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From ‘Not in my back yard’ to an ‘industrial village’: Understanding the crucial ‘where’ dimension of energy infrastructure deployment

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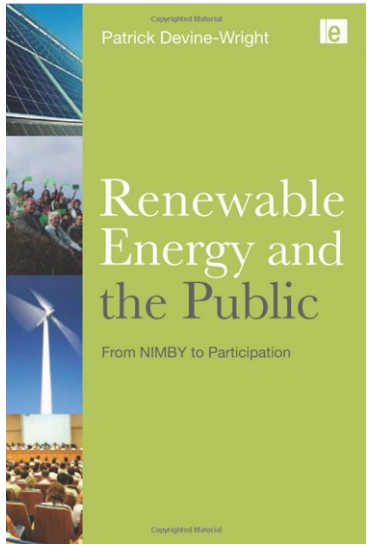
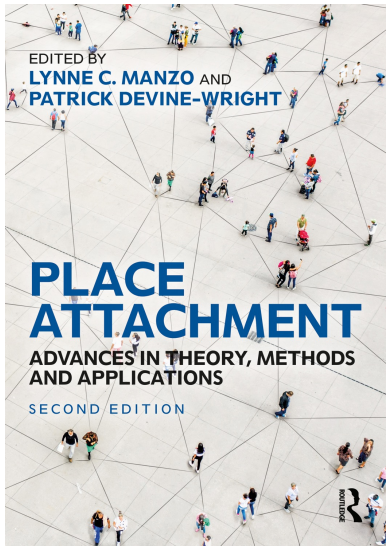
I-SEE Sustainable Energy and the Environment seminar

28th October 2025

Making an introduction

- Sustainable energy transitions – supply side infrastructures
- Public engagement and community responses – ‘place’
- Inter/transdisciplinary, theory-driven, empirical, applied
- **ACCESS - Advancing Capacity in Climate and Environment Social Science:** Championing social science to solve environmental problems





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Devon Net Zero Task Force

Exeter Community Energy

Summary

- Environment and climate emergency
- Energy transitions: society, space and place, justice
- Thinking like a geographer – spatial imaginaries
- Contested energy infrastructures – case studies:
  - Shale gas in the North of England
  - Industrial decarbonisation in Great Britain
- Conclusions and recommendations

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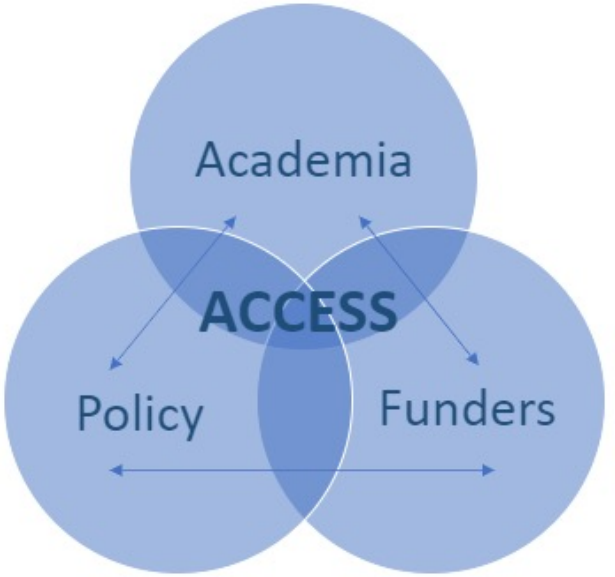
Environment and Climate Emergency



- Declaring an ‘emergency’ is the easy bit
- What research is needed for rapid yet fair transitions?
- Solutions-oriented, transdisciplinary, informing policy and practice, yet independent, trusted and legitimate
- **ACCESS** - a transformative intervention in the UK (social) science/policy/funding ecosystem, addressing:
  - fragmented academic landscape
  - lack of engagement across sectoral boundaries
  - lack of impact skills and confidence to lead in early career researchers
  - legitimacy of (social science) research that can be extractive and overlooks environmental impacts
- Building confidence, relationships and trust (video)

