

REPORT

The Landscape of Climate-Finance in Vietnam

Consultant: Nguyen Minh Khoi

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CONTENTS

1. INTRODUCTION	4
2. METHODOLOGY APPROACH.....	6
3. CLIMATE FINANCE FLOWS IN VIETNAM	6
3.1. International climate finance.....	6
<i>Overview</i>	6
<i>Financial instruments</i>	8
<i>Investment sectors</i>	9
<i>Donors perspective</i>	10
3.2. Private finance.....	11
<i>Overview</i>	11
<i>Green credit</i>	11
<i>Green bond</i>	12
<i>Public-Private Partnership Investment (PPP)</i>	13
<i>Future for the green securities</i>	13
3.3. Domestic Public Finance	14
<i>Overview</i>	14
<i>Capital expenditures on climate change at central level</i>	15
3.4. Key findings on climate finance flows in Vietnam	18
4. POLICY RECOMMENDATIONS.....	19
4.1. Recommendations for the improvement of the climate finance tracking	19
<i>Develop and Establish a nationwide green taxonomy that could cover climate change</i>	19
<i>Mainstreaming the climate change and green growth targets into budgeting progress</i>	19
4.2. Recommendations for the improvement of climate finance mobilisation	20
<i>Establish a Sustainable Finance Initiative Committee</i>	20
<i>Develop a variety of financial instruments to mobilise resources for climate change and green</i>	21
<i>growth</i>	21
<i>Enhance the role of public sector in guiding the private sector investment in green growth and</i> <i>climate change response</i>	22
BIBLIOGRAPHY.....	24
<i>Annex 1. Methodology, process and data sources used</i>	27
<i>Annex 2. SWOT Analysis for Domestic Climate Finance in Vietnam</i>	38
<i>Annex 3. SWOT Analysis for International Climate Finance</i>	40
<i>Annex 4. MPI's guidelines on the classification of climate change and green growth activities</i> . 46	
<i>Annex 5. Classifications systems for green budget tagging across select countries</i>	47
<i>Annex 6. Regulatory framework for climate finance in Vietnam for reviewed period 2016-</i> <i>2020</i>	49
<i>Annex 7. Deep dive: Private finance in the energy sector in Vietnam</i>	57

FIGURE

FIGURE 1: INTERNATIONAL DEVELOPMENT AID FOR CLIMATE CHANGE EFFORTS IN VIETNAM	7
FIGURE 2: INTERNATIONAL DEVELOPMENT AID FOR CLIMATE CHANGE IN VIETNAM BY THEME	8
FIGURE 3: INTERNATIONAL FUNDING FOR CLIMATE CHANGE IN VIETNAM BY INSTRUMENTS	8
FIGURE 4: INTERNATIONAL DEVELOPMENT AID FOR CLIMATE CHANGE IN VIETNAM BY SECTORS	9
FIGURE 5: GREEN CREDIT OUTSTANDING IN 2016-2020	12
FIGURE 6: SECTORAL OUTSTANDING GREEN CREDIT	12
FIGURE 7: GREEN BONDS ISSUED IN VIETNAM, VND TRILLION	13
FIGURE 8: KEY SECTORS OF PPP PROJECTS	14
FIGURE 9: PUBLIC EXPENDITURE IN VIETNAM	15
FIGURE 10: DOMESTIC PUBLIC CLIMATE INVESTMENT AT CENTRAL LEVEL	16
FIGURE 11: THE SHARE OF CLIMATE AND NON-CLIMATE RELATED PUBLIC INVESTMENT IN MINISTRIES	16
FIGURE 12: ALLOCATION OF DOMESTIC PUBLIC CLIMATE INVESTMENT AT CENTRAL LEVEL BY THEME	17
FIGURE 13: ALLOCATION OF DOMESTIC PUBLIC CLIMATE INVESTMENT AT CENTRAL LEVEL BY SECTORS	17
FIGURE 14: CLIMATE FINANCE IN THE SUSTAINABLE DEVELOPMENT PATH	30

TABLE

TABLE 1: CLASSIFICATION OF SECTORS AND SUB-SECTORS AS CLIMATE FINANCE	36
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1. INTRODUCTION

Being highly vulnerable to climate change, Vietnam has soon realised the importance of bringing climate actions into national policies, plans, and strategies.

Since the promulgation of the National Climate Change Strategy (NCCS, 2011) and the Vietnam Green Growth Strategy (VGGS, 2012), the international context has changed significantly for climate actions, most notably the adoption of the Paris Agreement in 2015 and the Agenda for Sustainable Development to 2030. The Covid-19 pandemic also generates complex impacts and implications on climate actions worldwide. It is crucial that the contribution from Vietnam be aligned with long-term goals under the Paris Agreement and international context. Nevertheless, as it is reflected in the Paris Accord itself through the principle “common but differentiated responsibilities”, the need for appropriate consideration of national circumstances, particularly the national regulatory framework for climate change and green growth, is equally important.

Climate finance is an important channel to finance the country’s long-term climate change and green growth strategy. As a coastal country, Vietnam is assessed to suffer significantly and directly from climate change impacts. In this context, the country shows a strong commitment to global climate efforts at both international and national levels.

At the international level, Vietnam committed to cut its emissions growth by 9% or nearly 84 million tonnes of CO₂ by 2030 compared with business-as-usual projections, using a 2014 baseline ([Vietnam's Update NDC, 2020](#)). At the national level, it has issued various legal documents to provide guidelines and direction for its economic development plan with the integration of green growth and climate change targets. Most recently, the new Vietnam Green Growth Strategy for the period 2021-2030 with vision to 2050 was issued by the Prime Minister under the Decision 1658/QĐ-TTg dated 1st October 2021.

The key issue to successfully achieve those targets is that Vietnam can mobilise sufficient financial sources, among others, to finance its action plans. ([World Bank, 2014](#)) estimates that the incremental investment cost for Vietnam to move from a BAU scenario to a low-carbon development path is 1% of annual GDP during 2010 - 2030, without accounting for the additional cost of adaptation. Meanwhile, budget spent on climate change in Vietnam in recent years accounting for 0.1% of its annual GDP ([MPI, 2016](#)) is far below that number. In this context, climate finance could be a promising area to explore for funding climate and green projects in the country.

Given its long-term potential perspective, climate finance in Vietnam is not widely recognised and developed. The taxonomy for climate finance in Vietnam, as in many other countries, is not well defined and structured. In terms of the legal framework, Vietnam has issued regulations and guidelines for climate financing practices, both in private and public sectors (see Annex) though these regulations are fragmented and not comprehensive. In practice, there are initial development in climate finance. In the public sector, there is no green or

climate expenditure category. Instead, there is one spending line of “environment protection expenditure” under the current expenditure of the state budget of Vietnam.

The study will provide the overall landscape of climate finance in Vietnam. It will review all financial flows of public, private and international funding used for different activities response to climate change in Vietnam for the period 2016-2020. Based on that review, the study will provide key policy recommendations on how to best enhance the current regulation framework on climate finance and propose suitable financial instruments that can be useful to mobilise finance sources for climate change activities in Vietnam for the coming time.

2. APPROACHING METHODOLOGY

This report utilises different methods to map out the picture of climate finance in Vietnam, including desk review and case studies. For tracking climate finance in the private sector, it follows the OECD's Exploring Potential Data Sources for Estimating Private Climate Finance (Randy Caruso and Raphaël Jachniki, 2014).

In terms of international climate finance, the report utilises the Common Principles for climate change mitigation and adaptation finance tracking developed by the joint climate finance group of Multilateral Development Banks and the International Development Finance Club (MDBs and IDFC, 2015a) and (MDBs and IDFC, 2015b).

To review the public sector's investment into climate effort, this report will deploy a mixed approach in to review the public expenditure on climate change in Vietnam. It will flexibly apply key prominent methodological approaches, such as the Climate Public Expenditure and Institutional Review (CPEIR) implemented by UNDP, World Bank, Overseas Development Institute (ODI), and independent CPEIR practitioners (UNDP, 2015a); the System of Environmental-Economic Accounting 2012 (SEEA) developed under the chairmanship of the UN (UN, 2014b); and the Guidelines on the classification of public investments in climate change and green growth issued by the Ministry of Planning and Investment of Vietnam in 2018 (MPI, 2018).

To aggregate climate finance from all sectors, the report looks for the reference in the Climate Bonds Initiative (CBI)'s Landscape of Green Finance in India 2020 (Acharya et al, 2020) and some other finance landscape reports from CBI.

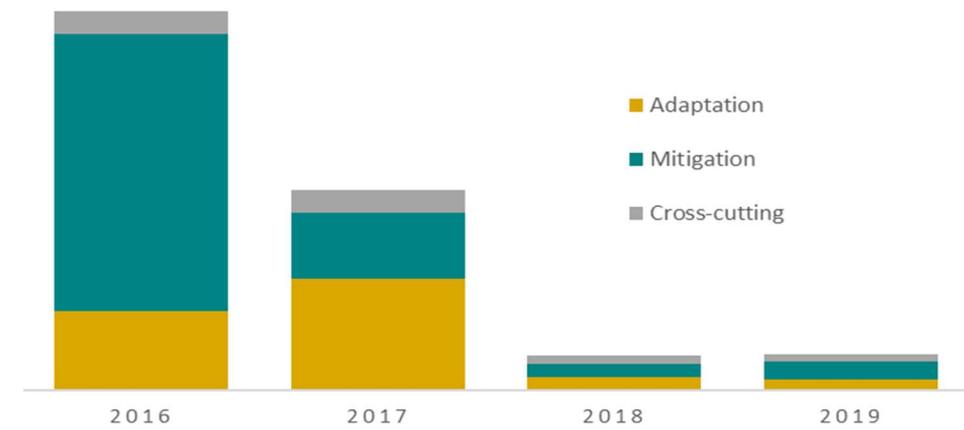
3. CLIMATE FINANCE FLOWS IN VIETNAM

3.1. International climate finance

Overview

Similar to the recent trend of international development fundings flowing into Vietnam, international assistance for climate change has decreased in recent years. Figures of inflow international fundings for climate change into Vietnam in the period 2016-2019, including mitigation, adaptation and cross-cutting finance, are collected and analysed for the easier comparison and captures the climate finance landscape in Vietnam.

Figure 1: International development aid for climate change efforts in Vietnam
(2016-2019 in VND trillion)



Source: Compiled Data from OECD DAC, MDB, IDFC, and MCFs

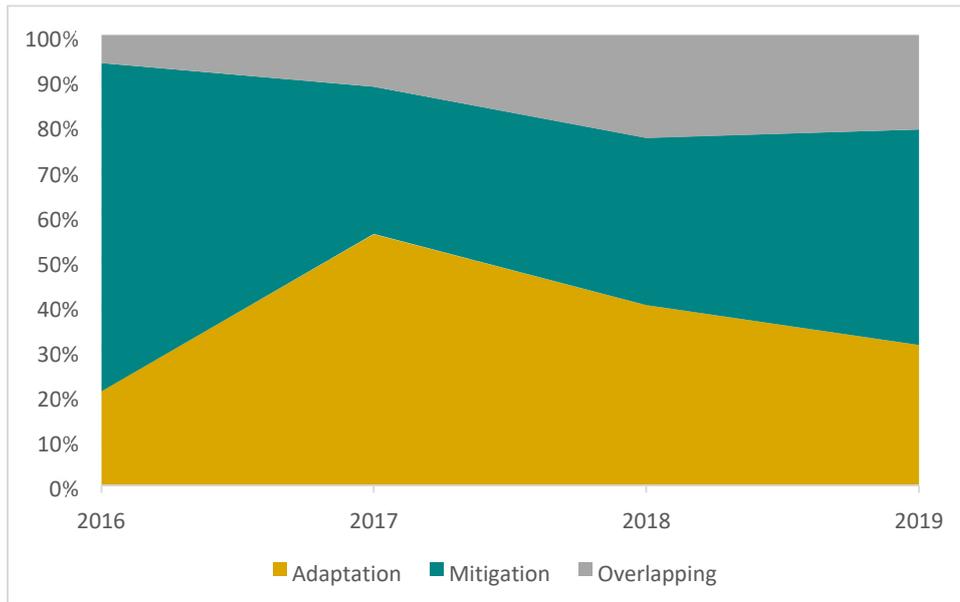
The surge in the number of international fundings for climate change in Vietnam in 2016 was largely from the six key debt-funded projects from France, Germany, and Japan with total value of VND 38.5 trillion, accounting for 86% of total international ODA in 2016. Ho Chi Minh City Urban Railway Construction Project in the transport sector and the Efficient Power Grids in Small and Medium-Sized Cities Project in the energy sector were among two of the above-mentioned six key projects. The two projects were funded through concessional loans from JICA and KfW. Ho Chi Minh City Urban Railway Construction Project recorded the loan of VND 18.5 trillion from the Japanese government, and the Efficient Power Grids in Small and Medium-Sized Cities Project recorded the loan of VND 8.7 trillion from Germany. Without the contribution of these six key projects, total international fundings for climate change into Vietnam in 2016 should be VND 6.3 trillion, which was in line with the recent trend of climate ODA inflows into Vietnam.

The same story happened in 2017 as there were six debt-funded projects with the value of VND 19.8 trillion from Japan and Germany to Bien Hoa and Ben Tre provinces on water treatment and energy sector that made the total international climate finance in 2017 surging. If these projects were excluded, the total international fundings for climate change from international development partners into Vietnam would be VND 3.81 trillion, in line with the overall decreasing trend of international fundings to Vietnam in general.

In term of components, the mitigation component has slightly more funding than adaptation at the ratio of 57% versus 33% in the period of 2016-2019. The rest (10%) was classified as cross-cutting finance, covering both mitigation and adaptation activities.

