

Making Energy Transitions Equitable and Sustainable in Transitional Societies

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Over the next half-century or so, the world will undergo a historic technological transformation related to energy, where existing energy systems will be replaced by alternatives. The transformation cannot leave society untouched. Democratising the transformation is key to attaining democratic and equitable solutions, which will be acceptable to all. Among technological infrastructures, energy systems are arguably the mostly deeply embedded in modern economies and societies. Their reconfiguration is bound to pose profound socio-political and economic challenges particularly in transitional societies where energy transition is likely to be sensitive and complicated. Technical questions concerning the economics of any innovation and potential to generate more power with minimal emissions will dominate the energy discourse. Besides, there will be emphasis on political questions related to the achievement of energy security. Questions of sustainability and justice will remain central and demand attention.

This paper seeks to address the problem of achieving just and sustainable energy transitions in transitional societies. It uses the Multi-Level Perspective (MLP) approach to understand the transition dynamics and applies energy justice theory to the analysis. Transitional societies face multifaceted challenges in respect of transition. The spectrum of challenges from the political to economic and social to cultural faced by these societies offer new opportunities as well as threats. This paper draws on the experiences of Nordic countries, which have achieved relative success in their sustainable energy transition projects. However, these countries too face justice and equity issues, which are particularly relevant to transitional societies. The paper uses MLP and energy justice theory to argue the need for due consideration of social aspects and justice issues at least on par with matters of sustainability and green innovation in energy transition in transitional societies. The paper identifies the following as challenges for energy transition in transitional societies: (a) affirming that energy transition ensures energy security and energy equity; (b) ascertaining that energy transition leads to low carbon future; and (c) ensuring that energy transition is economically affordable and sustainable.

Key words: *Energy justice, Energy transitions, Multi-level perspective, Sustainability, Transitional societies*