

Communities and the climate-energy nexus: a justice perspective

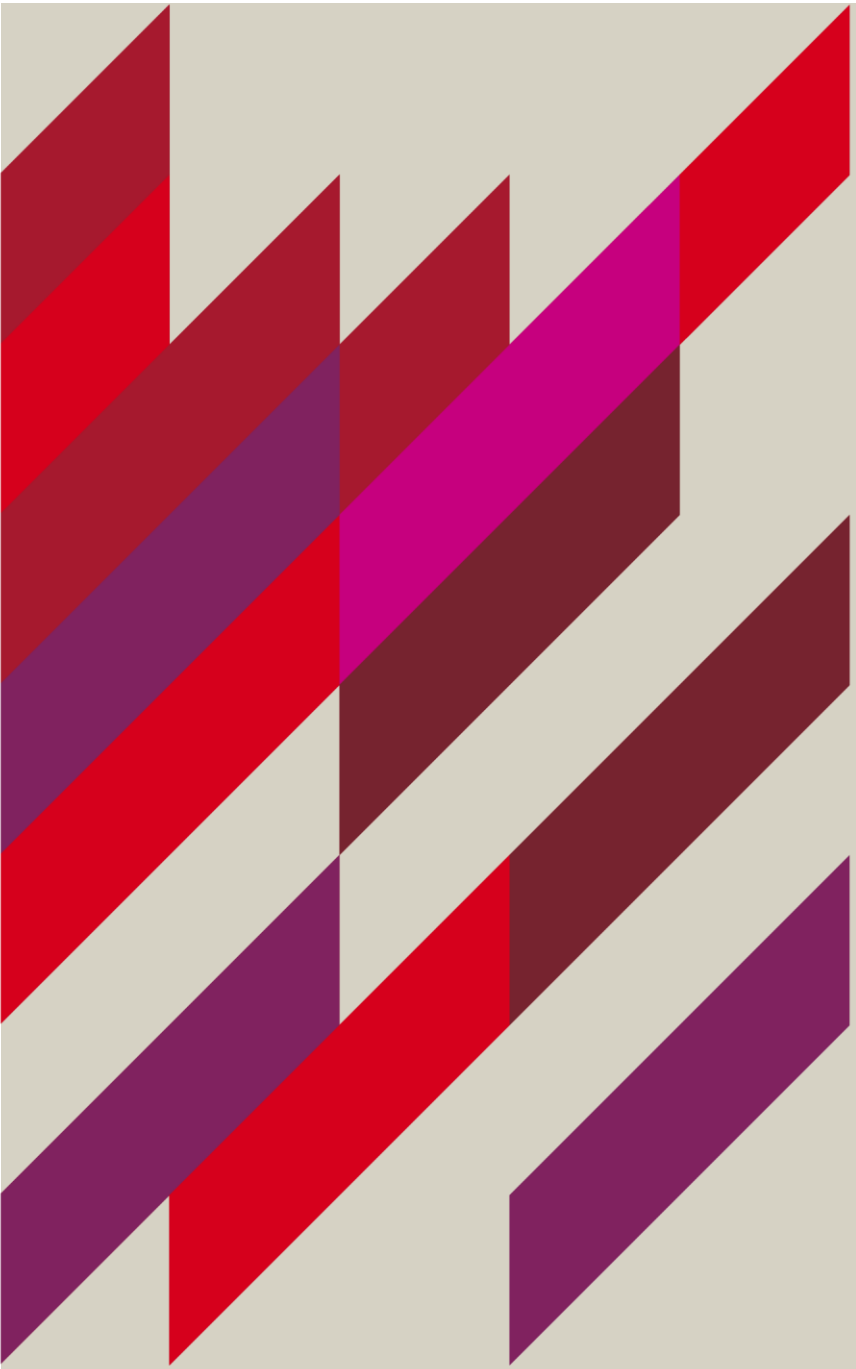
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Overview

