



MEASURING PRIVATE INVESTMENTS INTO GREEN GROWTH: VIETNAM'S PRIVATE CLIMATE EXPENDITURE AND INVESTMENTS REVIEW

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ACTIVITY AREA: ————— Mitigation

FOCUS AREA: ————— M&E

COUNTRY: ————— Vietnam

SECTORS

INVOLVED: ————— Energy, Industry

TIMEFRAME: ————— Study period: 2017-2018

CASE SUMMARY: ————— The role of private finance in accelerating actions for reducing greenhouse gas (GHG) emissions and adapting to climate change is now well recognised. To drive private finance in this direction, a conducive mix of appropriate incentives, legal frameworks and enforcement is required. The Ministry of Planning and Investment (MPI) of Vietnam therefore initiated the Private Climate Expenditure and Institutional Review (PCEIR) in 2017-18 to track the climate change mitigation and green growth investments made in the 2010-15 period.

The process undertaken under the PCEIR enables Vietnam to track and efficiently manage their climate investments such that it can help deliver maximum impact from the limited financial resources available. Various factors such as the adoption of a comprehensive data collection process, an alignment with domestic needs and frameworks, the assessment of future financial needs and the transparency of the process have contributed to the successful realisation of the PCEIR.

BACKGROUND: ————— Vietnam is extremely vulnerable to climate change impacts, especially due to its low-lying land that is prone to frequent flooding and the high population density concentrated along the coastal areas (USAID, 2017). The effect of climate change has led to a rise in the prevalence of extreme events like storms, typhoons and droughts. According to estimates, extreme weather events in the period of 1998-2018 have led to economic losses which account for almost 0.5% of Vietnam's Gross Domestic Product (GDP) (Germanwatch, 2019). With its GHG emissions expected to more than triple between 2010 and 2030 under a business as usual scenario (Viet Nam, 2015), the Government of Vietnam (GoV) has attempted to mitigate its emissions by developing the National Strategy on Climate Change (NSCC) and National Strategy on Green Growth (NSGG), in the years 2011 and 2012 respectively. Their strategic policies have helped in giving a push to the country's climate change mitigation and green growth (CC&GG) agenda, pointing to the need to mobilise additional public and private financing.





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To increase the effectiveness of its public expenditure, the GoV conducted two climate public expenditure and institutional reviews (CPEIR) – the first for five key ministries to track the public budgetary expenditure on climate change mitigation and adaptation, and the second for four provinces of the Mekong delta. The CPEIRs helped the GoV to understand the state of budgetary allocation towards CC&GG activities and identify ways to increase the effectiveness of budget allocation to steer towards low-carbon and green growth pathways.

Vietnam recognised the importance of tracking private climate finance spending along with public investments, as the majority of mitigation-related expenditures comes in the form of private sector investments and is therefore not covered under the CPEIR. To overcome this information gap and better understand the private sector finance mobilisation processes under the national climate policies, the MPI decided to conduct the Private Climate Expenditure and Institutional Review (PCEIR) in 2017-18, examining climate change mitigation and green growth investments made in the 2010-15 period. The PCEIR study had a threefold objective: i) identification of private investments for CC&GG; ii) support in the reporting on private climate finance flows; iii) and evaluation of efficacy of climate finance policies, including the public policies that leverage private finance. This process supplements the CPEIR and will assist the GoV in establishing a comprehensive climate finance monitoring framework. The review also supports the work being conducted by the National Climate Change Committee (NCCC) which is an advisory committee responsible for monitoring and coordination of national programmes on climate change in Vietnam.

ACTIVITIES:

With support from MPI, USAID and United Nations Development Programme (UNDP), the project management unit under the Department of Science, Education, Natural Resources and Environment conducted the comprehensive national-level review of private sector investments through the following process:

- **ANALYSIS OF THE EXISTING DOMESTIC PRIVATE CLIMATE FINANCE ARCHITECTURE:** An initial analysis was conducted to identify the policy instruments and the budgetary sources that support and deliver private sector investments for climate change mitigation and green growth actions. As part of this, the financial and regulatory structures that promote private finance mobilisation (such as the Law on Economical and Efficient Energy Use and feed-in tariffs for renewable energy) were reviewed to understand their effectiveness.
- **SETTING STUDY BOUNDARIES ON THE BASIS OF SECTORS:** The sectors that hold direct relevance for climate change were identified. The energy sector (renewable energy and energy efficiency) was selected for the review, building on the lessons of past PCEIR experiences regarding the selection of one or two key sectors for the review and keeping in mind the availability of specific data for the sector. This was followed by an identification of relevant sub-sectors, whose investments would be considered.
 - a. Energy efficiency (EE) measures in Vietnam's key energy-intensive industries (such as iron and steel, cement, pulp, paper and sugar) were included (such as the installation of waste-heat-recovery systems for the cement sector and cogeneration systems for the sugar industry).
 - b. Renewable energy (RE) investments for electricity generation from small-scale hydropower (less than 30 MW), wind and solar energy were included.
- **DATA COLLECTION FROM PRIVATE ENTERPRISES:** Through a structured bottom-up process, the investment data relevant for supporting climate actions and green growth were collected from a variety of online sources and reports, including the Clean Development Mechanism (CDM) project

documentation, data from sector associations and Official Development Aid (ODA) grants and concessional loans. The missing information was acquired from relevant government bodies and departments, expert estimates, interviews with key industry actors and commercial banks, as well as surveys.

- **ASSESSMENT OF FUTURE PRIVATE CLIMATE FINANCE NEEDS:** On the basis of recent data and studies by the Ministry of Industry and Trade (MOIT) and the World Bank, as well as investments already made into the selected industry sectors and the main identified measures, the future investment requirements were estimated. Finally, specific recommendations to enhance private climate finance flows were made, such as the need to further enforce EE laws and to develop flexible lending mechanisms with simplified procedures for EE and RE.

INSTITUTIONS

INVOLVED:

- **DEPARTMENT OF SCIENCE, EDUCATION, NATURAL RESOURCES AND ENVIRONMENT (DSENRE):** Conducted the study and review as part of the 'Strengthening Capacity and Institutional Reform for Green Growth and Sustainable Development in Vietnam' (CIGG) project commissioned by MPI.
- **MINISTRY OF PLANNING AND INVESTMENT (MPI):** MPI is the key agency responsible for managing and coordinating the PCEIR. It also provided inputs on the climate change and green growth financing landscape of Vietnam.
- **UNITED NATION'S DEVELOPMENT PROGRAMME (UNDP):** UNDP was responsible for funding the PCEIR. It has also helped with technical inputs for the development and refining of climate expenditure tracking methodologies.

COOPERATION WITH:

DSENRE, MPI and UNDP cooperated with several relevant government departments, including the Department of Hydrology, Meteorology and Climate Change, the Department of New and Renewable Energy and the Department of Science, Technology and Energy Conservation. Data was also collected from research organisations such as the Energy Conservation Research and Development Centre (ENERTEAM) and the Research Institute of Pulp and Paper Industry (RIPPI) as well as from commercial banks.

FINANCE:

The PCEIR has been funded under UNDP's Low Emission Capacity Building Programme (LECBP), with support from the United States Agency for International Development (USAID). The LECBP is a USD 40 million programme and focuses on 25 developing countries, including Vietnam. Exact funding numbers are not available.

IMPACT OF ACTIVITIES:

Based on its analysis, the PCEIR study projects the investments in renewable energy and energy efficiency to rise in the future due to a reduction in renewable energy prices (particularly solar and wind) and an adjustment of the energy price to market prices respectively. However, certain suggested measures, mentioned below, are required to drive private investments in these sectors.

- **RENEWABLE ENERGY INVESTMENTS:** The PCEIR study revealed that the private sector invested around USD 9.75 billion into renewable energy projects for the period of 2011-2015, with the majority of the investments made in 150 small-scale hydropower projects (MPI and UNDP, 2017). On the basis of the review, certain legislative actions were suggested to further drive investments in the sector – such as preparing a national level RE development Master Plan; updating power purchase agreements to reflect global best practices; strengthening the power grid; and simplifying and unifying the licensing procedures for RE projects.



