Philippines National Scoping Study

September 2017

UNITED NATIONS ESCAP
Economic and Social Commission for Asia and the Pacific

SERDEF

SUSTAINABLE DEVELOPMENT GOALS

Acknowledgements

We would like to express our sincere gratitude to the consultants from the Association of Development Financing Institutions in Asia and the Pacific (ADFIAP) for their valuable inputs and contribution to the preparation of the scoping study.

We also wish to thank the bankers and policy experts for sharing their expertise and insights which greatly contributed to the development of this paper.

We greatly appreciate the management of Small Enterprises Research and Development Foundation (SERDEF), as well for their valuable support during the process of developing this scoping study.

The SERDEF and ADFIAP team would like to express their gratitude to the staff of the banks that have very supportive and engaged in the interviews, including the Banko Sentral ng Pilipinas (Central Bank of the Philippines), the Department of Environment and Natural resources of the Development Bank of the Philippines, the Land Bank, the Bank of the Philippine Island, and Banco de ORO and the Commission on Climate Change.

Lastly, we gratefully acknowledge the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP) for mobilizing funding for promoting innovative climate finance mechanisms for financial institutions in the Asia-Pacific region and for selecting the Philippines and SERDEF for this important undertaking.

List of Acronyms

ADB	Asian Development Bank
APCF	Asia Pacific Carbon Fund
BAIPHIL	Bankers Institute of the Philippines
BDO	Banco de Oro
BOI	Board of Investments
BPI	Bank of the Philippine Islands
BSP	Bangko Sentral ng Pilipinas
CBC	China Banking Corporation
CCA	Climate Change Act
CCAM	Cabinet Cluster on Climate Change Adaptation and Mitigation
CCAP	Climate Change Action Plans
CCC	Climate Change Commission
CCF	Climate Change Fund
CEFPF	Clean Energy Financing Partnership Facility
CLEECP	Credit Line for Energy Efficiency and Climate Protection
DA	Department of Agriculture
DBM	Department of Budget and Management
DBP	Development Bank of the Philippines
DENR	Department of Environment and Natural Resources
DMC	Developing Member Countries
DILG	Department of the Interior and Local Government
DOA	Department of Agriculture
DOE	Department of Energy
DOF	Department of Finance
DOST	Department of Science and Technology
DOTC	Department of Transportation and Communication
DPWH	Department of Public Works and Highways
EISCP	Environmental Infrastructure Support Credit Program
FCF	Future Carbon Fund
FSCC	Financial Stability Coordination Council
GCF	Green Climate Fund
GDP	Gross Domestic Product
GHG	Greenhouse gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IFC	International Finance Corporation
ITH	Income tax holiday
INDC	Intended Nationally Determined Contribution
JICA	Japan International Cooperation Agency
KfW	Kreditanstalt fuer Wiederaufbau
LBP	Land Bank of the Philippines
LGU	Local Government Unit
MABS	Microenterprises Access to Banking Services
NCCAP	National Climate Change Action Plan
NDC	Nationally Determined Contribution
NDRRMC	National Disaster Risk Reduction and Management Council
NEDA	National Economic & Development Authority
NFSCC	National Framework Strategy on Climate Change
NOLCO	Net operating loss carry-over
ODA	Official Development Assistance
PEZA	Philippine Economic Zone Authority
PSF	People's Survival Fund
PSFB	Peoples' Survival Fund Board
SEF	Sustainable Energy Finance
UN ESCAP	United Nations Economic and Social Commission for the Asia and the Pacific
USAID	United States Agency for International Development
WB	World Bank

List of Figures, Tables & Graphs

Figures

Table of Contents

1. Introduction

The United Nations Economic and Social Commission for the Asia and the Pacific (UN ESCAP) commissioned studies between 2015 and 2016 to examine the trends and innovative approaches to climate finance in the Asia and the Pacific region. These studies revealed that central and national development banks are the emerging leaders and key players in the mobilization of domestic private finance. Based on these findings, ESCAP received funding support from the UN Development Account for providing targeted advisory and technical assistance support to central and national development banks in 4-5 countries in South and South-East Asia to develop financial instruments stimulating investments in low carbon climate resilient development. The aim of the regional project is to assist the selected countries in mobilizing (domestic) private funding to implement their Intended Nationally Determined Contribution (INDC).

Based on comparative analysis, the Philippines was selected as one of the four beneficiary counters where a scoping study was initiated with support from Small Enterprises Research and Development Foundation (SERDEF) and Association of Development Financing Institutions in Asia and the Pacific (ADFIAP).

Scope of Work and Methodology

The primary aims of the Scoping Study and the First National Workshop are as follows:

1. Assess on the ground the capacity gaps to identify priority strategic areas for intervention and institutional arrangements at the policy level and

2. Identify among the participating technical experts, policy makers and/or key stakeholders who with strong institutional support from their organization will serve as project "champions" at the national and regional level.

A secondary aim is to contribute to the development of a scenario of climate finance based on current institutional infrastructure in the country and a future of desired outcomes.

To prepare the Scoping Study, a literature research of existing documents and information on climate finance and environmental management was conducted for their relevance; some information gathered were incorporated in the scoping study.

