

EXPERIENCE NOTE

# VIETNAM'S CLIMATE STRATEGY LEADING IN ADAPTATION AND MITIGATION MONITORING

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TRANSFORMING DATA INTO MITIGATION ACTION:  
VIETNAM'S JOURNEY IN MEASURING REPORTING AND VERIFICATION

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# EXECUTIVE SUMMARY

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Vietnam, one of the world's most vulnerable nations to climate change, is pioneering climate monitoring and adaptation initiatives with significant support from Luxembourg. Starting in 2018, Luxembourg invested in two major projects in Thua Thien Hue (TT Hue) province. These initiatives focus on mitigating greenhouse gas (GHG) emissions and enhancing local resilience against climate impacts.

LuxDev, the Luxembourg Development Cooperation Agency, spearheaded these projects, emphasizing the importance of Monitoring and Evaluation and Measurement, Reporting, and Verification (MRV) systems. These systems are critical for tracking the effectiveness of climate interventions and ensuring adherence to international commitments like the Paris Agreement.

The projects had two main components. The Climate Change Adaptation project (VIE/433) aimed to strengthen resilience through systematic monitoring and evaluation of climate impacts and adaptation interventions. It targeted vulnerable communes, building local capacity to manage and mitigate climate risks. The Climate Change Mitigation project (VIE/401) focused on reducing GHG emissions by replacing high-energy lighting with efficient light-emitting diode (LED) lights in public spaces and schools, significantly lowering CO<sub>2</sub> emissions and raising awareness about energy efficiency.

A notable achievement of the Nationally Appropriate Mitigation Action pilot on energy efficient LED lighting was that the GHG emission reduction outcome of the intervention was the first ever mitigation result measured as per the United Nations Framework Convention on Climate Change (UNFCCC) guidelines, verified by and formally registered with the Government of Vietnam. This milestone set a precedent for future climate projects in Vietnam and attracted interest from national bodies, major donors, and the private sector.

Key to the success was the close collaboration with Vietnamese government agencies, both at the national level, such as the Department of Climate Change within the Ministry of Natural Resources and Environment, and the provincial level, including the Division of Climate Change at the Department of Natural Resources and Environment, as well as the Department of Industry and Trade, and the Department of Planning and Investment. This partnership ensured strong local ownership and alignment with national policies.

Capacity building was a cornerstone of these projects. Over four years, LuxDev conducted numerous trainings and workshops, significantly enhancing the technical skills and knowledge of provincial staff. By the end of the projects, the institutional capacity of TT Hue's Division of Climate Change had increased substantially, positioning it as a model for other provinces.

The projects also demonstrated the cost-effectiveness of LED lighting as a mitigation strategy. The installation of LEDs in schools and on streets not only reduced energy consumption and CO<sub>2</sub> emissions but also led to significant cost savings. By 2030, energy savings are expected to reach 10,441 MWh (equalling 55% reduction compared to conventional lighting), with a cumulative reduction in emissions estimated at 9,327.9 tCO<sub>2</sub>.

Despite challenges such as slow government procurement processes and the absence of national guidelines for MRV, the projects successfully developed and implemented comprehensive MRV frameworks. These frameworks were aligned with UNFCCC guidelines and adapted to the local context, providing a robust model for future mitigation measurement efforts.

The experience in TT Hue offers valuable lessons for scaling up similar initiatives nationwide. The success of these projects underscores the importance of strong government commitment, effective collaboration, and the development of local expertise. As climate issues continue to escalate globally, the methodologies and results from LuxDev's pioneering work in Vietnam serve as a benchmark for future interventions.

By documenting and sharing these experiences, LuxDev aims to highlight the potential for international cooperation in addressing climate change and inspire further climate action, contributing to a global community committed to sustainable solutions.