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Delivering Place-sensitive and Fair Industrial Decarbonisation

Policy Brief

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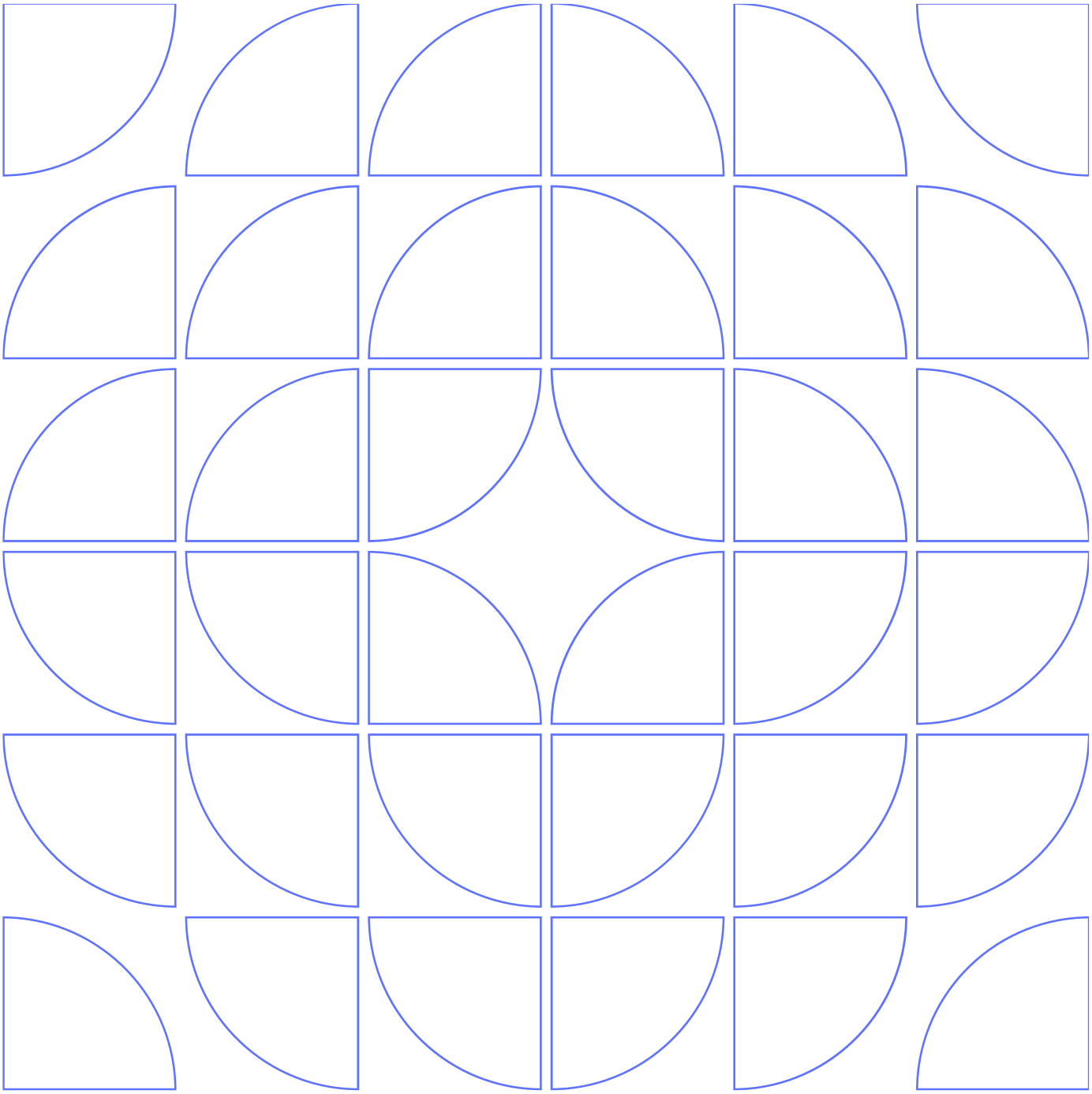

Policy Brief

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Delivering Place-sensitive and Fair Industrial Decarbonisation

To deliver socially acceptable and fair industrial decarbonisation, government and industry need to take a place-sensitive approach that sees host communities and workers as partners in making net zero industrial clusters. This requires 'bottom-up' as well as 'top-down' governance of industrial decarbonisation, and involves proactive, ongoing and two-way engagement with host communities and workers.