Primary data were also obtained through interviews of selected stakeholders.

A Mapping Exercise was also prepared with the following objectives:

1. To prepare a list of potential financial institutions, technical experts, policy makers and other stakeholders to identify "champions" to be involved in the project;

2. To identify organizations with climate finance related activities by other UN agencies, multilateral development banks, bilateral donors and others;

3. To map the role and actions taken by civil society in relation to climate finance;

4. To present the landscape in the country related to climate finance based on the current institutional infrastructure and future vision of desired outcomes;

5. To present the existing incentives for low carbon development such as taxation; and

6. To identify priority strategic areas for intervention, entry points and institutional arrangements.

2. Summary of findings

2.1 Identification of the identified/proposed national champion

Based on the discussions in the National Dialogue the Role of Central, Public and Private Banks and Opportunities for the Private Sector in Supporting Low-carbon, Climate Resilient Development in the Philippines, and its supervisory role of the banking system in the Philippines, the Central Bank, known as the Bangko Sentral ng Pilipinas (BSP) could serve as the anchor and champion for mobilizing domestic private sector climate finance. By including climate and other environmental initiatives on its agenda, the BSP can signal the importance of this topic to the financial sector and encourage them to take it seriously.

The Commission on Climate Change (CCC), as the focal point for climate change initiatives and Secretariat of the Cabinet Cluster on Climate Change Adaptation and Mitigation (CCAM), was also selected as the other champion.

2.2 Past and ongoing external support provided to banks for low carbon, climate resilient development

The World Bank (WB), Asian Development Bank (ADB), Japan International Cooperation Agency (JICA) / Japan Bank for International Cooperation (JBIC), US Agency for International Development (USAID), Kreditanstalt fuer Wiederaufbau (KfW) and International Finance Corporation (IFC) are international agencies that offer financial support for financing green investments in the Philippines[1]. As of 2015, JICA had the largest share in the Official Development Assistance (ODA) portfolio, followed by the WB and ADB[2].

There are 16 programs for financing green investments in the Philippines starting from 1998, to date, and onwards. Initiatives by WB are the: Philippine Chiller Energy Efficiency Project, Carbon Credit Purchase, and the Country Partnership Strategy for the Philippines. Projects initiated by ADB which benefits the Philippines as one of its developing member countries (DMCs) are the: Integrated Natural Resources and Environmental Management Sector Development Program, Seed Capital Assistance Facility (Financed by the Global Environment Facility), Carbon Market Program, Clean Energy Financing Partnership Facility (CEFPF), Climate Change Fund (CCF), Clean Energy Program, Energy for All, Asia Pacific Carbon Fund (APCF), and Future Carbon Fund (FCF). Other initiatives to mobilize private sector funding and build capacity of national financial institutes to mobilize private climate finance are the: Cool Earth Partnership by JICA, Microenterprises Access to Banking Services (MABS) by USAID, Industrial Pollution Control Lending Program by KfW, and Sustainable Energy Finance (SEF) by IFC.

At present, there is no comprehensive study which assessed the outcomes of these interventions.

2.3 Current and proposed institutional arrangements for mobilizing domestic/national private sector climate finance.

The Philippines has over the years significantly overhauled its climate policy framework from a number of stand-alone laws passed during 1997-2008 to the current comprehensive, nationally integrated climate policy architecture guided by the 2009 Climate Change Act (CCA).

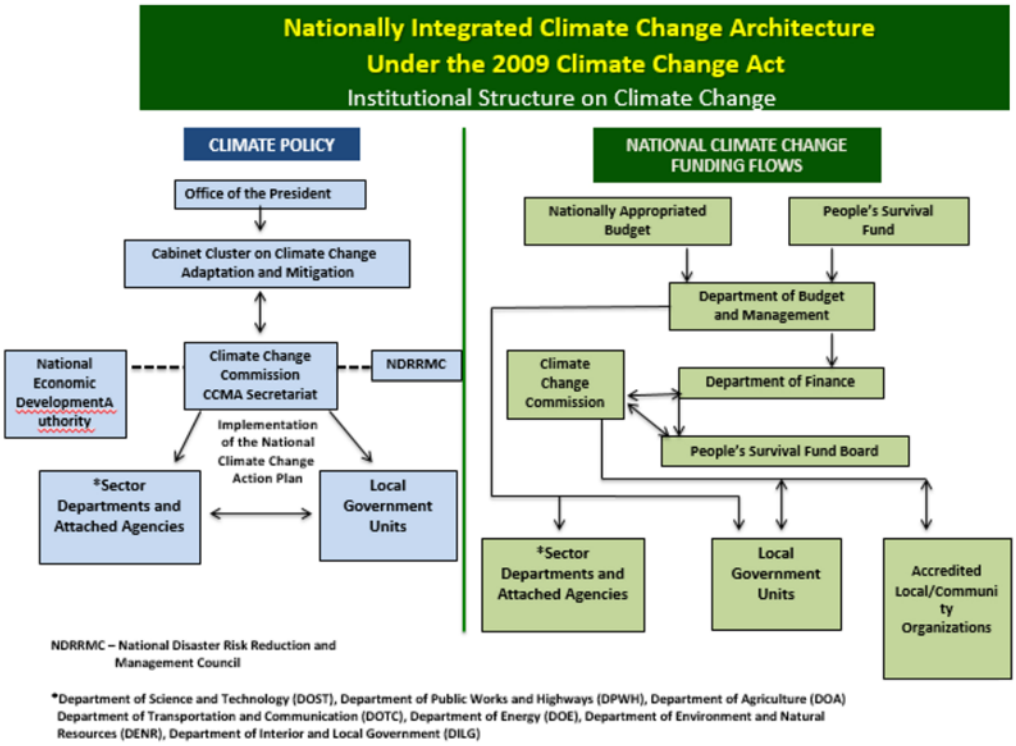
The CCA calls for the systematic integration of climate change in various phases of policy formulation, development plans, poverty reduction strategies and other development tools used by all government agencies and departments. It also led to the establishment of the Philippines Climate Change Commission (CCC) under the Cabinet Cluster on Climate Change Adaptation and Mitigation (CCAM). The CCC is tasked with coordinating policy integration.

