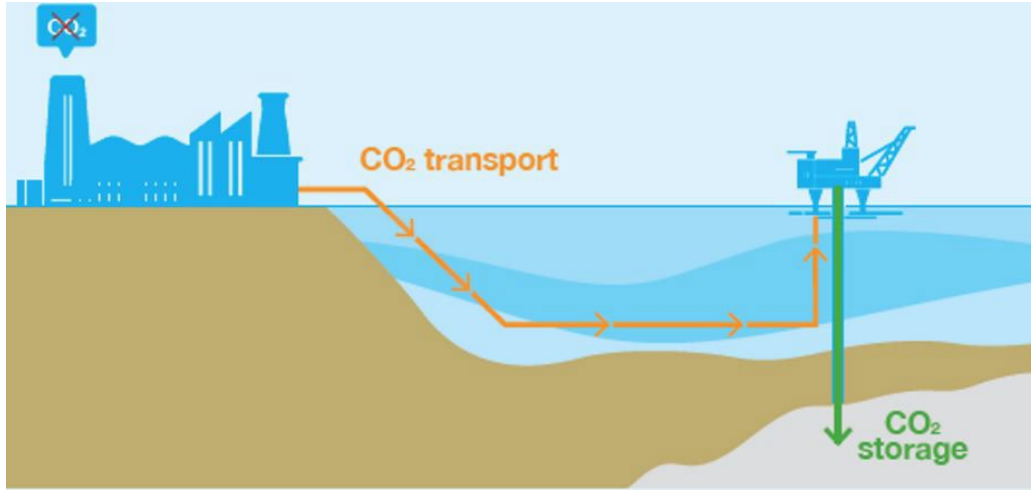


Stakeholder Engagement and a Just Transition - What is required of CCS?

6th International Workshop on Offshore Geologic CO_2 Storage

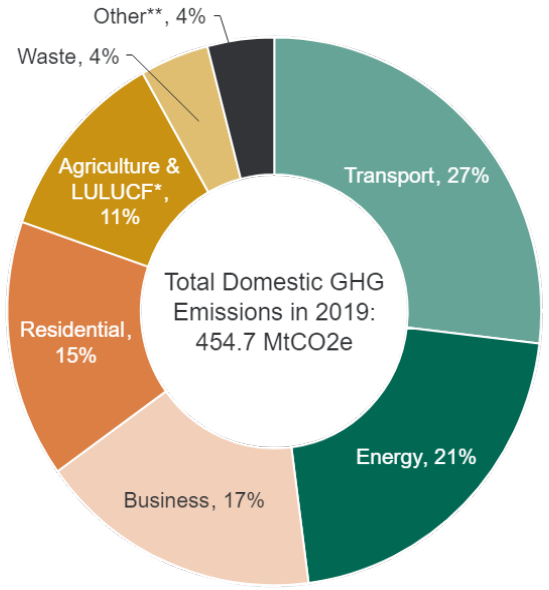
Prof Tavis Potts
Just Transitions Lab
www.abdn.ac.uk/jtl

