

JUST ENERGY TRANSITION

BASELINE KNOWLEDGE ASSESSMENT

A COMMUNITY SURVEY REPORT:

SOUTH DURBAN BASIN, ETHEKWINI, KWAZULU-NATAL



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FOREWORD

Sekoetlane Phamodi, Programme Director – New Economy Hub

South Africa is at a crossroads. The global race to achieve net-zero emissions is accelerating, reshaping economies, industries, and labour markets at unprecedented speed. Here at home, the Just Energy Transition (JET) has moved from aspiration to action, with the government's JET Investment Plan (JET-IP) setting the direction for how South Africa will decarbonise while addressing historical inequalities. Yet, all too often, these high-level shifts risk leaving behind the very communities most affected by both climate change and industrial decline.

Being among South Africa's petrochemical strongholds, a fossil-fuel free South Durban still feels like a pipe-dream, but its residents are dreaming vigorously. The Durban South Community Advice Centre's (DSCAC) is among the embedded and community-serving organisations encouraging these dreams to renew the South Durban Basin. They are doing this by supporting community people to map local understandings of their problems, vision alternatives, and generate community-owned evidence that can be leveraged to frame green industrial futures in practical terms.

This survey report—The Just Energy Transition Baseline Knowledge Assessment—offers insight into how the energy transition is understood, felt and imagined in one of South Africa's most fossil-fuel industry dependent and environmentally burdened regions. It also signals the sheer scale of work and investment that is required to understand, prepare and involve carbon-dependent and climate affected communities in charting concrete pathways to a new and inclusive economy beyond fossil-fuels that delivers material benefits.

A "just" transition to net-zero will not be measured solely in megawatts of renewable energy added to the grid or by emissions reductions alone; its true success will lie in whether it delivers tangible social outcomes: cleaner air, accessible energy, decent work, and more resilient local economies.

The New Economy Hub sees this work as part of a broader movement to ensure that South Africa's shift to a low-carbon economy is not only technologically sound but socially just. The choices made in places like the South Durban Basin will shape not just local futures, but the credibility and coherence of South Africa's national transition pathway in the years ahead.

Conducted by the Durban South Community Advice Centre (DSCAC)

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Supported by New Economy Hub



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1 INTRODUCTION

The Just Energy Transition (JET) project seeks to bring together community members, civil society structures, business and local government to co-create a roadmap to mitigate the impact of South Africa's energy transition on the lives and livelihoods of people living and working in the South Durban Basin (SDB).

This project focuses on strengthening the capacity of communities to understand the energy transition, the overarching just transition framework, and the imperatives that underpin these, to equip communities to be propositional about expectations and outcomes of the emerging plans to transition and adapt the key industries and communities in the SDB on a net-zero pathway. This will be done by building the information, skills and access to technical support to engage constructively and confidently in the process. The project will run for 12 months and started late in 2024.

Why a knowledge assessment?

The aim of the knowledge assessment is to help the project team and community representatives gather information about the community's understanding, awareness and perceptions of the just energy transition. This includes shifts to renewable energy, energy equity, and the social, economic and environmental impacts of an energy transition. The data collected for the assessment will inform key project activities and information materials development in the six communities of the SDB. This report documents this process and the findings and outlines a set of considerations to inform project implementation.



2 METHODOLOGY

A contextual analysis in the form of a desk review was conducted to determine the context and impact of energy transitions on the SDB. The analysis was used to provide the data collectors with an overview of the key issues as part of their training and to develop the questions for the survey (see Annex 1). The aim of the JET knowledge survey was to gauge understanding and knowledge of what energy transition entails, define and provide examples of a just energy transition, and explore the impact of energy transitions on communities, in terms of cost of living and employment.

Training and support for data collectors

Twelve data collectors were recruited from Merebank (3); Lamontville (2); Jacobs (1); Wentworth (3); Clairwood (1); and Bluff (2). On 1 February 2025 six of the twelve data collectors¹ attended a workshop on the knowledge survey process and the survey questions. The process was explained individually to other data collectors recruited from the community.

Data collectors were supported through weekly telephone calls and sites were visited to discuss challenges and progress, and to collect completed surveys. Data collectors were remunerated at R20 per questionnaire completed to contribute to their transport and incidental costs.

