An overview on energy justice and poverty
in social science research

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Session "*Making the energy transition inclusive: getting all citizens on board*"

Background

Final report Insight from Energy Policy Fellowship

https://energy-shifts.eu/insights-policy-fellowship-programme/

How does energy justice play out in the public debate through discourses of involved social and economic actors?
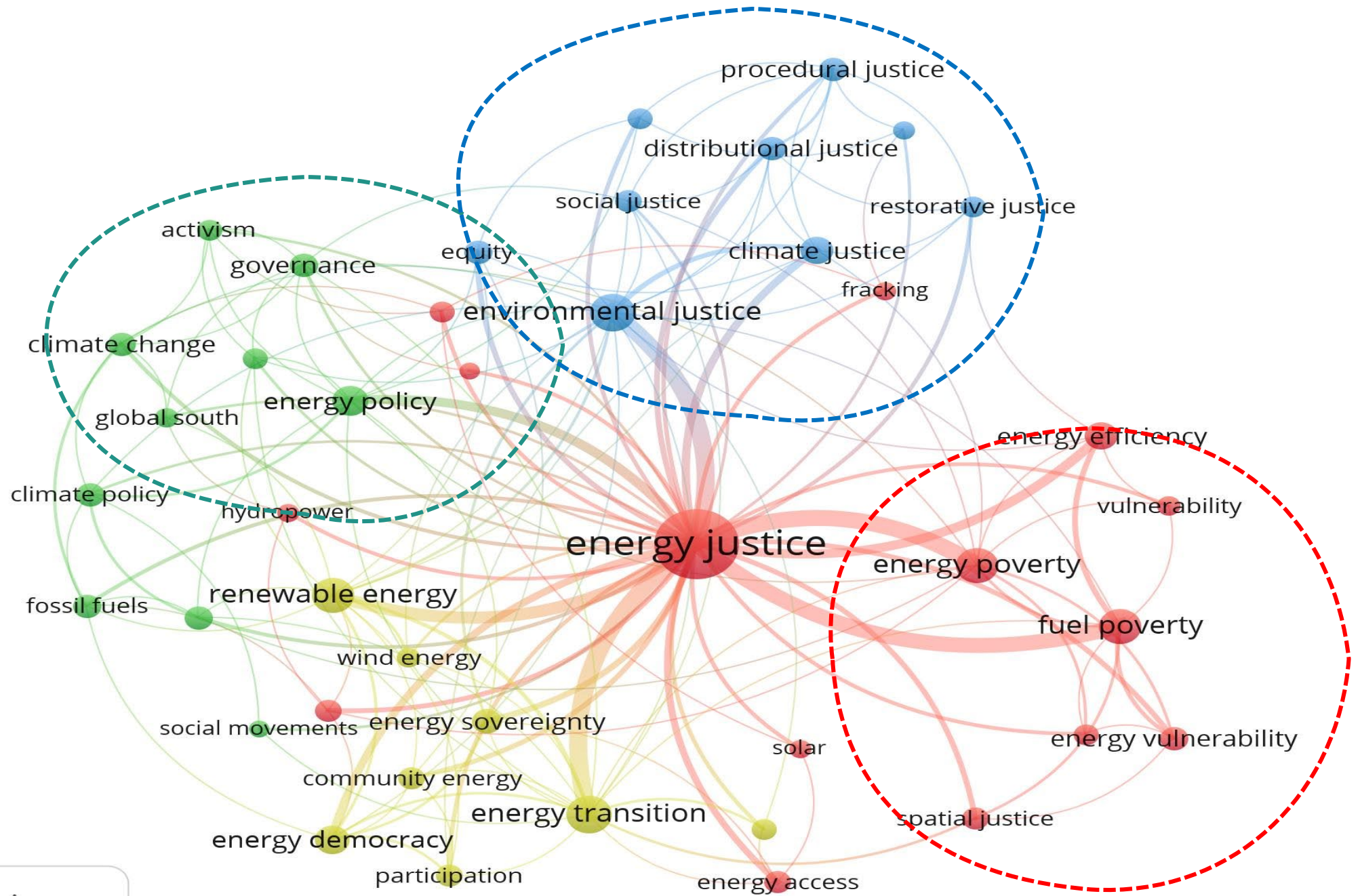
Core **energy challenge** = resource scarcity and population growth (in an increasingly unpredictable social and environmental climate)

