24th session of the Committee of Experts on Public Administration

Written statement by the United Nations University — Institute for the Advanced Study of Sustainability (UNU-IAS)

Agenda item 9: Leveraging key advances in building strong institutions and governance for climate action, focusing on clean energy transition

These inputs are based upon UNU-IAS research findings, including the following publication:

- Thompson, S., Suzuki, M., Moore, W., Takemoto, A. and Korwatanasakul, U. 2024. "Fostering renewable energy uptake in Caribbean Small Island Developing States". UNU-IAS Policy Brief No. 46, Tokyo.

- Okitasari, M. and Korwatanasakul, U. 2023. "Leaving no one behind in carbon neutrality strategies: Insight from developing countries in Asia and the Pacific". UNU-IAS Policy Brief No. 39, Tokyo.

- Akrofi, M.M., McLellan, B.C. and Okitasari, M. 2024. "Characterizing 'injustices' in clean energy transitions in Africa." *Energy for Sustainable Development*, 83, 10156.

Challenges for effective governance at the national level

- Inequalities are largely created by distributive injustices, where the benefits from clean energy projects are unevenly distributed. Urban areas typically benefit more due to project location, while rural and peri-urban communities face high costs in connecting to energy services, making such services inaccessible to low-income households. This deepens socio-economic divides and spatial inequality, potentially amplifying the energy injustice.

- Countries have started to establish regulatory provisions on clean energy transition concerning heating or cooling (e.g., China and Thailand). A few countries have established specific laws or regulations to ensure energy justice or just energy transition, but not specifically addressing heating or cooling (e.g., Ethiopia, Rwanda and South Africa). This gap could hinder the equitable distribution of benefits and costs associated with clean energy projects, undermining efforts to promote just transition in the energy system. Additionally, there is limited implementation of social protection systems as part of climate strategies to reduce inequalities, including through welfare benefits and social safeguards.

- Insufficient enabling conditions for the private sector to invest in clean energy creates a dependence on the traditional actors who largely manage the fossil fuel-based energy sector. This creates not only institutional lock-in but also carbon lock-in. Sectoral dominance can constrain the inclusive participation of vulnerable groups and local

communities in energy decision-making to shape initiatives such as off-grid clean energy projects and the adoption of new cooling methods and technologies.

- Transformation towards low-carbon development is a shared goal among many countries, yet existing strategies for energy investments and finance generally focus on industries and private sectors rather than vulnerable groups. This imbalance can undermine efforts to accelerate clean energy adoption, which is critical for heat resilience among the population.

- A UNU-IAS study on clean energy adoption in Barbados suggests a lack of understanding among the population regarding the benefits of greater clean energy utilization (Thomson et al. 2024). It found that 80% of respondents perceived the transition as too costly at both national and household levels. High costs imposed on households for installation, operation and maintenance prevented a significant portion of the population from participating. This highlights a disconnect between clean energy policy design and acceptance, hindering efforts to scale up uptake of clean energy.

Recommendations

- *Strengthen policy and legal frameworks to minimize energy injustice.*

  Enacting specific laws or regulations addressing energy justice is critical to ensure clean and just energy transitions. The presence of such regulatory frameworks can encourage clean energy projects to take into account local/community energy needs and reduce disparities in access to socio-economic benefits, such as employment, skill development and knowledge transfer, enabling local communities to participate in the energy transition equitably. An example is South Africa, where its Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) requires large clean energy producers to dedicate 1–1.5 per cent of their revenues to invest in the socioeconomic development of areas within 50 km of projects.

- *Promote community-driven clean energy project design and implementation.*

  The spatial distribution and locations of projects are essential to avoid creating or perpetuating inequalities. Locating clean energy projects closer to marginalized communities, addressing contextual barriers such as high connection costs and aligning projects with local needs could reduce disparities. Inclusive consultation and community ownership are key to equitable clean energy transition. The Rwamangana solar project in Rwanda took extra responsibility to ensure that the project incorporated creation of alternative livelihood activities in its design, beyond the primary objective of electricity generation, benefiting women in local communities.

  Additionally, without wider consultation and involvement, local communities tend to have different expectations from clean energy projects. Solar power plants, for example, require substantial installation, operation and maintenance costs, yet local communities may not understand this if they are not adequately informed about such projects. In 2024, Austria enacted the Renewable Deployment Act and established the Austrian Coordination Platform for Energy Communities, enabling conditions for successful and easy implementation of energy community models in which citizens can actively participate in the implementation of energy transition

- *Take urgent action to bridge the financing gap for transitioning to clean energy*.

  Policymakers should be further encouraged to prioritize investments in inclusive clean energy projects and establish financial inclusion regulations to accelerate the clean energy transition. Thematic bonds, such as green and blue bonds, represent a feasible option for small states to help buffer the costs of energy transition. In 2018 and 2021, Williams Caribbean Capital issued green bonds with a minimum investment of USD 250,000, aimed at financing clean energy projects in Barbados and St Lucia. Drawing upon existing knowledge and technical capacities, such as thematic bonds, provides considerable flexibility and security to investors and issuers. Affordable financing options such as lease agreements and low-interest loans are useful options to increase public participation in the energy transition by directly embedding social support and increasing the likelihood of success for households and businesses transitioning to the latest technology. Another example is the Global Energy Transfer Feed-in-Tariff, which mitigates investment risks in the renewable energy sector, fostering investments in developing countries (e.g., Uganda and Zambia).

- *Enhance knowledge and understanding of clean energy transition through public education campaigns.*

  In many developing countries, increasing clean energy uptake means requiring a large proportion of the population to adopt relatively new technologies over a short period. However, public opinion about any new technology often evolves slowly and is shaped by scepticism, cost concerns or lack of awareness about benefits, as observed in the UNU-IAS study in Barbados (Thomson et al. 2024). Coordinated public education campaigns, driven by partnerships between governments, the private sector and civil society organizations, offer a mechanism to overcome perception barriers, boost clean energy adoption and link clean energy to urgent needs such as extreme heat mitigation.

- *Establish a people-centered and gender-sensitive monitoring, reporting, and evaluation process to improve policymaking*

  Data-driven analysis, participatory investigations of specific local contexts, and a combination thereof are essential for tracking just energy transition. A suitable monitoring and evaluation process can be implemented, including through assessments that integrate the perspectives and experiences of vulnerable groups. For instance, Thailand mapped climate risks for children to develop child-sensitive climate policies. In Chile, the Energia + Mujer initiative was launched in 2018 to promote greater participation of women in the country’s clean energy transition.