



WP4: Mapping societal acceptance and the legitimacy of amine-based CCUS

SPRINT Event #4, Trondheim 22 June 2023

Abigail Martin, PhD

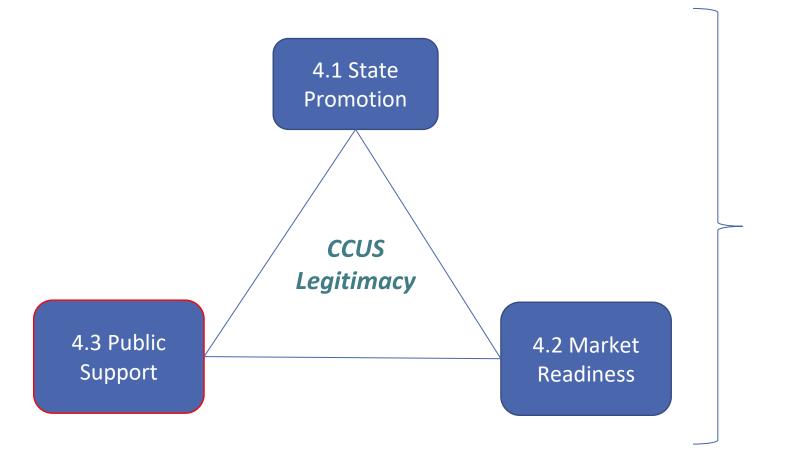
Science Policy Research Unit (SPRU), University of Sussex Business School

WP4 Objectives

- 1. Investigate nationally-specific promotion strategies;
- 2. Determine cross-national as well as geographically-specific challenges of scaling and commercialising amine-based CCUS projects;
- 3. Map the views of diverse publics regarding the impacts of CCUS developments generally and amine-based capture specifically;
- 4. Identify public expectations for ethical governance of amine-based CCUS projects at multiple levels of jurisdiction;
- 5. Transfer social science knowledge and governance recommendations through the Stakeholder, Policy, Research & Industry Network (SPRINT).



A Multi-Sectoral Framework for Studying Societal Acceptance



4.4 Governance strategies needed to improve societal acceptance / legitimacy



Mid-term Review Meeting, Oslo, WP4

Task 4.3: Investigating public support for CCS/CCUS/amine-based capture

4.3.1. Map the key impacts and public debates in 4 countries

- Review of impacts across key stages of industrial value chains adopting CCS/CCUS
- Qualitative research into civil society concerns international and domestic environmental NGOs about their positioning

4.3.2: Identify local concerns

- Qualitative research into workers & host "frontline" communities in the UK, NOR, NL, IN
- 4.3.3. Identify national opinions
 - Quantitative research: polling 4 nationally-representative samples



What do we already know about public perceptions & acceptance of CCS/CCUS?

- Overall trends:
 - Moderate public acceptance of CCS/CCUS
 - Low-to-moderate levels of public awareness and understanding
 - CCU perceived somewhat more positively than CCS
 - Some value chains perceived more positively than others
- Explanatory / contributing factors
 - High awareness-knowledge levels ≠ a higher degree of acceptance
 - NIMBY-ism doesn't dominate
 - Trust in the project developer matters
 - Meaningful v performative public engagement matters
 - Perceived risk & benefits matter... but which ones and why?



How does CCS/CCUS figure into public expectations for 'just transitions'?

- Just Transitions: "...the need for targeted and proactive measures from governments, agencies, and authorities to ensure that any negative social, environmental or economic impacts of economy-wide transitions are minimised, whilst benefits are maximised for those disproportionally affected."
- Key principles from trade union, indigenous rights and environmental justice movements
 - The need for "high road" family-supporting jobs; worker safety and protection; union power
 - The need to address disproportionate environmental risk in low-income and/or minority communities AND ensure access to benefits of low-carbon transition
 - The need for respect of, and democratic consultation with, affected groups (e.g. vulnerable, historically-disadvantaged, disenfranchised indigenous groups) via inclusive & meaningful participation in decision-making
 - The need to redress past harms and injustices



"Just Transition" in Policy Agendas

(b) European Green Deal – Just Transitions Fund (a) Just Transition commissions, task forces and dialogues CA GER PO US GF CH GH (c) Platform for coal regions in transition AUS Brandenburg, Saxony, Saxony Silesia, Lower Silesia, Greater Poland, Lesser Poland Anhalt, North Rhine-Westphalia Moravia-Silesia, Usti, Karlovy Vary Asturias, Aragón, Castilla-y-León Western Macedonia Upper Nitra Jiu Valley Zasavska, Savinjsko-Šaleška Costa Rica: National Czech Republic: Czech Finland: Working group to Australia: La Trobe Valley Canada: Task Force China: Mine closure Authority on Just Transition for provisions in the 13th Five Decarbonisation Plan **Coal Commission** ensure a fair and just **Canadian Coal Power** Year Plan for Coal Industry 2018-2050 transition and acceptability Midlands Workers Development, 2016-2020 of climate measures France: 2018 Ecological Germany: German Ghana: The National Greece: National Just New Zealand: 'Just Poland: The 1998 **Transition Contracts** Commission on Growth. **Dialogue on Decent Work** Transition Fund for Lignite Transitions Unit' within the Mining Social Package and 'Just Transition' to a ministry of Business. and Special Privileges programme Structural Change and areas **Employment** (German Coal Sustainable Economy and Innovation and for the mining Society **Employment (MBIE)** Commission) communes Scotland: Scottish Just Slovakia: Transformation South Africa: National Spain: Framework United States: Partnership Transition Commission Planning Just Transition Agreement for a Just for Opportunity and Action Plan of coal region Dialogue + the One Million Transition on Coal Mining Workforce and Economic **Upper Nitra Climate Jobs Campaign** and Sustainable **Revitalisation Plan** Development (POWER+)



