequently once both the Celtic and 2<sup>nd</sup> Ireland-France interconnectors are connected.

#### 1.2.3.2 Curtailment

In this report, for each hour of the study, the curtailment is shared pro-rata on a system-wide basis with no distinction made between priority and non-priority generators. This means that both curtailment reductions and curtailment increases are shared system wide.

Solar generation has different reported levels of curtailment compared to wind due to different capacity factors and annual profile shapes.

The applied curtailment is broadly constant across the system. However, due to differences in wind and solar profiles and capacity factors between areas, the percentage average curtailment differs between areas.

#### 1.2.3.3 Constraints

During the constraint of renewable generation, a distinction is made between priority and non-priority generators, with non-priority generators being dispatched down ahead of priority generators across the relevant transmission nodes within the subgroup. More details on the approach assumed in this study for the application of constraints on priority and non-priority renewable generation can be found in the main ECP 2.3 Assumptions and Methodology report.

In general, there is a tendency for renewable bulk power to flow towards the demand in Dublin and the interconnectors. These flow patterns are relevant when seeking to understand constraint apportionment in the simulation.

When presented as percentage values, the constraint results look different for solar and wind, as they have a low correlation due to different profile shapes driven by weather patterns.

## 1.3 Generation Overview

A detailed system-level overview of the renewable generation scenarios used in these studies is given in Section 2 of the area non-specific Assumptions and Methodology report. The distribution of generation in each scenario based on technology, area and node is given in Appendix B of the Assumptions and Methodology report. The node-level installed wind and solar generation for Area E in the “ECP” scenario is given in Table 1-1.

Node	SO	Status	Solar	Wind
<b>Athea</b>	TSO	connected		23
<b>Athea</b>	TSO	connected		34
<b>Ballinknockane</b>	TSO	due to connect	50	
<b>Ballyvouskil 220</b>	TSO	due to connect	13	
<b>Ballyvouskil 220</b>	TSO	due to connect		42
<b>Boggeragh</b>	TSO	due to connect	12	
<b>Boggeragh</b>	DSO	connected		17
<b>Boggeragh</b>	DSO	due to connect		3
<b>Boggeragh</b>	DSO	connected		26
<b>Boggeragh</b>	TSO	connected		123
<b>Charleville</b>	TSO	due to connect	120	
<b>Charleville</b>	DSO	connected		51
<b>Charleville</b>	DSO	connected		18
<b>Clahane</b>	TSO	due to connect	34	
<b>Clahane</b>	TSO	connected		52
<b>Cloghboola</b>	DSO	connected		55
<b>Cloghboola</b>	TSO	connected		46
<b>Coomagearlahy</b>	TSO	due to connect	7	
<b>Coomagearlahy</b>	TSO	connected		81
<b>Coomataggart</b>	DSO	connected		43
<b>Coomataggart</b>	TSO	connected		114
<b>Cordal</b>	DSO	connected		58
<b>Cordal</b>	TSO	connected		90
<b>Dromada</b>	TSO	connected		28
<b>Drombeg</b>	TSO	due to connect	94	
<b>Drombeg</b>	DSO	due to connect		25
<b>Garrow</b>	DSO	connected		10
<b>Garrow</b>	TSO	connected		59
<b>Garrow</b>	DSO	connected		5
<b>Glanlee</b>	TSO	connected		30
<b>Glenlara</b>	DSO	connected	5	
<b>Glenlara</b>	DSO	due to connect	5	
<b>Glenlara 220Kv Side</b>	DSO	connected		14
<b>Glenlara</b>	DSO	connected		26
<b>Glenlara 220Kv Side</b>	DSO	connected		27
<b>Kilpaddoge</b>	DSO	connected		18
<b>Kilpaddoge</b>	TSO	connected		42
<b>Knockacummer</b>	TSO	connected		100
<b>Knockearagh</b>	DSO	due to connect	9	
<b>Knockearagh</b>	DSO	connected		9
<b>Knockearagh</b>	DSO	connected		4
<b>Limerick</b>	DSO	due to connect	11	
<b>Limerick</b>	DSO	due to connect		5

<b>Mallow</b>	DSO	due to connect	10	
<b>Moneypoint 220Kv</b>	TSO	due to connect		450
<b>Moneypoint</b>	TSO	connected		17
<b>Oughtragh</b>	DSO	due to connect	8	
<b>Oughtragh</b>	DSO	connected		9
<b>Drombeg</b>	TSO	due to connect		50
<b>Rathkeale</b>	DSO	connected		28
<b>Rathkeale</b>	DSO	connected		5
<b>Reamore</b>	DSO	due to connect		30
<b>Reamore</b>	DSO	connected		58
<b>Reamore</b>	DSO	connected		2
<b>Tralee</b>	DSO	due to connect	14	
<b>Tralee</b>	DSO	connected		15
<b>Tralee</b>	DSO	connected		33
<b>Trien</b>	DSO	due to connect	9	
<b>Trien 220Kv Side</b>	DSO	connected		7
<b>Trien</b>	DSO	connected		8
<b>Trien 220Kv Side</b>	DSO	connected		40
<b>Trien</b>	DSO	connected		19
<b>Total</b>			401	2049

*Table 1-1 Wind and Solar Generation Summary in Area E for Generation Scenario “ECP”*

Table 1-2 and Table 1-3 show installed solar and wind generation for Ireland and Area E, and the available solar and wind generation for Area E for each generation scenario.

Solar	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
<b>Installed Ireland (MW)</b>	1563	3052	4542	6031	6031	6031
<b>Installed Area E (MW)</b>	162	242	321	401	401	401
<b>Installed Controllable Area E (MW)</b>	162	242	321	401	401	401
<b>Available Controllable Area E (GWh)</b>	190	283	377	470	470	470

*Table 1-2- Installed MW and Available GWh for Area E - Solar*

Wind	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
<b>Installed Ireland (MW)</b>	5144	5734	6324	6913	9987	11913
<b>Installed Area E (MW)</b>	1493	1528	1563	1598	2048	2048
<b>Installed Controllable Area E (MW)</b>	1407	1442	1477	1512	1962	1962
<b>Available Controllable Area E (GWh)</b>	4583	4697	4811	4894	6884	6884

*Table 1-3 - Installed MW and Available GWh for Area E - Wind*

## 1.4 Network Overview

Area E, in the southwest of the country includes a mix of wind and solar generation. A summary of this generation is given in Table 1.1.

The transmission network in Area E and the surrounding area is shown in Figure 1-1. The 220 kV circuits are shown in green and the 110 kV circuits in black. Possible future transmission stations and lines for the connection of new generation are also shown on the map below.



Figure 1-1 Network Map for Area E

At times of high renewable generation, there is a net export of power from Area E, and the dominant power flows tend to be from Area E towards the load centres on the east coast and the interconnectors. These flow patterns are relevant when seeking to understand constraint apportionment in the simulation.

Constraints in Area E can be caused both by local and wider system issues. Constraints in the model are optimised on a system-wide basis so, in theory, an increase in the installed generation in another area can increase constraints in Area E.

Also, the power flowing out of Area E meets and joins with power flows from other areas, as the power flows towards the demand centres and interconnectors. A transmission bottleneck between Area E and the east is shared with power flows coming from other areas.

With the addition of the Celtic interconnector in 2028 and the Future Grid horizons, during high renewable scenarios the power flow changes and flows towards the interconnector connected at Knockraha.

## 1.5 Future Grid Sensitivity Scenario

In line with the ECP-2.1 and ECP-2.2 studies, and in response to feedback from industry, the Future Grid scenario is included in the analysis. All reasonable efforts have been made to align the network assumptions in the Future Grid scenario to the Shaping Our Electricity Future (SOEF) 1.1 Roadmap. The network projects included in the study are given in Appendix A of the Assumptions and Methodology report found on the ECP-2.3 webpage. Additionally, any project that has progressed to stage three of the six stage project planning process after the publication of the SOEF 1.1 Roadmap are also included in the Future Grid studies. Note however, that the wind and solar generation portfolio in the ECP-2.3 Future Grid scenario differs from the wind and solar portfolio considered in the SOEF 1.1 Roadmap. This is done to maintain alignment with the ECP-2.3 process. The ECP study scenario includes all wind and solar projects which have applied through connection processes, whereas the SOEF 1.1 study includes generators up to and including ECP-2.3 applicants and then scaled renewable generation capacity to achieve the capacity volumes stated in the Climate Action Plan 23.

The Future Grid study includes a base renewable generation scenario (ECP), along with three sensitivity generation scenarios (ECP + 3.1 GW offshore, ECP + 5 GW offshore and a maintenance sensitivity study). The scenarios with additional offshore wind have been included to show the potential impact of increasing offshore wind on Total Dispatch Down levels.

The demand modelled for the Future Grid scenario is based on the medium demand scenario for 2030 as published in the All-Island Generation Capacity Statement 2023-2032.

The purpose of the Future Grid scenario is to provide insights on the potential impact of the SOEF 1.1 Roadmap network reinforcement portfolio on the dispatch down of wind and solar generators. This study is not intended to be exhaustive; it is not intended to remove all transmission constraints and it does not give individual generators a guarantee that their Total Dispatch Down will change to the estimated levels.

## 1.6 Area E - Average Results

The Total Dispatch Down results for Area E are provided below in Table 1-5 to Table 1-10 and Figure 1-3 to Figure 1-8. These include the breakdown between surplus, curtailment and constraint. The Total Dispatch Down percentages are based on the total available energy. The Total Dispatch Down is the sum of surplus, curtailment and constraint. The node level breakdown of surplus, curtailment and constraint are given in Section 2. The results show that the system level Total Dispatch Down increases with additional installed capacity due to a significant increase in surplus. However, the Total Dispatch Down reduces when the 2028 studies are compared with 2026 and there is a further reduction in the Future Grid scenario owing to increased demand, network reinforcement, interconnection and relaxed system level operational limits.

For each generation type in Area E (solar non-priority, wind non-priority and wind priority), the total installed capacity in MW and total available generation in GWh are given in Table 1-5 to Table 1-10. The total generation in GWh after dispatch down and the corresponding percentage Total Dispatch Down are also included in the tables for each scenario. Details on the generation and network scenarios are given in Section 2 of the Assumptions and Methodology report.

### 1.6.1 Offshore Wind Sensitivity Studies

Results for the offshore wind-based sensitivity studies are included, along with results for the core scenarios. The general trend is that with increasing levels of offshore wind, Total Dispatch Down increases due to significant increases in the available wind energy, which in turn leads to increased levels of surplus.

### 1.6.2 Impact of Article 12 and 13

Higher Total Dispatch Down is observed for non-priority generators due to the impact of the implementation of Article 12 and 13 in the studies, which results in non-priority generators being reduced ahead of priority generators for surplus and constraint reasons. More detail on the Article 12 clause is available in Section 3.6 of the Assumptions and Methodology report.

Another factor that contributes to the higher total dispatch down for non-priority wind and solar units is the proportion of priority to non-priority units within a subgroup. If a subgroup has a high volume of priority wind/solar units to non-priority wind/solar units, this can result in the constraints that would usually be allocated to the priority units only allocated to the non-priority units (due to the grandfathering of constraints). This can result in high constraints for non-priority units within a subgroup.

### 1.6.3 Future Grid Sensitivity Study

The results of the Future Grid scenario show a notable reduction in Total Dispatch Down over the core study years (2026 and 2028) due to the impact of the SOEF 1.1 Roadmap network reinforcements, increased demand levels, increased interconnection, and the relaxation of operational constraints. However, increases in installed wind and solar generation, as seen in the offshore wind scenarios, result in rising surplus levels, causing an increase in Total Dispatch Down levels. A detailed breakdown of the Total Dispatch Down components for Area E under the Future Grid scenarios and associated sensitivity case is given in Table 1-5 to Table 1-10. Further node level details can be viewed in Section 2.

### 1.6.4 Area Subgroups

The constraint forecast study, which is performed using PLEXOS software, applies mathematical optimisation to find the lowest cost generator dispatch schedule to meet demand, subject to several system and transmission level constraints. To ensure the model is impartial, the assumptions on the cost of renewable generators remain the same, irrespective of technology or location, and are always lower than that of conventional plants. This ensures renewable generators are given priority in the PLEXOS optimisation. However, due to network congestion caused by line limits and N-1 contingency security checks, the power flows in certain lines are limited, causing dispatch down in RES generators which may affect one generator or multiple generators chosen by PLEXOS' internal logic. During various initial studies, it was observed that PLEXOS may repeatedly choose the same generator(s) to dispatch down to manage an issue in a region shared by multiple generators.

There is often a post-processing step between the PLEXOS simulation and this report to ensure an appropriate allocation of constraints among generators sharing the bottlenecks. This is done by creating constraint subgroups within an area or spanning multiple different areas. The subgroups are selected based on an assessment of the raw PLEXOS results and based on TSO experience of dispatch down on the real system. The subgroups are chosen to group those generators into a constraint group that are expected to experience similar constraint levels. The subgroups are selected on the basis that they share a common transmission bottleneck, or they are electrically close to a congested area within the network.

The power from Area E tends to flow onto the 220 kV circuit connecting Tarbert 220 kV station to Knockraha 220 kV station. Any issues with the 220 kV circuit or with parallel paths can limit the generation in this area. The power flows towards either direction depending on the wind availability in the region. The area also benefits from the Celtic interconnector connecting to Knockraha in 2028 and in the Future Grid study scenario. Additionally, the issues binding for the circuits in Area E can create additional stress in the Area F and Area I circuits, as they merge with rescue flows towards Knockraha.

Contingencies in this area were seen to affect adjacent areas as the rescue flow utilizes the available parallel path formed by 110 kV circuits. The contingencies and overloaded lines associated with the area are included in Appendix C of the Assumptions and Methodology report.

Analysis of Area E identified a constraint subgroup for solar and wind generation combining Area E, Area F and Area I. The subgroup nodes are given in Table 1-4. A number of nodes in the north of Area E are included in the D and E North subgroup. The constraints are shared on a pro-rata basis amongst the non-priority generators in the subgroup ahead of priority generators. The individual node level dispatch down is given in Section 2.

Subgroup	Nodes
D and E North	Ballinknockane
	Limerick
	Moneypoint
	Moneypoint 220 kV
E, F & I	Athea
	Ballyvouskil 220 kV
	Boggeragh
	Charleville
	Clahane
	Cloghboola
	Coomagearlaha
	Coomataggart
	Cordal
	Dromada
	Drombeg
	Garrow
	Glanlee
	Glenlara
	Kilpaddoge
	Knockacummer
	Knockearagh
	Mallow
	Oughtragh
	Rathkeale
Reamore	
Tralee	
Trien	
Trien 220 kV side	

Table 1-4 Area E generators nodes and their subgroups



Figure 1-2 Subgroups E, F & I and D & E North (subgroups outlined by blue dashed line)



The solar non-priority data is given in the following table.

Area E (E, F & I)	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	112	188	264	340		
Installed Capacity (MW)	2028	112	188	264	340	340	
Installed Capacity (MW)	2030				340	340	340
Available Energy (GWh)	2026	131	220	309	398		
Available Energy (GWh)	2028	131	220	309	398	398	
Available Energy (GWh)	2030				398	398	398
Generation (GWh)	2026	124	209	283	342		
Generation (GWh)	2028	125	209	294	365	337	
Generation (GWh)	2030				378	365	348
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1 %	<1 %	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026	1 %	1 %	2 %	4 %		
Curtailement (%)	2028	<1 %	1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	1 %	1 %		
Constraint (%)	2028	5 %	4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026	5 %	5 %	8 %	14 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 1-5 - Surplus, Curtailment and Constraint for Solar Non-priority in Area E (E, F & I)

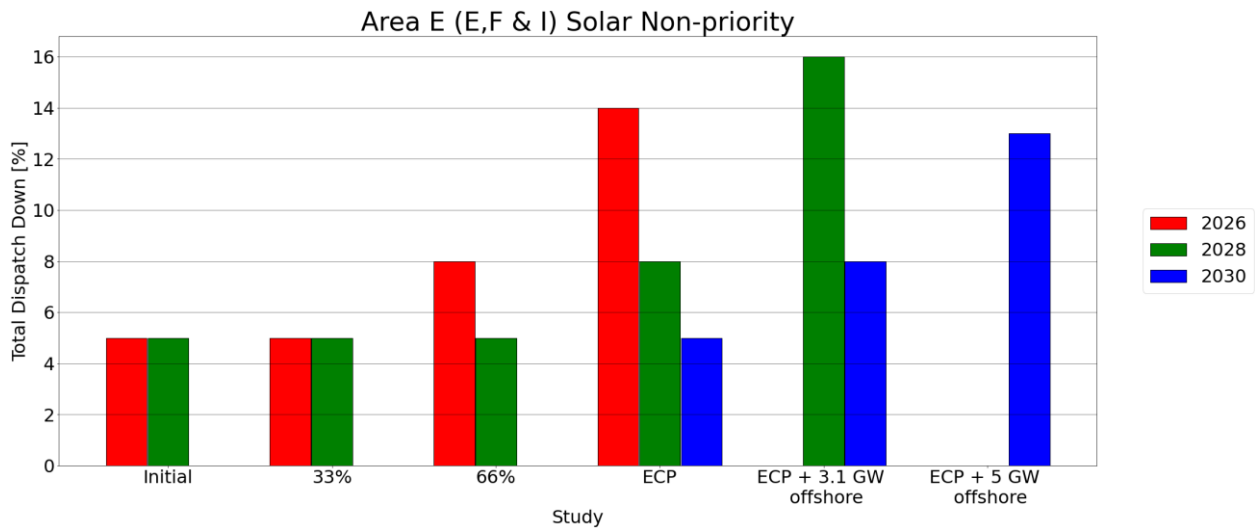


Figure 1-3 - Results Solar Non-priority Area E (E, F & I)

The wind non-priority data is given in the following table.

Area E (E, F & I)	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	268	301	335	368		
Installed Capacity (MW)	2028	268	301	335	368	368	
Installed Capacity (MW)	2030				368	368	368
Available Energy (GWh)	2026	868	976	1084	1192		
Available Energy (GWh)	2028	874	982	1091	1200	1200	
Available Energy (GWh)	2030				1192	1192	1192
Generation (GWh)	2026	705	775	823	858		
Generation (GWh)	2028	798	869	928	979	724	
Generation (GWh)	2030				1071	853	861
Surplus (%)	2026	2 %	5 %	9 %	14 %		
Surplus (%)	2028	<1%	1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailement (%)	2026	2 %	3 %	4 %	4 %		
Curtailement (%)	2028	<1 %	1 %	2 %	3 %	5 %	
Curtailement (%)	2030				<1%	2 %	2 %
Constraint (%)	2026	15 %	13 %	11 %	10%		
Constraint (%)	2028	8 %	10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026	19 %	21 %	24 %	28 %		
Total Dispatch Down (%)	2028	9 %	12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 1-6 - Surplus, Curtailment and Constraint for Wind Non-priority in Area E (E, F & I)

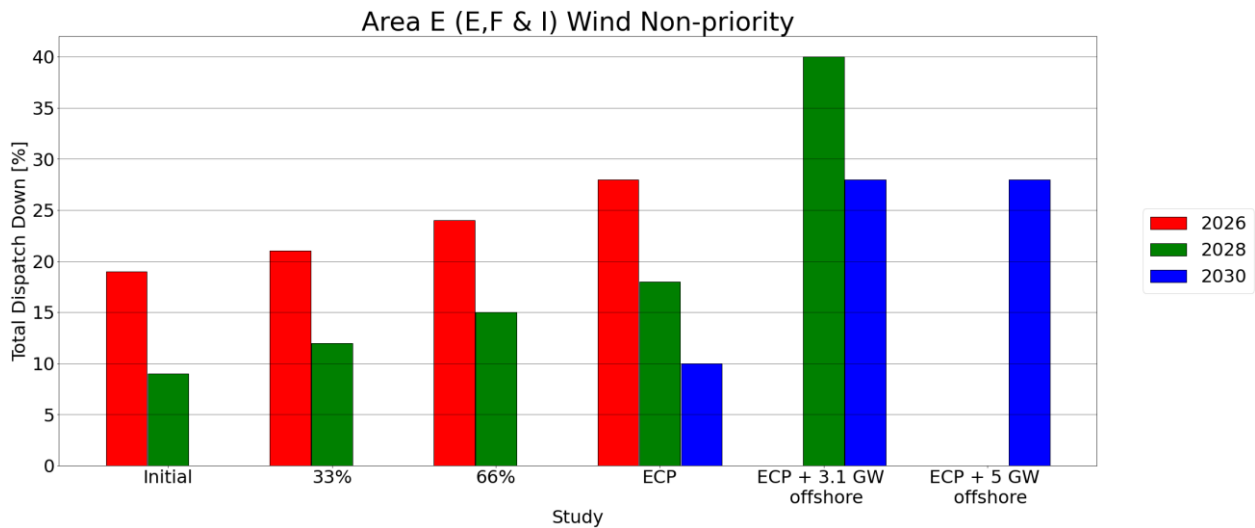


Figure 1-4 - Results Wind Non-priority Area E (E, F & I)

The wind priority data is given in the following table.

Area E (E, F & I)	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	1094	1094	1094	1094		
Installed Capacity (MW)	2028	1094	1094	1094	1094	1094	
Installed Capacity (MW)	2030				1094	1094	1094
Available Energy (GWh)	2026	3541	3541	3541	3541		
Available Energy (GWh)	2028	3564	3564	3564	3564	3564	
Available Energy (GWh)	2030				3541	3541	3541
Generation (GWh)	2026	3462	3414	3356	3307		
Generation (GWh)	2028	3554	3522	3486	3438	3310	
Generation (GWh)	2030				3520	3354	3424
Surplus (%)	2026	<1 %	<1 %	<1 %	<1 %		
Surplus (%)	2028	<1 %	<1%	<1%	<1 %	<1 %	
Surplus (%)	2030				<1 %	<1 %	<1 %
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1 %	<1 %	<1 %	<1 %		
Constraint (%)	2028	<1 %	<1 %	<1 %	<1 %	<1 %	
Constraint (%)	2030				<1 %	<1 %	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1 %	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 1-7 - Surplus, Curtailment and Constraint for Wind Priority in Area E (E, F & I)

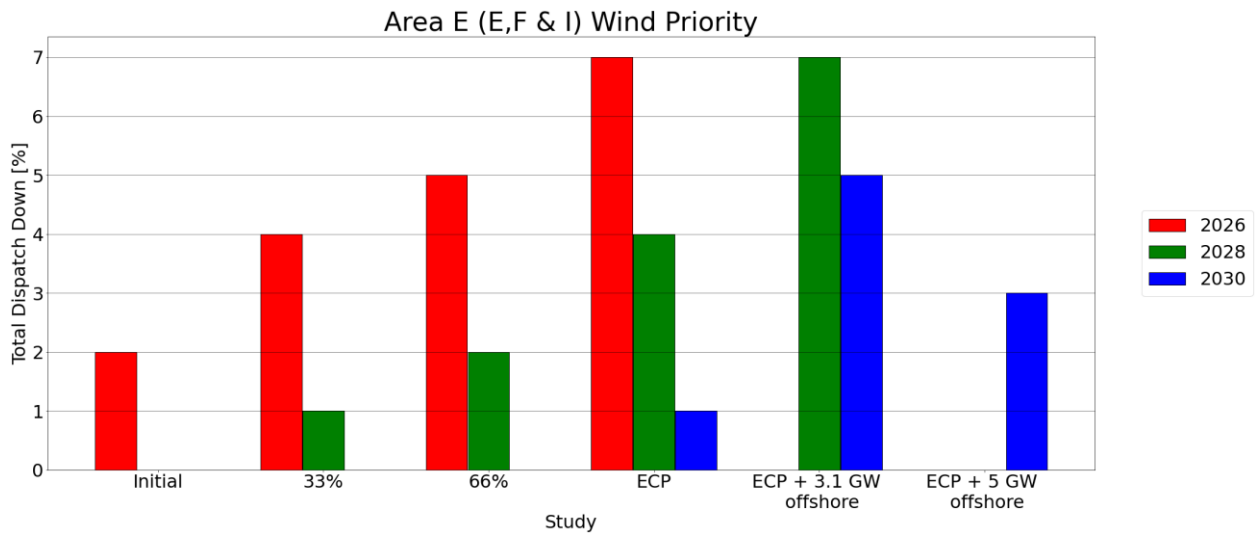


Figure 1-5 - Results Wind Priority Area E (E, F & I)

The solar non-priority data is given in the following table.

Area E (D and E North)	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	50	54	58	61		
Installed Capacity (MW)	2028	50	54	58	61	61	
Installed Capacity (MW)	2030				61	61	61
Available Energy (GWh)	2026	59	63	67	72		
Available Energy (GWh)	2028	59	63	68	72	72	
Available Energy (GWh)	2030				72	72	72
Generation (GWh)	2026	56	60	62	63		
Generation (GWh)	2028	56	60	64	67	61	
Generation (GWh)	2030				68	67	63
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1 %	<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailed (%)	2026	1 %	1 %	2 %	4 %		
Curtailed (%)	2028	<1 %	1 %	1 %	2 %	3 %	
Curtailed (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	<1 %	<1 %		
Constraint (%)	2028	5 %	4 %	1 %	<1 %	<1 %	
Constraint (%)	2030				2 %	<1%	<1 %
Total Dispatch Down (%)	2026	5 %	5 %	8 %	13 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	7 %	15 %	
Total Dispatch Down (%)	2030				5 %	7 %	12 %

Table 1-8 - Surplus, Curtailment and Constraint for Solar Non-priority in Area E (D and E North)

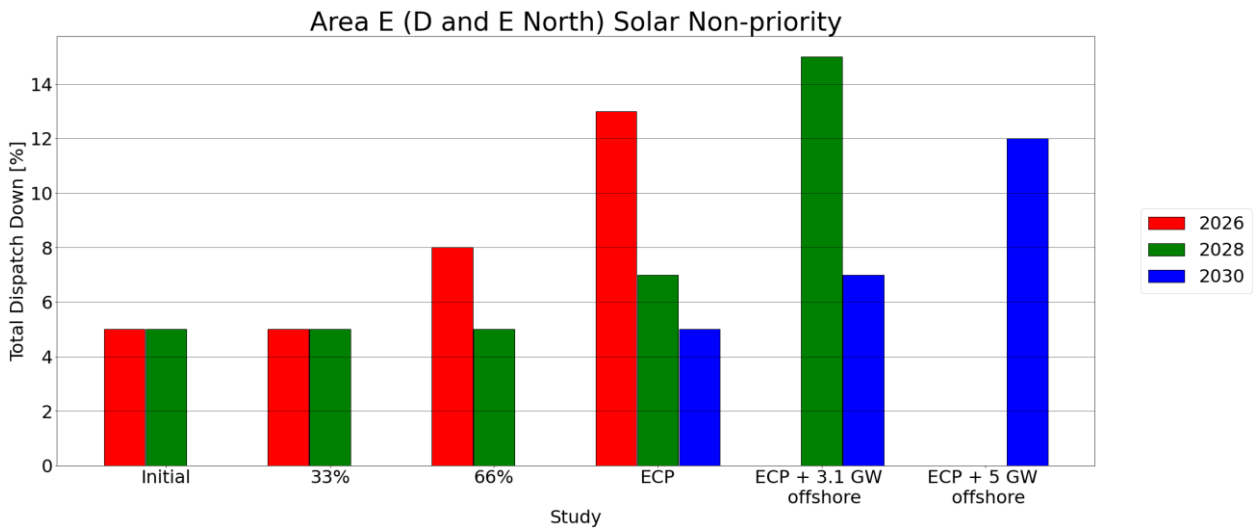


Figure 1-6 - Results Solar Non-priority Area E (D and E North)

The wind non-priority data is given in the following table.

Area E (D and E North)	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		2	3	5		
Installed Capacity (MW)	2028		2	3	5	455	
Installed Capacity (MW)	2030				5	455	455
Available Energy (GWh)	2026		5	11	16		
Available Energy (GWh)	2028		5	11	16	2015	
Available Energy (GWh)	2030				16	2006	2006
Generation (GWh)	2026		5	9	13		
Generation (GWh)	2028		5	10	15	1572	
Generation (GWh)	2030				15	1799	1567
Surplus (%)	2026		5 %	9 %	14 %		
Surplus (%)	2028		1 %	3 %	5 %	19 %	
Surplus (%)	2030				2 %	9 %	19 %
Curtailement (%)	2026		3 %	4 %	4 %		
Curtailement (%)	2028		1 %	2 %	3 %	4 %	
Curtailement (%)	2030				<1 %	2 %	2 %
Constraint (%)	2026		2 %	1 %	<1 %		
Constraint (%)	2028		3 %	1 %	<1 %	<1 %	
Constraint (%)	2030				3 %	<1 %	2 %
Total Dispatch Down (%)	2026		9 %	14 %	19 %		
Total Dispatch Down (%)	2028		5 %	5 %	8 %	24 %	
Total Dispatch Down (%)	2030				5 %	11 %	23 %

Table 1-9 - Surplus, Curtailment and Constraint for Wind Non-priority in Area E (D and E North)

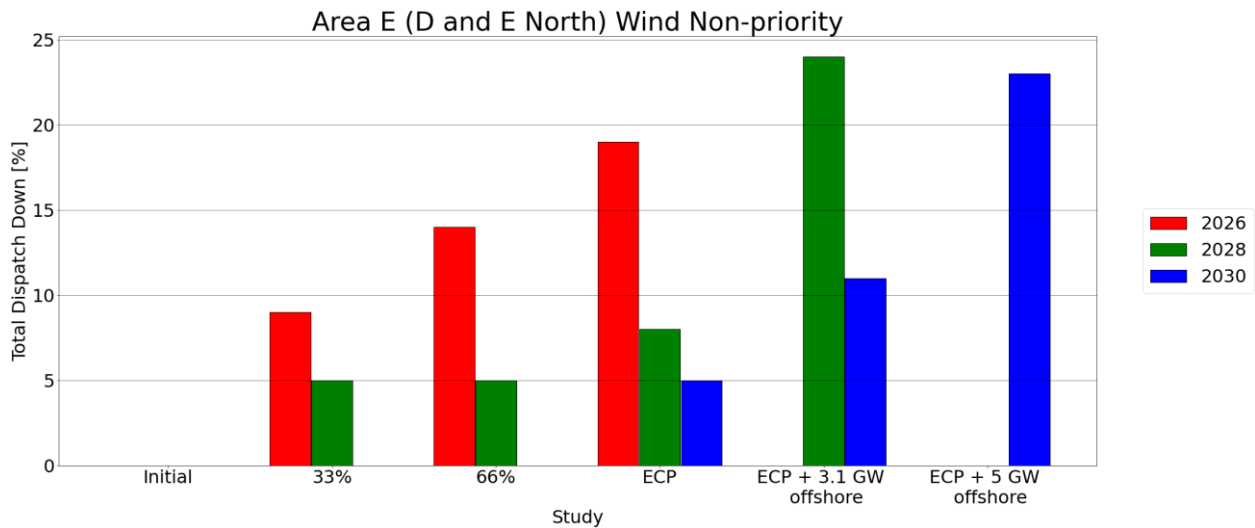


Figure 1-7 - Results Wind Non-priority Area E (D and E North)

The wind priority data is given in the following table.