Summary

Engagement with host communities by cluster stakeholders has been fragmented and deficient to date, only taking place around specific planning applications and lacking at the cluster level. This deficit in public engagement, coupled with widespread lack of trust in both government and industry, poses a serious risk to policy goals for industrial decarbonisation (ID). If not addressed, it can lead to unexpected resistance, costs and delays to the deployment of cluster plans. It also reduces the potential for ID to produce co-benefits across other policy domains consistent with Just Transition and Levelling Up.

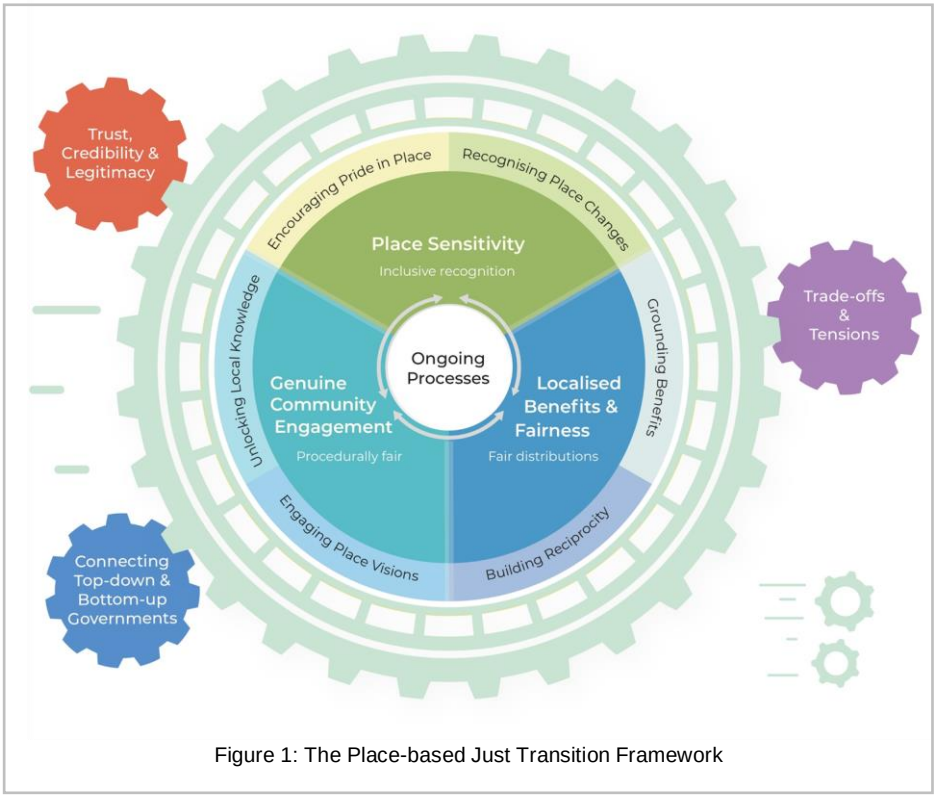

Figure 1: The Place-based Just Transition Framework

Our research shows that formulating policy and cluster plans that are acceptable to host communities rests on the ability to develop place-based understandings of local needs, desires, histories and experiences of unfairness. ID re-makes industrial places in ways that have the potential, if done with place and fairness in mind, to deliver social, economic and environmental justice for current and future generations.

This Policy Brief combines evidence from four social research projects funded by the Industrial Decarbonisation Research and Innovation Centre (IDRIC). It provides recommendations guided by the seven themes of a new framework (see Figure 1 and Section 2) to help policymakers and cluster developers:

- Attend to the long-term social impacts of ID to deliver a fairer, more sustainable future for host communities and workers;
- Recognise historical impacts of industrial development on host communities as well as potential future climate impacts requiring local adaptation;
- Use the benefits of ID to meet broader needs identified by host communities;
- Establish, support and evaluate diverse forms of public participation and engagement based on transparent and balanced information sharing and concrete actions;
- Build public trust in industry, governments and decarbonisation technologies;
- Improve coordination within and between administrations and governments; and
- Recognise and prepare for tensions and trade-offs between different stakeholder priorities.