1. Justice and the climate-energy nexus
2. Case study: low carbon communities
3. Future research directions



Justice and the climate- energy nexus

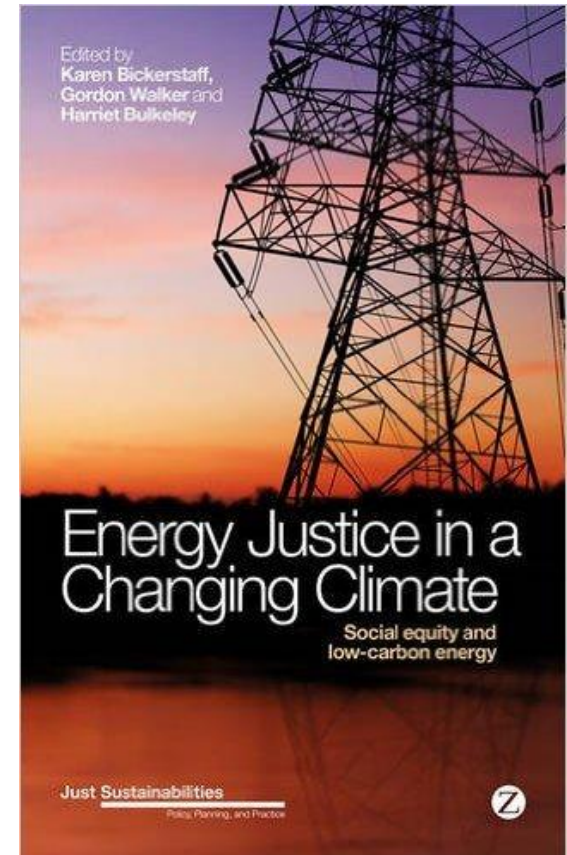
Connecting energy and climate (I)

- Energy justice framed in terms of ‘here and now’ in relation to access to affordable energy and fuel poverty

Adding a climate frame:

- Future energy vulnerability: the implications of heatwaves for future energy demand
- Low carbon transition: the justice implications associated with policy and practice of a low carbon transition

(Fuller and Bulkeley, 2013)



Connecting energy and climate (II)

“The impacts of climate change are seen as having repercussions for energy supply and demand. Problems with cooling households, transporting people, supplying water, treating sewage and providing food can occur when energy supply is disrupted due to climate change impacts such as flooding or heatwaves. And adapting energy networks to cope with direct and indirect climate change impacts (e.g. storms vs. peak demand) as well as transitioning to alternative energy sources to mitigate climate change, may produce spatially and socially uneven impacts on livelihoods, health and wellbeing. Yet very little research has recognised the complex interplay between these issues”

(Byrne and Portanger, 2014: 336)

Conceptualising energy justice

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- Distributional : location of existing energy facilities and the development of new energy infrastructures; social and spatial patterns of access to affordable energy (fuel/energy poverty)
 - Procedural : how community projects are developed & the provision of financial/material benefits; involvement in decision-making processes & cultural and political recognition of vulnerable/marginalised social groups for energy poverty

(Fuller and Bulkeley, 2013: Fuller and McCauley, 2016)

**Procedural
Injustice**



**Distributional
Injustice**



**Injustice in
Recognition**

Inadequate access
to **information** on
FP problem
Fuel prices
Solutions

Lack of
participation in
Energy Policy
Housing Policy
Climate Policy
Fiscal Policy

Restricted access to
legal rights and
requirements, and
barriers in ability to
challenge these

Inequalities
in **income**

**Inequalities
in access to
energy
services**

Inequalities in
energy prices

Inequalities in
**housing and technology
energy efficiency**

Lack of recognition of
**differences in
vulnerability and need** for
energy services

Unequal accordance of
cultural and political **respect**

(Walker and Day 2012)