https://www.youtube.com/watch?v=Ge5G4fFW-xA

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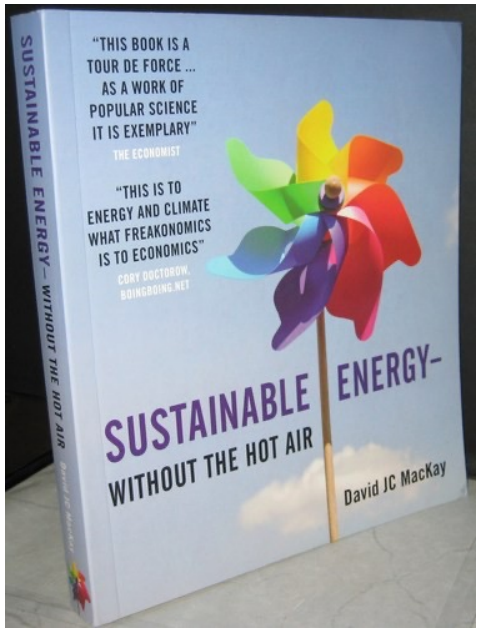
Energy transitions – society, place, space, justice

- Energy transitions 'localise' renewable energy infrastructures, changing familiar places and landscapes (Pasqualetti, 2000)
- Spatially uneven consequences (Bridge et al., 2013) raising issues of energy and environmental justice: restorative, recognition, distribution, procedure (Bickerstaff, 2013)
- Addressing 'hot air' around energy transitions – *emotions, identities, narratives, metaphors* – 'systems thinking' cannot ignore this
- "**Place** is not just a setting, backdrop, stage, or context for something else that becomes the focus of sociological attention … Everything that we study is emplaced" (Gieryn, 2000, 466)
- "Wind energy opposition politics are essentially **battles over rural space**; over who controls the productive and consumptive qualities of **rural landscapes**" (Phadke, 2011, 756)



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Theory - thinking like a geographer

- “Spatial imaginaries are **deeply held, collective understanding of socio-spatial relations** that are performed by, give sense to, make possible and change collective socio-spatial practices. They are produced through **political struggles** over the **conceptions, perceptions and lived experiences of place**. They are circulated and propagated through images, stories, texts, data, algorithms, and performances. They are infused by relations of power in which **contestation and resistance** are ever present” (Davoudi, 2018, 6)

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Types and characteristics of spatial imaginaries

1. Place imaginaries (e.g. Las Vegas, Siberia, Gaza)
2. Idealised spaces (e.g. rural village, city, ocean)
3. Spatial transformations (e.g. gentrification, rewilding) (Watkins, 2015)

- Characteristics:
  - Versatile - multi-dimensional, multi-scalar
  - Collective – socio-cultural, dynamic and emergent
  - Performative
  - Power-laden - legitimated, contested and resisted
  - ‘Othering’ and argumentation

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Spatial imaginaries in two case studies

- Transformation (and contestation) due to energy technology proposals
- Different technologies:
  - shale gas/fracking
  - decarbonising industrial areas through hydrogen and Carbon capture (CCUS)
- Different contexts:
  - rural and urban, countryside and city
  - natural and industrial
- Different sides in contested energy projects:
  - objecting and supporting

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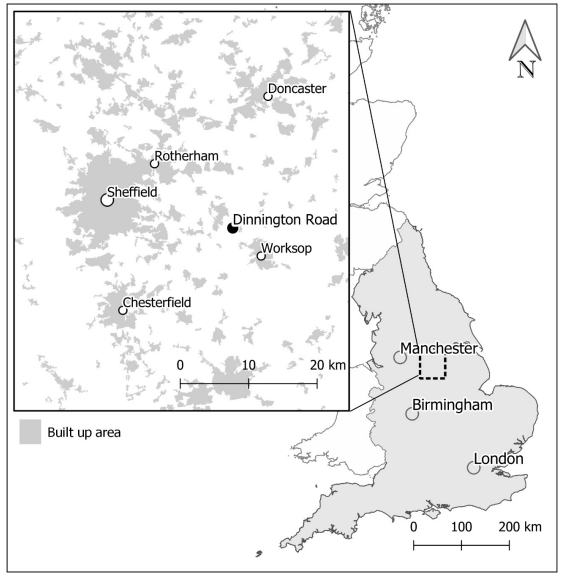
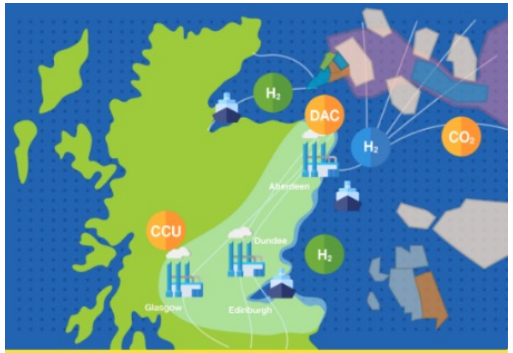
Different spaces and places …