What we mean by

Place-based: Technology deployment is a place-making process that impacts host communities and shapes sense of place.

Just transitions: Public support for ID is related to concerns over socio-economic inequalities and environmental injustices experienced by current and future generations that are impacted by industrial activities.

Social licence: Referring to high levels of ongoing support from multiple stakeholders on the need for and value of ID; it is context specific and dynamic in nature.

Two-way engagement: Recognising residents and workers as experts of the (work)places and engaging with them to refine ID projects and plans in specific contexts, while providing impartial and timely information of projects and clusters to obtain their consent.

1. Recommendations

Recommendations to government and cluster developers

(1) Start from the perspective of places and host communities where technology deployment is planned.

Doing so recognises that ID shapes the places where technologies are deployed, and pays more attention to positive *and* negative consequences for host communities with unique histories, lived experiences and development challenges.

(2) Provide integrated, responsive and accessible information.

More effort is needed to ensure clarity and consistency in policy and cluster narratives concerning how individual technologies fit into cluster plans and broader climate policy goals. Our evidence shows that information provision to the public about industrial clusters is often fragmented, outdated and dispersed across several project websites. This creates unnecessary barriers and confusion. It also worsens mistrust in government and industry given existing community perceptions of lack of transparency around policymaking and plans for technology deployment. This should be remedied by enabling information exchange through physical hubs in host communities and a cluster-wide online platform that uses plain English to: a) justify the approach to ID, b) address risks and concerns (not only the benefits) of the technologies selected, c) outline when decisions about ID projects were made and by whom, and d) learn from the suggestions and responses from local people to improve cluster plans, project designs and technology deployment.

(3) Support diverse forms of public participation in formulating net zero narratives, plans and policies.

This requires two-way public participation that delivers 'bottom up' as well as 'top down' net zero governance. In contrast to one-way messaging, this involves recognising the value of local and lay knowledge to inform technology deployment in places, and opens up spaces for people directly affected by ID (e.g. workers, residents, local council/representatives) to help shape cluster visions, narratives and decarbonisation technologies. These activities should be well-resourced, institutionalised and ongoing.

(4) Take an evidence-based approach to community engagement.

Evaluate existing mechanisms of community consultation and benefit sharing. Our evidence suggests that these are often not well known about or functioning effectively to address host communities' concerns. Recent examples of inadequate community engagement (e.g. about hydrogen) show the necessity for industry and government to learn from past mistakes by delivering two-way engagement from an early stage, and attend to tensions, trade-offs and polarisation. It is also useful to support knowledge exchange on (un)successful community engagement between places and clusters. Our evidence shows a need for mutual learning (e.g. regarding engagement practices and community development funds) exists, given the novelty and challenges of ID.

(5) Deliver positive impacts for the prosperity and wellbeing of host communities and workers.

We found widespread local scepticism about the potential benefits of ID, including claims to bring new jobs to host communities that could regenerate declining industrial areas. How these claims will be translated into concrete local benefits needs to be clarified as a condition of funding programmes and policy regulations (e.g. via community benefit funds, employment quotas, and training and skills programmes targeting host communities). A sense of fairness among residents and workers as well as the credibility of ID policies and plans can be enhanced, if industry and government address wider local concerns (e.g. the provision of housing for workers at different pay grades, reducing local unemployment, reducing residents' dependence on food banks, improving air quality).

(6) Rebuild trust.

Public trust needs to be rebuilt with government (both local and national) and industry, following past experiences and ongoing events in industrial settlements (e.g. flaring at industrial facilities, perceptions of secretiveness around industry activities, experiences of being ignored in decision making). There is scepticism of industry motives and commitment to decarbonisation, when specific deployment projects are seen as contradicted by other industrial activities by those companies. Our research indicates that open, transparent and sustained engagement by industry and government, involving trusted intermediaries, can enable relationship building and potentially regain trust over time.

