WORLD ENERGY COUNCIL

Source: World Energy Council Humanising Energy Series

SUMMARY REPORT

CITY LEVEL CLEAN AND JUST ENERGY TRANSITION

A HUMAN-CENTRED APPROACH

A report prepared for Phase 1 of the Aberdeen Clean and Just Energy Transition project.

ABOUT US

About the Aberdeen City Council
Aberdeen is a city with a population of around 200,000 people and as local authority, Aberdeen City Council is responsible for its planning, infrastructure, and services. The Council recognises the need to reduce emissions to play our part in limiting global emissions, preparing for the impacts of a changing climate, and transitioning towards net zero.

The Council is involved in a Net Zero Leadership and Delivery Unit, which leads on the Net Zero Aberdeen framework, setting a pathway towards becoming a net zero city by 2045. We have also worked with local organisations on Aberdeen Adapts, the associated approach for adapting to changes creating a more climate resilient Aberdeen. At the same time the city, long renowned as an energy hub, looks to lead on a just energy transition through leveraging its unique cluster of assets, resources and supply chain capabilities to advance opportunities in offshore wind, hydrogen production and carbon capture and storage.

About bp
bp is one of the world's largest energy companies, delivering energy solutions across its operations in Europe, North and South America, Australasia, Asia, and Africa. bp's purpose is reimagining energy for people and our planet, and it aims to be a net zero company by 2050 or sooner and support the world get to net zero. Aberdeen has been home to the company's North Sea operations for more than 50 years.

About the World Energy Council
The World Energy Council is the world's oldest independent and impartial community of energy leaders and practitioners. Through our Humanising

Energy vision, we are working to involve more people and communities in accelerating clean and just energy transitions in all world regions. Formed in 1923, the Council convenes diverse energy interests, with over 3,000 member organisations in around 90 countries, drawn from governments, private and state corporations, academia and civil society.

We effectively collaborate on breakthrough impact programmes and inform local, regional and global energy agendas in support of our enduring mission: to promote the sustainable use and supply of energy for the benefit of all people. The Council convenes leadership dialogues including the World Energy Congress to enable new collaborations and drive to impact and it provides a range of practical tools and briefings to help its members and wider stakeholders define and better manage energy transitions including the World Energy Trilemma Framework.

City Views, Aberdeen, Scotland. Source: Aberdeen City Council

ABOUT THE PROJECT

In May 2022, the Aberdeen Clean and Just Energy Transition project was established in collaboration with the World Energy Council, bp and Aberdeen City Council (ACC). This partnership was set up with the goal of discovering and building upon previous work relating to clean and just energy transition, aligned with the transition principles of the Scottish Government.

Contributing to the knowledge base of energy transition was deemed an important step in extending the ongoing work in the city of Aberdeen. The scope of the project is 1) to provide a knowledge base of outcomes and key learnings around issues of a clean and just energy transition through the rapid evidence research outputs and 2) to explore citizens' perspectives of the clean and just energy transition to inform further action plans into additional work on the clean and just energy transition in Aberdeen, Scotland.

This report includes the key highlights from task 1, with outcomes of a rapid evidence review on how to achieve an inclusive and just energy transition in energy cities. It also some insights on community engagement from the outcomes of task 2, which explored Aberdeen citizens' perspectives of the clean and just energy transition.

The complete outcomes of the Aberdeen Clean and Just Energy Transition project, including the full and summary reports of task 1 and insights from world-wide place-based clean and just energy transitions can be found here.

Aberdeen Citizens' Perspectives for a Clean and Just Energy Transition, January 2023.

Published by the World Energy Council.

Published by the World Energy Council, January 2023

World Energy Council
Registered in England and Wales
No. 4184478

VAT Reg. No. GB 123 3802 48

Registered Office
62–64 Cornhill
London
EC3V 3NH

PLACE-BASED CLEAN AND JUST TRANSITIONS

The Scottish Government has recognised the urgency and opportunity to lead a transformative energy transition in support of its plan to build a resilient economy that is clean, just, and inclusive. This momentous plan calls for country-wide alignment from government, communities, and the economy. The plan proposes ambitious targets for Scotland's cities. Specifically in Aberdeen, Scotland's third most populous city, this entails pursuing a rapid shift to a low-carbon economy that is set to position the city as Europe's energy transition capital.