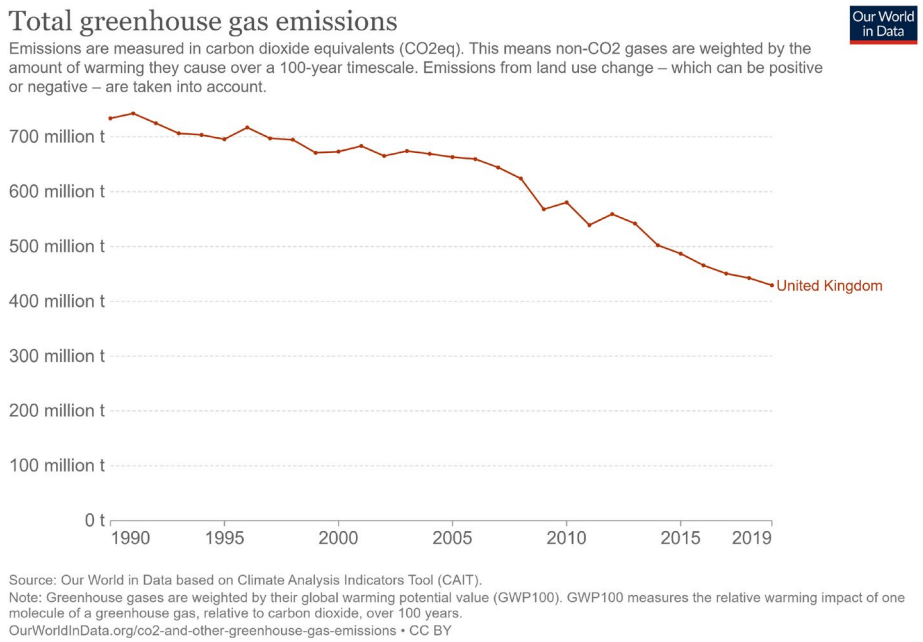
Conclusion

- Just transition has 3 pillars – jobs/skills, community revitalisation and empowerment. All 3 should be addressed simultaneously.
- While CCS development is at an early stage it has potential to contribute to employment growth and be part of Net Zero portfolio.
- There is substantial further work to be done on the community revitalisation linking CCS to local economies and infrastructure
- Gaining social licence is a critical step in CCS and can undermine, support or slow future initiatives.

UK Drivers in Net Zero

Electrical generation capacity from x2 to x4	**Offshore wind 50GW by 2030 (currently 10GW UK and 1 GW in Scotland)**	**CCS: 20-30 Mt CO2 by 2030 in 4 clusters**
Afforestation 30,000ha per annum	**29 Million existing homes installed with low carbon heat**	**Zero carbon cars: 23 million by 2032**
10GW Hydrogen production capacity 2030	**Major societal and structural changes in use of energy, housing, transport & mobility, diet social behaviours.**	**Just Transition of workers in current employment and energy justice in communities**





The benefits of transition are fairly distributed across society and the impacts do not fall upon those with the least ability to pay or adapt

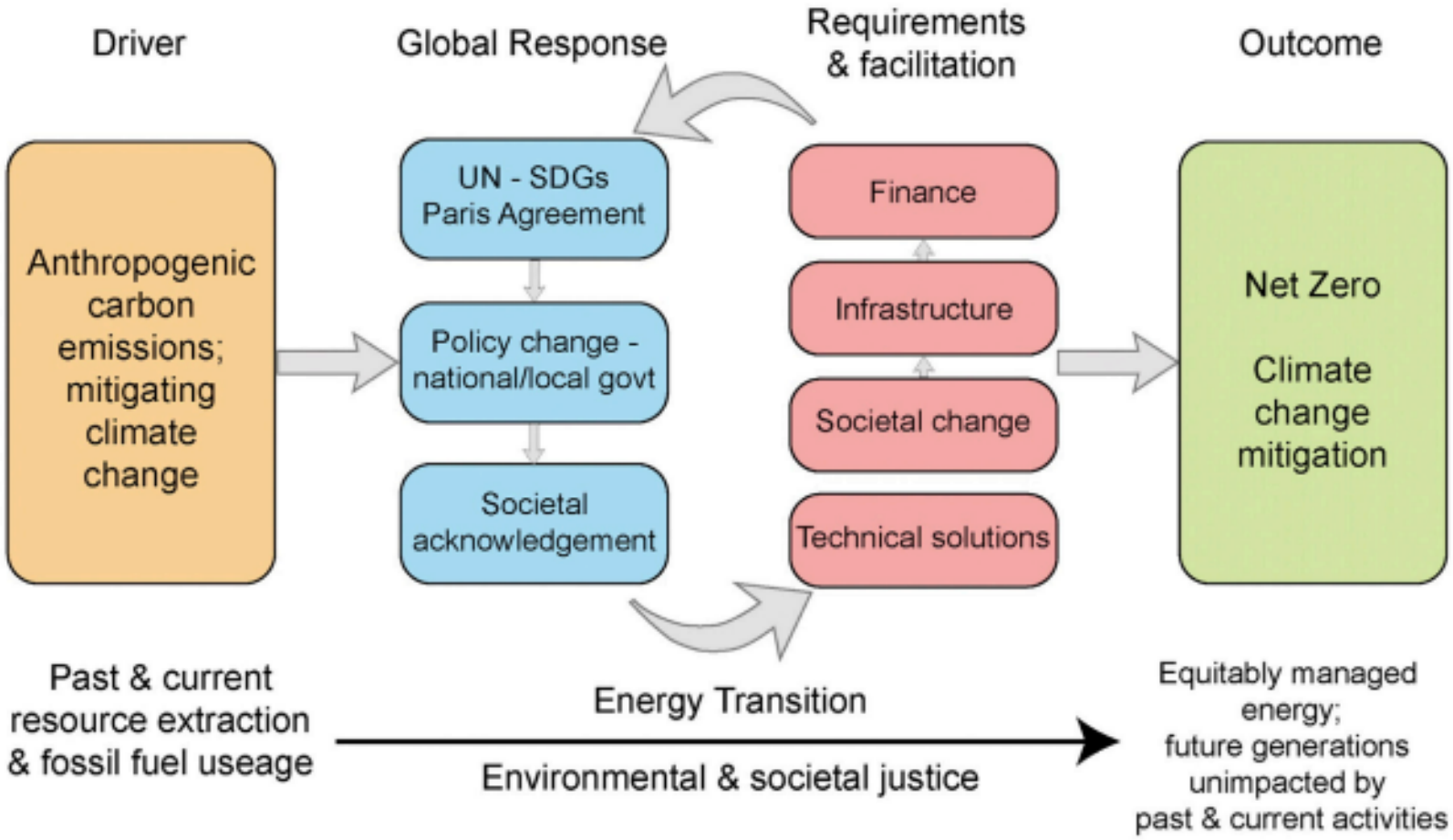
A Just Transition means greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.

