

70 by 30 Implementation Plan

IWEA Autumn Conference 24th October 2019

Paul Blount, BE CEng, Portfolio Director Coillte, paul.blount@coillte.ie, Chair of the 70by30 Committee



- Provide an evidence basis and support the delivery of a 70% RES-E target in 2030
- Is this a credible proposition?

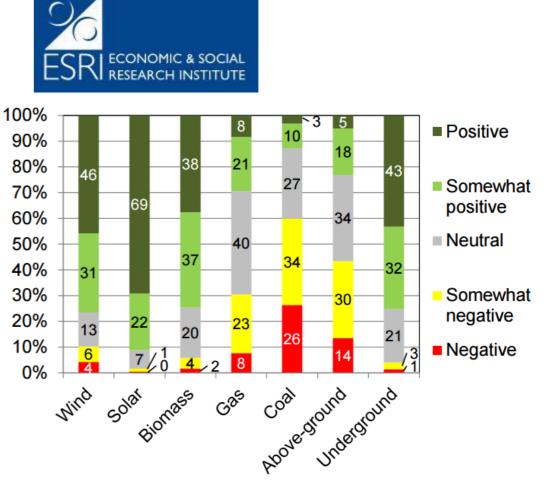




- Provide an evidence basis and support the delivery of a 70% RES-E target in 2030
- Is this a credible proposition?
- Can it be cost effective?



- Provide an evidence basis and support the delivery of a 70% RES-E target in 2030
- Is this a credible proposition?
- Can it be cost effective?
- Will it be supported by society?
- Can it be done in just 10 years?





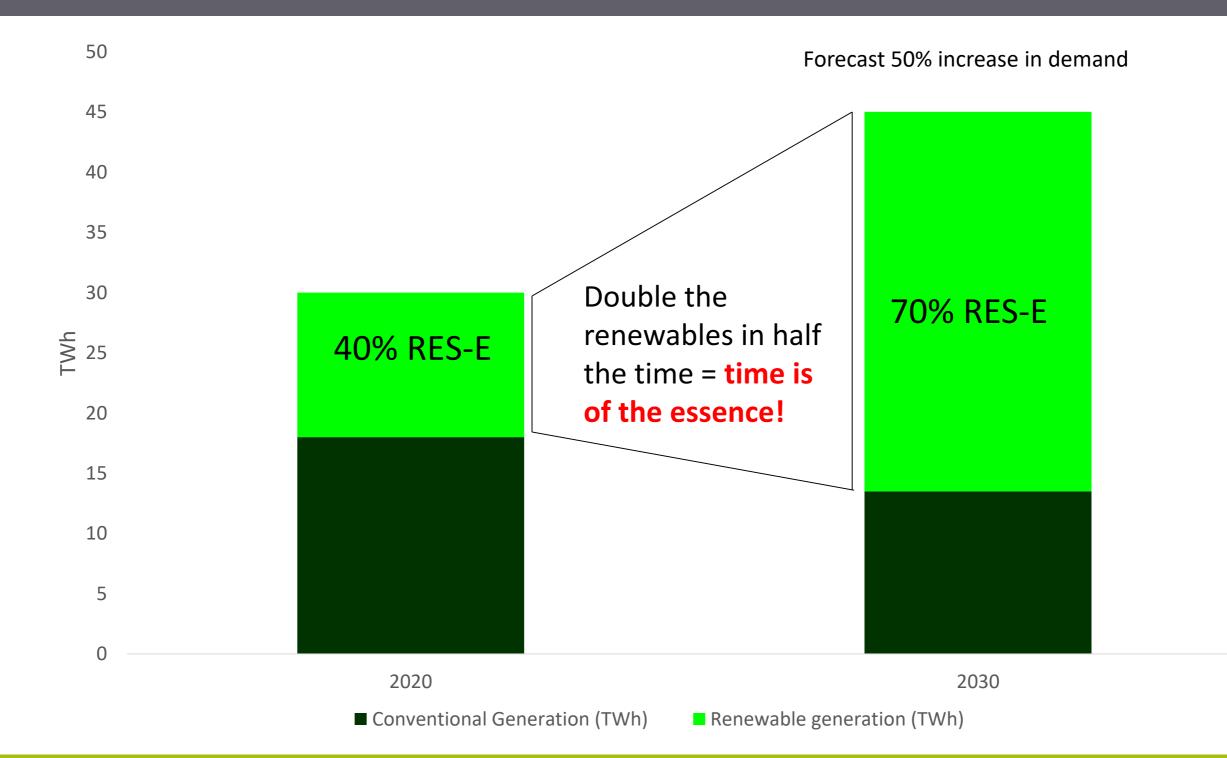
IWEA 70 by 30 Implementation Plan Working Group