As shown in the diagram below, the institutional structure on climate change is divided into Climate Policy and Climate Finance, specifically national climate change funding flows. These two go hand-in –hand in the NDC implementation as at the outset, Climate Policy is implementable only with the availability of adequate public financing.

[1] Department of Trade & Industry (2012). Green Financing in the Philippines.

[2] CY 2015 ODA Portfolio Review Report. http://www.neda.gov.ph/2017/01/19/oda-portfolio-review-2015/

Figure 1: Current Nationally Integrated Climate Change Architecture under the 2009 Climate Change Act



Source: ADFIAP

Climate Policy is under the responsibility of the CCAM which recommends measures on policy and operational matters for the consideration of the Office of the President. It focuses on the conservation and protection of the environment and natural resources and takes the lead in pursuing measures to adapt to and mitigate the effects of climate change in the Philippines. The CCC serves as the Secretariat of the CCAM while the CCAM exercises oversight function over the CCC in terms of providing guidance and direction in recommending legislation and the formulation of environment-related policies, strategies, programs on the appropriations for climate change adaptation and mitigation and other related activities. CCAM and CCC have a direct strong reporting relationship accounting for the solid lines connecting the two.

With the CCC as focal point for climate change initiatives, the previously fragmented sectoral approach to address climate change was modified into a coordinated national integration of sectoral initiatives wherein the CCC, the National Economic & Development Authority (NEDA) and the National Disaster Risk Reduction and Management Council (NDRRMC) hold dialogues to exchange inputs, feedback and recommendations for the effective implementation of the National Climate Change Action Plan (NCCAP). This accounts for the dotted lines relationship amongst the three indicating that while there is no direct reporting relationship, there is some formal level of interaction. The CCC was mandated to formulate a National Framework Strategy on Climate Change (NFSCC) which defines the overall parameters for developing a NCCAP. The NCCAP serves as the Government's road map for climate action and is the lead policy document guiding the climate agenda at all levels of government implemented by the CCC through the various sectors, departments and attached agencies of government such as the Department of Science and Technology (DOST), Department of Public Works and Highways (DPWH), Department of Agriculture (DOA), Department of Transportation and Communication (DOTC), Department of Energy (DOE), Department of Environment and Natural Resources (DENR) and through the Local Government Units (LGUs).

LGUs are required to develop local Climate Change Action Plans (CCAP), an integral part of which is to have comprehensive land use plan including climate change concerns. The LGUs are guided and aided by the various sectors, departments and attached agencies of government in the formulation of their CCAPs and they work in tandem with them in the implementation thereof. Adopting climate change adaptation and mitigation measures by local government units (LGUs) and their respective communities, national government agencies and the general public and ensure that these are incorporated in their annual work plans and budgets.

The Department of Budget and Management (DBM) undertakes the formulation of the annual national budget that ensures the appropriate prioritization and allocation of funds to support climate change-related programs and projects implemented by the relevant sector departments and attached agencies and LGUs.

On August 16, 2012, Republic Act 10174 was approved creating the People's Survival Fund (PSF) to supplement the annual budget appropriation. Sourced from the national budget, at least P1.0 Billion is intended for LGUs and accredited local/community organizations to implement climate change adaptation projects that will better equip vulnerable communities to deal with the impacts of climate change.

The PSF is administered by the Peoples' Survival Fund Board (PSFB) headed by the Secretary of the Department of Finance (DOF). The DOF coordinates with the CCC on matters concerning the monitoring and reporting measures involving climate finance including the utilization of the PSF.

The CCC is also tasked with the evaluation and review of project proposals from LGUs and community organizations and recommends approval of project proposals to the PSFB.

The amount allocated to the PSF may be increased as the need arises, subject to review and evaluation of the accomplishments of the CCC by the Office of the President and the DBM.