Case 1 The Scottish Cluster

Case 2 The South Wales Cluster

Case 3 The North West Cluster

1. Contested shale gas in the North of England

- '*We're going all out for shale*' (David Cameron) - UK energy policy (2015)
- Fracking of underground gas reserves in shale rock
- ASSIST research project funded by ESRC/NERC
- Great Altcar and Woodsetts – rural communities with histories of oil and coal extraction.
- Contested exploratory drilling, forming local action groups
- What spatial imaginaries feature in discourse of objection?
- Qualitative research method (interviews: n=45, participant observation, secondary data)

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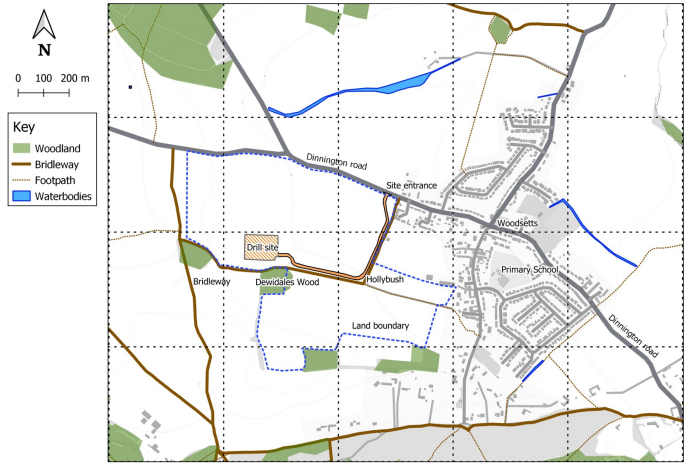
Findings: othering, transformations

1. Rural (natural) places ‘othered’ through urban (industrial) spaces

- “It is a very sort of special quiet area, it’s really valuable to local people, **especially from the urban areas** to come out for a bit of peace and quiet” – Altcar 21
- “Without a shadow of a doubt, and I've said this from the very beginning, Woodsetts will be deemed to be **an industrial village.** It will no longer be a rural village that we are all so blessed to be living in. I feel quite emotional about that. I feel very, very, very strong about maintaining and retaining its beauty and its peace and its calm. You have to have that in villages. You can't have everywhere being industrial, it's just ridiculous”