Conceptualising climate justice

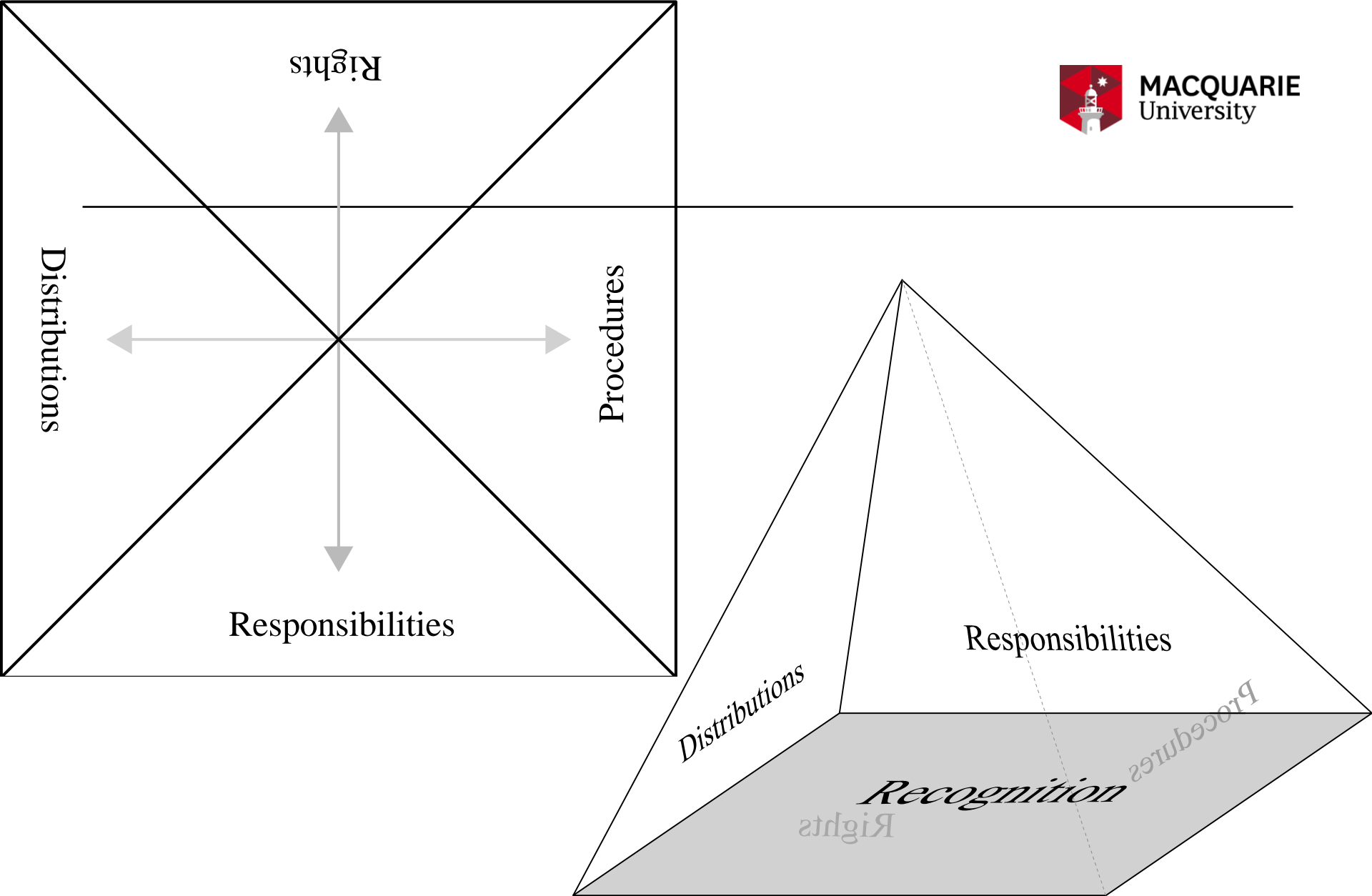
Predominantly distribution of ‘rights’ and ‘responsibilities’:

- who has the right to emit greenhouse gases and at what level
- whose responsibility it is to ameliorate climate change by reducing emissions.

More recently extended to include:

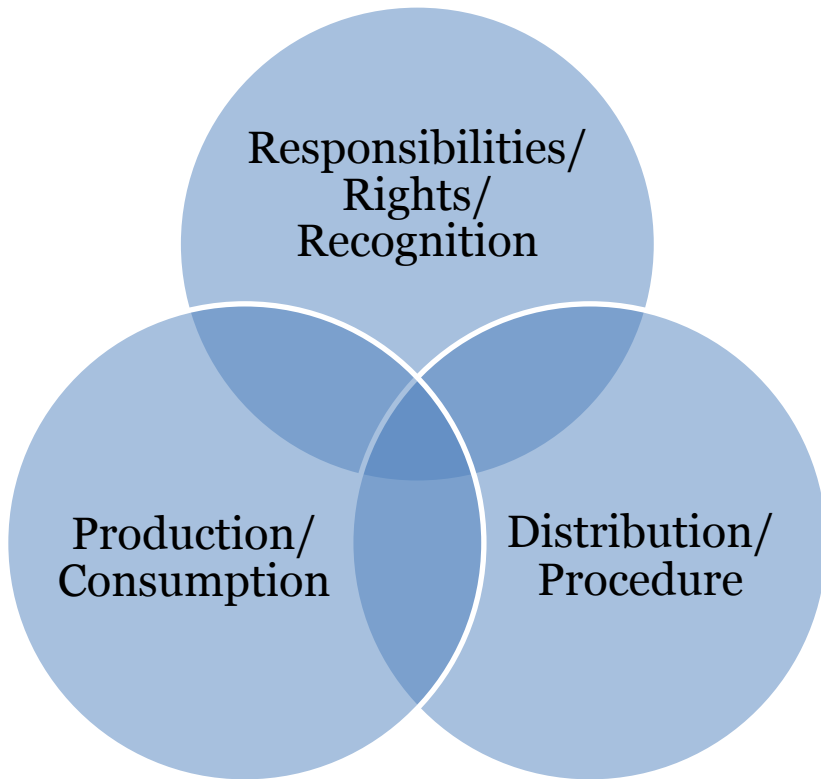
- The right to be protected from (dangerous) climate change
- The responsibility to provide compensation (e.g. climate change adaptation funding) for potential harm
- Consideration of questions of recognition, underpinning those of rights and responsibility

(Bulkeley, Edwards & Fuller, 2014)



(Bulkeley, Edwards & Fuller, 2014)

A justice perspective on the climate-energy nexus



- The relationship between climate, energy and justice is multifaceted
- Distributional and procedural elements in relation to production and consumption
- Framed through responsibilities, rights and recognition



Justice and low carbon communities

Low carbon communities

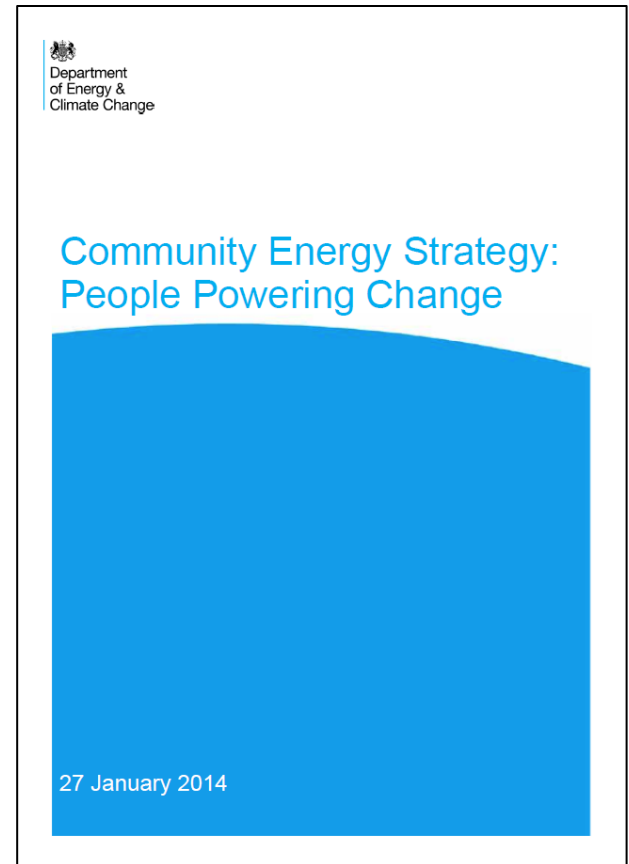
Increasing momentum for 'low carbon communities' around the world as a response to climate change, and as a more appropriate scale of action than individual



UK Community Energy Strategy

“Community-led action can often tackle challenges more effectively than government alone, developing solutions to meet local needs, and involving local people. Putting communities in control of the energy they use can help maintain energy security and tackle climate change; help people save money on their energy bills; and have wider social and economic benefits”

<https://www.gov.uk/government/publications/community-energy-strategy>



Defining 'community'

- As actor. Given agency, used to describe a distinct actor that can make a difference, take actions of various forms, and interact with others.
- As scale. Within a hierarchy of interacting scales of action; above the individual and households, but typically below the level of local government.
- As place. In popular usage, implies a set of social relationships embedded in a particular locality
- As network. Formed by networks and social relationships; can extend beyond specifically place-based networks.
- As process. Seen as a distinctive way of acting, involving the participation of 'ordinary people' in collaborative processes
- As identity. A way of thinking and being that people adopt in everyday encounters/ways of living.