Data collection took approximately six weeks, with final surveys submitted in mid March. A concurrent data capturing and checking process was supported by the JET project team using an Excel data analysis sheet for data entry. This was completed in mid March; 848 of a planned 900 surveys were completed (94% of the target).

Data analysis

Data analysis consisted of a coding process for the qualitative data collected, whereby the open-ended questions were analysed for a set of high-level themes. All responses were then coded accordingly to generate a set of graphs and a supporting narrative.

A post-survey workshop was held on 29 March 2025 to gather feedback from data collectors on the process and on what they observed to be key themes and key messages coming from the baseline assessment process.

¹ Lamontville (2), Merebank (1), Clairwood (1) and Bluff (2).

3 CONTEXT AND IMPACT

ENERGY TRANSITION AND CLIMATE ADAPTATION IN THE SDB

In the South Durban Basin (SDB), energy transition and climate adaptation efforts are set against a backdrop of significant industrial activity, environmental challenges, and social inequality. Residents of this heavily industrialised area, with its oil refineries, chemical plants and logistics centres, have long been exposed to pollution and environmental hazards. The changes that accompany South Africa's move toward a greener and more climate-resilient economy are likely to affect the livelihoods, health and daily lives of SDB's residents and workforce.

The community

The SDB is a densely populated area² with diverse ethnic groups, including Black, Indian, and Coloured populations and a mix of low- to middle-income households. Economic inequality is widespread with many families facing poverty and limited social mobility. A high percentage of children and youth, as well as a growing number of older people, obviates the need for services like education, healthcare, and elder care.

The economy of the SDB centres on the petrochemicals, manufacturing, and logistics sectors. Many SDB community members work in low- and semi-skilled jobs. High dependency on these sectors means any economic shifts in industry or energy could have a significant impact on household incomes and employment stability.

Poverty rates are high, particularly in informal settlements and low-income neighbourhoods. Limited access to quality education and job training further restricts income growth and mobility, which keep many families in poverty.

Many residents live in areas with substandard housing and infrastructure, where access to clean water, sanitation, and reliable electricity is inconsistent. These challenges reduce quality of life and increase vulnerability to environmental risks, like flooding and industrial pollution.

Women are more vulnerable to economic shifts and less likely to benefit directly from job growth in green industries. Men often dominate industrial jobs, particularly in skilled roles, while women are more likely to work in informal or lower-paying service roles. Women in the SDB, especially those in low-income households, are typically responsible for household management and caregiving. This can limit their time and ability to pursue formal employment, training, or community involvement.

Women, children, and elderly residents – those who typically spend more time in the community – are disproportionately affected by poor air and water quality, which increases health risks.

The SDB is at high risk of climate-related impacts such as flooding, storms, and heatwaves. Possible climate adaptation measures include better flood defences, stormwater management systems, and resilient infrastructure to protect homes, schools, and businesses. Climate-resilient infrastructure can help safeguard the community from extreme weather while creating jobs in the construction and maintenance of green spaces, stormwater systems, and other adaptive measures. These improvements can also enhance local quality of life by providing cleaner, safer, and more liveable spaces for residents.

² <https://worldpopulationreview.com/cities/south-africa/durban>

HOW WILL THE ENERGY TRANSITION AFFECT THE SDB?

The energy transition and climate adaptation represent challenges and opportunities and encompass many aspects of life. Improved environmental quality, new green jobs and enhanced climate resilience are possible benefits, but these gains depend on responsible, inclusive planning. Addressing social and environmental inequities, safeguarding jobs, and prioritising health and safety can help ensure that these changes create a more sustainable, equitable, and resilient future for everyone living and working in the SDB.

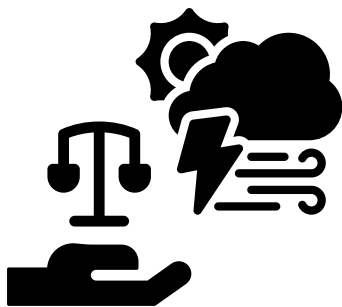
Pollution and health

The energy transition could decrease air and water pollution levels by encouraging industries to adopt cleaner technologies, such as renewable energy sources, and by limiting fossil fuel reliance. Improved air and water quality would benefit the health of SDB residents, potentially reducing respiratory and cardiovascular illnesses, which are prevalent in the area.

