



Social implications of transition to low-carbon economy – COP21 RIPPLES

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Background

- COP21 → general consensus that transition to low/zero-carbon economy is essential
- Transition to a low-carbon economy will involve changes affecting various actors/groups of actors
- Transition to a low-carbon economy has the **potential** to improve quality of life and to contribute to a more sustainable, resource-light economy
- **Poorly managed transition** could affect various actors unequally leading to public backlash, social upheaval and even greater inequality
- It is widely recognised that transition to low carbon economy needs to **address existing inequalities** and **avoid generating new inequalities**

Background

- The Paris Agreement – *Preamble*

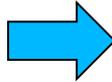
*‘Taking into account the imperatives of a **just transition of the workforce and the creation of decent work and quality jobs** in accordance with nationally defined development priorities*

*Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective **obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity,**’*

Why is inequality a problem?

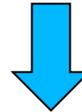
Inequalities in terms of

- Wealth and income
- Health
- Access to employment
- Access to social participation and democratic processes
- Access to new technologies and finance
- Quality of the environment and impacts of climate change



Leading to

- Eroding of social cohesion
- Increase in social polarisation
- Mass unemployment



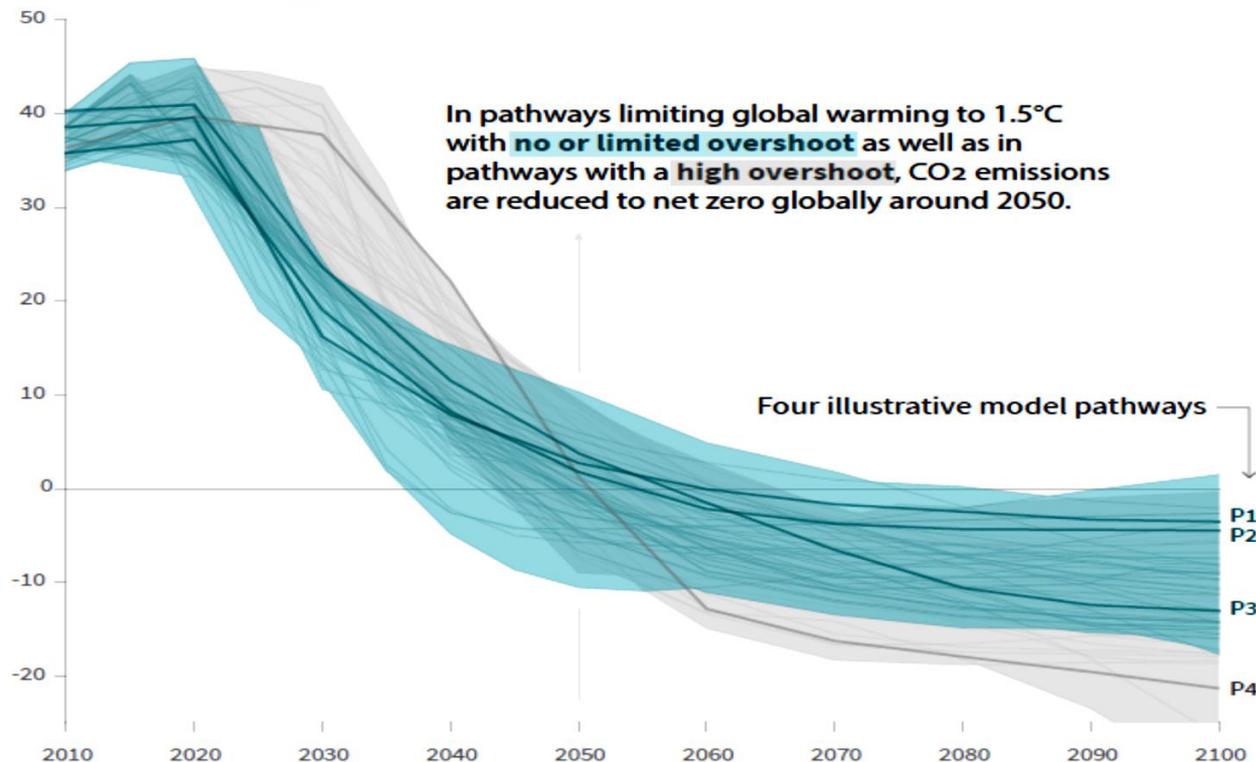
Leading to

- Challenges for the stability of communities and nations
- Involuntary migration