(Walker, 2011)

The role for community



A site where forms of technology are developed and deployed

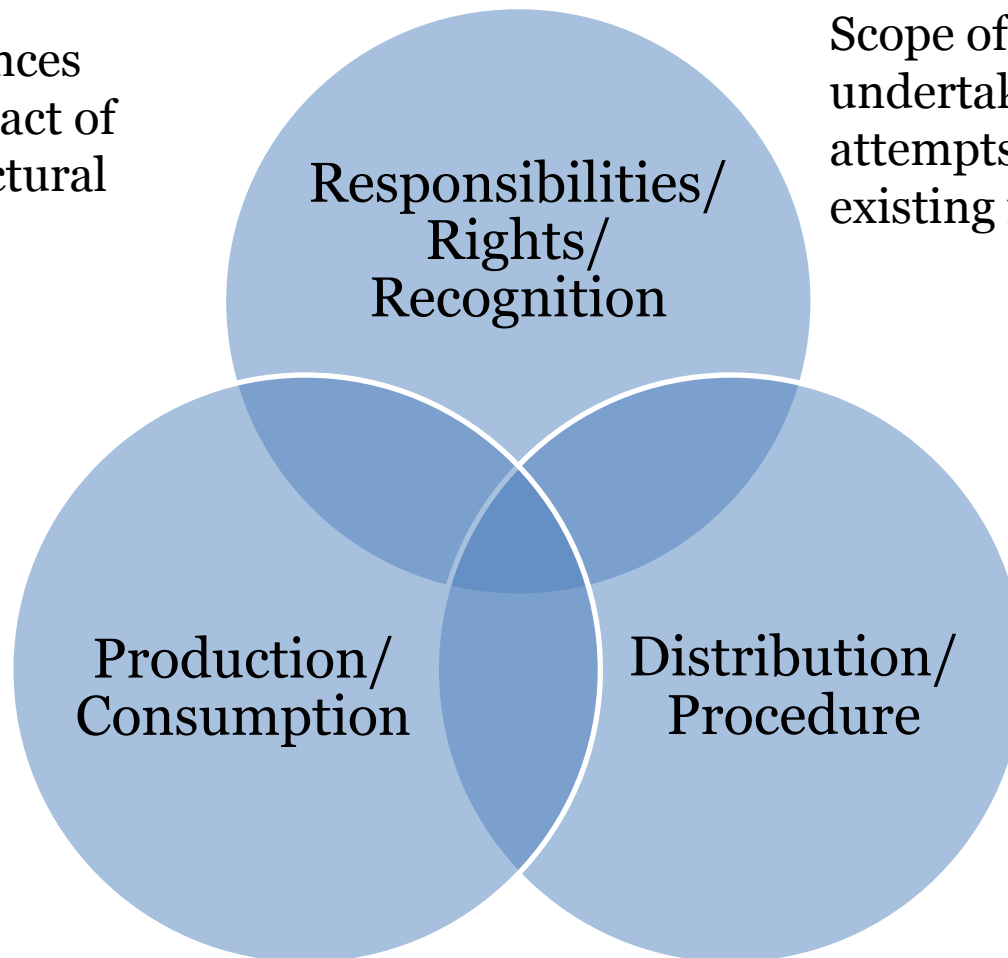
A means through which behaviour change to less carbon intensive lifestyles can be achieved



Some key questions

How are differences recognised- impact of underlying structural factors?

Scope of activities undertaken- whether attempts made to address existing injustices?



How should responsibility for mitigation be allocated?

How costs (e.g. energy security, affordability) and benefits (e.g. improved housing) are distributed?

