

**Assessment and Validation of Implemented DPWH Environmental Management Programs  
in Region Offices: Criteria and Mechanism for the  
Search for the DPWH Eco-Friendly Regional Office 2025**

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**Abstract**

As climate change intensifies the challenges of environmental degradation, the adoption of sustainable practices in government operations has become a crucial factor in promoting long-term ecological balance. This study explored the effectiveness of environmental management programs within the Department of Public Works and Highways (DPWH) regional offices in the Philippines, specifically focusing on sustainability practices such as energy conservation, waste management, water conservation, and air pollution prevention. Using a mixed-methods research design, data were collected from 16 DPWH regional offices through surveys, interviews, and observations. The results revealed that while significant strides have been made in implementing environmental policies, gaps remain in the consistent application and integration of sustainability measures across offices. The study concluded that internal assessments and external validations, along with resource allocation, play a vital role in enhancing the effectiveness of these programs. Statistical analysis using regression models showed that environmental management programs significantly contributed to improvements in resource utilization and sustainability practices, with an adjusted  $R^2$  value of 0.687. The findings underscore the need for continuous policy updates, resource allocation, and robust evaluation mechanisms to further improve environmental performance in DPWH regional offices.

*Keywords: Environmental management, sustainability practices, government operations, DPWH, Philippines, energy conservation, waste management, climate resilience*