Recommendations to the UK Government

- Deliver a programme of sustained net zero public participation to make industrial policy open and responsive to society at all levels. We found numerous concerns and questions among host communities about the proposed technologies (particularly carbon capture and storage and blue hydrogen) and decarbonisation plans (e.g. what role for efficiency and demand reduction). This indicates the need for wider public and stakeholder dialogue on these issues.
- Allocate more resources to increase the capacity for community engagement by government (especially at the local level which often suffers from budget cuts and a lack of human resources), enabling delivery, reflection, learning and evaluation, and make host community engagement a condition of awarding public funds to clusters and ID projects.

Recommendations to the UK and devolved governments

- Recognise the negative consequences of national policy instability on public support and social licence for net zero. Community trust in - and consent for – ID policies can be undermined when national government support for net zero is weakened.
- Publicly demonstrate how ID will improve existing and potential pollution burdens, so that environmental inequalities and social injustices experienced by host communities and workers are improved. This requires tackling current governance challenges, including shortage of resources and influence on industry in regulatory bodies such as SEPA.

Recommendations to local government

- Integrate ID projects with other local initiatives (e.g. Levelling up initiatives, community action plans).
- Integrate community benefit funds across projects, and ensure these are accessible to a wide range of local community organisations. Successful examples of community benefit funding can provide useful models (e.g. Shetland Community Benefit Fund).[1]

[1] See https://scbf.org.uk/.

2. Why these recommendations

In the following section, we provide more details about these recommendations and the rationale behind them. In line with this policy brief, we also produced contextualised **action plans** for three industrial heartlands (Grangemouth, Ellesmere Port and Milford Haven) to explore local implications of these recommendations. These action plans are available on our project webpage (see below).

The challenge: Costly delays for cluster development caused by a technocentric approach

Public support is crucial for delivering the UK climate goal of reaching net zero by 2050 and for creating low- and zero-carbon industrial clusters across nations by 2040. Decarbonisation technologies such as hydrogen and carbon capture, utilisation and storage (CCUS) will not only transform industrial heartlands. They will also affect people who live or work nearby. It is vital to obtain social licence and buy-in from local communities to enable a low-carbon industrial transition that can be considered fair, credible and legitimate.

Evidence from our research indicates a general lack of an integrated, constructive and proactive community engagement in cluster development. Most policy and industry attention has been paid to technological advancement and commercial models. Community consultation is mainly conducted in a passive, limited and instrumental manner (such as to obtain the land use planning consent for individual projects). Place is considered mainly in economic terms or as a branding technique. This approach reinforces a shared impression among local communities that their views and concerns over local development and impacts from industry have been overlooked. This poses significant challenges for the creation of a social licence and just transitions. It increases the risk of communities' misunderstanding and mistrusting industry, individual projects and the technologies involved, leading to unexpected resistance, costs and delays for the deployment of cluster plans.

Our research suggests that ID also offers valuable opportunities for governments and industry to build positive, reciprocal partnerships with local communities and workers if it is carried out in a place-sensitive, socially fair manner. Many industrial areas have suffered from environmental degradation, poor public services and infrastructure, and pockets of deprivation, along with declining economic and employment opportunities. Addressing these broader social concerns with benefits of ID and effective community engagement will help address residents' grievances and improve local perceptions of industrial and cluster activities. This will also help deliver the policy vision of levelling up declining industrial areas, demonstrate the social and economic values of ID, and create a low-carbon ecosystem for both industry and communities to thrive. These promising opportunities will not happen, however, unless there is a more place-sensitive approach to technology deployment in policymaking and cluster development.

Our solution: A tool for delivering place-based, fair industrial decarbonisation

To tackle the challenge and unlock the opportunities of ID, this policy brief urges policymakers, industry and cluster developers to adopt **a place-sensitive mindset.** This sees local communities and workers as partners in making net zero industrial places and commits to addressing the current and past burdens these groups have carried as a result of industrial change. Specifically, we propose seven key themes distilled from four IDRIC social research projects to support the delivery of place-based, fair industrial transitions in industrial clusters. We recommend reading this policy brief together with the introduction to this framework that is available on our project webpage (see Further Information). Below, we highlight the key points that underpin these policy recommendations.