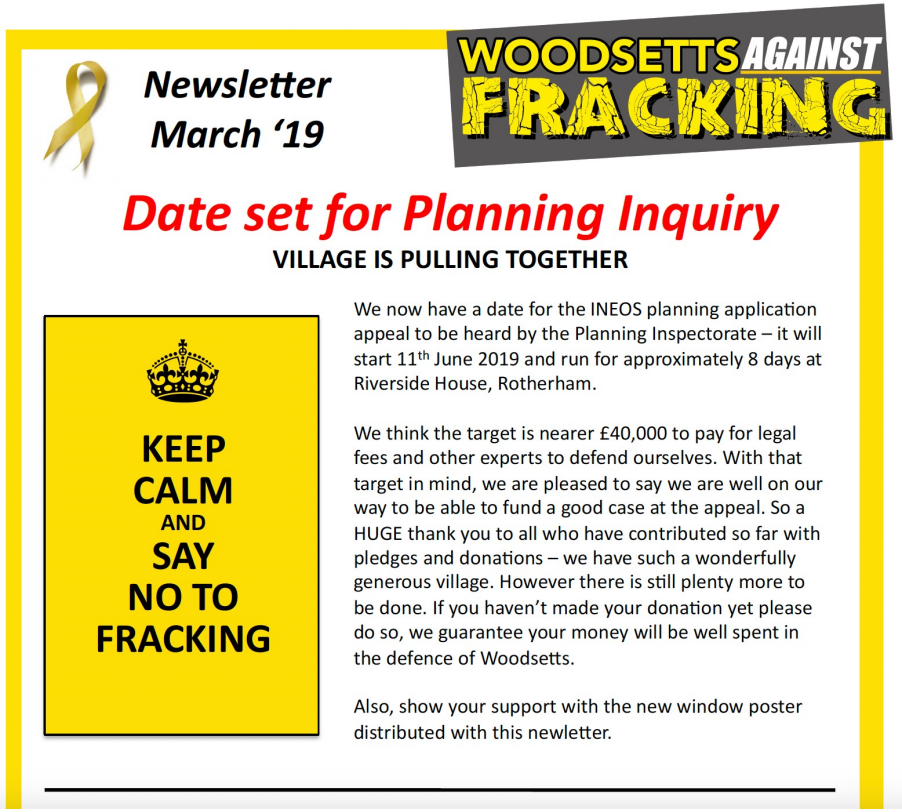
2. Spatial and social transformations

- “You go up there [to the field] now, I’ve been up there this morning, there’s birds singing, and there’s a vista, there’s a view, and just that feelgood factor, because **green space is important. This is why people go walking. The village uses the paths a lot, and it’s that sense of wellbeing**. Now, I wouldn’t go up there if there was cabins stacked on top of each other and a fence, and great big earth mounds, and lorries parked there” – Woodsetts 5
- “The [concern for the] need to police, **because it’s inevitable that protestors will arrive**, and whilst we welcome that, it’s going to have a downside as well ... And then there’s the sort of consequences of the police activity, again it wouldn’t be welcome” – Woodsetts 3

‘Small island’ place imaginary – scale, contradictions

3. Place imaginaries/othering at multiple scales

- “We’re [Great Britain] **an island**…we haven’t got vast amounts of land, not like America, America’s huge, so we haven’t got that type of land, so **they can go frack in the middle of the desert** or wherever they want, and nobody would even know they were there, but all ours is going to be … naturally beautiful sites” – Altcar 2



Newsletter
March ‘19

WOODSETTS AGAINST FRACKING

Date set for Planning Inquiry

VILLAGE IS PULLING TOGETHER

KEEP CALM AND SAY NO TO FRACKING

We now have a date for the INEOS planning application appeal to be heard by the Planning Inspectorate – it will start 11th June 2019 and run for approximately 8 days at Riverside House, Rotherham.

We think the target is nearer £40,000 to pay for legal fees and other experts to defend ourselves. With that target in mind, we are pleased to say we are well on our way to be able to fund a good case at the appeal. So a HUGE thank you to all who have contributed so far with pledges and donations – we have such a wonderfully generous village. However there is still plenty more to be done. If you haven’t made your donation yet please do so, we guarantee your money will be well spent in the defence of Woodsetts.

Also, show your support with the new window poster distributed with this newletter.

4. Contradictions in community discourse

- Open/green space as local vs. open space as elsewhere
- Rural idyll vs. industrial agriculture vs. sites of extraction (local oil and coal)
- Conclusions: Othering used to define and to deter - countryside through the city, nature through the industrial; locals through incomers; more international than insular

2. Decarbonising industrial areas

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- UK industrial policy: create ‘net zero’ industrial clusters (petrochemicals, steel, fertiliser, cement etc.)
- Three case study clusters
  - Scotland, North West, South Wales
- Three local places
  - Grangemouth, Ellesmere Port, Milford Haven
- What spatial imaginaries feature in stakeholder and host community discourses?
- Qualitative research: fieldtrips, interviews and focus groups with a) industry and government stakeholders (n=33); b) residents in three host communities (n=40)
- Project funded by IDRIC programme

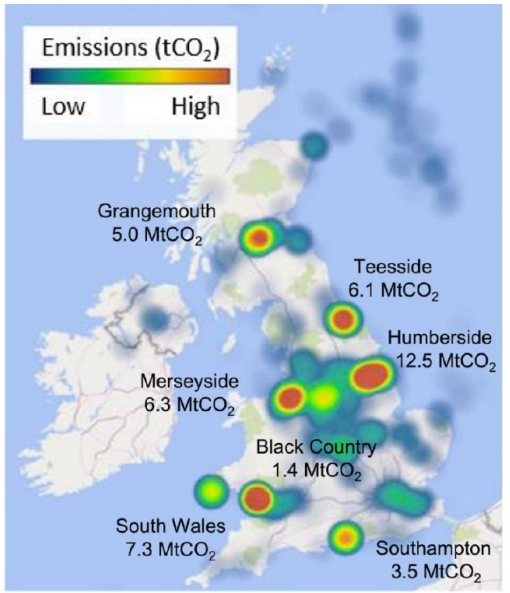


Figure 1 UK industrial clusters by $MtCO_2$ (million tonnes of carbon dioxide emissions per year) (Source: NAEI/Climate Change Committee and Element Energy Ltd 2020)