Figure 2: International development aid for climate change in Vietnam by theme

(2016-2019, %)

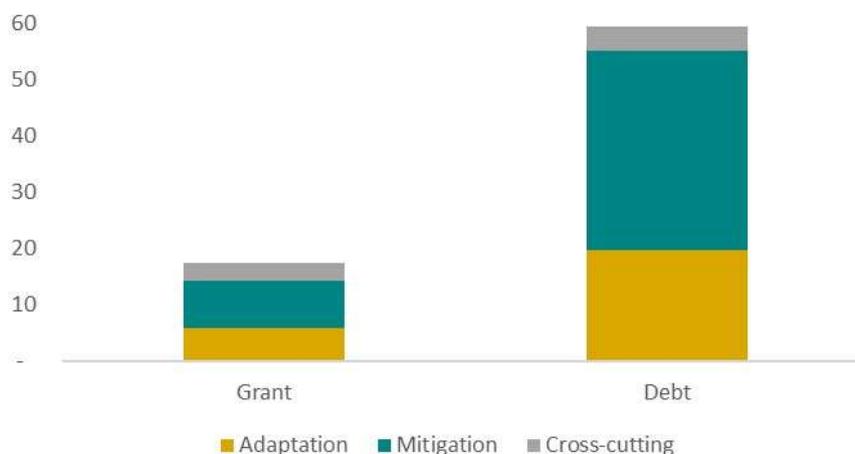


Source: Compiled Data from OECD DAC, MDB, IDFC, and MCFs

Financial instruments

There are two main *financial instruments* for inflows of international funding for climate change in Vietnam, including grant (non-refundable assistance) or debt issuance. In terms of the number of projects, grants in Vietnam were much higher than the number of debt-funded projects (789 projects compared to 37 projects). However, in terms of funded value, 37 projects using debt instruments account for 77% of total international funding while 789 grant-funded projects register only 23%.

Figure 3: International funding for climate change in Vietnam by instruments (2016-2019, VND trillion)



Source: Compiled Data from OECD DAC, MDB, IDFC, and MCFs

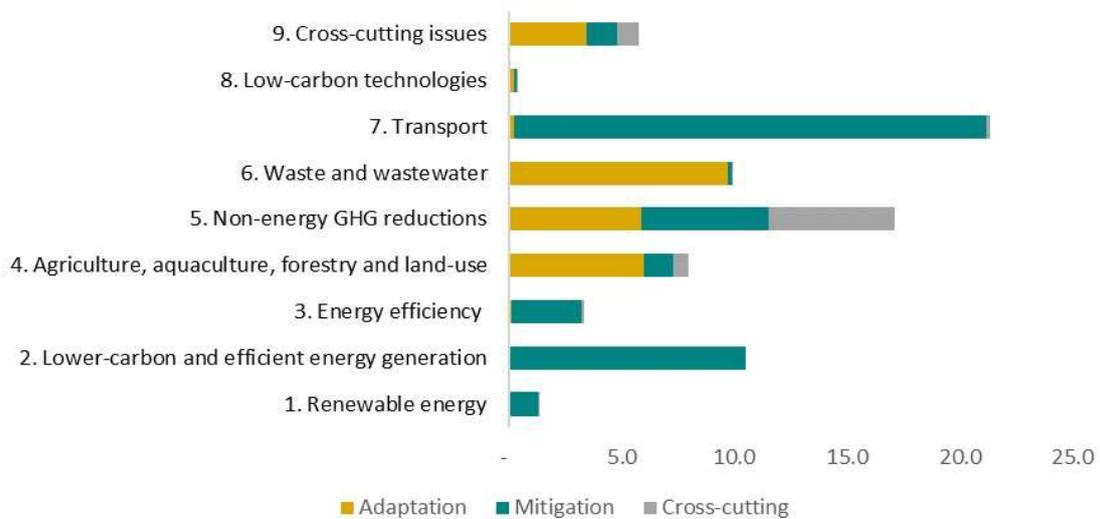
The outweigh of debt instrument to grant in Vietnam’s international funding for climate change is understandable given that the country’s economic situation was improving. Between 2002 and 2018, GDP per capita increased by 2.7 times, reaching over USD 2,700 in

2019. This improvement in the country’s economic development, on one hand, lead to better living condition for Vietnamese people; on the other hand, however, it decreased the volume of international funding into the country. Moreover, as Vietnam officially “graduated” from the International Development Association (IDA) in 2017, it has since lost access to IDA concessional financing. IDA loans and grants previously financed a majority of Vietnam’s infrastructure projects (Oxfam, 2019). Therefore, it is urgent for Vietnam to diversify financial resources for climate change.

Investment sectors

For the 2016-2019 period, the transport sector was at the leading position with the total value of inflows accounted for 28% of total international climate finance in Vietnam, in which debt accounted for 98% of total climate change finance from international flows into the transport sector in Vietnam. These fundings flowed into two key projects, the Japan-funded Ho Chi Minh City Urban Railway Construction Project and the France-funded Construction of Line 3 Métro Hanoi Project with the funding of VND 18.5 trillion and VND 1.7 trillion respectively (Figure 5). The rest VND 0.4 trillion of grant in the transport sector accounted only 1.98% in total international finance of the sector.

Figure 4: International development aid for climate change in Vietnam by sectors (2016-2019, VND trillion)



Source: Compiled Data from OECD DAC, MDB, IDFC, and MCFs

The second major sector was the energy sector (including renewable energy, lower carbon and efficient energy generation, and energy efficiency) which accounted for 20% of total international development aid for climate change to Vietnam in the period of 2016-2019. The debt instrument (70%) remained the dominant funding instrument over grant (30%) for international funding for climate change in energy sector. Most debt instrument projects were on a large scale while grant projects were on a smaller scale. For the energy sector, while there were 24 grant-funding projects, there were only two debt-funding projects in 2016. These projects were funded by German’s KfW development bank, namely Smart Grid - Transmission Efficiency Project and Efficient Power Grids in small and medium sized project.

This is also the reason why the total international funding for climate finance in Vietnam in 2016 suddenly increased.

In the agriculture, aquaculture, forestry and land-use sector, all the international fundings into Vietnam were in the form of a non-refundable assistance. Projects were often in agriculture development, agriculture alternative development, agriculture research, or agriculture education/training. There were also projects in the area of forestry policy and administrative management and fishery education/training. The total investment of international finance for climate change into this sector in the period 2016-2019, however, was relatively small, reaching 10% at maximum.

In the waste and wastewater sector, the situation was similar to the agriculture, aquaculture, forestry and land-use sector where all projects were on small scale and received funding in the form of grants. During the 2016-2019 period, there was a populous number of projects in the waste and wastewater sector, accounting for 86 projects with investment sources taking up 13% of total international finance for climate change for Vietnam.

In previous periods, international donors tended to invest in the energy sector and transport sector. In this period, however, they were heading to a more diversified approach with multiple *sectors*, including agriculture sector, cross-cutting sector, and low carbon investments beside two traditional sectors as before. Fundings in the transport sector came into projects that enhance the capacity of the rail transport system in Vietnam.

Donors perspective

Among *international donors* investing in Vietnam, Japan, Germany, United States, France, and EU Institutions (excl. EIB) were the top five donors providing the most international funding for climate change to Vietnam in the period of 2016-2019. There is a similar point of all these donors that all of them financing Vietnam with the mixture in both grant and debt instrument. Other donors often joined the climate change efforts in Vietnam by giving grants in small projects to the country.

In this period, grant and debt from Japan accounted for 60% of total international development fundings for climate change to Vietnam. Most of the finance from Japan into Vietnam was in the form of debt instrument (97%) and deployed mainly for transport sector, environmental policy and administrative management, and water supply & sanitation sector.

Germany ranked second after Japan with 18% of total international fundings for climate change to Vietnam came from this country. The majority of German funding was used to invest in the energy sector (79%) and general environmental protection sector (biodiversity and environmental policy and administrative management...). The debt and grant ratio in the total funding from Germany to Vietnam is 75-25%. In terms of the immediate body to implement foreign assistance for climate change in Vietnam, while Japan often utilised the government channel to implement its commitments, Germany showed a little difference in choosing the implementing bodies of its international fundings with higher diversification of government-to-government channel, public sector institutions, and public corporations.

For the top five donors' choice of *financial instruments* in providing the international funding for climate change in Vietnam, United States was the country providing the most grant in comparison to debt in the period of 2016-2019. Other countries such as Germany, France, and Japan provided support via debt instrument more than a grant, respectively with Germany (75% in comparison to 25%), France (95% in comparison to 5%) and Japan (97% in comparison to 3%).

3.2. Private climate finance

Overview

As previously mentioned, the gradual transition of Vietnam from a low-income country to a lower-middle income country does not simply mean the country will receive less ODA or limited access to concessional loans. It also means the country needs to develop and rely more of its economy on the private sector, particularly nurturing the looming of small and medium enterprises. In this process, having a sound capital market to support the economy pace of development is crucially important. For the country's targets in progressing on the sustainable path, green finance from the private sector will play a complementary and vital role for facilitating it.

In Vietnam, climate private finance is at the initial stage of development, but it has seen a rapid and firmly trend of surging with the complementment of different financial instruments. This report reviews the available private financial channels in Vietnam recent years, including green credit, green bond, PPP investments and the future of green securities.

Green credit

Green credit in Vietnam has grown steadily over the years. Green credit outstanding has increased from more than VND 85 trillion at the end of 2016 to over VND 333 trillion at the end of 2020, corresponding to an increase of 3.62% of total outstanding credit of the system. The green credit growth rate continued to be maintained high since 2016 to 2020.

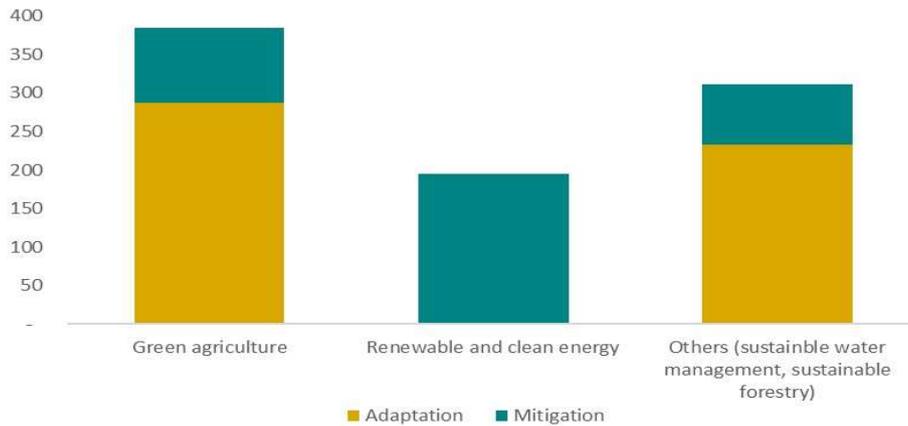
Figure 5: Green credit outstanding in 2016-2020
(VND trillion)



Source: Author's compilation from the SBV's data

Green credit for climate change in Vietnam flowed mostly into agriculture, renewable energy, and other sectors (including sustainable water management and sustainable forestry), in which 59% of total green credit was disbursed for adaptation and 41% ended up with mitigation projects. The details of sectoral investments from green credit sources is presented at Figure 6.

Figure 6: Sectoral outstanding green credit (2018-2020, VND trillion)

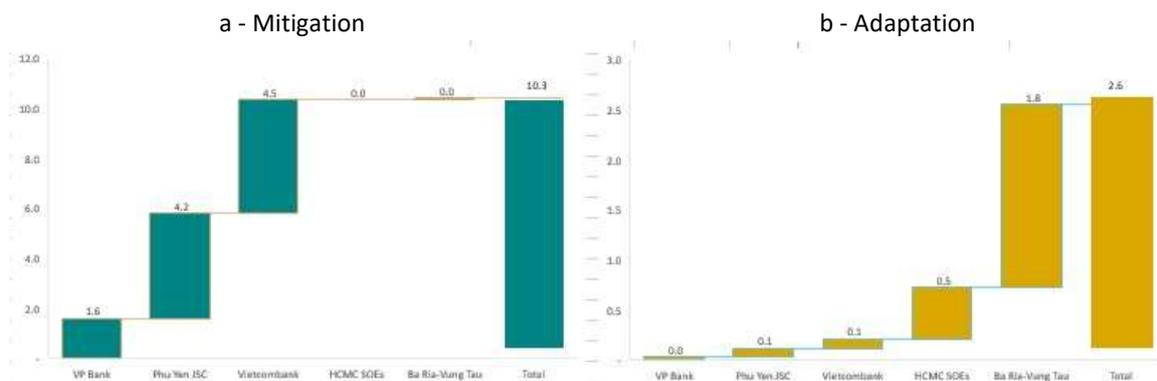


Source: Author’s compilation from the SBV¹ data

Green bond

In 2016, the MOF approved a pilot project on the issuance of municipal green bonds. Accordingly, green bonds are built to mobilise capital for green projects such as projects on irrigation, environmental protection, wind power, etc. The Hanoi Stock Exchange (HNX) supports owners to issue green bond products and pilot implementation in some localities that need to raise capital. Among them, Ho Chi Minh City and Ba Ria - Vung Tau are two localities that have implemented this project.

Figure 7: Green bonds issued in Vietnam, VND trillion



Source: Author’s compilation from BloombergNEF, CBI, MOF and SBV data

Note: currency conversion rates are taken on date of issue

So far, Vietnam has issued VND 13.0 trillion of green bonds and the economy shows great potential room for development in the field. Among those VND 13 trillion, mitigation finance

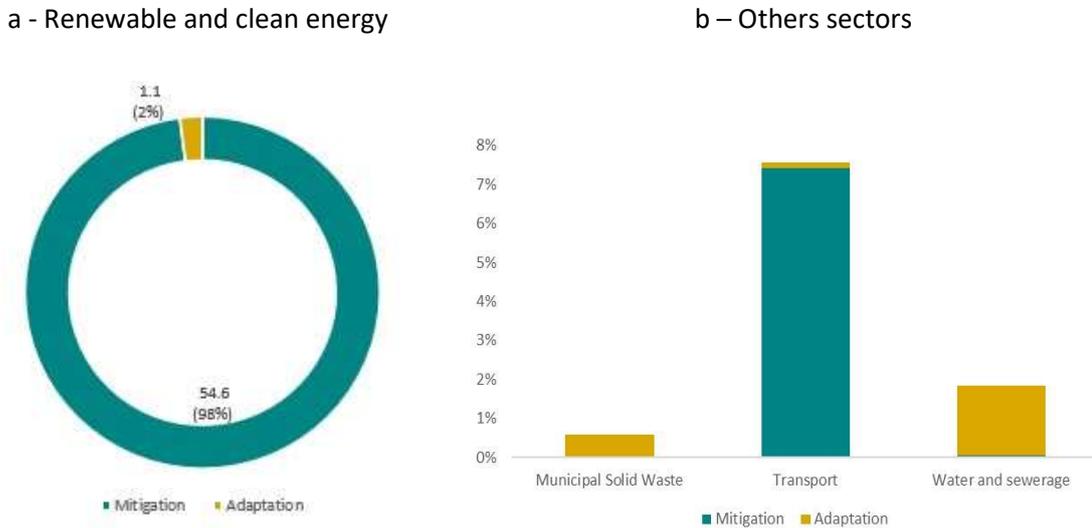
¹ SBV, official dispatch to the MPI, 2021.

by green bonds in Vietnam accounts for 80% and adaptation finance registers 20% with details as in Figure 7a and Figure 7b.

