

A “Spatially Just” Transition in the Electricity Sector on the Island of Ireland: Mapping Regional Risk

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Outline:

What we knew going into the project:

- Electricity demand on the Island is growing.
- Governments in both jurisdictions have put in plans to reduce emissions stemming from fossil-fuelled power generation. (Climate Action Plans, Carbon Budgets, etc.)
- These plans require urgent restructuring of how electricity is generated across the island and will fundamentally change the way electricity is generated on the island.

What we did not know:

- Current state of electricity generation in both jurisdictions.
- Are we on track to achieve compliance with the sectoral emission ceilings set out in the government's carbon budgets.
- What does employment look like within this sector of the economy.
- What does regional socio-economic data tell us about the regions affected by the plans to decarbonize electricity generation.
- What does a *Just Transition* look like within this sector as we move away for fossil-fuelled electricity generation.

Regional Breakdown

In ROI:

- NUTS 3
- NUTS 2
- County.

In NI:

- ITL 3 categorization which is used across the UK.
- ITL 3 regions correspond local government districts and works across county borders in NI.

Sectoral Categorization

NACE REV 2 Category:

- Industry B-E
- D35 - D3514 where this data has been available.

ROI		
NUTS 2 Region	NUTS 3 Region	County
Northern and Western	Border	Donegal
		Sligo
		Letrim
		Cavan
		Monaghan
	West	Galway
		Mayo
		Roscommon
Southern	Mid-west	Clare
		Tipperary
		Limerick
	South East	Waterford
		Kilkenny
		Carlow
		Wexford
	South-west	Cork
		Kerry
Eastern & Midlands	Dublin	Dublin
	Mid-east	Wicklow
		Kildare
		Meath
		Louth
	Midlands	Longford
		Westmeath
		Offaly
		Laois

Northern Ireland
ITL 3 Regions
Derry City and Strabane
Causeway Coast and Glens
Mid and East Antrim
Mid Ulster
Fermanagh and Omagh
Armagh City, Banbridge and Craigavon
Newry, Mourne and Down
Ards and North Down
Lisburn and Castlereagh
Antrim and Newtownabbey
Belfast

NACE Rev 2 Sectoral Employment, and Estimates of Average weekly Earnings by Broad Occupational Categories ROI Q3 2022.

* ROI data are imputed to the nearest hundred based on relative proportions in NI data

NACE Sector	NI	ROI	Occupational category NACE Sector	
D3511 Production of electricity	370	2,300*	Average weekly earnings	
D3512 Transmission of electricity	463	2,800*	Managers, professionals and associated professionals	
D3513 Distribution of electricity	450	2,700*	Industry (B-E)	€1,672.45
D3514 Trade of electricity	215	1,300*	All	€1,420.06
D351 Electric power generation, transmission and distribution (Total)	1,498	9,142	Clerical, sales and service employees	
			Industry (B-E)	€946.28
			All	€642.51
			Production, transport, craft and other manual workers	
			Industry (B-E)	€831.32
			All	€665.55

Gross weekly pay by percentile NI 2021

NACE Sector	20 th percentile	40 th percentile	75 th percentile
Industry (B-E)	£388.10	£475.20	£671.70
All	£262.40	£405.30	£694.20

Regions Affected by Planned Closures of Generation Sites.

NI.