Lecocq, F., H. Winkler, J.P. Daka, S. Fu, J.S. Gerber, S. Kartha, V. Krey, H. Lofgren, T. Masui, R. Mathur, J. Portugal-Pereira, B. K. Sovacool, M. V. Vilariño, N. Zhou. "Mitigation and development pathways in the near- to mid-term. In Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.006

Decarbonising the Scottish Cluster with CCS







Just Transition Commission

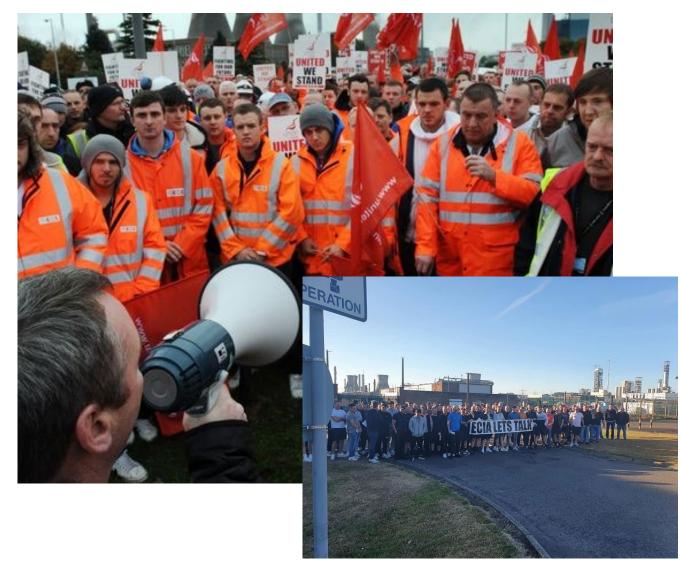
A national mission for a fairer, greener Scotland



Just transition concerns and CCS/CCUS

Worker perspectives from the UK:

- Hope that CCS will preserve jobs and generate new training and employment opportunities for new generation unionized and independent contract labor
- Enthusiasm for Grangemouth and UK as a global leader in deploying CCS as a climate mitigation technology
- Concerns about whether CCS will strengthen or weaken labor power (e.g. Unite and Ineos in the "Battle for Grangemouth")
- Solidarity with communities ("We don't want to cross their picket line" - GMB NW Leadership on respecting local protestors)



UK worker disputes at Ineos Grangemouth oil refinery in Oct 2013 & Aug 2022

9

Just transition concerns and CCS/CCUS

Community perspectives from the UK:

- Mixed sentiments about CCS in Grangemouth intertwine with views on Ineos & Jim Rattcliff
- Desire to maintain assets & local legacy as a "cradle" of industrial revolution and (the site of Watt's steam engine experiments to CCS + hydrogen innovations)
- Desire for "cleaner and healthier future, free from the oil and gas giant" that is not dependent on Ineos ("we have other industries and companies")
- Ongoing distress about Ineos flaring
- Deep distrust towards Ineos and Scottish Environmental Regulator
- Skepticism towards local, Scottish & National gov't's ability to address inequality & pollution, and keep Ineos happy
- Local environmental and youth activism against CCS and hydrogen as greenwashing Ineos



Community photos of Ineos flaring (Oct 2022) and organizers for a Grangemouth climate camp(June 2023)

SCCPE

Just transition concerns & emerging crossnational patterns



Procedural justice concerns:

- Will defining our collective industrial future and the energy transition be democratic and participatory?
- Will industrial decarbonisation exacerbate or help resolve ongoing conflicts between industry and workers/communities about how to regulate industrial activity and govern industrial change?

Distributive injustices

- Does state support for CCS direct public resources towards shoring up O&G companies that aren't serious about keeping fossil fuels in the ground? Are these resources better spent elsewhere?
- Will investment in CCS for hard-to-abate industries improve pollution hotspots?



Task 4.3: Investigating public support for CCS/CCUS/amine-based capture

4.3.1. Map the key impacts and public debates in 4 countries

- Review of impacts across key stages of industrial value chains adopting CCS/CCUS
- Qualitative research into civil society concerns international and domestic environmental NGOs about their positioning

4.3.2: Identify local concerns

• Qualitative research into workers & host "frontline" communities in the UK, NOR, NL, IN

4.3.3. Identify national opinions

• Quantitative research: polling 4 national samples



Acknowledgements

This project is funded through the ACT programme (Accelerating CCS Technologies), ACT 3 Project No 327341. Financial contributions made by the Research Council of Norway (RCN), Rijksdienst voor Ondernemend Nederland (RVO), Department for Business, Energy & Industrial Strategy UK (BEIS), Forschungszentrum Jülich GmbH, Projektträger Jülich (FZJ/PtJ) Germany, Department of Energy (DoE) USA and Department of Science and Technology (DST) India are gratefully acknowledged.

www.scope-act.org

@SCOPE_ACT