As the transition reduces pollution, there is potential for improved overall health and reduced healthcare costs for residents. Cleaner air and water can reduce exposure-related illnesses, which disproportionately affect children, the elderly, and low-income households.

However, during the transition phase, ongoing industrial activity and incomplete pollution control could continue to expose residents to harmful emissions. Stringent regulatory enforcement will be crucial to ensure that industrial emissions are reduced as cleaner technologies are phased in.





Environmental justice

Communities in the SDB – which are mostly low-income and marginalised – bear the brunt of industrial pollution. The energy transition provides an opportunity to address historic inequities by ensuring that cleaner energy and climate adaptation initiatives are designed with the needs of these communities in mind.

Access to affordable, reliable energy

Many SDB residents, particularly those from low-income households, already struggle with access to affordable and reliable energy. If energy transition policies result in increased costs, this could exacerbate financial burdens. Conversely, programmes to provide affordable, renewable energy access could help improve living standards, reduce energy costs, and enhance energy security.



Green jobs

Many SDB residents are employed by the industrial and petrochemical sectors. As industries adapt to new environmental regulations or shift toward renewable energy, there may be a risk of job losses in traditional energy sectors. Economic support for retraining workers and creating new roles in green sectors will be vital to mitigate job displacement. The energy transition also brings opportunities for job creation in green industries, such as renewable energy, energy efficiency, waste management, and environmental restoration. Training programmes focused on skills relevant to green jobs like solar installation, sustainable construction, and eco-friendly manufacturing, could improve employment prospects and local economic resilience.

Social cohesion

Transparent planning processes that involve the community can enhance trust and social cohesion. Involving local voices in decision-making and ensuring that community health and safety are prioritised can empower residents and create a sense of ownership over these transformative changes.



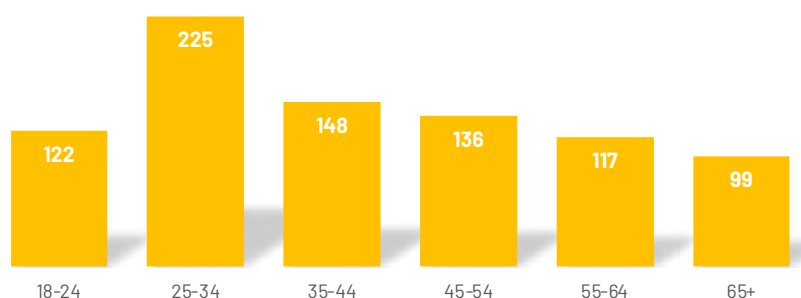
4 COMMUNITY ENGAGEMENT

Community engagement is critical to success of the JET project. JET project aims and objectives and related activities, were shared in initial consultations during which community champions and data collectors were identified to support the process. A wide sample of community participants was selected from the six areas. The demographics of the communities engaged through the baseline process are summarised in the table.

Area	Age range						Gender				Disability?	
	18-24	25-34	35-44	45-54	55-64	65+	Male	Female	Non-binary	Prefer not to say	Y	N
Bluff	26	48	33	26	6	1	71	70	1	1	0	119
Clairwood	28	62	28	19	10	4	59	84	2	2	5	133
Jacobs	23	27	21	20	12	3	36	19	0	0	0	101
Lamontville	29	40	20	20	26	21	59	70	2	3	24	126
Merebank	5	21	12	27	30	48	54	94	0	0	26	101
Wentworth	11	27	34	24	33	22	65	72	0	0	1	151
Total	122	225	148	136	117	99	344	409	5	6	56	731

More detail on each category is shared in the sections that follow.

Age range



Of the 848 people interviewed, 847 indicated their age ranges. The breakdown indicates the following: 14.4% were between 18 and 24, 26.5% were between 25 and 34, 17.4% were between 35 and 44, 16% were between 45 and 54, 13.8% were between 55 and 64, and 11.6% were 65 years and over.

Gender

Of the 848 people interviewed, 764 indicated their gender. The gender breakdown shows that: 45% were male, 53.5% were female, and 1.4% indicated a non-binary gender or preferred not to say

Disability status

Of the 848 people interviewed, 787 indicated their disability status, with the majority (92.8%) indicating no serious disability.