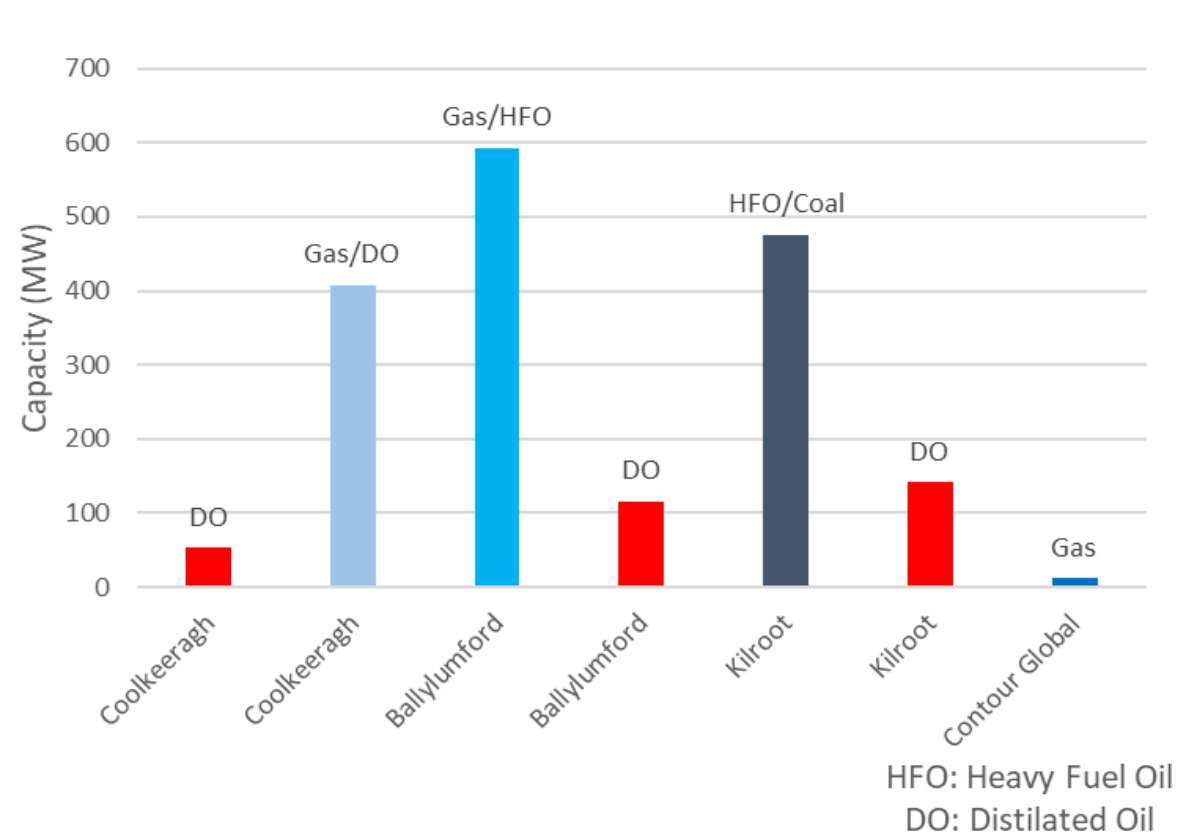
- Energy accounted for 14% of total emissions in 2020.
- Kilroot (**ITL 3 Region Mid and East Antrim**) plans to have phased out generation from a mix of HFO/Coal and DO by 2023.
- However, this will be done by switching to generation from natural gas.

ROI.