Allocation of scarce resources on alternative ends

→ a matter of (**social) justice** i.e. a form of justice referring to the role played by governments in promoting the just distribution of benefits and costs throughout society

Realising **Energy Justice** means achieving a fair distribution of benefits and costs through society in the production, distribution and use of energy.
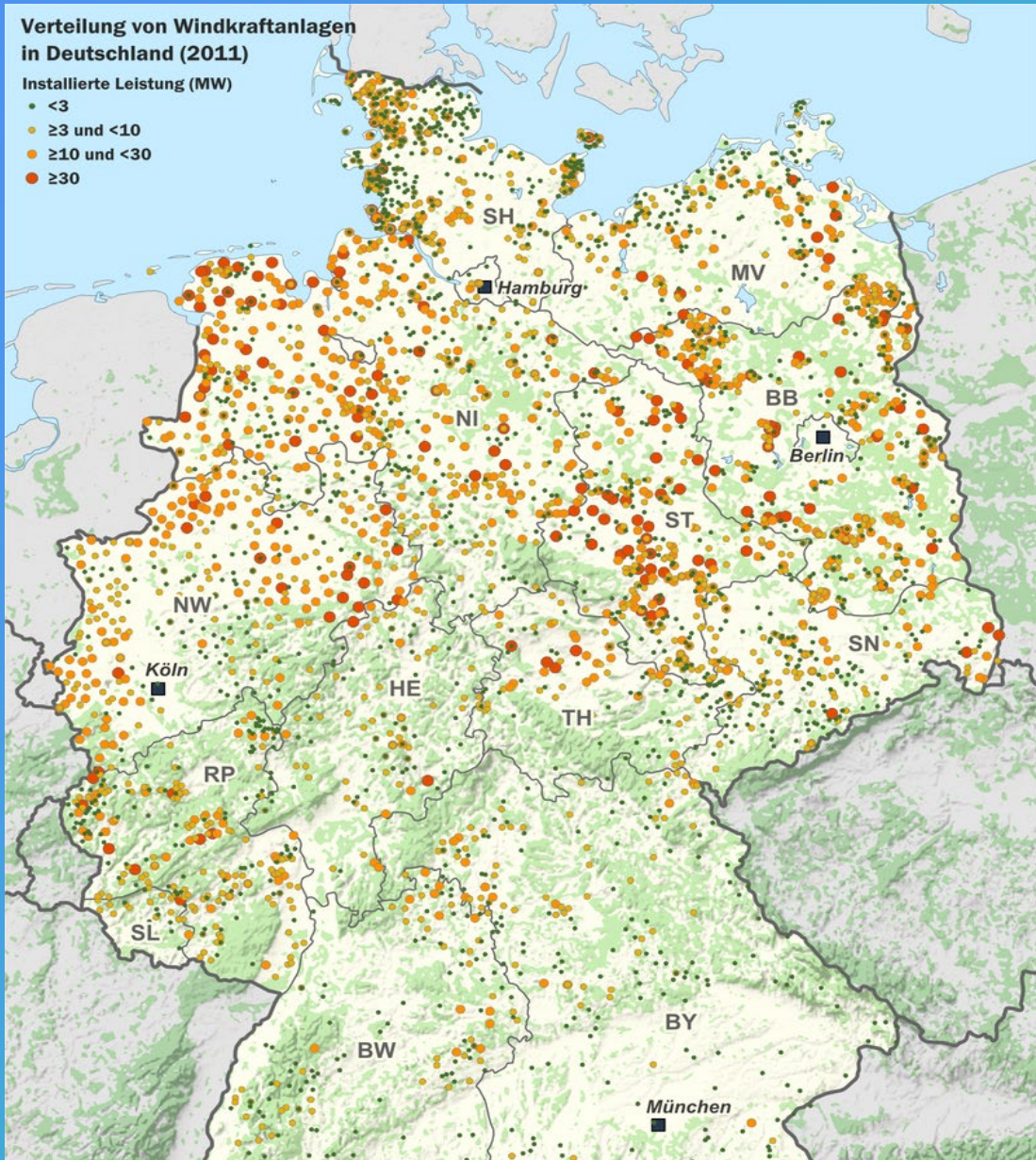
procedural justice