5 THE FINDINGS OF THE KNOWLEDGE ASSESSMENT

Is climate change real?

Of the 848 respondents more than 90% indicated that they thought climate change was real. Below is a summary of their reasons.

- 50% of respondents felt climate change was real due to global warming
- 37% of respondents felt climate change was real due to changing weather patterns
- 13% of respondents attributed climate change to various forms of pollution

Impacts of climate change

A high percentage (43%) of interviewees felt climate change had a negative impact on their livelihoods and that it was the cause of some of their health-related problems. People also felt climate change played a role in damage to infrastructure (17%) due to severe storms, strong winds and tidal waves.

50%

GLOBAL WARMING
PROVES THAT
CLIMATE CHANGE
IS REAL

37%

CHANGING
WEATHER
PATTERNS ARE
PROOF THAT
CLIMATE CHANGE
IS REAL

13%

CLIMATE CHANGE
IS CAUSED BY
POLLUTION

43%

CLIMATE CHANGE
HAS A NEGATIVE
IMPACT ON MY
LIVELIHOODS AND
MY HEALTH

17%

EXTREME
WEATHER
BECAUSE OF
CLIMATE CHANGE
CAN DAMAGE
INFRASTRUCTURE



Sustainable energy solutions

Awareness: Most interviewees were aware of solar power (42%) as they have seen solar panels on the roofs of houses and businesses, but noted that most did not use solar power. Very few interviewees knew of or had heard about biofuel energy (3%) and wind energy (7%). A large portion of respondents (33%) were not aware of sustainable energy solutions.

Access: Many of the community members (43%) interviewed stated that they had no access to sustainable energy sources and felt that the high costs of energy sources were unaffordable. They also felt there was no fair and equal system in place to ensure access to sustainable energy sources (34%). Other comments (23%) related to corruption and the level of willingness of government and industry to support access to sustainable energy.

42%

I KNOW ABOUT
SOLAR POWER
BUT DO NOT USE
IT

33%

I DO NOT
KNOW ABOUT
SUSTAINABLE
ENERGY SOLUTIONS

43%

SUSTAINABLE
ENERGY
SOLUTIONS ARE
TOO EXPENSIVE
FOR ME

34%

THERE IS NO
SYSTEM TO HELP
ME GET ACCESS
TO SUSTAINABLE
ENERGY

77%

I DON'T
KNOW ABOUT
SUSTAINABLE
ENERGY POLICIES

Awareness of policies driving energy transitions

Just over 77% of interviewees had no idea or were even aware of existing sustainable energy policies. Those with some idea (22%) referred to the [COP Summits](#), the [Paris Agreement of 2015](#) and the [National Transmission Company South Africa](#).

Ideas to increase awareness of climate change

A high percentage of interviewees (40%) felt that the best communication tools would be workshops and outreach in the communities to create awareness. Younger interviewees felt social media (21%) would be a good community communication platform. Other respondents (19%) felt that pamphlets and posters would also be good to create awareness.

HOW CAN WE INCREASE AWARENESS?

40%

WORKSHOPS
AND
OUTREACH

21%

SOCIAL
MEDIA

20%

PAMPHLETS
AND POSTERS

How much do people know about the just energy transition?

Only 30% of people interviewed had some idea of what a just energy transition is and indicated that it is a gradual move from the use of fossil fuels (coal and gas) to renewable energy (solar, wind and bio-fuels). Most had little to no knowledge of a just energy transition process (66%) but felt it was something communities needed to know about.

Almost 60% of the people interviewed had no idea what the 'just' meant in the term just energy transition. Those who had some idea (40%), referred to it being inclusive, fair and accessible.

Nearly a third of interviewees (27%) ventured into visualising what a community with renewable energy sources could look like. Examples included solar plants/stations subsidised by government, windmill farms and job opportunities, particularly for young people.

Barriers to a just energy transition

Respondents indicated the following barriers to the energy transition process:

- Cost was seen as a major barrier by 40% of respondents
- Lack of support from government, communities and industry (20%)
- Lack of knowledge (18%)

14% of people interviewed were unable to articulate or had no idea of barriers, mainly due to lack of knowledge.

