

Task Force 2: Energy, Climate and Sustainable Development



Towards an Evidence-Base for the Just Transition

Dina Azhgaliyeva, Senior Research Fellow, Asian Development Bank Institute (ADBI), Japan

Jakob Dirksen, Research and Policy Officer, OPHI, University of Oxford, United Kingdom

Upalat Korwatanasakul, Associate Professor, Waseda University; Consultant, United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), Japan

Katharina Lima de Miranda, Fellow, Kiel Institute for the World Economy, Germany

Mahesti Okitasari, Consultant, United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), Japan

Dil Rahut, Senior Research Fellow, Asian Development Bank Institute (ADBI), Japan

Ashish Sedai, Assistant Professor, University of Texas at Arlington, United States

Tetsushi Sonobe, Chief Executive Officer, Asian Development Bank Institute (ADBI), Japan

Akio Takemoto, Head of Programme and Administration, United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), Japan

Abstract

COP28 yielded consensus on transitioning from fossil fuels in energy systems, emphasising a just, orderly, and equitable approach. Central to this agreement is the principle of “leaving no one behind” (LNOB), which seeks not only to mitigate climate change’s propensity to exacerbate vulnerabilities and poverty across current and future generations, but also to avoid reinforcing existing inequities. This brief delineates emerging issues from the just transition framework and proposes critical actions for the G7. These actions are aimed at fostering effective decarbonisation and promoting a just and equitable energy transition both within the G7 nations and globally.

Recommendations:

- Identify gaps, needs, and opportunities for a just transition through data collection and analysing the relationship between decarbonised actions and socio-economic challenges at the national, international, and transnational levels.
- Improve governance mechanisms to harmonise climate change policies with socio-economic measures.
- Enhance support measures for vulnerable populations to ensure equal access to clean energy through evidence-based information.
- Establish a people- and gender-sensitive monitoring, reporting, and evaluation process.

To achieve these four points, we recommend the G7 to invest in multidimensional and distribution-sensitive metrics of well-being and prosperity to inform policies and advance the LNOB agenda.

- Sustain decent work and reinforce labour rights to mitigate disruptions from the transition.
- Promote investments in inclusive climate projects and establish financial inclusion regulations.
- Enhance international cooperation to promote a just and equitable transition in developing countries considering nationally defined development priorities.

The challenge

Transitioning away from fossil fuels in energy systems in a just, orderly, and equitable manner will pose a challenge to sustainability, affecting not only millions of fossil fuel workers but also vulnerable populations’ livelihoods due to rising energy and food prices. The current just transition framework developed based on domestically oriented visions may not correspond to the needs and realities of other nations. Leaving no one behind (LNOB) is essential for a just transition globally.

Some countries currently rely more strongly on fossil fuels than others. Where these same countries also have larger numbers or shares of already disadvantaged or vulnerable populations and hence face more challenges in implementing just and equitable decarbonisation, they need greater international support and cooperation (Anbumozhi et al. 2023; Azhgaliyeva 2023).

Challenge 1: Lack of an evidence-base and implementation framework for what works to achieve a just transition. This includes the need for data, reporting and monitoring, as well as robust and independent guidance and capacity building.

Challenge 2: Risks for vulnerable groups (highly dependent on fossil fuel) from energy transition, particularly those already experiencing many disadvantages along frequently intersectional lines of inequality.

Challenge 3: Lack of financing and needs for funding, especially to people/households with a lack of access to finance, but also lack of financing for wider social protection (monetary and non-monetary) to alleviate disadvantages and vulnerabilities.

The role of the G7

This policy brief identifies issues emerging from just transition discourse and suggests urgent actions from the Group of Seven (G7) to support effective decarbonisation and just and equitable energy transition in all (developing) countries as part of the overall socio-economic transformation necessary for long-term sustainable development.

During the Hiroshima Summit in 2023, G7 committed to supporting “just transition to a clean energy economy that achieves sustainable growth and high-quality jobs. In this context, we underline the significance of building secure, resilient, affordable, and sustainable clean energy supply chains and strong industrial bases that reduce undue strategic dependencies and benefit local workers and communities around the world” in G7 Clean Energy Economy Action Plan (G7 2023: 1). The role of G7 in this policy brief is as follows:

1. First and foremost, the G7 can and should act as role model for other countries. G7 countries have the resources, capacities, and the responsibility to lead by example.
2. The G7 should invest in a better evidence-base to guide policies and interventions. This would be important both to inform the G7’s own transitions and as public good for others to make use of. This investment should include data collection and analyses, as well as additional independent research and guidance on how to inform and ensure just transitions worldwide.
3. And, finally, the world is in this together. G7 countries have the responsibility and self-interest to support other countries in realising just transitions. In addition to leading by example and investing in the necessary evidence-base to inform implementation, the G7 should offer monetary and in-kind support to finance just transitions. This may include capacity building and the resources required to implement social protection measures to live up to the global pledge of LNOB.