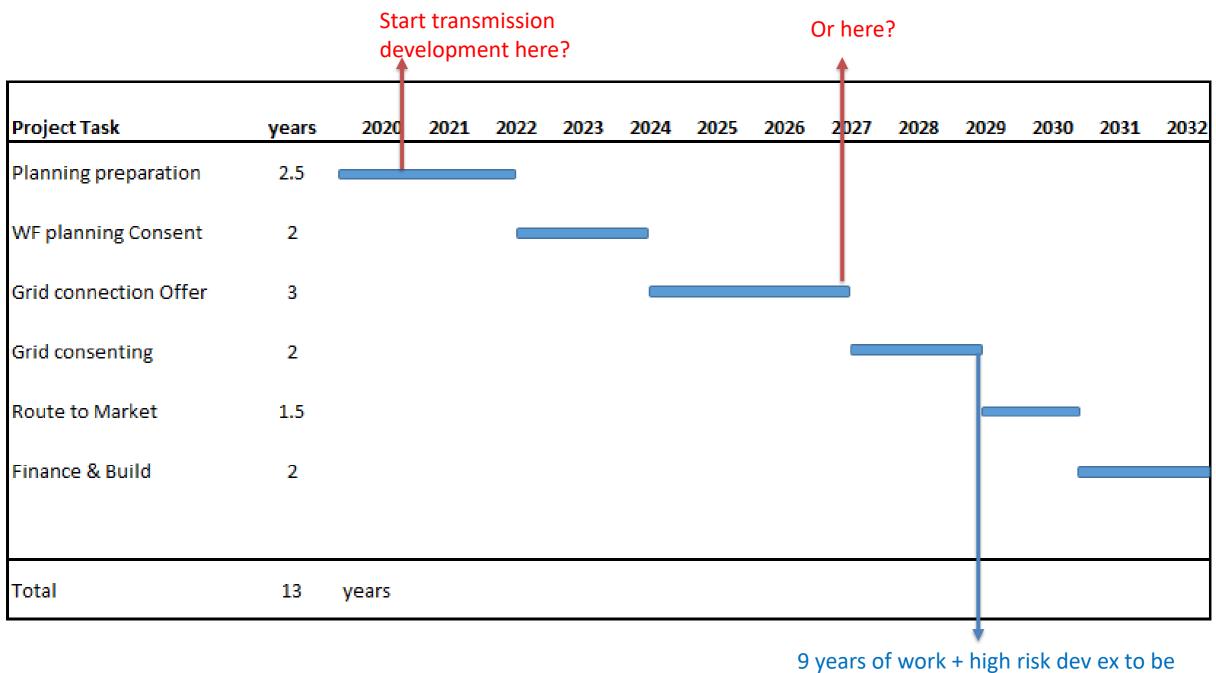
70% Renewable Electricity





BaU "Typical" Project timelines

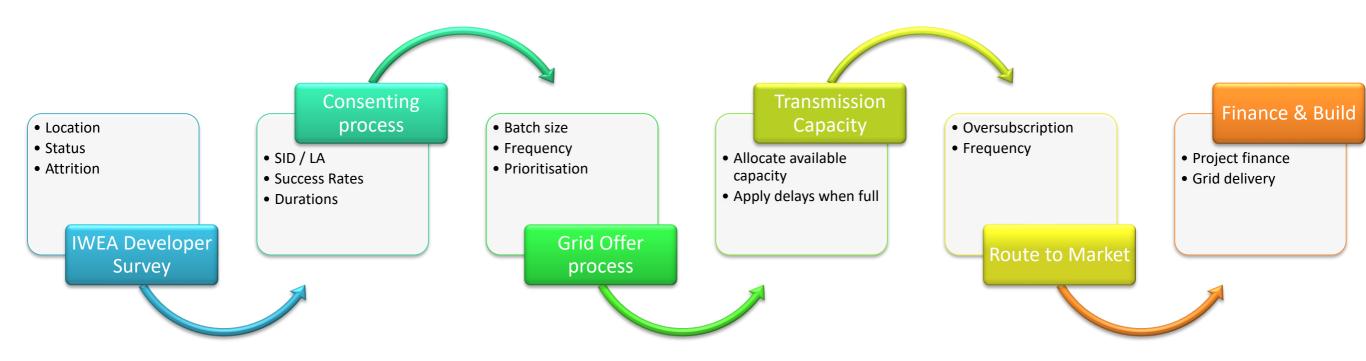




ready to bid into an auction

i-PAT (IWEA pipeline analysis tool)