Just Transition

The process of change to Net Zero is fair, equal, inclusive and open.

Job creation per se does not deliver 'just' outcomes

If the process of transition is not just, the outcome will never be….Climate Justice Alliance (US).



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Geosciences and the Energy Transition

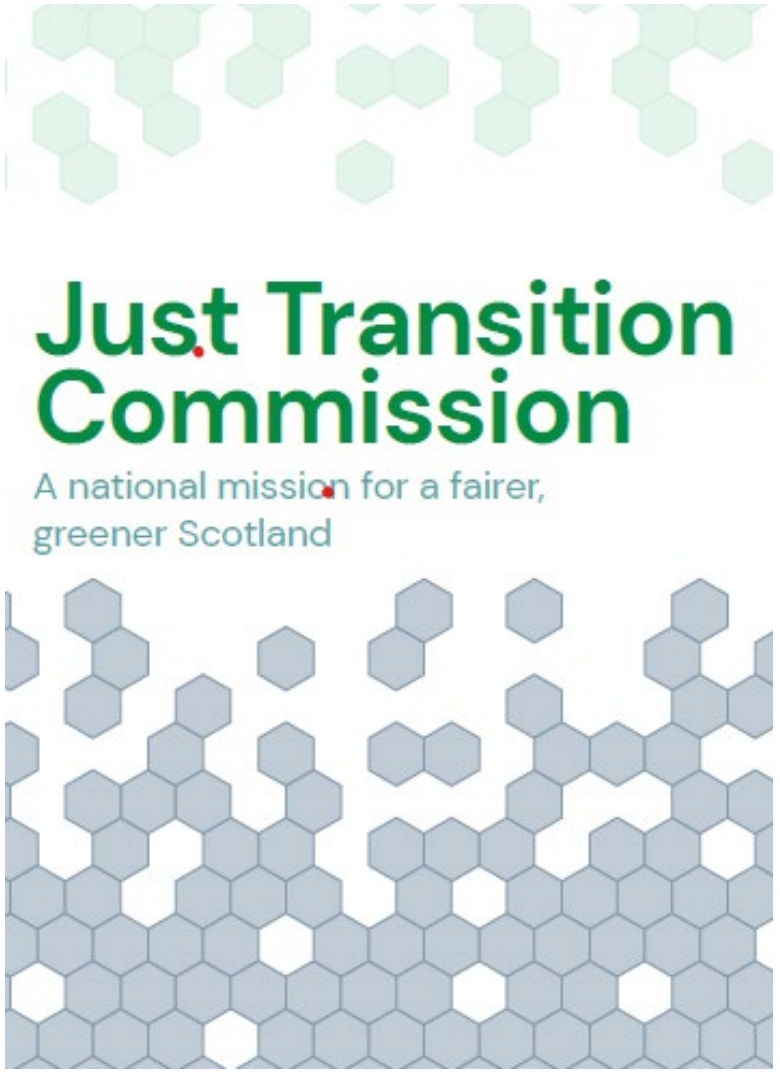
Nicholas J. Gardiner[1]*, Jennifer J. Roberts[2], Gareth Johnson[2†], Daniel J. Smith[3], Clare E. Bond[4]
Rob Knipe[5], Stuart Haszeldine[6], Sarah Gordon[7] and Megan O'Donnell[8]


