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Stakeholder Perspectives on Challenges in Integrating and Developing Infrastructure for Small Modular Reactors (SMRs) in Kuwait

Kuwait endeavors to reduce its reliance on oil in alignment with the Kuwait National Development Plan, diverting investments towards non-oil sectors. Concurrently, the nation is committed to mitigating greenhouse gas emissions. Recognizing the nuclear energy chain as a highly dependable and low-emission power source per unit, Kuwait deems it imperative to incorporate various low-carbon energy technologies, particularly nuclear power, to meet its climate policy objectives. Small Modular Reactors (SMRs) emerge as promising contributors to climate change mitigation and bolstering energy security. This study, an integral part of an ongoing research initiative, delves into the challenges associated with integrating and developing Small Modular Reactor (SMR) infrastructure in Kuwait, encompassing diverse stakeholder perspectives. Employing an empirical-qualitative approach, incorporating expert interviews and discussions, the research explores hurdles in nuclear infrastructure development, addressing regulatory frameworks, technical considerations, and the necessity for capacity-building. Notably, local political instability emerges as a significant risk, according to the majority of interviewed experts, directly influencing the development of a national nuclear program. This instability contributes to a lack of governance within various institutions across the country, posing both direct and indirect risks to the nuclear program's progress. The paper strives to provide decision-makers with a comprehensive understanding of these challenges for informed decision-making.

Country OR International Organization

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