Theme 1: Ongoing processes

ID is a dynamic process coupled with the remaking of industrial places and the pursuit of social, environmental and economic justice for current and future generations. Two premises need to be constantly taken into account in policymaking and cluster development:

- Technology deployment will have long-term social impacts on the lives and wellbeing of host communities and workers, besides long-standing economic consequences for regional development.
- Public support is not simply a result of consultation and promotional activities. Instead, it requires continuous commitment to obtain and maintain the trust of those affected and society at large in every step of political and industry decision making. Policy changes that are seen as contradicting UK climate goals will reduce public trust in government and industry.

Theme 2: Place sensitivity

Past/existing impacts of industry in place – both positive and negative – need to be recognised and addressed in the process of industrial decarbonisation.

- Mixed feelings for industry often exist in industrial places. Many residents across our research sites observed a decrease in industry support for worker communities and places. Global competition and the profitmaking imperative of multinational companies, along with the decline in local employment, contribute to a seemingly extractive relationship in which industry is seen as separate from community life rather than as a source of pride.

> *"I want industry to be seen as a blessing rather than a curse."*
> - Grangemouth resident

- Current concerns over industrial pollution and grievances against industry, if unaddressed, increase the risk of local opposition against individual decarbonisation projects and broader cluster plans. Our research indicates a shared scepticism within host communities across cases in the proclaimed benefits of ID, due to the existing and past experiences, sense of injustice and distrust, and imbalanced industry-community relationships.

Theme 3: Genuine community engagement

Engagement needs to be systematic, transparent, accessible, timely, ongoing, balanced, address concerns and acted on.

- Host communities are typically unaware of cluster decarbonisation plans but are keen to learn more. Forms of communication and engagement can include:
  - Accessible integrated points of contact for learning and engagement. This could take the form of one user-friendly, public-facing website with a holistic overview and updated information about the status of all projects and involved technologies in a cluster. Another example could be a physical hub in the high street of a place like Grangemouth to ensure continuous updates about technology deployment plans in the local area.

> *"It seems that [engagement] should have happened way back, talking about [cluster deployment projects] happening in 2025 – what's happening? People are already on the back foot. We're talking about this as a concept and yet things are already happening."*
> - Ellesmere Port resident

  - Regular public forums for Q&A, information provision, building trust and knowledge exchange.
  - Citizen assemblies and juries can provide opportunities for lay and expert participants to deliberate about technically complex issues (e.g. carbon capture, utilisation and storage), exchange ideas, and ultimately share viewpoints that can inform policy.

- These activities can also serve as engagement skills training for both the organisers (e.g. government, industry and cluster developers) and host communities, and should be regarded as of similar importance as technology skills training programmes to meet the workforce demand of ID.
- Current one-way messaging and fragmented consultation activities aiming at obtaining legal consent for individual projects are clearly insufficient to win trust and support from host communities. Genuine community engagement means:
    - Respect host communities as equal partners and experts in the local social and natural environment;
    - Be proactive (e.g. open dialogues on alternative visions or options at an early stage) and inclusive (e.g. involving non-government organisations, independent experts, residents of various backgrounds);
    - Build upon previous consultation results and lessons;
    - Produce tangible results and impacts afterwards.

Theme 4: Localised benefits & fairness

Channel benefits to host communities in ways that address past harms and tackle broader needs.

- General claims of 'bringing jobs and delivering economic growth' need to be translated into better-paid and better-quality jobs and clear workforce development plans accessible for local people (including the youth and the unemployed) in a timely manner. This could involve specifying how jobs and skills training align with national government educational policies; implementing and upholding local employment quotas; channelling skills and training opportunities to where needed locally; and setting up longer term partnerships (e.g. paid apprenticeships) with schools, colleges and agencies responsible for older unemployed people.
- Need to address broader local concerns (e.g. transport, poverty, housing, education, healthcare, non-CO_2 pollutants) besides jobs provision and greenhouse gas emission reduction. Many industrial places have suffered from high level of social inequality and a lack of public services and infrastructure. Attending to these broader social issues directly or indirectly with benefits of ID (e.g. setting up community benefit funds for local development projects) can generate a sense of reciprocity and improve local perceptions of industry and decarbonisation projects. Lessening the cumulative impacts of industrial pollution borne by host communities can also reduce local grievances and sense of injustice.