Area E (D and E North)	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	45	45	45	45		
Installed Capacity (MW)	2028	45	45	45	45	45	
Installed Capacity (MW)	2030				45	45	45
Available Energy (GWh)	2026	145	145	145	145		
Available Energy (GWh)	2028	146	146	146	146	146	
Available Energy (GWh)	2030				145	145	145
Generation (GWh)	2026	142	140	137	135		
Generation (GWh)	2028	145	144	143	141	135	
Generation (GWh)	2030				144	137	140
Surplus (%)	2026	<1 %	<1 %	<1 %	<1 %		
Surplus (%)	2028	<1 %	<1 %	<1 %	<1 %	<1 %	
Surplus (%)	2030				<1 %	<1 %	<1 %
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1 %	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1 %	<1 %	<1 %	<1 %		
Constraint (%)	2028	<1 %	<1 %	<1 %	<1 %	<1 %	
Constraint (%)	2030				<1 %	<1 %	<1 %
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1 %	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 1-10 - Surplus, Curtailment and Constraint for Wind Priority in Area E (D and E North)

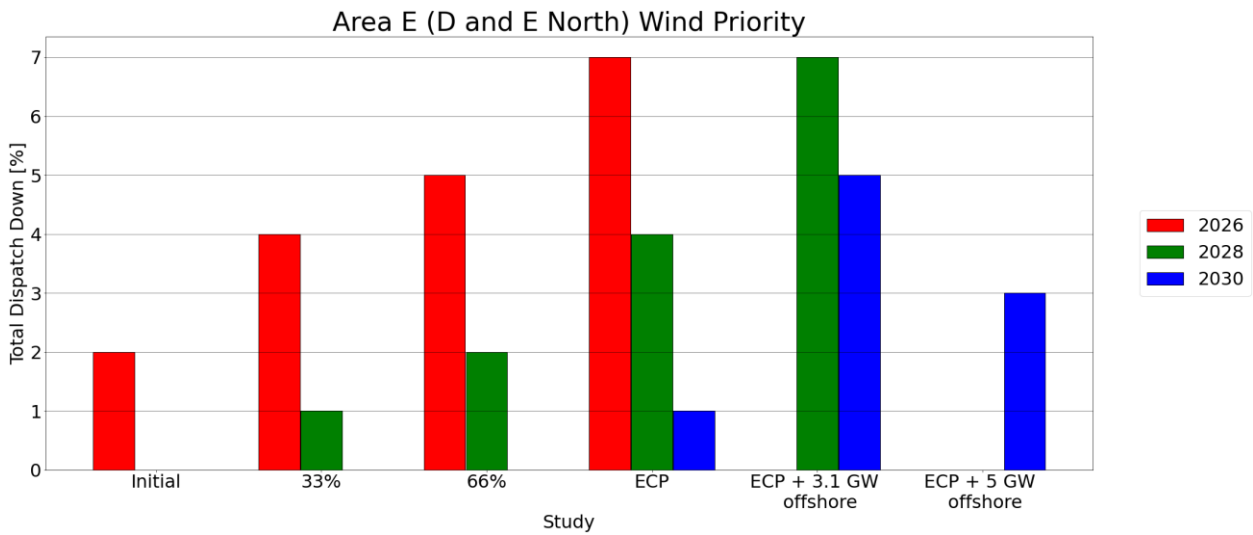


Figure 1-8 - Results Wind Priority Area E (D and E North)

## 1.7 Conclusion - Results for Area E

This section provides an overview of the estimated surplus, curtailment and constraint values for Area E for a range of scenarios based on a number of installed generation assumptions (generation scenarios) and the study year (network and demand assumptions). The results highly depend on the study assumptions, which are described in the Assumptions and Methodology report.

Section 2 contains the detailed results consisting of available energy (GWh) and percentage surplus, curtailment, and constraint values for each node for both solar and wind in Area E.

## 2 Area E Node Results

This section presents the results of the modelling analysis for Area E. The levels of surplus, curtailment and constraint that controllable solar and wind generators in Area E might expect to experience are reported on a nodal basis for the study scenarios. Details on the generation capacity at each node are also provided along with the assumed amount of controllable generation.

This section also presents a list of the generators at each node that are included in the study.

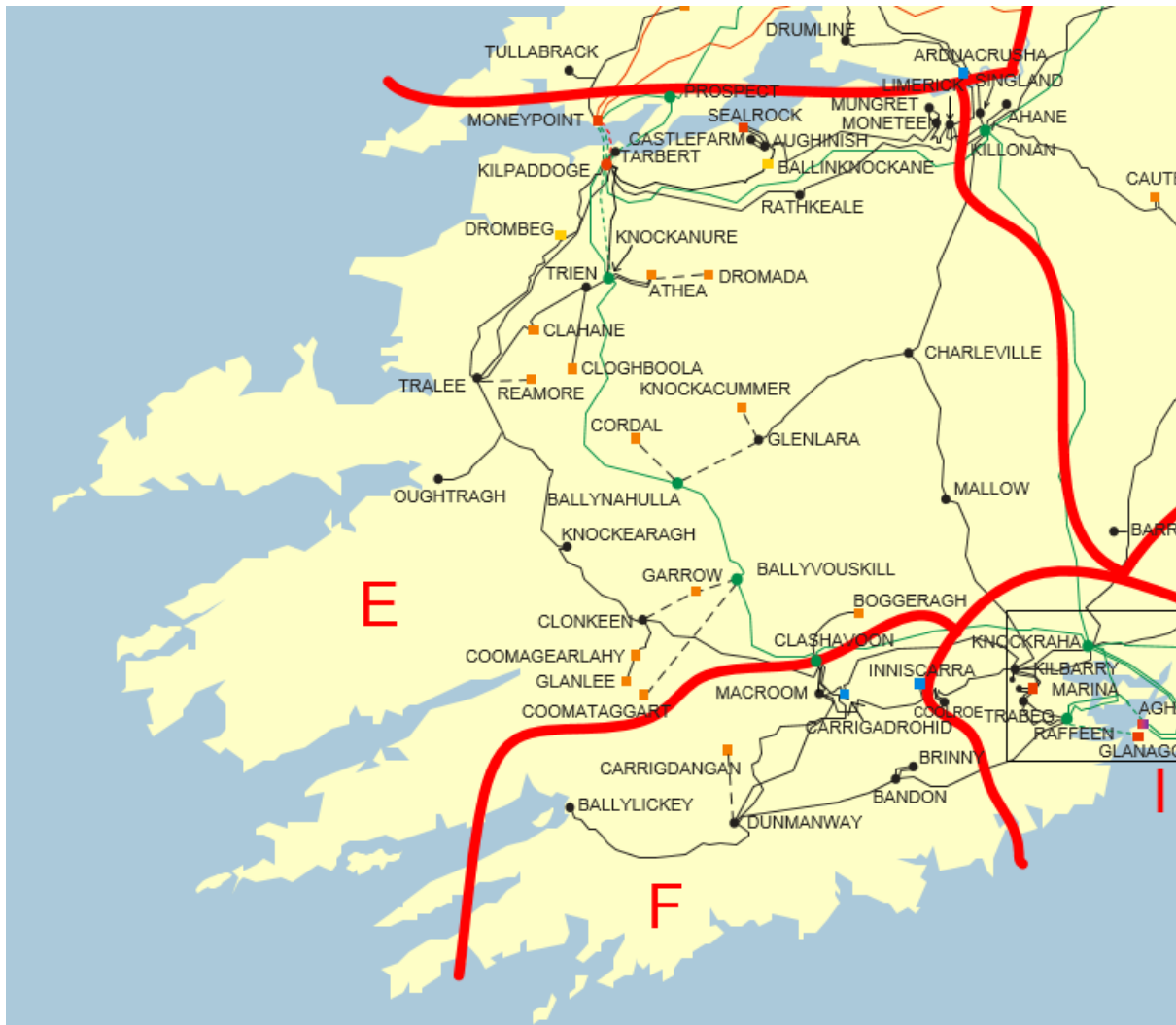


Figure 2-0 Area E



## 2.1 Athea

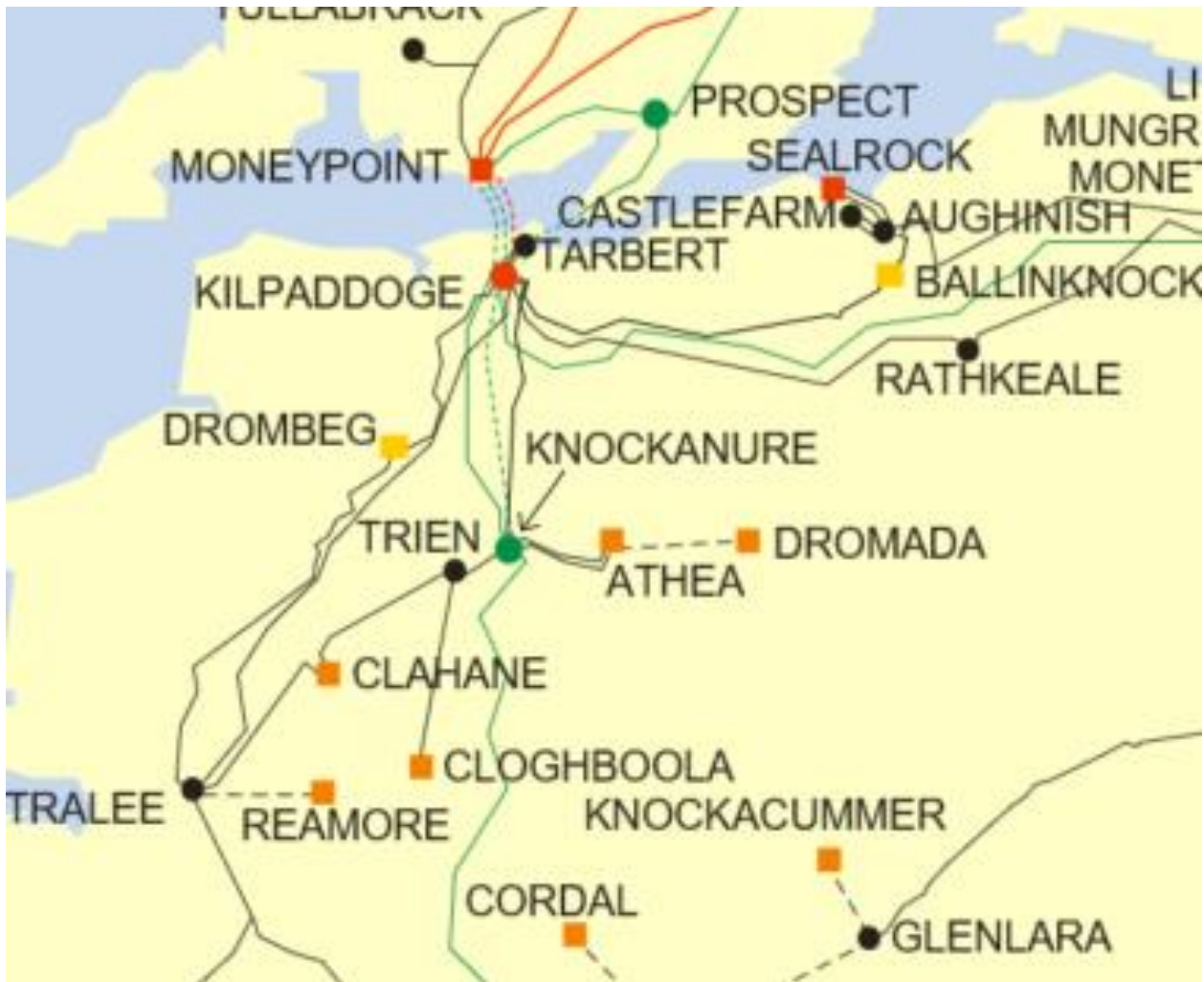


Figure 2-1 - Location of node Athea

Generator	SO	Capacity	Type	Status
<b>Athea (1)a</b>	TSO	34.35	wind priority	connected
<b>Beenaspock and Tobertooreen Wind Farm</b>	TSO	23.0	wind non-priority	connected

Table 2-1 - Generation Included in Study for Node Athea

The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	23	23	23	23		
Installed Capacity (MW)	2028	23	23	23	23	23	
Installed Capacity (MW)	2030				23	23	23
Available Energy (GWh)	2026	74	74	74	74		
Available Energy (GWh)	2028	75	75	75	75	75	
Available Energy (GWh)	2030				74	74	74
Generation (GWh)	2026	60	59	57	54		
Generation (GWh)	2028	68	66	64	61	45	
Generation (GWh)	2030				67	53	54
Surplus (%)	2026	2 %	5 %	9 %	14 %		
Surplus (%)	2028	<1%	1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailed (%)	2026	2 %	3 %	4 %	4 %		
Curtailed (%)	2028	<1%	1 %	2 %	3 %	5 %	
Curtailed (%)	2030				<1%	2 %	2 %
Constraint (%)	2026	15 %	13 %	11 %	10%		
Constraint (%)	2028	8 %	10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026	19 %	21 %	24 %	28 %		
Total Dispatch Down (%)	2028	9 %	12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 2-2 - Surplus, Curtailment and Constraint for Wind non-priority in Area E

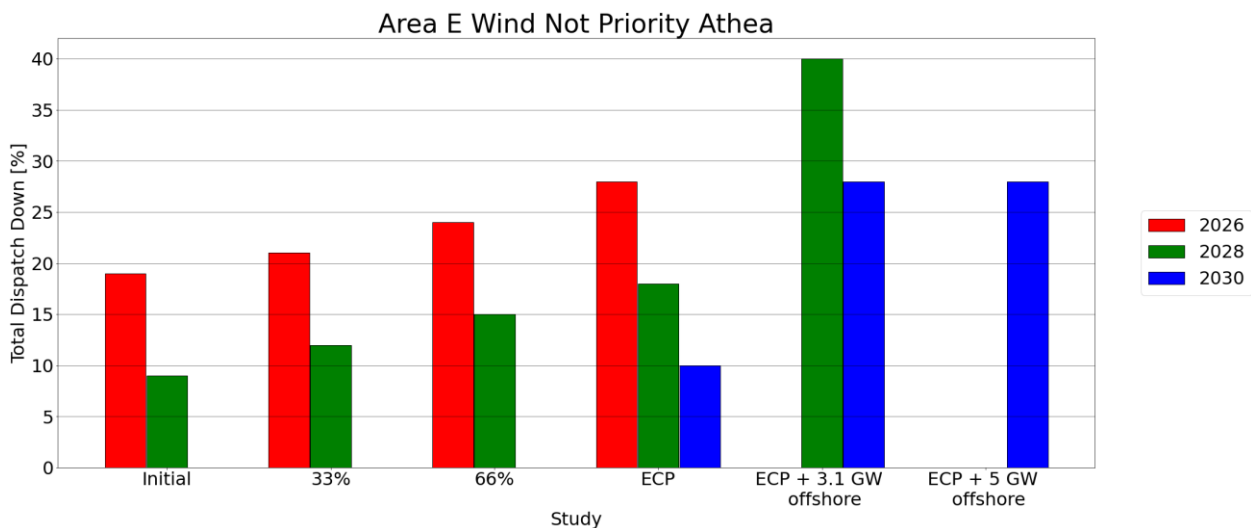


Figure 2-2 - Total Dispatch Down for Wind non-priority for Node Athea

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	34	34	34	34		
Installed Capacity (MW)	2028	34	34	34	34	34	
Installed Capacity (MW)	2030				34	34	34
Available Energy (GWh)	2026	111	111	111	111		
Available Energy (GWh)	2028	112	112	112	112	112	
Available Energy (GWh)	2030				111	111	111
Generation (GWh)	2026	109	107	105	104		
Generation (GWh)	2028	112	111	109	108	104	
Generation (GWh)	2030				111	105	108
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-3 - Surplus, Curtailment and Constraint for Wind priority in Area E

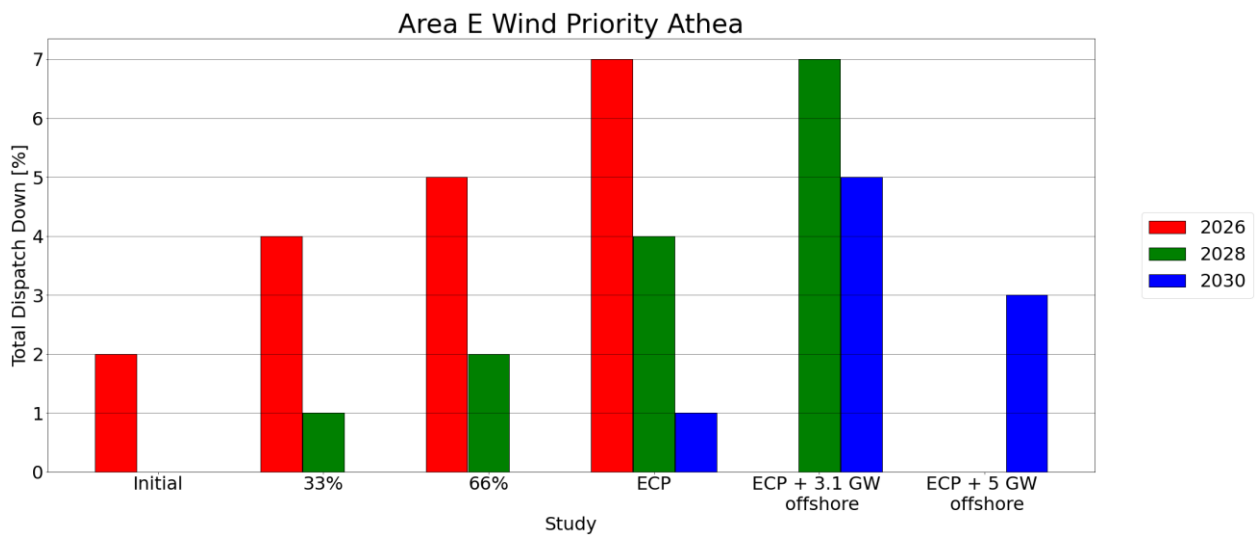


Figure 2-3 - Total Dispatch Down for Wind priority for Node Athea

## 2.2 Ballinknockane

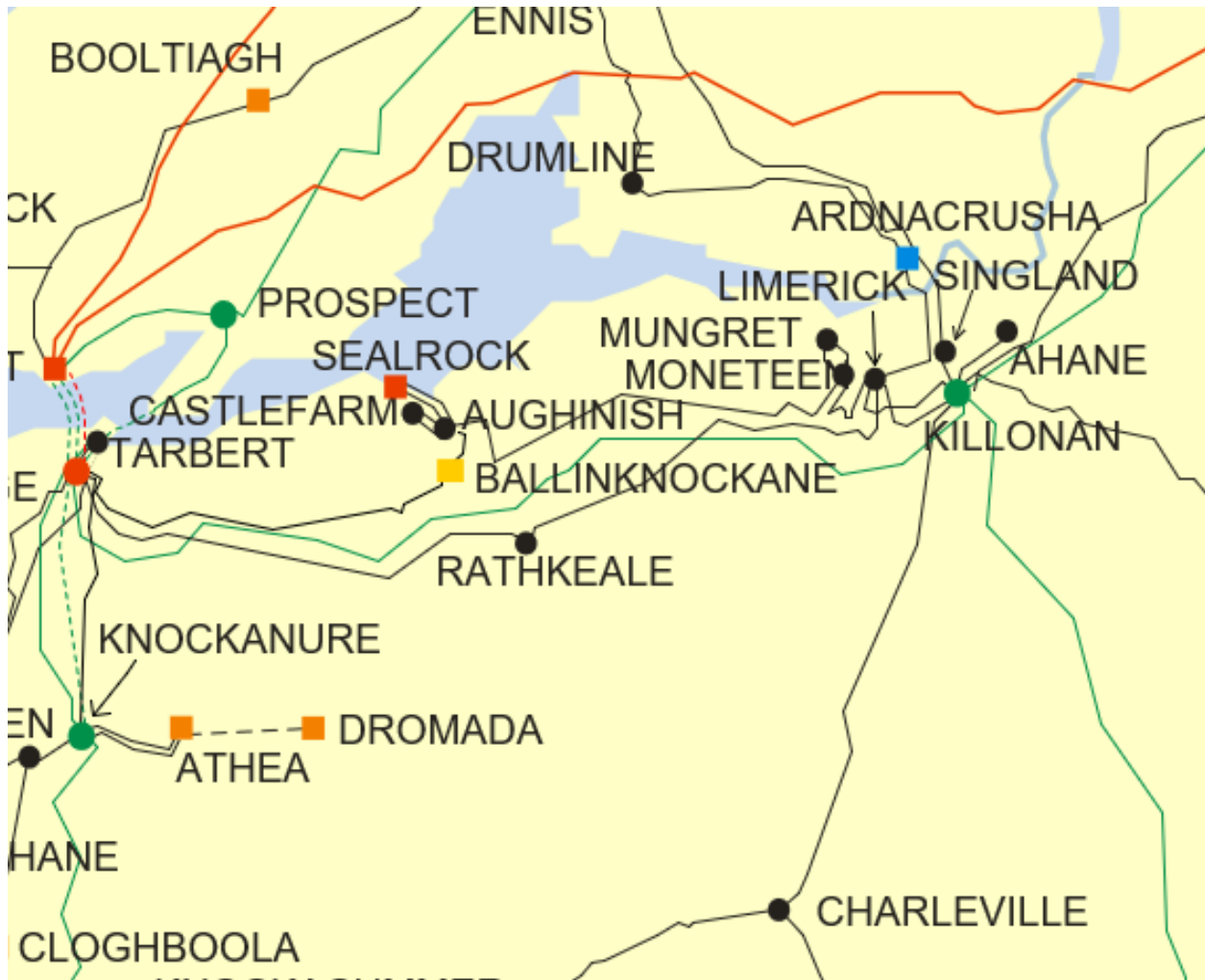


Figure 2-4 - Location of node Ballinknockane

Generator	SO	Capacity	Type	Status
<b>Ballinknockane Solar Farm</b>	TSO	50.0	solar non-priority	due to connect

Table 2-4 - Generation Included in Study for Node Ballinknockane

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	50	50	50	50		
Installed Capacity (MW)	2028	50	50	50	50	50	
Installed Capacity (MW)	2030				50	50	50
Available Energy (GWh)	2026	59	59	59	59		
Available Energy (GWh)	2028	59	59	59	59	59	
Available Energy (GWh)	2030				59	59	59
Generation (GWh)	2026	56	56	54	51		
Generation (GWh)	2028	56	56	56	54	50	
Generation (GWh)	2030				56	54	52
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1%	<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026	1 %	1 %	2 %	4 %		
Curtailement (%)	2028	<1%	1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	<1%	<1%		
Constraint (%)	2028	5 %	4 %	1 %	<1%	<1%	
Constraint (%)	2030				2 %	<1%	<1%
Total Dispatch Down (%)	2026	5 %	5 %	8 %	13 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	7 %	15 %	
Total Dispatch Down (%)	2030				5 %	7 %	12 %

Table 2-5 - Surplus, Curtailement and Constraint for Solar non-priority in Area E

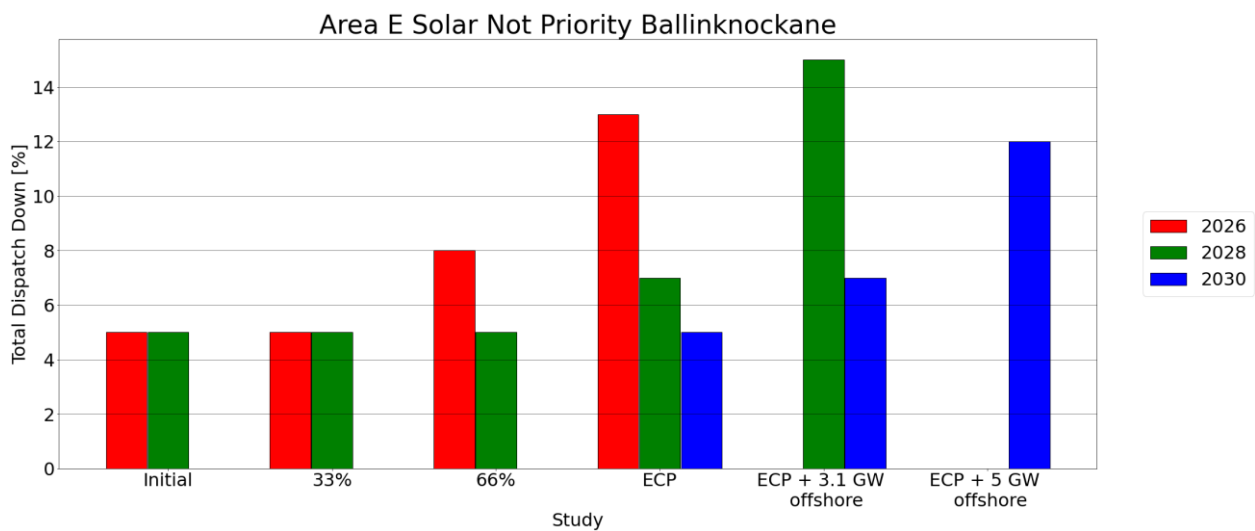


Figure 2-5 - Total Dispatch Down for Solar non-priority for Node Ballinknockane

## 2.3 Ballyvouskil 220 kV

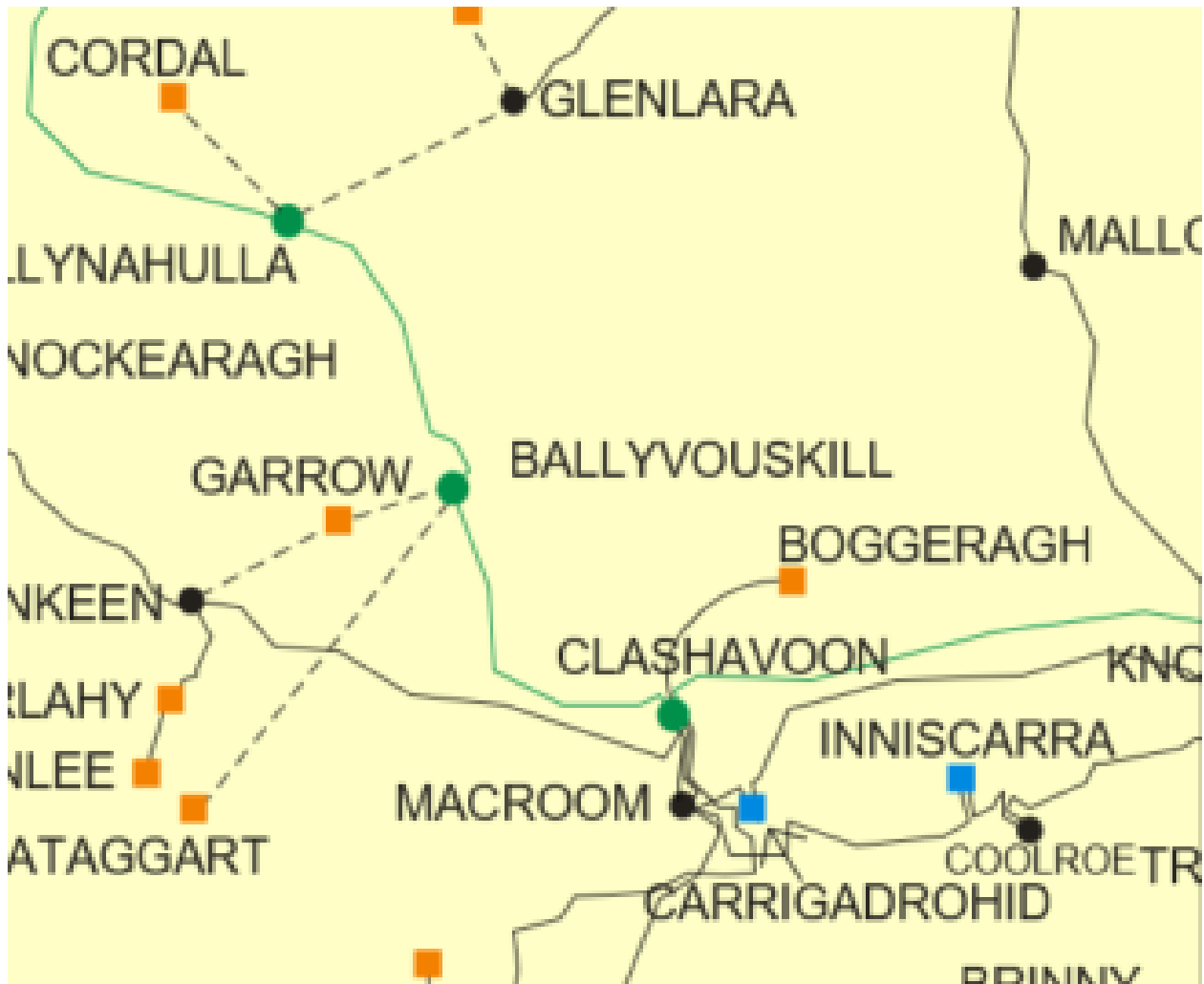


Figure 2-6 - Location of node Ballyvouskil 220 kV

Generator	SO	Capacity	Type	Status
Knocknamork solar	TSO	13.0	solar non-priority	due to connect
Knocknamork wind	TSO	42.0	wind non-priority	due to connect

Table 2-6 - Generation Included in Study for Node Ballyvouskil 220 kV

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		4	9	13		
Installed Capacity (MW)	2028		4	9	13	13	
Installed Capacity (MW)	2030				13	13	13
Available Energy (GWh)	2026		5	10	15		
Available Energy (GWh)	2028		5	10	15	15	
Available Energy (GWh)	2030				15	15	15
Generation (GWh)	2026		5	9	13		
Generation (GWh)	2028		5	10	14	13	
Generation (GWh)	2030				14	14	13
Surplus (%)	2026		2 %	5 %	9 %		
Surplus (%)	2028		<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026		1 %	2 %	4 %		
Curtailement (%)	2028		1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026		1 %	1 %	1 %		
Constraint (%)	2028		4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026		5 %	8 %	14 %		
Total Dispatch Down (%)	2028		5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-7 - Surplus, Curtailement and Constraint for Solar non-priority in Area E

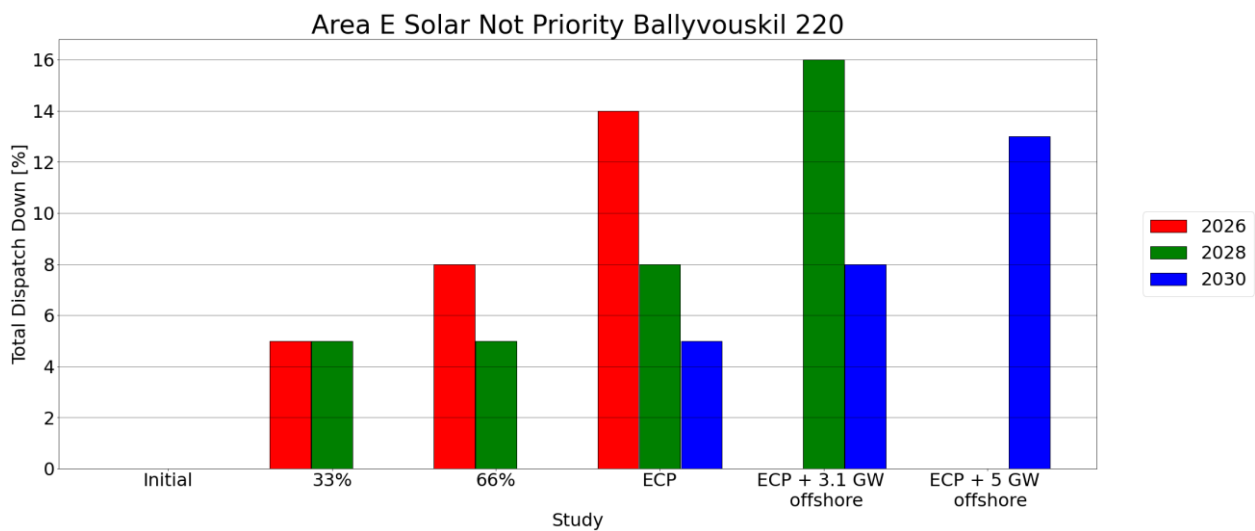


Figure 2-7 - Total Dispatch Down for Solar non-priority for Node Ballyvouskil 220 kV

The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		14	28	42		
Installed Capacity (MW)	2028		14	28	42	42	
Installed Capacity (MW)	2030				42	42	42
Available Energy (GWh)	2026		45	91	136		
Available Energy (GWh)	2028		46	91	137	137	
Available Energy (GWh)	2030				136	136	136
Generation (GWh)	2026		36	69	98		
Generation (GWh)	2028		40	78	112	83	
Generation (GWh)	2030				122	97	98
Surplus (%)	2026		5 %	9 %	14 %		
Surplus (%)	2028		1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailement (%)	2026		3 %	4 %	4 %		
Curtailement (%)	2028		1 %	2 %	3 %	5 %	
Curtailement (%)	2030				<1%	2 %	2 %
Constraint (%)	2026		13 %	11 %	10%		
Constraint (%)	2028		10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026		21 %	24 %	28 %		
Total Dispatch Down (%)	2028		12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 2-8 - Surplus, Curtailement and Constraint for Wind non-priority in Area E