30%

THE JET IS A GRADUAL
MOVE FROM FOSSIL
FUELS TO RENEWABLE
ENERGY

40%

THE 'JUST' IN
JET MEANS IT IS
INCLUSIVE, FAIR AND
ACCESSIBLE

27%

A JET COMMUNITY HAS
SOLAR PLANTS SUBSIDISED
BY GOVERNMENT,
WINDMILL FARMS AND JOB
OPPORTUNITIES, PARTICULARLY
FOR YOUNG PEOPLE

40%

THE ENERGY
TRANSITION IS VERY
EXPENSIVE

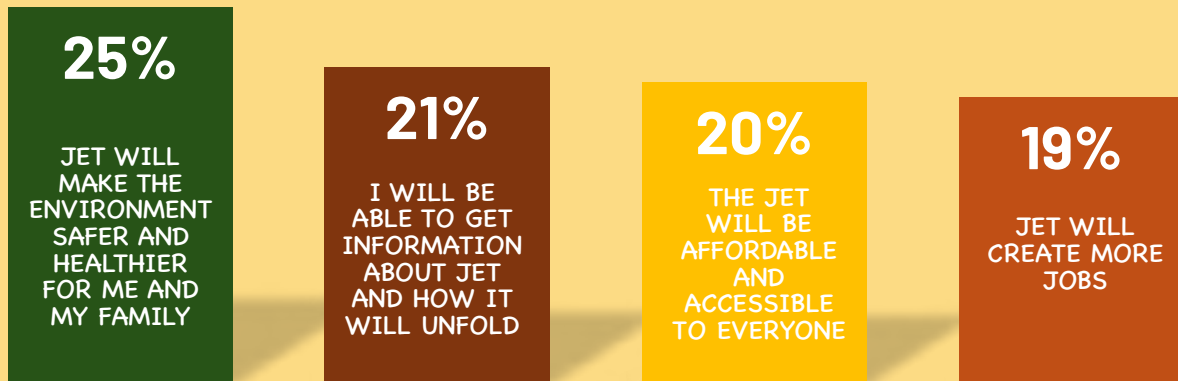
20%

WE NEED MORE
SUPPORT FROM
GOVERNMENT,
COMMUNITIES AND
INDUSTRY

18%

WE NEED MORE
INFORMATION

Personal hopes about the JET process



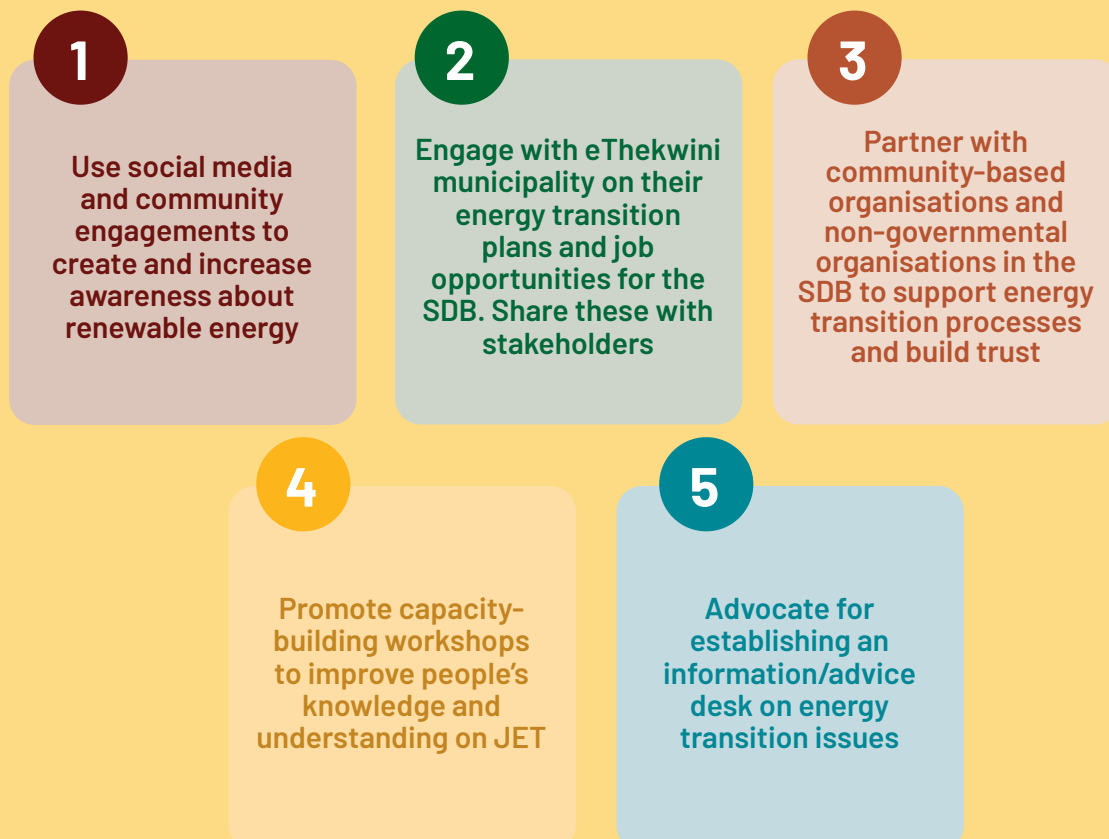
General feedback

Many interviewees had no further comment (55%) due to their lack of understanding around the renewable energy process. Those who gave general reflections (45%) felt that:

- Government should subsidise the process
- The poor need to have access to renewable energy
- Communities are made aware through outreach engagements and social media
- There is support from other stakeholders including industries and community organisations
- The transition creates job opportunities

Recommendations

The following recommendations emanate from the Baseline Knowledge Survey:



ANNEX 1: JUST ENERGY TRANSITIONS PROJECT COMMUNITY KNOWLEDGE ASSESSMENT

Data collector: _____ Date of survey: _____

Area (tick or circle):

Bluff	Clairwood	Jacobs	Lamontville	Merebank	Wentworth
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Project overview

The JET project seeks to facilitate community members, civil society structures, business and local government to work together to co-create a roadmap that mitigates the impact of South Africa's energy transition on the lives and livelihoods of people living and working in the South Durban Basin. Recognising that communities are generally ill-prepared for these conversations, this project focuses on strengthening communities' capacity to understand the energy transition, the overarching "just transition" framework, and the imperatives underpinning them so that they are equipped to be propositional about expectations and outcomes of the emerging plans to transition and adapt the key industries and communities in the SDB on a net-zero pathway. This will be done by building the information, skills and access to technical support to engage constructively and confidently in the process. The project will run for 12 months and started late in 