Public-Private Partnership Investment (PPP)

PPP in Vietnam was not fully functioned as the shortage of a comprehensive legal framework in this area. The Law on Public-Private Partnership (Law No. 64/2020/QH14) was ratified came into effect on 1 January 2021. So far, there are approximately 146 major PPP projects in planning that is climate change earmarked for delivery via the PPP model in Vietnam². Among those projects, the projects share the finance for mitigation is around 96% while for adaptation is around 4%. Most of the investment comes into the Renewable and clean energy sector, which accounts for 90% of the total PPP investments in Vietnam. The rest of 10% of PPP investment goes to municipal solid waste management sector, transport sector, and water and sewerage management sector.

Figure 8: Key sectors of PPP projects



Source: Author’s compilation from the MPI’s data

Future for the green securities

The green index in the stock market in Vietnam is still in the creation stage. In 2016, the State Securities Commission (SSC), with the support of IFC, published a Guide to ESG reporting for listed companies. In March 2017, Ho Chi Minh City Stock Exchange (HOSE) announced the Vietnam Sustainability Index (VNSI) and officially put it into operation from the end of July 2017. The index is researched and deployed by HOSE in collaboration with GIZ and the SSC. So far, the VNSI includes 20 listed enterprises within the top 100 listed enterprises in Vietnam. The total market capitalisation of VNSI reached about VND 999.2 trillion, accounting for 28.7% of the total value of the stock market capitalisation of Vietnam and equivalent to 18.48% of the country GDP³. In this report, however, the green equities will not be included to the overall picture of climate finance in Vietnam due to the lack of detailed data and the

² PPIAF (PPIAF Database, n.d.) - Public-Private Infrastructure Advisory Facility

³ Thomson Reuters Refinitiv, 2021

possibility of double accounting issues. The reviewing of green equity, thus, will be considered in further study.

3.3. Domestic Public Finance

Overview

At the current design of the public financial management system, the public finance in Vietnam goes into two channels, including the central government level and at local government level. In term of budget structure, public finance in Vietnam can usually be viewed from two perspectives: regular expenditure and development expenditure. In general, the proportion between these two perspectives remained stable for the period of 2016-2019.

Figure 9: Public expenditure in Vietnam⁴
(2016-2019 in VND trillion)



Source: Compiled from MOF, GSO, CEIC data

Similar to other countries, reviewing public expenditure for climate change in Vietnam is facing the difficulty of data scarcity and the absence of available climate finance accounting. Under the scope of this report, the chapter on public climate finance focuses on reviewing capital expenditures from domestic sources used for climate change response in the period of 2016-2020 in 8 key relevant ministries: Ministry of Transport (MOT), Ministry of Agriculture and Rural Development (MARD), Ministry of Industry and Trade (MOIT), Ministry of Construction (MOC), Ministry of Health (MOH), Ministry of Education and Training (MOET), Ministry of Science and Technology (MOST), and Ministry of Natural Resources and Environment (MONRE). The assessment for the choice of these eight ministries is based on the author’s background review, data availability, and international experience and practices of previous CPEIRs in Vietnam and other countries in the region.

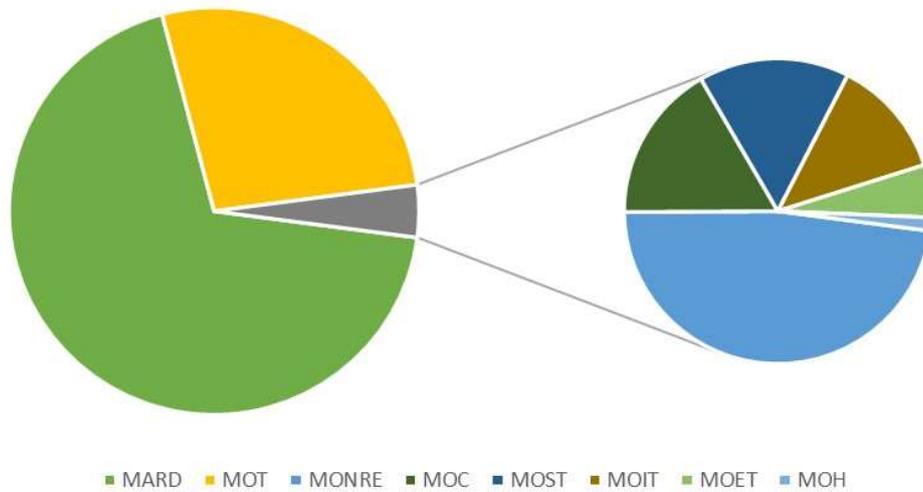
⁴ Official data for 2020 is not available yet

The total capital expenditures of these eight Ministries accounted for 57% of the total expense for development investment from ministries and Central agencies in the period of 2016-2029.

Public expenditures on climate change at central level

At the central level, the Ministry of Transport and the Ministry of Agriculture and Rural Development dominated the public investment on climate change with the total spending on climate-related projects accounted for 96% of total public climate investment at the central level. It should be noted that this figure did not include ODA-funded projects, which has been analysed in previous part on international finance sources.

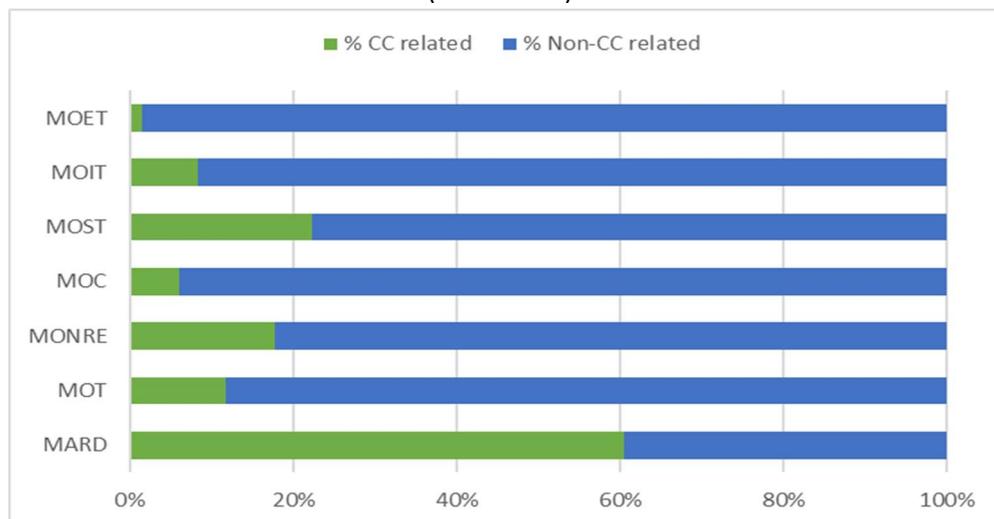
Figure 10: Domestic public climate investment at central level (2016-2019, %)



Source: Compiled from MOF data

There were differences in the share of investment for climate change in comparison with total development budget of each ministry. In the 2016-2019 period, while MARD spent 60% of its domestic capital expenditures on climate related projects; that figures of MOST and MOT were 22% and 12% respectively.

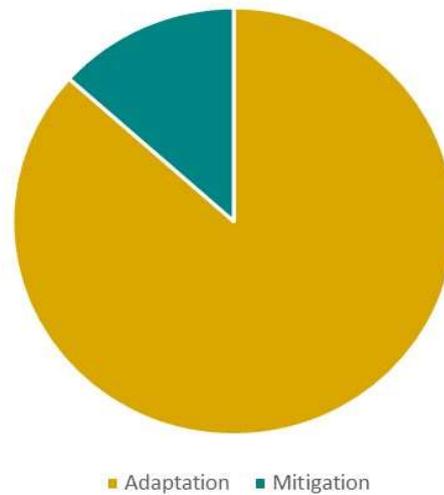
Figure 11: The share of climate and non-climate related public investment in Ministries (2016-2019)



Source: Compiled from MOF, GSO data

In terms of climate theme, adaptation attracted more public investment on climate change. The percentage of public adaptation and mitigation between 2016-2019 was 87 and 13%, respectively.

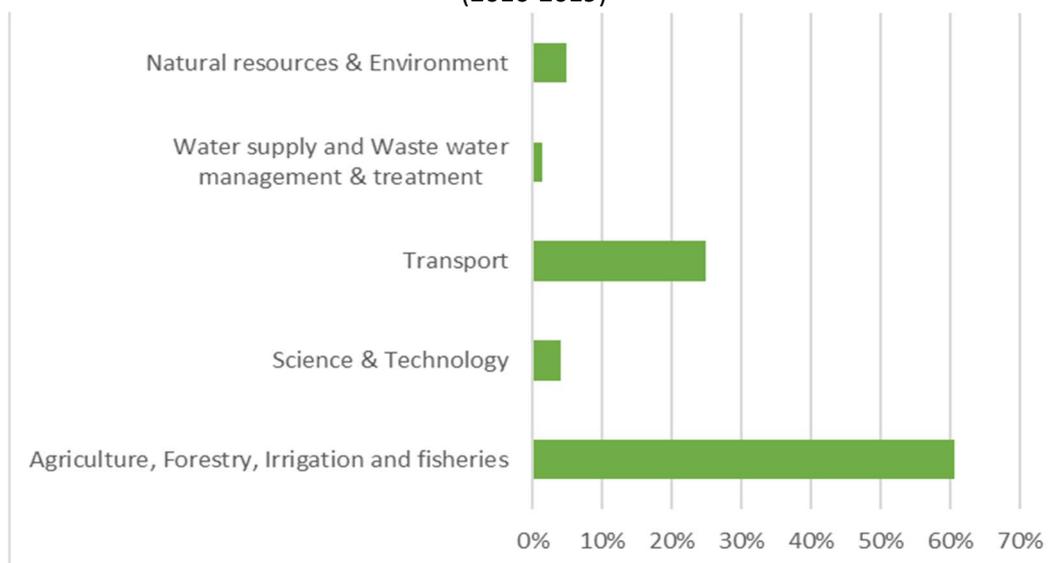
Figure 12: Allocation of domestic public climate investment at central level by theme (2016-2019)



Source: Compiled from MOF and MPI data

Particularly, public investment on climate change at MOT and MARD were on adaptation projects. While MARD often spent more than 87% of its development budget on adaptation, this ratio of adaptation and mitigation investment from the MOT was 90% and 10%. As the ministry responsible for implementing several energy and energy efficiency targets, MOIT focused its investment more on mitigation activities. Mitigation efforts accounted for 90% of its climate investment.

Figure 13: Allocation of domestic public climate investment at central level by sectors (2016-2019)



Source: Compiled from MOF, GSO data

In terms of economic sectors and activities, public investment using ministerial budgets focused mostly on agriculture, forestry, irrigation, and transport, taking up more than 85% of total public investment at the ministerial level.

3.4. Overview on climate finance in Vietnam

Based on the review of separate financial flows for climate change in Vietnam, it can be seen that there are three key financial flows facilitating the climate change efforts in Vietnam: international support, domestic public investment, and private finance.

The international funding for climate changes in Vietnam recorded at VND 77 trillion in four years from its traditional partners with Germany, Japan, France, the US.,... However, such international funding for Vietnam was decreasing in tandem with the country's exiting from the World Bank's IDA. In the long run, Vietnam should get used to the fact that the country could access to the international capital market for its extra financial needs with limited preferential treatment or without any concessional terms.

The private sector in Vietnam led the way in all areas of climate change funding thanks to the rapid economic growth in the country. Most of private climate finance came from the boom in green credit market, even though it was a instrument newly developed in 2016. There was a large room and prospects for the development of the private finance in Vietnam. Particularly, this review did not have an opportunity to look at the green securities market as it was still in its infancy of the development path.

In the public sector, the Ministry of Agriculture and Rural Development and Ministry of Transport comprised most of the investment for climate change in Vietnam at the ministerial level. Given its role as a path guider, public finance in Vietnam was being outpaced by the rapid development of the private green finance, with more and more diversified market instruments and timeliness in finding business opportunities. Reviewing and evaluating investment for climate change in public sector faced the difficulty of data scarcity and the lack of a standardised and appropriate tracking methodology in line with the budget reporting system of Vietnam.

In terms of objectives of the investment, there was a difference among all three sectors. While the public sector spent most of its financial sources on adaptation projects (87%), the private sector invested more on the mitigation projects with the target on energy and infrastructure-related projects in agriculture and water processing. The international finance inflows diversified their objectives thanks to its populous number of projects. However, the main focus of international finance inflows was transportation projects (27.5% of the total inflows), following by the energy projects (19.5%). These two sectors also attracted the largest projects of international finance inflows, all of which were in the form of debtbacked projects.

4. POLICY RECOMMENDATIONS

4.1. Recommendations for the improvement of the climate finance tracking

Develop and Establish a nationwide green taxonomy that could cover climate change

First and foremost, Vietnam needs to have guidelines for climate change finance with specific criteria and classifications, or a *green taxonomy*, that is recognised and applied nationwide. The taxonomy for green finance in Vietnam, as in many other countries, is currently not well defined and structured. In terms of the legal framework, Vietnam has issued regulations and guidelines for green financing practices for both private and public sectors, although these regulations are fragmented and not comprehensive. It is necessary to have a mechanism to monitor and periodically evaluate the above expenditures. This recommendation is essentially a first priority to other recommendations, because a taxonomy can provide appropriate guidelines on climate finance and how should be classified by sectors, sub-sectors and accompanied by assessment forms with specific criteria and prioritisation to facilitate review and analysis of the climate change finance allocation, including budgeting activities for expenditure items on climate change in its annual budget plans in addition to the existing budget line for expenditure on technology and environmental protection. Based on that, the Ministry of Planning and Investment and the Ministry of Finance can request ministries and provinces to fill out information on climate change related projects/activities on specific and standardised forms.

