

Planning for a Just Transition in Northern Ireland

27th January 2021

Main themes & findings

- Lack of data
- Production & consumption
- Vulnerabilities & opportunities
- COVID-19

Employment vulnerability – energy production

- No major FF extraction & production industry – power generation (53% FF power)
- Ballylumford & Kilroot owned by EP UK, Coolkeeragh by ESB.
- Opportunities for transition but also carbon lock-in a problem.

Power station	Capacity (GW)	Estimated total full time employment
Ballylumford (gas)	0.709	100
Kilroot (coal & currently being transitioned to gas, due to be completed by 2023)	0.618	120
Coolkeeragh (gas)	0.461	60-80
Aggregated generational units	0.076	Unk.
Contour Global	0.012	Unk.
Total	1.876	Approx. 300

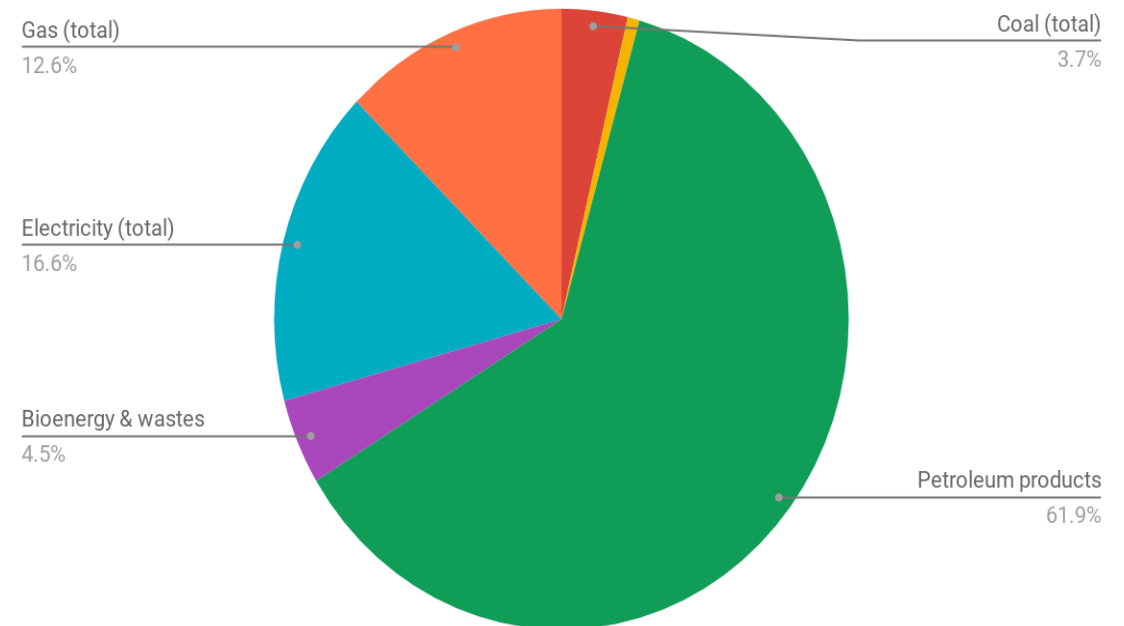
Case Study – A Just Transition at Kilroot

- EP UK transformation of Kilroot site from coal to gas – at £600m it is the largest energy generation investment project in NI history
- 100 jobs will be lost by 2023 – employer, government & unions aware and no plan in place
- ‘Longannet Taskforce-style’ intervention led by Dept. for Economy
- Lessons to be learned

Employment disruption – energy consumption

- Ní Lochlainn (2021) covers agriculture extensively & indicates areas at risk
- Extensive dependency on petroleum products
- 50% all energy usage heat, 33% for transport, and 17% for power.
- JT policy priorities: Fuel poverty, public transport, electrification of heat technology, etc.

