# Just transitions in renewable energy

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### Structure

- 1. Just Transitions
- 2. ROLES Project overview
- 3. Data collection in Brighton
  - 1. Results and Analysis
  - 2. Core themes and data from Brighton
- 4. Conclusion
- 5. Quick plug: Local GND project
- 6. Q & A



### A Just Transition – What is it?

The definition varies quite considerably and is contested – often contextually and regionally specific

#### Wang & Lo (2021) offer a conceptual review:

- (1) just transition as a labor-oriented concept,
- (2) just transition as an integrated framework for justice
- (3) just transition as a theory of socio-technical transition
- (4) just transition as a governance strategy, and
- (5) just transition as public perception.

Here I seek to expand on the concept of a just transition as both a framework for justice and governance strategy





### **Just Transitions**

Social Justice in the Shift Towards a Low-Carbon World

EDITED BY

Edouard Morena, Dunia Krause and Dimitris Stevis

### Just Transitions – Why is it important?

#### Global calls for an equitable green recovery have emerged

We are slowly entering the era of a post-covid recovery, inequality has been exacerbated and low-carbon transitions are critical in coming decades

#### **Carbon Trust**

'The aim of just transition should be to create a more equal society, whilst still moving towards a decarbonised future. Where policymakers acknowledge the different experiences of exclusion from the benefits of the transition and prioritise diverse, local engagement, the costs borne by vulnerable groups and communities could be minimised. To truly be a just transition, it must also be inclusive'







### ROLES Project (1)



- ROLES (2020 2023) seeks to identify
  how European city-regions can accelerate
  the decarbonisation of energy systems
  through the digitalisation of energy
  infrastructure, in ways that also create
  societal benefits.
- Data collection in: Norway (Bergen) Italy (Trento) UK (Brighton)
- Solar PV deployment in Brighton
- Key concepts: just transition and socially inclusive innovation important



### Data collection in Brighton: Summer 2021 (1)

#### We used our expert interviews to feed into our 'community interviews'

- In one expert interview, a council-led 'Housing Revenue Account Solar PV
   Distribution Programme' was discussed, where the council distributed solar PV to council housing homes.
- Brighton & Hove City Council targeted four areas high in council housing to deploy solar PV in the initial stages of this programme. The areas mentioned were;
   Whitehawk, Coldean, Bevendean and Hangleton & Knoll.
- Once ethical approval was obtained from the School Research Ethics Officer
  (SREO) within the Sussex Business School, ROLES members created a leaflet to
  handout / post to homes in the areas identified above in our expert interviews. We
  posted to 100+ homes!

### Data collection in Brighton (2)



#### WHAT

Hello! The University of Sussex is pleased to invite you to a research interview on solar power and society in Brighton. Interviews will take 10-30 minutes. Afterwards you will be given a £30 supermarket voucher for participating. Ethical approval number: ER/ML681/1

#### WHEN

July - September 2021, on weekdays between 9 and 5pm. A date and time will be agreed to suit you.

#### WHERE

In-person, online or via phone.

#### **WHO**

You will be interviewed by a researcher from the University of Sussex. Contact information is here:

#### WEB ADDRESS

https://roles.w.uib.no/

#### INTERVIEW INVITE

### WHAT IS THE ROLES PROJECT?

ROLES is exploring the social implications of changes to how our electricity is supplied. At the University of Sussex, we are looking at the latest digital innovations for solar electricity, and exploring how these could benefit all sections of the community in Brighton.

#### FUNDER

Economic and Social Research Council (ESRC)

#### CONTACT INFO:

#### Researchers:

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#### **ROLES – Community Interview Questions**

- 1. Introductory questions:
  - a. e.g. for Whitehawk, Hangleton & Knoll, Bevendean and Coldean residents 'can you tell me a bit about your solar installation, such as when it was installed and how it's performed?
  - b. For others 'please can you tell me a bit about your involvement with the solar energy sector?'

**For homes** - What role do digital technologies play in your home energy system?

- 2. Are there any groups who are you think are currently excluded from solar programmes but who ought to be included more?
  - a. Are you aware of any digital initiative's and/or innovations in solar deployment?
- 3. Why should they be included more, and how could they be brought into green economy activities?
- 4. How can policy-makers/government help promote more socially inclusive approaches?



### Results & Analysis (1)

### Where did we get interviews?

Once data collection had finished, we had completed a total of 24 interviews across the Brighton & Hove local authority area. This is broken down into interviews from Whitehawk (n=6), Coldean (n=6), Bevendean (n=4), Hangleton & Knoll (n=5) and Hove (n=3) respectively.

#### Who did we interview?

A brief demographic analysis of our data shows that of the 24 participants, the majority are homeowners (n=16), while the rest are either council housing tenants (n=5) or renting in the private sector (n=3). We also interviewed a roughly even split between genders, with 13 male and 11 female participants.