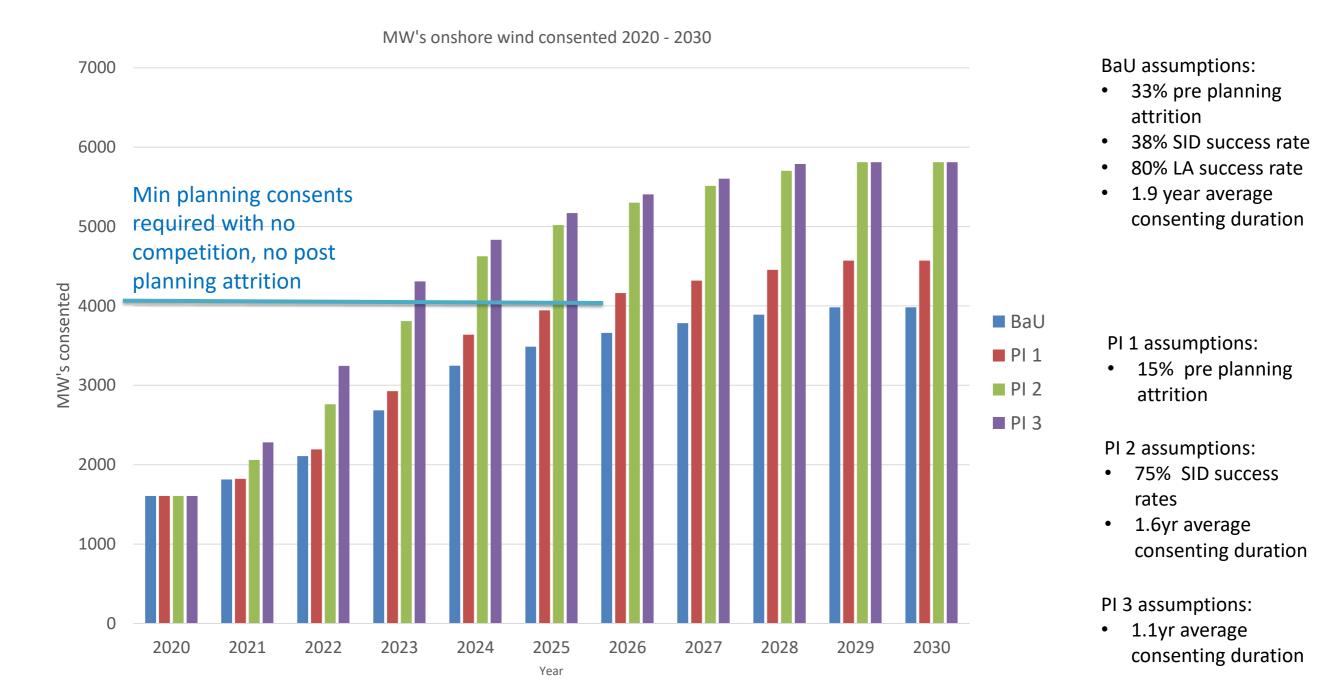






i-PAT Preliminary Results Onshore Wind Planning Consents

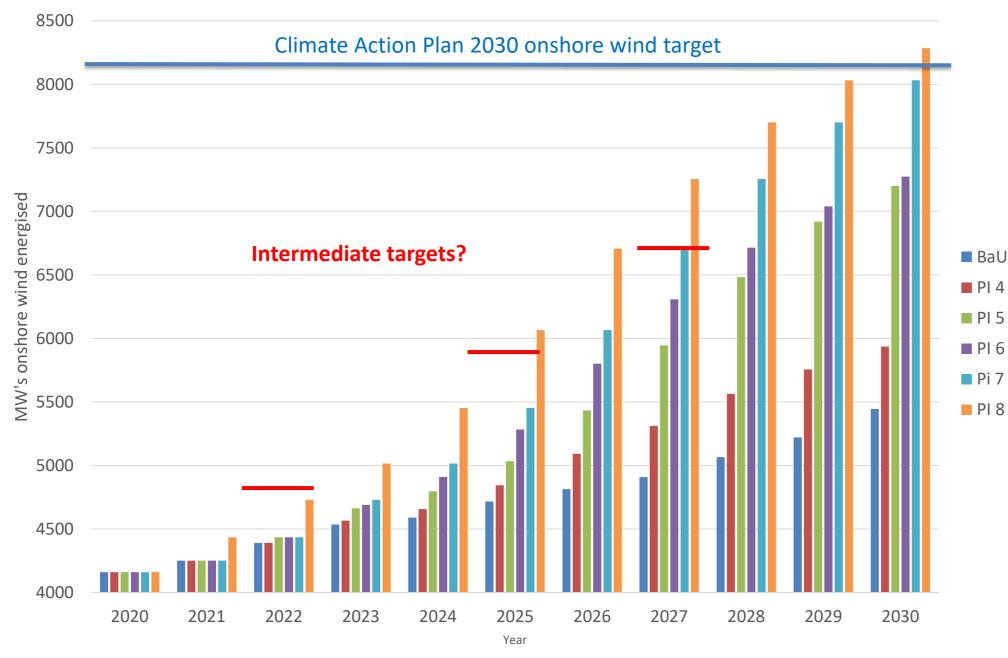




i-PAT Preliminary Results Onshore Wind Energisations



MW's onshore wind energised 2020 - 2030



BaU assumptions:

