Just Transitions in Coal Communities

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Coal Transitions in India

❑ What is just transition?

❑ What does it mean in the Indian coal sector context?

❑ What is the role of RE jobs in a just transition?

❑ What are the key elements of a just transition?
What will happen to the livelihood of millions of fossil fuel workers & their communities?
Just Transition

- From a justice point of view, it's important to think about fossil fuel workers and their communities.

- Countries face regional push back.

- Just transition endorsed by:
  - ILO
  - UNFCCC
  - World Bank

JUST TRANSITION DECLARATION

Considering the social aspect of the transition towards a low-carbon economy is crucial for gaining social approval for the changes taking place. Emissions will face social resistance and significant political risks for the governments implementing them if they are not accompanied by social workers whose jobs will be lost or transformed. For these reasons, the issue of fair transition is a vital issue for governments, social partners, and organizations.
Coal mining & power generation have large impacts on the environment.
Map of India (700+ districts)

- 170 districts have coal fired power plants

- Coal mining districts – processing RTI replies

- Roughly 200 districts have either coal power plants, mines or both

Data: Global Energy Monitor
What is at risk at District level?

**Jobs & Pensions**
- Direct jobs
- Indirect jobs
- Induced jobs
- Informal jobs
- Pensioners

**District Revenues**
- Various district level rents & taxes
- District mineral fund

**Welfare Spending**
- Corporate social responsibility
- Area level welfare funds (example: CIL)

**Industry & household fuels**
- Household cooking fuel
- Industrial fuel

Source: (Pai & Carr-Wilson 2018; Chandra, 2018; CIL, 2019; NTPC, 2019; personal interviews with stakeholders; do not copy or distribute – research ongoing)
Entire families are involved

Pai & Carr-Wilson, Total Transition: The Human Side of the Renewable Energy Revolution
Millions of people work in the informal sector (old coal mining belt)

- Coal cycle *wallahs* transport 150-450 kg of coal on their bicycles to cities, travelling up to 60 km

- Earn $3-$7 USD per trip

Motorcycle wallah
What is the role of renewable energy jobs in a just transition?
## Coal Mining Areas Not Always Suitable for Utility Scale Wind Power

<table>
<thead>
<tr>
<th>Country</th>
<th>Solar capacity required (Gwe)</th>
<th>% area for solar</th>
<th>Wind capacity required (GWe)</th>
<th>% area for wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1.96</td>
<td>99%</td>
<td>1.96</td>
<td>1%</td>
</tr>
</tbody>
</table>

### Analysis of Academic/Policy Literature on “Just Transition”

<table>
<thead>
<tr>
<th>Elements identified</th>
<th>Justice forms</th>
<th>Space</th>
<th>Time</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term planning</td>
<td>R2</td>
<td>National &amp; state/provincial level</td>
<td>Long-term</td>
<td>(Snell, 2018), (Snyder, 2018), (Weller, 2019), (Rosemberg, 2010), (Eisenberg, 2019)</td>
</tr>
<tr>
<td>The role of unions</td>
<td>P</td>
<td>National &amp; state/provincial &amp; local level</td>
<td>Long-term</td>
<td>(Cha, 2016), (Abraham, 2017), (Stevis &amp; Felli, 2015)</td>
</tr>
<tr>
<td>Community engagement</td>
<td>P</td>
<td>Local level</td>
<td>Long-term</td>
<td>(Eisenberg, 2019), (Goddard &amp; Farrelly, 2018), (Rosemberg, 2010), (Snell, 2018), (Weller, 2019)</td>
</tr>
<tr>
<td>Local jobs and diversified economies</td>
<td>D, R2</td>
<td>Local level</td>
<td>Long-term</td>
<td>(Carley et al., 2018), (Olson-Hazboun, 2018), (Prinz &amp; Pegels, 2018), (Rosemberg, 2010), (Snell, 2018), (Snyder, 2018)</td>
</tr>
<tr>
<td>Local government revenue streams</td>
<td>R1, R2</td>
<td>Local level</td>
<td>Medium-term</td>
<td>(Carley, Evans, &amp; Konisky, 2018), (Johnstone &amp; Hielcher, 2017), (Haggerty et al., 2018)</td>
</tr>
<tr>
<td>Communication of phase-out plans</td>
<td>P</td>
<td>National &amp; state/provincial &amp; local level</td>
<td>Short-term</td>
<td>(Herpich, Brauers, &amp; Oel, 2018)</td>
</tr>
<tr>
<td>Environmental remediation</td>
<td>R1</td>
<td>Local level</td>
<td>Short-term</td>
<td>(Greenberg, 2018), (Haggerty et al., 2018), (Pollin &amp; Callaci, 2019)</td>
</tr>
</tbody>
</table>

(Pai, Harrison & Zerriffi, 2020, Smart Prosperity Institute)
Take Home Messages

❑ Just transition requires long-term government planning for regional economic diversification

❑ These plans should zoom in on districts to assess risks & resilience

❑ Before India implements any power plant/mine shutdowns, it should assess local socio-economic risks & create plans to address them

❑ Renewable energy jobs might be an option for some not for all
Thank you & Questions

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