### Results & Analysis (2)

#### Who had solar and how was this financed / owned?

The majority of the homes had solar (n=19), while the rest did not (n=5). 10 of the households solar PV installations were 'self-financed', 5 owned and managed by the council and the remaining 4 are divided between; ownership by a private company (n=1); already installed before the purchase of the house (n=2) and delivered through the councils 'Solar Together' scheme (n=1).

### Who engaged in digital technology adoption?

The majority displayed no engagement with digital technologies (n=12), a small minority considered digital technologies (n=3) and the rest were actively engaged (n=9). Of the 19 homes that had solar installed, less than half (n=8) were actively engaged in digital technologies.



### Results & Analysis (3)

A closer thematic analysis of the data collected revealed five core themes:

- [1] Income and housing divides: inequalities in council tenant and homeowner experiences
- [2] Technological scepticism: smart meters, trust and lack of engagement
- [3] Knowledge and awareness: the need for education and simple communication
- [4] Technical issues: inverter hurdles and the burden of self-management
- [5] The left behind and non-adopters: participants thoughts on widening inclusion.
- Many of these are explored further in our paper in *Energy Policy* (link in references)



### Core Themes (1)

[1] Income and housing divides: inequalities in council tenant and homeowner experiences with solar PV

[Whitehawk\_01] Pensioner living in council house on her own, has never had internet and does not use the internet. Stated that the solar installed on her rooftop has made a difference to her energy bills and reduced costs. Felt as though all council residents should have solar PV'

[Coldean\_04] 'We get about, I don't know, £800 a year of income from what we generate, so on that basis it would pay for itself in something under 10 years [...] we could afford the cost'



### Core Themes (2)

# [3] Knowledge and awareness: the need for education and simple communication

[Whitehawk\_14] "I look up at them all the time, but I don't really know how they work, who installed it, how old they are or anything like that"

#### Homeowners:

'It wasn't a bad thing from an environmental point of view as we looked at it' [Coldean\_04] 'Anything, basically anything that helps, yes, helps the planet at the long term' [Coldean\_03] 'I've been interested in any alternative power from coal-fired production of electricity, anything that can be done naturally, wave power, wind power, solar power, everything' [Hove\_06]

[Bevendean\_09] "There needs to be education from the ground level up. [...] so you're getting the education from a young age but then you're getting the incentives to buy it when you've got the feasibility, when you've got the money, to enable yourself to put these onto a property that you might own'

SCHOOL

### Core themes (3)

# [5] The left behind and non-adopters: participants thoughts on widening inclusion.

Participants were asked – who else should be benefitting from solar PV distribution?

'the really, really, super-low income and people who are privately renting. Anything that helps towards paying less for where you live [...] If you're coughing up so much money just to keep the roof over your head then other things, utilities, should be lower' [Whitehawk\_02] Income divide?

'I guess people who are renting, their landlord is probably unlikely to put the money in to get solar panels, because it is not directly benefiting the landlord. It is benefitting the rental people. I guess renters, it is excluding them really [Bevendean\_10] – Split incentives?



### Conclusion (1)

- 1. A just transition needs to try to close the gap in access to benefits from core low-carbon technologies.
- 2. Important to engage with people on the ground to understand what a local just transition entails. Our policy recommendations suggest:
- Increasing access to information and advice provision for the adoption of solar
- Council-led solar needs to improve consistent engagement with solar households
- Simplifying and changing language around solar innovations can support inclusion







### Conclusion (2)

3. We are in the midst of a fuel poverty crisis: the UK-wide 'End Fuel Poverty Coalition' are predicting up to 8.5 million people will be in fuel poverty after the October price cap is lifted (£3000 per year average annual cost).



4. In the context of the energy price crisis and Ukraine, energy security and independence are increasing support for a more rapid deployment of renewables. March 2022 target (first of it's kind) >

UK minister aims to triple solar power capacity by 2030

5. Importance of local authority intervention to reduce social inequalities is critical. With the right support, Solar PV distribution can play a key role in lowering energy bills.



### Quick plug: Local GND Project @ Sussex

# Local Green New Deals: a sustainable and equitable path for post Covid-19 recovery



ENERGY DEMAND SOLUTIONS

- Framing of local economic recovery packages
- 2. Value mapping of local social, environmental and economic values
- 3. Develop sets of metrics and criteria for assessing projects
- 4. Develop case for public capital investment in beneficial options







# Thank you!

## Q & A

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### **Key References**

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UK Minister Aims to Triple Solar Power Capacity by 2030 *Financial Times* <a href="https://www.ft.com/content/60a90c04-f7ea-4a20-ba07-00ca6abced86">https://www.ft.com/content/60a90c04-f7ea-4a20-ba07-00ca6abced86</a>

ROLES Project: <a href="https://roles.w.uib.no/">https://roles.w.uib.no/</a>