Transition pathways limiting global warming to 1.5 C

Global total net CO₂ emissions

Billion tonnes of CO₂/yr



Source: IPCC SR1.5, 2018

Inequalities of transition

Transition to low-carbon economy

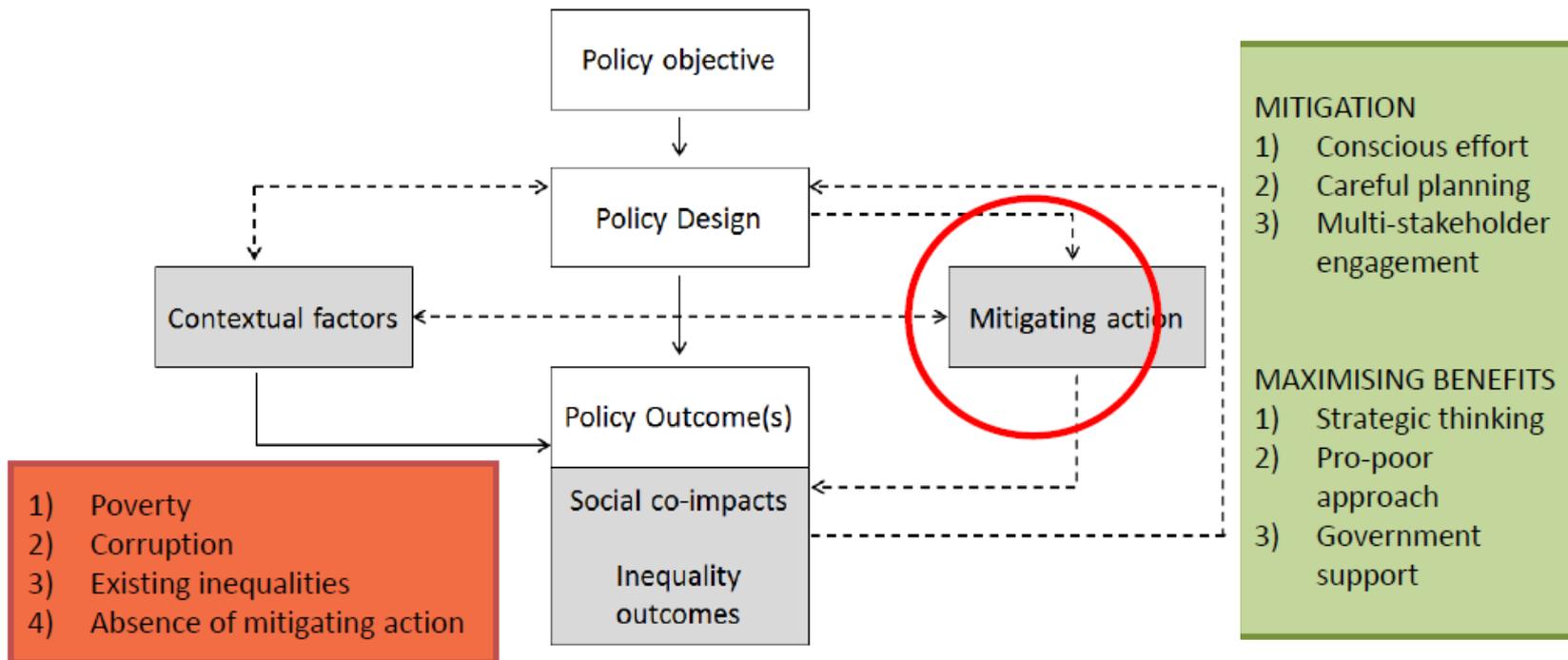
- Recalibration of the existing economic, energy and industrial agendas
- Decline in carbon-intensive industries
- Some business models will be radically altered (e.g. power sector, construction)
- Some occupations and business models will be eliminated or diminished (for e.g. coal mining, refineries)
- Changes in land use



Implications for Inequalities, including

- Income disparity
- Wealth disparity
- Health inequality
- Ethnic inequality
- Unequal access to opportunities
- Gender inequality and gendered patterns of employment
- Environment and climate

