

Women's agency and living realities in the wake of energy transitions

A systematic map of gender in coal transition regions

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Agenda

1. Are energy transitions gendered?
2. Theoretical background: Constitutive power and path dependencies
3. Methodology & current stage of research process
4. Preliminary findings

1. Are energy transitions gendered?

Women's agency and living realities in the wake of energy transitions

Interdependency between gender, energy/climate change and policy exist:

Gender and energy

Energy poverty	Women and female headed households are more heavily affected, both in countries of Global North and South (Bleckmann et al. 2016)
Energy production	Higher share of men in management and workforce of energy industry, both conventional (22%) & renewable (32%) (IRINA 2020), higher share of male members in energy coops (Fraune 2018)

Gender and climate change

Effects of climate change	Gender differences in the impacts of climate change: e.g. increasing care work (food insecurity and access to water), natural disaster effects (Vincent et al. 2015)
Perception of risk and behavioural change	Women tend to perceive climate change as greater risk & are more open to change behaviour, deniers of climate change are primarily white men (Röhr, Alber, and Göldner 2018)
Adaptive capacities	Generally lower for women, influenced by economic capacity & ability to participate in decision making processes (Vincent et al. 2015)

Gender and climate policy

Energy usage and mobility patterns	Gendered differences in mobility patterns and energy usage can be used to make climate policy more effective
Institutionalized androcentrism	The association of technological solutions with masculinity and behavioural changes with femininity leads to a technology bias in both research and policy making (Braunger and Hauenstein 2020)

Are energy transitions gendered? Yes, but ...

- Research on gender/sex and energy evolved parallel but more or less unconnected to social science transition research (Fraune 2018)
- The nexus between gender relations and energy remains heavily under-researched within the field of sustainability transitions research (Köhler et al. 2019)

We want to shed light on the nexus gender and coal transitions, because:

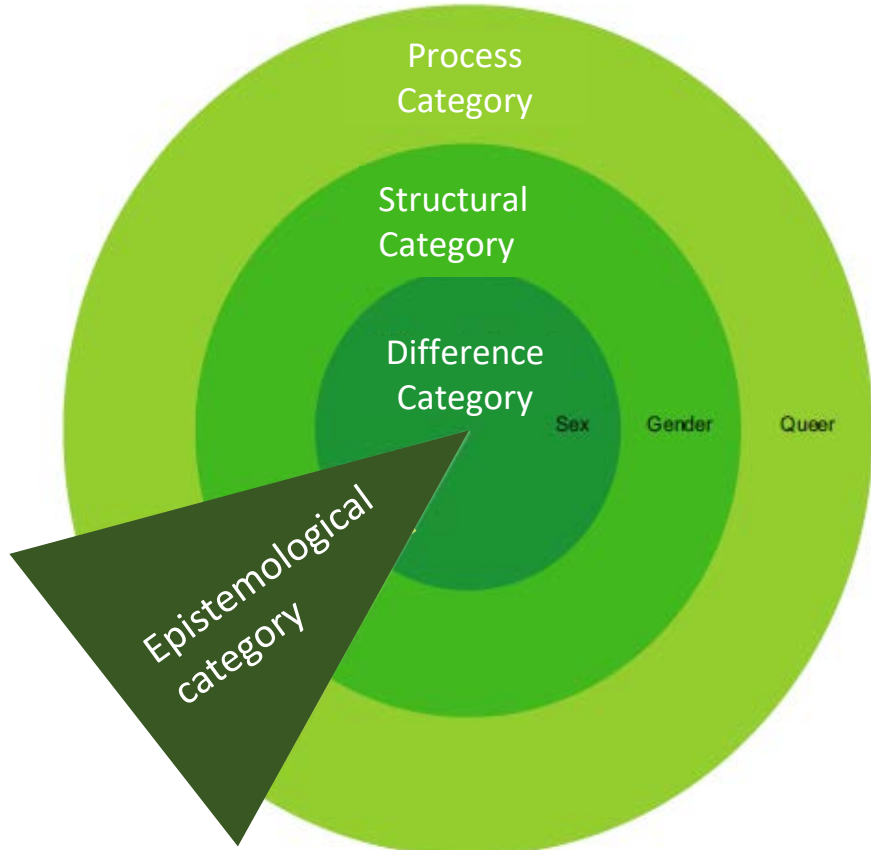
- 80% of the existing coal reserves must stay under ground making the coal industry one of the major transition sites on the road to sustainable energy system
- To enable just transitions, questions of power, distribution and participation within gendered energy regimes must be raised.
- Policies to soften negative effects for the coal regions should address all stakeholders
- The Great Transformation that lies ahead can also be used to dissolve social power structures

