


# Dispatch Down Working Group Update – 6<sup>th</sup> September 2022



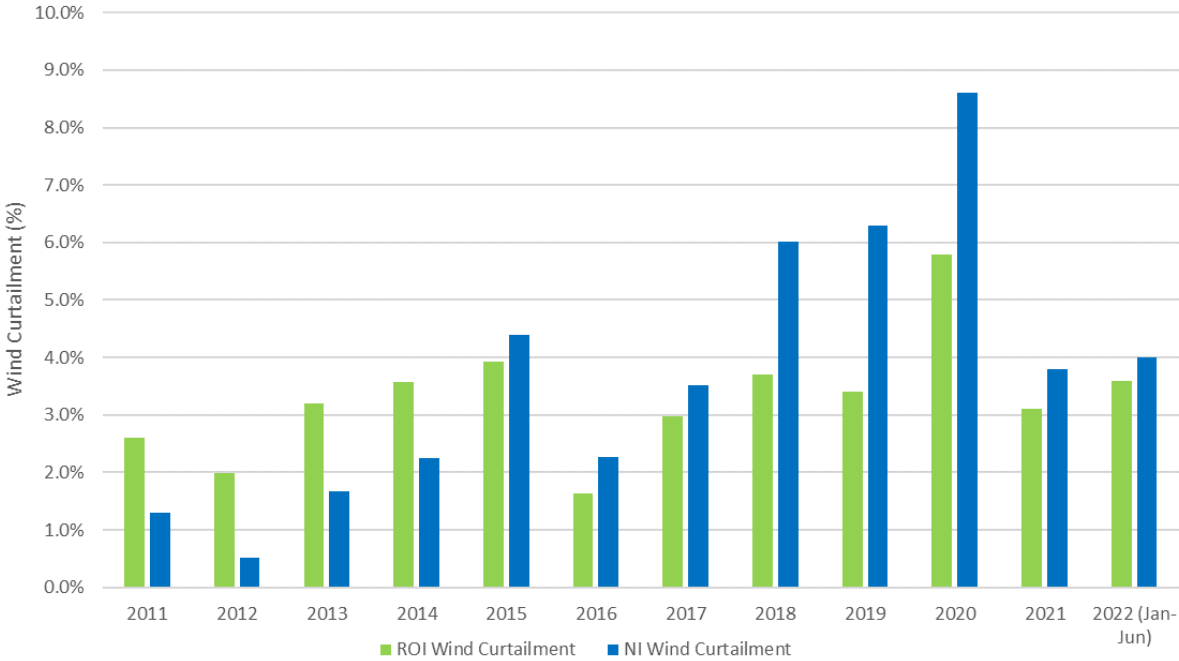
**Renewable**ni

 **WIND** ENERGY  
IRELAND

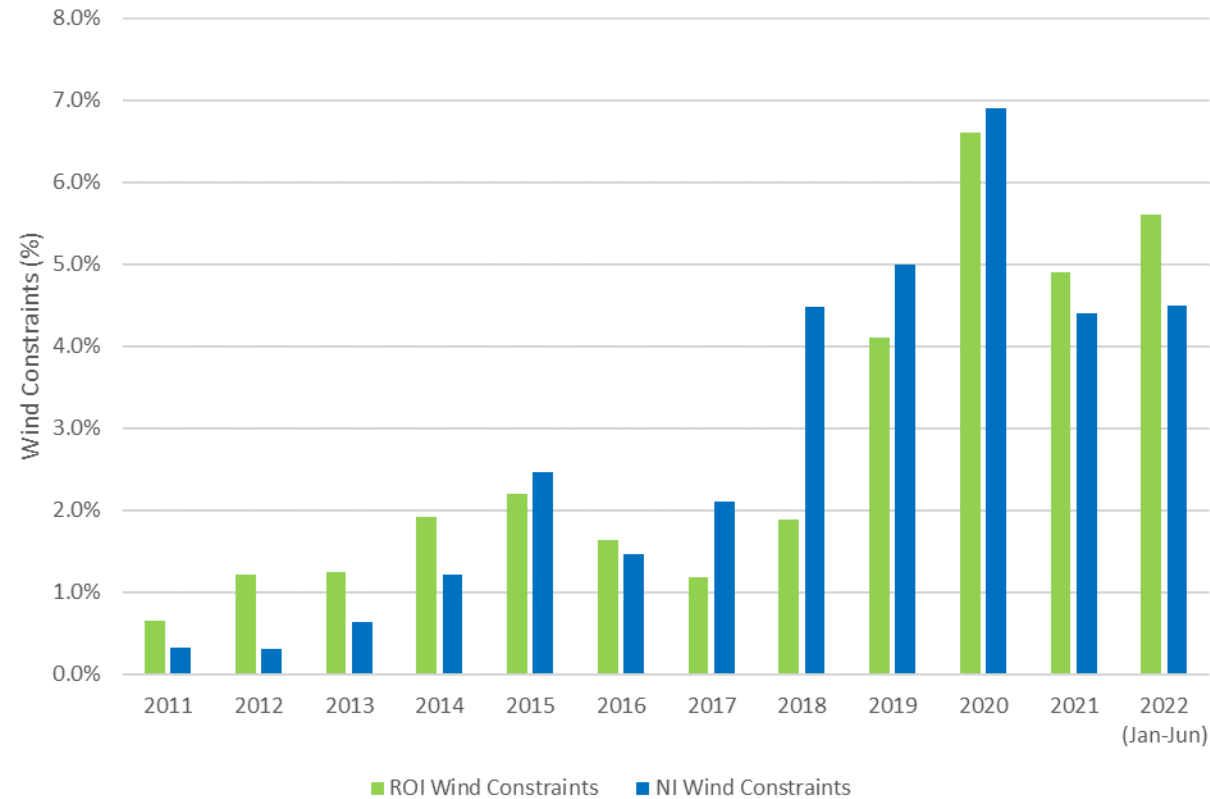
- Reducing Dispatch Down is priority policy issue for WEI
- Dispatch Down Working Group set up in Q1 2019
- MullanGrid complete analysis for the working group 
- Members of the Working Group manage 4,500 MW of operating wind farms across the island, ~90% of controllable wind generation



## Curtailment levels



## Constraint levels



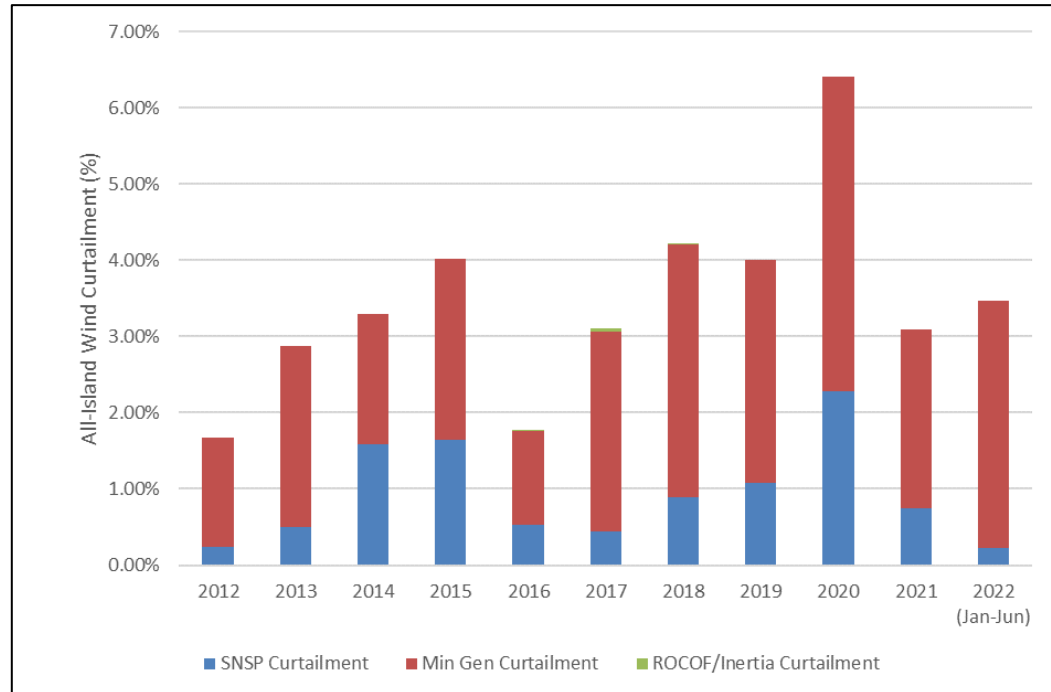
| Parameter  | 2018        | 2019        | 2020         | 2021        | Jan-Jun 2022 |
|--|-------------|-------------|--------------|-------------|--------------|
| Curtailment (%)  | 4.2%        | 4.0%        | 6.4%         | 3.2%        | 3.7%         |
| Constraints (%)  | 2.5%        | 4.3%        | 6.7%         | 4.8%        | 5.3%         |
| Total Dispatch Down (%)  | 6.7%        | 8.3%        | 13.1%        | 8.0%        | 9.0%         |
| Dispatched Down Energy (GWh)   | 705         | 1015        | 1874         | 912         | 715          |
| Lost Revenue (€)   | <b>€49m</b> | <b>€77m</b> | <b>€129m</b> | <b>€81m</b> | <b>€57m</b>  |
| Dispatched Down Energy equivalent to CO2 emissions from thermal generators (Mt CO2)* | 0.256       | 0.370       | 0.688        | 0.345       | 0.385        |
| Estimated Lost Wind Energy as Percentage of 2022 YTD All-Island Electricity Demand** | 1.9%        | 2.8%        | 5.2%         | 2.4%        | 3.6%         |