Overview of methodology



Overview of methodology

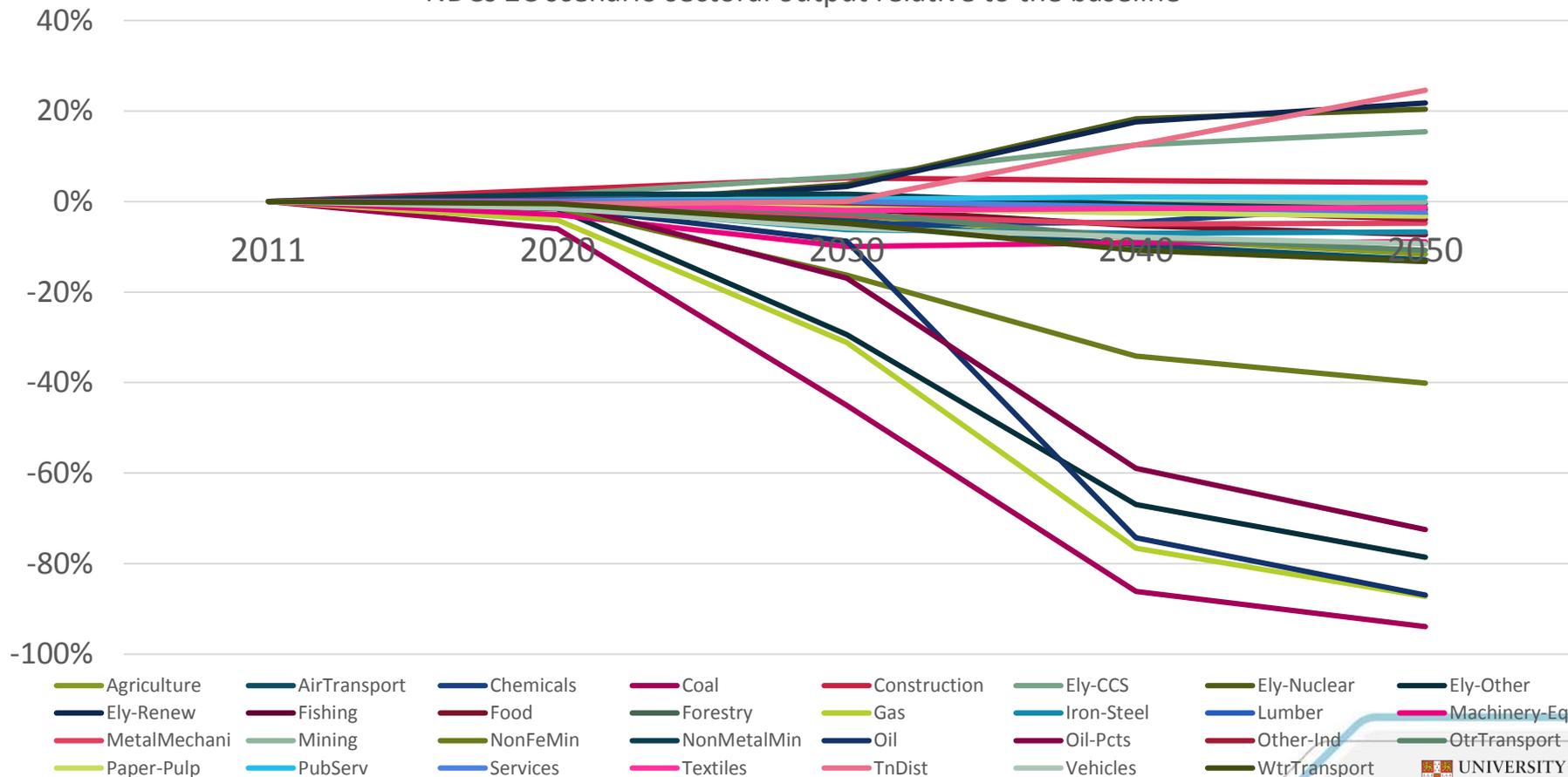
| Overall policy objective | Policy measure | Potential equality outcome(s) | | | | | Factors influencing the extent and direction of impacts |
|----------------------------|--|-------------------------------|-------------------|--------|--------|---------------------|--|
| | | Health | Wealth/ income | Gender | Ethnic | Risk of conflict | |
| Reduced energy consumption | Programmes to improve energy efficiency in homes | ↑↓ | ↑↓ | ↑ | | Low | Targeting of fuel poor and low-income households can maximise co-benefits; policy design and quality of home improvements important to avoid adverse outcomes, such as health problems and growing cost of electricity |
| | Removal of fossil fuel subsidies | ↑↓ | ↓ | ↑↓ | | Low | Mechanisms for compensating vulnerable consumers for potential losses to reduce regressive distributional impacts |
| | Improved public transport networks | ↑ | ↑ | ↑ | ↑ | Low | Consultation at planning stage to ensure that the proposed changes address the transport needs of the poor without creating cost barriers |
| | Improved modal choice | ↑ | ↑↓ | | | Low | Important to ensure that public funds are used to provide improved choices also for the poorest |