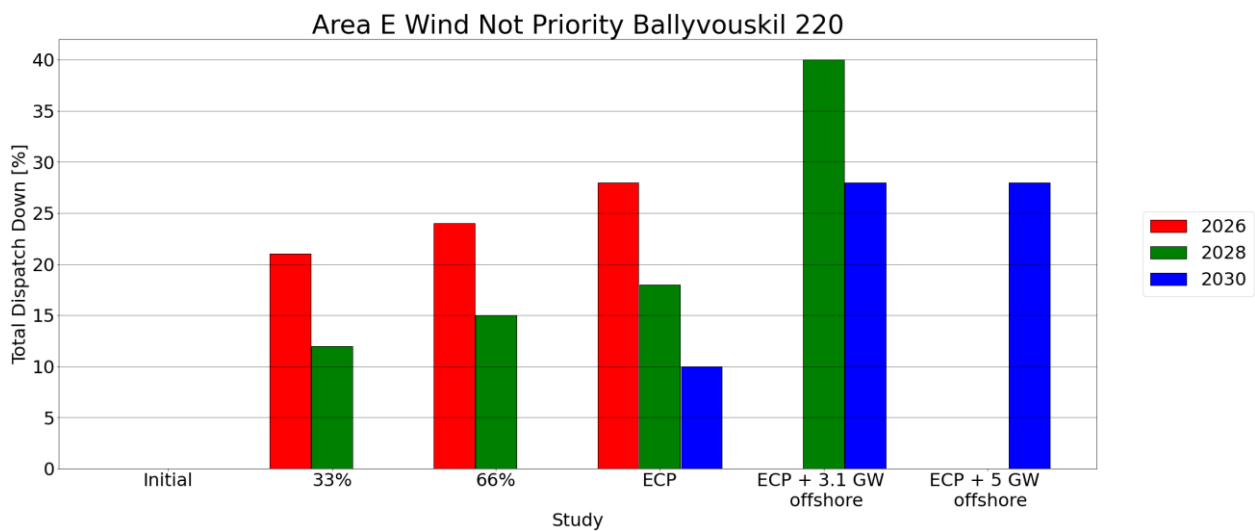


Figure 2-8 - Total Dispatch Down for Wind non-priority for Node Ballyvouskil 220



## 2.4 Boggeragh

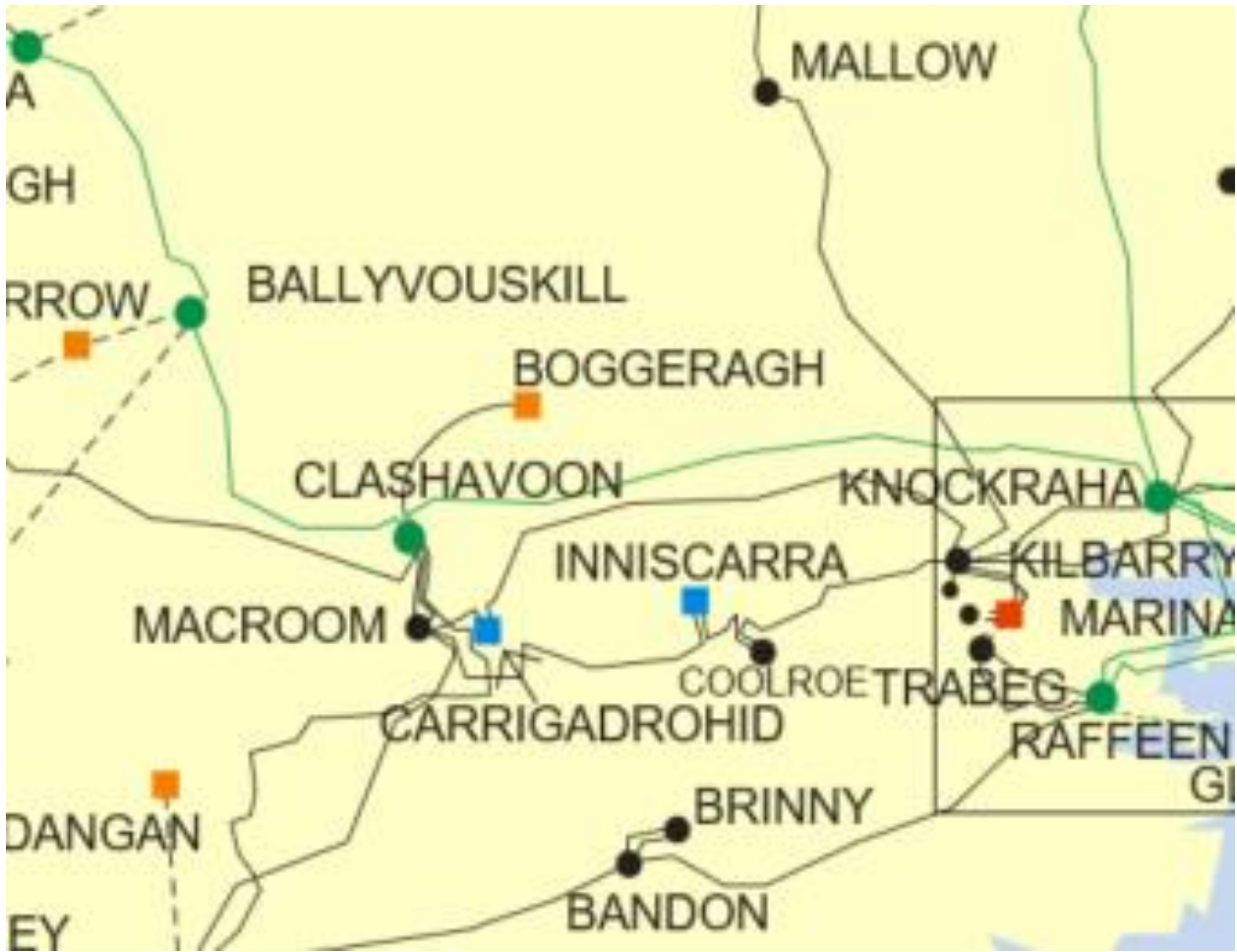


Figure 2-9 - Location of node Boggeragh

Generator	SO	Capacity	Type	Status
<b>Boggeragh (1)</b>	TSO	57.0	wind priority	connected
<b>Boggeragh 2</b>	TSO	65.7	wind priority	connected
<b>Carrigannon (1)</b>	DSO	20.0	wind priority	connected
<b>Carrigannon (2)</b>	DSO	3.0	wind non-priority	due to connect
<b>Esk (1)</b>	DSO	5.95	wind priority	connected
<b>Esk Wind Farm (sub metered Gneevs 2 Merge)</b>	DSO	5.4	wind non-priority	connected
<b>ESK Wind Farm Phase 2</b>	DSO	12.0	wind non-priority	connected
<b>Carrigraigue Solar Extension</b>	TSO	11.5	solar non-priority	due to connect

Table 2-9 - Generation Included in Study for Node Boggeragh

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		4	8	12		
Installed Capacity (MW)	2028		4	8	12	12	
Installed Capacity (MW)	2030				12	12	12
Available Energy (GWh)	2026		4	9	13		
Available Energy (GWh)	2028		4	9	13	13	
Available Energy (GWh)	2030				13	13	13
Generation (GWh)	2026		4	8	12		
Generation (GWh)	2028		4	9	12	11	
Generation (GWh)	2030				13	12	12
Surplus (%)	2026		2 %	5 %	9 %		
Surplus (%)	2028		<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026		1 %	2 %	4 %		
Curtailement (%)	2028		1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026		1 %	1 %	1 %		
Constraint (%)	2028		4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026		5 %	8 %	14 %		
Total Dispatch Down (%)	2028		5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-10 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

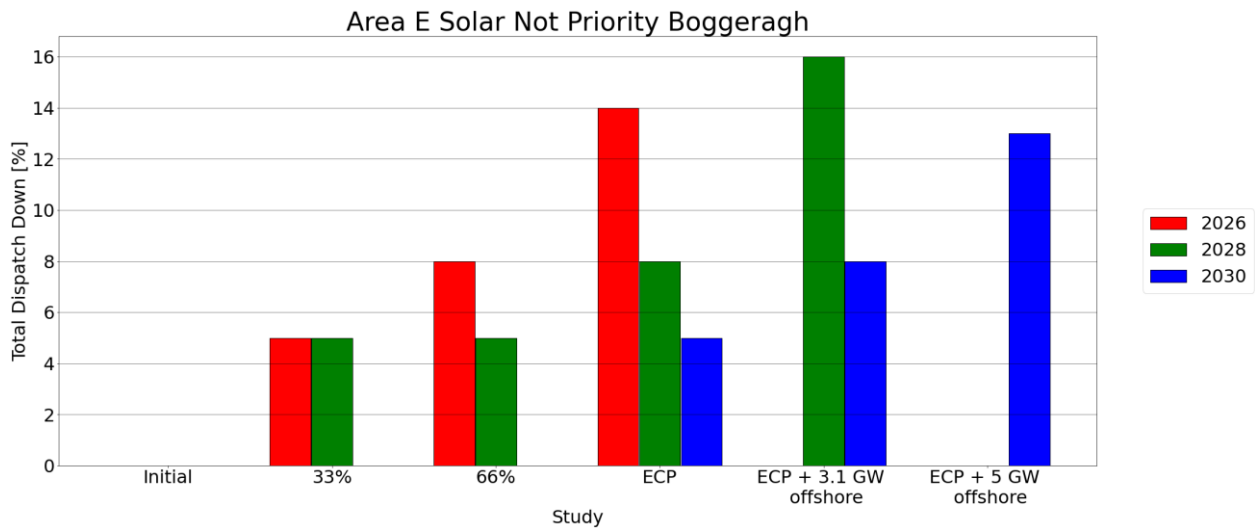


Figure 2-10 - Total Dispatch Down for Solar non-priority for Node Boggeragh

The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	17	18	19	20		
Installed Capacity (MW)	2028	17	18	19	20	20	
Installed Capacity (MW)	2030				20	20	20
Available Energy (GWh)	2026	56	60	63	66		
Available Energy (GWh)	2028	57	60	63	66	66	
Available Energy (GWh)	2030				66	66	66
Generation (GWh)	2026	46	47	48	48		
Generation (GWh)	2028	52	53	54	54	40	
Generation (GWh)	2030				59	47	48
Surplus (%)	2026	2 %	5 %	9 %	14 %		
Surplus (%)	2028	<1%	1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailement (%)	2026	2 %	3 %	4 %	4 %		
Curtailement (%)	2028	<1%	1 %	2 %	3 %	5 %	
Curtailement (%)	2030				<1%	2 %	2 %
Constraint (%)	2026	15 %	13 %	11 %	10%		
Constraint (%)	2028	8 %	10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026	19 %	21 %	24 %	28 %		
Total Dispatch Down (%)	2028	9 %	12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 2-11 - Surplus, Curtailment and Constraint for Wind non-priority in Area E

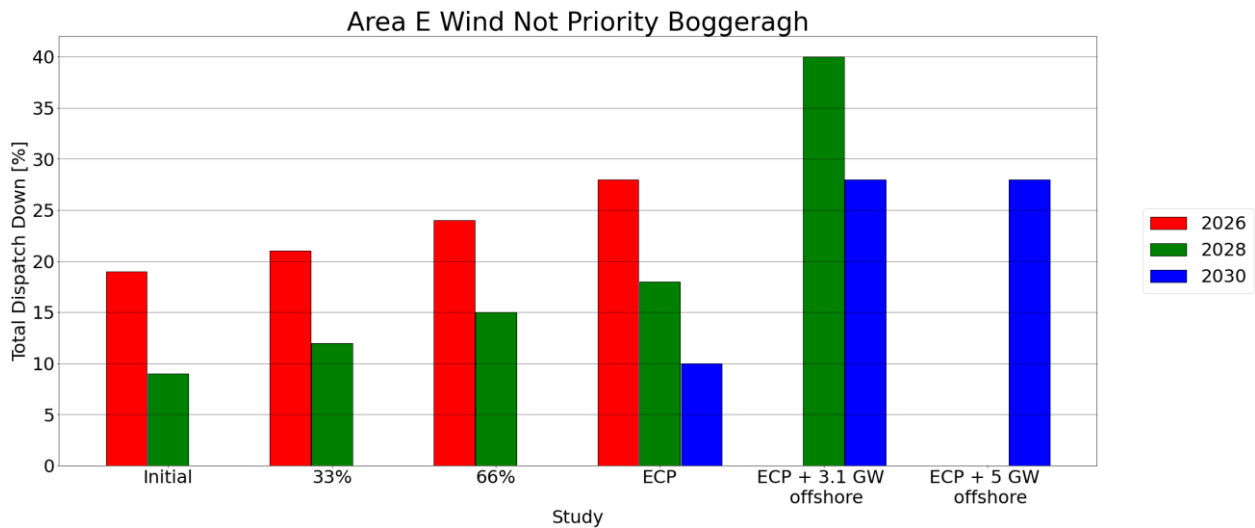


Figure 2-11 - Total Dispatch Down for Wind non-priority for Node Boggeragh

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	149	149	149	149		
Installed Capacity (MW)	2028	149	149	149	149	149	
Installed Capacity (MW)	2030				149	149	149
Available Energy (GWh)	2026	481	481	481	481		
Available Energy (GWh)	2028	484	484	484	484	484	
Available Energy (GWh)	2030				481	481	481
Generation (GWh)	2026	471	464	456	449		
Generation (GWh)	2028	483	479	474	467	450	
Generation (GWh)	2030				478	456	465
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-12 - Surplus, Curtailement and Constraint for Wind priority in Area E

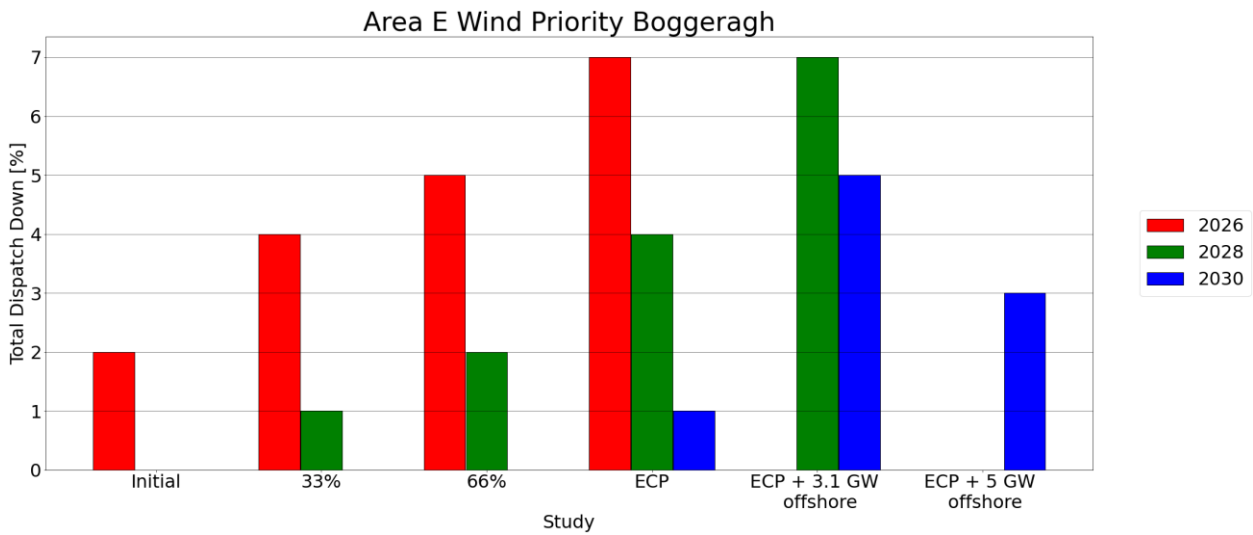


Figure 2-12 - Total Dispatch Down for Wind priority for Node Boggeragh

## 2.5 Charleville



Figure 2-13 - Location of node Charleville

Generator	SO	Capacity	Type	Status
Ballyroe Solar	TSO	120.0	solar non-priority	due to connect
Booldard Wind Farm (Charleville)	DSO	4.45	wind uncontrolled	connected
Castlepook (1)	DSO	33.1	wind priority	connected
Kilberehert (1)	DSO	4.799	wind uncontrolled	connected
Kilmeedy (1)	DSO	4.7	wind uncontrolled	connected
Knocknatallig	DSO	18.3	wind priority	connected
Rathnacally (1)	DSO	4.45	wind uncontrolled	connected

Table 2-13 - Generation Included in Study for Node Charleville

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		40	80	120		
Installed Capacity (MW)	2028		40	80	120	120	
Installed Capacity (MW)	2030				120	120	120
Available Energy (GWh)	2026		47	94	140		
Available Energy (GWh)	2028		47	94	141	141	
Available Energy (GWh)	2030				140	140	140
Generation (GWh)	2026		44	86	121		
Generation (GWh)	2028		45	89	129	119	
Generation (GWh)	2030				133	129	123
Surplus (%)	2026		2 %	5 %	9 %		
Surplus (%)	2028		<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026		1 %	2 %	4 %		
Curtailement (%)	2028		1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026		1 %	1 %	1 %		
Constraint (%)	2028		4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026		5 %	8 %	14 %		
Total Dispatch Down (%)	2028		5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-14 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

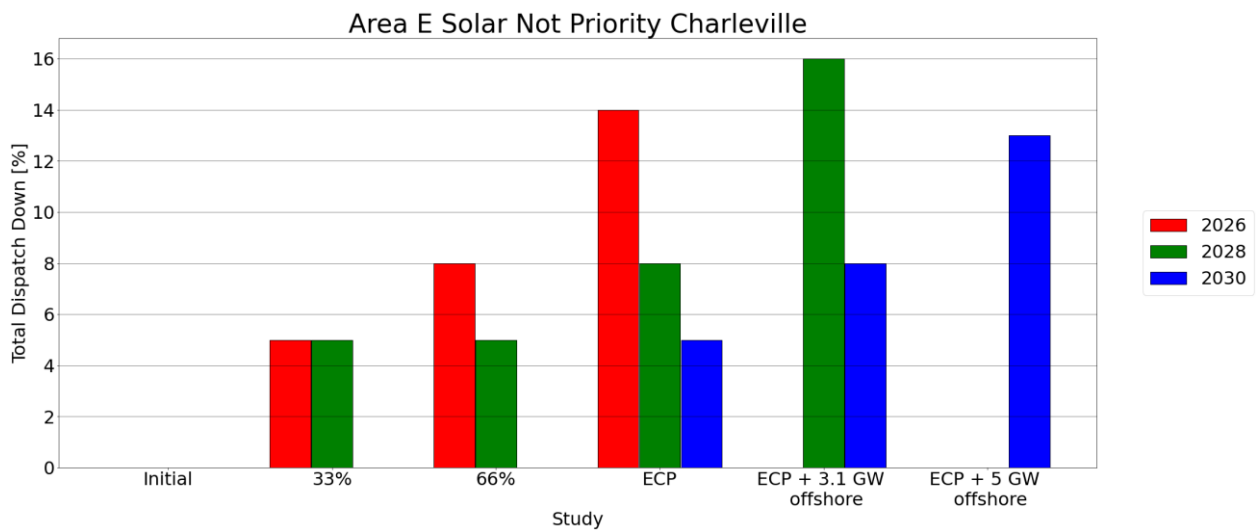


Figure 2-14 - Total Dispatch Down for Solar non-priority for Node Charleville

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	51	51	51	51		
Installed Capacity (MW)	2028	51	51	51	51	51	
Installed Capacity (MW)	2030				51	51	51
Available Energy (GWh)	2026	166	166	166	166		
Available Energy (GWh)	2028	167	167	167	167	167	
Available Energy (GWh)	2030				166	166	166
Generation (GWh)	2026	163	160	158	155		
Generation (GWh)	2028	167	166	164	162	156	
Generation (GWh)	2030				165	158	161
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-15 - Surplus, Curtailement and Constraint for Wind priority in Area E

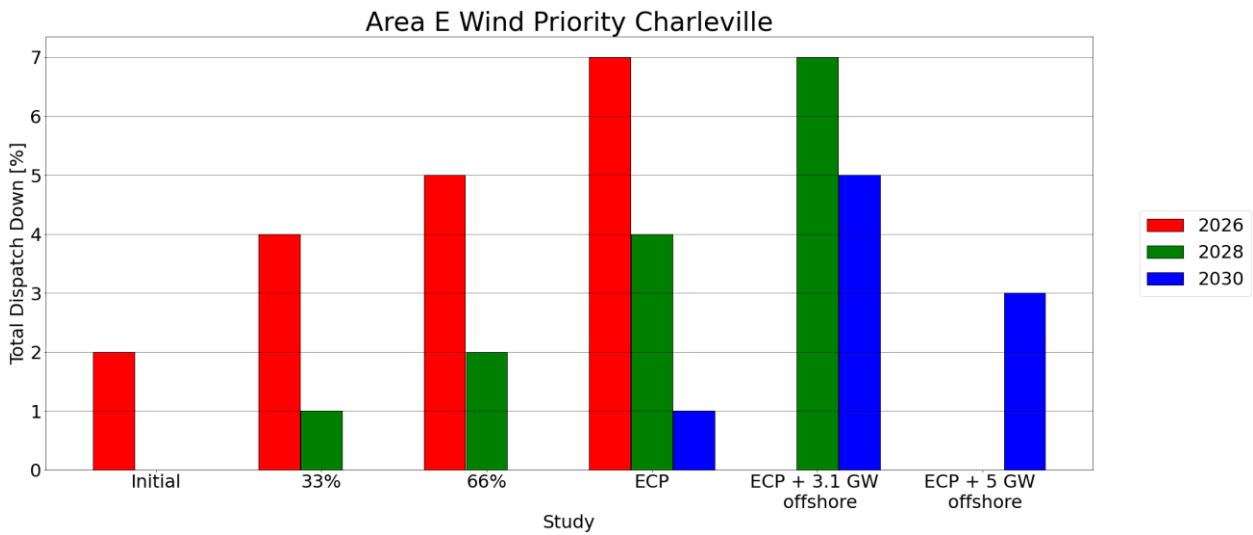


Figure 2-15 - Total Dispatch Down for Wind priority for Node Charleville

## 2.6 Clahane

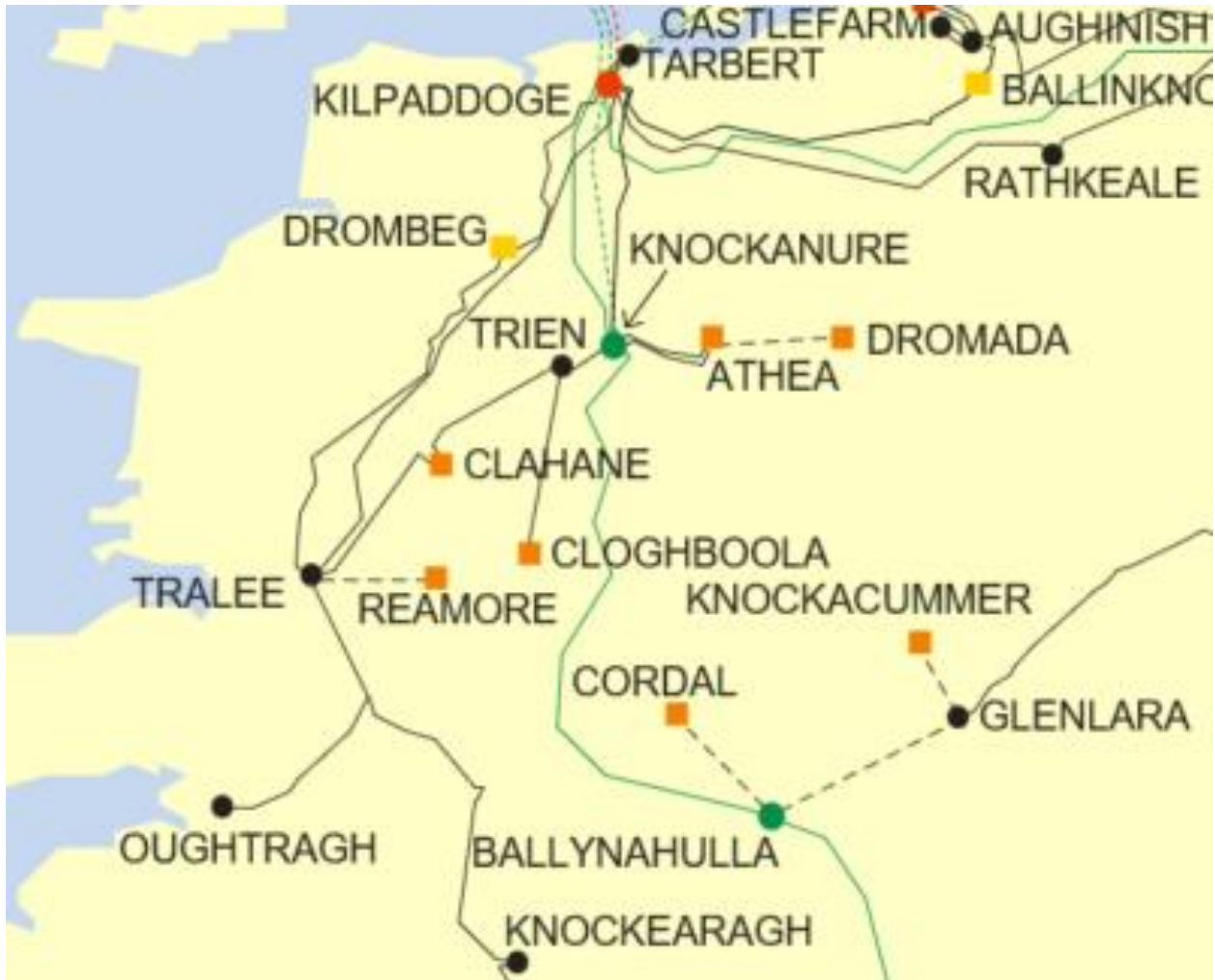


Figure 2-16 - Location of node Clahane

Generator	SO	Capacity	Type	Status
Banemore Solar Farm	TSO	34.0	solar non-priority	due to connect
Clahane (1)	TSO	37.8	wind priority	connected
Clahane (2)	TSO	13.8	wind priority	connected

Table 2-16 - Generation Included in Study for Node Clahane



The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	34	34	34	34		
Installed Capacity (MW)	2028	34	34	34	34	34	
Installed Capacity (MW)	2030				34	34	34
Available Energy (GWh)	2026	40	40	40	40		
Available Energy (GWh)	2028	40	40	40	40	40	
Available Energy (GWh)	2030				40	40	40
Generation (GWh)	2026	38	38	36	34		
Generation (GWh)	2028	38	38	38	37	34	
Generation (GWh)	2030				38	36	35
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1%	<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailed (%)	2026	1 %	1 %	2 %	4 %		
Curtailed (%)	2028	<1%	1 %	1 %	2 %	3 %	
Curtailed (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	1 %	1 %		
Constraint (%)	2028	5 %	4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026	5 %	5 %	8 %	14 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-17 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

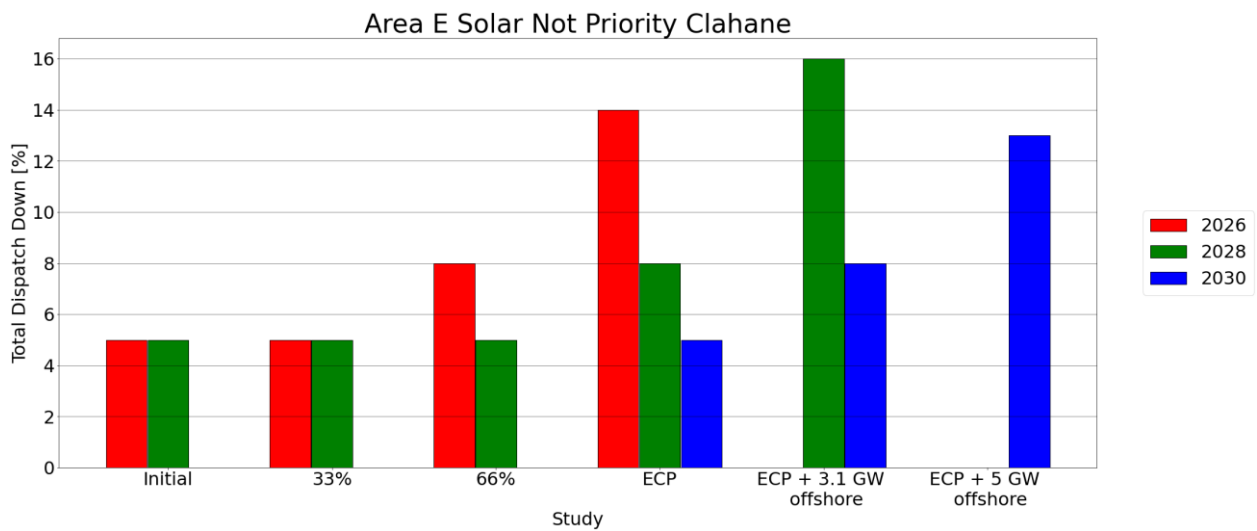


Figure 2-17 - Total Dispatch Down for Solar non-priority for Node Clahane

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	52	52	52	52		
Installed Capacity (MW)	2028	52	52	52	52	52	
Installed Capacity (MW)	2030				52	52	52
Available Energy (GWh)	2026	167	167	167	167		
Available Energy (GWh)	2028	168	168	168	168	168	
Available Energy (GWh)	2030				167	167	167
Generation (GWh)	2026	163	161	158	156		
Generation (GWh)	2028	168	166	164	162	156	
Generation (GWh)	2030				166	158	162
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-18 - Surplus, Curtailment and Constraint for Wind priority in Area E

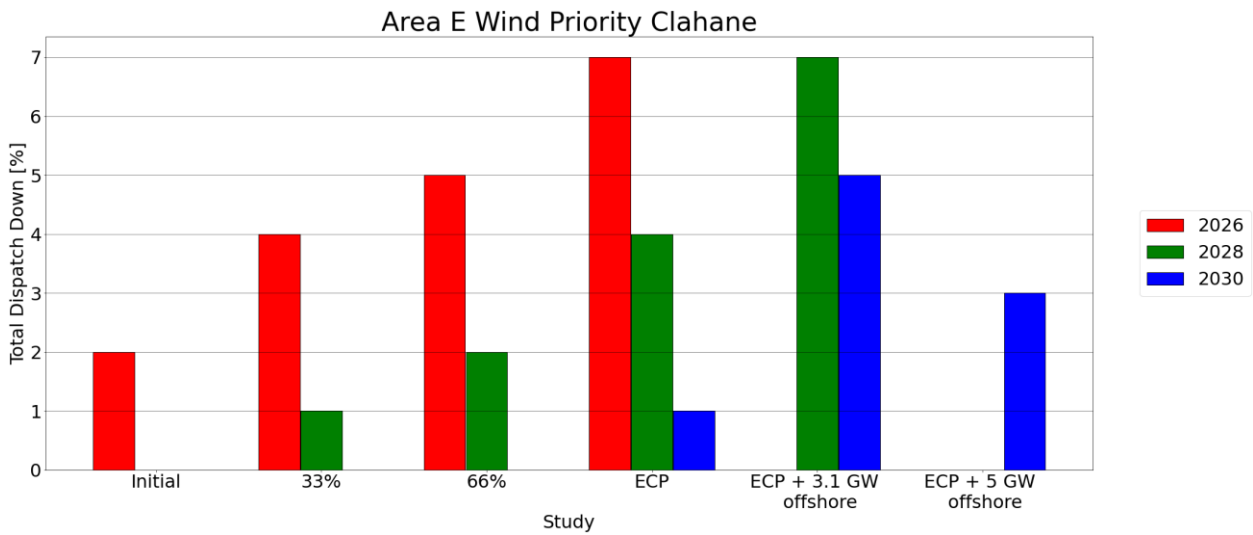


Figure 2-18 - Total Dispatch Down for Wind priority for Node Clahane

## 2.7 Cloghboola

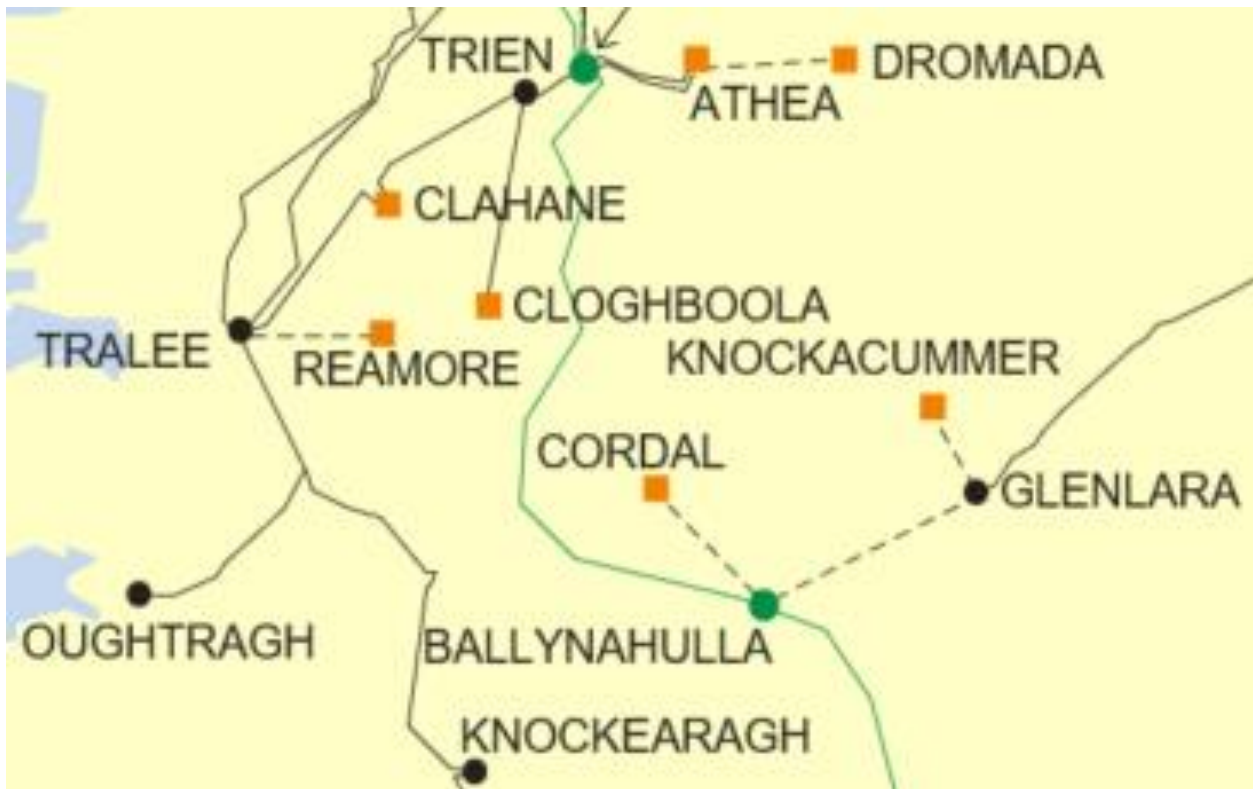


Figure 2-19 - Location of node Cloghboola

Generator	SO	Capacity	Type	Status
Cloghanaleskirt (1)	DSO	12.55	wind priority	connected
Glanaruddery 1 (formerly Dromadda More Wind Farm)	DSO	20.0	wind priority	connected
Glanaruddery 2 (formerly Dromadda More 2)	DSO	12.0	wind priority	connected
Glantaunyalkeen Windfarm (Cloghboola (2) Ext)	DSO	9.999	wind priority	connected
Knocknagashel Wind (Cloghboola (1))	TSO	46.0	wind priority	connected