> *"It is a nice lot of words, but it also makes me a little bit angry. Because if there is much money in the area, why do we have food banks and child poverty? … billions of pounds worth of investment. Is Milford going to see any of that? Are locals going to see any of that?"*
> - Milford Haven resident

Theme 5: Trust, credibility & legitimacy

Early, open and honest engagement wins trust and can help secure a social licence.

- Higher level of transparency in decision making is necessary. A lack of trust between government, industry and host communities is common in industrial places. For instance, there is little public trust in oil and gas companies delivering carbon storage, in environmental regulators and in government awarding contracts (related to corruption concerns during the awarding of covid contracts). Our research shows that host communities value 'honest' conversations about the risks and benefits of ID.
- Ways to improve trust in cluster decarbonisation plans can include:
    - Meaningful community engagement from the early stage;
    - Learn from past successful and unsuccessful experiences;

- Involve trusted intermediaries (e.g. community councillors and local independent news reporting);
- Deliver on targets and promises;
- Coherent policy goals and decision making;
- Establish accountability mechanism.

Theme 6: Connecting top-down & bottom-up devolved administrations and governments

Better coordination between levels of government is needed for effective resource allocation, knowledge exchange and community engagement.

- Given the multi-scalar and multi-faceted nature of cluster development, it is important to ensure good connection between different levels of government, government departments and different local authorities in a cluster region. This could involve new institutional partnership/organisations to enable integrated and multilevel decision making across governments, industry and civil society organisations. Emerging examples at the local level include the Grangemouth Future Industrial Board (GFIB) led by Scottish Government in cooperation with local authorities, industry and local civic groups. Clarification of responsibilities among different government agencies in regulating the decarbonisation process can help reduce confusion and misplaced blames. Additionally, there is a need for cross-cluster networking among government and cluster developers to exchange lessons about engaging communities with ID.
- More public resources need to be allocated to local authorities and environmental regulators to strengthen their capacity to monitor technology and infrastructure deployment, and to channel benefits to people and areas that are affected and most in need. Similarly, more cluster resources should be devoted to community engagement besides developing technologies and business models.

Theme 7: Trade-offs & tensions

Recognise and prepare for tensions between different stakeholders and priorities that will inevitably arise alongside the decarbonisation process.

- Explore tensions between communities and workers' needs and broader social justice issues, such as that between local people and existing mobile workforce from elsewhere, as well as trade-offs between the need to secure jobs and the concern over risks and environmental impacts of industrial activities. Particularly, building host communities' capacity to engage with change generated by ID will be imperative. Change to industrial places is likely to be inevitable as industrial companies alter their operations in response to the global push to cut emissions. Host communities will face trade-offs and tensions navigating between different future trajectories, that could include shifts in job opportunities and potential economic restructuring. This adds to the importance of providing host communities with sufficient information and opportunities for engaging in the process, as well as improving community capacity with localised benefits of ID.
- There is seemingly a tension between speeding up ID and making the process more inclusive and fair. We recommend government and industry consider genuine community engagement as an enabler – rather than an impediment – to deliver ID in a timely, more effective and socially acceptable manner. While meaningful community engagement will take time and entail resourcing, it also reduces the risk of unexpected delays to decarbonisation projects, inadequate designs that do not fit local contexts, and project cancellations due to local opposition.