distributional justice

social justice

restorative justice

climate justice

fracking

activism

governance

equity

environmental justice

climate change

global south

energy policy

energy efficiency

climate policy

hydropower

vulnerability

energy justice

energy poverty

fuel poverty

fossil fuels

renewable energy

wind energy

social movements

energy sovereignty

solar

energy vulnerability

community energy

spatial justice

energy transition

energy democracy

participation

energy access

VOSviewer

1. What we talk about when we talk of Energy Justice?

Energy Justice evaluates

- where injustices emerge → Distributional justice
- which affected sections of society are ignored
  → Recognition-based justice
- which processes exist for their remediation in order to (i) reveal, and (ii) reduce such injustices → Procedural justice

Energy system = the entire energy chain, from mining, conversion, production, transmission, and distribution, right through to energy consumption and waste

Verteilung von Windkraftanlagen in Deutschland (2011)
Installierte Leistung (MW)
• <3
• ≥3 und <10
• ≥10 und <30
• ≥30

Ex. Wind turbines in Germany

Distributional justice

the physically unequal allocation of environmental benefits and ills, and the uneven distribution of their associated responsibilities

Recognition-based justice

ARGUMENTS AGAINST—
NUCLEAR
OIL
COAL
BP
IT'S IN MY BACKYARD!

sections of society ignored or misrepresented in energy policies and calls to acknowledge the divergent perspectives rooted in social, cultural, ethnic, racial and gender differences
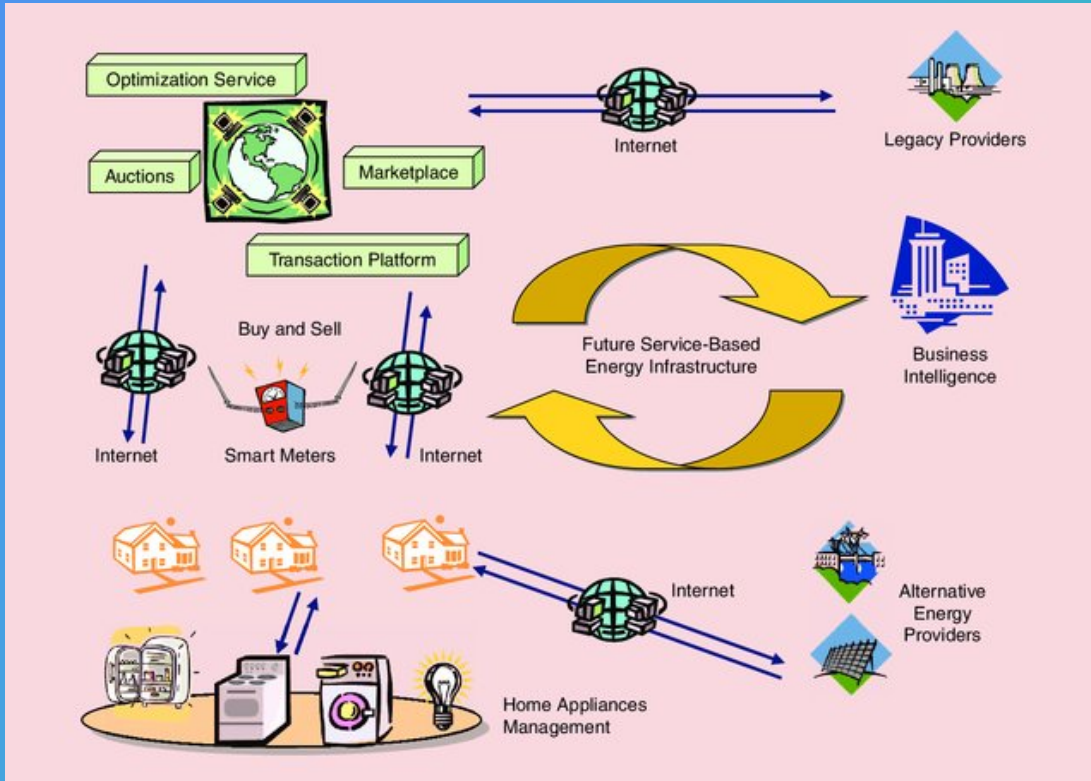
Ex: UK Government-sponsored programmes