Table 2-19 - Generation Included in Study for Node Cloghboola

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	101	101	101	101		
Installed Capacity (MW)	2028	101	101	101	101	101	
Installed Capacity (MW)	2030				101	101	101
Available Energy (GWh)	2026	326	326	326	326		
Available Energy (GWh)	2028	328	328	328	328	328	
Available Energy (GWh)	2030				326	326	326
Generation (GWh)	2026	318	314	309	304		
Generation (GWh)	2028	327	324	320	316	304	
Generation (GWh)	2030				324	308	315
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-20 - Surplus, Curtailment and Constraint for Wind priority in Area E

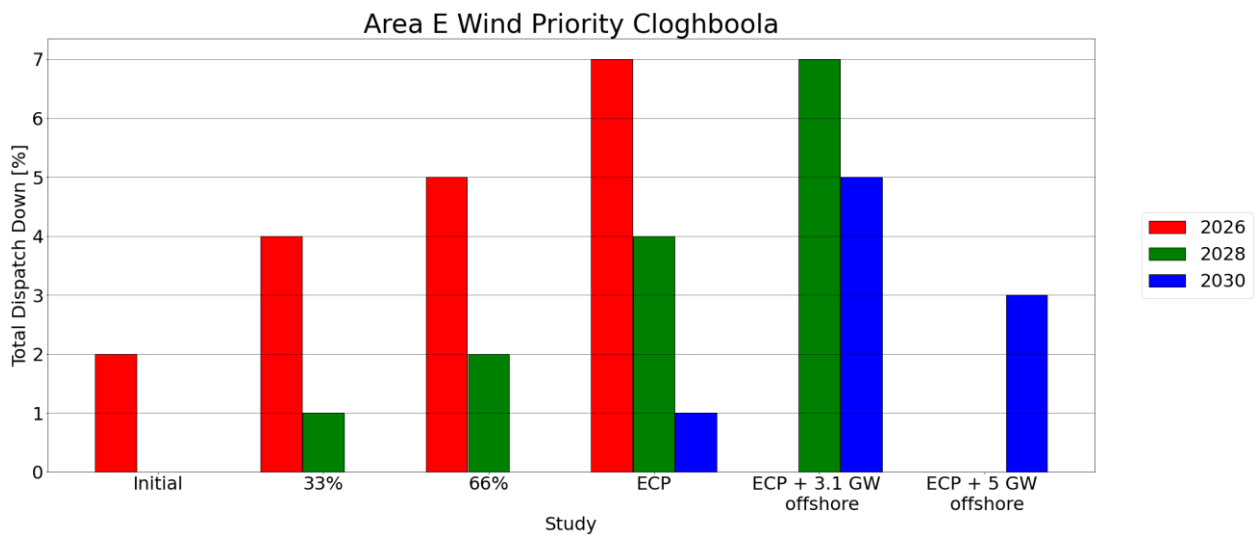


Figure 2-20 - Total Dispatch Down for Wind priority for Node Cloghboola

## 2.8 Coomagearlahy

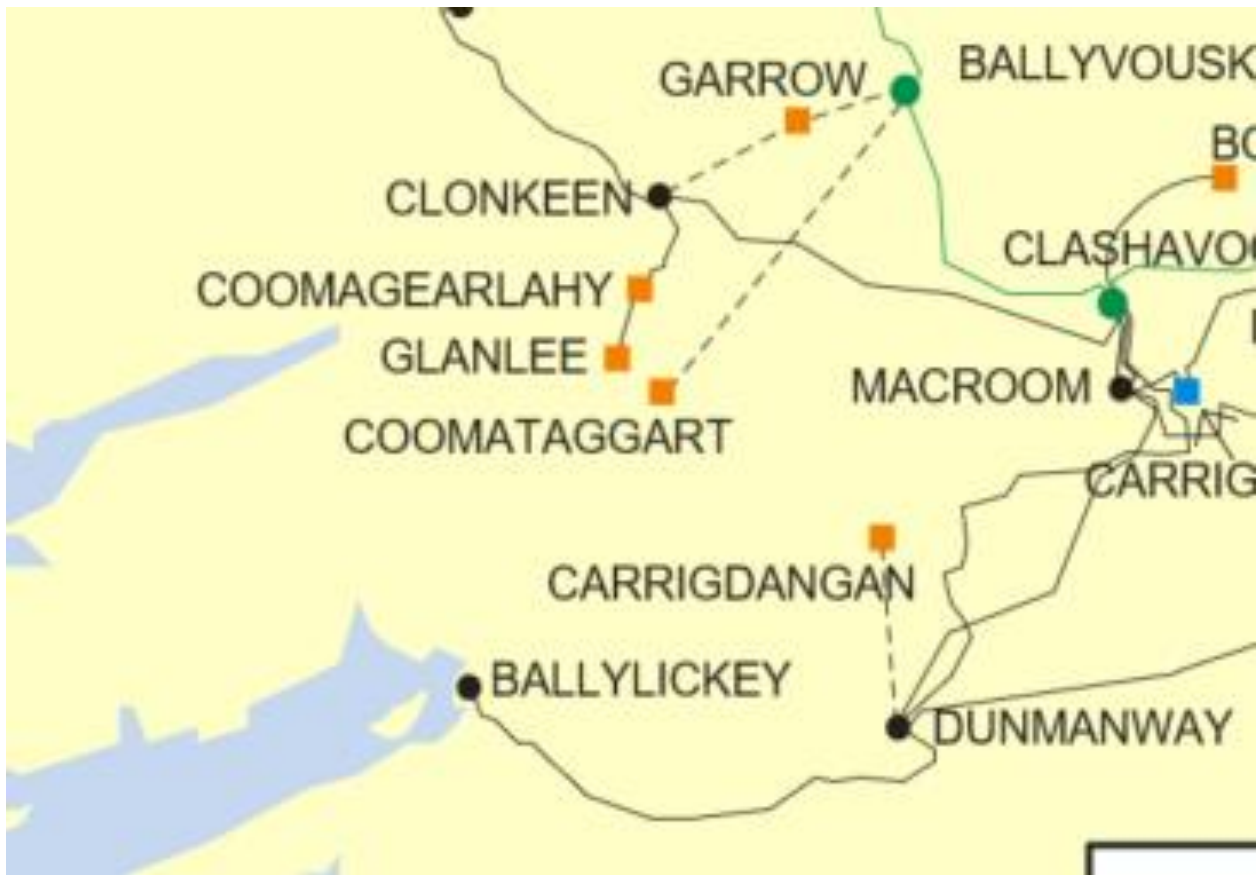


Figure 2-21 - Location of node Coomagearlahy

Generator	SO	Capacity	Type	Status
<b>Coomagearlahy (1)</b>	TSO	42.5	wind priority	connected
<b>Coomagearlahy (2)</b>	TSO	8.5	wind priority	connected
<b>Coomagearlahy (3)</b>	TSO	30.0	wind priority	connected
<b>Coumaclovane Solar Extension</b>	TSO	7.0	solar non-priority	due to connect

Table 2-21 - Generation Included in Study for Node Coomagearlahy

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		2	5	7		
Installed Capacity (MW)	2028		2	5	7	7	
Installed Capacity (MW)	2030				7	7	7
Available Energy (GWh)	2026		3	5	8		
Available Energy (GWh)	2028		3	5	8	8	
Available Energy (GWh)	2030				8	8	8
Generation (GWh)	2026		3	5	7		
Generation (GWh)	2028		3	5	8	7	
Generation (GWh)	2030				8	8	7
Surplus (%)	2026		2 %	5 %	9 %		
Surplus (%)	2028		<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026		1 %	2 %	4 %		
Curtailement (%)	2028		1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026		1 %	1 %	1 %		
Constraint (%)	2028		4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026		5 %	8 %	14 %		
Total Dispatch Down (%)	2028		5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-22 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

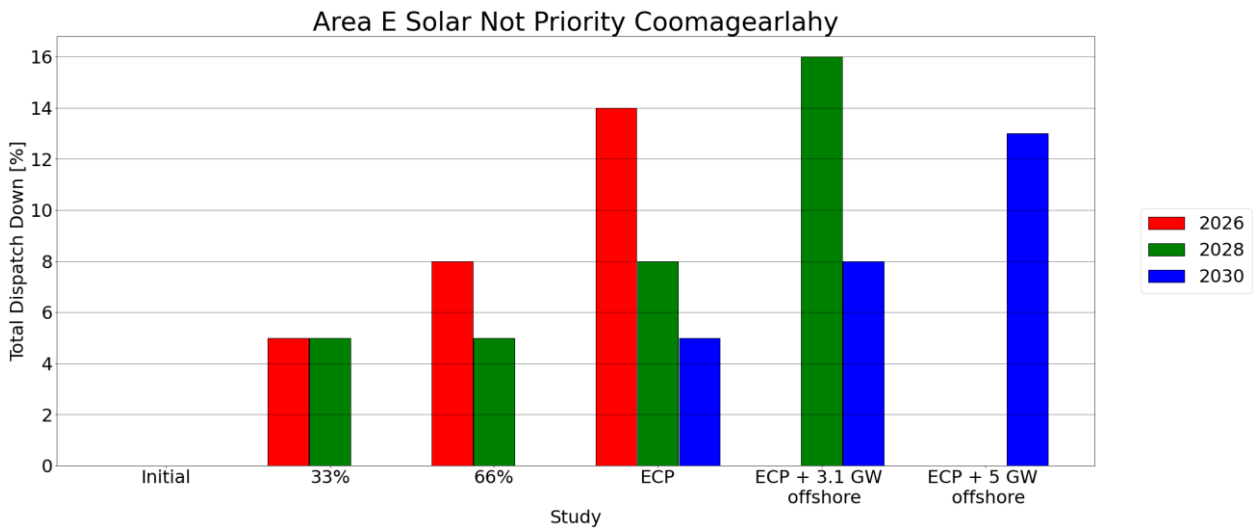


Figure 2-22 - Total Dispatch Down for Solar non-priority for Node Coomagearlaly

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	81	81	81	81		
Installed Capacity (MW)	2028	81	81	81	81	81	
Installed Capacity (MW)	2030				81	81	81
Available Energy (GWh)	2026	262	262	262	262		
Available Energy (GWh)	2028	264	264	264	264	264	
Available Energy (GWh)	2030				262	262	262
Generation (GWh)	2026	256	253	249	245		
Generation (GWh)	2028	263	261	258	255	245	
Generation (GWh)	2030				261	248	254
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-23 - Surplus, Curtailment and Constraint for Wind priority in Area E

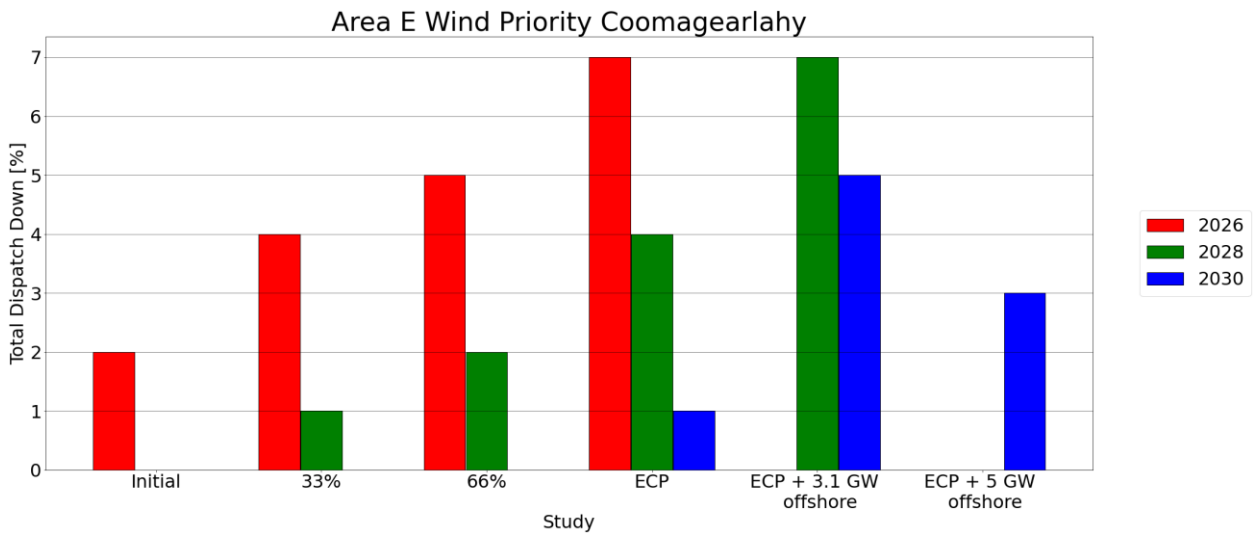


Figure 2-23 - Total Dispatch Down for Wind priority for Node Coomagearlaha

## 2.9 Coomataggart

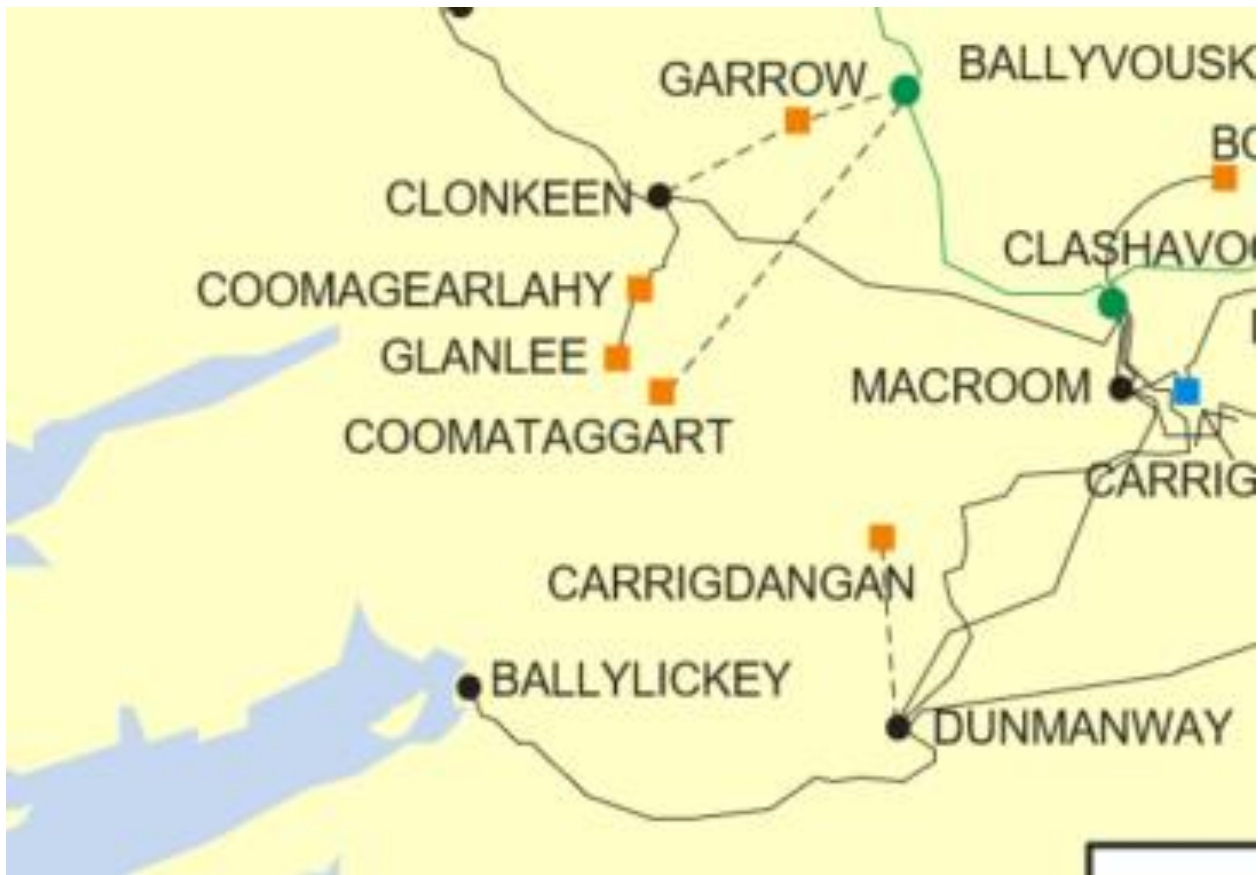


Figure 2-24 - Location of node Coomataggart

Generator	SO	Capacity	Type	Status
Cleanrath (1)	DSO	42.64	wind non-priority	connected
Grousemount WF	TSO	114.2	wind non-priority	connected

Table 2-24 - Generation Included in Study for Node Coomataggart



The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	157	157	157	157		
Installed Capacity (MW)	2028	157	157	157	157	157	
Installed Capacity (MW)	2030				157	157	157
Available Energy (GWh)	2026	508	508	508	508		
Available Energy (GWh)	2028	511	511	511	511	511	
Available Energy (GWh)	2030				508	508	508
Generation (GWh)	2026	412	403	386	366		
Generation (GWh)	2028	467	452	435	417	309	
Generation (GWh)	2030				456	363	367
Surplus (%)	2026	2 %	5 %	9 %	14 %		
Surplus (%)	2028	<1%	1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailement (%)	2026	2 %	3 %	4 %	4 %		
Curtailement (%)	2028	<1%	1 %	2 %	3 %	5 %	
Curtailement (%)	2030				<1%	2 %	2 %
Constraint (%)	2026	15 %	13 %	11 %	10%		
Constraint (%)	2028	8 %	10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026	19 %	21 %	24 %	28 %		
Total Dispatch Down (%)	2028	9 %	12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 2-25 - Surplus, Curtailment and Constraint for Wind non-priority in Area E

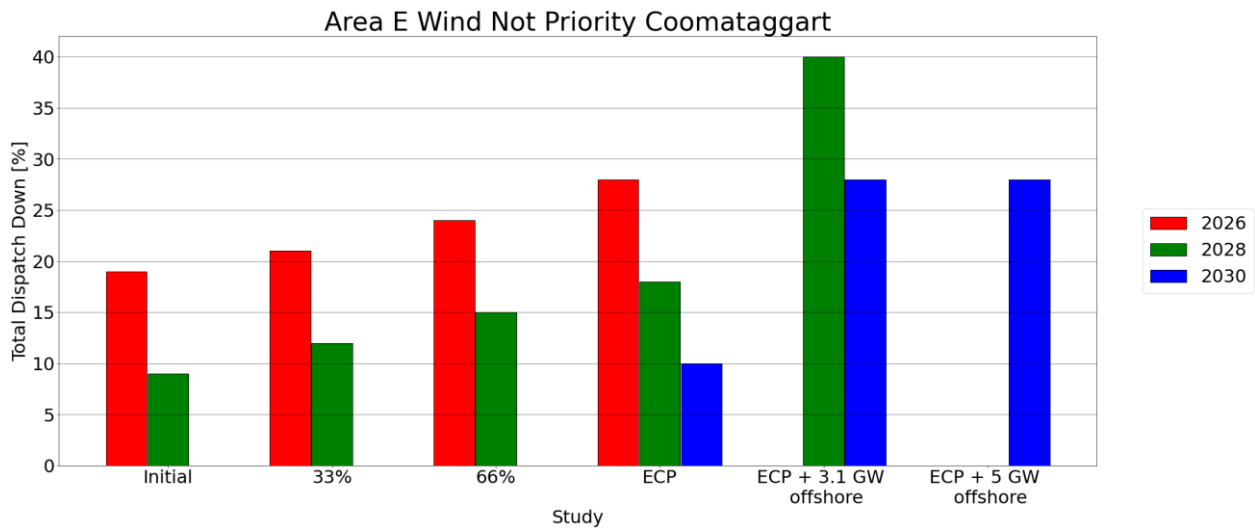


Figure 2-25 - Total Dispatch Down for Wind non-priority for Node Coomataggart

## 2.10 Cordal

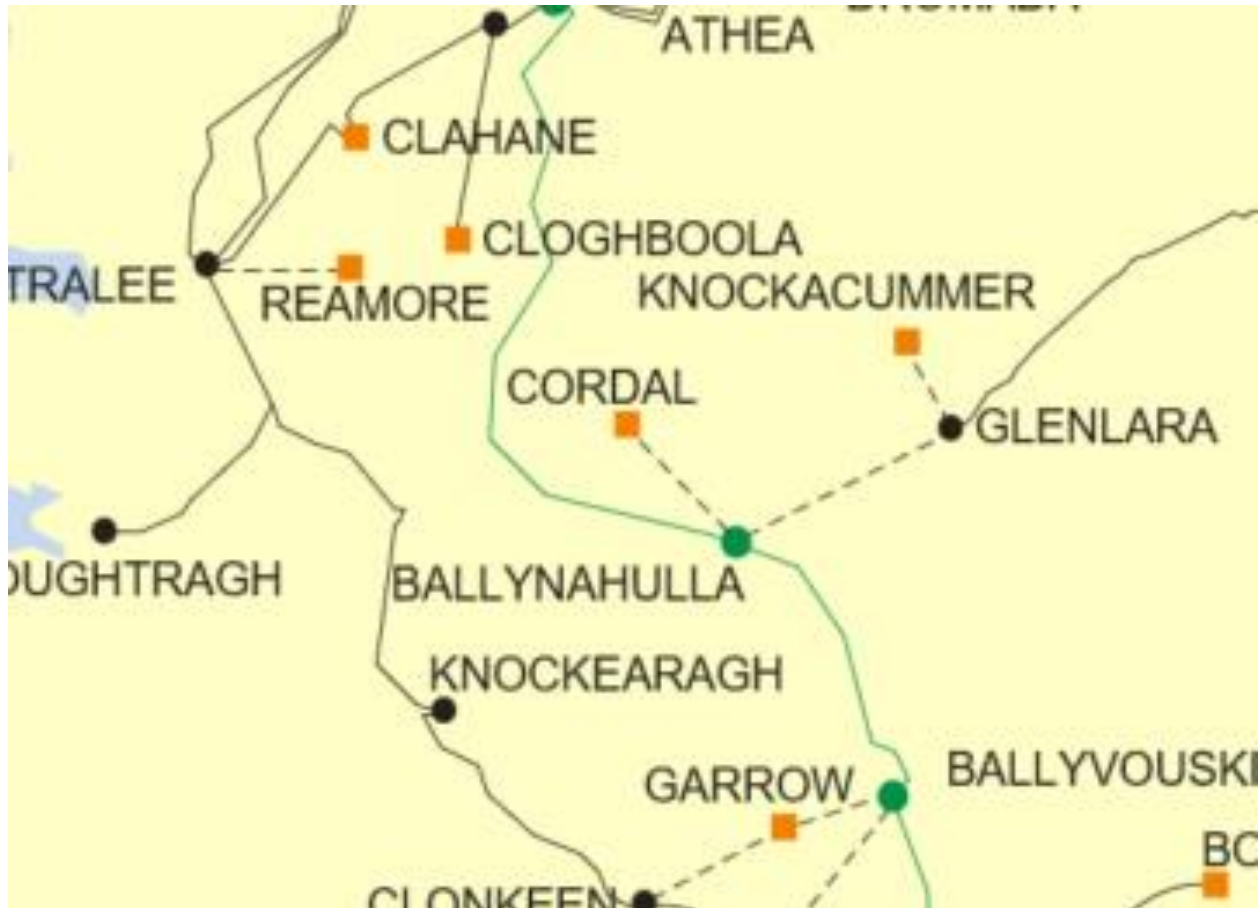


Figure 2-26 - Location of node Cordal

Generator	SO	Capacity	Type	Status
Coollegrean (1)	DSO	18.5	wind priority	connected
Cordal (1)	TSO	35.85	wind priority	connected
Cordal (2)	TSO	54.0	wind priority	connected
Scartaglen (1)	DSO	35.45	wind priority	connected
Scartaglen (2)	DSO	3.8	wind priority	connected

Table 2-26 - Generation Included in Study for Node Cordal

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	148	148	148	148		
Installed Capacity (MW)	2028	148	148	148	148	148	
Installed Capacity (MW)	2030				148	148	148
Available Energy (GWh)	2026	478	478	478	478		
Available Energy (GWh)	2028	481	481	481	481	481	
Available Energy (GWh)	2030				478	478	478
Generation (GWh)	2026	467	461	453	446		
Generation (GWh)	2028	480	475	470	464	447	
Generation (GWh)	2030				475	453	462
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-27 - Surplus, Curtailment and Constraint for Wind priority in Area E

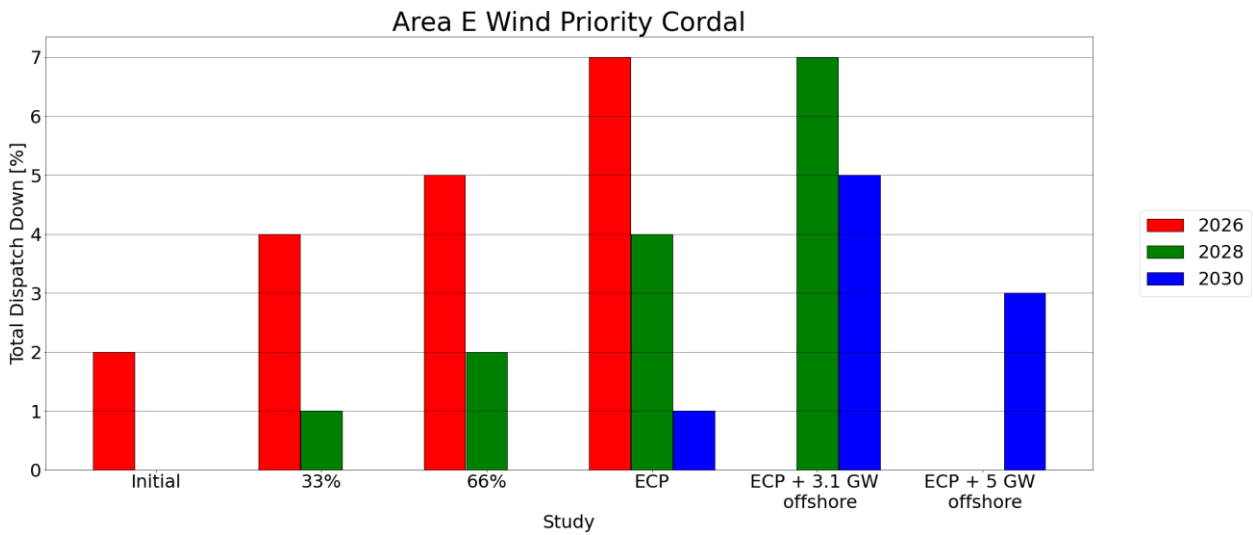


Figure 2-27 - Total Dispatch Down for Wind priority for Node Cordal

## 2.11 Dromada



Figure 2-28 - Location of node Dromada

Generator	SO	Capacity	Type	Status
<b>Dromada (1)</b>	TSO	28.5	wind priority	connected

Table 2-28 - Generation Included in Study for Node Dromada

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	28	28	28	28		
Installed Capacity (MW)	2028	28	28	28	28	28	
Installed Capacity (MW)	2030				28	28	28
Available Energy (GWh)	2026	92	92	92	92		
Available Energy (GWh)	2028	93	93	93	93	93	
Available Energy (GWh)	2030				92	92	92
Generation (GWh)	2026	90	89	87	86		
Generation (GWh)	2028	93	92	91	90	86	
Generation (GWh)	2030				92	87	89
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-29 - Surplus, Curtailment and Constraint for Wind priority in Area E