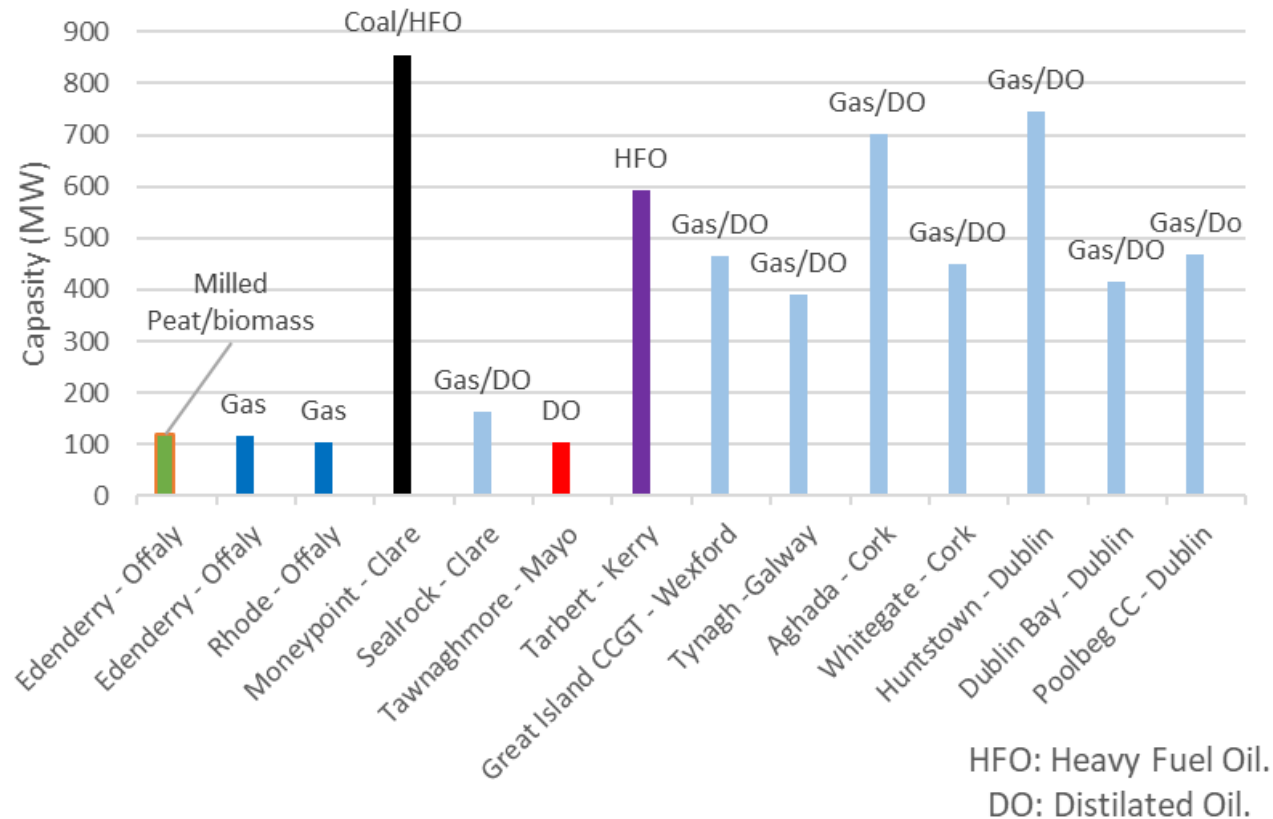
- Energy accounted for 14,4% of total emissions in 2021.
- Aghada - Gas (**Cork**) planned to close two of its gas fired turbines.
- Moneypoint - Coal/HFO (**Clare**) modelled as not available from October 2024.
- Tarbert - HFO (**Kerry**) Scheduled to close by December 2023.
- Edenderry (**Offaly**) Switching from mix of milled peat and biomass to purely biomass from January 2024.

Fossil Fuel Electricity Generation in both Jurisdictions.

Electricity Generation Sites and Fuel Types in NI



Electricity Generation Sites and Fuel Types in the ROI



Regional Social Risk Indicators.

Generation Site	Ballylumford (Mid and East Antrim)	Kilroot (Mid and East Antrim)	Coolkeeragh (Derry and Strabane)	Contour Global (Lisburn and Castlereagh)	National
Regional NACE D Overrepresentati on	-25.00%	-25.00%	48.70%	26.00%	0%
Regional pay % of national median	95.70%	95.70%	86.20%	114.00%	100%
Regional pay % of national median	4.10%	4.10%	3.90%	3.90%	3.70%
Regional Economic activity rate (15+)	74.90%	74.90%	68.00%	78.40%	73.00%
County HHDI £	18,022	18,022	15,470	19,795	17,301
Poverty rate	20%	20%	22%	15%	18%

Regional Social Risk Indicators.

Generation site	Edenderry (Offaly)	Tarbert (Kerry)	Moneypoint (Clare)	Aghada (Cork)	National
Regional NACE D overrepresentation.	13.60%	9.20%	-6.30%	9.20%	0%
Regional pay % of national median	88.40%	96.60%	91.60%	96.60%	100%
Regional unemployment (15-74)	3.50%	3.00%	4.40%	3.00%	4.20%
Regional Participation rate (15+)	63.10%	63.20%	61.30%	63.20%	64.60%
County HHDI €	18,757	20,462	21,422	23,856	23,461
Poverty	11.10%	13.30%	13.30%	13.30%	13.10%
Deprivation	16.00%	21.20%	21.20%	21.20%	17.70%

Thank you for listening.

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