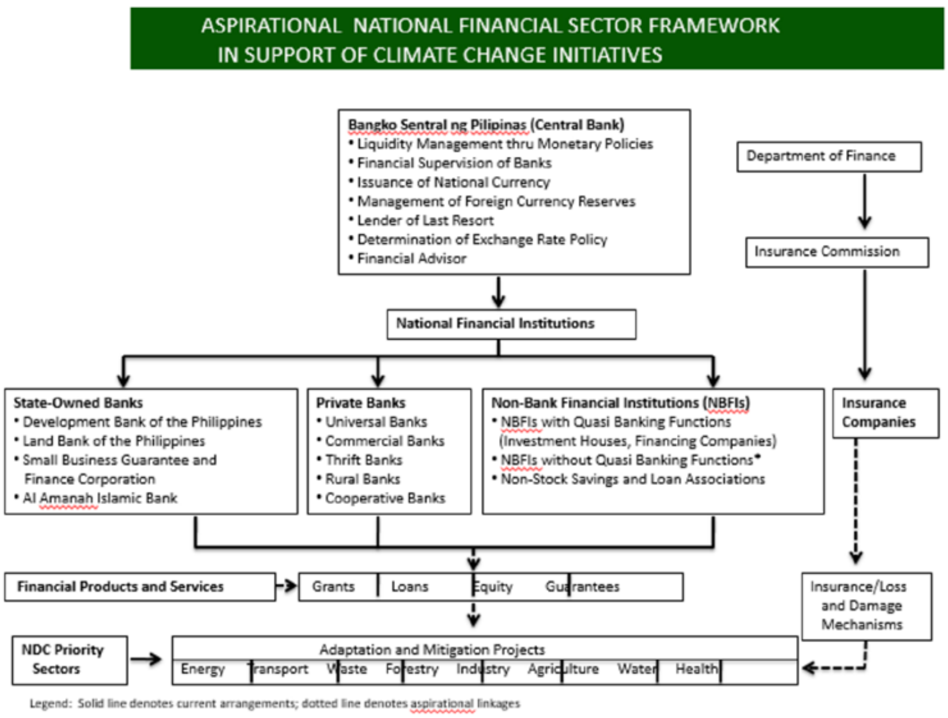
The current arrangements as per the diagram and description above are aligned with the institutional arrangements for NDC implementation wherein the Philippine government has put in place a comprehensive climate change policy agenda, the highlight of which is the passage of the CCA establishing the CCC to increase convergence and coordination among government agencies with key roles on adaptation and mitigation, and introduce the Peoples' Survival Fund for adaptation needs of local communities and local governments.

Aspirational National Financial Sector Framework in Support of Climate Change Initiatives

Significant investments are needed to support the transition to low-carbon, climate resilient future. To this end, national climate finance is essential involving both state-owned banks and private banks as government resources cannot finance this transition alone as shown in the climate finance gap of 1.7% of GDP mentioned above. Unlocking private sector capital will be essential to achieve large, transformational and long-term impacts across the economy. However, issues to be addressed include how to mobilize private investment in climate change activities, how to design risk-return arrangements that attract public and private capital and how to align public and private investment incentives.

In the Philippines, the ideal scenario towards attaining the country's low carbon and climate resilient/ climate smart/green development goals is illustrated below.

Figure 2: Aspirational National Financial Sector Framework in Support of Climate Change Initiatives



Source: ADFIAP

The Central Bank, known as the Bangko Sentral ng Pilipinas (BSP) could serve as the anchor and champion for mobilizing domestic private sector climate finance. BSP's over-all functions include liquidity management thru monetary policies, financial supervision of banks, issuance of national currency, management of foreign currency reserves, lender of last resort, determination of exchange rate policy and financial advisor of government. BSP's oversight function, prudential regulation and supervision of banks matters a lot for promoting the development of new green products and services and the nurturing of sustainable financial market practices.

By including climate and other environmental initiatives on its agenda, the BSP can signal the importance of this topic to the financial sector and encourage them to take it seriously.

The private sector is prepared to take certain risks, but less comfortable with policy risk and activity and country specific barriers to investments needed for climate-friendly technologies and projects, which affect the risk-return profiles of investments. Public funds are essential for unlocking needed private climate finance by taking on the classes of risk that the private market will not bear. National development banks or state-owned banks play a dual role in this context, both complementing and catalyzing private sector players.

State-owned banks have a unique role and focus. Their special knowledge and long-standing relationships with the local private sector places them in a privileged position to access local financial markets and understand local barriers to investments. Compared to commercial banks and investment funds, they have a greater potential to take risks and provide long-term financing, having access to multilateral and bilateral overseas development assistance funds, including environmental funds. State-owned banks can play a more active and effective role if they are given a clear mandate within national frameworks for action to mitigate climate change and their technical capacities for channeling international climate finance are strengthened.

National financial institutions are envisioned to offer a menu of financial products and services such as grants, loans, equity, and guarantees to support adaptation and mitigation projects of the NDC priority sectors namely: energy, transport, waste, forestry, industry, agriculture, water and health sectors. Insurance companies, which are supervised by the Insurance Commission which is an agency under the Department of Finance (DOF), are also essential actors in the climate finance framework to ensure that loss and damage from climate change and extreme events are minimized, thus, providing the National Financial Institutions a high level of comfort in lending to adaptation and mitigation projects. There is no operational link between the BSP and the DOF except that both are members of the Financial Stability Coordination Council (FSCC) together with the Insurance Commission, Philippine Deposit Insurance Corporation and Securities and Exchange Commission whose key objective is to identify, manage and mitigate the buildup of systemic risks.