\* Estimates based on SEAI data: monthly energy balances and emissions factors published on their website.

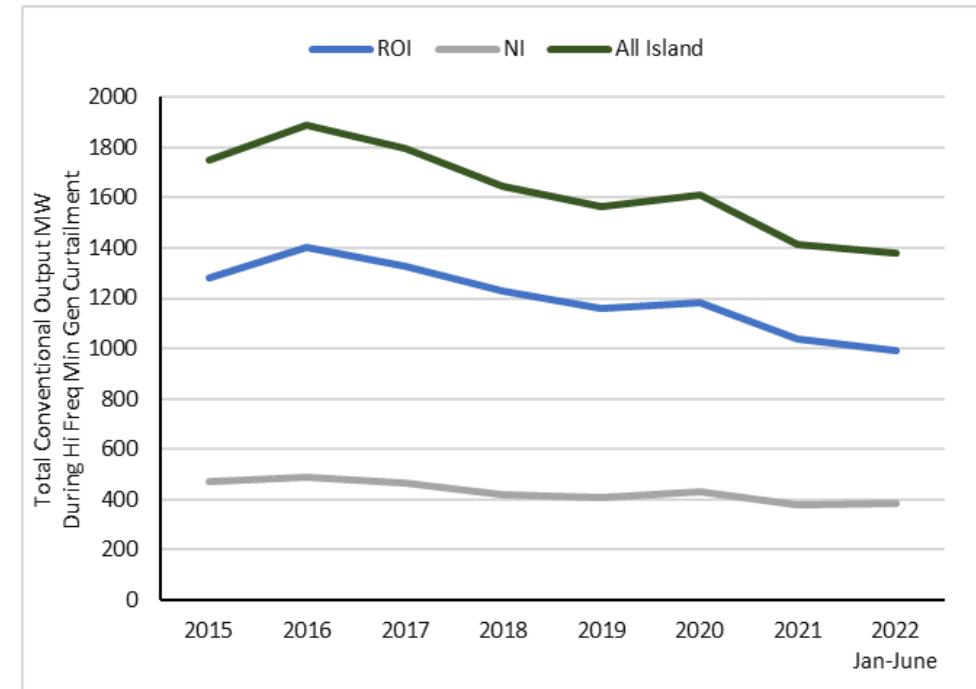
\*\* = Based on 2022 all-island demand figure obtained from EirGrid's "System-and-Renewable-Data-Summary-Report" spreadsheet on their website

- All-Island information presented above
- Constraint higher than curtailment since 2019
- Not all lost renewable energy from outages captured in EirGrid/SONI's dispatch reports

