

Areas of green jobs researched in the academic the literature

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Introduction

- **The transition to greener economies is and will provide opportunities such as generating economic growth, creating new jobs and contributing to social inclusion and poverty reduction. The transition however, will also be challenging and must consider things such as job displacements and job losses in different industries and overall net employment impacts, there is also potential for positive but also sometimes negative impacts on poor households (via changes in energy and commodity prices) and loss of livelihoods, and varied impacts on competitiveness (International Labour organisation 2018);**
- **Some of these issues are extensively discussed and tested in the academic literature, but there are also potentially other issues that have not been substantially discussed;**
- **No review studies currently systematically set out the different areas and focuses of empirical studies researching green jobs. Most focus on looking at overall job creation. The presentation today attempts to do the former;**
- **Systematic review of green jobs is undertaken to look at the different focuses taken in green jobs studies;**
- **The presentation today explores the different areas of study;**
- **We need to understand from practitioners and academics which areas they see as particularly important and moderately/little researched. Are there important research topics not currently mentioned?**

Research themes

Most researched:

- Typically country level analysis, jobs creation/economic impact (56) + detailed regional/spatial analysis (8);
- Green skills and employment (12);
- Employee attitudes/behaviour, job satisfaction & quality of life and green jobs (10).

Less prevalent, limited research

- *Micro economic analysis and green jobs (9);*
- *Green jobs, power, media, justice and politics (8);*
- *Green innovation and employment (6);*
- *Definition and measurement of green jobs (5);*
- *Enablers and barriers to green jobs (5);*
- *Green jobs and wages (3);*
- *Coronavirus and green jobs (3);*
- *Green jobs and environmental impact assessment (3).*

Little research

- Gender studies and green jobs (2);
- Green jobs and institutions (2);
- Green jobs and informal economy (1);
- Islamic perspectives and green jobs (1).