With all the support infrastructure and actors in place, the national financial sector framework will bring to fruition the country's low carbon and climate resilient/climate smart and green development goal.

2.4 Existing Low carbon, climate resilient financial products/schemes

Developing carbon, climate resilient financial products and schemes is just in its infancy stage in the Philippines[3]. Banks who are pioneering in prioritizing lending to this area are: Development Bank of the Philippines (DBP), Land Bank of the Philippines (LBP), and Bank of the Philippine Islands (BPI).

LBP, who was recently recognized as the 'Green Bank Champion for Environmental Due Diligence' by the Bankers Institute of the Philippines (BAIPHIL), has the Credit Line for Energy Efficiency and Climate Protection (CLEECP), which provides sub loans to reduce electricity consumption and GHG emissions, thereby contributing to mitigation while at the same time increasing the competitiveness of companies through resource efficiency.

DBP's Green Financing Program has funded climate change projects which include renewable energy, solid waste management, cleaner production, water sanitation, energy efficiency, green transport and green building. DBP's Industrial Pollution Control Loan Project II and Environmental Infrastructure Support Credit Program II (EISCP) are both lending programs which support SME's investments in efficient production and environmentally sound technologies, and support investments in projects that improve the quality of the environment through reduction or prevention of pollution, respectively.

BPI is the only private bank which was reported to be outstanding in the promotion of green fund. BPI's Sustainable Energy Finance (SEF) scheme, supported by IFC, offers financing opportunities which will allow interested parties to invest in technologies aimed at improving the efficiency of energy generation, energy distribution, and energy use.

[3] Private Sector Promotion Programme PSP SMEDSEP (2010). Climate Change and Private Sector Development: Integrating green growth strategies into the MSME Development Plan 2010-2016

Other banks who are now offering low carbon, climate resilient financial products are: Banco de Oro (BDO), China Banking Corporation (CBC, Chinabank), and BPI Globe BanKO. BDO, the largest bank in the Philippines, eventually joined SEF and is now leading in renewable energy in terms of carbon emission reduction. The two other banks followed in 2012.

Full implementation of the Philippine INDC GHG reduction target of 70% by 2030 requires support in the form of adequate, predictable and sustainable financing; capacity building; technology transfer; enabling policy environment and partnerships. Reduction of CO_2 emissions will derive from energy, transport, waste, forestry and industry sectors, but, currently, breakdown of sectoral targets in terms of mitigation and adaptation actions is lacking[4].

With the creation of the Commission on Climate Change in 2009, the efforts of CCC should be directed towards aligning its climate change efforts with the NDC.

2.5 Existing incentives for low carbon, climate resilient development

Existing incentives for low carbon, climate resilient development exist for project developers. These are enumerated in the Republic Act 9513 (An Act Promoting the Development, Utilization and Commercialization of Renewable Energy Resources and for other Purposes). According to the said law, renewable energy facilities, including hybrid systems, in proportion to and to the extent of the RE component, for both power and non-power applications, as duly certified by the Department of Energy (DOE), in consultation with the Board of Investments (BOI), shall be entitled to the following incentives[5]: 1) income tax holiday (ITH), 2) duty-free importation of RE machinery, equipment and materials, 3) special realty tax rates on equipment and machinery, 4) net operating loss carry-over (NOLCO), 5) corporate tax rate, 6) accelerated depreciation, 7) zero percent value-added tax rate, 8) cash incentive of renewable energy developers for missionary electrification, 9) tax exemption of carbon credits, and 10) tax credit on domestic capital equipment and services.

Non-Fiscal Incentives include: 1) employment of foreign nationals, 2) simplification of customs procedures, 3) importation of consigned equipment, and 4) privilege to operate a bonded manufacturing/trading warehouse.

At present, the impact and outcomes of the incentives have yet to be studied.

3. Additional findings

- Existing policies to incentivize low carbon investments such as those enumerated in the Renewable Energy Act, are incentives for the clients or developers. There is no policy incentivizing the banks at the national level.
- There are no financial products at national financial institutions to incentivize low carbon investments. Special funding programs availed by the banks are initiated by foreign governments and not by the Philippine government.
- While certain banks monitor their share of loans to climate projects, these are not monitored and mandated by the BSP.
- Banks need government support in the aspect of climate finance policy. The government may come up a quota in the total portfolio for green projects similar to agri-agra law, and to give tax credit to the bank should a bank give a loan to a green project.
- Institutions that provide capacity building support are all from multilateral institutions such as the Green Climate Fund (GCF), IFC, USAID and GIZ.
- Capacity building support that banks think will be effective are on the following:

[4] Republic of the Philippines (October 2015), Intended Nationally Determined Contributions, http://www4.unfccc.int/submissions/INDC/Published%20Documents/Philippines/1/Philippines%20-%20Final%20INDC%20submission.pdf

[5] Republic Act No. 9513, http://www.lawphil.net/statutes/repacts/ra2008/ra_9513_2008.html

a. Improvement of local knowledge on climate change and successful green technologies that can be adopted in the Philippines

b. How to prepare viable project proposals

c. How to access international funds

4. Overall Summary and Recommendations

The Philippine Government has increased its climate appropriations by 2.5 times in real terms and on the average 26% annually, outpacing the estimated 6% growth of the national budget. This corresponds to .3% of the GDP, which falls below the Stern Review recommendation that countries should expend at least 2% of GDP to implement climate action, resulting to a climate finance gap of 1.7%. Moreover, in order to achieve the Philippine INDC GHG reduction target of 70% by 2030, the Philippines needs to do more. The role of national financial institutions is essential in bridging said climate finance gap.