Mainstreaming the climate change and green growth targets into budgeting progress

In the circular guiding the formulation of annual budget plans, MPI (for investment expenditures) and MOF (for recurrent expenditures) should request ministries and provinces to fill in information about projects/activities tasks related to CC in specific forms. Further mainstreaming of climate change in sector projects should be promoted. Both into the design of proposed projects themselves but also for getting projects to be included into the MTIP medium-term investment plan. To achieve this there would be the need for strengthening local planning, ensuring clear and comprehensive analysis of public sector tasks and expenditure priorities on climate change.

Establish a climate finance MRV system for Vietnam

A monitoring, reporting and verification system for climate finance has yet to be developed in Vietnam, which is common in many countries as climate finance remains a new area. All reports on tracking and analysing climate finance flows in both public and private sector in Vietnam prepared by Ministry of Planning and Investment over the years have recorded difficulties in the process of data collection and approach. On the other hand, because the classification and integration of climate related information have not yet been applied at the

step of budget planning or project approval, the development of these reports then became imperfect and time-consuming.

In this regard, Vietnam should consider establishing a climate finance MRV system with mandatory guidelines and regulations on the provision of climate finance information, applying standardised methodologies and in line with the national context on public financial management system. This action will be necessary to support policy makers in proactively monitoring climate finance flows and making adjustments as well as directions for the allocation and mobilisation of financial resources to achieve specific targets on climate change and green growth. This will be even more comprehensive if the system can be developed simultaneously and is based on the enactment of the green taxonomy as proposed above. It could benefit the entire economy along with stakeholders due to sharing the same acknowledgement on definitions, standards and requirement on climate finance.

In addition, the development of a climate finance MRV system is critical to monitor and report the use of international financial flows for climate change into Vietnam, avoid duplication of efforts, identify investment gaps and improve accountability and transparency on climate finance with the UNFCCC and the international community.

4.2. Recommendations for the improvement of climate finance mobilisation

Establish a Sustainable Finance Initiative Committee

Given the context that there is no single “super regulator” supervising the entire climate change finance activities in Vietnam, all financial regulators and policymakers have equally important roles and responsibilities in the sustainable financial system. Consistent interagency collaboration across the entire financial system is needed to achieve the effective realisation of Vietnam’s Green Growth Strategy, Vietnam Sustainable Development Strategy, and the National Climate Change Strategy.

Furthermore, the participation of the private sector is one of the critical success factors of this process and needs to be maintained. In the face of this unique blend of private and public sector partnership, it is recommended to establish a Sustainable Finance Initiative Committee that would serve as an interagency structure to provide leadership in the monitoring and mobilising the implementation of the national strategies across the government and the private sector. The Committee could research, advise and propose policies and implementation roadmap related to the mobilisation of financial resources for green growth, climate change and sustainable development. The Committee should be responsible for mobilising financial resources in all forms related to green growth, climate change and sustainable development to avoid wasting and dispersing resources and reducing the country’s competitiveness in the international market.

The Chair of the Committee should be a high-level representative of the Government (Prime Minister or Vice Prime Minister). The members of the Committee could consist of high-level

representatives from the Ministry of Planning and Investment, State Bank of Vietnam, the Ministry of Finance, the Ministry of Environment and Natural Resources, the State Securities Commission, Vietnam Chamber of Commerce and Industry, development banks, insurance organisations, financial institutions, industrial associations, private sector, and civil society representatives.

The Committee could be chaired in rotation by the participating organisations. It will work closely with various international partners and networks operating in the sustainable finance field, connecting and steering emerging individual efforts towards a common goal. Furthermore, the Sustainable Finance Initiative Committee could benefit from closely engaging with international partners and networks working in the sustainable finance field and collaboration with regional countries.

The Sustainable Finance Initiative Committee can also play the role of coordinating in developing the green taxonomy for Vietnam, and ensure the taxonomy is regularly reviewed, discussed and updated, make it as a living document that serves better for the development of climate finance in Vietnam.

Develop a variety of financial instruments to mobilise resources for climate change and green growth projects

The Government of Vietnam has already set out priorities to promote green growth and climate change response in the country's socio-economic development plans. In the context of fiscal consolidation in Vietnam, financial supports from the government are limited so the government should focus on innovative ways to mobilise the financing sources for climate change efforts.

- Enhancing seed-funds financed by state budget to attract and guide the engagement of private sector for potential green and climate-related projects.
- Focusing on environmental taxes: Taxes can be a powerful means of inducing both individual and firm's behavioural change by imposing a burden on conduct that is considered harmful to society and/or by rewarding behaviour that is perceived as socially desirable. Other fiscal incentives such as tax reliefs to reward industries that meet certain environmental performance criteria (e.g. voluntarily meeting an energy efficiency target) can help engage businesses in sustainable practices and technologies.
- Introducing fiscal incentives along environmental taxes: Fiscal policies, within their double role of raising revenues (for instance, via taxation) and public spending, present an invaluable potential to foster sustainable development. Introducing "negative" economic tax (e.g. pollution) and fiscal incentives (i.e. reducing the relative cost) of sustainable investments can (an economic "good") can be a powerful means to drive development into the right direction in its economic, social, and environmental pillars.

- Develop and enhance the legal framework to promote the development of risk transfer instruments in the insurance market (climate risk insurance, disaster risk insurance, public asset insurance...) and the capital market (green bonds, sustainable development bonds, green securities, government and local government bonds for the green or climate targets...) to share the risks and diversify financial resources for green growth and climate change response. Especially in the context of negative effects of climate change are increasingly frequent, prolonged and seriously damaging to the economy.
- In addition to traditional instruments that are familiar to the domestic market, other innovative financial mechanisms/products should also be considered for research and evaluation of applicability for Vietnam such as debt swaps, debt forgiveness for decarbonisation, revolving funds, etc. These are incentives that have been applied in many countries to raise funding sources for climate change projects, especially those on resilient infrastructure.

Enhance the role of public sector in guiding the private sector investment in green growth and climate change response

When the government provides financial support to green industries, it must use different tools with various technology development stages. If a certain green industry is in its early stages, the government should focus on developing incentive programs to draw venture capital toward the green industry. Industry in an early stage involves a high-risk high-return profile, and thus the most appropriate private-sector vehicle to solve the financing gap would be venture capital. In Korea, the government established the Korea Fund of Funds in 2005. This empowers a fund manager to evaluate, select, and distribute capital to several sub-funds. It allocates its assets to sub-funds that are more appropriate for public purposes. As the Korean government is currently focused strongly on a green economy, the fund prioritises green industry-oriented sub-funds when it allocates its assets. The case of Vietnam is the State Capital and Investment Corporation and Commission for the Management of State Capital at Enterprises. Those agencies can play an important role in guiding the market, particularly the private investment into climate change efforts if financing tools are well designed with clear targets.

On the other hand, banks generally provide debt financing rather than equity financing. When green companies or projects do not have high credit ratings or great deals of collateral, banks are usually reluctant to award them loans. Additionally, green projects, such as clean energy and other infrastructure projects, affirmatively require long-term debt. One could scarcely expect commercial banks to voluntarily provide loans to green industries under these circumstances. Governments have a few tools to address these problems and facilitate loans to green industries. First, the public sector can directly provide loans to green companies or projects at concessional rates. This brings enhanced debt financing directly to the green sector

but does not induce private sector engagement. If the private sector is not involved, the green industry depends solely and continuously on public finance mechanisms. Hence, it fails to leverage private investment.

However, it should be noted that once a government advocates for financial assistance to green industries, it might prove more efficient to select some core green sectors and focus on them for strategic development. If a government applies only general assistance measures to all green sectors, each green industry will receive benefits at a level substantially below the level required to render it marketable. Hence, the government should consider a “choose and focus” strategy, due to the scarcity of available financial resources.

The role of government is important for fixing market distortions, but one thing must be kept firmly in mind. Government intervention is warranted only if it does not crowd out private sector participation. If the private sector’s market participation is limited in the short term, the public sector should pay in the short term. If the market begins to work itself out, the public sector should gradually diminish its role. Otherwise, private financial institutions could lose their interest in green industries due to limited market share. In this sense, public instruments must incentivise the private financial sector via public guarantees, co-investment, risk sharing, etc. The government should remain aware that the public sector complements, rather than duplicates, the functions of the private sector.

Improve the accessibility to international climate finance sources

For international climate finance, it is necessary to develop the linkages on the use of grant capital in combination with domestic policy or enabling environment risk reduction due to lengthy procedures, political pressures or lack of innovation culture in some institutions. This may reinforce the use of concessional capital being bottlenecked in key ‘connector’ institutions.

In addition, the government can improve Vietnam’s access to climate finance by providing technical assistance related to the criteria and registration process for accessing leading international climate funds, particularly the Adaptation Fund and the anticipated Green Climate Fund; this also requires facilitating coordination between MPI, MOF, SBV, and other relevant ministries and agencies.

On the other hand, it is necessary to improve financial accountability and transparency by establishing a national climate finance MRV system to enhance monitoring and reporting of climate finance flows in Vietnam. This should include efforts to develop a booklet of clear definitions and climate classification tools that tailored to the context of the public financial management system of Vietnam. This recommendation is essentially a continuation of the above recommendation on improving the monitoring of climate finance flowing in Vietnam.

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Annex 1. Methodology, process and data sources used

A1.1. Climate finance and its relates definitions

While climate change is approached as a comprehensive research area, it is worthwhile to define and distinguish climate change adaptation and mitigation for its difference in approaches and derivation in research.

Mitigation

Mitigation is aimed at tackling the causes and minimising the possible impacts of climate change, whereas adaptation looks at how to reduce the negative effects it has and how to take advantage of any opportunities that arise. Mitigation policies and measures focus on reducing GHG emission and benefit does not necessarily accrue in the region or country where mitigation policies and measures take place (Klein RJT et al., 2005). In Vietnam, as in many other developing countries, mitigation efforts involve the energy and forestry sectors while developed countries focus more resources on the energy and transportation sectors.

Adaptation

The Joint MDB-IDFC Framework for Climate Resilience Metrics defines climate-change adaptation as “the process of human and natural systems adjusting to the actual or expected impacts or effects of climate change” (MDB-IDFC, 2019) and climate resilience as “strengthening a system to withstand climate-related shocks or stressors where adaptation and resilience intersect... the capacity of a system to cope with, or recover from while retaining the essential components of the original system” (WB, 2019).

Mitigation and adaptation in climate actions

The differences between the two are well documented and have been seen as an important characteristic of the climate change literature (Cohen et al., 1998). The two differs from each other in at least three important ways.

The first difference between mitigation and adaptation is related to the spatial and temporal scales on which they are effective. Whilst they may well be implemented on the same local or regional scale, mitigation has global benefits, whereas adaptation typically works on the scale of an impacted system, which is regional at best, but mostly local. In addition, the benefits of mitigation activities carried out today will be evidenced in several decades because of the long residence time of greenhouse gases in the atmosphere, whereas many adaptation measures would be effective immediately and yield benefits by reducing vulnerability to climate variability. As climate change continues, so will the benefits of adaptation increase.

The second difference between mitigation and adaptation is the extent to which their costs and, in particular, their benefits can be determined, compared and aggregated.

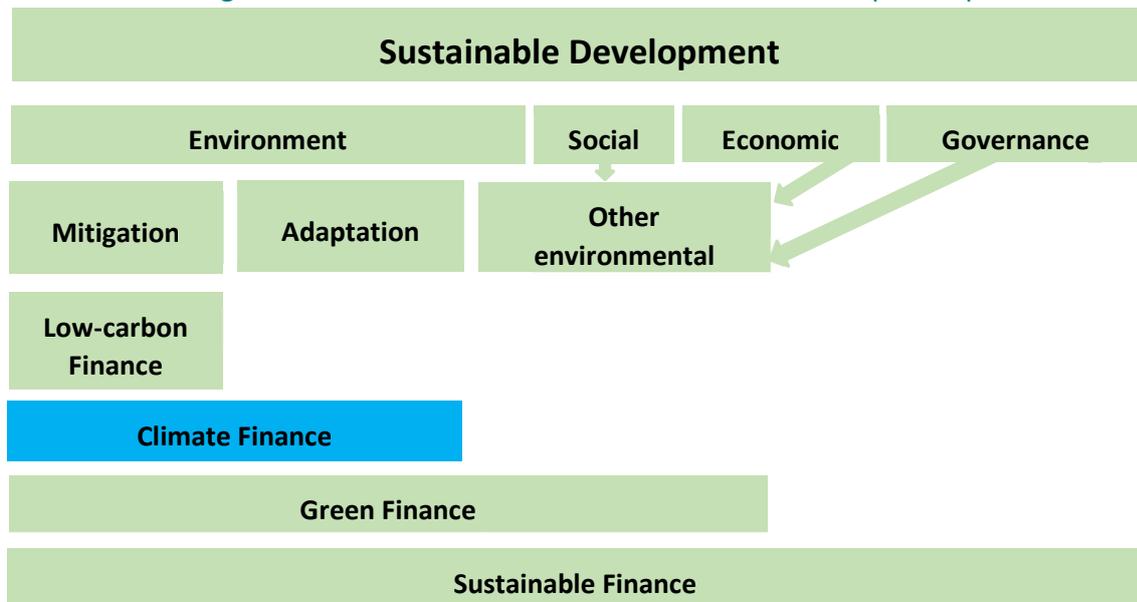
The third difference between mitigation and adaptation concerns the actors and types of policies involved in their implementation. Mitigation primarily involves the energy and transportation sectors in industrialised countries, and to an increasing extent the energy, forestry and agriculture sectors in developing countries. Compared to adaptation, the number of sectoral actors involved in mitigation is limited. Moreover, they are generally well organised, linked closely to national planning and policymaking, and used to taking medium to long-term investment decisions. In contrast, the actors involved in adaptation represent a large variety of sectoral interests, including agriculture, tourism and recreation, human health, water supply, coastal management, urban planning and nature conservation.