## Drivers of Wind Curtailment

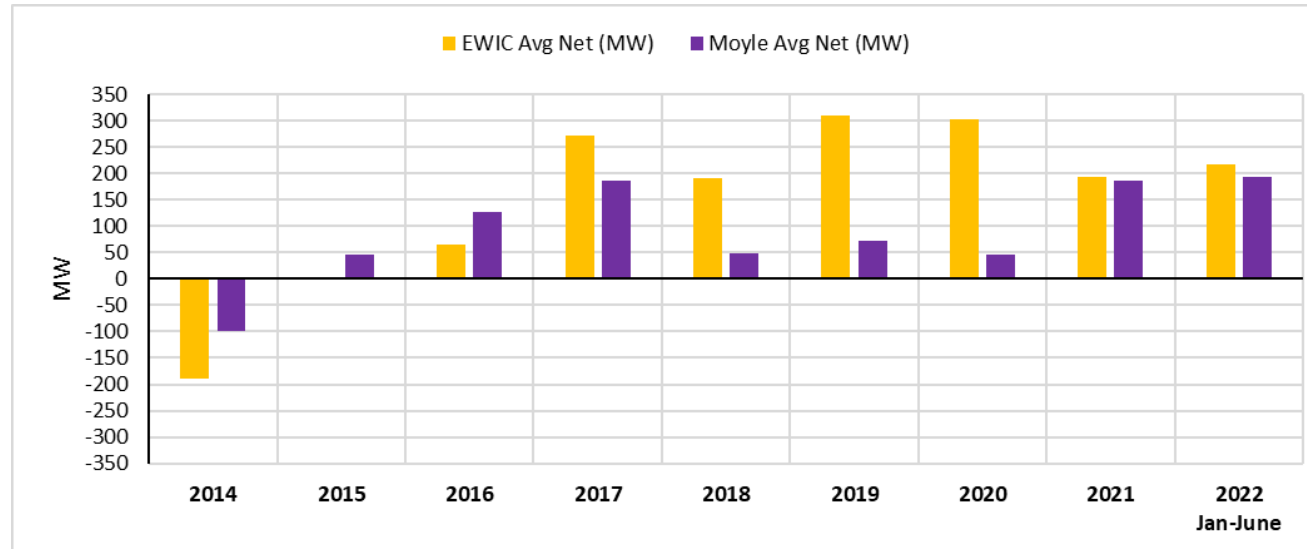


## Min Gen Levels



- Very good progress being made in increasing SNSP levels
- Need for greater focus on reducing total min gen levels

