

Matching skills needs with skills reserves:

Protecting workers and communities for a Just Transition.

23rd January 2020

NERI Seminar Series

Belfast

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Structure

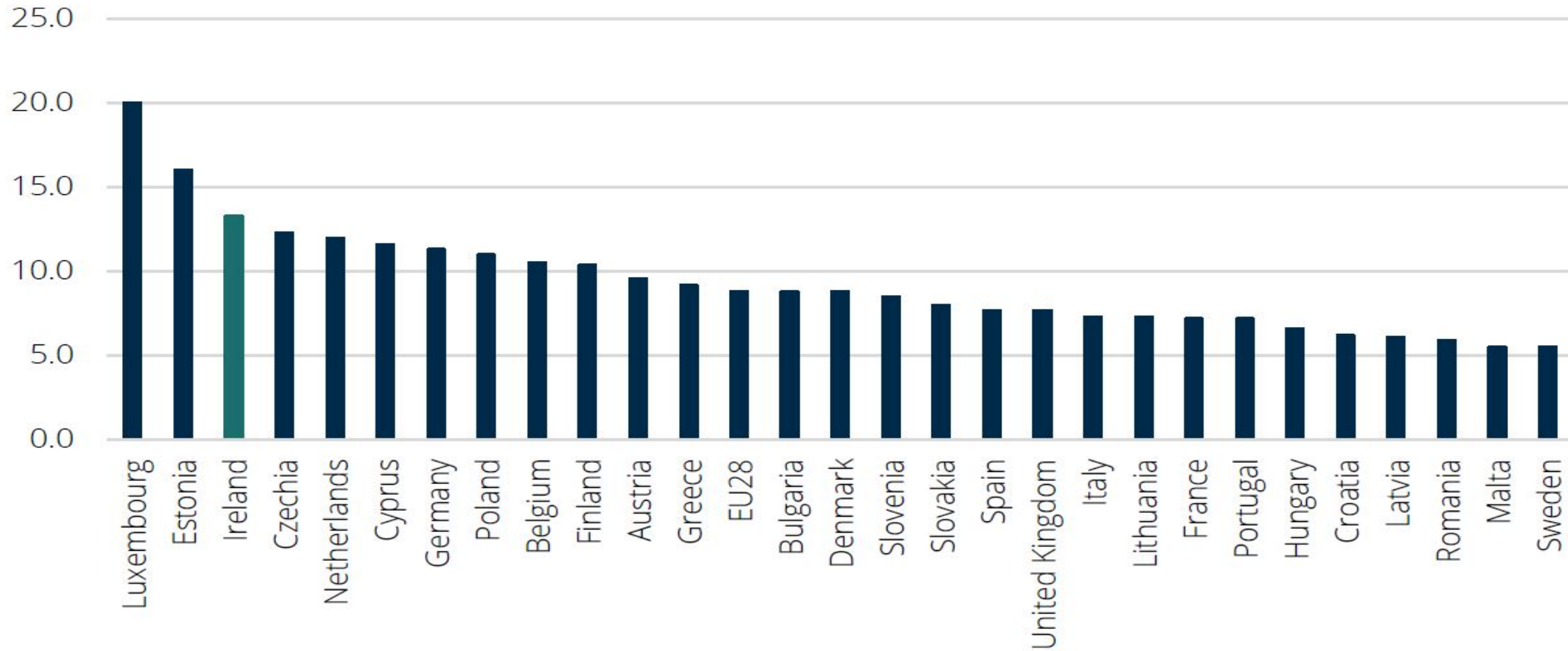
- Identifying at-risk sectors (we concentrate on those sectors which produce the most carbon). Regional component?
 - Skills and age profile of the most at-risk sectors.
 - Defining green skills, Identifying future skills needs (comparative advantage and areas for development).
 - Current underutilised skills: Skills mismatch and skills profile of PLS4.
 - International experience
-
- Demand-side (see NERI long read)



Introduction

- The Republic of Ireland is a laggard on many measures of environmental sustainability.
- This includes carbon emissions.
- ROI is projected to fall short of its European commitments to reduce emissions in both 2020 and 2030.
- Clearly, something has to change.

Tonnes of emissions Carbon Dioxide Equivalent per capita 2017



Introduction continued

- A “Just Transition” states that at-risk communities and workers should not bear the burden of adjustment.
- This entails a stronger role for government.
- A Just Transition incorporates many elements so we limit our focus.
- We examine the skills aspect of labour market transitions.