Preliminary ICES results for Brazil

| Energy Intensity of GDP | | |
|----------------------------------|---------|---------|
| | 2010-30 | 2030-50 |
| NDC Ambition to 2C | -36% | -54% |
| Accelerated ambition to 2C | -31% | -32% |
| Carbon Intensity of final energy | | |
| | 2010-30 | 2030-50 |
| NDC Ambition to 2C | -1% | -69% |
| Accelerated ambition to 2C | -22% | -69% |

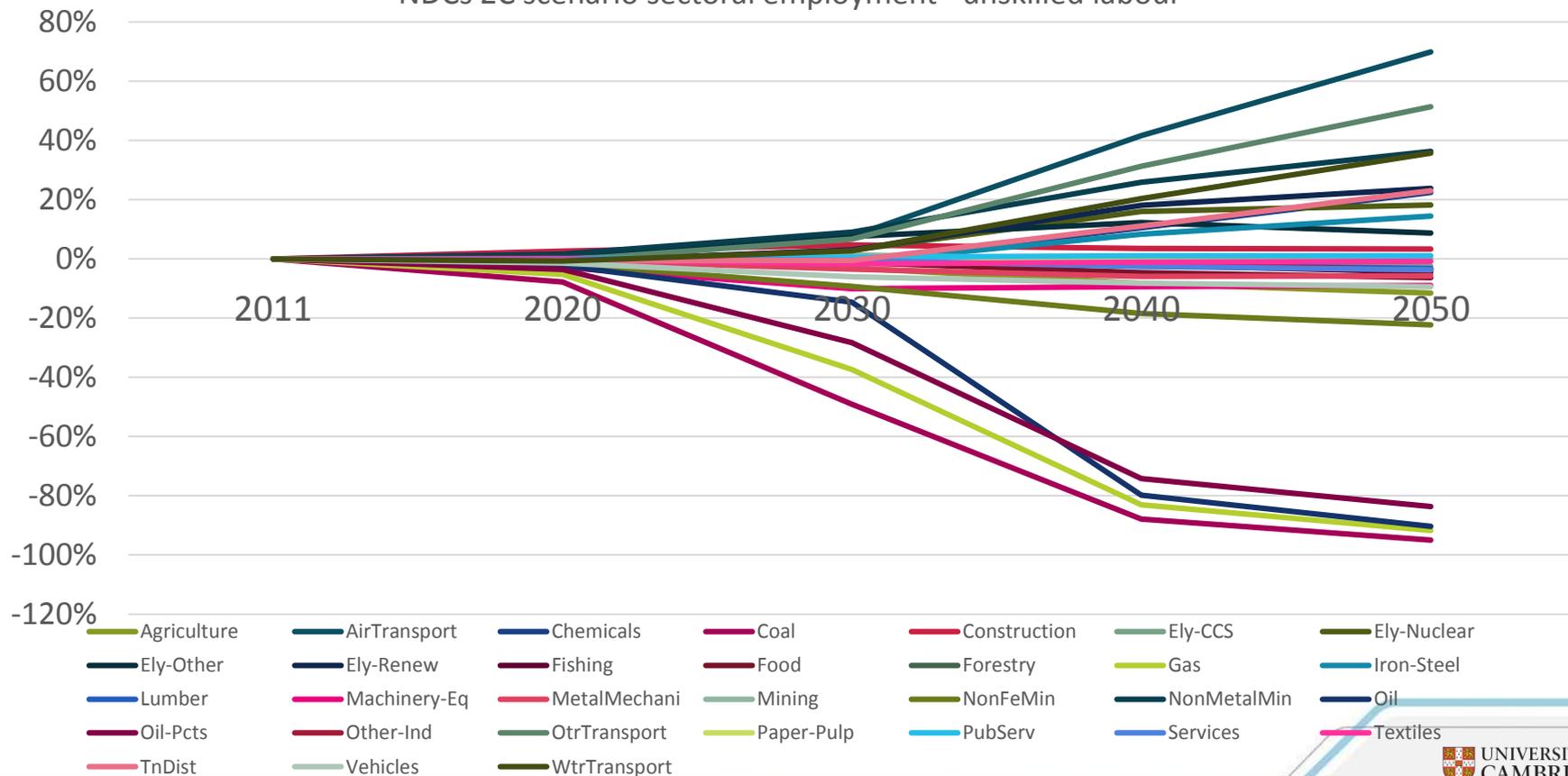
Preliminary ICES results for Brazil

NDCs 2C scenario sectoral output relative to the baseline

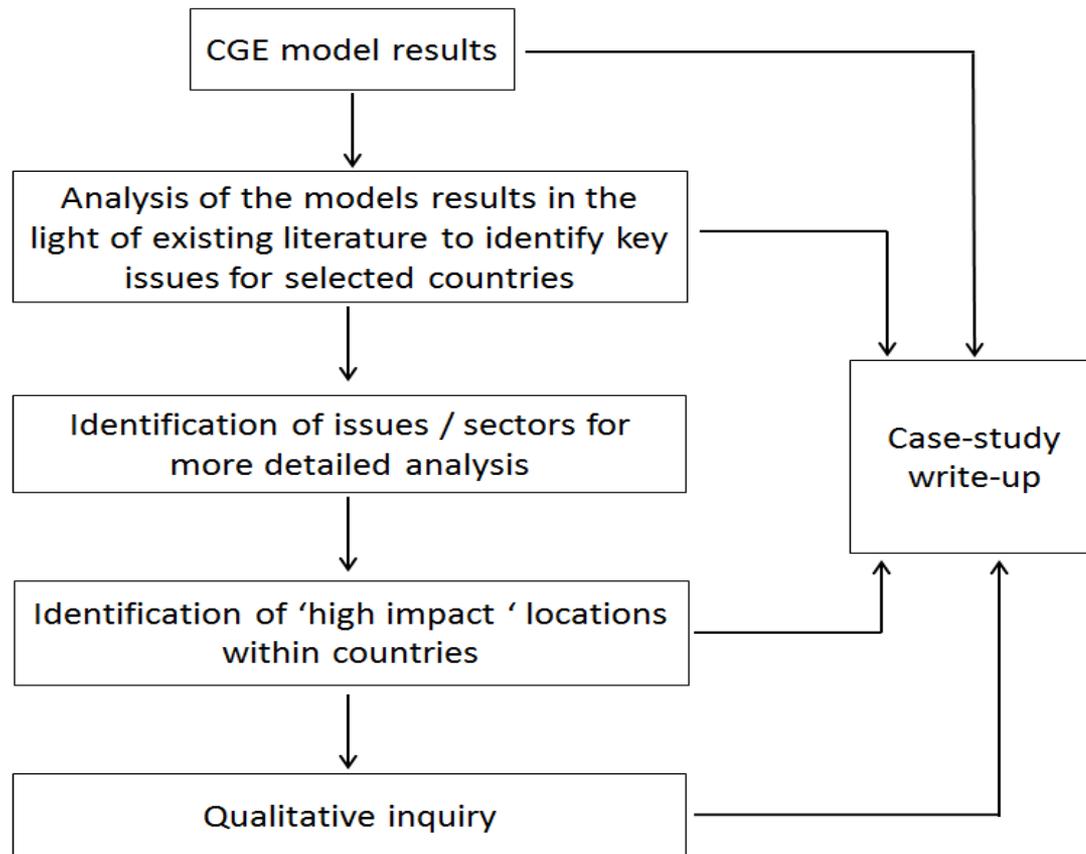


Preliminary ICES results for Brazil

NDCs 2C scenario sectoral employment –unskilled labour



Overview of methodology



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Thank you