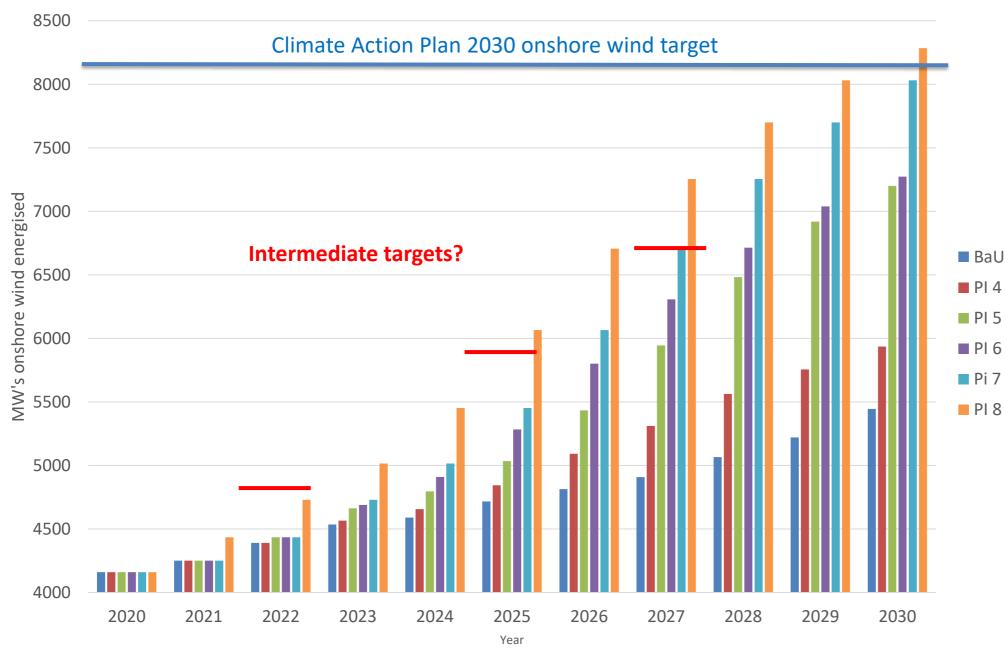
- ECP date order of planning grant, 50 offers p.a.
- Transmission development starts post WF planning
- 2nd application for grid connection planning
- 2.5 year finance and build period

All scenarios assume a route to market for 66% of the MW's available to contract every year

i-PAT Preliminary Results Onshore Wind Energisations



MW's onshore wind energised 2020 - 2030



PI 4 assumptions:

 ECP – 1st 25 offers each year to largest projects

PI 5 assumptions:

 Parallel development of the transmission system

PI 6 assumptions:

 Parallel consenting of shallow grid connection

PI 7 assumptions:

Less onerous ECP long stop dates

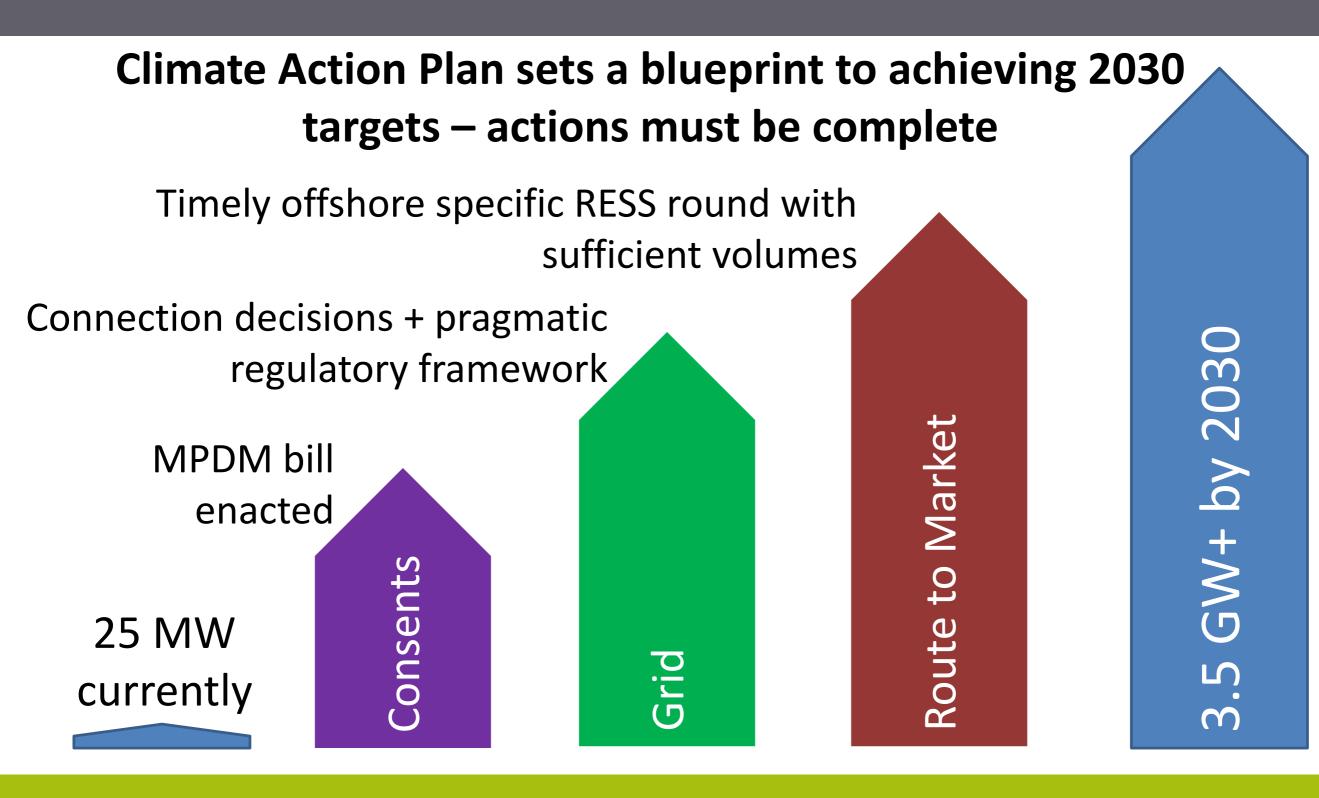
PI 8 assumptions:

 Shorter finance & build period

All scenarios assume a route to market for 66% of the MW's available to contract every year



Offshore Wind



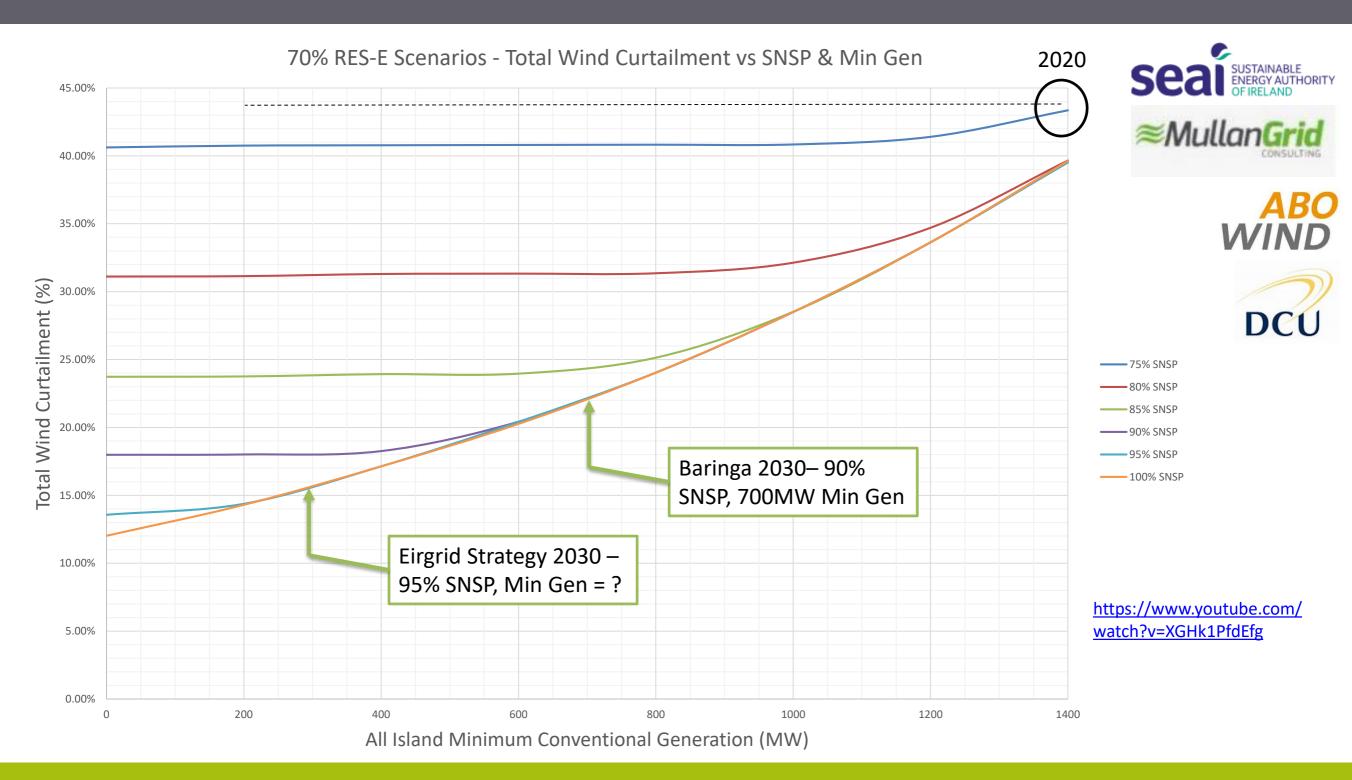
Shared challenges



- Parallel development of the transmission system
- Parallel consenting of shallow connection assets
- Timely grid connection offers + connection offer long stop dates
- Grid delivery timelines
- Route to market RESS / cPPAs
- ABP decision timelines
- Curtailment