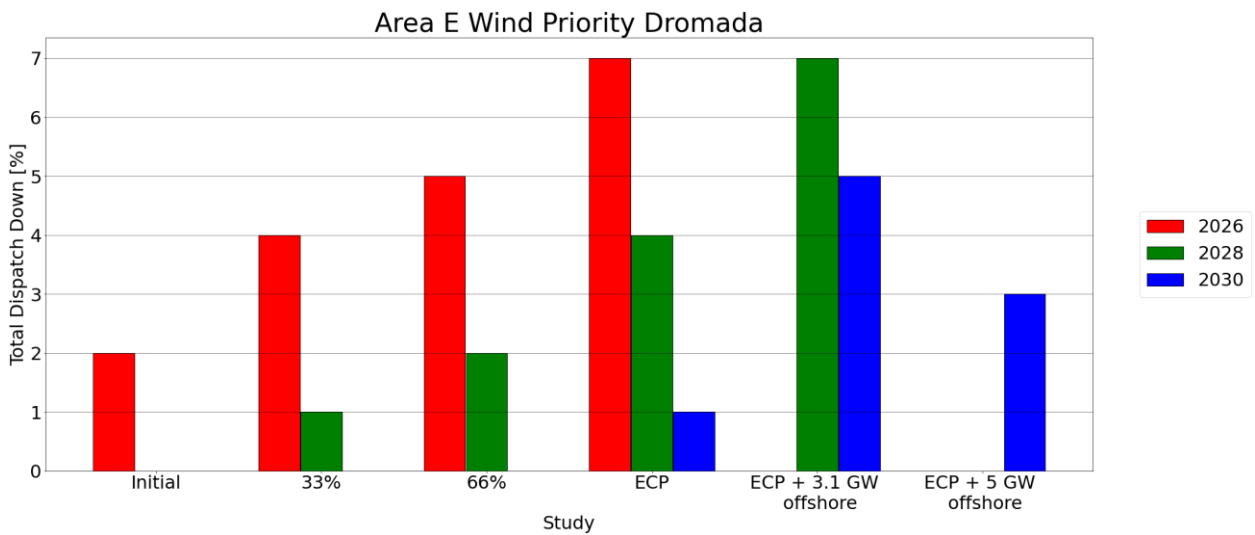


Figure 2-29 - Total Dispatch Down for Wind priority for Node Dromada

## 2.12 Drombeg

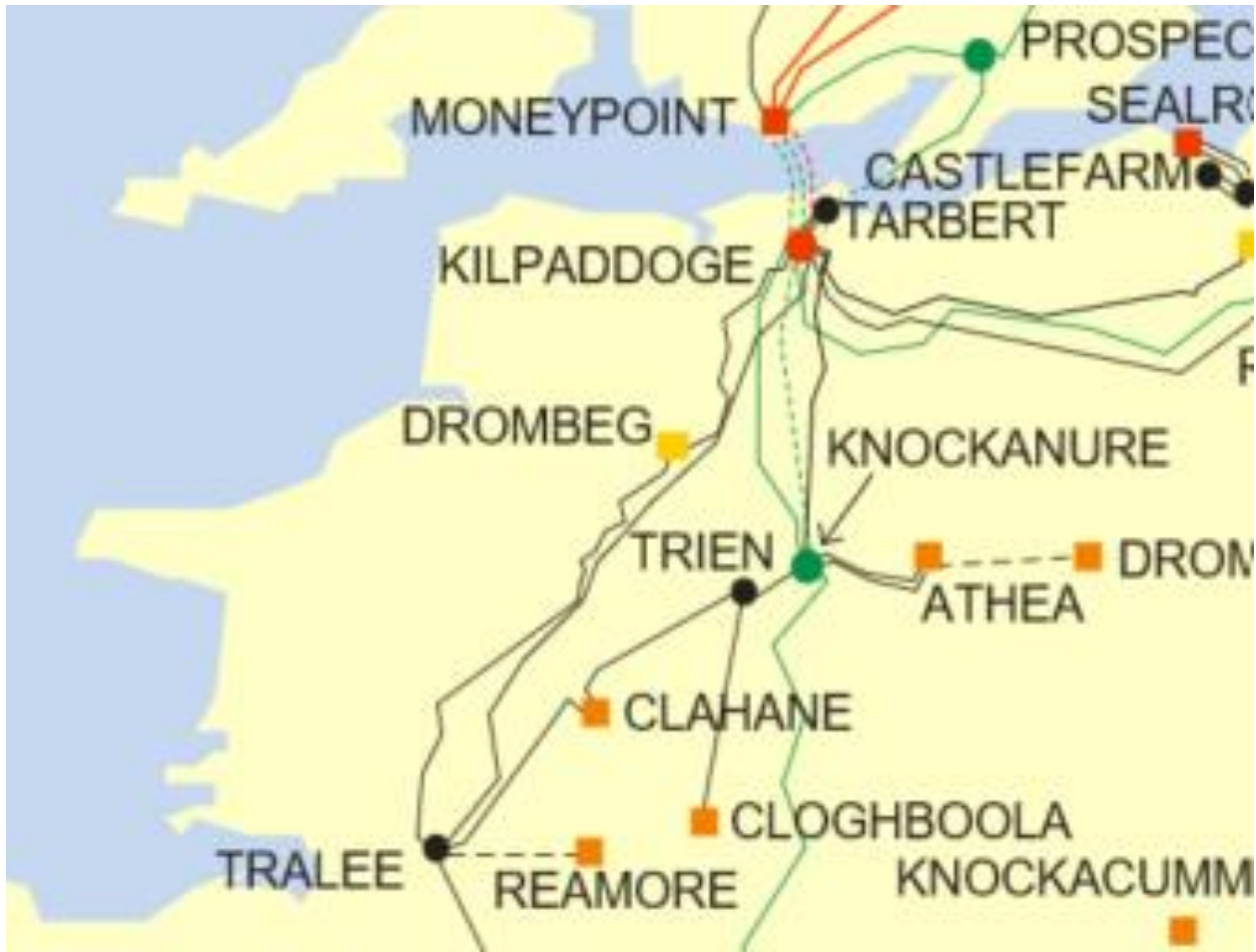


Figure 2-30 - Location of node Drombeg

Generator	SO	Capacity	Type	Status
Ballylongford Windfarm	DSO	25.2	wind non-priority	due to connect
Drombeg Solar Park	TSO	50.0	solar non-priority	due to connect
Drombeg Solar Park Phase II (Ballydonohoe)	TSO	44.0	solar non-priority	due to connect
Shrownowen Windfarm	TSO	50.0	wind non-priority	due to connect

Table 2-30 - Generation Included in Study for Node Drombeg

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	50	65	79	94		
Installed Capacity (MW)	2028	50	65	79	94	94	
Installed Capacity (MW)	2030				94	94	94
Available Energy (GWh)	2026	59	76	93	110		
Available Energy (GWh)	2028	59	76	93	110	110	
Available Energy (GWh)	2030				110	110	110
Generation (GWh)	2026	56	72	85	95		
Generation (GWh)	2028	56	72	88	101	93	
Generation (GWh)	2030				105	101	96
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1%	<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026	1 %	1 %	2 %	4 %		
Curtailement (%)	2028	<1%	1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	1 %	1 %		
Constraint (%)	2028	5 %	4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026	5 %	5 %	8 %	14 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-31 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

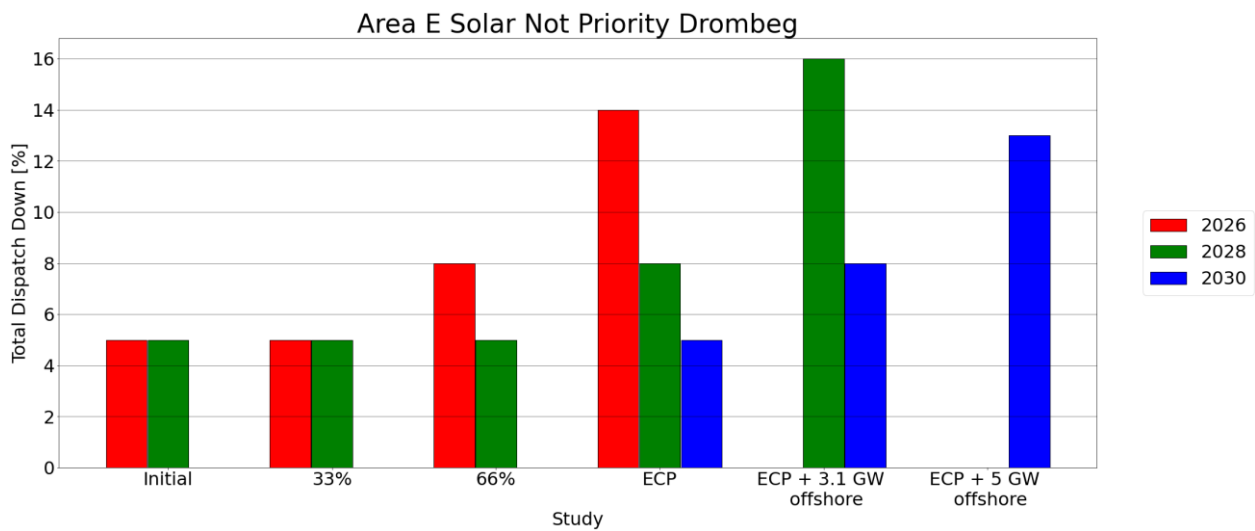


Figure 2-31 - Total Dispatch Down for Solar non-priority for Node Drombeg

The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	25	42	59	75		
Installed Capacity (MW)	2028	25	42	59	75	75	
Installed Capacity (MW)	2030				75	75	75
Available Energy (GWh)	2026	82	136	190	243		
Available Energy (GWh)	2028	82	136	191	245	245	
Available Energy (GWh)	2030				243	243	243
Generation (GWh)	2026	66	108	144	175		
Generation (GWh)	2028	75	121	162	200	148	
Generation (GWh)	2030				219	174	176
Surplus (%)	2026	2 %	5 %	9 %	14 %		
Surplus (%)	2028	<1%	1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailement (%)	2026	2 %	3 %	4 %	4 %		
Curtailement (%)	2028	<1%	1 %	2 %	3 %	5 %	
Curtailement (%)	2030				<1%	2 %	2 %
Constraint (%)	2026	15 %	13 %	11 %	10%		
Constraint (%)	2028	8 %	10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026	19 %	21 %	24 %	28 %		
Total Dispatch Down (%)	2028	9 %	12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 2-32 - Surplus, Curtailement and Constraint for Wind non-priority in Area E

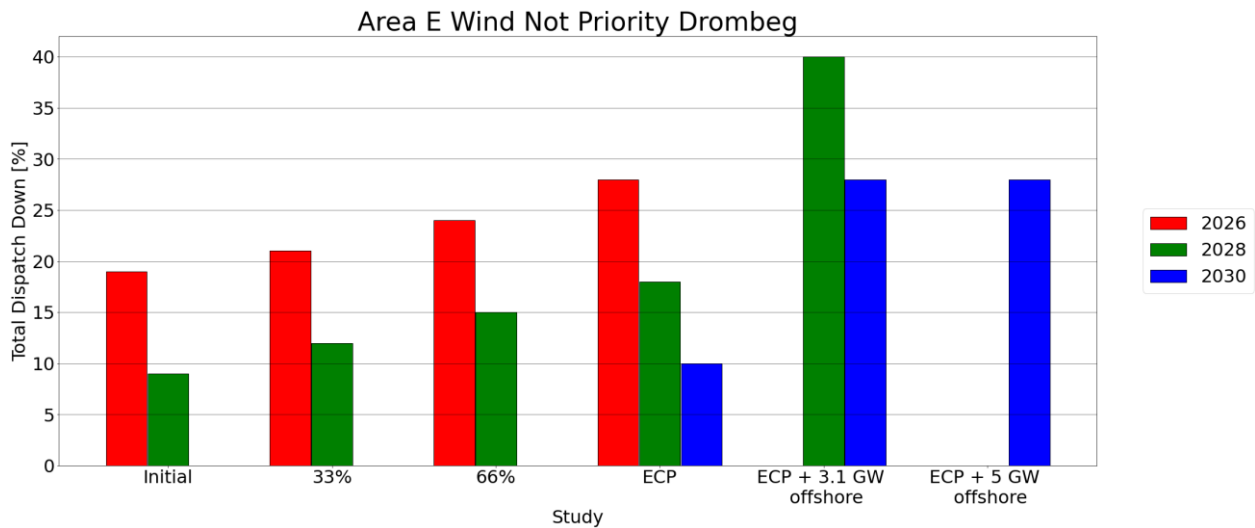


Figure 2-32 - Total Dispatch Down for Wind non-priority for Node Drombeg



## 2.13 Garrow



Figure 2-33 - Location of node Garrow

Generator	SO	Capacity	Type	Status
<b>Caherdowney (1)</b>	DSO	10.0	wind priority	connected
<b>Clydaghroe (1)</b>	DSO	4.99	wind uncontrolled	connected
<b>Coomacheo (1)</b>	TSO	41.225	wind priority	connected
<b>Coomacheo (2)</b>	TSO	18.0	wind priority	connected

Table 2-33 - Generation Included in Study for Node Garrow

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	69	69	69	69		
Installed Capacity (MW)	2028	69	69	69	69	69	
Installed Capacity (MW)	2030				69	69	69
Available Energy (GWh)	2026	224	224	224	224		
Available Energy (GWh)	2028	226	226	226	226	226	
Available Energy (GWh)	2030				224	224	224
Generation (GWh)	2026	219	216	212	209		
Generation (GWh)	2028	225	223	221	218	210	
Generation (GWh)	2030				223	212	217
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-34 - Surplus, Curtailment and Constraint for Wind priority in Area E

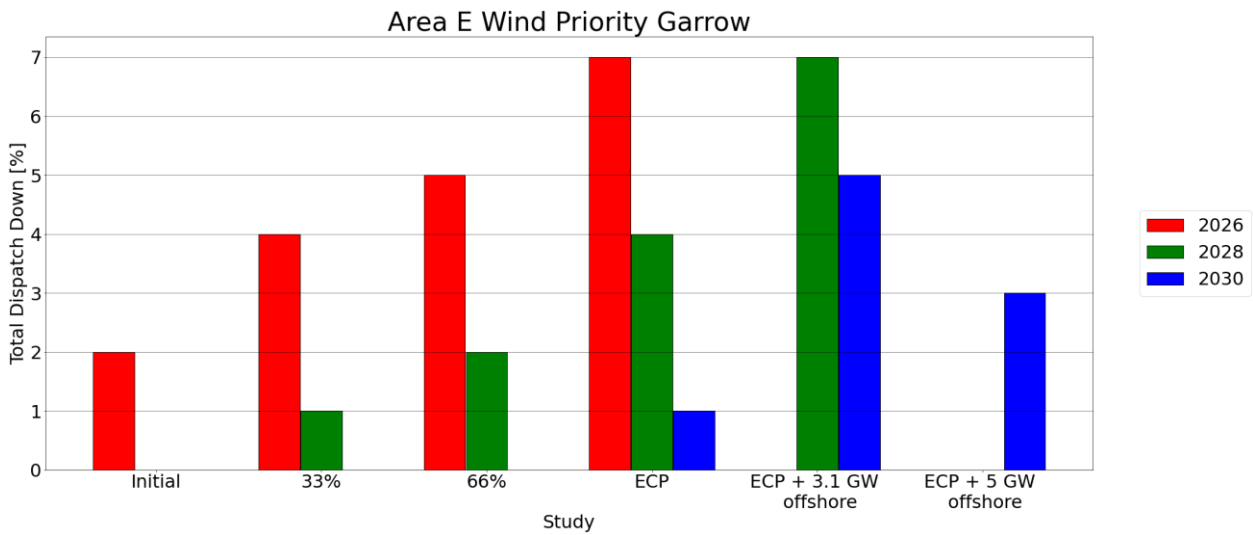


Figure 2-34 - Total Dispatch Down for Wind priority for Node Garrow

## 2.14 Glanlee

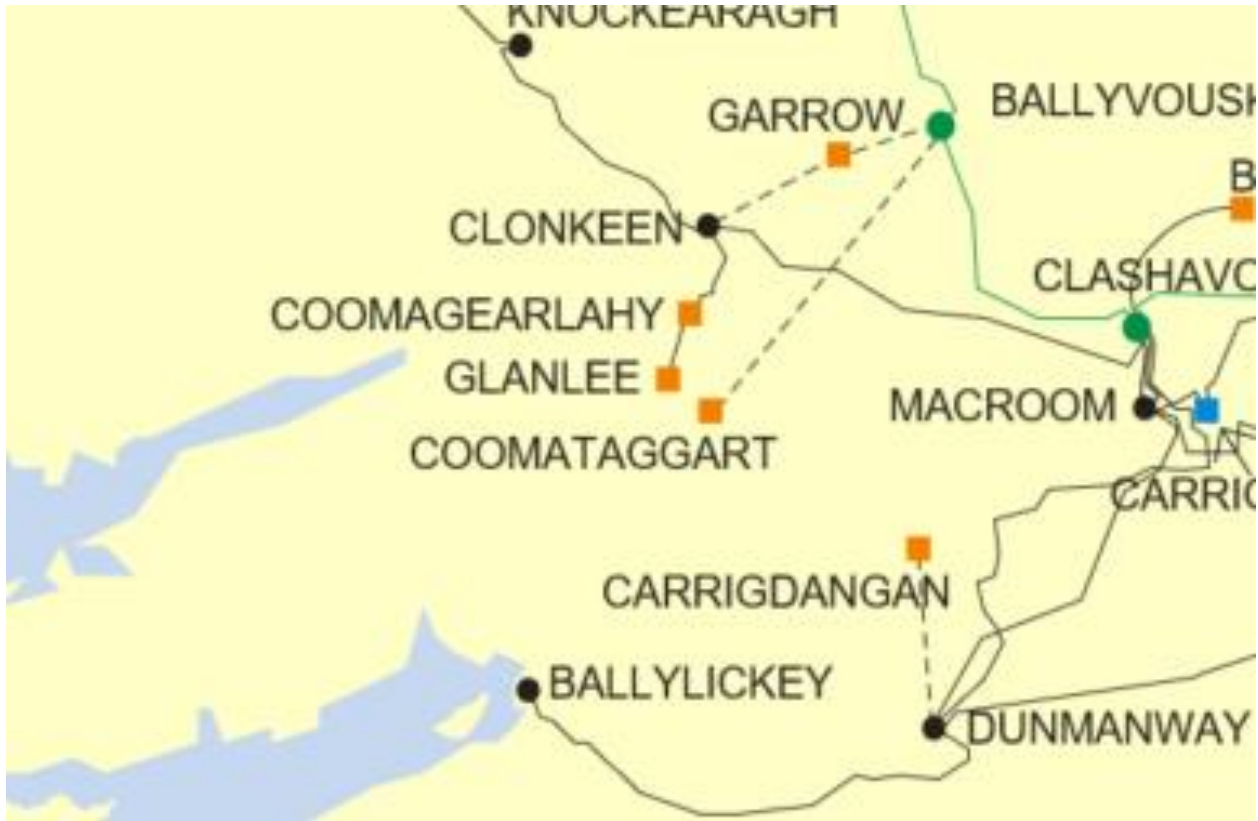


Figure 2-35 - Location of node Glanlee

Generator	SO	Capacity	Type	Status
<b>Glanlee (1)</b>	TSO	29.8	wind priority	connected

Table 2-35 - Generation Included in Study for Node Glanlee

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	30	30	30	30		
Installed Capacity (MW)	2028	30	30	30	30	30	
Installed Capacity (MW)	2030				30	30	30
Available Energy (GWh)	2026	96	96	96	96		
Available Energy (GWh)	2028	97	97	97	97	97	
Available Energy (GWh)	2030				96	96	96
Generation (GWh)	2026	94	93	91	90		
Generation (GWh)	2028	97	96	95	94	90	
Generation (GWh)	2030				96	91	93
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-36 - Surplus, Curtailement and Constraint for Wind priority in Area E

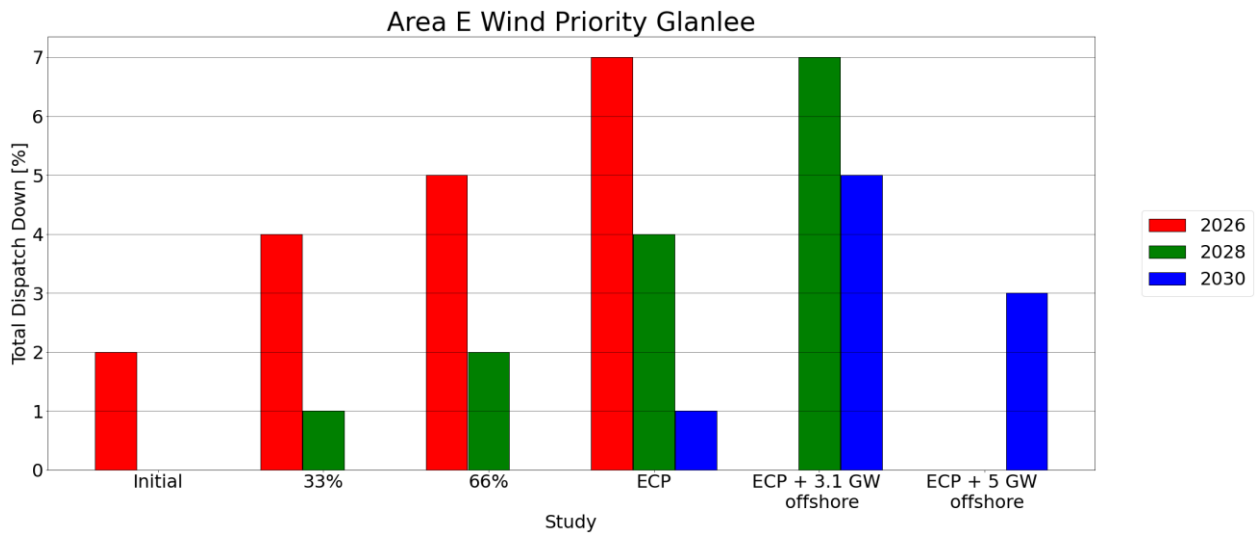


Figure 2-36 - Total Dispatch Down for Wind priority for Node Glanlee

## 2.15 Glenlara



Figure 2-37 - Location of node Glenlara

Generator	SO	Capacity	Type	Status
<b>Curraduff (previously Southwest Solar)</b>	DSO	4.99	solar non-priority	connected
<b>Dromalour</b>	DSO	4.95	solar non-priority	due to connect

Table 2-37 - Generation Included in Study for Node Glenlara

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	10	10	10	10		
Installed Capacity (MW)	2028	10	10	10	10	10	
Installed Capacity (MW)	2030				10	10	10
Available Energy (GWh)	2026	12	12	12	12		
Available Energy (GWh)	2028	12	12	12	12	12	
Available Energy (GWh)	2030				12	12	12
Generation (GWh)	2026	11	11	11	10		
Generation (GWh)	2028	11	11	11	11	10	
Generation (GWh)	2030				11	11	10
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1%	<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026	1 %	1 %	2 %	4 %		
Curtailement (%)	2028	<1%	1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	1 %	1 %		
Constraint (%)	2028	5 %	4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026	5 %	5 %	8 %	14 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-38 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

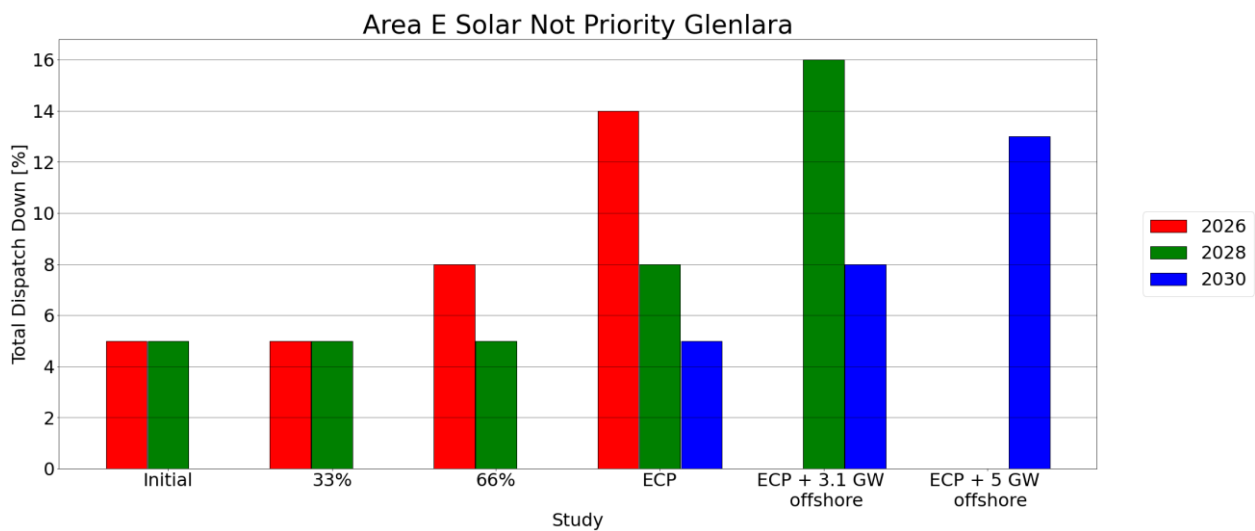


Figure 2-38 - Total Dispatch Down for Solar non-priority for Node Glenlara

## 2.16 Glenlara 220kv side



Figure 2-39 - Location of node Glenlara 220kv side

Generator	SO	Capacity	Type	Status
<b>Dromdeeveen (1)</b>	DSO	10.5	wind priority	connected
<b>Dromdeeveen (2)</b>	DSO	16.5	wind priority	connected
<b>Taurbeg (1)</b>	DSO	26.0	wind priority	connected
<b>Mauricetown (Glenduff) Wind Farm</b>	DSO	13.8	wind not priority	connected

Table 2-39 - Generation Included in Study for Node Glenlara 220kv side

The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	14	14	14	14		
Installed Capacity (MW)	2028	14	14	14	14	14	
Installed Capacity (MW)	2030				14	14	14
Available Energy (GWh)	2026	45	45	45	45		
Available Energy (GWh)	2028	45	45	45	45	45	
Available Energy (GWh)	2030				45	45	45
Generation (GWh)	2026	36	35	34	32		
Generation (GWh)	2028	41	40	38	37	27	
Generation (GWh)	2030				40	32	32
Surplus (%)	2026	2 %	5 %	9 %	14 %		
Surplus (%)	2028	<1%	1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailement (%)	2026	2 %	3 %	4 %	4 %		
Curtailement (%)	2028	<1%	1 %	2 %	3 %	5 %	
Curtailement (%)	2030				<1%	2 %	2 %
Constraint (%)	2026	15 %	13 %	11 %	10%		
Constraint (%)	2028	8 %	10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026	19 %	21 %	24 %	28 %		
Total Dispatch Down (%)	2028	9 %	12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 2-40 - Surplus, Curtailment and Constraint for Wind non-priority in Area E

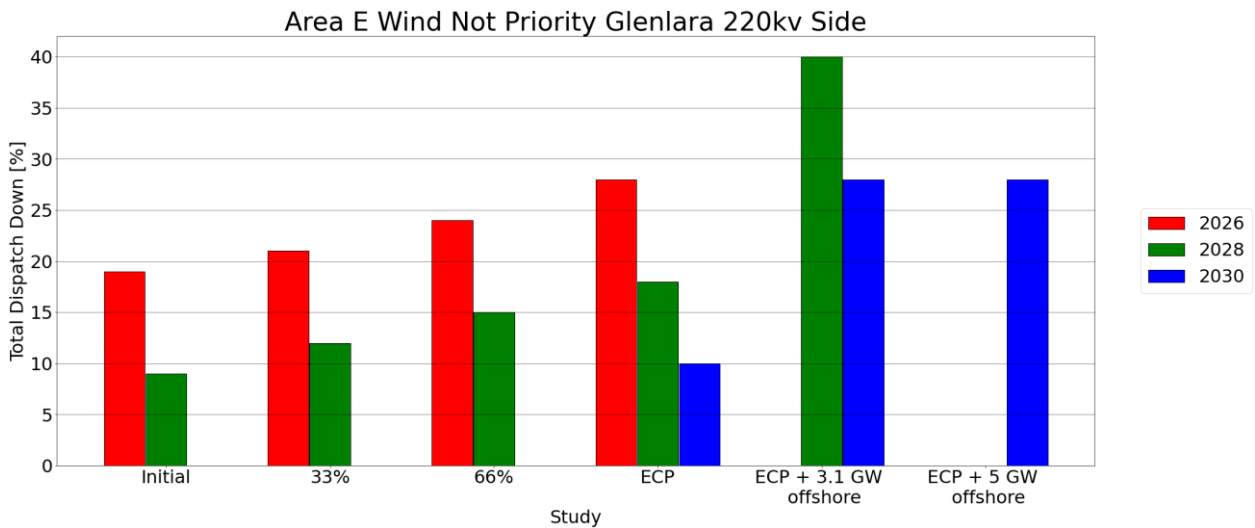


Figure 2-40 - Total Dispatch Down for Wind non-priority for Node Glenlara 220kv side



The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	53	53	53	53		
Installed Capacity (MW)	2028	53	53	53	53	53	
Installed Capacity (MW)	2030				53	53	53
Available Energy (GWh)	2026	172	172	172	172		
Available Energy (GWh)	2028	173	173	173	173	173	
Available Energy (GWh)	2030				172	172	172
Generation (GWh)	2026	168	165	163	160		
Generation (GWh)	2028	172	171	169	167	160	
Generation (GWh)	2030				171	163	166
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-41 - Surplus, Curtailement and Constraint for Wind priority in Area E

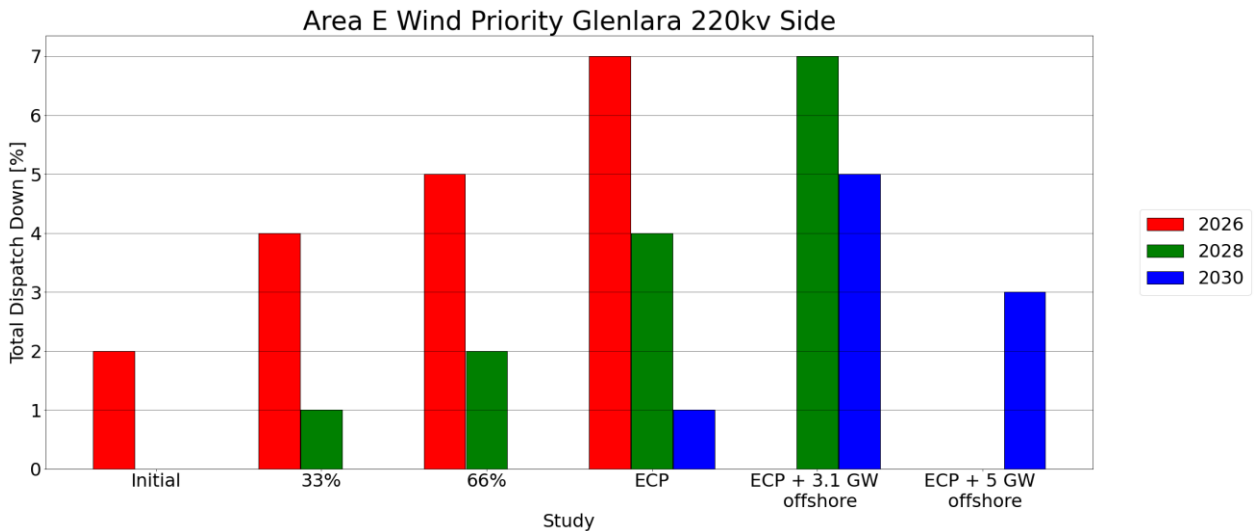


Figure 2-41 - Total Dispatch Down for Wind priority for Node Glenlara 220kv side

## 2.17 Kilpaddoge

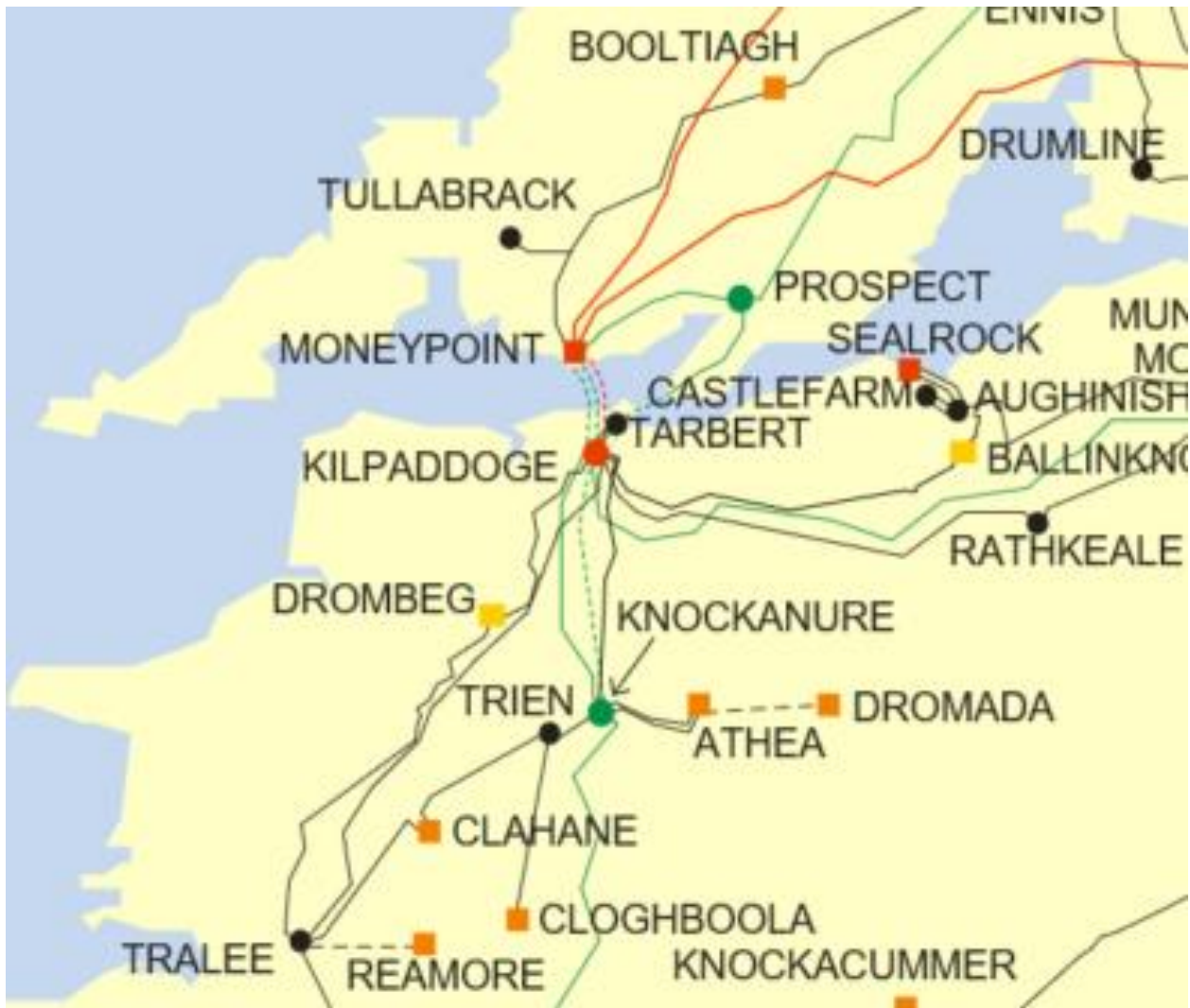


Figure 2-42 - Location of node Kilpaddoge

Generator	SO	Capacity	Type	Status
<b>Kelwin Power Plant</b>	TSO	41.6	wind priority	connected
<b>Leanamore (1) (formerly Tarbert (1))</b>	DSO	18.0	wind priority	connected