Northern Ireland energy consumption by source, 2017



Eco-Transformation of Industry Matrix (McIvor et al, 2020)

Leaders: 'the most eco-friendly...do not produce high levels of carbon emissions...are intensively involved in activities that directly protect the environment'.

Neutrals: 'produce low levels of carbon emissions but are not involved in activities that directly protect the environment.'

Followers: 'producing high levels of emissions...activities that are intended to protect the environment and could thus create green jobs.'

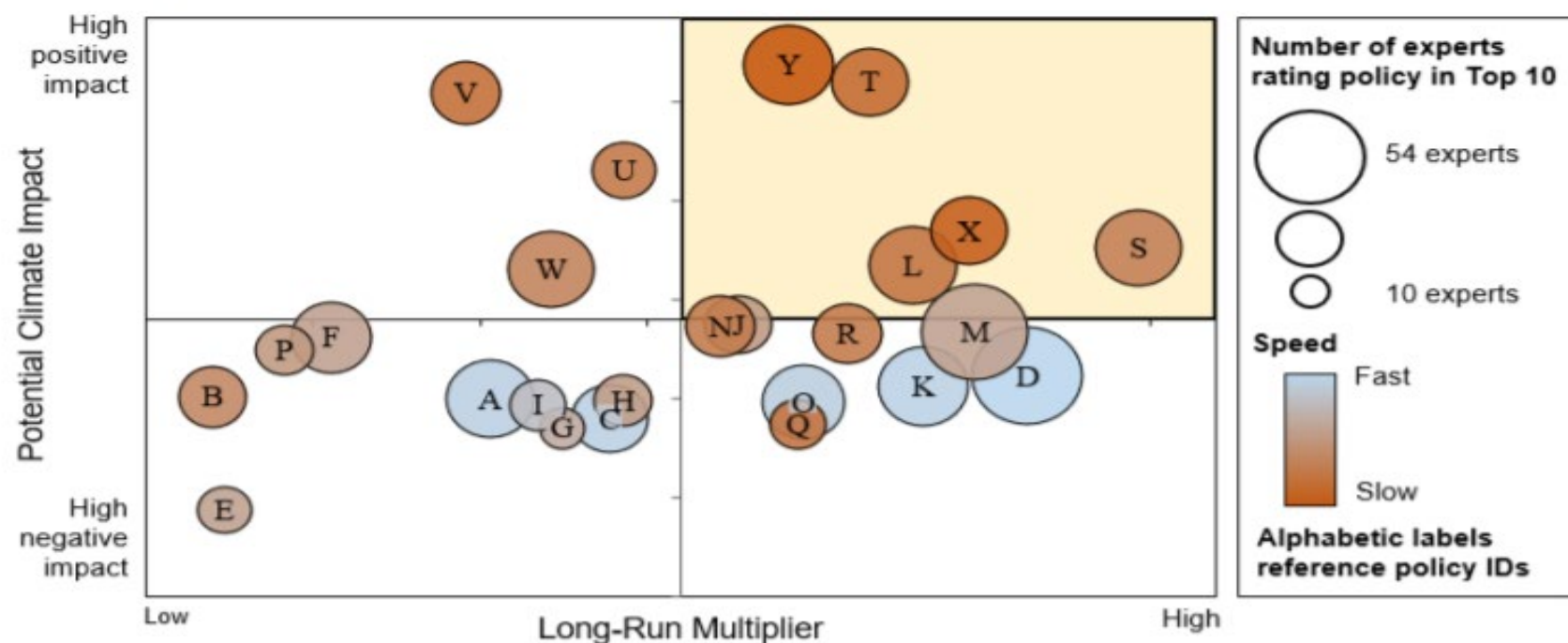
Laggards: 'produce high levels of carbon emissions and are not involved in activities aimed at protecting the environment.'