Findings: gap between industry and host communities

1. Stakeholder imaginaries of net zero clusters:
    - Technocentric perspective
    - Win-win, hopeful place branding/visions
    - Historical revival of 'industrial heartlands'

2. Host communities:
    - Strong feelings of 'home', yet ambivalence after decades of economic decline
    - Lived experience of risk (explosions, smells)
    - Pride in industry (worker families) yet feelings of neglect by industry and government
    - Decarbonisation as spatial transformation:
        - Distributive injustice (e.g. food poverty)
        - Scepticism of technologies (e.g. hydrogen)
        - Mistrust of oil and gas companies

- Lack of engagement by stakeholders with host communities - disengagement

South Wales is a strategically important region for the UKs energy supply, including the **UKs largest 'energy' port,** Milford Haven (CR Plus, 2020: 4)

We [North West] were the cradle of the first industrial revolution and must now be the **powerhouse of the fourth digital and sustainable industrial revolution** (NZNW, n.d.)

Main street has just gone. It [Milford Haven] was a lovely town and **it's just a wreck now** (MH3)

At the moment **I'm not massively proud** of being from Ellesmere Port, but if it did become a world leading location for Green Growth, then I would be [EP resident]

I feel very strongly that we as Grangemouth citizens are not benefitting [from industry], and **we're in grave danger of just becoming the dumping ground** (G9)