-> We address a significant information gap relevant to political decision makers

Our research will collect information on the following questions:

1. What effects may coal transitions have on women in difference to men?
2. (How) does agency differ between men and women in coal transitions?
 - a. In which way do women/men have different interests in the wake of coal transitions?
 - b. How does the involvement of women/men in coal transitions processes influence the processes respectively?

Limitations of our research:



Source: Kanning 2016

The analysis remains in the difference category which is criticised for:

- Treating women as a homogenous group, with a determined identity.
- Emphasise on differences between men and women can lead to reproduction/reinforcement of traditional role models.
- Women can be regarded as deficient and have to adapt to the given circumstances. Solutions that aim to change the underlying causes of inequalities are thus eliminated.

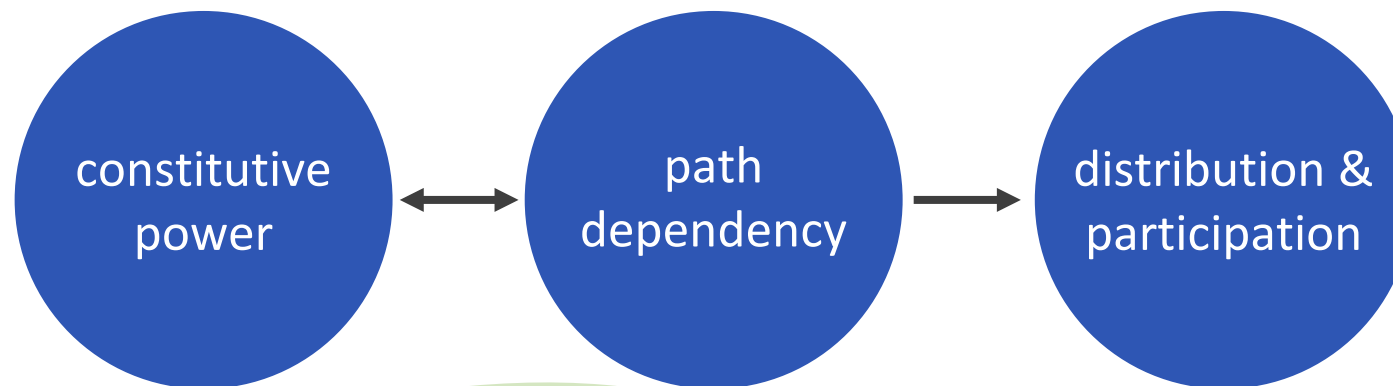
-> Most of the existing literature is based on the difference category

2. Theoretical Background: Constitutive power and path dependencies

Bridging Energy Transitions & Gender Studies

The existing interdependencies between gender and energy, as well as the connected questions of power, have not been given enough attention within sustainability transitions research (Fraune 2018, Köhler et al. 2019).

-> to bring gender into sustainability transition research we base our research on three components





constitutive
power

- The “ability to constitute a distribution of resources“ (Avelino & Rotmans 2009: 552) through institutions and structures.
- Constitutive power is embedded in structures where masculinity is the dominant and unspoken norm which is perceived as natural and given (landscape level in socio-technical transition research)
- Insofar relevant to our research as it gives us an understanding of the structures in which women in coal transitions operate



path
dependency

- Naturalization of masculinity in the (gender) landscape is what creates path dependency
- The gender order does not require any explicit politics to be maintained, the gender order is simply reproduced.
- If gender is not recognized in energy transition policies, they are not gender neutral (Kronsell 2013), but overlook and thereby reproduce inherent power dynamics (Fraune 2018).