Key challenges faced in investing in climate projects are in the areas of 1) financing, 2) technology, 3) technical assistance, 4) capacity building, and 5) regulations.

Specific challenges in financing include: limited local funds for climate projects (e.g. bank's internal funds) because of lack of support from government, difficulty in accessing international funds (e.g. Green Climate Fund, Adaptation Fund, etc.), high cost of funds, difficulty of clients to submit environmental and climate requirements (e.g. Environmental Compliance Certificate (ECC), solid waste management plan, comprehensive land use plan, local climate change action plan, etc.), and difficulty of clients in preparing viable project proposals.

Technological challenges cited are: few proven and tested green technologies implemented in the Philippines, inadequate knowledge on latest successful green technologies, and high cost of green technologies.

Challenges in technical assistance are: limited technical assistance grants for developing climate project proposals, and difficulty in accessing grant funds.

In terms of capacity building, limited local training on climate change, limited readiness assistance to access international funds, and inadequate knowledge in preparing project proposal on climate change adaptation and mitigation, were identified.

Lastly, regulatory challenges include: absence of a regulatory policy mandating banks to embed environmental and social safeguards in credit evaluation, and low climate portfolio since there is no law requiring the banks to finance climate projects (need to pass a law similar to Agri-Agra law).

It is recommended that the government, through the Climate Change Commission, should play a stronger role in engaging all key government agencies such as the BSP, DENR, DOE, DOST, DPWH, DOTC, DILG, and DA, and other key stakeholders. They should also increase public awareness on climate change, measures on adaptation and mitigation, and the availability of climate financing and how to access them.

Central Bank or BSP should take a more proactive role in climate finance by including climate and other environmental initiatives on its agenda. In so doing, the BSP can signal the importance of climate change to the financial sector and encourage them to increase their portfolio on green finance. They may also consider the best practices of the central banks of other countries, such as coming up with specialized schemes to incentivize the banks (e.g. risk-sharing scheme) which is being done by the Central Bank of Pakistan.

Financial Institutions should be capacitated on how to assess climate-related risks and green technologies, and on environmental management and governance.

Target clients should be capacitated as well about climate change, climate finance, and how to prepare a viable project proposal.

Annex A

List of stakeholders interviewed (in chronological order)

Date	Organization	Names and Designation	Organization Type
May 29, 2017	Climate Change Commission (CCC)	Hon. Emmanuel M. de Guzman, Commissioner	National Government Agency
June 1, 2017	Bangko Sentral ng Pilipinas (BSP)	Rochelle D. Tomas, Acting Deputy Director, Policy and Literacy Group, Financial Consumer Protection Department	Central Bank
June 2, 2017	Department of Environment and Natural Resources, Climate Change Office (DENR)	Atty. Analiza R. Teh, Undersecretary for Climate Change Service	National Government Agency
July 12, 2017	Development Bank of the Philippines (DBP)	Benel D. Lagua, Executive Vice President, Head, Development Sector	Universal Bank (State-owned development bank)
July 17, 2017	BDO Unibank, Inc.	Eun Joo Park Minc, Chief Advisor, Multilateral and ECA Desk / International Desks	Universal Bank (Private)

Annex B

Assessment of possible national champions (list most suitable on the top)

Type	Organization	Level and Rationale
Central Bank	Bangko Sentral ng Pilipinas (BSP)	BSP is the supervisor and regulator of banks and non-bank financial institutions in the Philippines.
National Government Agency	Commission on Climate Change (CCC)	CCC serves as the focal point for climate policy formulation. Climate policies are implemented by the CCC through the various sectors, departments and attached agencies of government. It also serves as secretariat of the People's Survival Fund Board.
National Government Agency	Department of Environment and Natural Resources (DENR)	DENR provides inputs and recommendations to CCC and implements climate policies.
Universal Bank (Specialized Government Bank)	Land Bank of the Philippines (LBP)	LBP was recognized as the 'Green Bank Champion for Environmental Due Diligence' by the Bankers Institute of the Philippines (BAIPHIL) as environment is one of its ten priority lending sectors.
Universal Bank (State-owned development bank)	Development Bank of the Philippines (DBP)	DBP has been pioneering in prioritizing lending to environment related projects, including CDM eligible projects by offering the 'Green Financing Program' as an umbrella for the environment sector thrust designed primarily to assist industries and local government units (LGU) in adopting environment-friendly processes and technologies.