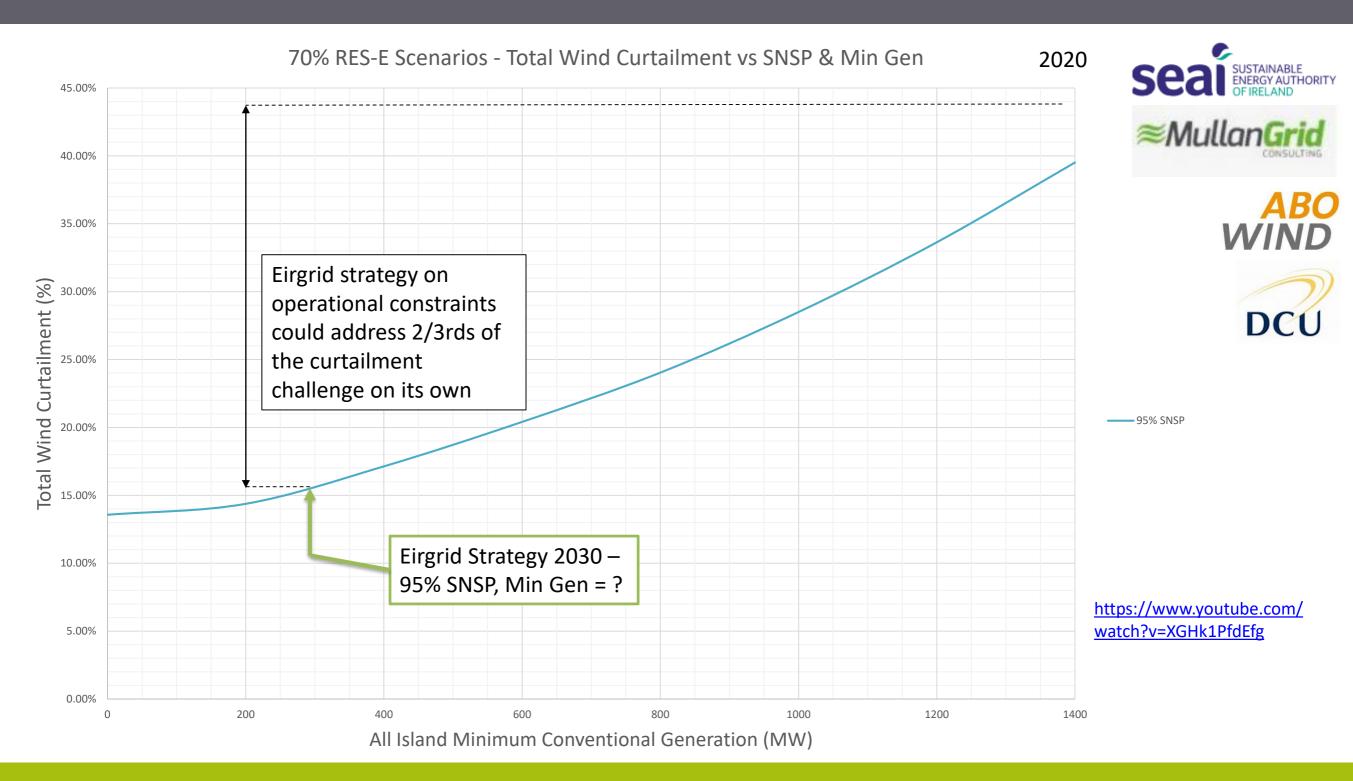
Curtailment vs Operational Constraints





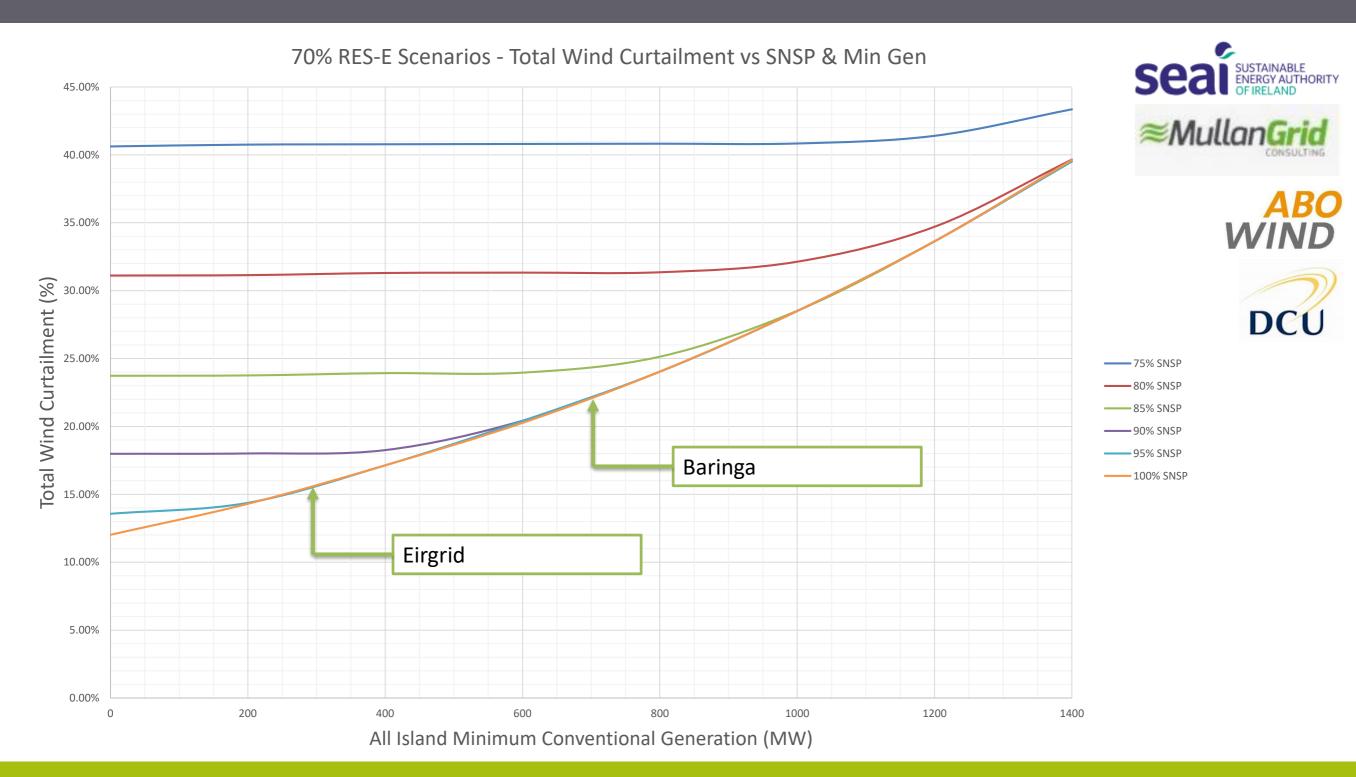
Curtailment vs Operational Constraints





Curtailment vs Operational Constraints

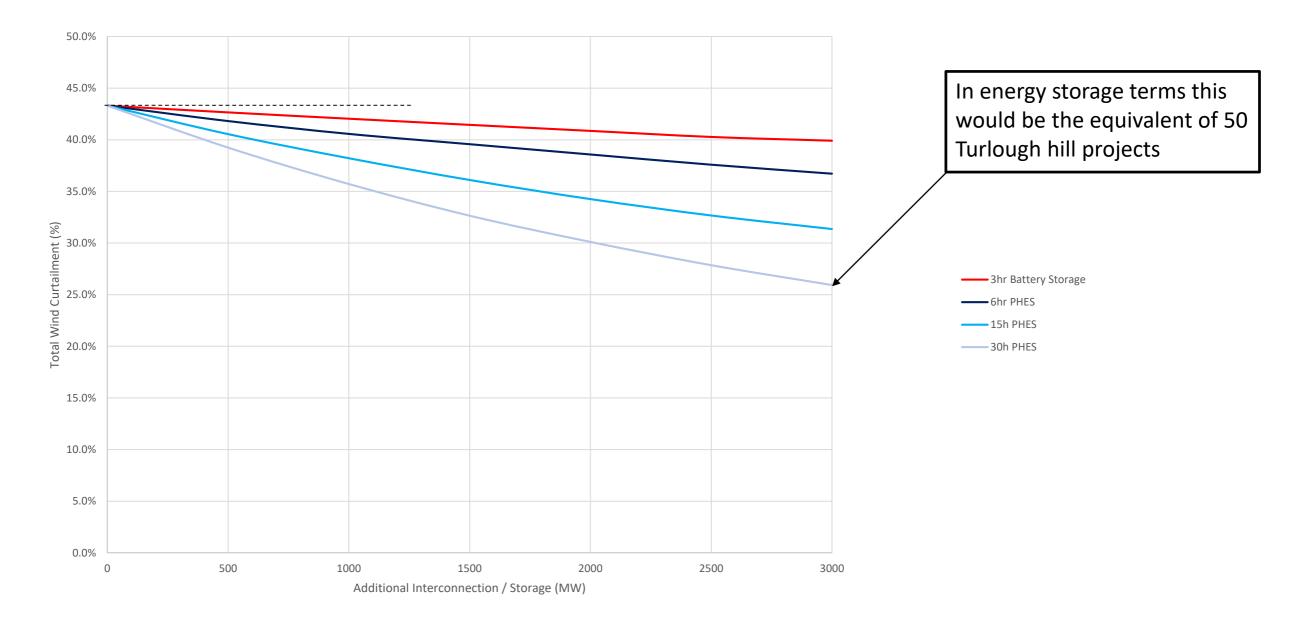




Curtailment vs Storage & Interconnectors



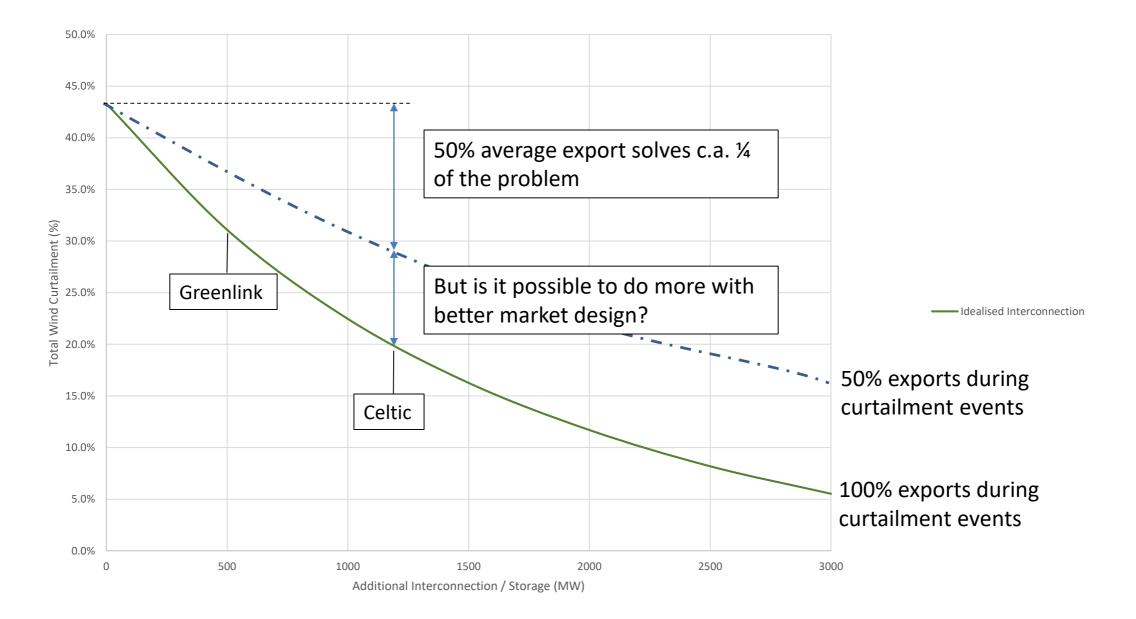
All Island Wind Curtailment Vs Additional Idealised Interconnection and Storage



Curtailment vs Storage & Interconnectors



All Island Wind Curtailment Vs Additional Idealised Interconnection and Storage





Healthy development pipelines on & offshore





An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil Department of Housing, Planning and Local Government







Draft Renewable Electricity Policy and Development Framework



Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil Department of Communications, Climate Action & Environment







- Healthy development pipelines on & offshore
- Timely grid connection offers







- Healthy development pipelines on & offshore