Country level analysis

Policy
legislation
impact
studies

Energy
sector/low
carbon
transition



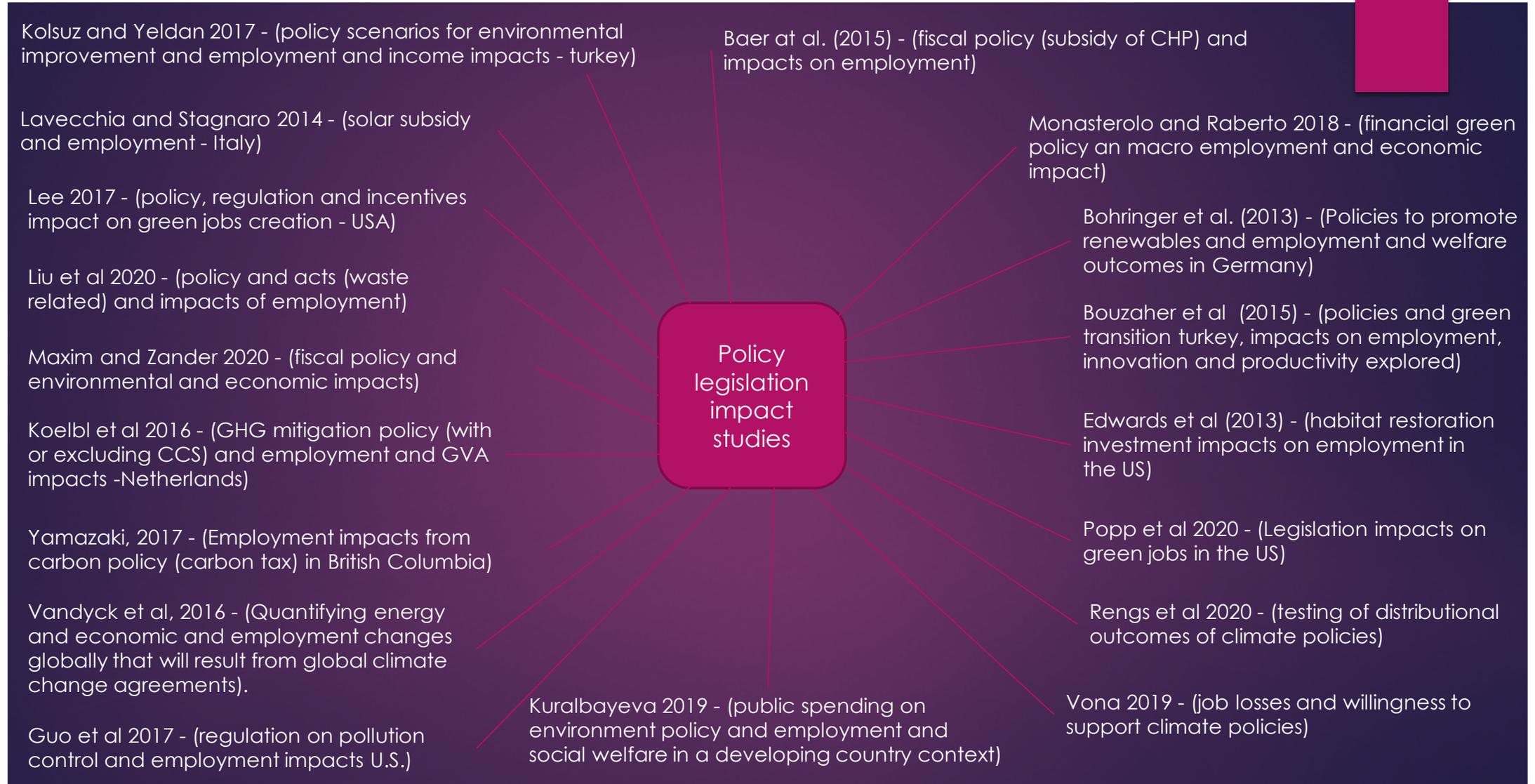
Economic
impact and
green jobs

Economic
impact and
green jobs

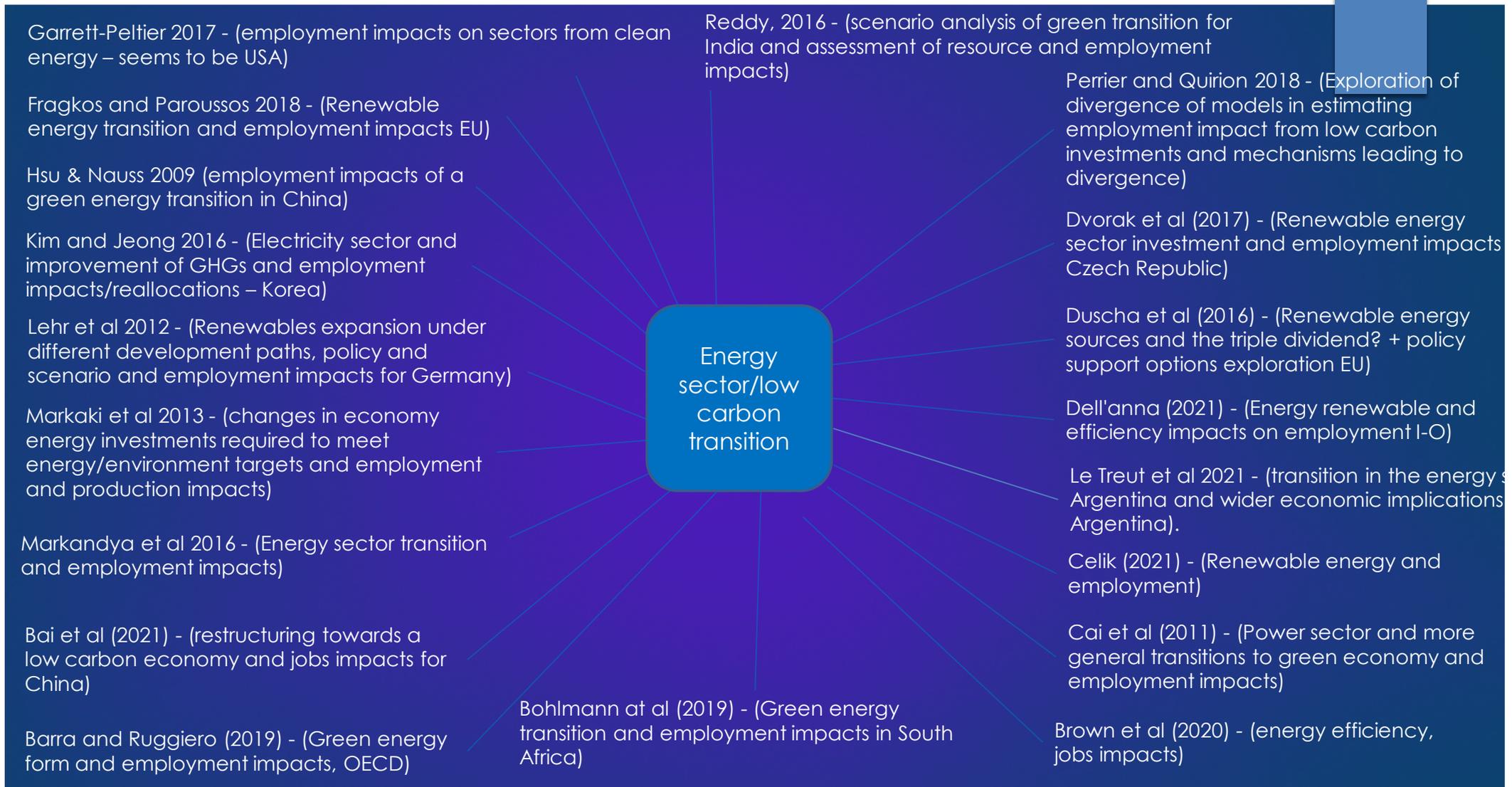
Green
economy

Circular
economy

Job creation/net job creation/economic impact, typically whole economy analysis



Job creation/net job creation/economic impact, typically whole economy analysis



Detailed regional and spatial analysis

Policy
legislation
analysis

Energy
sector/low
carbon
transition

Other
sector focus

Economic
impact and
green jobs

Green
economy -
economic
complexity
& location
preferences

Social
policy and
detailed
modelling

Detailed regional and spatial – most researched

Yi, 2013 - (policy impact at state and local levels in stimulating and maintaining green jobs)

Yi and Liu 2015 - (detailed spatial estimation (allowing assessment of geographical distribution) of green jobs using bottom up methodology and analysis of sub national green energy policies impacts on green jobs in China)

Yoo and Heshmati 2019 - (regulatory impacts on employment and labour productivity for green and non green sectors).