Recommendations to the G7

Below, we list six concrete recommendations to the G7 to contribute to realising a just transition globally.

1) *Invest in a new evidence base to identify and prioritise those at risk of being left behind to achieve a just, equitable, and inclusive transition.* To ensure that no one is left behind in implementing climate change mitigation strategies and to avoid the exacerbation of inequalities, governments need a solid evidence-base to identify those who are most vulnerable and least well-off. For example, governments need data to identify vulnerable energy users facing challenges accessing clean energy and energy efficiency solutions (Takemoto et al. 2022), and those at risk of socio-economic implications of energy transitions and other necessary climate change mitigation strategies.

This calls for an alignment with global values and objectives outlined in the Sustainable Development Goals, recognising the limitations of traditional economic indicators in capturing the full extent of human development. In particular, it requires more nuanced methods of measuring well-being, poverty, and vulnerability in all forms and dimensions, moving beyond GDP and purchasing power as policy informants and yardstick indicators.

The G7 should play a crucial role in the further development and use of multidimensional metrics of economic, social, and environmental well-being, vulnerability and poverty (Think7 Engagement Group 2022; Dirksen et al. 2022; Matsushita et al. 2023; Zhou et al. 2023).

To inform the LNOB agenda, we stress, in particular, the importance of addressing poverty in all its forms and dimensions. The G7 should thus align their efforts to achieve a just, equitable, and inclusive transition with indicators for SDG 1 – No Poverty – and in particular SDG Indicator 1.2.2, “Poverty in all its forms and dimensions according to national definitions”. National multidimensional poverty indices used as official statistics and policy tools, provide a unique evidence-base to identify and target those at risk of being left behind. The G7 should invest in the uptake of indices that measure multiple aspects of poverty, vulnerability, and overall well-being to promote equitable and inclusive progress, helping to mitigate the deepening of inequalities and disadvantages.

Crucial to inform LNOB efforts, these metrics allow for nuanced distributional analyses, enabling policymakers to focus on reducing inequalities and target support towards the least advantaged. This is critical to steer an equitable transition away from fossil fuels whilst ensuring that energy systems evolve in a just, orderly, and inclusive way. The G7, particularly under Italy’s 2024 Presidency, should play a pivotal role in championing policies that not only support sustainable development but also respect planetary boundaries, and advance the 2030 Agenda. New multidimensional well-being metrics - as yardstick indicators of social progress – have a crucial

function for this, too.

We recommend that the G7 establish a Working Group to realign policies with concepts and measures of social welfare and societal progress in all its forms and dimensions beyond GDP and purchasing power. Such a working group should comprise relevant technical experts – e.g. national statistical offices – as well as high-level decision-makers from relevant line ministries of each country to ensure that this is an all-G7 and all-of-government initiative.

This G7 working group should leverage the knowledge and practices from numerous countries and UN Agencies worldwide who have already developed and used multidimensional metrics thus. Notable examples include Bhutan's innovative Gross National Happiness Index, a variety of National Multidimensional Poverty Indices that are also used to report against SDG 1.2.2 (MPPN 2024), and the UN's comprehensive global Multidimensional Poverty Index, which, too, is aligned with the SDGs (UNDP and OPHI 2023).

People-centred metrics should also be integrated into monitoring, reporting, and evaluation processes to help ensure a just transition in climate action (Okitasari and Korwatanasakul 2023). They should also be complemented by participatory investigations of specific local contexts to better understand and address the disadvantages of marginalised groups. Civil society efforts to promote access to information and communication technology for marginalised populations should be strengthened to enhance people-centred reporting. Incorporating additional perspectives and sources of information, such as academic publications and community-led data collection, can also help address the invisibility of marginalised groups in official data.