TURN OFF YOUR POWER
NO - WALK
PROUD COAL MINER
PROUD COAL

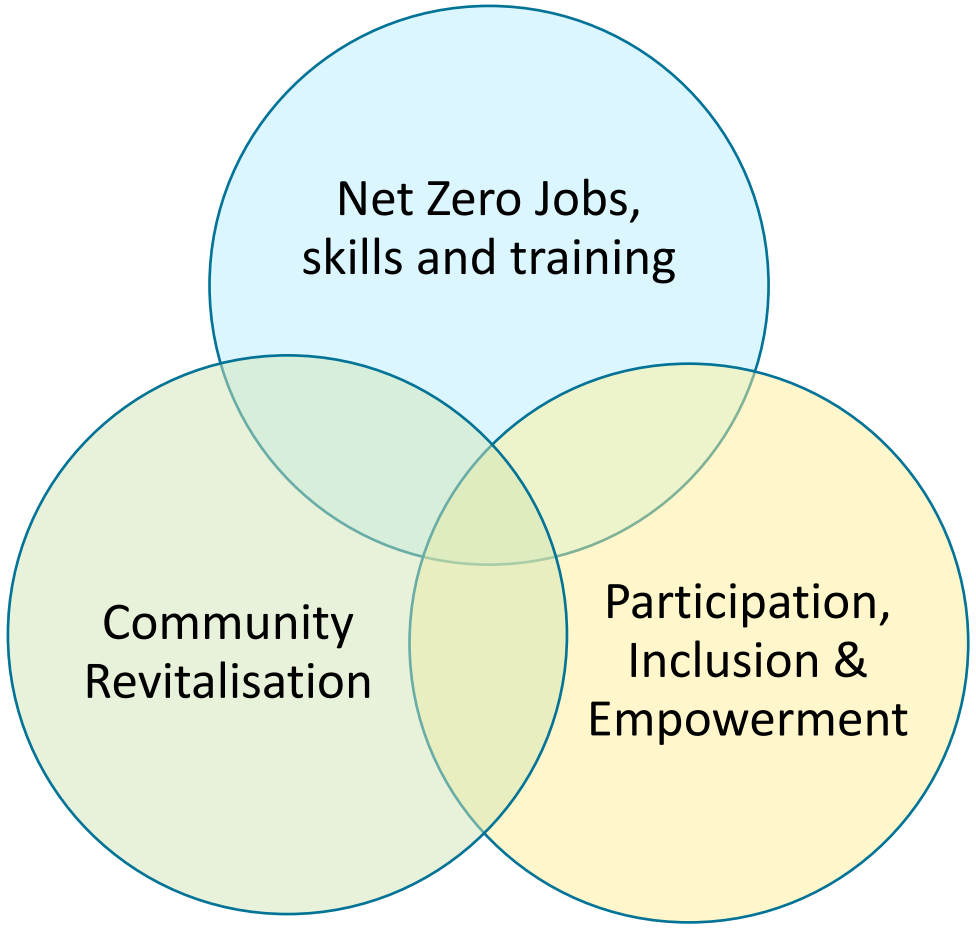

Lochgelly Miners Strike
THE FUTURE IS OURS
COAL NOT DOLE
COAL THE NATIONS ENERGY FUTURE
NUM


JUST TRANSITION
Decent Jobs on a Living Plan
MAY we please have a FUTURE with SECURE JOBS in a GREEN, LOCAL ECONOMY?