Climate finance and green finance

For definition of climate finance and green finance, as Vietnam does not have its comprehensive green taxonomy, this report follows the definition of UNFCCC (UNFCCC SCF, 2014, 2016, 2018), of which, climate finance refers to local, national, or transnational financing, drawn from public, private and alternative sources of financing, that seeks to support adaptation and mitigation actions that will address climate change. And green finance includes climate finance as well as other environmental objectives that are necessary to support sustainability, and in particular, aspects such as biodiversity and resource conservation.

The chart below puts climate finance and green finance in a comprehensive context for easier comparison and understanding.

Figure 14: Climate finance in the sustainable development path



Source: Author’s compilation from UNFCCC

This report adopts the definition of climate finance of the UNFCCC Standing Committee on

Finance (UNFCCC SCF, 2014, 2016, 2018) which states: “Climate finance aims at reducing emissions and enhancing sinks of greenhouse gases and aims at reducing the vulnerability of, and maintaining and increasing the resilience of, human and ecological systems to negative climate change impacts.”

Green finance is finance flows (banks, microfinance, insurance, equity) from different economic sectors (private, public, and non-profits sector) serving for policy priorities and sustainable growth targets.

Climate finance for mitigation

Climate change mitigation reduces, limits or sequesters greenhouse gas (GHG) emissions to mitigate climate change. Consequently, climate finance for mitigation activities will be classified as related to climate change mitigation if it promotes “efforts to reduce or limit greenhouse gas (GHG) emissions or enhance GHG sequestration” (The OECD Development Assistance Committee, 2011, 2017).

Climate finance for adaptation

Unlike mitigation finance, where it is possible to identify activities that will reduce greenhouse gas emissions regardless of context, adaptation finance is largely context dependent. Whether an investment has adaptation and resilience outcomes depends on specific regional or local vulnerabilities (MDB and IDFC, 2018).

Although adaptation finance is well understood at the international level, there is no common definition for “adaptation finance”. In most cases, “adaptation” activities cannot be distinguished from regular “development” activities because of the close relationship between the two. Interventions on the ground are not explicitly directed to climate change adaptation, but rather to livelihood enhancement. Low levels of transparency and reluctance of implementing agencies to disclose information on how funds were being spent makes it hard to ascertain the effectiveness of adaptation funds (AFAI, 2015).

(AFAI, 2015) suggests that in order to be considered “adaptation,” a project must help people deal with present or future impacts of climate change, which requires an understanding of both impacts and vulnerability at the local level. Documents associated with the project should reflect this understanding, and they should clearly explain why certain activities were selected and illustrate how they will contribute to adaptation.

For definition of climate finance and green finance, as Vietnam does not have its comprehensive green taxonomy, this report follows the definition of UNFCCC (UNFCCC SCF, 2014, 2016, 2018), of which, climate finance refers to local, national, or transnational financing, drawn from public, private and alternative sources of financing, that seeks to

support adaptation and mitigation actions that will address climate change. And green finance includes climate finance as well as other environmental objectives that are necessary to support sustainability, and in particular, aspects such as biodiversity and resource conservation.

Cross-cutting finance

There is a fact that many adaptation and mitigation options can help address climate change, but no single option is sufficient by itself. Effective implementation depends on policies and cooperation at all scales and can be enhanced through integrated responses that link mitigation and adaptation with other societal objectives. Approaches for managing the risks of climate change should be considered cross-cutting rather than discrete, and they are often pursued simultaneously.

The mitigation and adaptation efforts would need to coordinate extensively with existing institutions. And in some cases, it is difficult to define activities are belonging to mitigation or adaptation, hence the cross-cutting finance exists. In practice, the degree of overlap is likely to be higher for countries with relatively lower incomes. Overlap is also likely to be high in areas where its activities most closely resemble traditional development aid. Consequently, its role would need to be delineated from that of existing institutions (IISD, 2009).

Therefore, besides tracking the adaptation finance, this report also draws on the cross-cutting finance that combines both the adaptation and mitigation efforts which are not possible to separately defining as sole mitigation or adaptation purposes. This is an important issue, especially for a developing country like Vietnam.

A1.2. Methodology

This report utilises different methods to map out the picture of climate finance in Vietnam, including desk review, case studies. For tracking climate finance in the private sector, it follows the OECD's Exploring Potential Data Sources for Estimating Private Climate Finance (Randy Caruso and Raphaël Jachniki, 2014).

In terms of international climate finance, it utilise the Common Principles for climate change mitigation and adaptation finance tracking developed by the joint climate finance group of Multilateral Development Banks and by the International Development Finance Club (MDBs and IDFC, 2015a) and (MDBs and IDFC, 2015b).

And to track the public sector's investment of climate effort, this report will deploy a mixed approach in to review the public expenditure on climate change in Vietnam. It will flexibly apply key prominent methodological approaches, such as the Climate Public Expenditure and

Institutional Review (CPEIR) implemented by UNDP, World Bank, Overseas Development Institute (ODI), and independent CPEIR practitioners (UNDP, 2015a) and the System of Environmental-Economic Accounting 2012 (SEEA) developed under the chairmanship of the UN (UN, 2014b), and the Guidelines on the classification of public investments in climate change and green growth issued by the Ministry of Planning and Investment of Vietnam in 2018 (MPI, 2018).

To synthesis the climate finance from all sectors, the report looks for the reference in the Climate Bonds Initiative (CBI)'s Landscape of Green Finance in India 2020 (Acharya et al, 2020) and some other finance landscape reports from CBI.

A1.3. Specifications and analysis strategy for the climate change public finance

This session highlights the specification and analysis for climate finance in the public sector. The reason for this special treatment is that climate change expenditures in the public sector can broadly be defined as the spending aimed at funding climate change policy responses such as mitigation, adaptation, and management of climate-related disasters and risks. At present there are no internationally agreed upon tracking methodologies to identify climate change related expenditures in public sector budgets (World Bank, 2021). Identifying and evaluating climate expenditures in the public sector, or budget tracking, has generated increasing attention from multiple stakeholders, not only to assess the government's climate change policy, but also to monitor fiscal risks associated with increasing and unpredictable climate change impacts.

Analysis strategy: adjustment and modification of climate change weighting

Following the CPEIR guideline and classification, in order to quantify climate relevant expenditures, the next step of climate relevant expenditure analysis is to identify and applying the weighting of relevance to climate change of these policies and programmes. The relevance to climate change of policies and programmes depends on the responsiveness to the estimated current and potential impacts of climate change on different population groups (the poor, vulnerable and disadvantaged groups, women and children), different geographic areas and different institutional capabilities to deliver services.

Some programmes are wholly relevant, such as those developing climate change adaptation and mitigation policies or researching the impact of climate change. However, some programmes that address the development gap and already existing climate challenges may only provide additional benefits under climate change circumstances. To appreciate how resources are dedicated to policies and programmes responsive to the impact of climate change, it is thus useful to weight the allocation and expenditure data collected.

The reason for allocating the weight for expenditure data, as outlined above, is because it is challenging to define climate change finance in an objective manner that is practical and easy to understand. For the purpose of providing a weighting for allocations and expenditures, a clear decision needs to be made with regard to such questions as: Can addressing the development gap be distinguished from climate change impact adaptation? What is the additional benefit of the expenditure should climate change impact realise itself? Is the additional benefit of providing adaptation for vulnerable areas and groups the same in all regions and over time? Answering those questions requires detailed information and analysis that may not always be possible.

(UNDP, 2015a) Guideline proposes two weighting tools that reflect the different levels of data availability to the CPEIR report, namely: i) CPEIR Climate Relevance Index (if data is limited – Tier 1), and ii) Benefit Costs Ratio (if necessary data is available – Tier 2). These tools are not mutually exclusive but rather should be seen as complementary: option 1 allows for a first rapid assessment, while option 2 requires more information and provides an economic assessment of the benefits associated with a specific programme.

The previous CPEIR reports in Vietnam, (MPI, UNDP, WB, 2015) and (MPI, 2019) applied the first approach, CPEIR Climate Relevance Index. This typology was developed through consultation with governmental representatives to be a unifying framework for the full range of activities involved in the climate change response. The top level of the typology divides the investments into three pillars: Policy and Governance (PG); Scientific, Technological and Societal Capacity (ST); and Climate Change Delivery (CCD). Within each pillar there are a number of categories and within those categories there are a suite of tasks.

Taken into account the fact that there is limited availability in data granularity and continuity, the report chooses to review the climate finance data in some steps. Firstly, it reviews and selectively forms a set of climate relevance ratio of expenditures in the previous CPEIR reports that have been conducted in Vietnam and some regional countries. The climate relevant ratio of expenditure are then sorted in line with the classification of economic sectors and line ministries as defined in the following session: “*Specifications: climate change weighting for sectoral expenditures*”. In the meantime, the report conducted another review on the list of public expenditure projects of line ministries and provinces/cities (see Annex 8). This step can help to verify swiftly the overall picture of climate expenditures from line ministries and provinces, though at a glance and incomplete picture. Secondly, the report reviews the midterm expenditure allocation of line ministries whereas it focuses on expenditure on climate change and green related projects. And at the third step, the report uses climate change weighting ratio to calculate the public climate expenditure and compares the results with the previous reviewed (Vietnam and regional countries CPEIRs, and CPEIR methodology in 2012, 2015). Accordingly, this process utilises and inherits the results from the two reports

developed by the MPI with development partners in 2015 and 2019 (MPI, UNDP, WB, 2015) and (MPI, 2019).

For advantages, the report is built on, and inherits existing results from the previous review of climate public finance in Vietnam, particularly the CPEIR reviews in Vietnam in 2015 and 2019. It also considers the international and regional experience and knowledge of climate public finance because it uses some cost norms of regional countries in relevant expenditure categories, where Vietnam data are missing. This approach can be applied to generate a macro view of climate finance in the public sector in a rapid and direct time and approach. The result from this review can provide a clear pattern of public expenditure on climate change in Vietnam. It also can save a lot of time and resources for the reviewing work, particularly in the context of there is a large number of data are not available, and the level of data granularity is presented.

Specifications: climate change weighting for sectoral expenditures

The weigh allocated for sectoral (and line ministries) are estimated based on results from CPEIR reports in 2015 and 2019 with close reference to the guidelines from (UNDP, 2015b). This weight ratio is different slightly from ministry to ministry. To address this difference among line ministries, this report adds an additional step in modifying the final weigh for ministerial public expenditure. That is, we use the reference from UNDP's guidelines for CPEIR methodology (UNDP, 2015a). In the guideline, it provides common norms for sectoral expenditure for climate change, including of climate change. The report then modifies these common norms with consideration to other best practices in other countries in the region which completed their CPEIRs.

A1.4. Economic sectors

There are different definitions and approaches of sectors which often makes distinguishing the financed sectors difficult, not only in Vietnam but for the world. Often flows from different financing sources end up feeding into the same climate actions, but are not always easy to separate, especially if they are transferred through funds, joint ventures, and investors in the bond and stock markets. This study will utilise the Rio marker⁵ on climate change adaptation to classify and track the finance flow. The rationale of utilising the Rio marker in this report

⁵ The Rio markers were originally designed to help members with the preparation of their National Communications or National Reports to the Rio Conventions, by identifying activities that mainstream the Conventions' objectives into development co-operation. The Rio markers on climate change and desertification were introduced in 1998.

origins from the fact that the Rio marker allows tracking of multiple objectives simultaneously whilst avoiding double counting.

Furthermore, this approach is the most universal applying to different sectors of public, private, and international finance for climate change. Hence it is more useful to the later stage

of consolidation of the whole picture of climate finance in the country. The other classification of climate finance such as in the Decision No. 1085/QĐ-BKHĐT in 2018 on the Public Investment Classification Guidelines for Climate Change and Green Growth are more suitable for particularly public finance. So, to ensure the consistency and comparability of reporting the results among outcomes from the consultants, the Rio maker is applied in all reports and data tracking.

For sectors to track climate finance in this report, we use the sectors defined in the Common Principles for Climate Change Mitigation Finance Tracking (MDBs and IDFC, 2015a) and Common Principles for Climate Change Adaptation Finance Tracking (MDBs and IDFC, 2015b). Those are relevant and useful to define which activities, and thus sectors, are eligible to be classified as climate finance for all private, international, and public sources of investment.

Table 3 below determines sectors to be covered while tracking the climate finance for Vietnam. The table is based on a list that the MDBs and IDFC developed in the common principles for climate finance tracking. MDBs apply the list of eligible activities to financing through all types of financial instrument.

Table 1: Classification of sectors and sub-sectors as climate finance

Sectors	Sub-sectors
1. RENEWABLE ENERGY	1.1. Electricity generation Wind power
	1.2. Heat production or other renewable energy application
	1.3. Measures to facilitate the integration of renewable energy into grids
2. LOWER-CARBON AND EFFICIENT ENERGY GENERATION	2.1. Transmission and distribution systems
	2.2. Power plants (thermal power plant retrofit to switch from a more GHG-intensive fuel to a different and less GHG-intensive type of fuel)
3. ENERGY EFFICIENCY	3.1. Energy efficiency in industry in existing facilities
	3.2. Energy efficiency improvements in existing commercial, public and residential buildings
	3.3. Energy efficiency improvements in the utility sector and public services
	3.4. Vehicle fleet energy efficiency and low-carbon fuels
	3.5. Energy efficiency in new commercial, public and residential buildings

	3.6. Energy audits
4. AGRICULTURE, AQUACULTURE, FORESTRY AND LAND-USE	4.1. Agriculture
	4.2. Afforestation and reforestation and biosphere conservation
	4.3. Livestock
	4.4. Biofuels
	4.5. Aquaculture
	5.1. Fugitive emissions
5. NON-ENERGY GHG REDUCTIONS	5.2. Carbon capture and storage
	5.3. Air conditioning and refrigeration
	5.4. Industrial processes
6. WASTE AND WASTEWATER	6.1. Wastewater
	6.2. Solid waste management
7. TRANSPORT	7.1. Urban transport modal change
	7.2. Transport-oriented urban development
	7.3. Inter-urban transport
	7.4. Infrastructure for low-carbon and efficient transport
8. LOW-CARBON TECHNOLOGIES	8.1. Products or equipment
	8.2. Research and development
9. CROSS-CUTTING ISSUES	9.1. Support for national, regional or local policy, through technical assistance or policy lending
	9.2. Carbon finance
	9.3. Supply chain
10. MISCELLANEOUS	10.1. Other activities with net greenhouse-gas reduction

Source: Author's compilation from Common Principles of (MDBs and IDFC, 2015a) and (MDBs and IDFC, 2015b).