Table 2-42 - Generation Included in Study for Node Kilpaddoge

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	60	60	60	60		
Installed Capacity (MW)	2028	60	60	60	60	60	
Installed Capacity (MW)	2030				60	60	60
Available Energy (GWh)	2026	193	193	193	193		
Available Energy (GWh)	2028	194	194	194	194	194	
Available Energy (GWh)	2030				193	193	193
Generation (GWh)	2026	189	186	183	180		
Generation (GWh)	2028	194	192	190	187	180	
Generation (GWh)	2030				192	183	187
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-43 - Surplus, Curtailement and Constraint for Wind priority in Area E

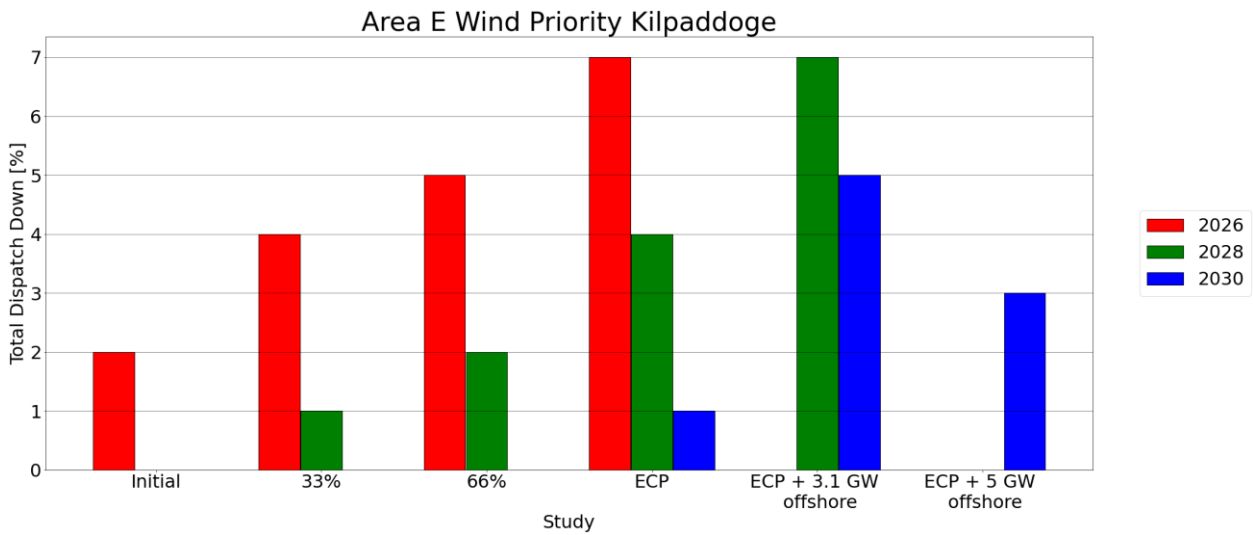


Figure 2-43 - Total Dispatch Down for Wind priority for Node Kilpaddoge

## 2.18 Knockacummer

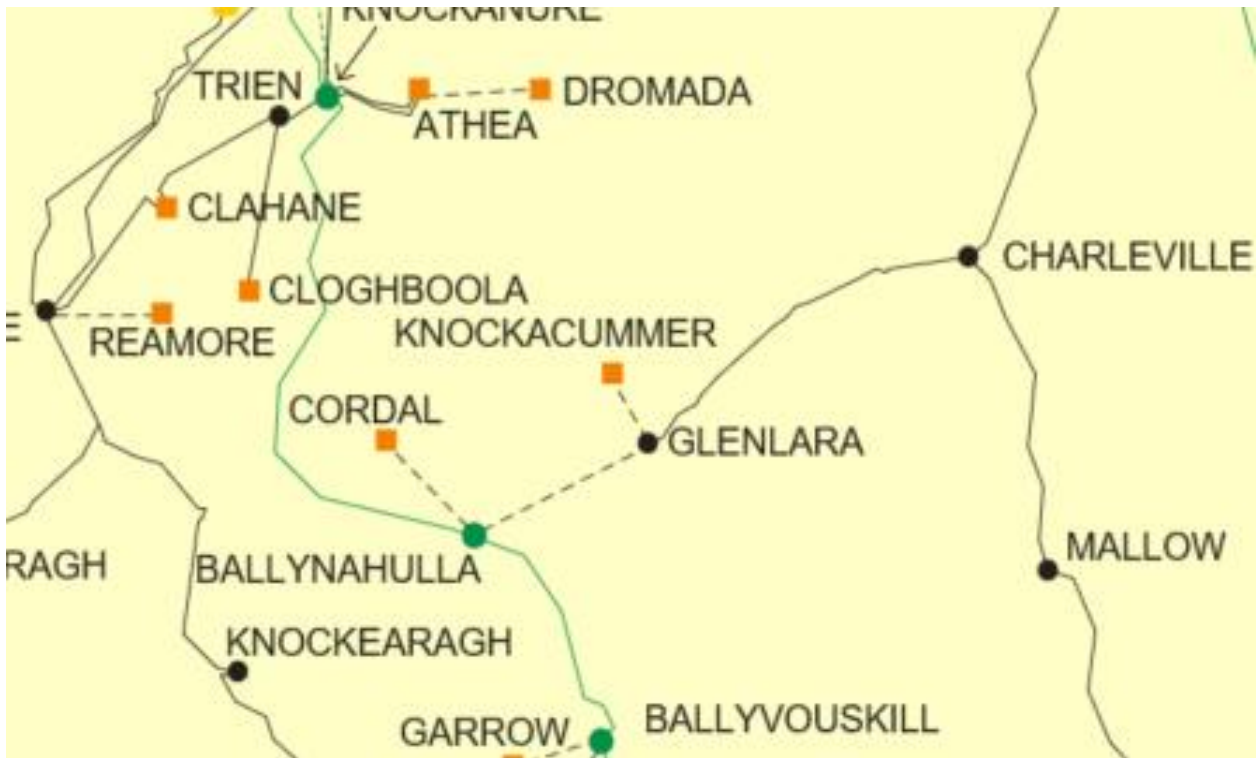


Figure 2-44 - Location of node Knockacummer

Generator	SO	Capacity	Type	Status
<b>Knockacummer (1)</b>	TSO	100.0	wind priority	connected

Table 2-44 - Generation Included in Study for Node Knockacummer

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	100	100	100	100		
Installed Capacity (MW)	2028	100	100	100	100	100	
Installed Capacity (MW)	2030				100	100	100
Available Energy (GWh)	2026	324	324	324	324		
Available Energy (GWh)	2028	326	326	326	326	326	
Available Energy (GWh)	2030				324	324	324
Generation (GWh)	2026	317	312	307	302		
Generation (GWh)	2028	325	322	319	314	303	
Generation (GWh)	2030				322	307	313
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-45 - Surplus, Curtailment and Constraint for Wind priority in Area E

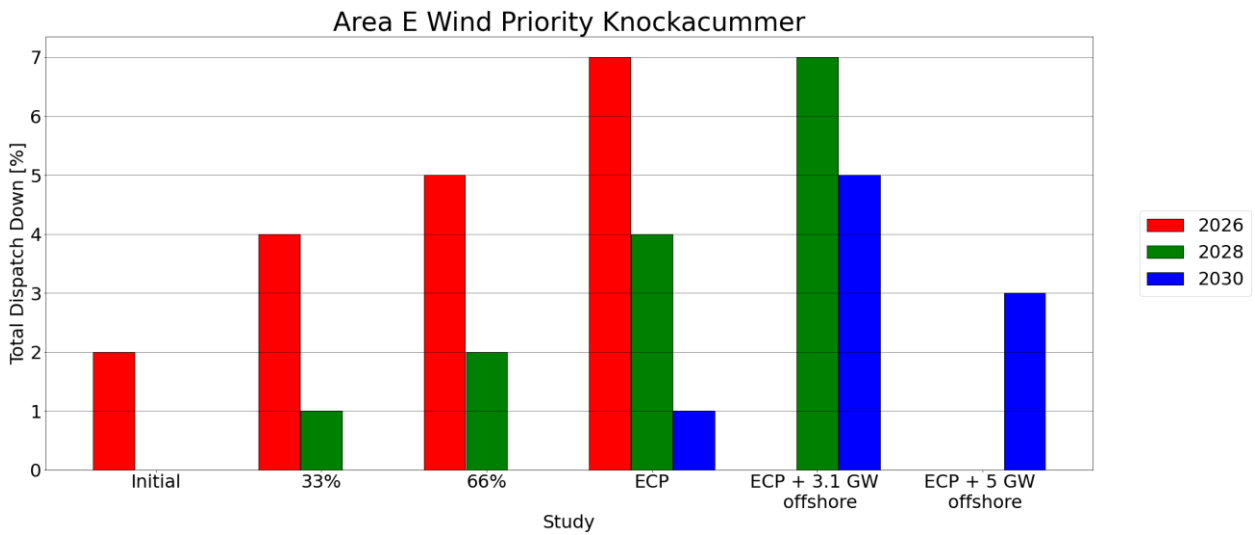


Figure 2-45 - Total Dispatch Down for Wind priority for Node Knockacummer

## 2.19 Knockearagh



Figure 2-46 - Location of node Knockearagh

Generator	SO	Capacity	Type	Status
<b>Gneeves (1)</b>	DSO	9.35	wind priority	connected
<b>Madam's Hill Solar Park</b>	DSO	8.99	solar non-priority	due to connect
<b>WEDcross (1)</b>	DSO	4.5	wind uncontrolled	connected

Table 2-46 - Generation Included in Study for Node Knockearagh

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	9	9	9	9		
Installed Capacity (MW)	2028	9	9	9	9	9	
Installed Capacity (MW)	2030				9	9	9
Available Energy (GWh)	2026	11	11	11	11		
Available Energy (GWh)	2028	11	11	11	11	11	
Available Energy (GWh)	2030				11	11	11
Generation (GWh)	2026	10	10	10	9		
Generation (GWh)	2028	10	10	10	10	9	
Generation (GWh)	2030				10	10	9
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1%	<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026	1 %	1 %	2 %	4 %		
Curtailement (%)	2028	<1%	1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	1 %	1 %		
Constraint (%)	2028	5 %	4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026	5 %	5 %	8 %	14 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-47 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

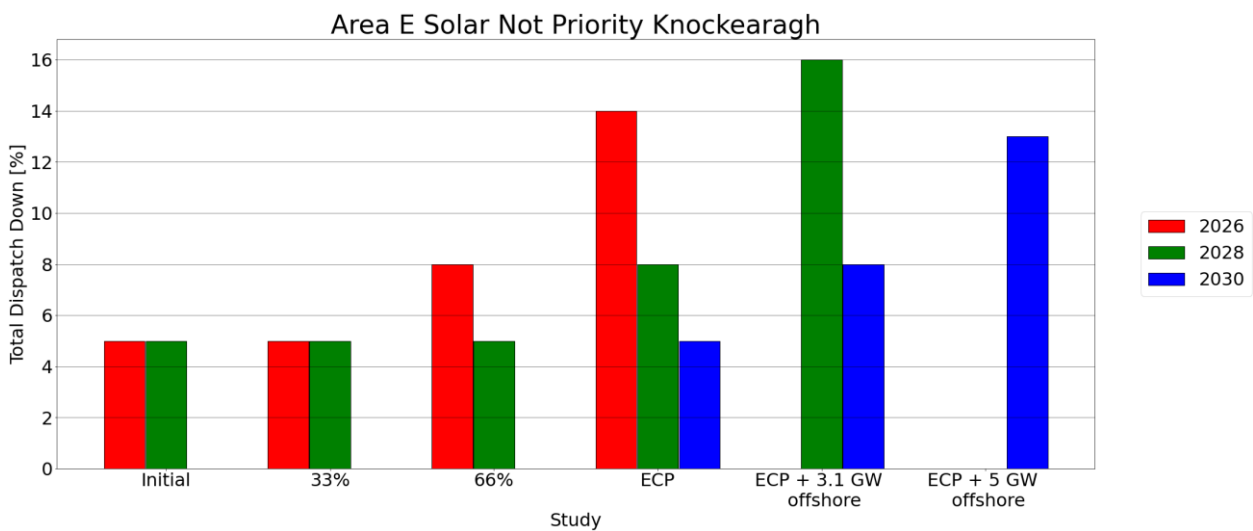


Figure 2-47 - Total Dispatch Down for Solar non-priority for Node Knockearagh

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	9	9	9	9		
Installed Capacity (MW)	2028	9	9	9	9	9	
Installed Capacity (MW)	2030				9	9	9
Available Energy (GWh)	2026	30	30	30	30		
Available Energy (GWh)	2028	30	30	30	30	30	
Available Energy (GWh)	2030				30	30	30
Generation (GWh)	2026	30	29	29	28		
Generation (GWh)	2028	30	30	30	29	28	
Generation (GWh)	2030				30	29	29
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-48 - Surplus, Curtailement and Constraint for Wind priority in Area E

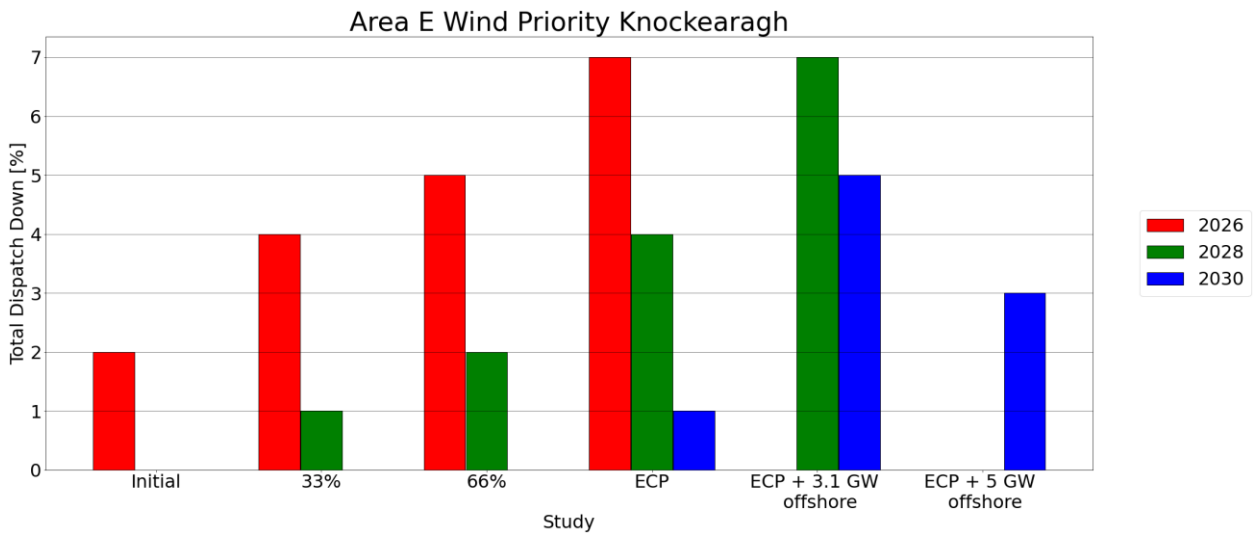


Figure 2-48 - Total Dispatch Down for Wind priority for Node Knockearagh



## 2.20 Limerick



Figure 2-49 - Location of node Limerick

Generator	SO	Capacity	Type	Status
Islanduane Solar Farm	DSO	4.95	solar non-priority	due to connect
Kilballyowen Windfarm	DSO	4.99	wind non-priority	due to connect
Kilcolman Solar Farm	DSO	4.0	solar non-priority	due to connect
Mungret Solar	DSO	2.5	solar non-priority	due to connect

Table 2-49 - Generation Included in Study for Node Limerick

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		4	8	11		
Installed Capacity (MW)	2028		4	8	11	11	
Installed Capacity (MW)	2030				11	11	11
Available Energy (GWh)	2026		4	9	13		
Available Energy (GWh)	2028		4	9	13	13	
Available Energy (GWh)	2030				13	13	13
Generation (GWh)	2026		4	8	12		
Generation (GWh)	2028		4	9	12	11	
Generation (GWh)	2030				13	12	12
Surplus (%)	2026		2 %	5 %	9 %		
Surplus (%)	2028		<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026		1 %	2 %	4 %		
Curtailement (%)	2028		1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026		1 %	<1%	<1%		
Constraint (%)	2028		4 %	1 %	<1%	<1%	
Constraint (%)	2030				2 %	<1%	<1%
Total Dispatch Down (%)	2026		5 %	8 %	13 %		
Total Dispatch Down (%)	2028		5 %	5 %	7 %	15 %	
Total Dispatch Down (%)	2030				5 %	7 %	12 %

Table 2-50 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

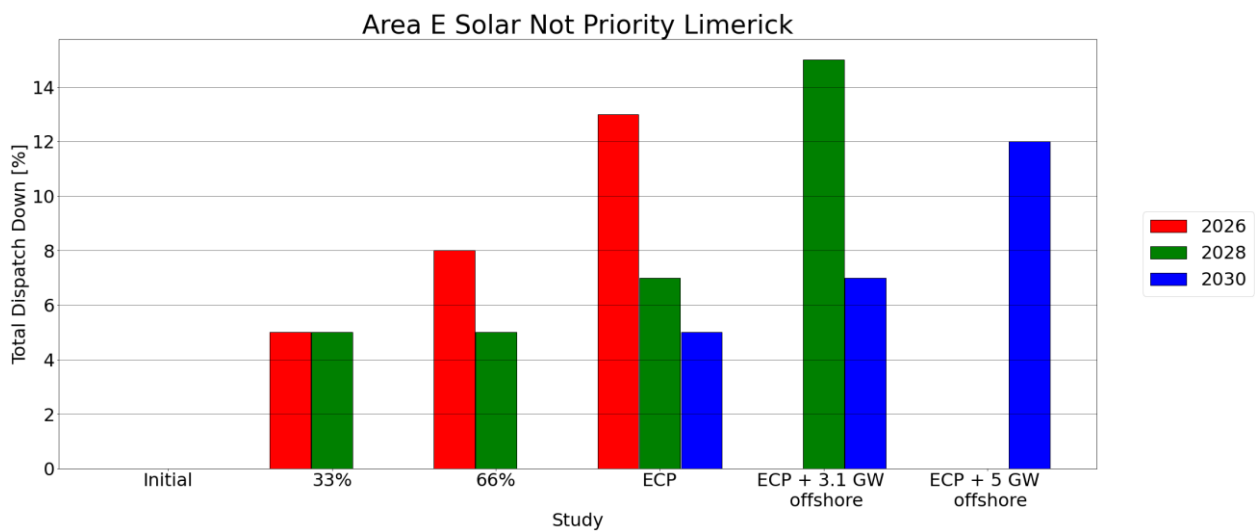


Figure 2-50 - Total Dispatch Down for Solar non-priority for Node Limerick

The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		2	3	5		
Installed Capacity (MW)	2028		2	3	5	5	
Installed Capacity (MW)	2030				5	5	5
Available Energy (GWh)	2026		5	11	16		
Available Energy (GWh)	2028		5	11	16	16	
Available Energy (GWh)	2030				16	16	16
Generation (GWh)	2026		5	9	13		
Generation (GWh)	2028		5	10	15	12	
Generation (GWh)	2030				15	14	12
Surplus (%)	2026		5 %	9 %	14 %		
Surplus (%)	2028		1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailement (%)	2026		3 %	4 %	4 %		
Curtailement (%)	2028		1 %	2 %	3 %	5 %	
Curtailement (%)	2030				<1%	2 %	2 %
Constraint (%)	2026		2 %	1 %	<1%		
Constraint (%)	2028		3 %	1 %	<1%	<1%	
Constraint (%)	2030				3 %	<1%	2 %
Total Dispatch Down (%)	2026		9 %	14 %	19 %		
Total Dispatch Down (%)	2028		5 %	5 %	8 %	26 %	
Total Dispatch Down (%)	2030				5 %	12 %	25 %

Table 2-51 - Surplus, Curtailment and Constraint for Wind non-priority in Area E

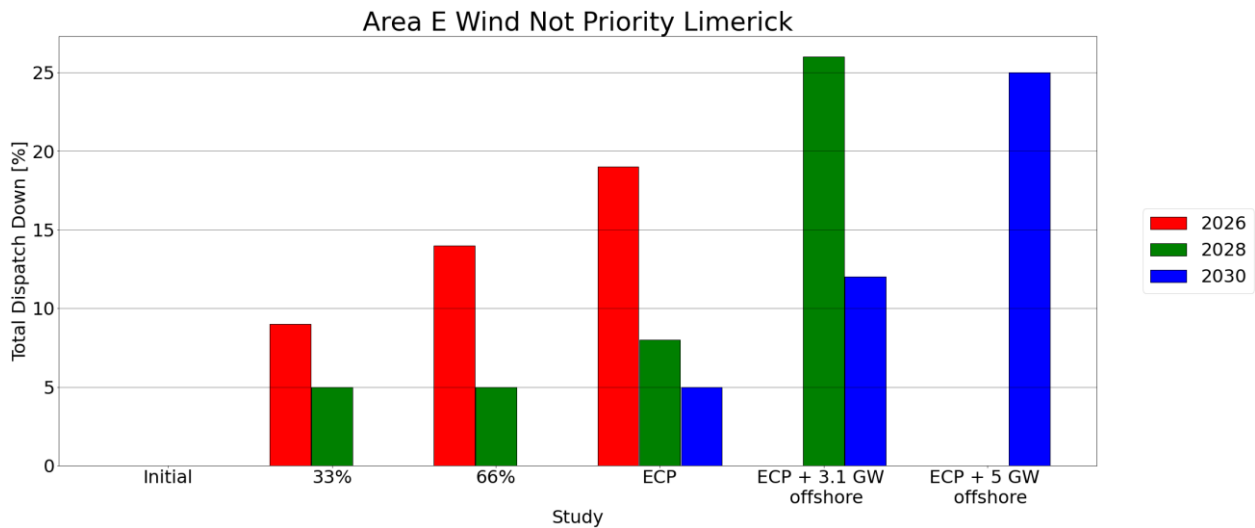


Figure 2-51 - Total Dispatch Down for Wind non-priority for Node Limerick

## 2.21 Mallow

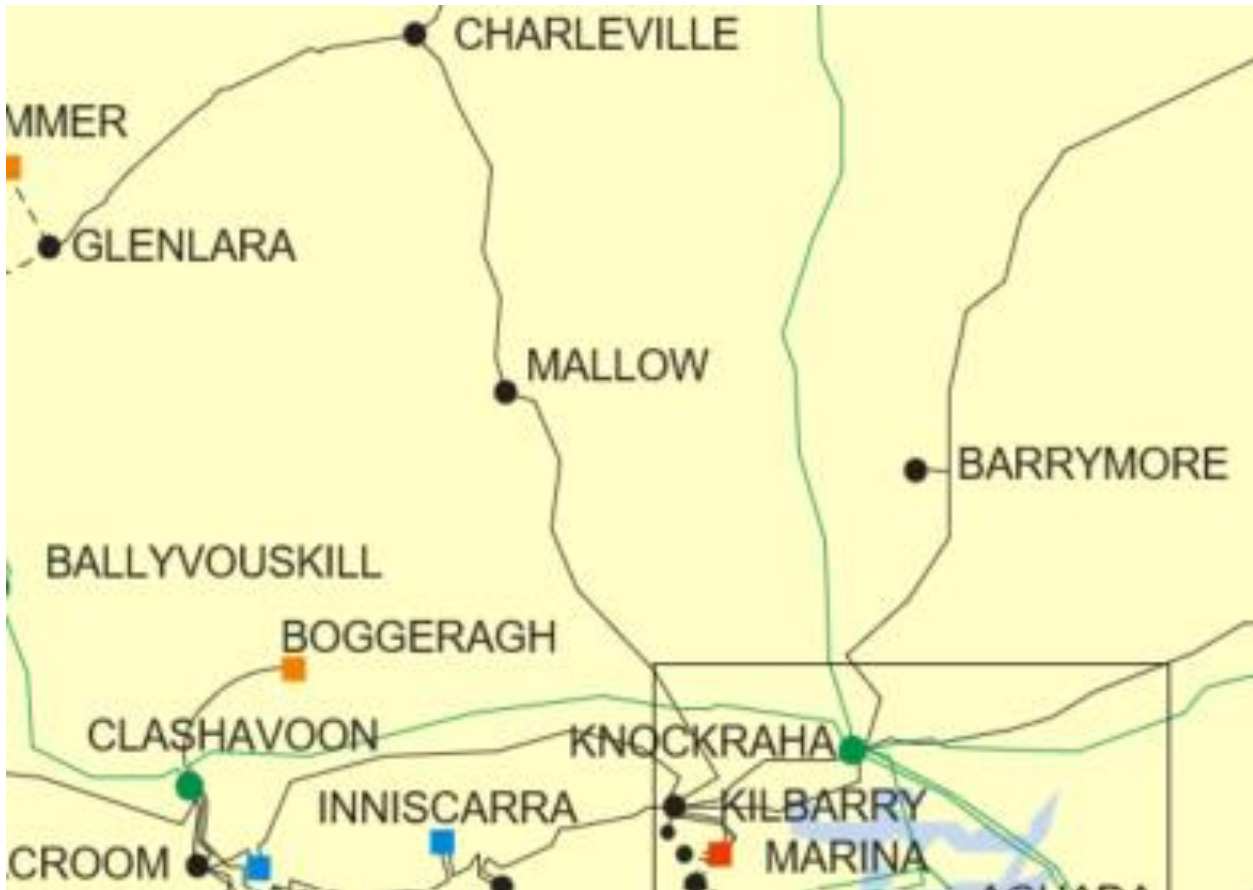


Figure 2-52 - Location of node Mallow

Generator	SO	Capacity	Type	Status
Crossfield	DSO	4.95	solar non-priority	due to connect
Knockbarry Solar Farm (prev Buttevant)	DSO	4.99	solar non-priority	due to connect

Table 2-52 - Generation Included in Study for Node Mallow

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	5	7	8	10		
Installed Capacity (MW)	2028	5	7	8	10	10	
Installed Capacity (MW)	2030				10	10	10
Available Energy (GWh)	2026	6	8	10	12		
Available Energy (GWh)	2028	6	8	10	12	12	
Available Energy (GWh)	2030				12	12	12
Generation (GWh)	2026	6	7	9	10		
Generation (GWh)	2028	6	7	9	11	10	
Generation (GWh)	2030				11	11	10
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1%	<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailed (%)	2026	1 %	1 %	2 %	4 %		
Curtailed (%)	2028	<1%	1 %	1 %	2 %	3 %	
Curtailed (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	1 %	1 %		
Constraint (%)	2028	5 %	4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026	5 %	5 %	8 %	14 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-53 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

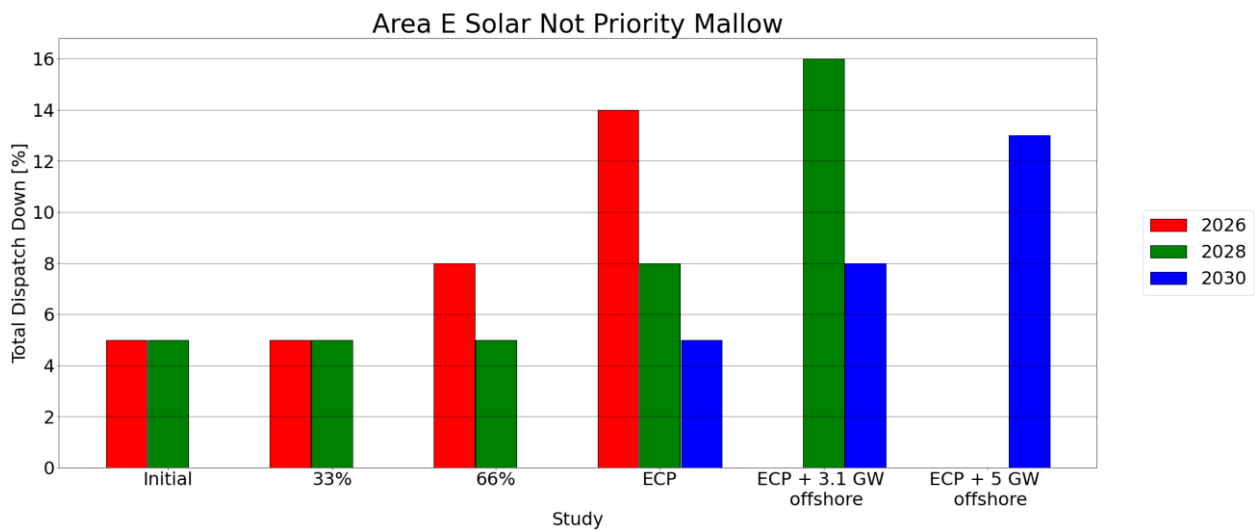


Figure 2-53 - Total Dispatch Down for Solar non-priority for Node Mallow

## 2.22 Moneypoint

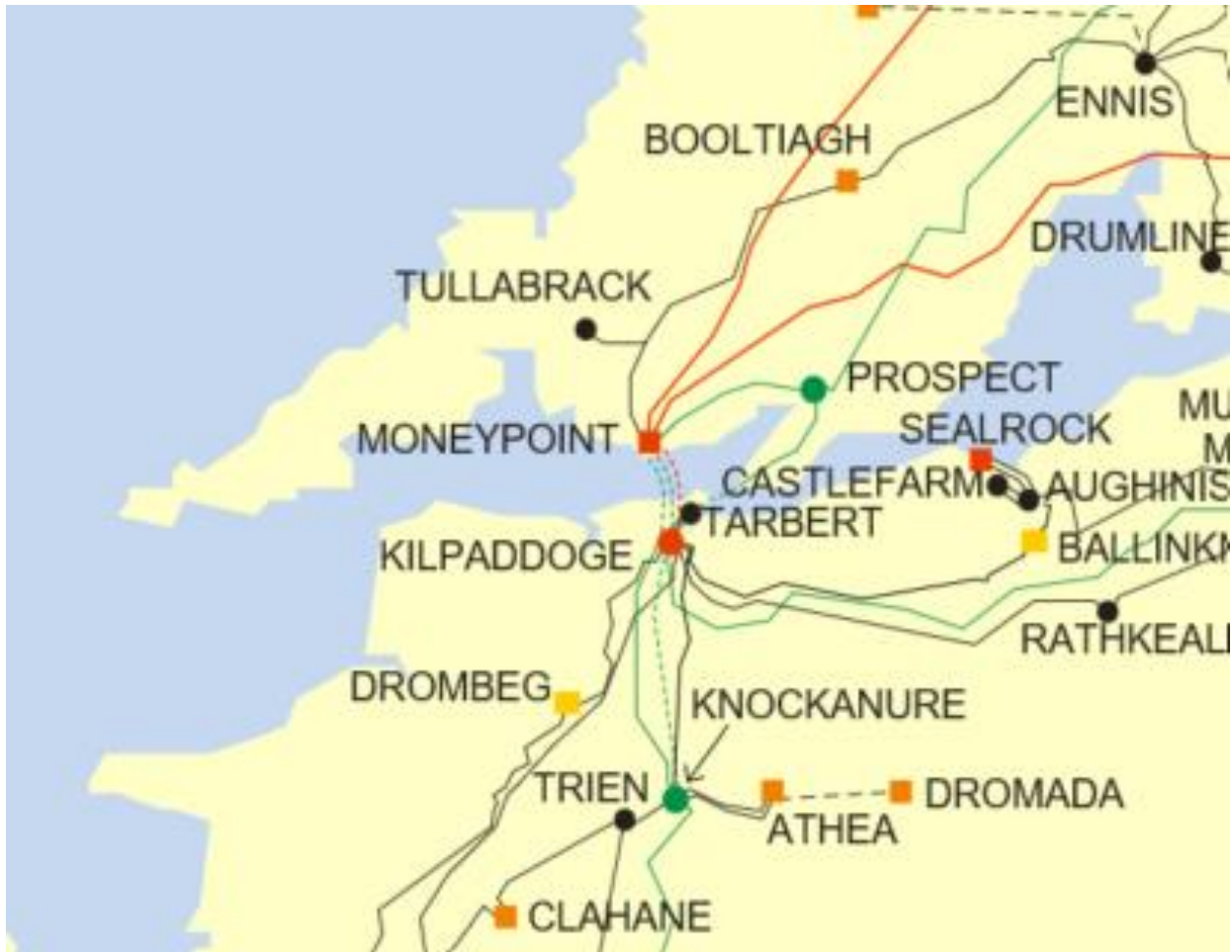


Figure 2-54 - Location of node Moneypoint

Generator	SO	Capacity	Type	Status
<b>Moneypoint WF</b>	TSO	17.25	wind priority	connected