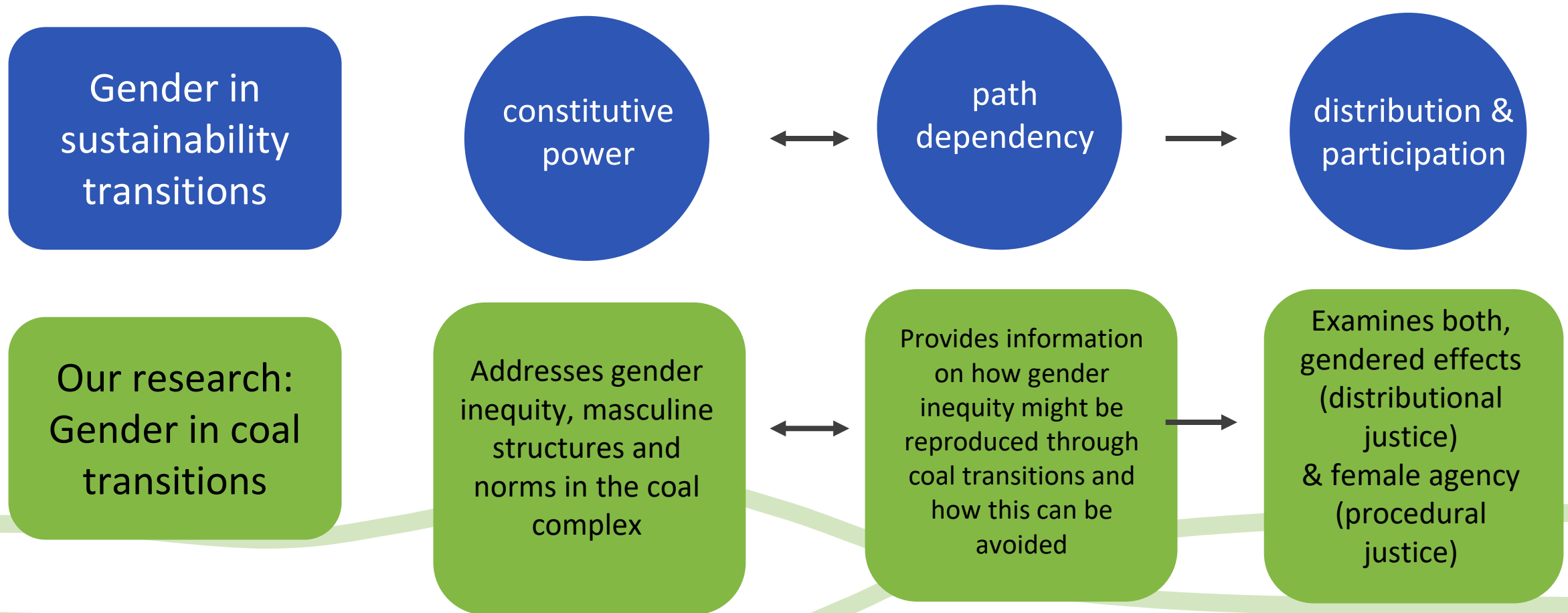
Two elements are central to address social justice and break these path dependencies within sustainability transitions (Sovacool 2014):

- Distribution of the transition's benefits and constraints
- Participation and representation of actor groups within transition processes



distribution &
participation

Our research within the theoretical background:



3. Methodology

Introduction to Systematic Mapping and the current stage of our research process

Systematic Mapping:

- Systematic Maps collate, catalogue, and describe available scientific literature (primary, secondary, quantitative, and qualitative) relating to the topic of interest.
- Conducted through transparent and repeatable processes.
- Maximize objectivity and comprehensiveness in the review process and reduce selection bias.
- Develop a descriptive overview of the existing literature highlighting knowledge clusters, gaps and trends and can help to develop new research questions

(James et al. 2016; Haddaway and Macura 2018)