2) Improve governance mechanisms to harmonise energy transition policies with socio-economic measures. Robust vertical and horizontal governance mechanisms could ensure distributive justice and procedural justice in transitioning to clean energy (Okitasari et al. 2019; Takemoto et al. 2022). Stronger G7 commitment to governing redistributive revenues that enhance social protection policies and foster climate welfare is essential for achieving socially just climate action, as it can address the negative impacts of transition and maintain an adequate standard of living for all segments of society. These should be aligned with the evidence-base on who is least advantaged across the many dimensions of well-being and poverty and should thus follow comprehensive multidimensional metrics as highlighted under point 1 above. G7 development cooperation should continue its efforts by building social protection programmes in countries with limited or no nationwide social protection systems, as they require support in social protection reforms to protect vulnerable groups in transitioning to clean energy economies and escaping poverty in all its forms and dimensions (Okitasari and Korwatanasakul 2023). The G7 already set a target for the phase-out of environmentally harmful and inefficient fossil fuel subsidies by 2025 and urged other countries to do the same. Fossil fuel subsidies need to be replaced with a more targeted support to low-income groups, as removal of fossil fuel subsidies could negatively affect their health (lack of access to energy for cooking, heating or cooling) and also increase

GHG emission and air pollution due to a substitution of electricity with polluting solid fuel.

3) *Enhance support measures for vulnerable populations to ensure universal access to clean energy through evidence-based information.* Energy transition could harm energy access. Thus, during energy transition, governments need to ensure universal access to clean energy solutions through financial and non-financial support measures for vulnerable energy users (Takemoto et al. 2022). The example of the US illustrates how targeted efforts by public agencies and solar firms have successfully expanded the adoption of photovoltaic (PV) technology among lower- and middle-income households, leading to a decline in the annual median income of PV adopters (Barbose et al. 2021). Similarly, the European Commission's proposal to create a Social Climate Fund aims to finance temporary direct income support for vulnerable households to reduce emissions from road transport and buildings (European Commission 2021). To better attenuate vulnerabilities, decisions on support measures should be based on criteria that fully consider the impact of energy transition, and the overexposure to climate change and threats to biodiversity.

4) *Sustain decent work and reinforce labour rights to mitigate disruptions from the transition.* The G7 should increase its efforts to address labour market changes resulting from transition and exacerbated by demographic change and digitalisation through mandatory and voluntary measures, such as legislation, incentives and guidance for business. Efforts to create green jobs must be coupled with initiatives to generate greater opportunities for decent employment and income across demographic groups, particularly vulnerable populations (Okitasari and Korwatanasakul 2023). To identify particularly vulnerable groups, the G7 and other countries have a promising tool in the new evidence-base provided by multidimensional metrics of well-being, making visible who is least advantaged all-things-considered and at risk of being left behind (Recommendation 1). It is also vital to strengthen engagement with industrial stakeholders to encourage employment generation in undergoing transition. Efforts to increase G7 development assistance shares, which flow into the creation of green jobs and green skills, should consider developing countries' key transition sectors. In developing Asia-Pacific countries, energy, agriculture, forestry, and fishing sectors play pivotal roles in advancing environmental sustainability while fostering decent work to mitigate transition disruptions (ILO 2019). It is important to plan and fund re-skilling and re-employment of workers, as well as re-purposing coal-based power plants and coal mining.

5) *Promote investments in inclusive climate projects and enhance climate financing for loss and damage.* Vulnerable populations often receive inadequate investment, prompting the need for policymakers to advocate for inclusive climate projects based on evidence. Building on recommendation 1, the G7 should prioritise marginalised groups within sector policies and adopt targeted strategies for established projects like housing, energy, and basic infrastructures to implement inclusive climate policies and bolster resilience to climate-related challenges (Okitasari and Korwatanasakul 2023). Policymakers ought to establish transparent principles for climate investments, encompassing considerations of national climate goals, objectives for vulnerable

groups, gender equality, and the initial capital investment and lifecycle cost of implementation.

The G7, comprising leading industrialised nations with significant investment and innovation capacities, is pivotal in enhancing climate financing for addressing loss and damage. Bridging existing gaps in climate finance mechanisms includes advocating for universal disaster risk insurance, bolstering funding for the Global Shield against Climate Risks initiative, and expanding support for Global Environmental Facility funds to address the urgent climate adaptation needs of countries facing greater challenges. The G7 should commit to increasing their national budget allocations for climate finance, implementing clear policies to align and mobilise public and private finance flows, and expanding the domestic carbon market and pricing instruments in line with the Paris goals. Moreover, the G7 should prioritise scaling up and delivering finance commitment for all international financial institutions in which they are shareholders, aiming for more coherent and effective actions. The G7 should strengthen support for reforms in multilateral development banks and other development finance institutions to facilitate an enabling environment for private finance mobilisation and make finance flexible for supporting a wider range of climate investments.