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- **ENERGY EFFICIENCY INVESTMENTS:** Private sector investments amounting to over USD 630 million were calculated for the energy efficiency projects (MPI and UNDP, 2017) in areas such as technology and equipment replacement, energy circulation and technological renovation. The investments were found to be limited since the economic incentives in energy efficiency are significantly lower. Some suggestions for enhancing private investments included increasing energy costs to reflect the 'polluter pays' principle; the need for appropriate sanctions for non-compliance; and incentivising local commercial banks to develop preferential debt products and simplify the processes.

The findings of the review concluded that cost-benefit considerations are the key drivers for private investments in these sectors. This will aid the government in decision-making on financial allocations for the sector and for designing suitable measures such as loan subsidies, investment guarantees, regulations, etc.

WHY IS IT GOOD

PRACTICE:

- **ALIGNMENT WITH NATIONAL FRAMEWORKS:** The PCEIR was initiated to fill the gap that was identified through the previously conducted CPEIR exercise, which found that while the majority of the investments for mitigation-related activities comes from the private sector, these were not captured in most of the extensive assessment frameworks, including CPEIR. Thus the need for the PCEIR was established and goals for the study were formed accordingly. Further, the work conducted under PCEIR aimed to support the work of the National Climate Change Committee and also link the assessment to similar studies taking place across the globe. The PCEIR also holds domestic significance as it has helped in reviewing the existing climate finance related financial instruments and will also support the Vietnam's Green Finance Policy Framework that aims to provide impetus to green credit programmes and green bond projects. The study helped the GoV to identify avenues that can help in stimulating private sector engagement, improve its alignment with domestic climate policies and strengthen the organisational structure of private climate finance in Vietnam.
- **TECHNICAL FEASIBILITY:** Limitations such as the absence of studies on private climate investments as well as the data being scattered across sectors - which is a key characteristic globally - demanded a carefully planned and detailed approach. It involved a bottom-up approach wherein the investments in the selected sectors were first reviewed with data collection from a variety of sources such as the Foreign Direct Investment (FDI) database, corporate disclosure reports, government records, import-export data, CDM database etc. Technical workshops on private climate expenditure and institutional tracking were organised, along with several consultations and interviews for collection and verification of data. The data gaps were addressed through expert interviews and consultation with selected investors and state operating entities (SOE) that helped in determining investment values based on unit price of typical investments.
- **TRANSPARENCY:** To improve the data collection process and increase its credibility and reliability, the data on private climate finance is being reported to the government and is then fed into a database. This database includes data from various sectors and serves as the most comprehensive source for this type of financial information (as reported by case study contributors).

- SUCCESS FACTORS:**
- CREDIBLE COUNTRY-SPECIFIC METHODOLOGY:** The approach adopted for preparing the review methodology was structured and tailored to the context of Vietnam. For instance, the sectors were shortlisted based on their relevance to climate change and the availability of private investment data in Vietnam. The approach was also guided by an extensive analysis of the institutional, policy and financial architecture of private climate finance in the country. Further, the methodology development also incorporated lessons from the CPEIR conducted in Vietnam as well as the PCEIR reviews conducted in other countries.
 - ACTION-ORIENTED ANALYSIS OF BARRIERS TO PRIVATE CLIMATE INVESTMENTS:** Defining the scope and structure of the review involved a detailed analysis of the limitations hampering private investments, a sector-wise analysis of the barriers and financial constraints, and the identification of different relevant stakeholder groups, as well as their roles. An understanding of the barriers for mobilising private investment (from the perspective of the stakeholders) was crucial for formulating suggestions for effective plans and policies and helped in laying a strong foundation for identifying opportunities to address investment barriers. As an outcome, various sector-specific recommendations, leading to action plans, have been formulated that can help in mobilising future private investments.
 - COMPREHENSIVE AND MEANINGFUL ASSESSMENT TO SUPPORT PLANNING FOR FUTURE INTERVENTIONS:** The review assessed the investments required to meet the proposed renewable energy and energy efficiency targets in selected sectors (Table 1). This assessment has helped to inform the GoV about the scale of private climate finance investments already made and the amount required to meet the national targets. It has also helped them to put forward suitable recommendations and better align the existing financial instruments and schemes to encourage and mobilise private climate-related finance from potential investors.

