環境管理的情境規劃：導入技術路徑圖

Embedding a Roadmap into the Scenario Planning of Environment Management in Taiwan

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摘要

本文針對再生能源開發的情境規畫和資源發展路徑圖進行研究，共分為九個步驟。這是首篇納入情境發展 (步驟 1-4)、政策組合規劃 (步驟 5-6)，及資源發展路徑圖第 (步驟 7-9)，整合三者的學術研究。本研究係針對臺灣為實現 2025 年的再生能源發展目標，進行永續環境政策規劃。情境分析為直觀的邏輯方法，本研究結合兩種生命週期類型的政策方案，以及可執行的情境規劃，產生出 2018-2025 年間的資源發展路徑圖。最後，在情境穩健性分析中，確認出三個資源發展類型: 1.綠色價值鏈的向前整合、2.綠色事業單位的整合，以及 3.綠色事業的環境管理。

關鍵字：情境分析、情境穩健性分析、永續環境政策、資源發展路徑圖、環境管理

ABSTRACT

This paper is the first study to investigate scenario planning and roadmapping for renewable energy development with nine steps. It is believed that this is the first study to consider the first 1-4 steps with scenario development and latter 5-6 steps with policy portfolio planning, and the final 7-9 steps with resource development roadmap for environmental sustainability policy planning in Taiwan for achieving the 2025 renewable energy target. It marks new ground in considering intuitive logics approach-based scenarios and two life-cycle typed policies for portfolio plans of scenario planning on an extant, and providing the resulting resource development roadmap within 2018-2025. Finally, three resource development tasks, including forward integration of green value chain, integration of green business units, and green business environment management, were identified in the analysis of the robustness of the scenarios.

Keywords: Scenario analysis, Scenario robustness analysis, Renewable energy policy, Resource development roadmap, Environment management