Pursue	Pursue an orderly, managed transition to NetZero that creates benefits and opportunities for people across Scotland.
Equip	Equip people with the skills and education they need to benefit from the transition
Empower and invigorate	Empower and invigorate our communities and strengthen local economies
Share	Share benefits widely and ensure burdens are distributed on the basis of ability to pay.



Just Transition and the context of CCUS



Building & Training the Workforce

- Diversification of Net Zero industries – CCS across the supply chain; economics, planning & business case for CCUS; investments.
- Skills – removing obstacles for qualifications; mapping pathways; skills bottlenecks and competition.
- Equality, diversity and accessibility in the workforce.

Community Wealth Building

- Community wealth – investment in communities, local supply chains, fair employment – how does CCS contribute?
- Addressing fuel poverty, marginalisation & disadvantage.
- Integration of climate, biodiversity and wellbeing (economic & social).

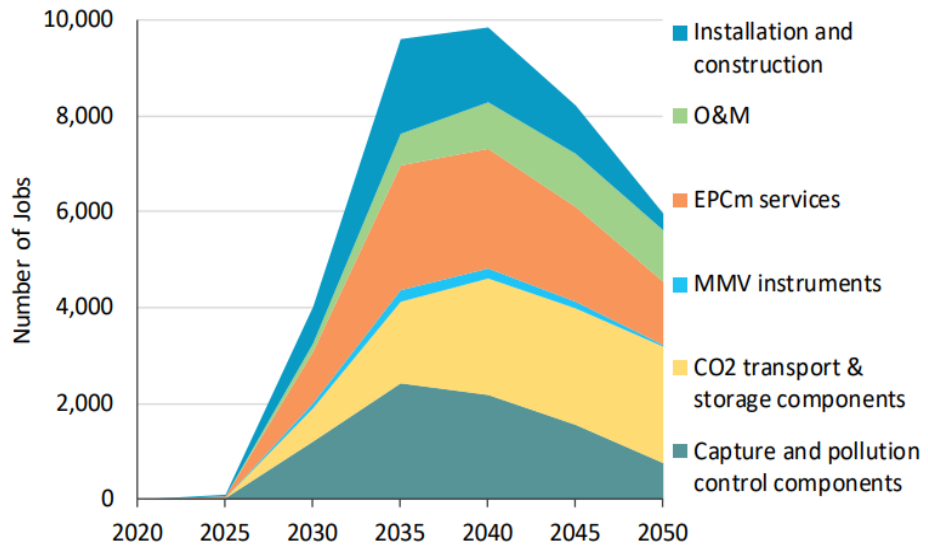
Who is at the 'table' with CCUS development

- Gaining a social licence to operate?
- Empowering voices – citizen assemblies, deliberative actions
- From consultation to genuine partnership
- Local & traditional knowledge
- Representation in planning

Growth of UK CCUS exports could support £4.3 billion in GVA and 48,000 jobs per annum by 2050