Scotland's approach to just energy transition puts equity, fairness, and inclusion at the centre of transformation and provides a representative frame aligned with the global understanding of just transitions principles and objectives:

> *"A just energy transition is both the outcome – a fairer, greener future for all – and the process that must be undertaken in partnership with those impacted by the transition to net zero. Just energy transition is how we get to a net zero and climate resilient economy, in a way that delivers fairness and tackles inequality and injustice."*[1]

In May 2022, the Aberdeen Clean and Just Energy Transition project was established in collaboration with the World Energy Council, bp and Aberdeen City Council (ACC). This partnership was set up with the goal of discovering and building upon previous work relating to clean and just energy transition, aligned with of the transition principles of the Scottish Government.

The project is being delivered in three phases: I) exploration and discovery, II) co-creating and developing action plan and III) implementing, disseminating and scaling.

This summary report brings key insights from the Phase I outcomes:[2]

1. An engagement report on "Aberdeen Citizens' Perspectives for a Clean and Just Energy Transition", which explores the diverse community perspectives of Aberdeen's citizens, capturing levels of energy literacy and engagement with a clean and just energy transition.

2. A rapid evidence review, which suggests leading global practices of clean and just energy transitions, structured around three key learning areas:

- **A. Achieving equity** – Clean and Just Energy Transitions enable transformational change to create wealth and improve livelihoods, while recognising the needs and diversities across all community groups.
- **B. Buiding resilience** – Clean and Just Energy Transitions withstand shocks and responds to change without putting socio-economic wellbeing at risk.
- **C. Empowering communities** – Clean and Just Energy Transitions promote participatory processes and collective wealth building and strategies to meet the needs voiced by community members.

Jobs and Employment and broader **Socio-Economic** opportunities are understood as cross-cutting objectives that are relevant to each of the three key learning areas.

[1] The Scottish Government (2021), Just Transition: A Fairer, Greener Scotland. Edinburgh: The Scottish Government. Available at: https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2021/09/transition-fairer-greener-scotland/documents/transition-fairer-greener-scotland/transition-fairer-greener-scotland/govscot%3Adocument/transition-fairer-greener-scotland.pdf

[2] The full Aberdeen Clean and Just Energy Transition project Phase I reports can be found at https://www.aberdeencity.gov.uk/net-zero-aberdeen/jet-project-just-energy-transition

ACHIEVING EQUITY

Communities across the world are experiencing energy transition differently, based on the social, cultural and economic constructs of their societies. Achieving better economic opportunities, improved livelihoods, and enhanced prosperity for all in energy transitions requires close examination of the linkages between energy systems and the social mechanisms that drive communities to prosper. Literature is still inconclusive on the set of metrics and mechanisms that can help address this issue. Still, the evidence reviewed suggests that the shortcomings with just transition pathways stem from a failure to devise whole systems approaches that deliver to different places and needs, leading to poorer outcomes because of uninformed, socially exclusive decisions. Mechanisms used to address these issues are quite diverse but tend to address issues such as inclusion of disadvantaged or minority groups and place-based action. Understanding how transitions affect different communities and engaging diverse players in devising solutions are initial steps which have proven to help deliver positive and wide socio-economic impact.

MECHANISMS FOR ACHIEVING EQUITY

From the rapid evidence review, two 'jobs and employment mechanisms' and two 'wider socio-economic mechanisms' are provided to support achieving equity in just transitions. These mechanisms are in themselves not the only answer in achieving equity. Enabling factors such as who has access and the role of leadership in society goes a long way in ensuring equity is achieved in the transition.

Jobs and Employment

Bring minorities and vulnerable groups onboard

Just transitions must provide economic opportunity, education and skills training, and adequate social safety systems especially to the most vulnerable population. The extent to which an individual can benefit economically from the energy transition assists to improve workforce equity while implementing a just transition. Often, inequalities can be stronger around younger generations, those with low levels of education, or female-headed households. Community groups affected by the transition will be well-integrated into the dynamics of opportunities and can provide valuable insights on the employment and economic ecosystems in relation to transition. Ways to utilise this mechanism include determining what impact climate policy imposes on communities, schools, and childhood through discussion, cooperation, and collaboration, including traditions, symbols, and practices to illustrate the words of local/indigenous peoples.

Reference Case: New Zealand Educational Institute, New Zealand.[3]

Support low-skilled workers to access new job markets

High-skilled workers tend to benefit more easily from transition, while low-skilled workers tend to be discouraged to pursue skilled job opportunities. If we provide support to low-skilled workers to access new job markets, tailoring employment strategies to the specific local context serving the most vulnerable, then labour market programs will expand and evolve dynamically. This has the potential to engage and benefit low skilled workers, enhancing equity in the transition process. Ways to utilise this mechanism include facilitating resources such as wage subsidies, entrepreneurship, and demand-responsive training (theoretical training and internship), in-depth counselling sessions, elaboration of individual action plans (IAPs), continuous training of regionally relevant professional skills, as well as using local labour market data and demand surveys to identify skills gaps and employers' needs.