A.1.5. Financial instruments

Key financial instruments are captured in the report including mixture of financial vehicles that money flows come from investors to projects. They include capital expenditure from the public sector, grant and debt from international funding, and multiple and innovative financial instruments from the private sector. Specifically, this report will focus on:

For international funding:

- Grants: Transfers made in cash, goods or services for which no repayment is required. Grants are provided for investment support, policy-based support and/or technical assistance and advice.
- Project-level debt: Debt relying on a project's cash flow for repayment.

For public investment:

- Expenditure instruments, focus on capital expenditure on activities to address climate change impacts. Development (Capital) expenditure comprises acquisition of fixed capital assets with both a normal life of more than one year and more than a significant minimum value, purchases of strategic stocks, purchases of land and intangible assets, and capital transfers.

For private investment:

- Green bond: The first-ever legal framework for corporate green bonds in Vietnam, Decree No. 163/ND-CP issued by the Government of Vietnam (GVN) dated 4 December 2018 on corporate bond issuance, provides a definition of green bond in Vietnam. Accordingly, green bonds are a type of debt issued by public or private institutions which use the funds for environmental purposes.
- Green equity: Equities that meet the guidance of the Ministry of Finance of Vietnam (MOF) in its Circular No. 155/TT-BTC dated 6 Oct 2015 on disclosure on information on the securities market. The circular is an important legal cornerstone of building green indexing as an indicator of the green economy in Vietnam, the Green and Sustainable Index (VNSI).
- Green credit: Credits that meet and are reported to the State Bank of Vietnam (SBV) in the Directive No. 03/CT-NHNN dated 24 March 2015 on promoting green credit growth and environmental/social risk management in credit granting activities.
- Blended finance in PPP project: All PPP projects investment vehicles that are recorded and checked.

A.1.6. Data sources used

Because of the gigantic scope of data collected for the report, we use multiple sources of data and classified data into three groups: (i) group of data for public investment, (ii) group of data for private investment; and (iii) group of data for international funding.

There are limited data sources of *private climate finance* in Vietnam because the country is still at the developing stage of the formalisation of its private climate finance market. Data for private climate finance in Vietnam are now collecting from various sources, including the State Bank of Vietnam (SBV), Ministry of Finance (MOF), Ministry of Industry and Trade (MOIT), World Bank, OECD, ADB, commercial sources such as Thompson Reuters Refinitiv, BloombergNEF (BNEF), CIEC, and some other sources. Among those data sources, data from the SBV includes data reporting from different commercial banks in Vietnam in line with the guidelines in the Directive No. 03/CT-NHNN dated 24 March 2015 on promotion of green credit growth and environmental and social risk management in providing credit activities.

To determine what constitutes climate finance in *international funding*, the report relies on the tracking data reporting by: (1) the members of the OECD's Development Assistance Committee (DAC), data for which is publicly available through the Creditor Reporting System (CRS) database; (2) the group of Multilateral Development Banks (MDB) and members of the International Development Finance Club (IDFC) reporting on climate finance; and (3) the group of Multilateral Climate Funds (MCFs), as reported through the Climate Funds Update.

For the public sector's climate finance, the data and data sources for the review will be based on total government budget allocations and outturns by types of development expenditure and at the scope of total climate relevant expenditures by ministries. Most data are extracted from public data of the Ministry of Finance's regulation on state budget information dissemination, available at line ministries, Ministry of Finance (MOF), General Statistics Office of Vietnam (GSO) and line ministries. Some data are additionally collected from commercial data providers, such as CEIC, Thomson Reuters Refinitiv. In total, the report will examine data from 8 line ministries in 4 years, from 2016 to 2019.

Annex 2. SWOT Analysis for Domestic Climate Finance in Vietnam

Strengths

Improvement of the budget legal framework: The State Budget Law and its regulatory implementation guidelines are currently under review, with the objective of revising the Legislation in order to overcome the remaining limitations in the current provisions, and to bring State budget expenditure management into line with good international practice. It is intended to add new provisions which will make it possible to address more effectively problems of macro-economic management, including the need to control inflation and respond flexibly to changes in the global economic climate.

Availability of financial policies to support green growth in Vietnam have made positive contributions to the implementation of the 2012-2020 Strategy. Tax policies have played an important role in guiding and encouraging organisations and individuals to consider in choosing investment plans, environmentally friendly technologies and equipment, and investing in protection. environment. However, incentives for policies related to green growth are scattered in many different legal documents, not yet ensuring the uniformity of focus in implementation.

Continued improvement of the State budget reporting and accounting through implementation of the TABMIS (Treasury and Budget Management Information System) throughout the country.

Vietnam has activated the application of Medium-Term Fiscal and Medium-Term Expenditure Frameworks (MTFF and MTEF) as the medium-term fiscal and expenditure framework. This will help to make different governmental plans/strategies consistent with resources available in the overall fiscal envelope, and the integration of the planning of future current and capital expenditure.

Weaknesses

The growth of financial market instruments is not really sustainable. Green credit growth in Vietnam is still not sustainable. The balance sheet of banks is mainly formed from short-term capital, so there is a lack of medium and long-term capital to invest in green projects. The economy lacks medium and long-term capital mobilisation channels to support the green credit program.

There is a lack of synchronisation on "green" criteria: The development of green credit needs to be put in connection with the development of green financial instruments, green investment projects and towards the goal of increasing green credit. green growth. The

contents of current green monetary policy and green capital market development policy are all based on "green" criteria to implement incentives, encouragement, and investment attraction, but the content of the criteria "green" in policies is still inconsistent and lacks synchronisation.

Financing sources to implement financial market tools for green growth is limited: The capital needed to implement green credit is very large while Vietnamese banks are still facing challenges. knowledge from bad debt settlement, bank restructuring, credit growth pressure, capital mobilisation pressure to meet Basel II standards, circulars stipulating safety limits and ratios in operations of credit institutions, foreign bank branches [1] .

Public awareness about green financial products is still limited: The experience and understanding of the investing public is still low, even for investment activities on the stock market in general as well as for other products. green finance in particular. Although the policy direction of the capital market for green growth in Vietnam has been clearly established, public awareness and interest in green financial products is still very limited.

The participation of institutional investors is low: Institutional investors, especially long-term investors, play an important role in the development of green financial instruments. In addition, institutional investors are also the driving force in promoting new financial ideas and products, promoting the modernization of the financial sector, transparency and improvement of corporate governance standards, bringing many benefits to the development of the market. Opportunities

Supporting national policies: On March 20, 2014, the Prime Minister issued Decision No. 403/QD-TTg approving the National Action Plan on green growth for the period 2014-2020 to implement the implementation. implementation of the National Strategy on Green Growth specified in Decision No. 1393/QD-TTg.

Clear targets at the Green Growth Action Plan: 70% of green growth funding will be mobilised from the private sector, in addition to ODA for green growth projects. Currently, most credit sources for green projects are mainly based on funding sources, the contribution of banks is very small while the green economy has a lot of potential for developing industries. such as eco-tourism, organic agriculture, renewable energy, environmental services, etc.

The demand for green finance is getting bigger and bigger: The need for financial resources for green growth is not small, it is estimated that Vietnam needs up to 30 billion USD and the Government's commitment through national budget support is necessary. However, the implementation of the National Strategy on Green Growth needs to mobilise resources from

the commercial banking system, the private sector, especially from foreign investment in parallel with international support.

Challenges

The legal provisions are still lagging behind the development trend: The legal provisions on environment, green growth and sustainable development have been concerned by the State management agencies but are located in the spread over a fairly large number of documents, issued by many different management agencies, and at the same time have not defined the joint responsibility between the parties when environmental incidents occur.

Awareness, experience, skills and knowledge in implementing environmental and social risk management are still limited: The application and implementation of environmental and social risk management requires organisations to Finance, investors, relevant agencies and ministries must meet the institutional capacity, human capacity from the senior management team to the risk assessment capacity of full-time officials. As with banks, in order to manage environmental and social risks, banks must develop internal capacity to be able to identify and assess environmental risks when appraising projects, focusing Professional training for staff to make loans related to green credit. Currently, the capacity of credit officers to assess environmental and social risks is still limited, most of them only check in the loan application to see if there is an approved environmental impact assessment or not. no, some will check the discharge technology and migration plan (if any) of the work/project, but most are based on the experience of the appraiser.

Lack of uniform process and standards in project evaluation: When evaluating a project in the green manufacturing industry, there is currently no complete standardisation process, and our country does not have a detailed set of indicators for "Green Enterprise" to bind and classify...

Annex 3. SWOT Analysis for International Climate Finance

Strengths

Strong political commitment to long-term investment planning for climate change and green growth programs

Vietnam made its strong commitments to the climate change efforts and green growth path. The Resolution of the 13rd National Congress of the Communist Party of Vietnam affirms the role of the green economy in the country's development orientation for the period 2021 - 2030 (Orientation 6): actively and effectively adapt to climate change; actively engage in prevention, control and mitigation of natural disasters and epidemics; manage, exploit and

use resources reasonably, economically, efficiently and sustainably; take the protection of the living environment and people's health as the top priorities; resolutely eliminate projects that pollute the environment, ensure the quality of the living environment, and protect biodiversity and ecosystems; build a green, circular and environmentally friendly economy. This is a further guideline for the previous effort of Vietnam's government with the National Green Growth Strategy for the period 2011 - 2020 with a vision to 2050 (The 2011 - 2020 Strategy) was approved by the Prime Minister in Decision no. 1393/QĐ-TTg dated September 29, 2012. Vietnam's government is revising this strategy together with the soon expired National Climate Change Strategy (NCCS).

Direct connection of implementing the climate policy agenda with developed governments

The utilisation of international fundings for climate change also helps the Vietnamese government to connect directly its objectives with developed partners'. Government-to-government programming and related implementation processes make it much easier to access and handle funding for many developing countries, compared to the preparation of proposals tendering for climate finance and/or establishing direct access structures & processes. It also encourages the development capacities and builds governance and institutional framework conditions, preparing for large investments to come, on the one hand. They are also useful for accessing funding for larger investment projects that fit both the climate policy agendas and related investment strategies of the recipient and the donor countries.

Alignment with climate change and policy mainstreaming in sectors

The financial sector is exposed to the physical risks associated with climate change and the impact of climate policies. Securing global financial and economic stability and scaling up lowcarbon, climate-resilient investments are not conflicting, but rather mutually reinforcing, objectives. Although crucial, classic climate policies - such as carbon pricing, emission standards and technology objectives - do not appear sufficient to address the challenges from climate change that the financial sector is facing. Policies affecting the demand side and supply side of finance, as well as instruments matching supply and demand, need to be aligned with climate objectives to efficiently shift investments toward a low-carbon, climate-resilient economy.

The government can hence consider integrating climate change issues into their risk and stability assessment frameworks. Once the link between climate change and the mandates of international financial sector governance and regulatory institutions is understood, the existing tool kits and processes of these institutions - common standards, principles and guidelines with various levels of legal force, country surveillance and technical assistance - present entry points to mainstream climate-related risks and opportunities into their core operations.

Increased efficiency in financial infrastructure

With international fundings, Vietnam like many other developing countries needs to design its projects to meet the eligibility of international donors. This process might stimulate lasting changes in the structure/ function of a sector, or market by improving internal rates of return on low GHG emissions investments.

International fundings often encourage market-based instruments.

Raising capital through capital markets prevents moral hazards that might occur due to strong policy directives on renewable policy and favourable fiscal incentives, which may induce banks to take on riskier projects in their portfolio with an overreliance on public policy support. Financing projects through the capital market could promote transparency in the market, thereby minimising information asymmetry in the industry. The disclosure requirements of capital markets require both project developers and financiers to provide a greater diversity of perspectives from various stakeholders, such as investors and intermediaries that could provide independent evaluation and second opinions on the projects. Furthermore, the additional transparency and disclosure requirements of green bonds would help to strengthen price discovery, information identification and risk pricing for the projects. As the market deepens, related expertise could be built internally, thereby expanding and improving the financial services sector, enforcing the strength of related infrastructure, thus contributing to the building of the national capital markets.

Emerging of new initiatives for development funding

There are currently many foreign-financed connectivity initiatives in the region, such as China's Belt and Road Initiative, Japan's Expanded Partnership for Quality Infrastructure, and projects supported by America's International Development Finance Corporation. Among these new initiatives, Vietnam need to access and evaluate itself the best options for them in the long run. But there is a fact that with new initiatives, the government of Vietnam could have more options in finding the gapped funds for its national climate change investment.

Well-organised public-private ties that offer favourable conditions for implementing climate actions

In light of remarkable economic growth and industrialisation over the past few decades, Vietnam's electricity demand has climbed substantially in recent years and is predicted to increase by around 8% annually until 2035. To meet this demand, it is estimated that the Vietnamese energy sector will require upwards of US\$148 billion of investment by 2030. Vietnam has excellent potential for renewable energy deployment, with an estimated 4 to 5 kWh per square metre for solar power and more than 3,000km of coastlines with consistent wind speeds for offshore wind capacity. As such, the Vietnamese government has set bold targets for increasing the share of renewable electricity generation– up from 58 billion kWh

in 2015 to 186 billion kWh by 2030, translating into an overall 10% share of electricity generation by 2030.

The Vietnamese government has in place a number of measures to attract both domestic and foreign investment into its renewable energy markets such as a Feed-in-Tariff (FiT) scheme, a new public-private partnership (PPP) framework, a power purchase agreement framework, corporate income tax exemptions or reductions, favourable land rental policies and funding for research and technology used in pilot projects.

Weaknesses

Fiscal deficit set to narrow room for issuing guarantees for concessional loans

The fiscal deficit will narrow slightly in 2021 thanks to stronger fiscal revenue collection supported by a continued economic recovery. Expenditures should continue to grow faster than revenues, as the government is seeking to accelerate disbursements for public investments on major infrastructure projects, which only met 57% of the target set by the Prime Minister in the first nine months of 2020. The pandemic, combined with difficulties between local authorities and landowners in reaching agreements on land handover, delayed infrastructure projects. The public debt-to-GDP ratio should decrease slightly, favoured by the growth momentum and a contained budget deficit. However, the debt remains exposed to currency risks as 46% of the public debt is denominated in foreign currency. Therefore, it is not easy for the government to issue any guarantees for international concessional loans.