Search String

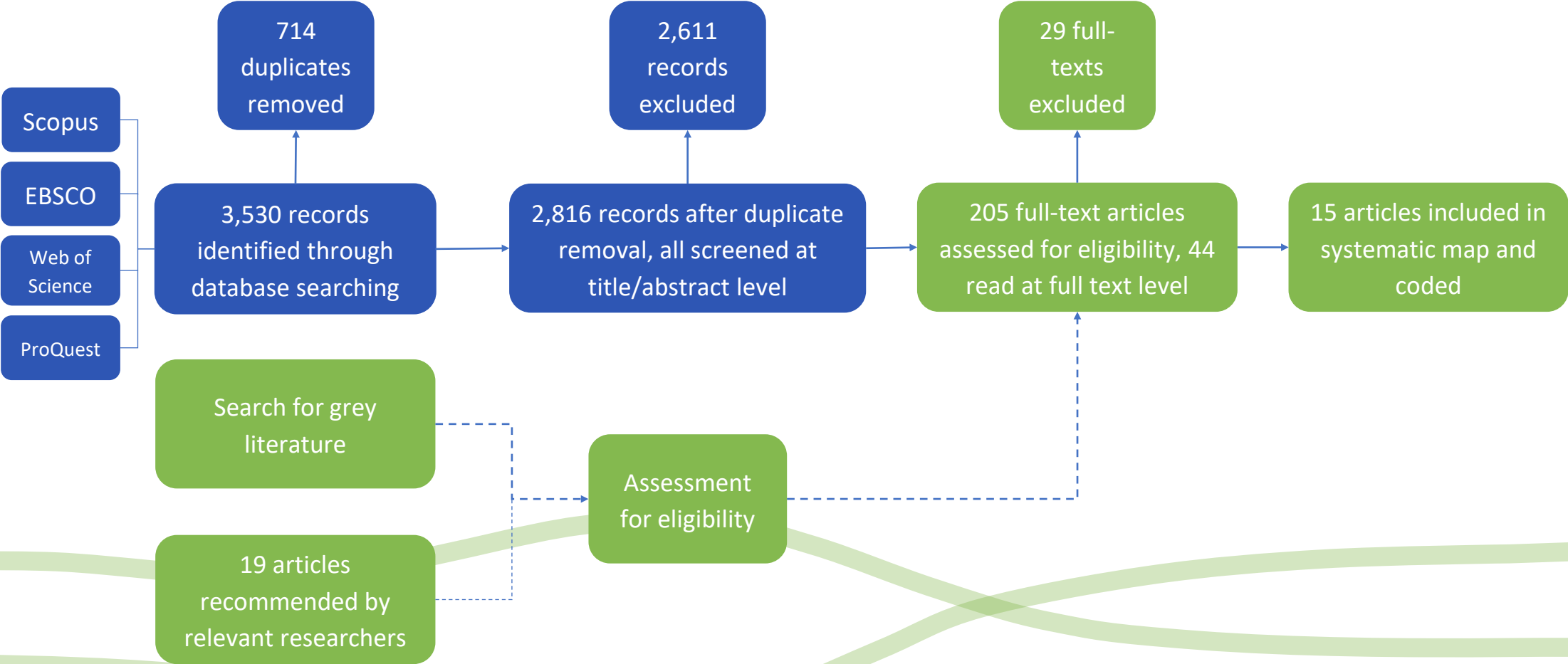
- Heart of any systematic literature search.
- Is identified in a multistage process including a test list and various preliminary searches.
- One term of each category has to be included in the abstract or title of a publication

gender*	coal	transition*
OR woman*	OR lignite*	OR transformation*
OR women*	OR anthracite*	OR change*
OR female*	OR coalfield*	OR reform
OR femini*	OR coalface	OR closure*
OR mother*	OR mining	OR decreasing
OR *wives	OR miner	OR decrease*
OR *wife	OR miners	OR declin*
	AND NOT "data mining"	OR collaps*
	AND NOT "text mining"	OR cris*s
		OR strik*
		OR resistance
		OR protest*
		OR agency
		OR activis*
		OR oppos*

