Narendra N. Dalei Anshuman Gupta *Editors*

Economics and Policy of Energy and Environmental Sustainability



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Sustainable Energy and Environmental Sustainability in an Economics and Policy Prospective



Narendra N. Dalei and Anshuman Gupta

1 Introduction

Sustainable energy, which is accessible and affordable, has been positioned as one of the major Agenda 2030 for Sustainable Development Goal 7 (SDG7) (UN, 2018). Heavy dependence on fossil fuel energy has created hurdles (Tollefson, 2018) during previous decades to shift to sustainable energy sources and as a result, the decarbonisation of the energy system becomes a distant dream, despite lots of effort put by the global community for better, affordable, clean, and sustainable energy. While around two-thirds of greenhouse gas (GHG) emissions is coming entirely from energy generation and its usages, the entire world is putting effort to shift to sustainable energy quickly in order not to be trapped into the detrimental impact of climate change for a long period (Dalei & Gupta, 2020). Transitioning to sustainable energy according to the Paris agreement has been considered as one of the major drivers of keeping the global mean temperature rise well below 2 °C above the pre-industrial level (Dalei & Gupta, 2020). Following the Paris agreement, energy policies of most of the countries at large have been aligned to sustainable energy with the objective of providing affordable and clean energy to all citizens along with decarbonizing the energy systems (Sovacool et al., 2018; Tagliapietra et al., 2019). Despite lots of effort put by global communities (Julia & Kassim, 2020) for cost-effective and environmentally friendly generation, distribution, and access to sustainable energy, there are many challenges to the realization of environmental sustainability and green

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