Annex C

List of external support provided to banks

Organization	Dates	Activity	Target beneficiaries and Impact
World Bank (WB)	2010-2017	Philippine Chiller Energy Efficiency Project	Property managers or owners
WB	2010-2020	Carbon Credit Purchase	Local government units (LGUs) and operators of sanitary landfills
WB	2015-2018	Country Partnership Strategy (CPS) for the Philippines	Philippine Government
Asian Development Bank (ADB)	2012-2020	Integrated Natural Resources and Environmental Management Sector Development Program	Philippine government and LGUs
ADB, UNEP, and other multilateral institutions	2009-onward (Ph. 1&2)	Seed Capital Assistance Facility (Financed by the Global Environment Facility)	Local RE and EE enterprises
ADB	2010-onward	Carbon Market Program	All ADB developing member countries (DMCs)
ADB	2007-onward	Clean Energy Financing Partnership Facility (CEFPF)	All DMCs
ADB	2008-onward	Climate Change Fund (CCF)	All DMCs
ADB	2010-onward	Clean Energy Program	All DMCs
ADB	2008-onward	Energy for All	All DMCs
ADB	2007-onward	Asia Pacific Carbon Fund (APCF)	All DMCs
ADB	2008-2015 (or 2023)	Future Carbon Fund (FCF)	All DMCs
Japan International Cooperation Agency (JICA)	2011-onward	Cool Earth Partnership	Developing countries
United States Agency for International Development (USAID)	1998-onward	Microenterprises Access to Banking Services (MABS)	Local rural banks
Kreditanstalt für Wiederaufbau (KfW)	2004-onward	Industrial Pollution Control Lending Program	SMEs
International Finance Corporation (IFC) with local bank partners	2011-onward	Sustainable Energy Finance (SEF)	Businesses with sustainable energy projects
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	2013-2016	Promotion of Green Economic Development (ProGED) Project	MSMEs and government institutions

Annex D

List of existing financial products/schemes for low-carbon, climate resilient development

Organization	Type of product	Date Introduced
Land Bank of the Philippines	Credit Line for Energy Efficiency and Climate Protection (CLEECP)	TBV
Development Bank of the Philippines	Industrial Pollution Control Loan Project	TBV
Development Bank of the Philippines	Environmental Infrastructure Support Credit Program (EISCP)	TBV
Bank of the Philippine Islands Banco de Oro	Sustainable Energy Finance	TBV
Department of Science and Technology – Technology Application and Promotion Institute	Venture Financing for Environmentally Sound Technologies Program	TBV

Annex E

List of Existing incentives for low-carbon and climate resilient development

Incentive	Mechanism	Administrative Level
Fiscal: Income Tax Holiday (ITH)	Renewable Energy (RE) developer fully exempt from income taxes by the National Government for a certain period (7 years)	Philippine Board of Investments (BOI), an attached agency of Department of Trade and Industry (DTI)
Fiscal: Exemptions from duties on RE machinery, equipment, and materials	Within the first 10 years from the issuance of Certificate of Registration, the importation of machinery and equipment, and materials and parts thereof, including control and communication equipment.	Duly certified by the DOE, in consultation with the BOI
Fiscal: Special realty tax rates on equipment and machinery	Any law to the contrary notwithstanding, realty and other taxes on civil works, equipment, machinery, and other improvements of a Registered RE Developer actually and exclusively used for RE facilities shall not exceed one and a half percent (1.5%) of their original cost less accumulated normal depreciation or net book value: Provided, That in case of an integrated resource development and generation facility as provided under Republic Act No. 9136, the real property tax shall only be imposed on the power plant;	DOE and BOI
Fiscal: Zero percent value-added tax rate	The sale of fuel or power generated from renewable sources of energy such as, but not limited to, biomass, solar, wind, hydropower, geothermal, ocean energy and other emerging energy sources using technologies such as fuel cells and hydrogen fuels, shall be subject to zero percent (0%) value-added tax (VAT), pursuant to the National Internal Revenue Code (NIRC) of 1997, as amended by Republic Act No. 9337.	DOE and BOI
Fiscal: Tax exemption of carbon credits	All proceeds from the sale of carbon emission credits shall be exempt from any and all taxes	BOI

Fiscal:
 	
Reduction of the Rates of Duty on Capital Equipment, Spareparts and Accessories by Virtue of EO 528
	• Any importation of capital equipment, spare parts and accessories by enterprises registered with the Board of Investments (BOI) shall be subjected to zero (0%) duty, as indicated in Section 2 hereof.
	
	• The zero percent (0%) duty on article or equipment classified under Chapters 40, 59, 68, 69, 70, 73, 76, 82, 83, 84, 85, 87, 89, 90, 91 and 96 of the Tariff and Customs Code of the Philippines, as amended, shall be granted to BOI registered new and expanding enterprises, upon the issuance by the BOI of a Certificate of Authority; provided that the importation of machinery, equipment, spare parts and accessories shall comply with the following conditions:
	
	    • They are not manufactured domestically in sufficient quantity, of comparable quality and at reasonable prices; and
	
	    • They are reasonably needed and will be used exclusively by the enterprise in its registered activity, unless prior approval of the BOI is secured.
		BOI

Non-Fiscal:
 	
Employment of Foreign Nationals
	A registered enterprise may be allowed to employ foreign nationals in supervisory, technical or advisory positions for five (5) years from date of registration, extendible for limited periods at the discretion of the Board. The positions of President, General Manager and Treasurer of foreign-owned registered enterprises (more than 40%) or their equivalent shall, however, not be subject to the foregoing limitations.
	