Tougher donors' requirements

Vietnam began receiving ODA funds from the international community in 1993, which helped to achieve its remarkable socioeconomic development throughout the decades. However, since it became a middle-income country, aid sources gradually diminished while lending rates were rising. For instance, Japan's ODA into Vietnam has increasingly become stricter and expensive. As such, lending rates for loans during the fiscal year 2018 rose 0.3 per cent from October 1, 2017. Moreover, preferential rates applicable to loans also rose from 0.3 to 1 per cent per year. Japan began requiring to set the salary level of advisors for financial loan projects at about \$30,000 per month per person, not including allowances – 20-25 per cent higher than average salaries of foreign ODA consultants.

Lack of robust climate and green taxonomy in Vietnam

A key point to note for climate change finance is that Vietnam does not have a comprehensive climate and green taxonomy to provide guidance on green and climate projects. For example, green bonds in Vietnam have been issued for some projects. But the green credentials of a green bond are based on the projects or assets linked to its issuance, not the green credentials of the organisation issuing the bond. This means that any organisation can issue a green bond, as long as they can prove that the bond proceeds are used for environmentally-friendly

purposes. This characteristic induces two main concerns regarding finances raised by green bonds: the transparency on the use of funds (referred to hereafter as financial integrity) and the environmental integrity of the bond. The financial integrity of the bond is usually ensured by earmarking the proceeds to finance environmentally friendly projects or by tying proceeds to a green underlying asset. While financial integrity does not present many areas of controversy, protecting the environmental integrity of the green bond issuance is highly ambiguous.

Although green bond issuances are mostly classified under the seven broad themes, which lay down broad categories for projects, the complex and integrated nature of environmental issues suggests that absolute definitions of what could constitute a 'green investment' may remain hypothetical and illusive. Thorny issues surrounding the discussion include what should be considered green and who should define greenness. Other potential market participants might view the lack of a robust green and climate taxonomy as a potential trigger for the loss of investor confidence in the green instrument. This has constantly been an area of concern for various stakeholders, with different parties attempting to provide solutions to overcome this difficulty.

Lack of competency of market participants for climate change projects

In Vietnam, besides the above issue, financial institutions have suffered from a lack of discipline, or have a high proportion of borrower membership that pressures credit ratings. For example, some national development banks are often entirely owned by their national government, and domestic policy goals can take priority over financial prudence. Another issue is the lack of capacity and technical know-how in the country's financial institutions and firms, particularly in principle areas such as the adoption of a harmonised climate accounting, climate finance targets, or mainstreaming.

Opportunities

Strong donor interest

Given that Vietnam is one of five coastal developing countries most affected by climate change, it needs to increase its efforts to mainstream its climate change response within sectoral and provincial programs, mobilise resources for climate change response activities, promote understanding of climate change in the mass media and education system, and invest in the necessary human resources and technical skills to combat the effects of climate change, which typically impact the poorest and most vulnerable the most. International fundings for climate change is therefore still in the strong interest of donors to support the country. Moving forward, these aids should focus more on capacity building and institutional strengthening for the delivery of social services, including via CSOs and working with CSOs to influence policies and delivery of social services. To increase the effectiveness of scarce

resources, it should be a catalyst rather than the main direct source of funding for services and infrastructure

Strong momentum for growth

Vietnam economy rebounds strongly and registers 2.9% growth on an annual basis in 2020. The economic recovery is broad-based and enabled by effective containment measures against the pandemic. Manufacturing output is boosted by the robust export sector, which benefited from Vietnam's relatively resilient export mix as well as positive spill over from global supply chain restructuring. While domestic consumption recovered following the relaxation of mobility restrictions, the growth rebound benefited also from an acceleration in public investment disbursement. The economy is expected to continue to rebound in 2021, to around 7% growth on an annual basis on the back of a strong recovery in external demand, a resilient domestic economy and continued investment inflows. The strong growth momentum could hint at more opportunities for investment for the country. It also means that the country will have more chance to access financial sources for financing its climate change efforts.

Threats

Decreased competitiveness of energy-intensive industries from emissions reduction actions

The latest draft of Vietnam's 8th Power Development Plan (PDP8) shows increased intentions to move away from coal-fired power and toward renewables and natural gas during the next decade, even as the country seeks to keep up with rapid demand growth. PDP8 scales back coal-fired power significantly showing Vietnam's intentions to reduce emissions, as well as to reduce its dependency on imported fossil fuels. The plan also proposes no new coal-fired power plants except those already under construction or planned for completion by 2025 or sooner. This development together with the risk of the industrialisation process in Vietnam with large incoming FDI could unintentionally encourage the energy-intensive industries which soon be uncompetitive in the future.

High level of vulnerability from climate change

Climate change will seriously affect people and the economy, especially vulnerable groups. It is forecasted that by 2050, with a vision to 2100, climate change will continue to be complicated and have significant impacts on the national socio-economic development. According to the 2016 scenario of climate change and sea-level rise of MONRE, by 2050, depending on the scenario and geographical location, the average annual temperature in Vietnam could increase by 1.3 - 2.3 o C, and the rainfall will increase by 5-10%; the sea level will rise by 13-35 cm and about 6.3% of the land area will be submerged at the sea level rise of 100cm, and extreme climate events will occur with a higher frequency and intensity, increasing risks such as hurricanes, heavy rains, floods, landslides, droughts, saltwater intrusion, coastal erosion...

Annex 4. MPI's guidelines on the classification of climate change and green growth activities

Areas	Activities	Explanation
Energy Efficiency	Energy efficiency	Mitigation (M1)
Planning	Enhanced climate information, early warning and hydromet systems	Information used mainly for adaptation (A1)
Electricity	Low-carbon and resilient energy generation, transmission and distribution	Mainly mitigation (M2), but potentially involves adaptation by improved energy security (A2)
Industry	Sustainable industry production	Mitigation (M3)
Disaster Risk Reduction	Disaster risk reduction	Adaptation (A3)
Urban	Clean and resilient urban development and construction	Mainly adaptation related to flood control (A4), but some mitigation with energy efficient cities (M4)
Transport	Sustainable transport	Mainly flood proofing and control in roads (A5), some efficiency from public transport (M5)
Waste	Waste management and treatment	Mainly reduced GHG emissions (M6), plus some proofing of infrastructure (A6)
Agriculture	Sustainable agriculture and livestock	Mainly resilience in farming systems (A7), plus some reduced GHG emissions (M7)
Forestry	Sustainable forest management	Most forestry projects have adaptation (A8) and mitigation (M8)
Health	Health and social services	Both adaptation (A9) and mitigation (M9)
Irrigation	Irrigation	Mainly irrigation system construction/development with adaptation (A10) and mitigation (M10) purposes
Water Supply	Water quality and supply	Improved efficiency of water supply and drainage with adaptation (A11) and mitigation purposes (M11)
Fisheries	Sustainable fisheries and aquaculture production	More resilient aquaculture production with adaptation (A12) and mitigation (M12) purposes
Biodiversity	Biodiversity and conservation	More resilience ecosystems with adaptation (A13) and mitigation (M13) purposes
River	Water resource management	Construction/development of flood management structures and management of river flows (A14)

Coastal	Coastal protection	Construction/development of resilient coastal protection infrastructure/system (A15)
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Annex 5. Classifications systems for green budget tagging across select countries

Approach	Country	Purpose of green budget tagging	Classification system
Focussed on identifying	Bangladesh	Climate budget tagging helps the country to track and	Expenditures are tagged if they contribute to one of the

climate-relevant budget items		report climate finance.	6 thematic areas (Food Security/Social Protection/Health, Comprehensive Disaster Management, Infrastructure, Research and Knowledge Management, Mitigation and lowcarbon development, Capacity Building and Institutional Strengthening) or one of the 44 programmes under the national climate change policy.
	Colombia	Climate budget tagging aims to help achieve the country's goals as part of the UN Framework Convention on Climate Change (UNFCCC).	Tagging covers national, regional and local expenditures along twelve sectors considered most directly linked to mitigation and adaptation efforts.

	Ireland	Green budget tagging supports the reporting requirements relating to Irish Sovereign Green Bonds.	Tagging identifies expenditure that is dedicated to addressing climate change (using International Capital Market Association’s (ICMA’s) standard definition of “green expenditure”)
Focussed on identifying budget items relevant to climate and other environmental dimensions	France	Green budget tagging helps improve transparency around government policy relating to the environment and climate change.	Budget items are classified using the six different categories defined in the EU Taxonomy for Sustainable Finance; climate change adaptation, mitigation, biodiversity, circular economy, water management and air quality.
	Italy	Green budget tagging was introduced at the request of parliament for improved transparency on environmental expenditure.	Tagging identifies expenditure items in accordance with the classifications system set out in the European System for the Collection of Economic Information on the Environment (SERIEE) addressing environmental protection and reducing environmental degradation.

	Philippines	Climate budget tagging was introduced to help track how much expenditure is going towards the priority areas set out in the country's National Climate Change Action Plan.	Tagging identifies expenditure across seven areas; food security, water sufficiency, ecosystem and environmental and ecological stability, human security, climate-smart industries and services, sustainable energy, and knowledge and capacity development.
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Sources: OECD, Green budget tagging: introductory guidance & principles (working draft) - GOV/PGC/SBO(2020)

Annex 6. Regulatory framework for climate finance in Vietnam for reviewed period 2016-2020

1. Overview

The climate change finance regulatory in Vietnam highlights the importance of the introduction of the National Climate Change Strategy (NCCS) in 2011 and Vietnam Green Growth Strategy (VGGS) in 2012. These two important documents leverage and shape the requirement of mobilising the adequate financial sources for the implementation of these strategies and to advance the climate and green economic targets of Vietnam.

The National Climate Change Strategy 2011

The National Climate Change Strategy 2011 and its implementing document, the National Action Plan on Climate Change (NAPCC) for the period to 2020 set strategic tasks on adaptation and mitigation with priorities on:

- implementing the National Target Program to Respond to Climate Change (NTP-RCC);
- National Scientific Program on Climate Change;
- hydro-meteorological observation and forecasting;
- water resources management and climate change adaptation in the major deltas;
- management of GHG emission reduction activities and GHG emission inventory;
- climate change responses in megacities;
- sea dyke and river embankment reinforcement;

- healthcare;
- and community-level response.

These priorities are specialised in tasks that there are three key tasks on the mobilisation of financing sources. These tasks are

- Task No. 25: To develop green growth strategy of Vietnam with model of low carbon economy, green lifestyle and sustainable consumption
- Task No. 45: To develop financial mechanism, to manage and use investment fund for climate change appropriate with international financial mechanism
- Task No. 63: To implement activities to mobilise international communities, to call on investment in climate change responses

Provinces and sector ministries created action plans or similar policy instruments for the implementation of the NCCS, NAPCC and other national climate change policies, approved by the province or ministry concerned.

Cities and provinces are requested to develop their respective action plans with assignment to “mobilise resources from provinces, ODA, and the private sector” among other guidelines and detailed actions

Vietnam Green Growth Strategy 2012

Vietnam Green Growth Strategy was introduced in 2012, and similar to the NCCS 2011, it follows by an action plan called Green Growth Action Plan (GGAP) for the period 2014-2020. While the NCCS focused on adaptation and mitigation actions, the VGGGS targets more on mitigation actions and low-carbon, green growth. The low-carbon green growth approach in the GGAP looks forward to increasing access to energy for the poor, creating green jobs and boosting the economy, while reducing GHG emissions.

These documents were also followed by sectoral and provincial action plans with some specifics. Particularly, the Green Growth Action Plan presents 66 activities, which are grouped under four themes:

- (1) Institutional improvement and formulation of green growth action plans at the local level;
- (2) Reducing GHG emissions intensity and promoting the use of clean and renewable sources of energy;

(3) Greening production; and

(4) Greening lifestyle and promoting sustainable consumption.

The VGGs was also localised in provinces, ministries in their implementation. Its action plan covers the same ground as the NCCS but for sectoral and locally specific aspects. Similarly, it sets out priority activities included formulating a green growth financial policy framework in its action plan as below:

- Action 3. Formulate the green growth financial policy framework
- Action 37. Improve the institutional arrangement and capacity of financial and credit activities of commercial banks to promote green growth
- Action 64. Public expenditure by green standards

Other related policies

With international support, several Nationally Appropriate Mitigation Actions (NAMA) were formulated in the years since issuing the VGGs. NAMAs offer opportunities for technology transfer and partial international financing and have been developed in Vietnam, requiring major efforts on monitoring and reporting on emissions. Formulation of NAMAs and systems for monitoring, reporting and verification (MRV) of emissions has been supported by several international development partners.

Vietnam has also progressed with REDD+ policy formulation and implementation. Harmonisation with both forestry sector and mitigation policy and targets has taken place. REDD+ in Vietnam is governed by the National Action Program on REDD+ 2011-2020. This is a key programme also referred to in the NCCS. Substantial international finance for REDD+ implementation has been granted to Vietnam in the past decade. It has also been linked to national regulations on payments for ecological services by for example enterprises that generate hydro-electricity, with revenues allocated to e.g. local forest managers.

Under the UNFCCC's Kyoto Protocol, Vietnam regulated carbon offsets as enabled by the Clean Development Mechanism (CDM) and prepare to apply market-based instruments also within Vietnam. Vietnam has participated quite substantially in CDM offsets through the past decade, as new mechanisms are being developed under the Paris Agreement. This is aiming to support technology and financial transfers, especially to local enterprises that take responsibility for reducing emissions. Monitoring of GHG emissions is critical for the success of NAMAs, REDD+ and CDM or similar carbon market mechanisms, and with international support capacity for monitoring emissions has increased.

Glance picture of climate finance after the NCCS 2011 and VGGs 2012

Green finance is an important channel to finance the country's long-term green and climate-resilient strategy. As a coastal country, Vietnam is assessed to suffer significantly and directly from climate change impacts. In this context, the country shows a strong commitment to global climate efforts at both international and national levels. At the international level, Vietnam committed to cut its emissions growth by 9% or nearly 84 million tonnes of CO₂ by 2030 compared with business as usual projections, using a 2014 baseline ([Vietnam's Update NDC, 2020](#)).