Table 2-54 - Generation Included in Study for Node Moneypoint

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	17	17	17	17		
Installed Capacity (MW)	2028	17	17	17	17	17	
Installed Capacity (MW)	2030				17	17	17
Available Energy (GWh)	2026	56	56	56	56		
Available Energy (GWh)	2028	56	56	56	56	56	
Available Energy (GWh)	2030				56	56	56
Generation (GWh)	2026	55	54	53	52		
Generation (GWh)	2028	56	56	55	54	52	
Generation (GWh)	2030				56	53	54
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-55 - Surplus, Curtailement and Constraint for Wind priority in Area E

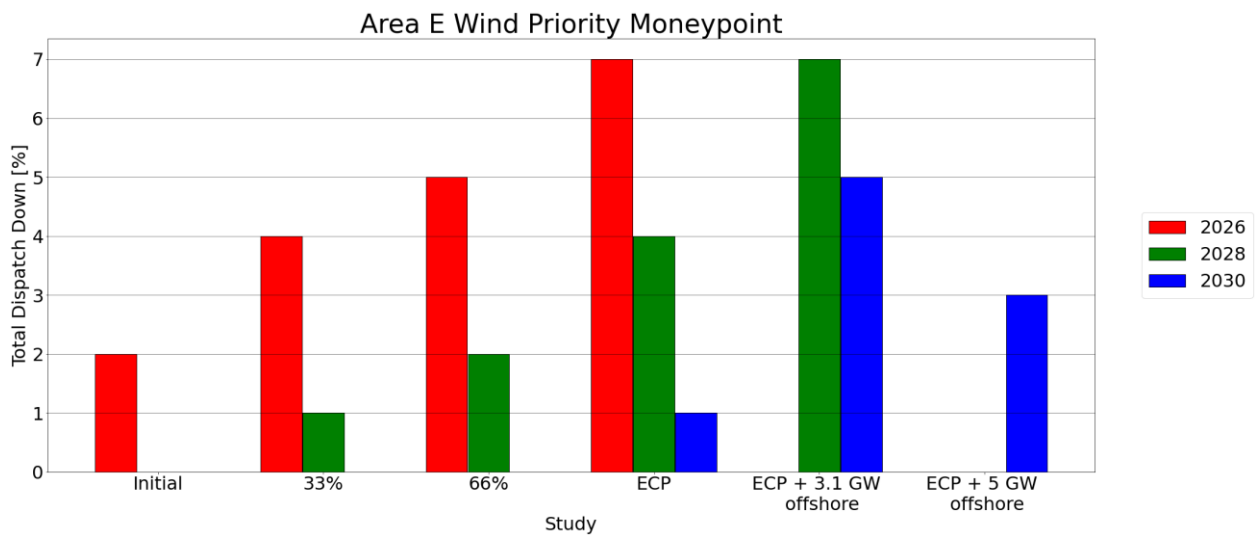


Figure 2-55 - Total Dispatch Down for Wind priority for Node Moneypoint

## 2.23 Moneypoint 220 kV

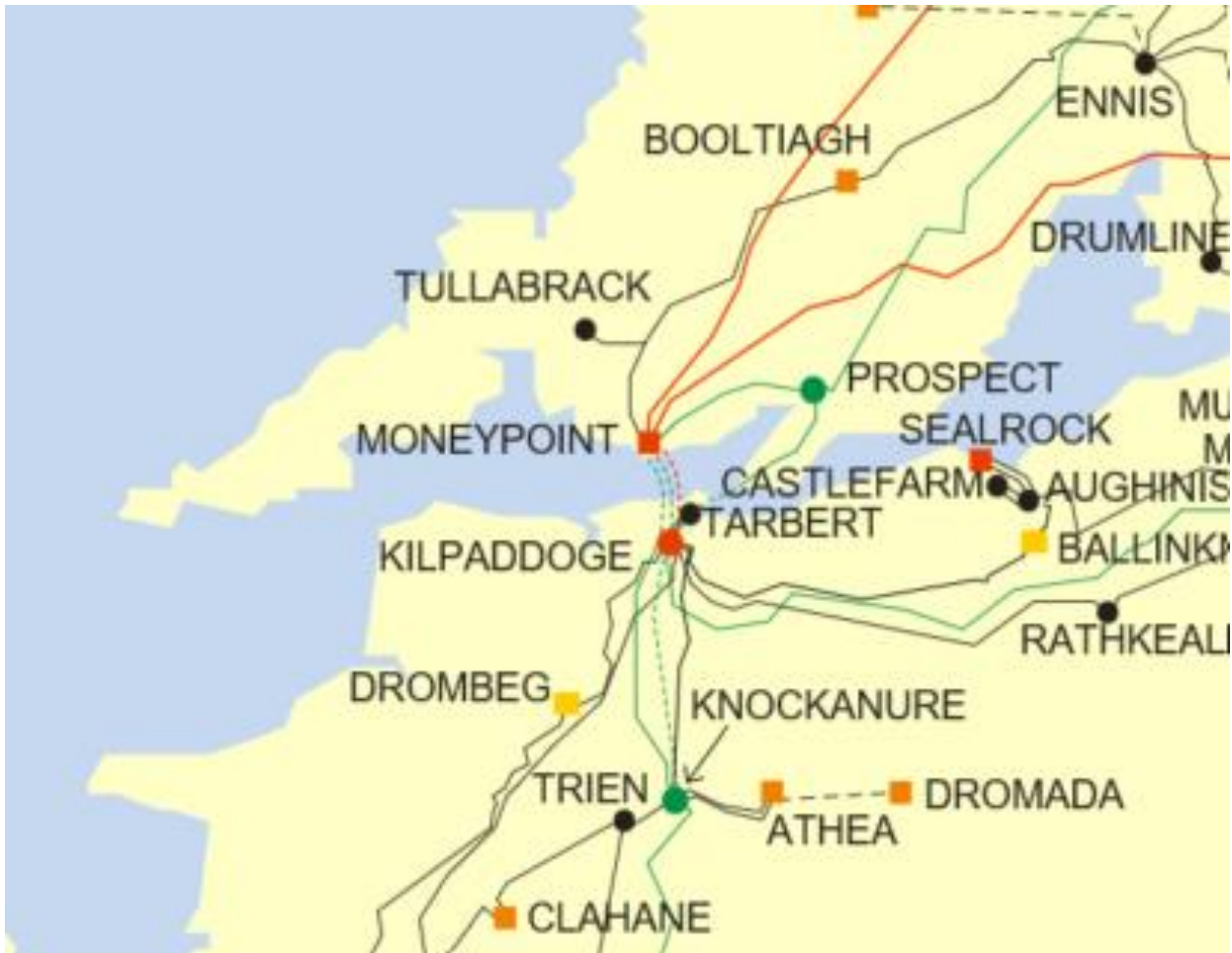


Figure 2-56 - Location of node Moneypoint 220 kV

Generator	SO	Capacity	Type	Status
Sceirde Rocks	TSO	450.0	wind non-priority	due to connect

Table 2-56 - Generation Included in Study for Node Moneypoint 220 kV



The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026						
Installed Capacity (MW)	2028					450	
Installed Capacity (MW)	2030					450	450
Available Energy (GWh)	2026						
Available Energy (GWh)	2028					1999	
Available Energy (GWh)	2030					1990	1990
Generation (GWh)	2026						
Generation (GWh)	2028					1560	
Generation (GWh)	2030					1785	1555
Surplus (%)	2026						
Surplus (%)	2028					18 %	
Surplus (%)	2030					9 %	18 %
Curtailement (%)	2026						
Curtailement (%)	2028					4 %	
Curtailement (%)	2030					1 %	2 %
Constraint (%)	2026						
Constraint (%)	2028					<1%	
Constraint (%)	2030					<1%	2 %
Total Dispatch Down (%)	2026						
Total Dispatch Down (%)	2028					22 %	
Total Dispatch Down (%)	2030					10%	22 %

Table 2-57 - Surplus, Curtailement and Constraint for Wind non-priority in Area E

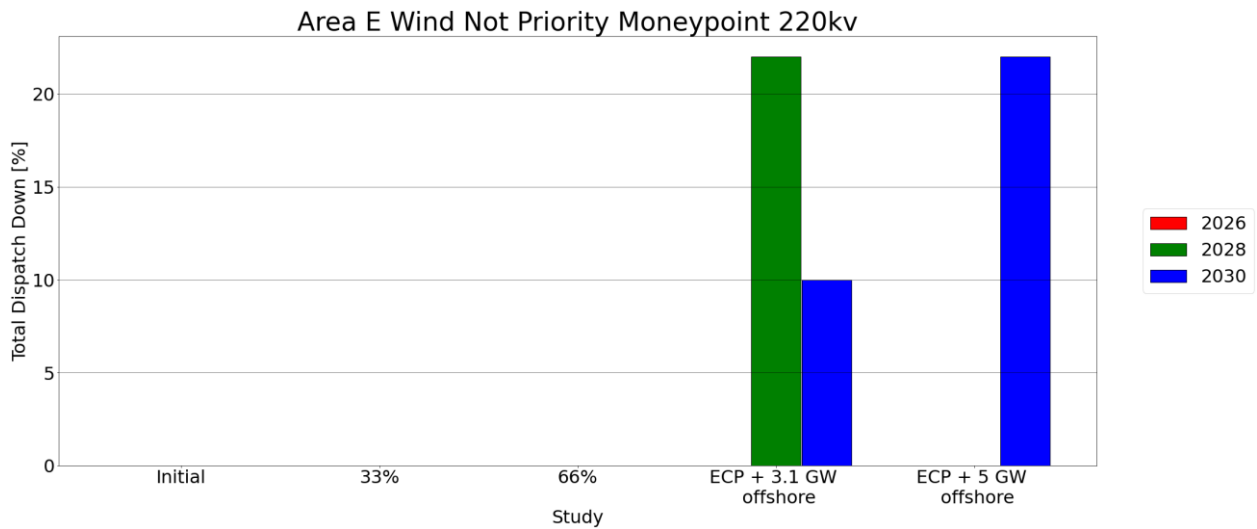


Figure 2-57 - Total Dispatch Down for Wind non-priority for Node Moneypoint 220 kV

## 2.24 Oughtragh



Figure 2-58 - Location of node Oughtragh

Generator	SO	Capacity	Type	Status
<b>Knockaneden (1)</b>	DSO	9.0	wind priority	connected
<b>Maine Solar</b>	DSO	4.0	solar non-priority	due to connect
<b>Knockreagh Community Solar</b>	DSO	4.4	solar non-priority	due to connect

Table 2-58 - Generation Included in Study for Node Oughtragh

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		3	6	8		
Installed Capacity (MW)	2028		3	6	8	8	
Installed Capacity (MW)	2030				8	8	8
Available Energy (GWh)	2026		3	7	10		
Available Energy (GWh)	2028		3	7	10	10	
Available Energy (GWh)	2030				10	10	10
Generation (GWh)	2026		3	6	8		
Generation (GWh)	2028		3	6	9	8	
Generation (GWh)	2030				9	9	9
Surplus (%)	2026		2 %	5 %	9 %		
Surplus (%)	2028		<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026		1 %	2 %	4 %		
Curtailement (%)	2028		1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026		1 %	1 %	1 %		
Constraint (%)	2028		4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026		5 %	8 %	14 %		
Total Dispatch Down (%)	2028		5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-59 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

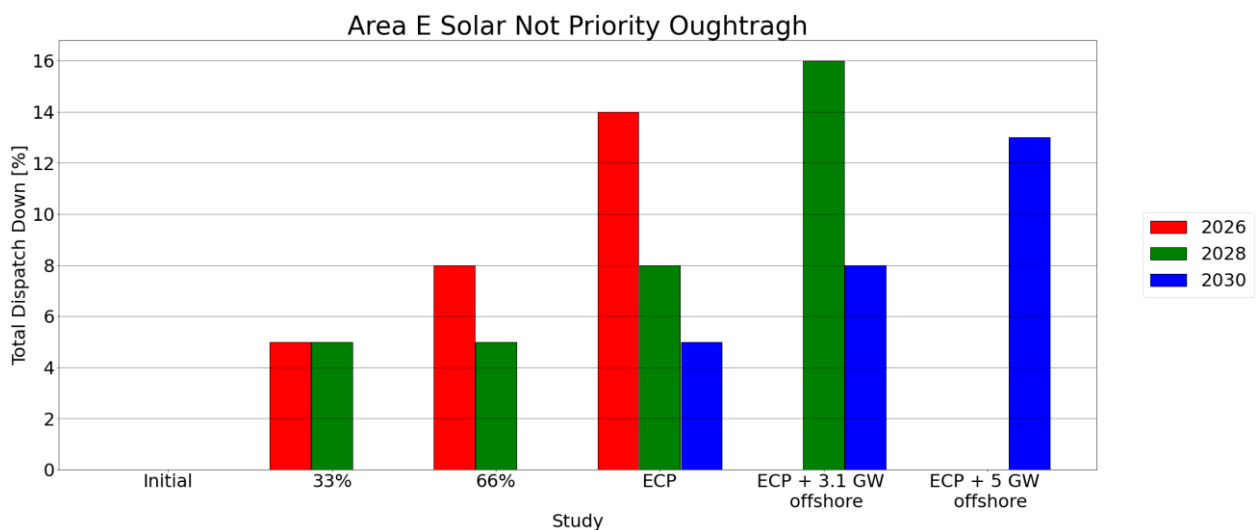


Figure 2-59 - Total Dispatch Down for Solar non-priority for Node Oughtragh

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	9	9	9	9		
Installed Capacity (MW)	2028	9	9	9	9	9	
Installed Capacity (MW)	2030				9	9	9
Available Energy (GWh)	2026	29	29	29	29		
Available Energy (GWh)	2028	29	29	29	29	29	
Available Energy (GWh)	2030				29	29	29
Generation (GWh)	2026	28	28	28	27		
Generation (GWh)	2028	29	29	29	28	27	
Generation (GWh)	2030				29	28	28
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-60 - Surplus, Curtailement and Constraint for Wind priority in Area E

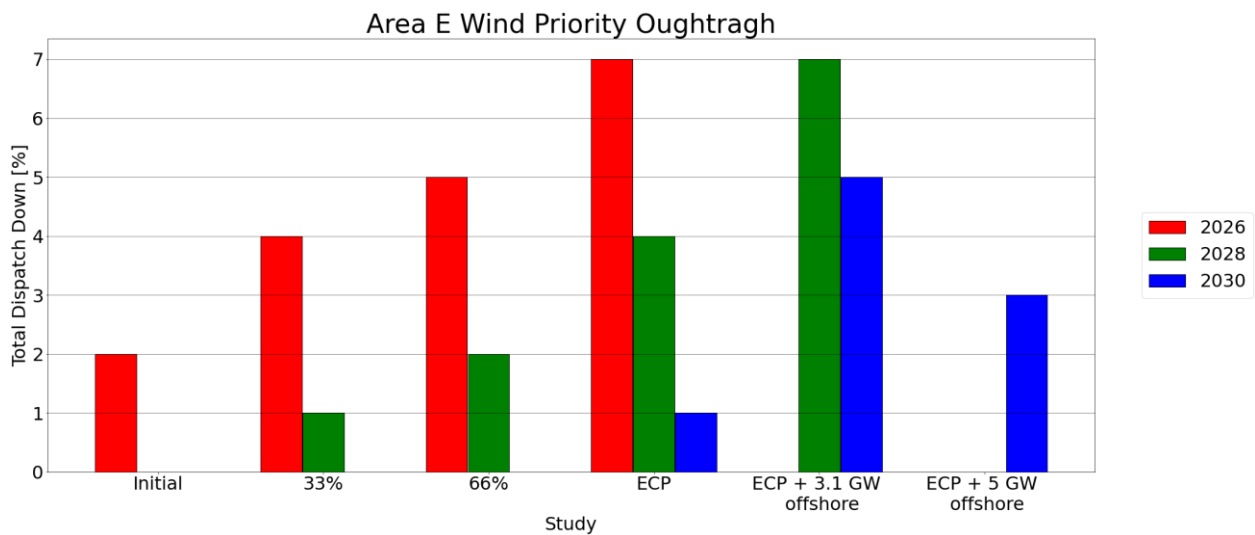


Figure 2-60 - Total Dispatch Down for Wind priority for Node Oughtragh

## 2.25 Rathkeale

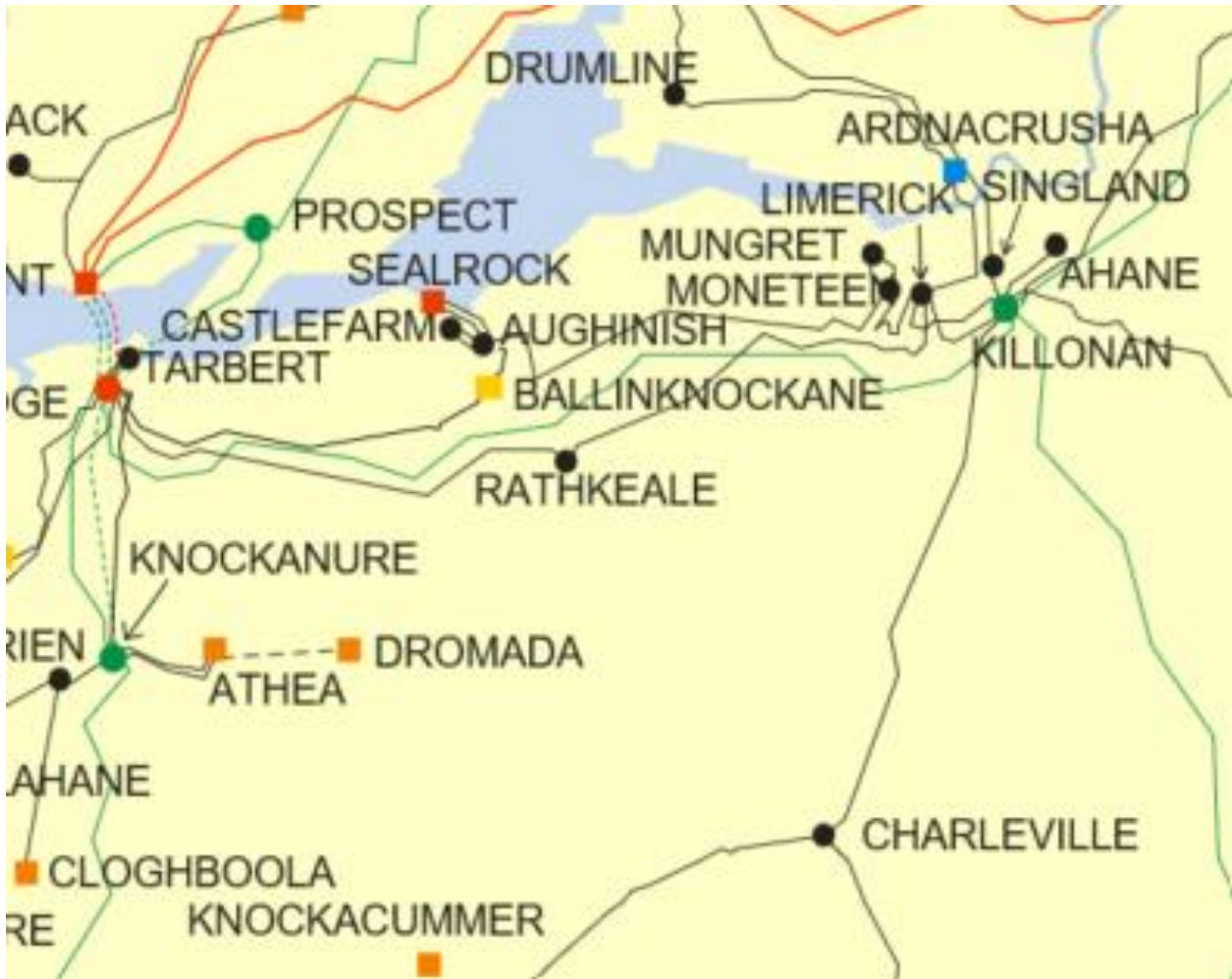


Figure 2-61 - Location of node Rathkeale

Generator	SO	Capacity	Type	Status
Carrons (1)	DSO	4.99	wind uncontrolled	connected
Grouse Lodge (1)	DSO	15.0	wind priority	connected
Rathcahill (1)	DSO	12.5	wind priority	connected

Table 2-61 - Generation Included in Study for Node Rathkeale

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	28	28	28	28		
Installed Capacity (MW)	2028	28	28	28	28	28	
Installed Capacity (MW)	2030				28	28	28
Available Energy (GWh)	2026	89	89	89	89		
Available Energy (GWh)	2028	90	90	90	90	90	
Available Energy (GWh)	2030				89	89	89
Generation (GWh)	2026	87	86	84	83		
Generation (GWh)	2028	89	89	88	86	83	
Generation (GWh)	2030				89	84	86
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-62 - Surplus, Curtailment and Constraint for Wind priority in Area E

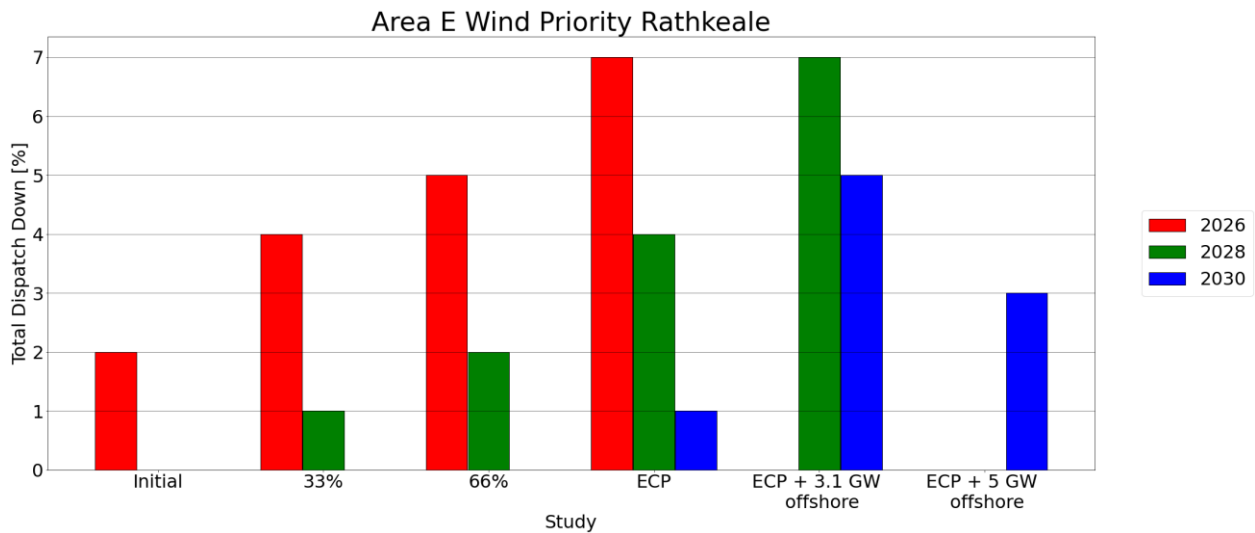


Figure 2-62 - Total Dispatch Down for Wind priority for Node Rathkeale

## 2.26 Reamore

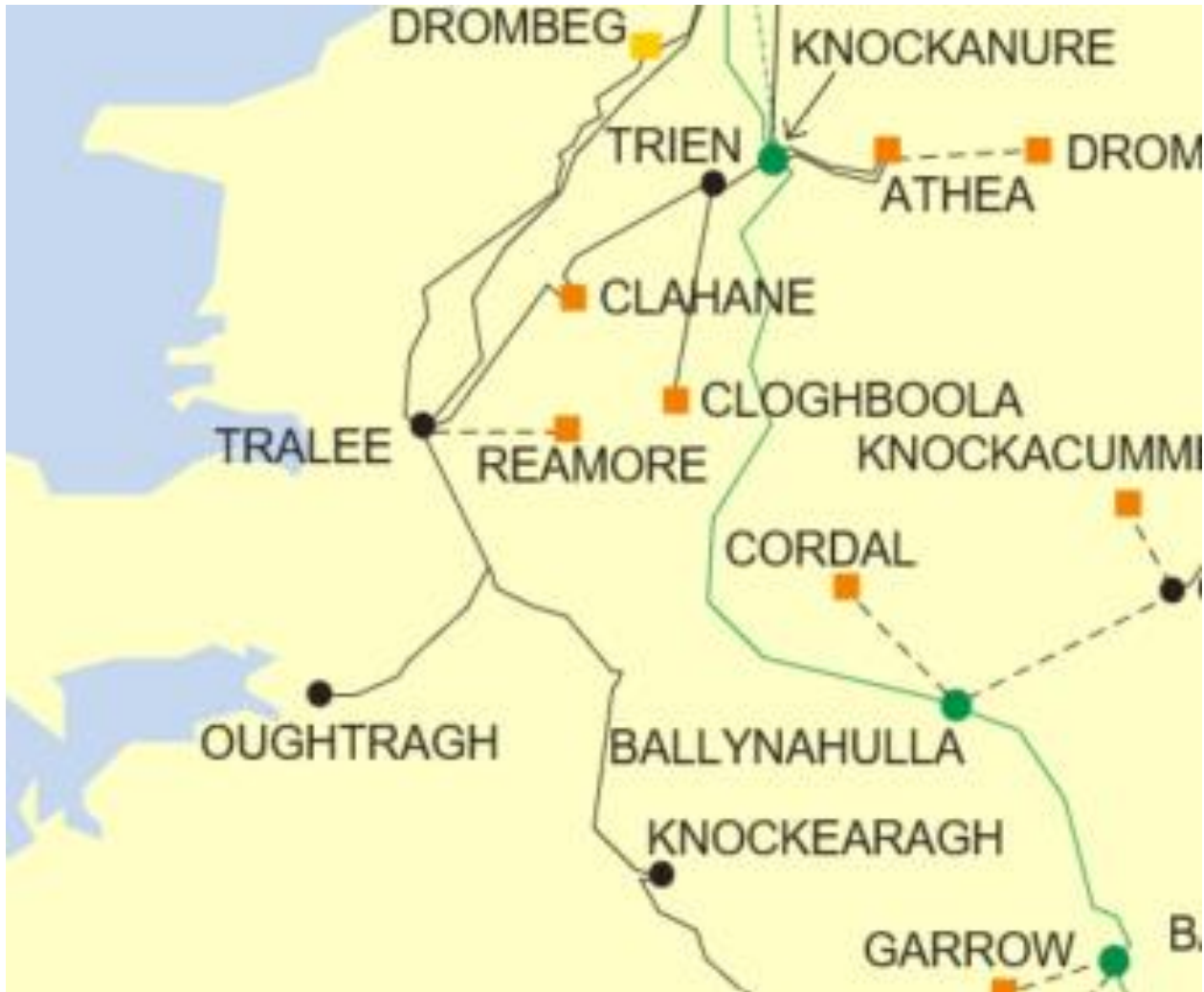


Figure 2-63 - Location of node Reamore

Generator	SO	Capacity	Type	Status
Knocknagoum (1)	DSO	42.55	wind priority	connected
Knocknagoum (2) formerly Muingnatee (3)	DSO	1.8	wind uncontrolled	connected
Muingnaminnane (1)	DSO	15.3	wind priority	connected
Stack's Mountain	DSO	25.3	wind non- priority	due to connect
Stacks Mountain Wind Farm 2	DSO	5.0	wind non- priority	due to connect

Table 2-63 - Generation Included in Study for Node Reamore

The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	25	27	29	30		
Installed Capacity (MW)	2028	25	27	29	30	30	
Installed Capacity (MW)	2030				30	30	30
Available Energy (GWh)	2026	82	87	93	98		
Available Energy (GWh)	2028	82	88	93	99	99	
Available Energy (GWh)	2030				98	98	98
Generation (GWh)	2026	67	69	70	71		
Generation (GWh)	2028	75	78	79	81	60	
Generation (GWh)	2030				88	70	71
Surplus (%)	2026	2 %	5 %	9 %	14 %		
Surplus (%)	2028	<1%	1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailement (%)	2026	2 %	3 %	4 %	4 %		
Curtailement (%)	2028	<1%	1 %	2 %	3 %	5 %	
Curtailement (%)	2030				<1%	2 %	2 %
Constraint (%)	2026	15 %	13 %	11 %	10%		
Constraint (%)	2028	8 %	10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026	19 %	21 %	24 %	28 %		
Total Dispatch Down (%)	2028	9 %	12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 2-64 - Surplus, Curtailement and Constraint for Wind non-priority in Area E

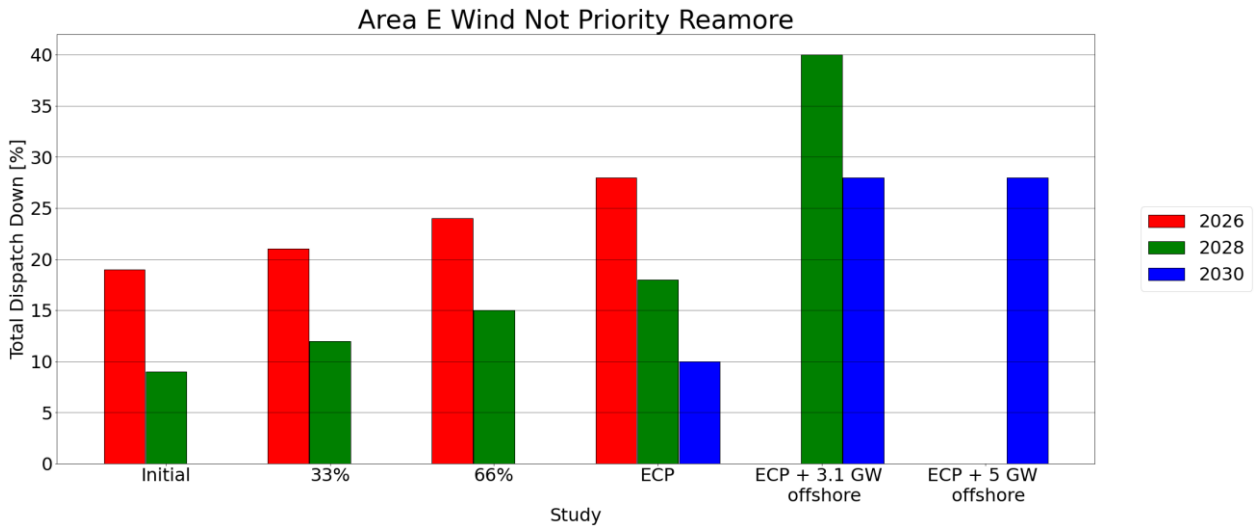


Figure 2-64 - Total Dispatch Down for Wind non-priority for Node Reamore



The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	58	58	58	58		
Installed Capacity (MW)	2028	58	58	58	58	58	
Installed Capacity (MW)	2030				58	58	58
Available Energy (GWh)	2026	187	187	187	187		
Available Energy (GWh)	2028	189	189	189	189	189	
Available Energy (GWh)	2030				187	187	187
Generation (GWh)	2026	183	181	178	175		
Generation (GWh)	2028	188	186	184	182	175	
Generation (GWh)	2030				186	177	181
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-65 - Surplus, Curtailment and Constraint for Wind priority in Area E