Reference Case: Coal transition in Western Macedonia, Greece.[4]

[3] Smith, S., (2017), Just Transition. A Report for the OECD. Available at: https://www.oecd.org/env/cc/g20-climate/collapsecontents/Just-Transition-Centre-report-just-transition.pdf

[4] Christiaensen, L. and Ferré, C., (2020), Just Coal Transition in Western Macedonia, Greece: Insights from the Labor Market, Jobs Working Paper No. 54, Washington DC: World Bank. Available at: https://openknowledge.worldbank.org/handle/10986/34737

Socio-Economic

Create flexibility for locally relevant approaches

Just transition strategies recognise the impact on workers transitioning from the fossil fuel industries and other vulnerable groups within the whole community. If we enable community development from the inside, then we can innovate to drive growth and prosperity for all. This can help to engage and benefit workers transitioning from the fossil fuel industries and other vulnerable groups within the community (women, children, people with disabilities, elders). Ways to utilise this mechanism include enabling community development policies, community development action plans, gender action plans, along with ESG policies and investments mobilised by government entities and developers.

Reference Case: Bhadla Solar Park, India.[5]

Design technologies and incentives for widespread socio-economic benefits

Experience with carbon taxes in many countries has yielded positive outcomes. Typically, governments with successful carbon tax schemes have addressed political economy issues through dialogue with key stakeholders to build consensus. If decision makers implement economic schemes to improve community socio-economic wellbeing, then there will be stronger consensus across stakeholders' base to advance transition initiatives. This can help to engage and benefit communities coming together to champion and implement economic schemes for the common good, as well as government socio-economic outcomes. Ways to utilise this mechanism include community-centric economic schemes such as carbon taxation can be economically beneficial and generate revenues to compensate for adverse effects on the economy and vulnerable groups. Net impact on equity tends to become more progressive if revenues are used to scale up social assistance and related policies to support workers through labour market transitions.

Reference Case: Carbon pricing scenarios in Bulgaria, Croatia, and Romania.[6]

BUILDING RESILIENCE

Building community resilience is crucial to a just transition. This requires careful planning, both in the short and long term. Understanding what skills are required in the low carbon energy system, how they can be built and how transferable they are from existing industries is critical. This is especially important for fossil fuel industries such as oil and gas, where focusing on skills mobilisation and development can create opportunities to enhance workforce resilience and job retention. The practice of cities, countries, and regions to enhance community resilience to navigate transitions builds on principles of advance and collaborative planning and delivery. Innovation is accelerating rapidly, and the ways of working have changed immeasurably with the advent of technological solutions for collaboration and co-creation. While advance planning helps communities to better prepare for challenges and opportunities ahead, collaborative approaches help to ensure that plans can deliver on meeting the needs of unique local situations. Together, these principles have helped just transition initiatives to deliver resilience and build mechanisms to counter challenges emerging at different stages of the transition process.

MECHANISMS FOR BUILDING RESILIENCE

From the rapid evidence review, two 'jobs and employment mechanisms' and two 'wider socio-economic mechanisms' are provided to support building community resilience. Other mechanisms that promote social and community dialogues or that explore different framing options for the types of costs that consumers face can and must be explored to enhance community resilience in just transitions.

[5] CIF, (2021), Supporting Just Transitions in India, case study. Available at: https://www.cif.org/sites/cif_enc/files/knowledge-documents/supporting_just_transitions_in_india.pdf

[6] World Bank, (2022), Reshaping Norms: A New Way Forward, South Asia Economic Focus, Spring 2022, Washington, DC: World Bank. Available at: https://openknowledge.worldbank.org/handle/10986/37121

Jobs and Employment

Plan workforce transition proactively
A proactive workforce transition plan is a long-term strategy based on the intersection between diversity inclusion, stakeholder dialogue, and experimentation. It is not provided solely as reparatory action to the consequences of transition, as it starts much sooner than the impact can materialise. If mechanisms and tools are designed to support workforce in the long-term, then adaptation time and opportunities to address injustices and inequalities will increase. This can engage and benefit workforce both directly and indirectly impacted by decarbonisation. Ways to utilize this mechanism include setting up institutions and partnerships to support workers' transitions, deploying social programs for continued access to health, education, and similar services, as well as pension benefits wherever necessary.