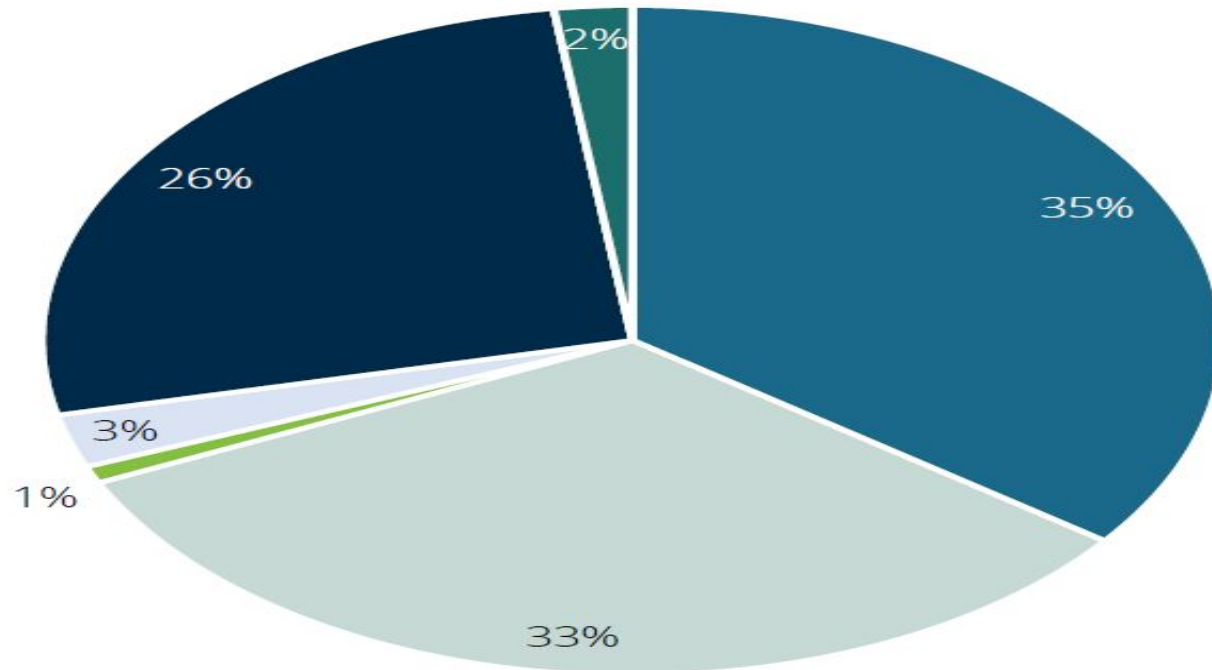


Where are at risk jobs concentrated?

- A proactive policy approach should try to identify the workers and communities at high risk.
- This is complex – sectors are linked nationally and internationally.
- One method we use is an examination of carbon intensities of different economic sectors.
- We observe high concentrations in 6 sectors – they account for less than a tenth of employment but nearly 90 per cent of emissions.

Non-household emissions by broad NACE Sector 2017

- Agriculture, forestry and fishing (A)
- Industry (B to E)
- Construction (F)
- Wholesale and retail trade, repair of motor vehicles and motorcycles (G)
- Transportation and storage (H)
- Services (G,I-U)



Proportions of emissions and employment by sector 2017

Sector/Subsector	Broader NACE Sector	Percentage of total non-household emissions (CO ₂ equivalent)	Percentage of total employment
Crop and animal production, hunting and related service activities	A: Agriculture, forestry and fishing	35.1	4.9
Air transport	H: Transportation and storage	21.4	0.5
Electricity, gas, steam and air conditioning supply	D: Electricity, gas, steam and air conditioning supply	19.0	0.4
Manufacture of other non-metallic mineral products	C: Manufacturing	5.5	0.4
Land transport and transport via pipelines	H: Transportation and storage	4.5	2.1
Manufacture of basic metals	C: Manufacturing	2.0	0.3
Cumulative share		87.5	8.6