Leaders – 22%	Followers – 19.6%
P. Education – 9.2%	C. Manufacturing – 11.1%
M. Professional, scientific and technical activities – 4.6%	F. Construction – 4.5%
O. Public administration and defence – 6.3%	S. Other service activities – 2%
R. Arts, entertainment and recreation – 1.9%	A. Agriculture, forestry, and fishing – 1.7%
	D. Electricity, gas, steam and air conditioning supply – 0.3%
Neutrals – 30.2%	Laggards – 28%
Q. Human health and social work activities – 16.7%	G. Wholesale and retail trade, repair of motor vehicles, etc. – 16.6%
N. Administrative and support service activities – 7%	I. Accommodation and food service activities – 7.3%
J. Information and communications – 2.9%	H. Transportation and storage – 3.8%
K. Financial and insurance activities – 2.3%	B. Mining and quarrying – 0.3%
L. Real estate activities – 1.3%	

Note: % may not equal due to rounding

Vulnerabilities & opportunities

- **Laggards** – some of most carbon intensive or 'least green' sectors are most exposed to COVID-19 (UUEPC, 2020). Opportunity to 'build back better'.
- **Followers** – post-COVID investment in construction & retrofitting offers significant ecological & economic value.
- *45% of emissions in Belfast come from domestic housing sector where fuel poverty is pervasive (Gouldson et al, 2020).*
- Allan et al (2020) point to high multiplier and positive climate impact of retrofitting & building upgrade.
- At UK level Robins et al (2019) estimate 60% of jobs in construction industry will be disrupted – 30% of skills in more demand, 30% in less demand.



A	Temporary waiver of interest payments	N	Worker retraining
B	Assisted bankruptcy (super Chapter 11)	O	Targeted direct cash transfers or temporary wage increases
C	Liquidity support for large corporations	P	Rural support policies
D	Liquidity support for households, start-ups and SME's	Q	Traditional transport infrastructure
E	Airline bailouts	R	Project-based local infrastructure grants
F	Not for profits, education, research, health inst. bailouts	S	Connectivity infrastructure
G	Reduction in VAT and other goods and services taxes	T	Clean energy infrastructure investment
H	Income tax cuts	U	Buildings upgrades
I	Business tax deferrals	V	Green spaces and natural infrastructure
J	Business tax relief for strategic and structural adj.	W	Disaster preparedness, capacity building
K	Direct provision of basic needs	X	General R&D spending
L	Education investment	Y	Clean R&D spending
M	Healthcare investment		

Sector	Emissions targets	Employment levels	% of jobs affected by greening of the sector	% of jobs that will require new skills in the transition
Surface transport	98% reduction in emissions by 2050	1.6m employed in transport and storage; 4m in retail and repair of vehicles	46% ¹	26% ¹
Industry	90% reduction in emissions by 2050	3m employed in manufacturing	50% ²	17% ²
Buildings	All new heating systems low carbon from 2035	2.4m jobs in construction; 0.5m jobs in real estate	60% ³	30% ³
Power	99–100% low-carbon generation by 2050	90,000 employed in electricity production, transmission and distribution; 544,000 employed in UK energy industry	43% ⁴	26% ⁴
Agriculture	30–50,000ha afforested every year to 2050; 20% cut in consumption of beef, lamb and dairy	426,000 employed in agriculture; 4m jobs in agri-food sector overall	11% ⁵	6% ⁵

Notes: 1. Transport and storage. 2. Manufacturing sector only. 3. Construction sector only. 4. Mining, quarrying and utilities. 5. Agriculture, forestry and fishing.

Sources: Key sectors for decarbonisation and long-term emissions targets from CCC (2019b); Skills profile of sectors from Robins et al. (2019); Numbers employed in each sector from Rhodes (2018), Defra et al. (2019), ONS (2017) and Energy UK (2018).

Broader themes & patterns

- Skills transition – issues of age & class
- Issues around awareness & engagement
- State & fiscal capacity
- More radical understanding of just transition – economic growth & emissions decoupling