Stavropoulos et al 2020 - (Detailed analysis of circular economy policies in European cities and impact on green jobs and foreign direct investment)



Policy
legislation
analysis

Employee attitudes and behaviour, job satisfaction and quality of life



Job satisfaction and quality of life

Hwang et al., (2020) - identify the relationships between job satisfaction and its key influencing factors on green construction projects, and put forward strategies to improve the job satisfaction.

Iranmanesh et al., (2017) - Investigate the effects of green product and process innovation on job satisfaction.

Kim et al., (2019) - Investigate the linkages among prior job satisfaction, voluntary workplace green behaviour, and job satisfaction (as dependent on group gender composition).

Bellootti et al., (2011) - Provide a longitudinal study of the mental health, quality of life and functional outcomes of Operation Iraqi Freedom/Operation Enduring Freedom veterans enrolled in the Veterans Conservation Corps job training program.

Chen et al., (2020) - investigates the potential antecedents (i.e. environmental stewardship orientation (ESO) and job autonomy) and consequences (i.e. job satisfaction, life satisfaction, and intention to leave) of harmonious job passion among employees working in green restaurants in Taiwan. First, how does job passion of green restaurant employees affect their psychological well-being? Second, our study investigates both individual- and job-related antecedents that may trigger employees' job passion.

Pinzone (2019) - Theorise and empirically test the effects of 'green' training on both: "i) OCBEs performed by employees, which are expected to benefit the organisation in terms of environmental sustainability; and ii) job satisfaction, which benefits employees and is an important indicator of the internal social sustainability of the organisation. Furthermore, this study investigates two mediating mechanisms between 'green' training and OCBEs and job satisfaction, respectively. (p.22, Pinzone 2019)

DeHart-Davies et al., (2014) - look at whether organizational rules make employees happy?

Job
satisfaction
& quality of
life

Green skills and employment

Education
and policy

Green jobs
and skills
compared
to other
jobs

Green skills
and
employment

Future skills
in relation to
green
growth,

Green jobs &
employment

Investment
in human
capital,
impact on
green jobs,
productivity
& welfare



Green skills and employment

Karakul (2016) - Look at government policy on encouraging business and industry to actually create green collar jobs focusing on the Turkish education system.

Otieno (2018) - With a South African, and local government focus analyse the existing and potential green jobs and green qualifications and skills required to develop the green economy for the waste water treatment sector.

Sharpe and Martinez-Fernandez (2021) - Generate a policy framework and apply to investigate the policy readiness in greening employment and supporting a just transition across ASEAN with particular case study analysis of the Philippines.

Jung (2015) - Construct a theoretical framework focused on sustainable development and use to assess the process and contents of South Korea's green job policy.

Li et al., (2018) Conduct an empirical enquiry of the factors that shape household participation decisions for the Grain for Green program and impacts on participants.

Scully-Russ (2013) - Investigate qualitatively, two Energy Training Partnerships (ETP) funded by the US Department of Labour to train workers for green jobs.

Falxa-Raymond (2013) - Explore motivation to seek out, participate in, and remain in green job training programs and jobs related to urban natural resource management as well as a range of related questions.



Education
and policy

Less prevalent areas, but still reasonably researched

- Micro analysis of green jobs;
- Green jobs, power, media justice, and politics;
- Green innovation and employment;
- Definition and measurement of green jobs;
- Enablers and barriers to green jobs;
- Green jobs and wages;
- Covid 19 and green jobs;
- Green jobs and environmental impact assessment.

Little researched

- **Gender studies and green jobs (2)**
- **Green jobs and institutions (2)**
- **Green jobs and informal economy (1)**
- **Islamic perspectives and green jobs (1)**

Conclusions

- The vast majority of research has been conducted to study in relation to understand the impacts on overall jobs numbers and overall economic impacts in relation to policy or green energy transitions (or green economy).
- As seen in the review however there are other important areas that have been substantially under researched;
- There is a need for more research in the areas that are moderately or little researched.
- We need to understand from practitioners and academics as to which of these areas they see as most important and important areas for research not currently mentioned at all.

References

- Greening with jobs. International Labour Organisation 2018. World Employment Social Outlook. Available: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/--publ/documents/publication/wcms_628654.pdf Accessed: 30.5.23
- Other reference see references in working paper