Reference Case: Ruhr Valley Transition, Germany.[7]

Join education and industry together to empower the workforce
Coordination between education and industry needs can be achieved through collaboration with affected communities to co-create solutions that are relevant for workers and for the community's economic future. If we can anticipate how the job market will develop in response to the transition, then we will be able to design better skills building programmes and remediation funds. This can engage and benefit the whole community, including workforce affected by industry transition and supply chain industries exposed to spin-off effects. Ways to utilise this mechanism include deploying transitional programs that meet locally appropriate development needs. Activities can be geared towards (1) diversifying economies, (2) creating jobs in new or existing industries, (3) attracting new sources of job-creating investment, (4) and providing a range of workforce services and skills training.

Reference Case: Partnerships for Opportunity and Workforce and Economic Revitalisation program (POWER), United States.[8]

Socio-Economic

Enable localised action for widespread resilience
Municipal strategies designed around the purpose of community resilience can support a sustainable approach to urban development that considers the rights and needs of vulnerable sections of society. If we use a transparent and inclusive approach in transition, then essential transition systems and vulnerable sections of society will be strengthened. This approach can engage and benefit local and regional governments committed to sustainable urban development and their affected communities. Ways to utilise this mechanism include running iterative learning processes for a ground-up approach to transition via stakeholder consultations, collaboration with local partners and community-led initiatives to identify key challenges and formulate recommendations.

Reference case: ICLEI – Local Governments for Sustainability.[9]

Promote partnerships with society to deliver relevant measures
A comprehensive approach to clean and just transition, aimed not only at improving the environmental balance of the city region, but also at developing jobs for inhabitants and revitalising the city's economy. If we include all relevant stakeholders in the planning and implementation of the energy-transitions strategies, then we can deliver measures that are relevant to the local context. This can engage and benefit a wide stakeholder base including government, the private sector, civil society, and affected populations. Ways to utilise this mechanism include proactive, participatory, and integrated approaches via mobilisation of all the sector stakeholders;

[7] Galgóczi, B., (2018), Just transition towards environmentally sustainable economies and societies for all- ILO ACTRAV Policy Brief, Geneva: International Labour Organization. Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_647648.pdf
[8] Galgóczi, B., (2018), Just transition towards environmentally sustainable economies and societies for all- ILO ACTRAV Policy Brief, Geneva: International Labour Organization. Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/publication/wcms_647648.pdf
[9] Van Staden, M., (2020), The Sustainable Energy Transition Cities and Local Governments in Focus. In: Uyar, T. (eds), Accelerating the Transition to a 100% Renewable Energy Era. Lecture Notes in Energy, vol 74, Springer, Cham. Available at: https://doi.org/10.1007/978-3-030-40738-4_7

preparation of actions linked to the needs of affected stakeholders; promotion of cooperation between players from different areas; complementary actions and synergies around strategic objectives; and the development of collaborative action plans.

Reference Case: The Brussels Employment-Environment Alliance.[10]

EMPOWERING COMMUNITIES

Participatory processes empower communities by building collective capital. Open dialogues between workers, employers, and government engender trust between community members, as well as institutional trust. The importance of participatory methods was also validated in the Aberdeen community engagement report. Aberdeen residents across age groups showed strong support for a clean and just energy transition, although survey respondents have placed a greater priority on more immediate issues such as the cost-of-living crisis and post-Covid economic recovery than on the energy transition. Community insights show the importance of inclusive dialogues to ensure that the collective vision of a clean and just transition is built by, and for all, community members. The mechanisms that facilitate community engagement include models of community wealth building, projects for communal well-being, and community energy projects. These projects generate resilient communities with an embodied understanding of the common good. From the community report, Aberdeen survey respondents indicated the need for visible initiatives that mark progress towards the clean transition. They also signalled a perception that the energy transition is happening too slowly. Residents in focus group discussions attributed this mostly to lack of investment in infrastructure, such as charging points for electric vehicles, and to governance and broader leadership issues. Both survey and focus group community representatives perceive their input today as less influential than that of government and businesses. This challenge of engagement impacts the community's capacity for transition. Although there is still little clarity globally on systematically enabling community's perspectives to influence energy transitions, providing regulatory and financial support, and promoting bottom-up energy leadership are initial steps towards this goal.