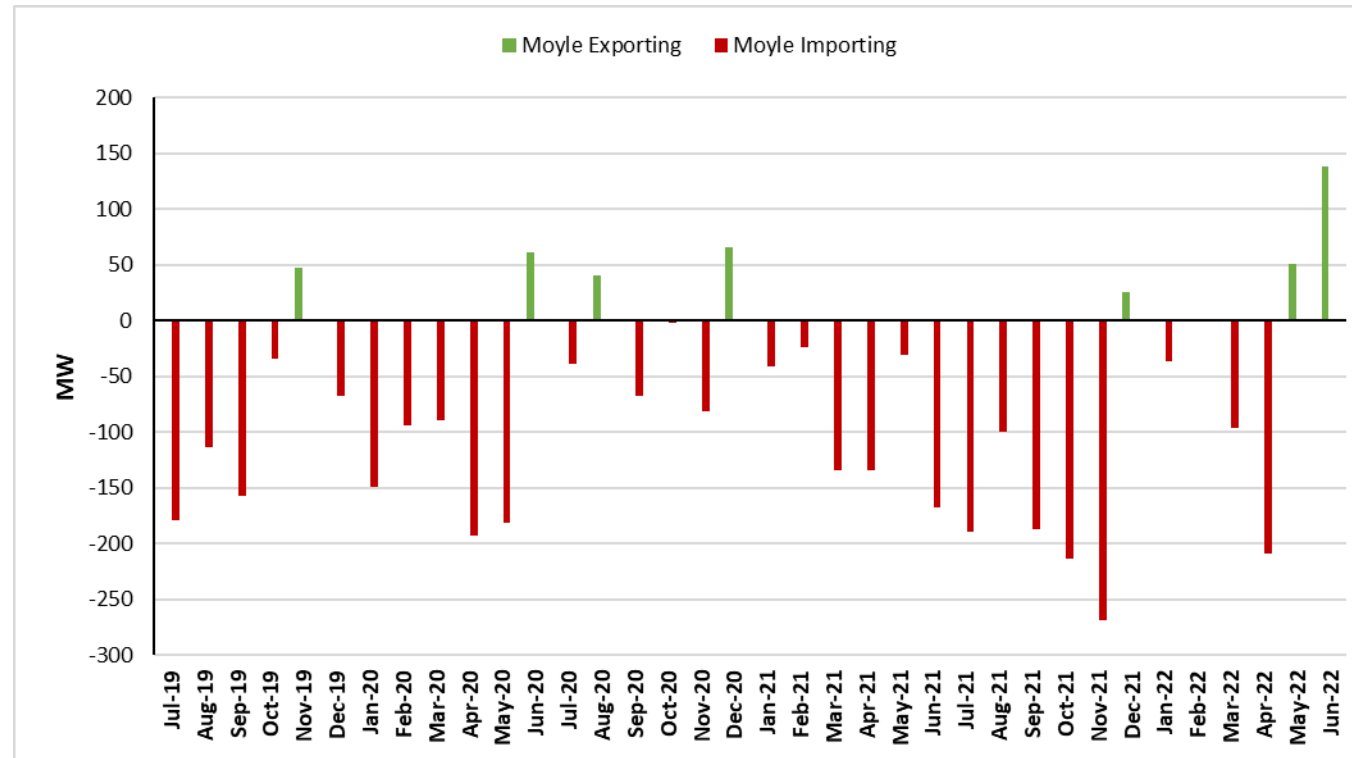
## EWIC & Moyle Avg MW During Curtailment Events



|                                |                           | 2014                   | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Jan-June 2022 |
|--------------------------------|---------------------------|------------------------|------|------|------|------|------|------|------|---------------|
| <b>Curtailment Event (nr.)</b> | EWIC (ROI)                | 137                    | 119  | 87   | 103  | 112  | 135  | 166  | 178  | 84            |
|                                | EWIC Avg Net (MW)         | -190                   | 1    | 64   | 271  | 190  | 311  | 302  | 193  | 217           |
| <b>Curtailment Event</b>       | EWIC Avg Net (%)          | -36%                   | 0%   | 12%  | 51%  | 36%  | 59%  | 57%  | 36%  | 41%           |
|                                | Moyle Avg Net (MW)        | -99                    | 46   | 127  | 186  | 49   | 72   | 45   | 186  | 193           |
|                                | Moyle Avg Net (%)         | -40%                   | 18%  | 42%  | 62%  | 16%  | 19%  | 11%  | 46%  | 48%           |
|                                | EWIC & Moyle Avg Net (MW) | -289                   | 47   | 191  | 457  | 239  | 383  | 348  | 379  | 410           |
|                                | EWIC & Moyle Avg Net (%)  | -37%                   | 6%   | 23%  | 55%  | 29%  | 42%  | 37%  | 41%  | 44%           |
|                                | <b>All Periods</b>        | EWIC Absolute Day (MW) | -376 | -213 | -14  | 18   | -39  | 40   | 96   | -92           |
| EWIC Absolute Night (MW)       |                           | -78                    | 24   | 15   | 171  | 154  | 83   | 140  | 14   | 102           |
| Moyle Absolute Day (MW)        |                           | -154                   | -61  | 11   | -41  | -145 | -98  | -65  | -131 | -12           |
| Moyle Absolute Night (MW)      |                           | -50                    | 92   | 59   | 76   | -16  | -67  | 30   | -35  | 140           |

- Scope for greater use of interconnectors to reduce curtailment

## Moyle Interconnector Average MW During NI North-South Constraint Events



- Concerns at Moyle generally importing on average during NI constraints events, although very recent trends are more encouraging