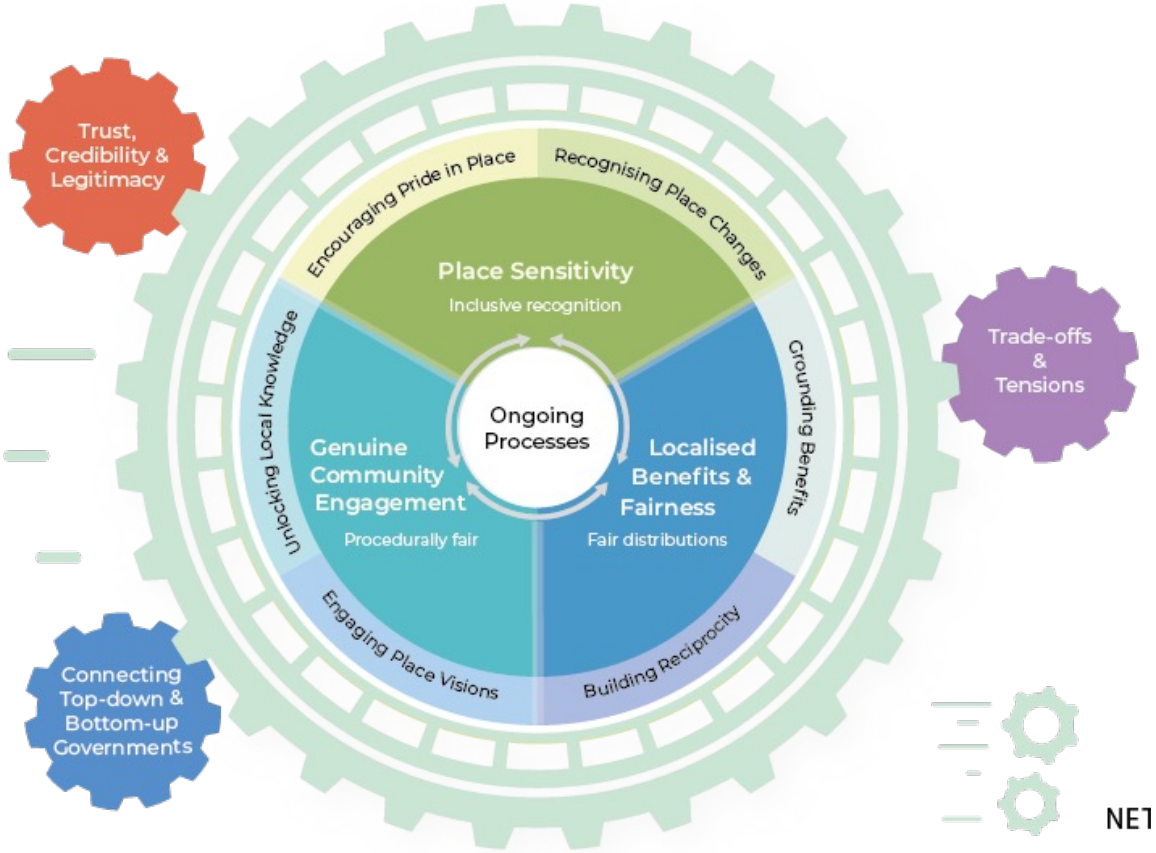
Conclusions

- Fair energy transitions must address ‘hot air’, not just criticise or ignore it
- We need better ways than ‘NIMBYism’ to navigate arguments over space & place
- Spatial imaginaries provide versatile ‘thinking tools’ to reveal how space and place is embedded in energy transitions
- Case studies show that each type of imaginary was invoked in each case study – the countryside and the city, nature and industry, Sheffield and Liverpool, the North and South of England, Great Britain
- From imaginaries to governance: listening to community voices

Recommendations

- Net Zero as a socio-technical project
- Enhance spaces and places, along with related place attachments and identities - The countryside, the North of England, ‘left behind places’
- Visions for sustainable energy technologies need to connect with visions of flourishing spaces & places (*connecting top down and bottom up*)
- Host communities must be genuinely involved in (co-creating) technological change (*trust, legitimacy*)
- Contestation is inevitable, so consensus is not the end goal (*tensions, trade-offs*)

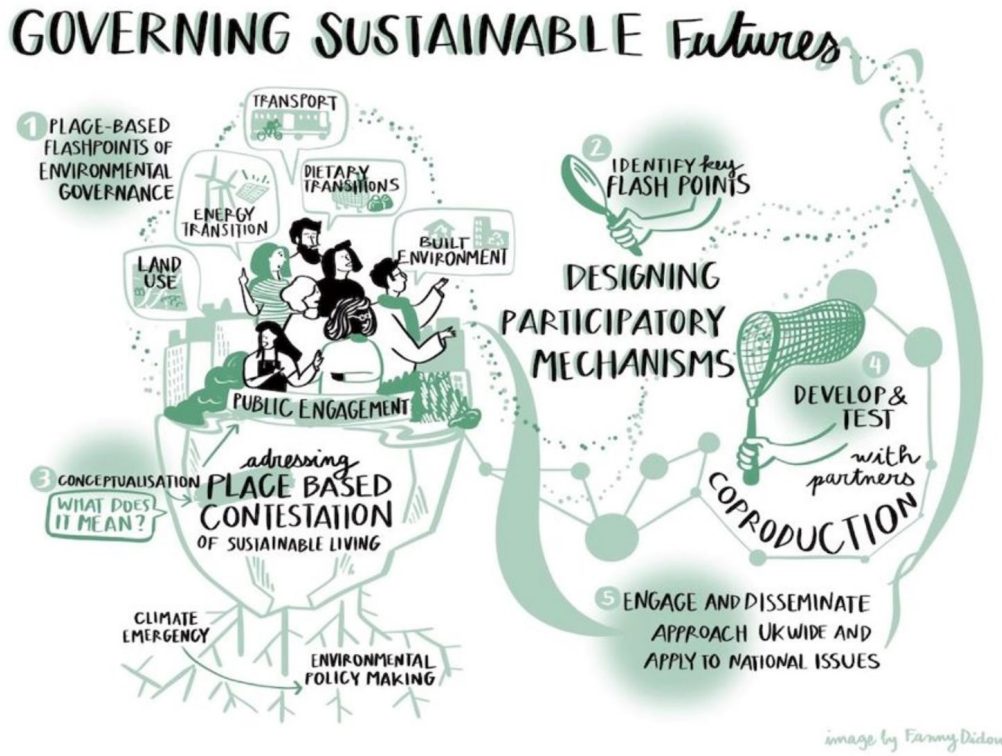
Place-sensitive, Just Transitions Framework



https://idric.org/project/ia-3-1-delivering-a-place-based-just-transition-in-industrial-clusters/

Next steps: Governing Sustainable Futures project

- Sustainability ‘flashpoints’ are conflicts that emerge in specific places arising from policies or interventions to reduce environmental impacts
- Project aims:
  - To understand local and non-local causes of sustainability ‘flashpoints’ that evolve over time
  - To develop participatory methods for responding to flashpoints in Devon and apply to challenges on the ground, working with local partners
  - To generate new understandings of how participatory processes can support public and stakeholder engagement with place-based sustainability flashpoints, and progress action on just transitions in the UK



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Thank you – any questions?

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Relevant articles and web resources

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