As a result of COP27 and COP28, a “loss and damage fund” was established to help compensate vulnerable countries coping with loss and damage caused by climate change. Landlocked developing countries (LLDC) and small island developing states (SIDS) are particularly vulnerable, because they are disproportionately affected by “changing weather patterns that will likely bring untold misery to millions of people in LLDCs while rising sea levels will threaten submerging lands and the very survival of many SIDS” (FAO 2014). The G7 should invest in this fund to compensate for climate-related loss and damage (for example due to extreme storms, rising sea levels, severe droughts, and powerful wildfires) (Oxfam 2022). The G7 should also ensure that relevant stakeholders (countries) receive the necessary training to calculate and claim against loss and damage.

6) Enhance international cooperation to promote a just and equitable transition considering nationally defined development priorities. To enhance the scaling-up of actions for a just transition, the G7 must bolster multi-stakeholder coalitions that align with the objectives of the Paris Agreement and the 2030 Agenda (Matsushita et al. 2023). Leveraging platforms such as the G7 Climate Club and the Universal Climate Alliance can be valuable foundations for fostering such coalitions. These collaborative efforts should be rooted in achieving shared goals, such as carbon neutrality by agreed-upon dates, while accommodating the diverse economic, social, and political contexts across different countries. Building on national needs, country-led and multi-stakeholder partnerships are critical to coordinate just transition actions and scale up climate investments in emerging and developing countries. Promoting a just energy transition can be facilitated by establishing Just Energy Transition Partnerships (JETP), prioritising environmental sustainability and well-being in global supply chains in collaboration with the Group of Twenty (G20) and other developing countries. An example is JETP between Senegal and G7 countries to transition Senegal’s energy mix to 40 per cent of renewable energy by 2030. Furthermore,

strengthening mutual learning between G7 and G20 leaders and practitioners is vital. This can be achieved through greater inclusivity of countries facing similar challenges and more structured collaboration to facilitate substantive and sustained learning, along with fostering open and transparent communication channels.

References

Anbumozhi, Venkatachalam, et al. 2023. Accelerating “just” energy transition: Implementation and financing pathways for the G7. *Think7 Policy Briefs*. <https://think7.org/?p=397896>

Azhgaliyeva, Dina. 2023. Financing just energy transition. *T20 Policy Briefs*. <https://www.global-solutions-initiative.org/?p=67263>

Bangladesh Ministry of Environment, Forest and Climate Change. 2022. *National adaptation plan of Bangladesh (2023-2050)*. <https://unfccc.int/sites/default/files/resource/NAP-Bangladesh-2023.pdf>

Barbose, Galen, et al. 2021. *Residential solar-adopter income and demographic trends: 2021 update*. <https://www.osti.gov/biblio/1861999>

Dirksen, Jakob, Lima de Miranda, Katharina, and Wike, Richard. 2022. Towards economic and social prosperity measurement beyond GDP. *Think7 Policy Briefs*. <http://web.archive.org/web/20230602184755/https://www.think7.org/publication/towards-economic-and-social-prosperity-measurement-beyond-gdp>

ESCAP-Economic and Social Commission for Asia and the Pacific, et al. 2022. *2022 review of climate ambition in Asia and the Pacific: Raising NDC targets with enhanced nature-based solutions*. Bangkok: United Nations. <https://www.unescap.org/kp/2022/2022-review-climate-ambition-asia-and-pacific-raising-ndc-targets-enhanced-nature-based>

European Commission. 2021. *Proposal for a regulation establishing a Social Climate Fund*. <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex:52021PC0568>

FAO. 2014. *Climate change threatening small island countries and posing a danger to food security in landlocked states*. <https://www.fao.org/asiapacific/news/detail-events/en/c/216718>

Fiji Ministry of Economy. 2018. *Fiji low emission development strategy 2018-2050*. <https://unfccc.int/documents/193323>

G7. 2023. *G7 clean energy economy action plan*. <https://europa.eu/!pXNmfd>

Guillán Montero, Aránzazu. 2021. Connecting the dots: The still elusive synergies between accountability institutions and the follow-up and review of the sustainable development goals. *UNDESA Policy Briefs* 114. <https://doi.org/10.18356/27081990-114>

ILO-International Labour Organization. 2019. *Green jobs and a just transition for climate action in Asia and the Pacific*. Geneva: ILO. <https://www.ilo.org/node/175961>