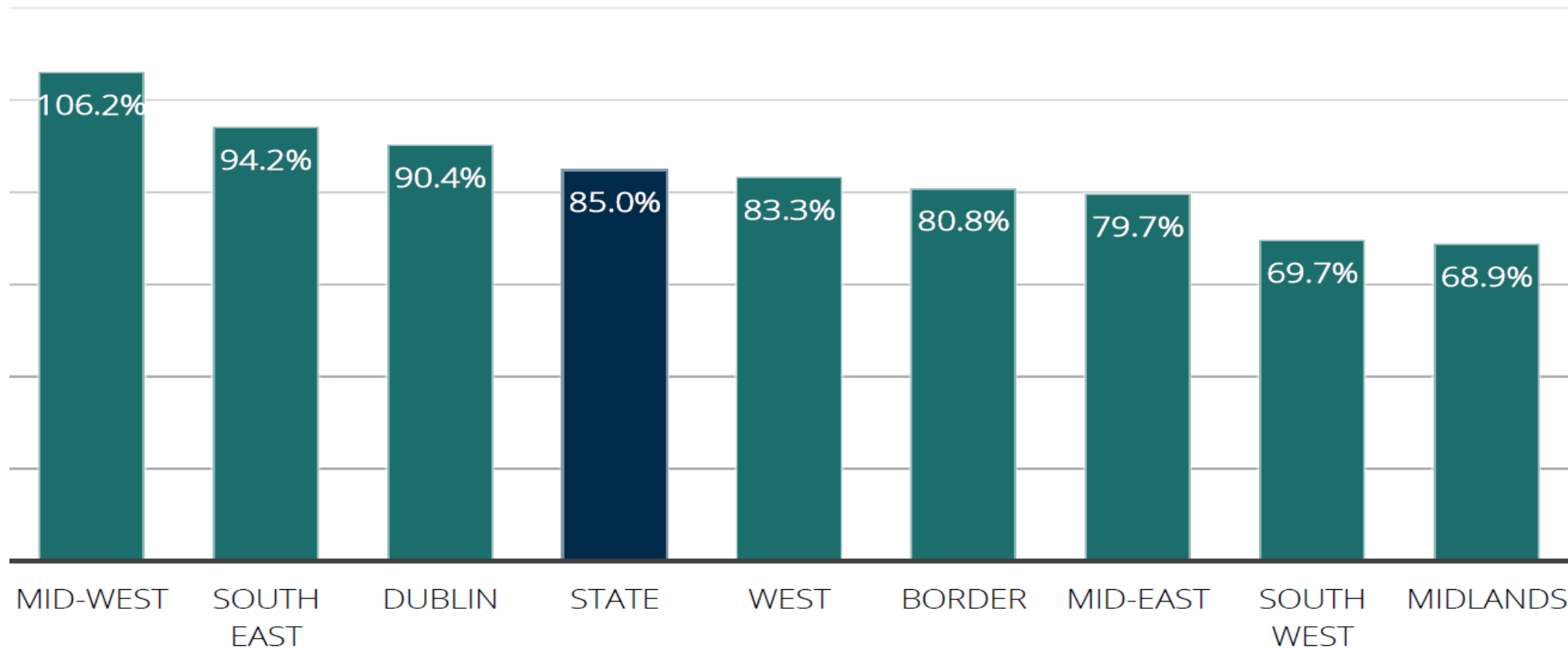
Where are at risk jobs concentrated?

- There is also a regional dimension to this.
- In the absence of detailed sub sectoral data, we examine higher level sector aggregates to see where these jobs might be.
- West, South-west and Midlands have higher shares of Industry. Border and Midlands have higher shares of Agriculture.
- The proportion of new jobs created in “non-emitting” sectors between 2012 and 2019 is particularly bad in the Midlands and South-west.

Regional Composition of National Sectoral Employment Q2 2019

Sector	B	W	MW	SE	SW	D	ME	M
Agriculture, Forestry & Fishing (A)	18.2	11.1	14.5	12.9	17.9	4.6	10.5	10.3
Industry (B to E)	9.8	13.3	10.9	10.0	18.4	16.2	14.2	7.2
Construction (F)	9.5	9.3	9.8	10.1	13.8	23.2	19.1	5.3
Transportation ...(H)	6.8	8.5	8.9	7.4	13.0	35.7	14.7	5.1
Services (G, I-U)	6.9	8.7	8.9	7.4	13.1	35.5	14.5	5.1
All Sectors	7.9	9.3	9.4	8.1	13.9	31.2	14.7	5.5

Proportion of employment growth explained (net new jobs) by Non-Emissions intensive sectors Q2 2012- 2019



The skills challenge of transition

- Similarly, defining “green jobs” and skills is complicated and various definitions are used.
- A lot of this depends on the approach of the public sector of course!
- However, “green jobs” seem to value STEM, Administration and Business qualifications. Key target areas for carbon reduction identified in the recent Climate Action Report (renewables, retrofitting etc) also inform our selected indicators.
- There is evidence of significant skills mismatch in the ROI economy in comparison to other EU countries, both horizontal and vertical.