Code Book

Study				Transition basis				Transition drivers				Management				Gender-related outcomes - general information (to be included)				Gender-related outcomes - general information (to be included)				Gender-related outcomes - general information (to be included)							
Study Design				Form of inquiry				Basic Information				Transition drivers				Political and agency outcomes - men				Political and agency outcomes - men				Political and agency outcomes - men							
Country	State	Location	Methodological design	Form of inquiry	Form of Specificity	Type of Transition	Type of Specificity	Scale of Transition	Scale of Specificity	Date of Transition	Transition drivers	Transition drivers - Specificity	Gendered transition management	Political and agency outcomes - men	Political and agency outcomes - men	Political and agency outcomes - men	Primary job market outcomes	Primary job market outcomes - Specificity	Secondary job market outcomes	Secondary job market outcomes - Specificity	Further economic outcomes	Social outcomes 1	Social outcomes 1 - Specificity	Social outcomes 2	Social outcomes 2 - Specificity						
Social/Community				Households																											
Social outcomes 1				Social outcomes 1 - Specification				Social outcomes 2				Social outcomes 2 - Specification				Intra-household outcomes 1				Intra-household outcomes 1 - Specification				Intra-household outcomes 2				Intra-household outcomes 2 - Specification			
dropdown				text				dropdown				text				dropdown				text				dropdown				text			
demography, migration, crime rate, community structure				time frame, quantity, comparison to before, comparison men - women				demography, migration, crime rate, community structure				time frame, quantity, comparison to before, comparison men - women				marriage rates, intra-household division of labour, gendered domestic roles				time frame, quantity, comparison to before, comparison men - women				marriage rates, intra-household division of labour, gendered domestic roles				time frame, quantity, comparison to before, comparison men - women			
demography				For instance, even in 2010				outmigration				We also found a significant				single parenting				Although the percentage of				Men can no longer be							
public space within cities				As some networks of 1060				decrease in community				In short, with increased 1059				other				". Indeed, as wives, it 43				liberalisation of gender 1055, 1							
increase in community				as women frequently 50				decrease in community				the community solidarity 51																			
				40 000 working age men 829				other (describe here)				out-commuting among women				increased by 16 000 between 1981 and 2008															

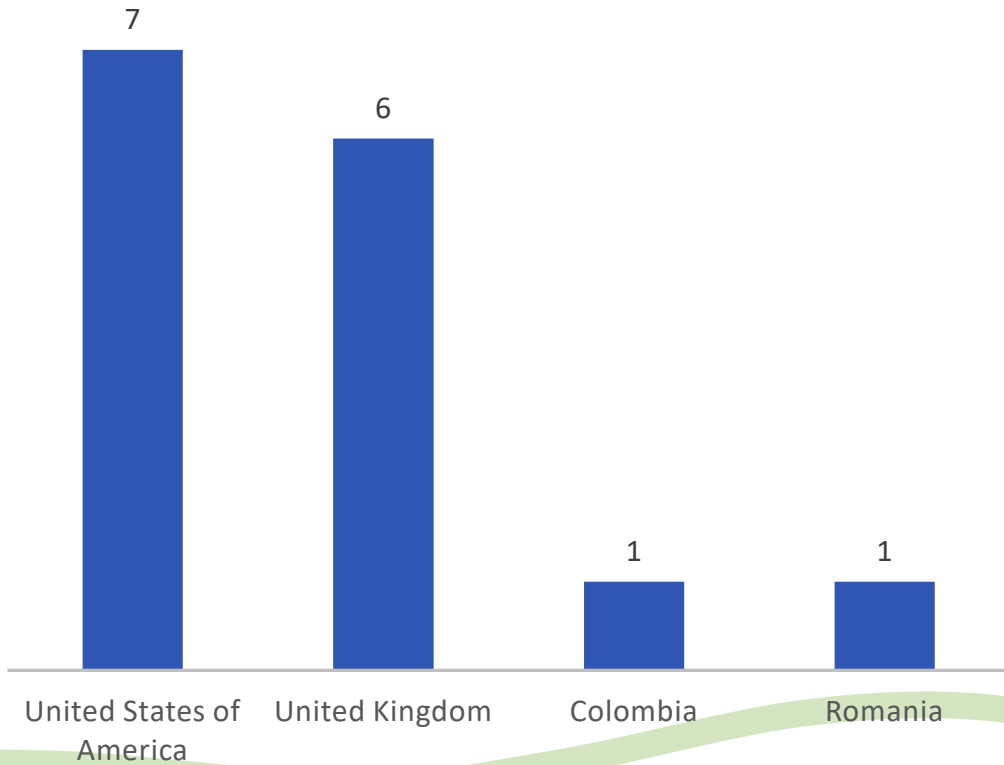
Current stage of research process (as of 3 August 2020)