(Bulkeley and Fuller, 2012)

Low Carbon Zones

- To reduce emissions by 20.12% by 2012 in time for Olympics
- Local authorities invited to bid for funding for neighbourhood level climate change activities

“These energy busting zones will create an armada of flagships across London, focused on finding the most effective ways to rapidly cut carbon and slash energy bills” (GLA, 2009)

Environment > Greenhouse gas emissions

Boris Johnson announces London's 10 'low-carbon zones'

Ten boroughs awarded £200,000 to develop energy efficient neighbourhoods of 13,000 homes and 1,000 businesses

Press Association
theguardian.com, Thursday 3 September 2009 19.35 AEST



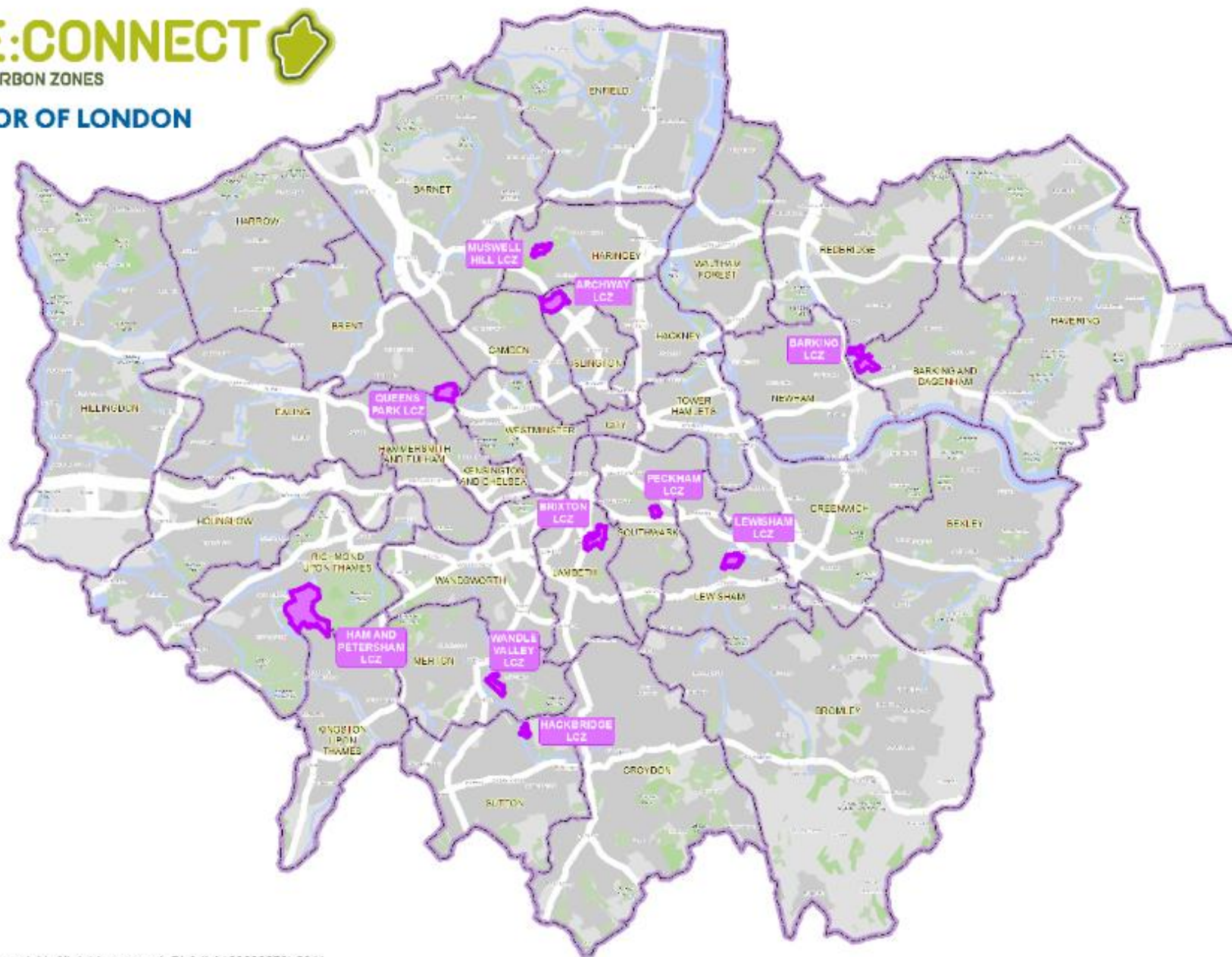
London Mayor Boris Johnson on the balcony of his offices at City Hall. Photograph: Richard Saker

Ten [London](#) boroughs have won funding to develop "low-carbon zones" with schemes ranging from "[energy](#) doctors" to solar panels for schools and electric car charging points, London Mayor [Boris Johnson](#) said today.