- Timely grid connection offers
- Manage Curtailment
- Manage Constraint







- Healthy development pipelines on & offshore
- Timely grid connection offers
- Manage Curtailment
- Manage Constraint
- Route to market







Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil Department of Communications, Climate Action & Environment





An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil Department of Housing, Irish Wind Energy Association Healthy development pipelines on & offshore Planning and Local Government Timely grid connection offers Tionól Réigiúnach an Deiscirt =53 NETWORKS outhern Regional Assembly CRU Manage Curtailment onól Reigiúnach Oirthir agus Lár-Tíre Eastern and Midland Regional Assembly Northern & Western Manage Constraint **Regional Assembly** EIRGR GROUP and Development Framework Route to market Roinn Cumarsáide, Gníomhaithe ar son na hAeráide & Comhshaoil Department of Communications, An Bord **Climate Action & Environment** Partnerships / Cooperation / Collaboration / Pleanála • information sharing **IDA** Ireland "Work with partners for positive change"

Key take aways



• Transmission system development could be the greatest challenge – we need to start now



Key take aways



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- 2030 is just a waypoint on a longer journey

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Environment > Climate Change | Heritage & Habitat

Ireland to support EU carbon-neutral objective for 2050

As of Tuesday, Ireland is among 19 countries now backing the long-term target

O Tue, Jun 18, 2019, 16:37 Updated: Tue, Jun 18, 2019, 19:24

Key take aways



- Transmission system development could be the greatest challenge we need to start now
- 2030 is just a waypoint on a longer journey
- Collaboration / partnerships across all stakeholders is key to success and what we do together in the next 1-2 years will determine whether we succeed or fail.
 - REI proposal to bring SOs, CRU, Industry, DCCAE, DHPLG, and ABP together regularly to monitor progress / remove road blocks.