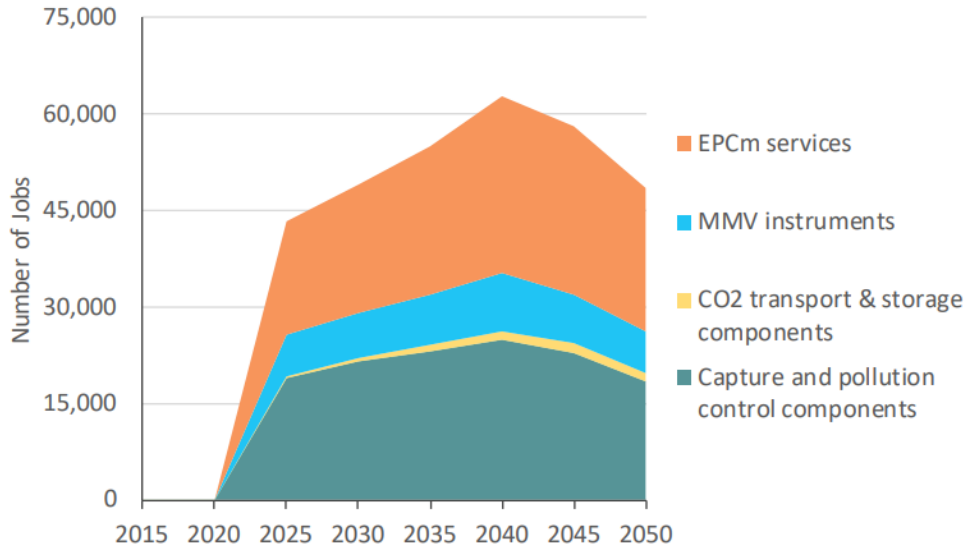
UK exports are likely greatest in the 2040s, as the rate of power and industry CCUS deployment increases to meet climate targets, adding £5.1 billion in GVA and supporting around 62,700 jobs per annum

Figure 9 **Jobs supported from domestic markets by component – CCUS**



Source: *Vivid Economics*

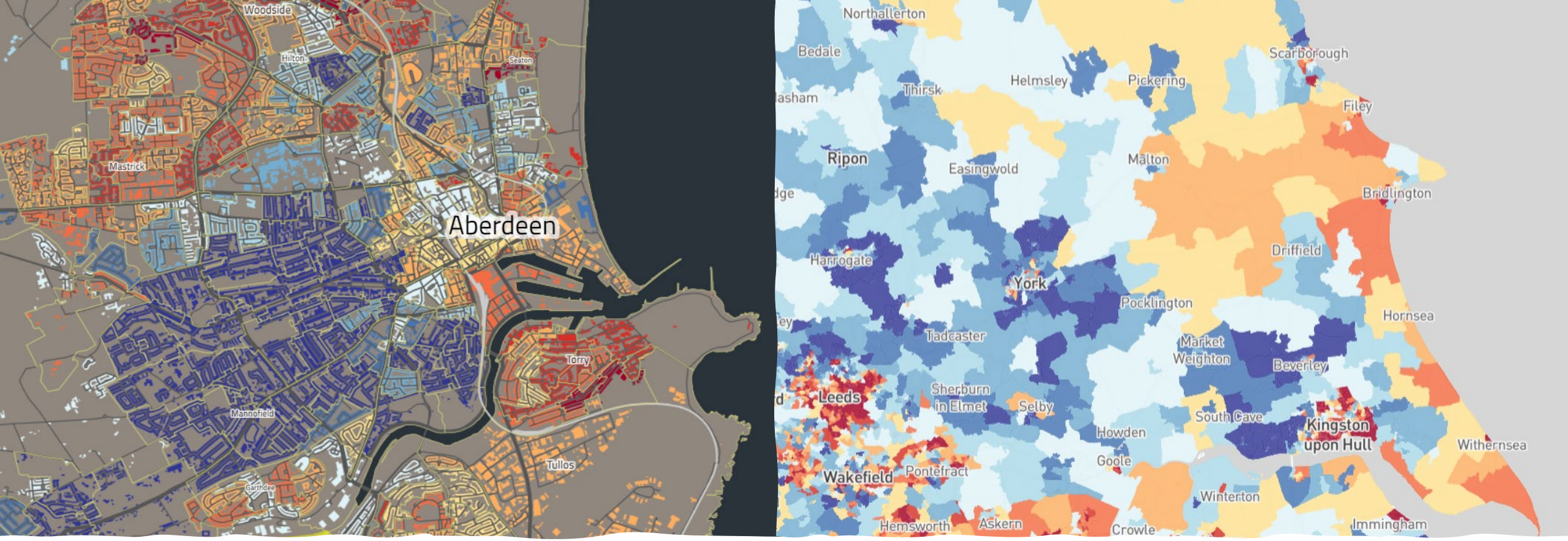
Figure 5 **Jobs supported from export markets by component – CCUS**



Source: *Vivid Economics*

BEIS 2019 Energy Innovation Needs Assessment: CCUS

Export opportunities are considerably larger given the growth of CCUS in the rest of the world to 2050, particularly in the United States and Asia. This is driven by the UK's ability to capture a modest share of the substantial global market for EPCm services and capture and pollution control components.