Matching the skills of workers in at-risk sectors and the potential labour supply

- Data is limited here, but LFS offers a picture of some at risk sectors.
- There is substantial variation in the skills profile of these sectors. Some sectors are better equipped for transition – like Electricity , gas, steam and hot water (BnM, ESB)
- Some less so (Crop and animal production)

Matching the skills of workers in at-risk sectors and the potential labour supply

- Opportunities: Examining a broad measure of labour supply PLS4 (includes discouraged workers, those available but not seeking and part-time underemployed), we also observe unutilised skills in this population*
- Turning to selected regions, we identify a varied regional picture.
- Worryingly, ROI displays low levels of in-job training, higher ed funding and a fraction of former apprenticeship levels.

*actually higher in Q2 2019 than Q2 2016 according to CSO

Highly educated and inactive

Potential Labour Supply (PLS4) (%)	2018	Bachelor's degree + in PLS4 (%)	2018
ROI	17.0	ROI	23.2
Western	18.1	Western	21.2
Mid-West	18.7	Mid-West	20.4
South-West	15.5	South-West	27.0
Midlands	23.3	Midlands	18.9

Continued...

Fields of Education	PLS (4) (%)	PLS (4) with Degree +
Business, Administration and Law	22.4	24.9
Natural Sciences, Mathematics and Statistics	4.3	6.9
Information and Communication Technologies	9.4	9.5
Engineering, Manufacturing and Construction	10.9	7.7

Previous Experience of the Inactive by Occupation (8 years or less inactive)

Managers	5.1
Professionals	13.6
Technicians and Associate Professionals	9.4
Clerical Support Workers	9.9
Service and sales workers	30.4
Skilled Ag, forestry, fishing	1.2
Craft and Related Trades workers	9.7
Plant and machine operators and assemblers	6.3
Elementary Professions	14.4

Lessons for managing transition in Ireland

- There are successful and unsuccessful examples of transition experience.
- International lessons include:
 - Agreed Transition timelines through meaningful social dialogue. This allows for pro-active as opposed to reactive policy responses.
 - Inclusion of local bodies in planning – various levels of government, local actors.
 - Labour market institutions for upskilling, eg. Swedish job security councils.
 - Social security important elsewhere.
 - Public investment for infrastructure and to support high skilled labour demand.

Policy recommendations from our paper

- Strategic planning and implementation:
 - High level bodies serve a purpose and must coordinate to meet the GHG challenge. Includes EU, ROI and others.
 - High level planning and carbon targets are appropriate but local engagement is needed to avoid top-down pitfalls.
 - Institutions to reflect and negotiate between workers, employers are not an impediment to success. Co-ordinated market economy institutions appear to fare better.
 - The government should shape skills demand, rather than adopt a reactive approach.
- The social insurance system is underdeveloped in ROI, €11 billion extra if we collected at peer rates. This could help address limited in-work upskilling.

The case of Northern Ireland

- Northern Ireland is a better performer in emissions per capita terms:
 - 10.7 tonnes CO2 equivalent per person vs 13.3 tonnes in ROI in 2017.
 - However, this is still well in excess of the EU28 average of 8.8 tonnes, UK average of 7.7 tonnes and EU best Sweden at 5.5 tonnes.
- This may be down to compositional effects, better emissions performance in sectors or some combination of the two:
 - One example, Agriculture, one of ROI's biggest problem sectors is far smaller in employment terms in NI.
- Emissions are not entirely separable given economic and infrastructural links:
 - Example of integrated electricity sectors.

The case of Northern Ireland continued...

- NI represents a different case to ROI institutionally, economically etc., even if general lessons might be drawn for both.
- Policy questions arise:
 - To what extent is climate policy in the purview of the NI assembly or the UK government?
 - What sectors present a particular problem in the NI context?
 - How does this intersect with productivity issues in NI?
 - What jobs are on offer in the green economy and on what terms?

NERI work programme in the area

- We have recently incorporated Climate and Just Transition as an explicit work stream:
 - The paper this seminar is based upon was also the focus of the last Quarterly Economic Observer.
 - Material including a "*Long read*" regarding "Investing in a Just Transition".
 - An episode of our video series on our Youtube channel discussing the Just Transition.
 - Upcoming NI Just Transition work.
- Stay tuned!

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