RE:CONNECT

LOW CARBON ZONES

MAYOR OF LONDON



Brixton Low Carbon Zone

- Approx. 3,500 properties: 10 high-rise and 36 low-rise blocks; street properties (social/private housing); commercial/public sector buildings
- Led by local authority with partners (private sector partners; community organisations)
- Leverage private sector investment (energy suppliers)
- A range of different projects



Example: Brixton Energy

Community owned energy project:

- Generating energy
- Increasing energy resilience and security
- Raising awareness about energy efficiency and tackling fuel poverty
- Providing training and employment for local people



<https://brixtonenergy.co.uk>

Findings (I)

Ongoing community activities as a way into carbon targets

“a balance to be struck... would we get people who would be interested in energy related projects, would it only be about food growing, which wouldn't really help us achieve our carbon targets?”



Findings (II)

Benefits include the creation of local employment

“I think the project does touch a lot on skills building. Building skills, but also identifying who has the skills and getting them to use the skills in the community”



Findings (III)

Strong focus on energy efficiency and fuel poverty

“when engaging with people, it was about, this is how you can manage your bills better, this is how you can save money. And that’s been a key element of why people even bothered listening to them”



Summary

- Ongoing community activities as a way into carbon targets
- Benefits: energy efficiency measures (addressing energy poverty), local employment; community resilience
- Opportunities for whole community to be involved

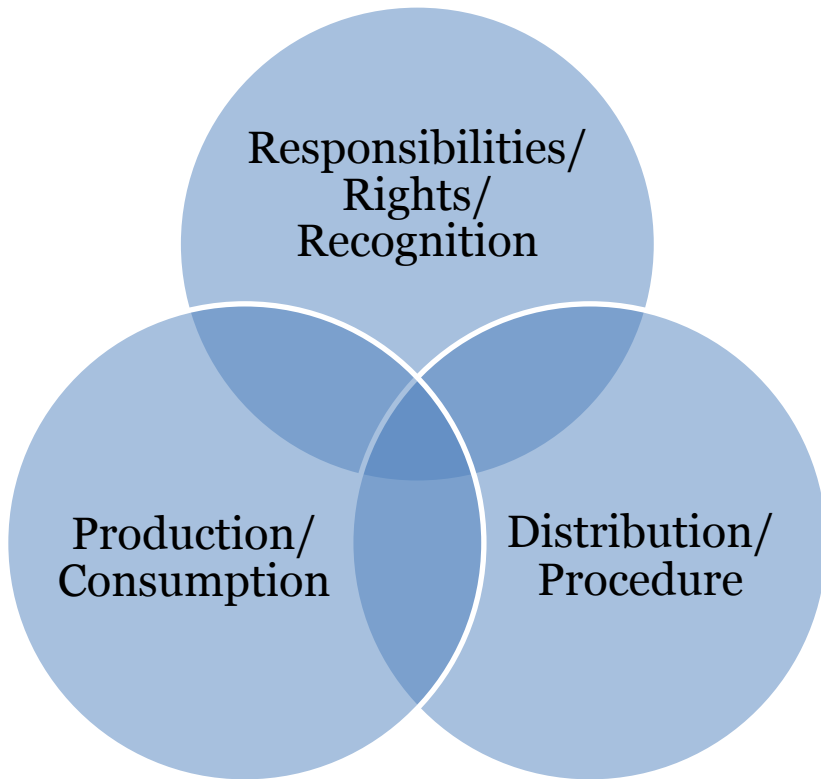




MACQUARIE
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Future research directions

Revisiting the energy-climate nexus



- The relationship between climate, energy and justice is multifaceted
- Distributional and procedural elements in relation to production and consumption
- Framed through responsibilities, rights and recognition

Future research directions

- What are the challenges/opportunities of framing an energy-climate nexus, and what are the issues of vulnerability/inequality that emerge?
- If the framing of justice is dependent on local circumstances (population, deprivation, housing), how might international experience be relevant in the context of the Asia-Pacific, and Hong Kong specifically? Or what is specific about Hong Kong?
- How do we understand the implications of transferring responsibility for climate mitigation/energy efficiency away from government? e.g. cities, universities, individuals...

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Thank you! Questions?

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