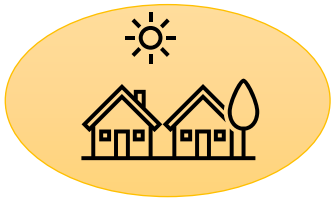


Just transitions in skills

- “Access to jobs and training associated with net zero will likely remain skewed towards certain socio-economic groups, unless this issue is proactively addressed.
- Critical sectors of the economy are male dominated, with under-representation of women and ethnic minorities.
- Additionally, those in lower skilled, low income or unstable employment are less likely to have the funding, information or flexibility to take advantage of new training opportunities.”
- - CESAP 2020

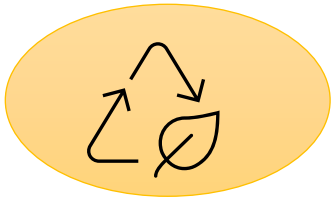
Community Participation for a Just Transition in the North-East of Scotland

scottish universities insight institute
mobilising knowledge for a better Scotland



Community revitalisation

- Community ownership of infrastructure, assets, land – Comm. Wealth creation.
- Capacity building – from volunteers to paid employment, civic –private partnerships.
- Decentralisation of the energy system – owning the infrastructure.

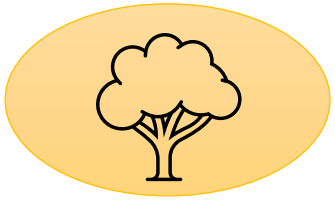


N0 Jobs & Skills

- Build upon O&G skills, capacities and knowledge
- Diversify into broad range of N0 industries e,g, homes, food, transport, local energy
- Diversify skills and make training accessible within and without energy industry

Fuel Poverty

- Smart local energy systems & public infrastructure for energy.
- Expand Heat networks – with social consent - and move away from gas CHP.
- Prioritise energy efficiency, local energy, prosumers, storage, new financial models.



Greenspace

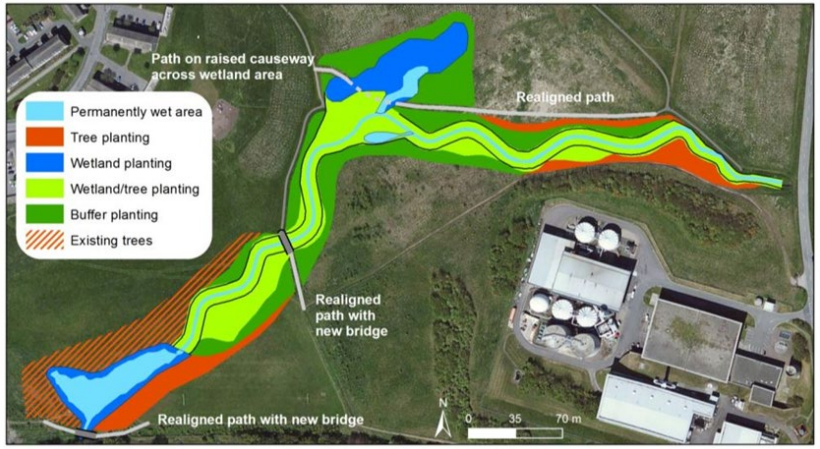
- Recognition that GS supports wellbeing, resilience & adaptation (esp. GS in urban areas) not to be traded off.
- No sacrifice zones, use existing brownfield & industrial sites.
- Use GS to advance social, health and local energy innovation while protecting biodiversity.

Participation & Empowerment

- Reform local decision making with inclusive approaches that represent all interests. Include marginalised voices. E.g. Climate Assemblies
- Clear N0 vision for the NE – deal with fractured governance and competition.
- Empower communities, not passively 'consult' on JT.