2024. This knowledge assessment will help the project team and community representatives gather information about the current understanding, awareness and perceptions of a community on just energy transitions. This includes shifts to renewable energy, energy equity, and the social, economic and environmental impacts of an energy transition. This data will inform key project activities and information materials development in the six communities of the Basin.

Consent

The information being collected will be anonymous, and the data collected will be collated and analysed into a report to inform project activities and information materials. While quotes may be used, they will not be identified.

Do you give your consent to participate in this knowledge assessment?

Yes ☐ No ☐

Demographics

Age range (tick or circle):

18-24	25-34	35-44	45-54	55-64	65+
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Gender:

M	F	Non-binary	Prefer not to say
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Disability:

Yes ☐ No ☐

Questions

1. Do you think climate change is real?

Yes ☐ No ☐

1a. Why do you think this?

1b. How is it having an impact on your life?

2. How many kinds of sustainable energy solutions are you aware of?
(Tick those they mention)

Solar power	Wind power	Hydro-electric (water power)	Bioenergy	Water tanks
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Other (please specify) _____

2a. Please share examples of people using these in your community

3. Do you think everyone has fair and equal access to sustainable energy solutions?

Yes ☐ No ☐

3a. Why do you think this?

3b. How are people in your community accessing these sustainable energy solutions?

4. Are you aware of any policies driving energy transitions?

Yes ☐ No ☐

4a. If yes, please give examples:

4b. What would improve your access to and understanding of these policies?

5. What do you know about the concept 'JUST energy transitions'?

5a. Why do you think it is called the JUST energy transition?

5b. Why do you think the 'just' part is important?

6. What could a JUST energy transition look like in your community?

6a. What would be the best outcome – what difference could it make?

6b. What might some of the barriers be?

6c. What are your personal hopes around it?

7. Would you like to share any other feedback?

Thank you