MECHANISMS FOR EMPOWERING COMMUNITIES

From the rapid evidence review, two 'jobs and employment mechanisms' and two 'wider socio-economic mechanisms' are provided to support empowering communities in just transitions. These participative processes are key to establishing interpersonal and institutional trust in communities. However, they are not sufficient for fully empowering communities in the transition process. Further mechanisms that enable new models of financing and ownership, that explore metrics around participation and that enable society drive value generation are also instrumental to achieve just transition objectives.

Jobs and Employment

Understand diversity to meet workforce needs

Collecting, managing, and sharing data on the city population characteristic and needs can help better coordinate existing barriers and empower just transitions by retooling, re-skilling and via energy initiatives that create livelihood opportunities that serve the actual needs of diverse communities. If we strengthen institutional capacity to understand diversity needs, then we can better address exiting barriers and empower just transitions. This can engage and benefit stakeholders from energy and adjacent sectors including healthcare, universities, municipal government, etc. Ways to utilise this mechanism include promoting inclusive approaches offering jobs and a sense of security and well-being to workers; avoiding top-down mechanisms, such as training for jobs that are not relevant for the community's way of living; focusing on equipping workers not only with jobs, but also with a supportive ecosystem.

Reference Case: The Evergreen Cooperatives, Ohio, United States[11]

[10] The Brussels Employment-Environment Alliance https://environment.brussels/state-environment/report-2011-2014/environment-sustainable-city/focus-alliance-emploi-environnement
[11] The Evergreen Cooperatives https://www.evgoh.com

Bottom-up participation for effective workforce transition

While the purpose of ground-up initiatives often expands well beyond employment, they offer examples of holistic place-based approach that enables individuals and households to thrive. If we enable bottom-up participation in place-based transitions, then individuals and households are better empowered to thrive. This can engage local community foundations that funnel assets from local donors and technical expertise to benefit community projects. Ways to utilise this mechanism include seeking new systems that values caregiving and cultivate holistically supportive environments; clearly defining metrics for success; running feasibility studies on economic development proposals and collect expertise to critique the proposals; rapid prototyping to move to action, and push feedback to government on policy barriers; providing grants to innovative grassroots charities that support projects to employment pathways.

Reference Case: Latrobe Valley, Australia[12]

Socio-Economic

Support community energy projects for inclusive economic activation

Energy Communities enable a new energy systems' structure where citizens participate more actively in the clean transition. These projects are powered by a mixture of distributed technologies including geothermal heat pumps, air source heat pumps, solar pv, wind turbines, hydro, battery storage, hydrogen, etc. If we enable energy systems' structures where citizens participate more actively, then communities can benefit more directly from the outcomes of a clean transition. This can engage and benefit citizens and communities involved as producers, distributors, and sellers of electricity, in addition to their consumer role. Ways to utilise this mechanism include leveraging flexibility to understand, adapt and respond to local needs greatly enhances the relevance of funding options. Some existing flexible formats include bottom-up finance such as share offers with priority access to community members, or investor memberships, whereby shareholders receive interest on their investment from the funds raised and project outcomes. These models contribute to keeping individual investment affordable for a citizen-level investor, although they are usually limited as able to only partially cover CAPEX costs.

Reference Case: Darebin Solar Savers Scheme[13]*, Donside Hydro Scheme*[14]

Promote energy literacy to enable bottom-up energy leadership

Energy literacy initiatives are often used to empower bottom-up leadership and promote community engagement. While bottom-up energy leadership is still to become an evident trait of just transitions, this is a crucial area to ensure justice is equally spread among society's multifaceted needs. If citizens are more aware of the demands and changes brought by the transition, then communities are more empowered to participate and engage in the transition process. This can engage and benefit a wide range of community stakeholders, such as urban and rural households, small businesses, as well as the workforce. Ways to utilise this mechanism towards one of such stakeholder groups include conducting visits to households aimed at reducing utility costs, where experts explain appliance costs, identify issues impacting use, and help budget energy use, supplying accessible energy and water-saving technology, retrofitting items and demand-response technology.

Reference Case: Kildonan Energy Initiative[15]

[12] Cain, K., (2019), A just transition for the Latrobe Valley [PowerPoint presentation]. Available at: https://www.climate-transparency.org/wp-content/uploads/2019/03/17.Karen-Cain-Latrobe-Valley-Authority-February-2019.pdf
[13] Darebin Solar Savers Scheme https://www.darebin.vic.gov.au/solar
[14] Donside Hydro Scheme https://acenergy.org.uk
[15] Kildonan Energy Initiative https://www.kildonanenergy.com

MEASURING TO MANAGE

The relationships between communities, governments and how policies influence the pace of energy transitions is not conclusive from the body of evidence presented from the research. It is generally understood that the city must embark on a process of fairness, address previous inequalities, empower communities to drive continous progress of the energy transition. These key learnings point to the need to ensure measurable actions are taken towards clean and just energy transitions.