Procedural justice

Ex. Interactive smart grids (Dimeas et al., 2014)

equitable procedures that engage all stakeholders   in a non-discriminatory way

- *Mobilizing local knowledge*

- *Disclosing information*

- *Representation in institutions*

2. How energy justice becomes a delivered outcome through policy

Restorative justice arose from society that questions after an injustice occurred what is the response to the victim.

Applied to the energy sector it would ensure that decision-making was made in light of considering the potential harm of that decision and consequently the true cost of that decision.

Promising practices

Environmental Impact Assessments for international, national and local communities to achieve a balance between development and the environment.

Social-License-to-Operate that ensures developing cooperation with the local community over the life-span of the energy infrastructure.

Energy Financial Reserve Obligation where the company needs to demonstrate they have the financial capacity to clean and restore energy infrastructure at the end of its lifespan

open questions

How this can impact in the daily practice of Local Energy Companies and municipal utilities?

How can they deal with poverty or justice issues?

3.How Energy Injustice manifests in Energy Poverty

Energy Poverty = 'the inability to attain a socially and materially necessitated level of domestic energy services' (Bouzarovski and Petrova, 2015).

The environmental features of a place are crucial in shaping vulnerability to energy poverty.

GEOGRAPHIC UNDERPINNINGS OF ENERGY POVERTY

1	🇩🇪 Germany	3,863.344
2	🇬🇧 United Kingdom	2,743.586
3	🇫🇷 France	2,707.074
4	🇮🇹 Italy	1,988.636
5	🇷🇺 Russia	1,637.892
6	🇪🇸 Spain	1,397.870
7	🇳🇱 Netherlands	902.355
8	🇹🇷 Turkey	743.708
9	🇨🇭 Switzerland	715.360
10	🇵🇱 Poland	565.854
11	🇸🇪 Sweden	528.929
12	🇧🇪 Belgium	517.609
13	🇦🇹 Austria	447.718
14	🇳🇴 Norway	417.627
15	🇮🇪 Ireland	384.940
16	🇩🇰 Denmark	347.176
17	🇫🇮 Finland	269.654

Fig. 1: EDEPI scores show the majority of EU countries have 'moderately high' to 'extreme' levels of energy poverty among low-income households

	Country	EDEPI Score
1	Sweden	95.4
2	Finland	85.6
3	Denmark	81.9
4	Austria	81.2
5	Luxembourg	80.9
6	United Kingdom	80.5
7	Ireland	79.3
8	Netherlands	78.1
9	Germany	75.8
10	France	73.3
11	Belgium	67.6
12	Spain	64.7
13	Romania	64.2
14	Poland	61.0
15	Czech Republic	60.2
16	Croatia	58.8
17	Malta	58.6
18	Estonia	58.0
19	Italy	52.1
20	Slovenia	51.3
21	Cyprus	46.2
22	Greece	43.7
23	Lithuania	42.4
24	Latvia	40.0
25	Portugal	36.7
26	Slovakia	8.4
27	Hungary	6.2
28	Bulgaria	0.7

Level of energy poverty:

Low — Moderate — Moderately high — High — Very high — Extreme

EDEPI scores show a divide reflecting GDP per capita levels in the EU.
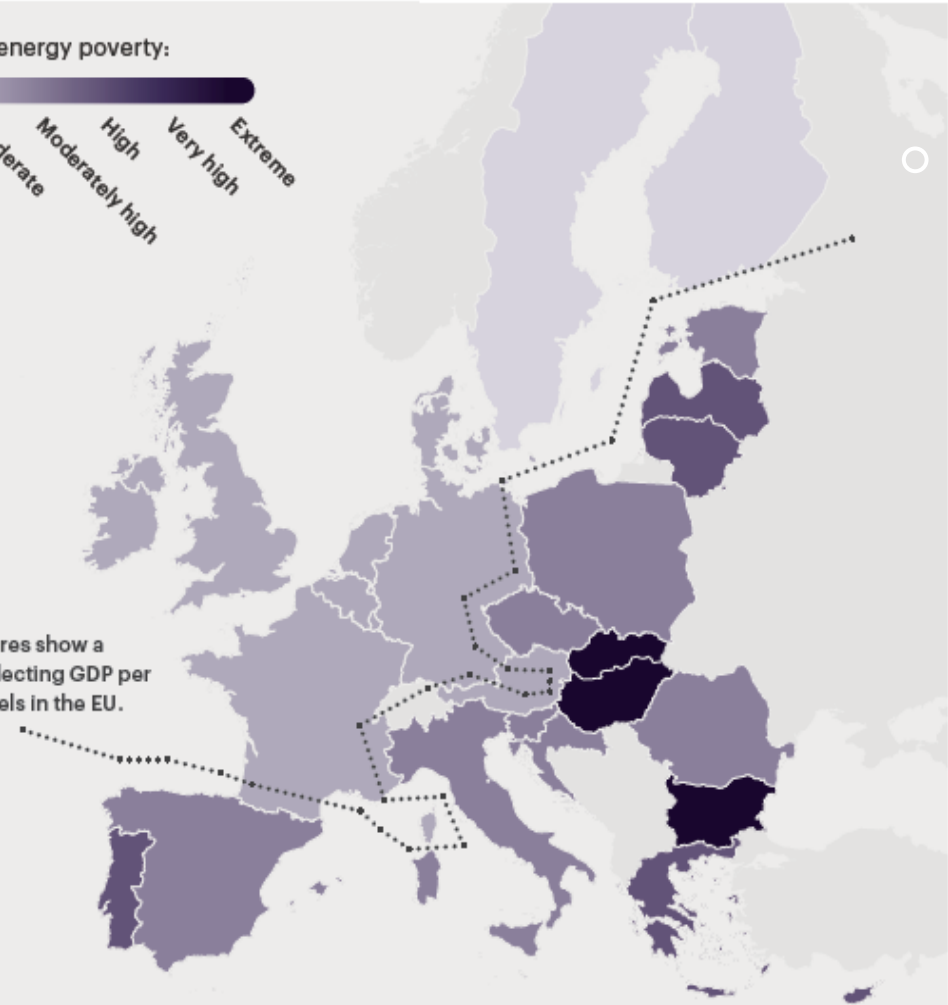
Source: OpenExp, 2019.

Present decision-making frameworks can be improved with :

1. policies that target particular areas by providing comprehensive, **spatially-sensitive support for vulnerable households** across cities and regions

2. strategies that **address the underpinning mechanisms** through which spatially energy vulnerability and injustice is (re)produced

3. approaches to **detect socio-demographic groups** that are vulnerable by virtue of spatially-based injustices

Our survey:
Framing Energy Justice

https://www.soscisurvey.de/en_justice/

How would you define energy justice?

How do you think energy justice can be achieved?

Is energy justice relevant for the work of your company/organisation? Do you have policies or strategies to deal with it?

Some references

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- Filippo Corsini, Chiara Certomà, Mark Dyer and Marco Frey (2018) "Participatory Energy: research, imaginaries and practices on people' contribute to energy systems in the smart city", *Technological Forecasting and Social Change*, 142