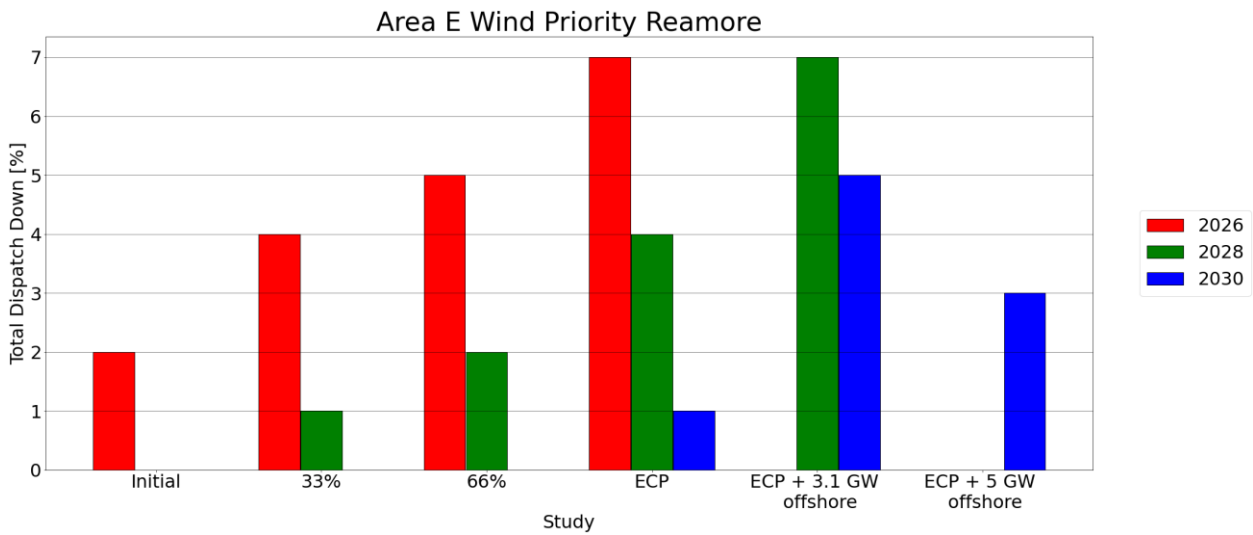


Figure 2-65 - Total Dispatch Down for Wind priority for Node Reamore

## 2.27 Tralee

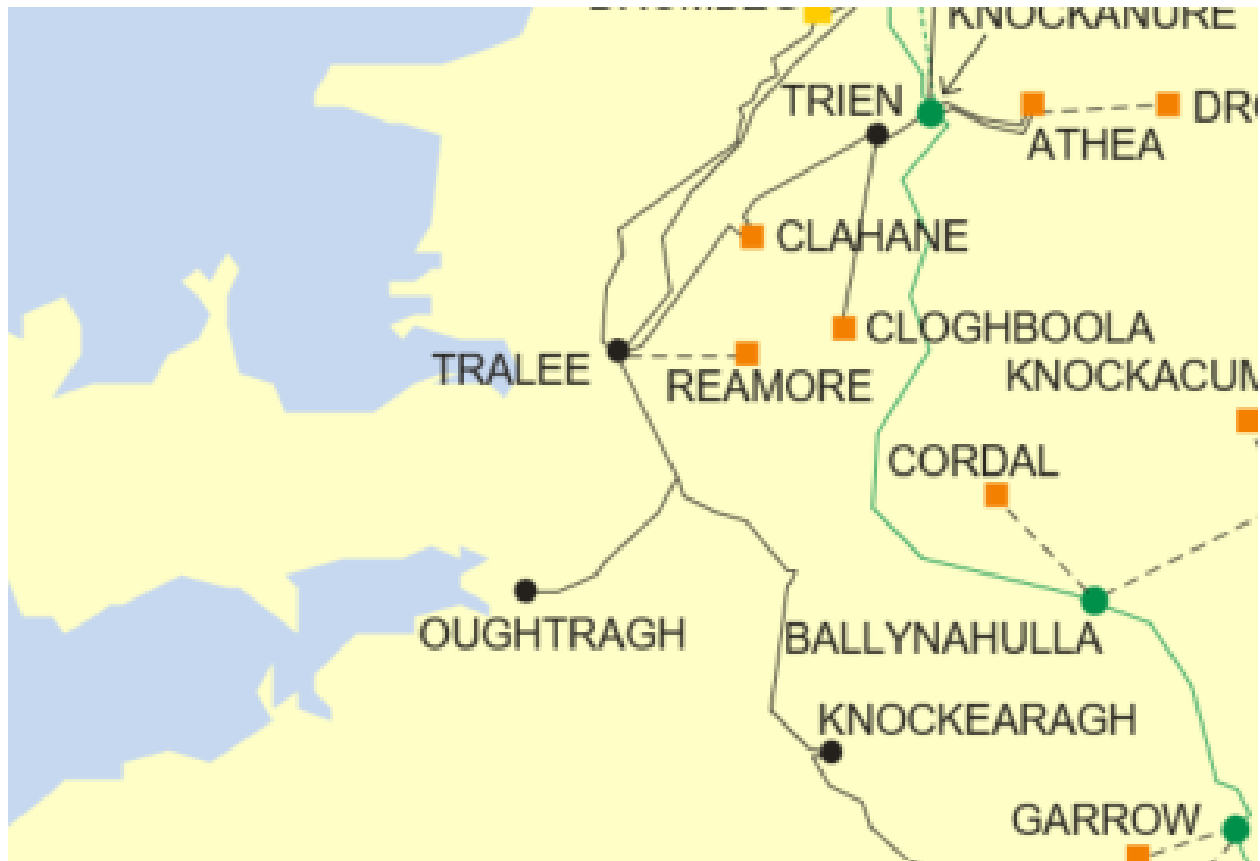


Figure 2-66 - Location of node Tralee

Generator	SO	Capacity	Type	Status
Ballincollig Hill (1)	DSO	15.0	wind priority	connected
Ballyenaghty Solar Park	DSO	9.9	solar non-priority	due to connect
Beenageeha (1)	DSO	3.96	wind uncontrolled	connected
Dromroe Solar	DSO	4.0	solar non-priority	due to connect
Mount Eagle (1)	DSO	5.1	wind uncontrolled	connected
Mount Eagle (2)	DSO	1.7	wind uncontrolled	connected
Tursillagh (1)	DSO	15.0	wind uncontrolled	connected
Tursillagh (2)	DSO	6.8	wind uncontrolled	connected

Table 2-66 - Generation Included in Study for Node Tralee

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	4	7	11	14		
Installed Capacity (MW)	2028	4	7	11	14	14	
Installed Capacity (MW)	2030				14	14	14
Available Energy (GWh)	2026	5	9	12	16		
Available Energy (GWh)	2028	5	9	12	16	16	
Available Energy (GWh)	2030				16	16	16
Generation (GWh)	2026	4	8	11	14		
Generation (GWh)	2028	4	8	12	15	14	
Generation (GWh)	2030				15	15	14
Surplus (%)	2026	1 %	2 %	5 %	9 %		
Surplus (%)	2028	<1%	<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailed (%)	2026	1 %	1 %	2 %	4 %		
Curtailed (%)	2028	<1%	1 %	1 %	2 %	3 %	
Curtailed (%)	2030				1 %	1 %	1 %
Constraint (%)	2026	4 %	1 %	1 %	1 %		
Constraint (%)	2028	5 %	4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026	5 %	5 %	8 %	14 %		
Total Dispatch Down (%)	2028	5 %	5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-67 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

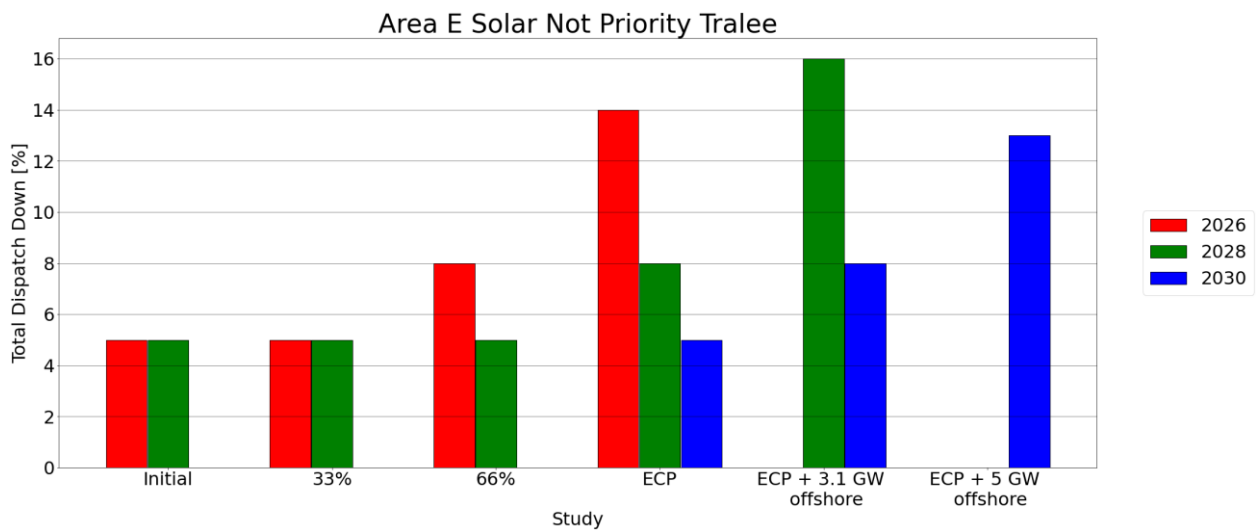


Figure 2-67 - Total Dispatch Down for Solar non-priority for Node Tralee

The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	15	15	15	15		
Installed Capacity (MW)	2028	15	15	15	15	15	
Installed Capacity (MW)	2030				15	15	15
Available Energy (GWh)	2026	49	49	49	49		
Available Energy (GWh)	2028	49	49	49	49	49	
Available Energy (GWh)	2030				49	49	49
Generation (GWh)	2026	47	47	46	45		
Generation (GWh)	2028	49	48	48	47	45	
Generation (GWh)	2030				48	46	47
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailed (%)	2026	2 %	4 %	5 %	7 %		
Curtailed (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailed (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-68 - Surplus, Curtailment and Constraint for Wind priority in Area E

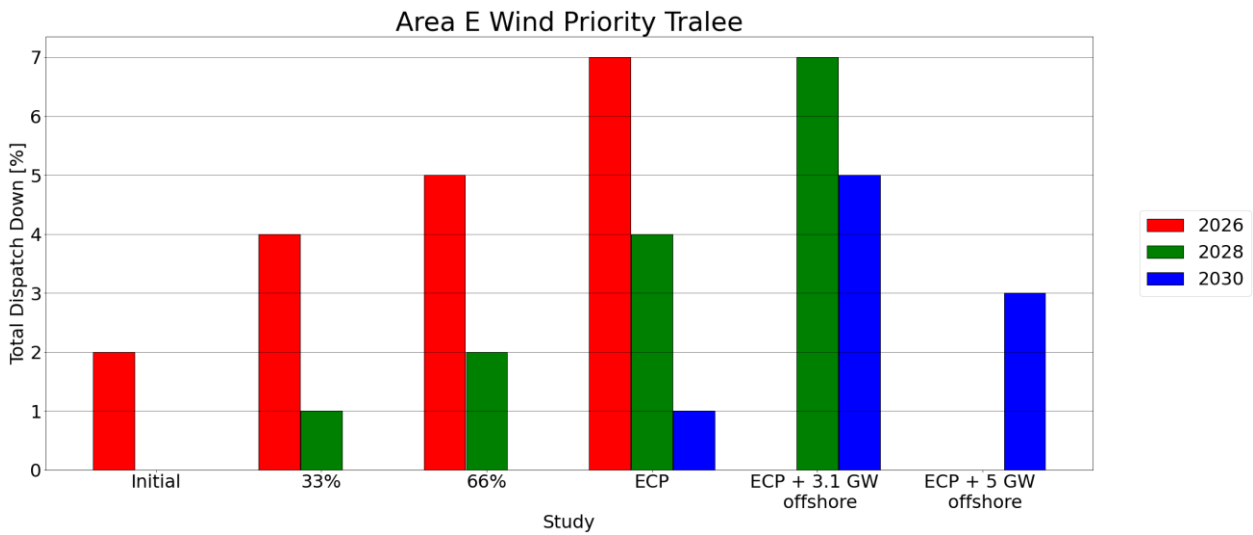


Figure 2-68 - Total Dispatch Down for Wind priority for Node Tralee

## 2.28 Trien

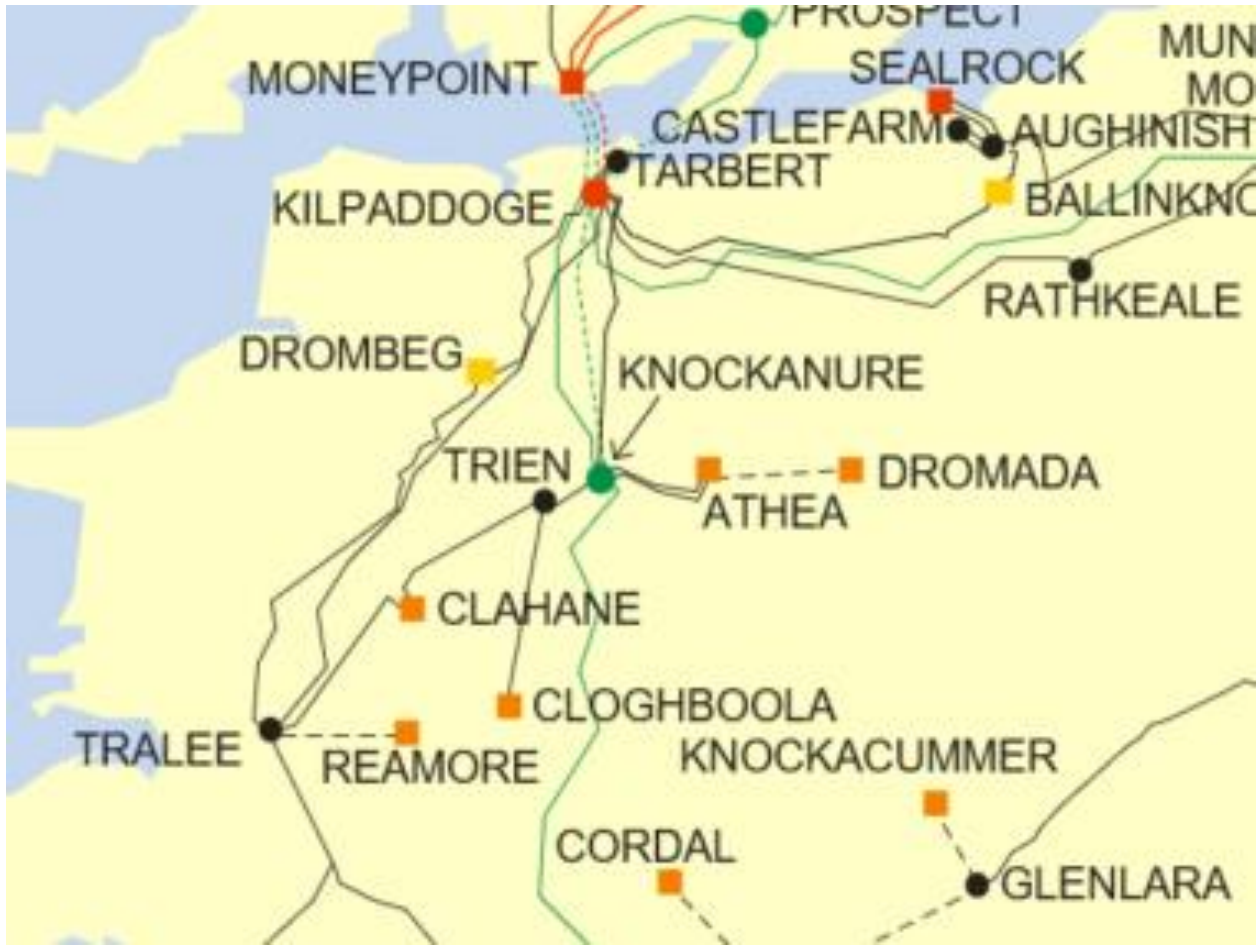


Figure 2-69 - Location of node Trien

Generator	SO	Capacity	Type	Status
Ballagh (1)	DSO	4.6	wind uncontrolled	connected
Beale Hill (1)	DSO	1.65	wind uncontrolled	connected
Beale Hill (2)	DSO	2.55	wind uncontrolled	connected
Beale Hill (3)	DSO	1.3	wind uncontrolled	connected
Curraghderrig (1)	DSO	4.5	wind uncontrolled	connected
Gortnacloghy Wind Farm	DSO	4.4	wind uncontrolled	connected
Shanacool (Trienearagh) Solar Park	DSO	4.0	solar non-priority	due to connect
Knockbrack Solar Farm (prev. Abbeyfeale)	DSO	5.0	solar non-priority	due to connect

Table 2-69 - Generation Included in Study for Node Trien

The solar non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026		3	6	9		
Installed Capacity (MW)	2028		3	6	9	9	
Installed Capacity (MW)	2030				9	9	9
Available Energy (GWh)	2026		4	7	11		
Available Energy (GWh)	2028		4	7	11	11	
Available Energy (GWh)	2030				11	11	11
Generation (GWh)	2026		3	6	9		
Generation (GWh)	2028		3	7	10	9	
Generation (GWh)	2030				10	10	9
Surplus (%)	2026		2 %	5 %	9 %		
Surplus (%)	2028		<1%	2 %	5 %	11 %	
Surplus (%)	2030				2 %	6 %	10%
Curtailement (%)	2026		1 %	2 %	4 %		
Curtailement (%)	2028		1 %	1 %	2 %	3 %	
Curtailement (%)	2030				1 %	1 %	1 %
Constraint (%)	2026		1 %	1 %	1 %		
Constraint (%)	2028		4 %	1 %	1 %	1 %	
Constraint (%)	2030				2 %	1 %	1 %
Total Dispatch Down (%)	2026		5 %	8 %	14 %		
Total Dispatch Down (%)	2028		5 %	5 %	8 %	16 %	
Total Dispatch Down (%)	2030				5 %	8 %	13 %

Table 2-70 - Surplus, Curtailment and Constraint for Solar non-priority in Area E

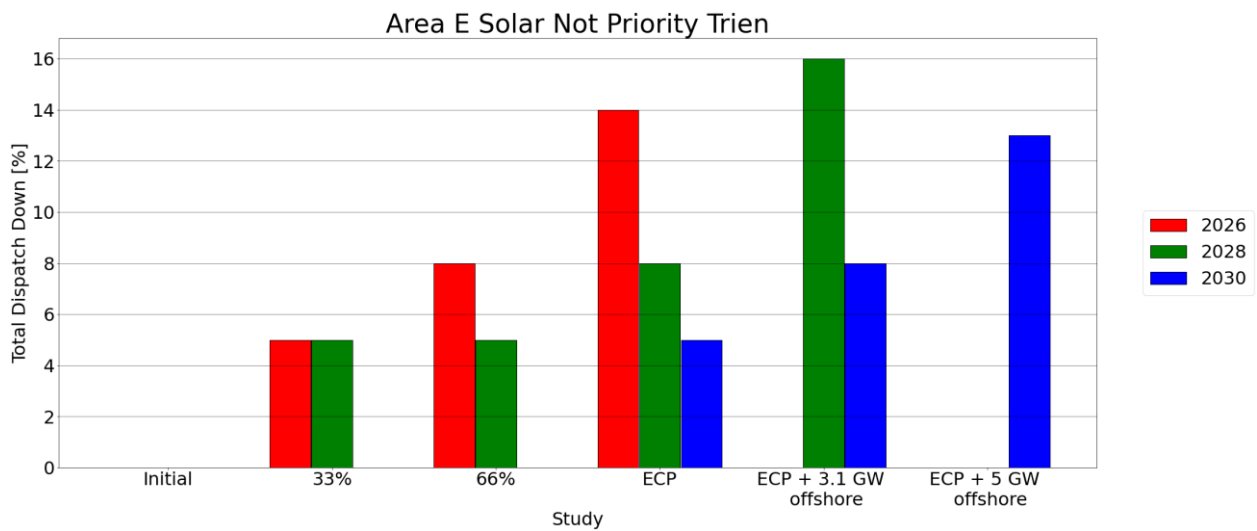


Figure 2-70 - Total Dispatch Down for Solar non-priority for Node Trien

## 2.29 Trien 220 kV side

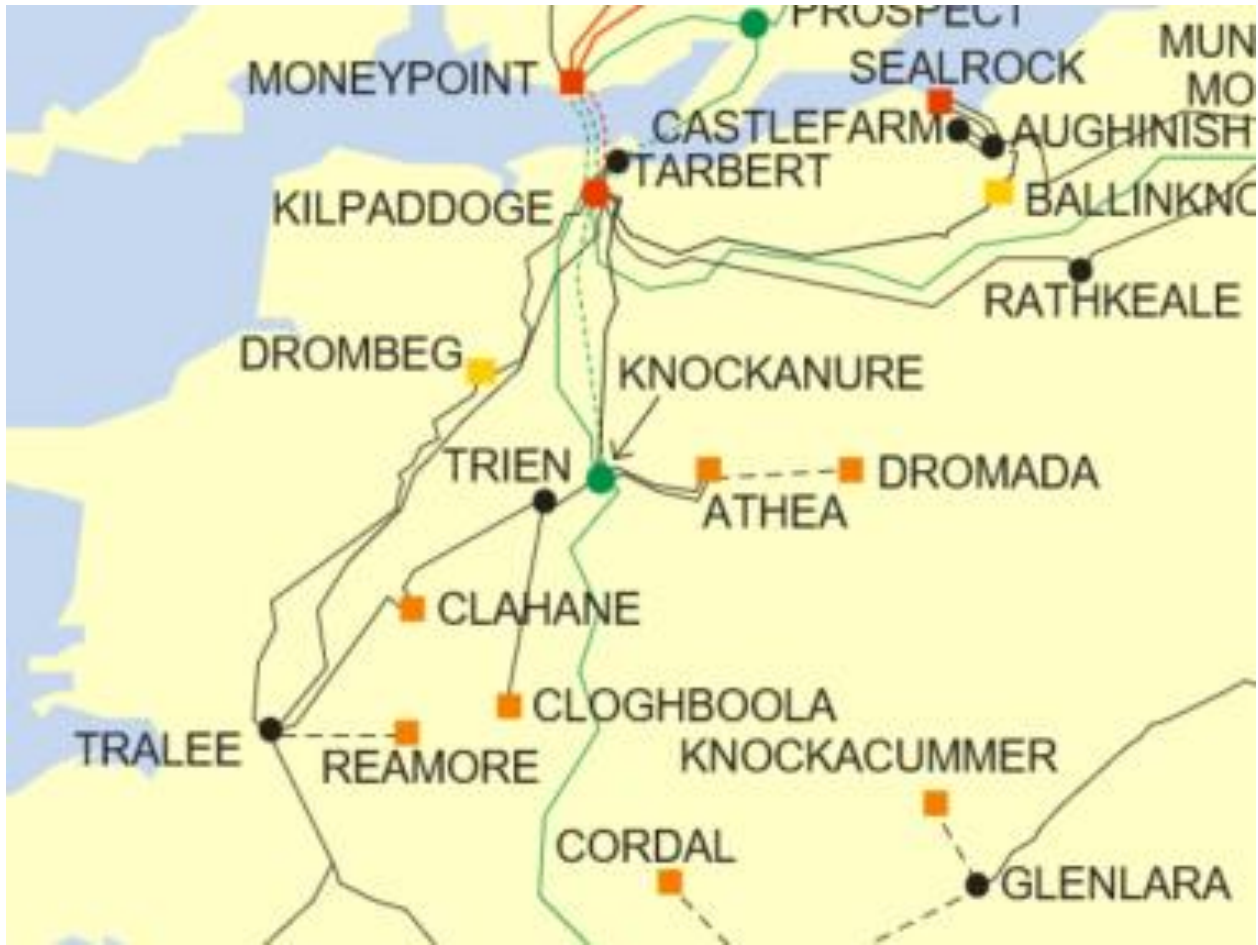


Figure 2-71 - Location of node Trien 220kv side

Generator	SO	Capacity	Type	Status
Knockawarriga (1)	DSO	22.5	wind priority	connected
Knockawarriga Extension (Glenduff & Caherlevoy)	DSO	6.6	wind non-priority	connected
Tournafulla (1)	DSO	7.5	wind priority	connected
Tournafulla (2)	DSO	17.2	wind priority	connected

Table 2-71 - Generation Included in Study for Node Trien 220 kV side

The wind non-priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	7	7	7	7		
Installed Capacity (MW)	2028	7	7	7	7	7	
Installed Capacity (MW)	2030				7	7	7
Available Energy (GWh)	2026	21	21	21	21		
Available Energy (GWh)	2028	22	22	22	22	22	
Available Energy (GWh)	2030				21	21	21
Generation (GWh)	2026	17	17	16	15		
Generation (GWh)	2028	20	19	18	18	13	
Generation (GWh)	2030				19	15	15
Surplus (%)	2026	2 %	5 %	9 %	14 %		
Surplus (%)	2028	<1%	1 %	3 %	5 %	21 %	
Surplus (%)	2030				2 %	10%	21 %
Curtailed (%)	2026	2 %	3 %	4 %	4 %		
Curtailed (%)	2028	<1%	1 %	2 %	3 %	5 %	
Curtailed (%)	2030				<1%	2 %	2 %
Constraint (%)	2026	15 %	13 %	11 %	10%		
Constraint (%)	2028	8 %	10%	11 %	10%	14 %	
Constraint (%)	2030				8 %	16 %	5 %
Total Dispatch Down (%)	2026	19 %	21 %	24 %	28 %		
Total Dispatch Down (%)	2028	9 %	12 %	15 %	18 %	40%	
Total Dispatch Down (%)	2030				10%	28 %	28 %

Table 2-72 - Surplus, Curtailment and Constraint for Wind non-priority in Area E

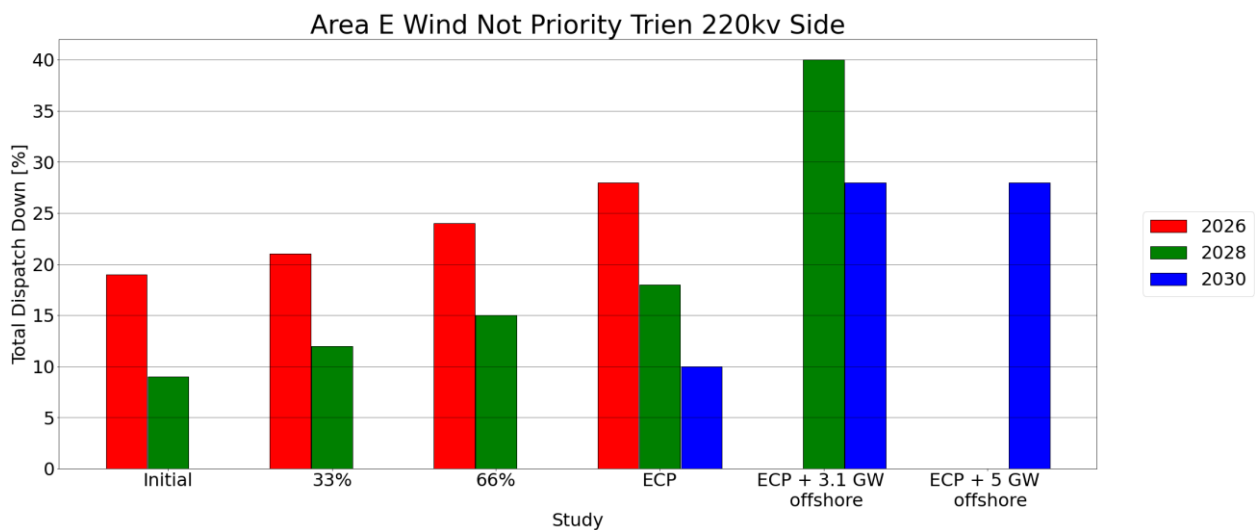


Figure 2-72 - Total Dispatch Down for Wind non-priority for Node Trien 220 kV side



The wind priority data is given in the following table.

Area E	Year	Initial	33%	66%	ECP	ECP + 3.1 GW offshore	ECP + 5 GW offshore
Installed Capacity (MW)	2026	47	47	47	47		
Installed Capacity (MW)	2028	47	47	47	47	47	
Installed Capacity (MW)	2030				47	47	47
Available Energy (GWh)	2026	153	153	153	153		
Available Energy (GWh)	2028	154	154	154	154	154	
Available Energy (GWh)	2030				153	153	153
Generation (GWh)	2026	149	147	145	143		
Generation (GWh)	2028	153	152	150	148	143	
Generation (GWh)	2030				152	145	148
Surplus (%)	2026	<1%	<1%	<1%	<1%		
Surplus (%)	2028	<1%	<1%	<1%	<1%	<1%	
Surplus (%)	2030				<1%	<1%	<1%
Curtailement (%)	2026	2 %	4 %	5 %	7 %		
Curtailement (%)	2028	<1%	1 %	2 %	4 %	7 %	
Curtailement (%)	2030				1 %	5 %	3 %
Constraint (%)	2026	<1%	<1%	<1%	<1%		
Constraint (%)	2028	<1%	<1%	<1%	<1%	<1%	
Constraint (%)	2030				<1%	<1%	<1%
Total Dispatch Down (%)	2026	2 %	4 %	5 %	7 %		
Total Dispatch Down (%)	2028	<1%	1 %	2 %	4 %	7 %	
Total Dispatch Down (%)	2030				1 %	5 %	3 %

Table 2-73 - Surplus, Curtailement and Constraint for Wind priority in Area E

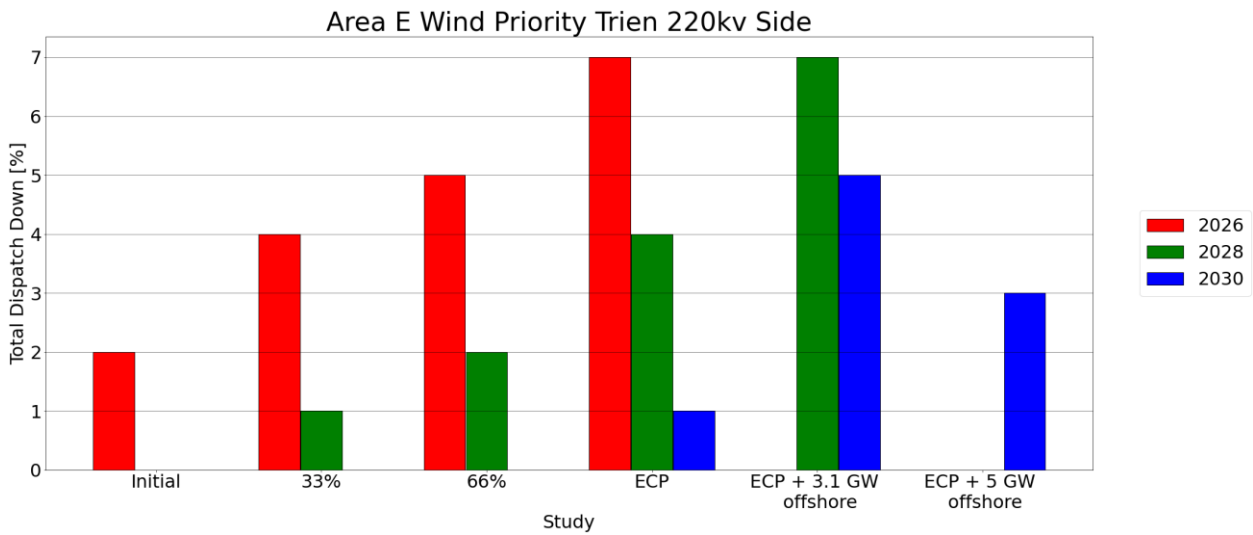


Figure 2-73 - Total Dispatch Down for Wind Priority for Node Trien 220 kV side