Knowledge on enabling just transitions continues to emerge. In parallel, clear and actionable metrics must be established to guide the direction of progress. It is therefore in the longer-term interest of people and the planet to consider what new action metrics are needed to anchor just transition interests and monitor progress in this direction.

Building on progress towards achieving equity, building resilience and empowering communities summarised in this study, some metric areas[16] that cut across these different aspects of the just transition are proposed below. Some are already incorporated in Aberdeen's Just Transition strategy; others should be considered as the work progress in Phase II (co-creating and developing action plan) of the Aberdeen Clean and Just Energy Transition project:

Metric Area 1: Justice and Equity

- Impacts of the just transition on workers, affected stakeholders and their business relationships
- Company alignment with policies and regulation that support the just transition
- Company support to financially vulnerable customers that are adversely affected by decarbonisation strategy in a way which ensures gender balance and inclusion of vulnerable groups
- Increase in funding (%) to support indigenous people's needs

Metric Area 2: Diversity and Inclusivity

- Participation of workers, unions, communities and suppliers in just transition planning
- Ongoing social dialogue and meaningful engagement with affected stakeholders
- Percentage of displaced people and affected communities with access to sustainable energy (disaggregated by energy end-use, gender, geographic location)
- Use of environmental impact assessment and a participatory process in land use planning related to the production and distribution of energy, involving indigenous populations and other affected communities (disaggregated by geographic location, wealth quintile)

Metric Area 3: Skills and Workforce (Intergenerational Goals)

- Company support for policies and regulation for green and decent job creation; retention, education and reskilling in a way which ensures gender balance and inclusion of vulnerable groups
- Access to green and decent jobs in a way which ensures gender balance and inclusion of vulnerable groups
- Percentage of fossil fuel-sector employees reskilled for employment in sustainable energy (disaggregated by gender)
- Increase (%) in finance available for women-led energy businesses, disaggregated by geographic area, educational level
- Percentage of people with disabilities employed by the energy industry in vocational or technical roles

Metric Area 4: Environmental Sustainability (Intergenerational Goals)

- Low-carbon initiatives (e.g., regeneration, access to clean and affordable energy, site repurposing) in regions affected by decarbonisation
- Percentage of clean transportation in cities (cars, public transportation) (disaggregated by energy source and technology)
- Percentage reduction in emissions via improvements in energy efficiency and/or increased reliance on renewable energy in buildings
- Percentage in increase in productivity from improvements in energy efficiency
- Amount spent on R&DD programmes for rural/urban infrastructure and agriculture

[16] Metric areas are built on on-going work of United Nations, the World Benchmarking Alliance and Climate Action 100+ towards measuring and managing impact of just transitions.

MOVING FORWARD

Inclusive energy transitions may create more socio-economic opportunities for workers and community members. The success of initiatives is likely to depend on citizen awareness, further reinforcing the importance of participatory processes in designing future communities. Understanding the most effective ways to build community resilience is an important part of enabling a just transition. At the same time, achieving a just transition requires a shared endeavour between governments, companies, unions, civil society, other stakeholders, with arguably more responsibility on governments to create the policy frameworks and enabling environment. As the evidence base matures and evolves, open questions around mechanisms that either catalyse or decelerate just transition will continue to unfold.

ACKNOWLEDGEMENTS

The authors express their thanks for the advice and contributions provided by the Steering Committee, the Project Leadership and the expertise of the Council's network of energy leaders.

PROJECT STEERING COMMITTEE

Aberdeen City Council
Sinclair Laing, Climate & Environment Policy Manager

bp
Carl Hickson, Vice President, Workforce Transition

World Energy Council
Angela Wilkinson, Secretary General & CEO
Paul Appleby, Chief Insights Officer
Chris Gentle, Senior Adviser, New Business Ventures
Olulana Nwosu, Director, Policy & Markets

PROJECT LEADERSHIP

Aberdeen City Council
Jennifer Lawie, Senior Project Officer

bp
Hannah Clayton, Just Transition Lead

World Energy Council
Olulana Nwosu, Director, Policy & Markets
Andrew Ritchie, Project Manager

AUTHORS

World Energy Council
Talita Covre, Manager, Insights
Arwa Guesmi, Senior Manager, Insights