Balnagask Golf Course
Torry & Balnagask
St Fittick's Community Park
Aberdeen South Harbour
Waste Water Treatment Works
Former Ness Landfill (Site of proposed Solar Farm)
Tullos Wood
Greyness


HAUNS AFFA TORRY
YIR NAE GETTING AWA WI THIS AGAIN
ACTION PORTY CLIMATE JOBS NOW
HANDS OFF


Path on raised causeway across wetland area
Realigned path
Permanently wet area
Tree planting
Wetland planting
Wetland/tree planting
Buffer planting
Existing trees
Realigned path with new bridge
Realigned path with new bridge
N
0
35
70 m

Energy Justice	Criterion	Themes from interviews
Distributional	What are the primary benefits?	Benefits from low carbon industrial development: offshore wind, CCS, decommissioning (long term); local employment opportunities; skills & training; investment; commercial opportunities.
	Who are the intended beneficiaries?	Energy workers; energy companies (local – international); economic agencies (ONE, AHB, ACC), SMEs; local people for 'jobs and training' opportunities.
	What are the costs and how are these costs distributed?	Loss of St Fittick's Park and commons / greenspace. Loss of access for immediate population and long-term impacts on community wellbeing. Deprived communities bear the costs.
Recognition	Who does this proposal serve?	Proposal is aligned with economic interests in the energy sector and regional economic development interests. Community cited as beneficiaries for jobs.
	How does the proposal level the playing field in terms of access to energy services or benefits?	Advances industrial decarbonised energy production. No reference to community energy initiatives or services.
Procedural	What channels have been employed to provide stakeholders with input to decision-making processes?	Limited public consultation on FS and D-LDP. Ad hoc informal consultation via community planning groups. No recognition of community alternatives.

Understanding Social Values on Low Carbon Sub-Surface Technologies in the UK and Australia

Aya El Samad

BACKGROUND

- Since the Paris Agreement was signed in 2015, greenhouse gas-emitting countries around the world have been speeding to set climate targets.
- Many countries including the UK and Australia have committed to net zero by 2050.
- The net zero strategies are reliant on the utilization of different low-carbon sub-surface technologies as prominent mitigation methods including Carbon Capture, Utilisation and Storage (CCUS).
- CCUS has many challenges one of which is the acceptability by different stakeholders, which can impact project deployment.
- This research project aims to map the level of public understanding and social acceptance of CCUS in the UK and Australia, specifically in North East of Scotland and Western Australia.

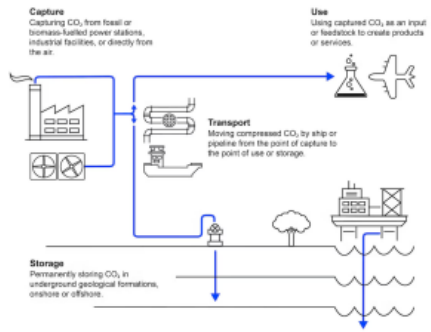


Figure 1: What is CCUS? (IEA, 2021)

THEORETICAL FRAMEWORK - SOCIAL ACCEPTANCE & SOCIAL LICENCE TO OPERATE (SLO)

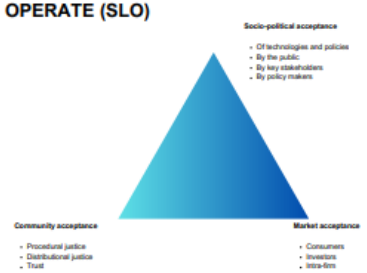


Figure 2: Triangle of Social Acceptance (adapted from Wüstenhagen et al. 2007)

Figure 3: Pyramid Model of SLO (Thomson and Boutilier, 2011)

RESEARCH OBJECTIVES

- Investigate the differences and similarities of CCUS mitigation strategies between the UK and Australia.
- Investigate the social perceptions of CCUS in the chosen case studies and the effect these perceptions have on CCUS uptake and gaining a social license to operate.
- Evaluate the utility of Q-methodology as a useful tool for research on CCUS perceptions.
- Investigate and examine the difference and similarities in perceptions across the UK and Australia and how improving engagement strategies and understanding local dynamics can help achieve national climate and energy goals.

RSE
The Royal Society of Edinburgh
KNOWLEDGE MADE USEFUL

Thankyou!

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