The key issue to successfully achieve those targets is that Vietnam can mobilise sufficient financial sources, among others, to finance its action plans. ([World Bank, 2014](#)) estimates that the incremental investment cost for Vietnam to move from a BAU scenario to a low-carbon development path is 1% of annual GDP during 2010-2030, without accounting for the additional cost of adaptation. Meanwhile, climate change spending budgeted in Vietnam in recent years of 0.1% of its annual GDP ([MPI, 2016](#)) is far below that number. In this context, green finance could be a promising area to explore for funding climate and green projects in the country.

Given its long-term potential perspective, green finance in Vietnam is not widely recognised and developed. The taxonomy for green finance in Vietnam, as in many other countries, is not well defined and structured. In terms of the legal framework, Vietnam has issued regulations and guidelines for green financing practices, both in private and public sectors though these regulations are fragmented and not comprehensive. They are:

The Target Programme on green growth and response to climate change was approved by Resolution No. 73/NQ-CP dated August 26, 2016. In addition, public investment capital for green growth is also provided through the capital from the environmental protection sector and related programmes and projects.

For public investment, the MPI developed and issued Decision No. 1085/QD-BKHDT on 16 July 2017 on "Guideline on the classification of public investment for climate change and green growth" with a list of codes for adaptation and mitigation (13 Adaptation Area A1-A13 and 14 mitigation areas M1-M14).

The financial sector's action plan for implementation of the 2011-2020 Strategy is an important legal basis for the development of green capital markets, thereby continuing to promote green capital market products and researching and developing a green financial framework for capital markets (Circular No. 155/TTBTC dated October 6, 2015 and Decree 95/ND-CP dated June 30, 2018). Recently, the Government issues the Decree No.

81/2020/ND-CP dated 09 July 2020 on providing amendments to the Government's Decree No. 163/2018/ND-CP dated 04 December 2018, on the issuance of corporate bonds. This Decree (regulated by the MOF) also mentions the issuance of green bonds, but no further guidance afterward.

The State Bank has actively promoted the development of green credit and green banking: requesting credit institutions to focus on giving priority to granting green credit to some economic sectors (Directive No. 03/CT-NHNN 23 April 2015). This requirement was detailed in the Official Letter No. 9050/NHNN-TD dated 03 November 2017 with the "list of 12 green economic sectors in mitigation for green credit statistics and reporting" applicable to all credit institutions since QIV/2017. This reporting requirement has been officially applied for all credit institutions since then. The SBV also prioritise green credit in their Strategy for Development of the Banking Industry to 2025, with a vision to 2030 (Decision No. 986/QD-TTg dated 8 August 2018), promulgating a Scheme for green banking development in Vietnam (Decision no. 1604/QD-NHNN dated 7 August 2018).

The SBV (ODA International Credit Project Management Unit) developed and issued a "Green Project Catalogue" attached with the Official Letter No. 237/NHNN-BQLDA3 dated 24 April 2017 applicable to participatory banks in the SME credit program funded by JICA. This covered only 6 green sectors with 41 green sub-sectors in mitigation. This initiative was implemented with the aim to green the current concessional loan program to see how the classification of green investment would work within the pilot scale before scaling up to the entire system.

In 2019 MONRE with IFC support issued the reference material on "environmental assessment criteria for green projects and the list of projects with a high risk of environmental pollution". This document defines a green project in one of two following categories: (i) projects which are already green such as environmental friendliness, natural resource-saving, biodiversity conservation, climate change adaptation, and prevention and pollution control, (ii) projects which are evaluated to meet at least 01 out of 08 criteria (energy saving; producing or using clean and renewable energy; using environmentally friendly raw materials and materials; conserve natural resources, protect ecosystems; using economically and efficiently natural resources; Climate change adaptation; environmentally friendly; pollution prevention and control.

In provincial level, all provinces and cities in Vietnam issued regulations to implement or integrate the climate change and green growth targets into their financing and budgeting plans. Particularly, Thua Thien Hue and Ha Tinh Provinces are the first two provinces issued regulation to encourage the PPP projects in the green and climate-related economic activities

2. Institutional and Operational Framework

Government Actors

The Vietnamese national authorities consider the response to climate change as one of their top priorities and a number of climate-related policies have been approved and implemented over the last decade. There are multiple government agencies involved in climate change response activities, among which the Ministry of Natural Resources and Environment (MONRE) plays the most important role: it is assigned by the national government to lead and coordinate the climate change policy development and implementation in Vietnam.

MONRE was the leading agency for the implementation of the National Target Program to Respond to Climate Change - NTPRCC (2011-2015), later transformed into the National Strategy on Climate Change and the National Target Program to Respond to Climate Change and on Green Growth - NTPRCC-GG (2016-2020). The Department of Climate Change of MONRE acts as the Standing Office for the National Committee for Climate Change (NCCC) and for the Support Program to Respond to Climate Change (SPRCC). The SPRCC is the main financial mechanism established to support the implementation of the NTPRCC and NTPRCCGG.

At the provincial level, the Department of Natural Resources and Environment (DONRE) is the leading agency for climate change responses. However, there is neither an agency nor a permanent government officer in charge of climate change at the district and commune levels. As the national State management bodies for disaster risk management, the Ministry of Agriculture and Rural Development (MARD) and its Disaster Management Authority play a central role in climate change responses, in complement with MONRE.

Specifically, MARD is responsible for developing and implementing policies, projects, and programs to address the impact of natural hazards such as flooding, typhoons, drought, and saline intrusion. The ministry serves as the permanent body of the Central Steering Committee for Natural Disaster Prevention and Control chaired by a Deputy Prime Minister. The minister of MARD is the permanent vice-chairman of this committee. A similar structure and division of responsibilities are applied at the provincial and district level where the Department of Agriculture and Rural Development (DARD) and the district level Division for Agriculture and Rural Development play the leading role in disaster risk management.

MONRE and MARD work closely with the Ministry of Planning and Investment (MPI) and the Ministry of Finance (MOF) to review and plan climate change and/or disaster risk management budgets. MPI is responsible for the overall development strategies, planning, and investment at the central level and for attracting, coordinating, and managing ODA. MOF is the State management body for finance management, budget allocation, and tracking of government budget spending.

Local Actors

At the commune levels, as far as State institutions are concerned, the People's Committees are the main bodies for managing or coordinating adaptation projects in cooperation with the implementing organisations and agencies. Within the People's Committees, the Steering Committee for Natural Disaster Prevention and Control is the entity in charge of Disaster Risk Management. This committee is not specifically mandated to implement adaptation to climate change.

However, as there is currently no organisational structure and staff dedicated to climate change adaptation at the local level, and as many adaptation practices are associated with weather-related disasters, the Steering Committee for Natural Disaster is often de facto involved when an adaptation project takes place. This committee works under the leadership of the chairperson of the communal People's Committee and involves officials in charge of different areas (e.g., agriculture, forestry, natural resource management, finance, land, infrastructure), police officers and local army, and representatives of mass organisations such as Women Union, Farmer Association, Youth Union as members. Sometimes, it also includes village leaders and local communist party secretaries. The communal Steering Committee for Natural Disaster often follows technical instructions from the equivalent entity at the district level and is responsible for supervising, coordinating, and directing disaster prevention and control activities, including the development and implementation of the communal action plan to respond to natural hazards and the organisation of training and awareness raising activities.

While all the commune level People's Committees officials are potentially mobilised to implement climate related disasters and sometimes adaptation interventions, some are more frequently involved, such as officers in charge of agriculture development and of construction and environment. Indeed, these officers are often the local contact persons for programs set up by the district and the provincial

International Organisations

As Vietnam has long been identified as highly vulnerable to climate change, bilateral and multilateral organisations have provided significant financial support to the country to respond to climate change. Funding from these organisations is often in the form of Official Development Aid (ODA), transferred directly to the central government budget. Some grants have also been provided but the amount is relatively small. To date, the World Bank, Japan, Germany, France, and the Asian Development Bank (ADB) are among the biggest climate change related donors in Vietnam. In addition, the United Nations agencies, especially the

United Nations Development Program (UNDP), have played an important role in supporting climate change adaptation in Vietnam.

For instance, UNDP often mobilises resources and acts as a direct recipient from financial institutions such as the Green Climate Fund, and then works with Vietnamese partners, especially the Ministry of Natural Resources and Environment and the Ministry of Agriculture and Rural Development, to implement adaptation projects. In addition to the funding provided directly to the Vietnamese government, bilateral and multilateral organisations have also funded non-governmental organisations (NGO), research institutions, and private consulting firms to implement adaptation projects in Vietnam. Some of the most active international NGOs in the field of climate change adaptation in Vietnam are Oxfam, Care International, World Wildlife Fund (WWF), Catholic Relief Services, ActionAid Vietnam, SNV, and the Institute for Social and Environmental Transition (ISET).

Annex 7. Deep dive: Private finance in the energy sector in Vietnam

Financing resources in the energy sector in Vietnam are limited. The landscape is dominated by loans from domestic commercial banks and developer equity, with institutional investors, retail investors, and the wider capital market playing a rather limited role. Green credit extended by domestic banks represents the largest source of finance for renewable energy projects in Vietnam. Green lending was initiated by the State Bank of Vietnam (SBV) as a pilot project with support from GIZ. It also included USD 240 million in donor capital through onlending by 23 commercial banks. Even renewable energy is not a designated priority sector for commercial loans, it is strongly encouraged by the Government of Vietnam (GVN) as one of the five priority sectors for investment.

Commercial banks in Vietnam prefer lesser risk and finance small-scale plants at a high cost. The constraints of the domestic banking sector are priced into the cost of debt; domestic loans have a relatively short tenor and carry an interest rate typically of 10%. This is much higher than the cost of foreign debt. International commercial banks can offer debt at 6-8% whereas export/import banks can lend at even lower costs. Renewable energy projects are eligible for concessional loans from the Viet Nam Development Bank (VDB), one of two government policy banks. The lending rates of the VDB, however, are only marginally lower than those offered by commercial banks, though its loans have a longer tenor. For a project to be financed by the VDB, it must qualify as a “development project” as defined by the government and be bankable. Clean energy has become a priority sector for the bank, and the VDB presently finances hydro and solar power projects with plans to foray into energy efficiency.

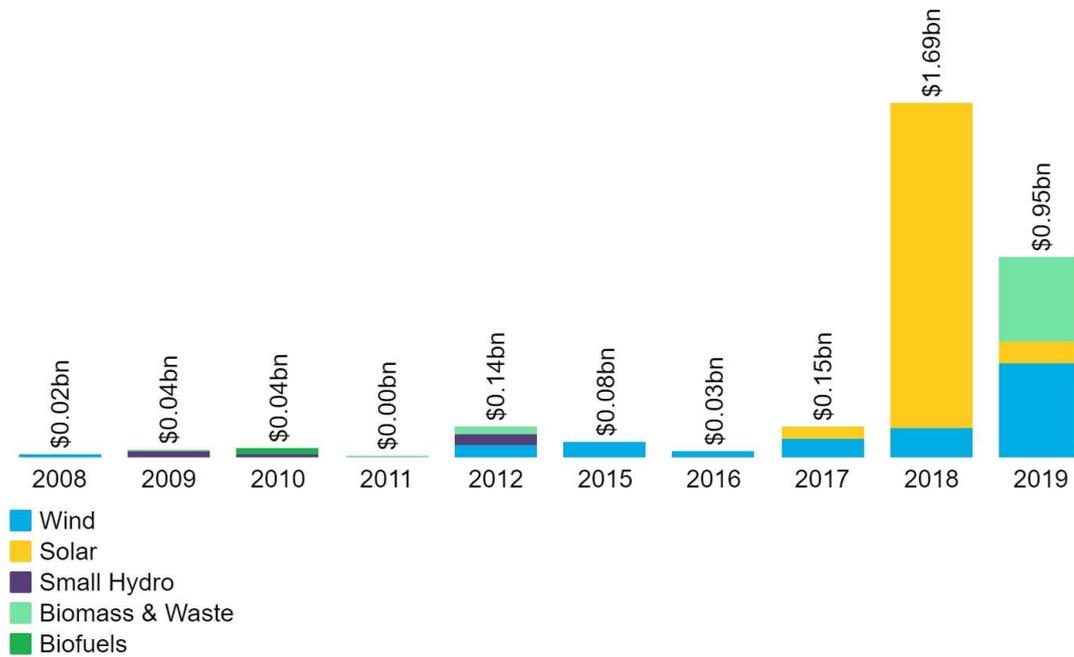
Figure A6.1. Renewable energy capacity investment in 2020

Country	2020 renewable energy capacity investment	Change from 2019
China	\$83.6 billion	-12%
U.S.	49.3	-20
Japan	19.3	+10
U.K.	16.2	+177
Netherlands	14.3	+221
Spain	10.0	+16
Brazil	8.7	+23
Vietnam	7.4	+89
France	7.3	+38
Germany	7.1	+14
India	6.2	-36
Total	303.5	+2

Source: BloombergNEF

Though there are difficulties, the private investment in renewable energy in Vietnam observed a surge in 2020, registering an increase of 87% year on year. This movement makes Vietnam becoming the top 8 countries globally in terms of capacity investment in renewable energy.

Figure A6.2. Clean Energy Investment in Vietnam from 2008-2019 in sub-sectors



Source: Data and illustration from BloombergNEF

Investment into renewable energy in Vietnam is increasing year by year and reached USD 3.15 billion in 2020. Most of the investments were in the forms of loans and projects' equities. And among industrial sectors, the solar area in 2018 and biomass are attracting the most investment in 2019. The reason behind this is mainly due to the Vietnam government pilot feed-in-tariff rates of 9.35 US cents per kilowatt for projects implemented between June 2017 and June 2019, which attracted over 4.46 GW of new capacity for the country installed and connected to the grid before 30 June 2019 (deadline to benefit of this FIT). This leads to the fact that the country has raised as a regional (Southeast Asia) leader in photovoltaic power generation. As of June 2019, 4.46GW of new projects were connected to the grid and it is expected to increase by 630MW by end of 2019, bringing to total solar energy production to 5.2GW from a mere 134 MW early 2017. However, this rapid expansion has raised challenges due to grid curtailment issues, overall, the country total installed production surpasses the grid capacity by already 18%. And in the near future, this rapid growth would see the slowdown, both from the investors' consideration and from the adjustment of the government side.