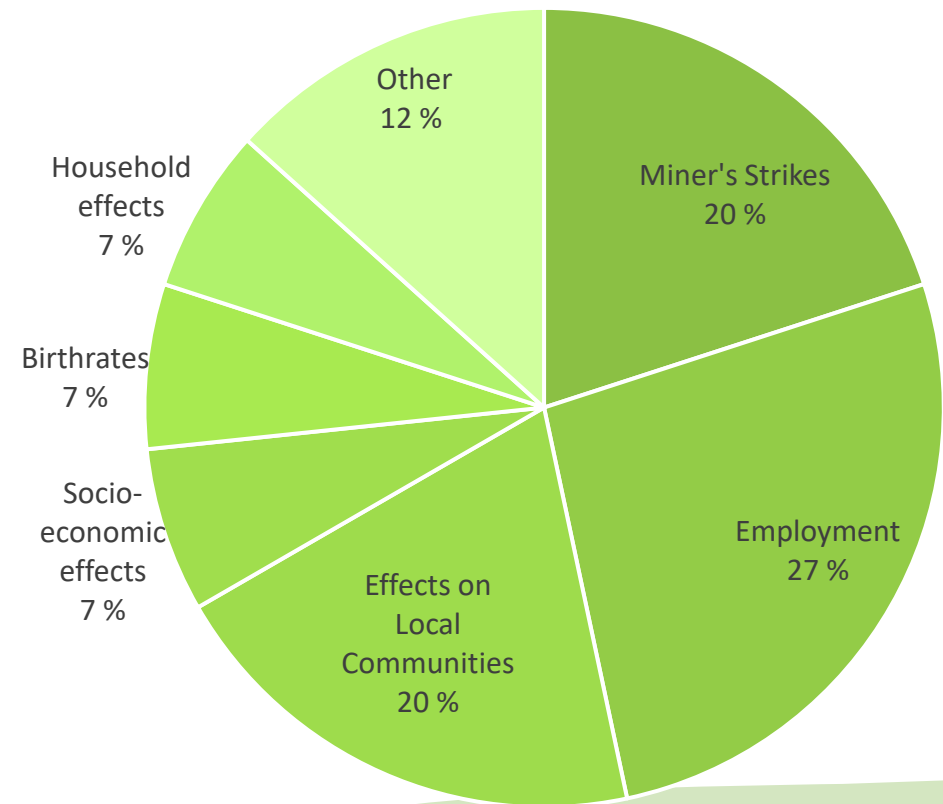
4. Preliminary findings

From 15 already included and coded journal articles

Country Distribution of Coded Research



Topics



**Effects:
Female
employment**

Financial dependency shifted towards female employment in the secondary market.

Miners' wives who entered the labour force gained a lower income and often part time job (Bennett 2014)

**Effects:
Community**

7/15 studies report a **decrease in community activity** due to outmigration (Smith 2015) or strike breaking (Kideckel 2004).

**Effects:
Households**

One study found an **increase in single female-headed households** (Miewald & McCann 2004). The workload of women increased due to the **double burden** of household and paid work (Bennett 2014) Reports of **patriarchal division of home labour becoming less accepted** as well as domestic fights and **violence increasing** (Bennett 2015, Kideckel 2004).

**Effects:
general**

Despite their **bargaining power shifting** financially through increased employment, their expected **gender roles remained the same** (Miewald & McCann 2004, Dublin & Licht 2000, Bell et al. 2019).

**Participation:
Women as miner's
relatives**

Many women were involved in **supporting their husband's striking** (Spence 1998). Most of the reported women striking were **strongly against the coal phase out** (Beckwith 1996, Spence 1998, Sutcliffe-Braithwaite & Thomlinson 2018). Women involved in the strike became only visibility as miner's wives.

**Participation:
Other female
stakeholders**

Despite supporting the coal strike through organisations of their own (Spence 1998, Shannon et al. 2019), there was also mentions of **women in anti-Mountain Top Removal movements** (Smith 2015).

Conclusion

- Social and ecological aspects of energy transitions should not be seen as competing problems
- Energy transitions are a chance to shift power structures in our society

Thanks a lot for your interest in our research!

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Appendix: Sources

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