International Conference on Small Modular Reactors and their Applications



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Minilaterals for Small Modular Reactors: Cost Effective and Environmentally Sound Energy Transition Towards Global Net Zero

Small Modular Reactors (SMRs) endorsed as the au courant solution to the dire global energy crisis are still in the incipient stage of its designing and deployment. While developing countries like India have had SMRs on their policy line-ups for a couple of years now, they haven't translated to practical commercial options given the lack of a standardized design, augmented investments and delayed profits, and major security concerns. Minilateral partnerships with like-minded countries to homogenize SMR design structures, regulation and safety approaches, with a shared goal of meeting energy demands and achieving climate goals, will aid in facilitating a conducive environment for SMR deployment by improving capacity-building, proposing shared investment models, and subsequent global design standardization. This paper will make a case for the importance of a 'minilateral approach'towards the deployment of SMRs for developing and poor economies with collaborative endeavours, shared economic burden and reduced financial risks, tech-support from their developed allies to reach a green and sustainable future.

SMRs will be key in increasing the nuclear energy share into the global energy grid. This paper analyzing such the advent of minilateral alliances that will focus on green taxonomies and the incorporation of SMRs into the developing countries'energy agenda, will also shed light on the need for an extensively elaborate technology-neutral policy framework and international harmonization on achieving net-zero. Further, for an India-specific case study from a policy perspective; inviting foreign and private sector investments into its currently only government-run nuclear energy sector, will prove to make India and asset to such collaborative partnerships.

Country OR International Organization

India

Email address

hely_d25@yahoo.com

Confirm that the work is original and has not been published anywhere else

YES

Author: DESAI, Hely (University of Cambridge)

Presenter: DESAI, Hely (University of Cambridge)

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