Further Information

Info & outputs of this project

- IA3.1 'Delivering a Place-based Just Transition in Industrial Clusters' project https://idric.org/project/ia-3-1-delivering-a-place-based-just-transition-in-industrial-clusters/

Publications of 4 partner projects

- MIP3.4 'Net Zero Sense of Place' project https://idric.org/project/mip-3-4/
- MIP2.4 'Just Transitions for Industrial Decarbonisation in the UK' project https://idric.org/project/mip-2-4/
- MIP6.5 'Protective Space and Social Licence to Operate Industrial Decarbonisation' project https://idric.org/project/mip-6-5/
- MIP9.1 'Learning from International Experience in Decarbonising Industrial Clusters' project https://idric.org/project/mip-9-1/

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Contact

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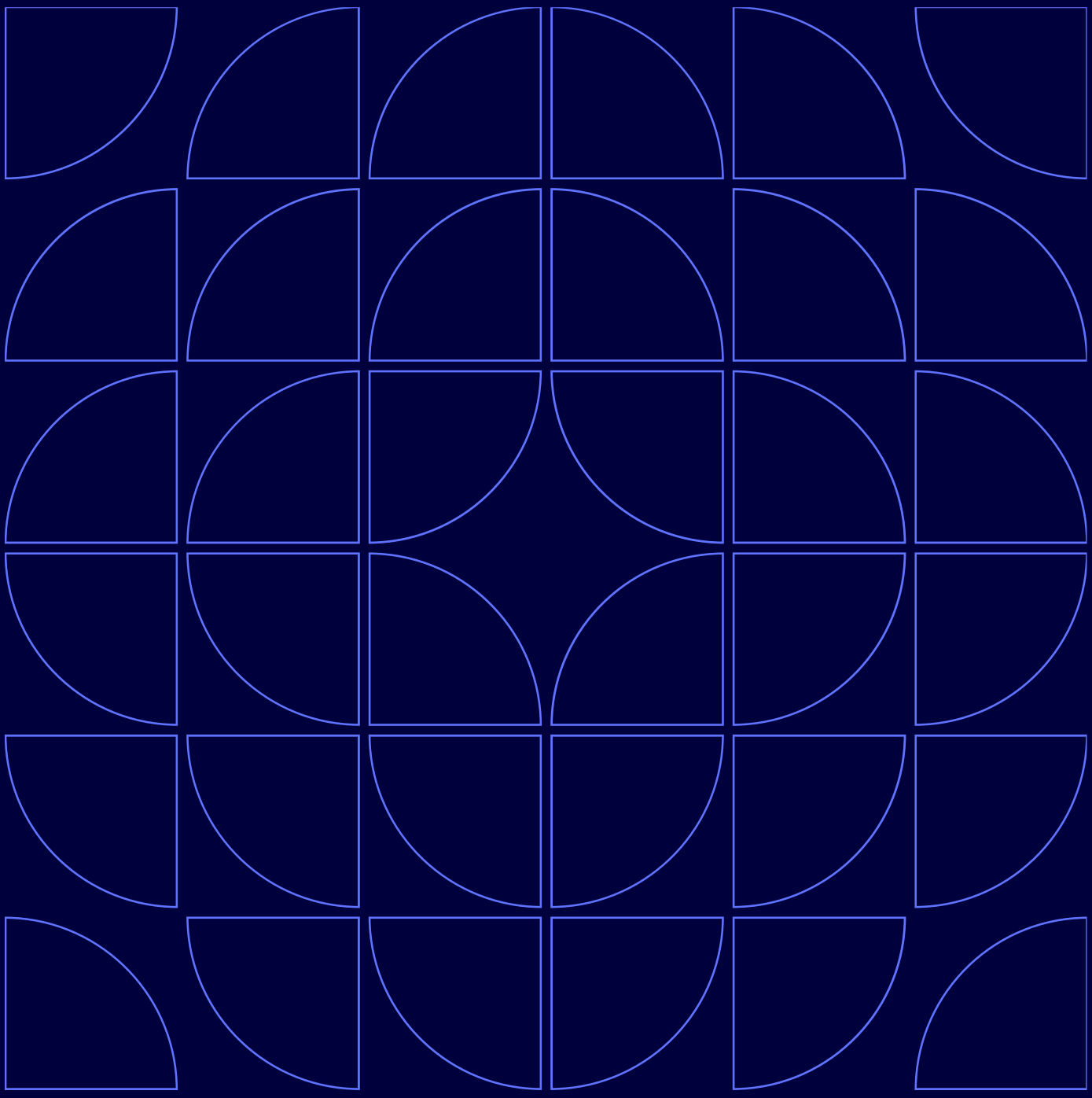
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