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Abstract

Renewable Energy Policy and Emission Reduction: Assessing Policy Strength and Outcomes in the Australian Context †

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As nations strive to meet climate commitments under the Paris Agreement, the role of climate law policy frameworks in driving emissions reduction has come under increasing scrutiny. This paper critically examines whether the strength of climate law frameworks and net zero policy correlates with measurable reductions in greenhouse gas emissions, focusing on the Australian context over the past two decades. Australia presents a complex case, characterized by periods of ambitious net zero and renewable energy targets, followed by political uncertainty, policy reversals, and uneven implementation across federal and state jurisdictions.

Using a mixed-methods approach, the study combines policy analysis with emissions data across key sectors to evaluate the effectiveness of climate law frameworks in driving participation in major renewable energy initiatives, including the rewiring the nation policy (RTN) and other recent policy frameworks. The research employs a policy strength assessment framework, considering elements such as legal enforceability, fiscal support, target ambition, institutional alignment, and longevity.

Findings indicate that stronger, more consistent policy frameworks are associated with clearer trends in emissions reductions, particularly in the electricity sector. Conversely, periods of policy fragmentation and weak political ambition have undermined progress, delaying investment in renewables and contributing to emissions volatility. The paper concludes that policy strength—defined by comprehensive and durable legislation that remains relevant and appropriate—is a critical factor in enabling renewable energy transitions and achieving sustained emissions reductions. Recommendations are offered for strengthening Australia's policy architecture to align with its net-zero commitments.

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