Indonesia Government. 2022. *CIF accelerating coal transition (ACT): Indonesia country investment plan (IP): Revision*. https://d2qx68gt0006nn.cloudfront.net/sites/cif_enc/files/meeting-documents/act_indonesia_investment_plan_revised.pdf

Kandpal, Richa, and Okitasari, Mahesti. 2022. Advancing follow-up and review for the SDGs: Lessons from the 2021 voluntary national reviews. *UNU-IAS Policy Briefs* 36. <https://doi.org/10.53326/ACRT2498>

Lima de Miranda, Katharina, and Snower, Dennis J. 2020. Recoupling economic and social prosperity. *Global Perspectives* 1(1): 11867. <https://doi.org/10.1525/001c.11867>

Liswanti, Nining, Tamara, Ade, and Djoudi, Houria. 2020. Climate finance and gender on the ground: Insights from mitigation and adaptation interventions in Indonesia. *CIFOR Infobriefs* 306. <https://doi.org/10.17528/cifor/007857>

Matsushita, Kazuo, et al. 2023. Integrated approach for well-being, environmental sustainability, and just transition. *Think7 Issue Papers*. <http://web.archive.org/web/20230604031631/https://www.think7.org/publication/integrated-approach-for-well-being-environmental-sustainability-and-just-transition>

MPPN-Multidimensional Poverty Peer Network. 2024. *Some national measures*. <https://www.mppn.org/?p=596>

Okitasari, Mahesti, and Korwatanasakul, Upalat. 2023. Leaving no one behind in carbon neutrality strategies: Insights from developing countries in Asia and the Pacific. *UNU-IAS Policy Briefs* 39. <https://doi.org/10.53326/ZFHC4987>

Okitasari, Mahesti, et al. 2019. Governance and national implementation of the 2030 Agenda: Lessons from voluntary national reviews. *UNU-IAS Policy Briefs* 18. <http://collections.unu.edu/view/UNU:7386>

Oxfam. 2022. *COP27: Loss and Damage Fund. A monumental win, but more action needed to prevent catastrophic climate change*. <https://www.oxfam.org.uk/mc/p2ocbo>

REN21. 2021. *Renewables in cities 2021 global status report*. Paris: REN21 Secretariat. <https://www.ren21.net/cities-2021>

Takemoto, Akio, et al. 2022. Supporting vulnerable populations in the transition to net zero emissions: Priorities for developed countries. *UNU-IAS Policy Briefs* 35. <https://doi.org/10.53326/XFPR8152>

TDRI-Thailand Development Research Institute. 2022. *Impact assessment of climate change and environmental degradation on children in Thailand*. Bangkok: TDRI & UNICEF Thailand. <https://www.unicef.org/thailand/node/3421>

Think7 Engagement Group. 2022. *Call for action: New conception of prosperity and measures of progress needed*. <https://www.global-solutions-initiative.org/?p=41741>

UK Government. 2022. *COP26 achievements at a glance*. <https://ukcop26.org/wp-content/uploads/2021/11/COP26-Presidency-Outcomes-The-Climate-Pact.pdf>

UN. 2015. *Transforming our world: The 2030 Agenda for Sustainable Development*. <https://undocs.org/en/A/RES/70/1>

UNDP-UN Development Programme and OPHI-Oxford Poverty and Human Development Initiative. 2023. *2023 Global Multidimensional Poverty Index (MPI): Unstacking global poverty: Data for high impact action*. New York: UNDP & OPHI. <https://hdr.undp.org/content/2023-global-multidimensional-poverty-index-mpi#/indicies/MPI>

Volz, Ulrich, et al. 2022. Scaling up sustainable finance to enable sustainable economic recovery. *Think7 Policy Briefs*. <https://think7.org/?p=398427>

World Bank. 2022. *World Bank East Asia and Pacific economic update, Spring 2022: Braving the storms*. Washington: IBRD/WB. <https://doi.org/10.1596/978-1-4648-1858-5>

Zhou, Xin, et al. 2023. Putting societal well-being at the core of G7 climate strategies: Entry points and enabling reforms. *Think7 Policy Briefs*. <https://think7.org/?p=397900>

About Think7

Think7 (T7) is the official think tank engagement group of the Group of 7 (G7). It provides research-based policy recommendations for G7 countries and partners. The Istituto Affari Internazionali (IAI) and Istituto per gli Studi di Politica Internazionale (ISPI) are the co-chairs of T7 under Italy's 2024 G7 presidency.