INDUSTRIAL SECTOR		
SUB SECTOR	OVERALL INVESTMENT NEED (MILLION USD)	ESTIMATED INVESTMENTS MADE IN THE PERIOD 2010-2015
IRON AND STEEL	450.0	169.6
CEMENT	650.0	
PULP AND PAPER	306.0	104.5
SUGAR	360.0	127
TOTAL	1,766	401.1

Table 1: Private sector investment needs for selected Industries (MPI and UNDP, 2017)



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OVERCOMING BARRIERS / CHALLENGES:

WHAT WERE THE MAIN BARRIERS / CHALLENGES TO DELIVERY?

INFORMATIONAL:

Since the data on private investments is bound by non-disclosure policies, most of the climate investment data was either scattered or not available.

CAPACITY:

Since climate finance remains poorly defined, the review team has throughout faced difficulties in understanding whether an investment delivers climate change benefits or should not qualify as climate finance.

HOW WERE THESE BARRIERS / CHALLENGES OVERCOME?

The GoV adopted a bottom-up approach in order to obtain the missing information related to private investments. This included the collection of data from various sources such as government reports, corporate disclosure reports, imports and custom records etc. Further, the missing information was collected by frequently engaging with the private enterprises, State Operating Entities (SOE) and the energy sector through structured interviews and consultations.

To overcome the problem of defining investments as climate-specific, the GoV acquired data and worked closely with selected investors to understand the degree of relevance to climate change for prospective investment datasets.

LESSONS LEARNED:

- **ESTABLISH A COUNTRY-SPECIFIC CLIMATE FINANCE DATABASE:** In order to overcome data gaps and limitations, countries should routinely collect data on climate expenditure and investment. The climate finance data from different sectors should be captured in a database to increase the ease of data accessibility by government departments.
- **CONSTANTLY ENGAGE WITH THE PRIVATE SECTOR:** A constant engagement with private enterprises is important to obtain information on private investments and identifying its relevance to climate change. This is also necessary to make private investors aware about the benefits associated with climate change investments that can consequently drive future private climate finance.
- **ASSESS FUTURE PRIVATE FINANCE NEEDS:** In line with the climate investment tracking exercise, the respective line departments should also assess their requirements for private finance in future. Such assessments can help them build strategies in advance to attract private investments and ensure that the available financing is sufficient enough to implement the planned actions.

HOW TO REPLICATE

THIS PRACTICE:

- **BUILD INTER-MINISTERIAL COORDINATION:** The exercise of tracking climate finance demands financial data from various ministries since climate change is multi-sectoral in nature. To best utilise the resources available (including private sector grants), it is important to build inter-ministerial coordination platforms that can help in efficiently allocating the scarce resources.
- **TAILOR EXISTING TRACKING METHODOLOGIES:** A common climate expenditure tracking methodology might not be widely applicable across all countries. The methodologies should therefore be tailored to the national context in terms of the scope and approach, while giving due consideration to the concerns of all stakeholders. The adoption of such an approach by the GoV clearly highlighted

the importance of developing domestic policy frameworks that have clear linkages with the government portfolio of expenditures for mobilising finance, especially from the private sector.

- **PERIODICALLY VERIFY DATA:** In order to track and robustly capture domestic climate finance trends, an arrangement to periodically collect, assess and verify data should be in place.

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FURTHER KEY

RESOURCES: ————— · MPI and UNDP (2017). Private Climate Expenditure and Investment Review of Vietnam. Available at: http://ledsgp.org/wp-content/uploads/2017/10/Vietnam_private-climate-expenditure_FINAL.pdf

WEBSITES: ————— · NDC Support Cluster on Private Sector Climate Expenditure Reviews: <https://www.ndc-cluster.net/tool/private-sector-climate-expenditure-review>

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CASE STUDY

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REFERENCES: ————— · Germanwatch (2019). Global Climate Risk Index. Available at: https://www.germanwatch.org/sites/germanwatch.org/files/Global%20Climate%20Risk%20Index%202019_2.pdf
· USAID (2017). Climate Change Risk Profile of Vietnam. Available at: https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Vietnam%20climate%20risk%20profile.pdf
· Viet Nam (2015). Intended Nationally Determined Contribution of Viet Nam. Available at: <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Viet%20Nam%20First/VIET-NAM%27S%20INDC.pdf>



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