	Non-Fiscal Incentives to PEZA-Registered Economic Zone Enterprises
	
	    • Simplified Import – Export Procedures (Electronic Import Permit System and Automated Export Documentation System).
	
	    • Non-resident Foreign Nationals may be employed by PEZA-registered Economic Zone Enterprises in supervisory, technical or advisory positions.
	
	    • Special Non-Immigrant Visa with Multiple Entry Privileges for the following non-resident Foreign Nationals in a PEZA-registered Economic Zone Enterprise: Investor/s, officers, and employees in supervisory, technical or advisory position, and their spouses and unmarried children under twenty-one years of age. PEZA extends Visa Facilitation Assistance to foreign nationals their spouses and dependents.
		BOI

Non-Fiscal: Simplification of customs procedures	Customs procedures for the importation of equipment, spare parts, raw materials and supplies, and exports of processed products by registered enterprises shall be simplified by the Bureau of Customs.	BOI
Non-Fiscal: Importation of consigned equipment	Importation of consigned equipment for a period of 10 years from date of registration, subject to posting of a re-export bond equivalent to 100% of the estimated taxes and duties.	BOI

Non-Fiscal: Privilege to operate a bonded manufacturing/trading warehouse	The privilege to operate a bonded manufacturing/ trading warehouse subject to customs rules and regulations.	BOI

Annex F

Summary of Answers to Questions for the National/Domestic Financial Institutions

Legend:

Bangko Sentral ng Pilipinas	BSP
Development Bank of the Philippines	DBP
Banco de Oro	BDO

The role of the financial sector in mobilizing climate finance		
	Question	Response
2-1	***Policies and key players***	
2-1-1	In what ways do policies incentivize low carbon investments?	**BSP**: There is no mandate for the banks to focus on climate projects. It is always the business decision of the banks. What we have put in place are safeguards, making sure they understand the risks, they mitigate the risks, or making sure their capital can absorb any losses. We have an ongoing initiative to encourage lending to that sector but it should be because they see the value in lending to that sector. It is an ongoing initiative with IFC. The primary purpose is to capacitate ourselves. We are also not very well-versed on how to do it or how to further encourage our banks to lend to climate-related projects. We also have to recognize that it is not just the financial sector that can drive this process. We have other other ministries which would need to be involved like the Climate Change Commission. We also need strong environmental regulations and enforcement of those regulations and they have to go hand in hand. Even if the banks decide to take on the responsibility of influencing their client firms to follow environmental standards, the enforcement is also weak in the country so we cannot blame clients if they are not open to it. We are trying to see the role we can play and how we can play it in this area. **DBP**: Tax holidays for pioneering projects in terms of technology, design, etc. **BDO**: There's a policy for our clients. For example the renewable energy law. It incentivizes clients directly but not the banks.
2-2	***Domestic equity finance***	

2-2-1	What financial products exist at national financial institutions (for e.g. central bank/national development bank / private sector financial institutions) to incentivize low carbon investments?	**DBP**: None that we know of. **BDO**: We have special funding programs that we availed from several government and international financial institutions that provide lower interest rate as compared to the prevailing commercial rates for project related to green projects. But these are not initiated by the Philippine government. It is all from foreign governments such as Japan (JBIC).
2-3	***Domestic debt finance***	
2-3-1	What is the share of loans to climate projects in banks' total lending portfolio?	**BSP**: Our financial reporting is sectoral. Before we can ask the banks to report on climate projects, we need to define first what a climate project is and change a lot in our systems. We don't have regulations saying that it should be defined and that banks should report on it. **DBP**: As of April 30, 2017, DBP's total lending portfolio is Php 157 Billion (US$3 Billion), of which, the climate projects funded under DBP's Green Financing Program is Php 21 Billion (US$419 Million) or 13.34%. Climate Change Mitigation Projects 1. Renewable energy – Php 8.5 Billion ($170 Million) 2. Solid Waste Management – Php 3.3 Billion ($66 Million) 3. Cleaner Production – Php 1.1 Billion ($22 Million) 4. Water Sanitation – Php 5.3 Billion ($106 Million) 5. Energy Efficiency – Php 101 Million ($2.02 Million) 6. Green Transport – Php 35.5 Million ($71 Million) 7. Green Building – Php 200 Million ($4 Million) Climate Change Adaptation Projects 1. Tunnel Ventilated Poultry – Php 951.4 Million ($19 Million) 2. Riverbank Stabilization – Php 166 Million ($3.3 Miillion) **BDO**: 2 to 3%

2-3-2	Do banks provide project loans to climate projects? That is, lending is based on project profitability, rather than on a firm's on-balance sheet assets.	**DBP**: We provide funding to the following Climate Projects: 1. Renewable energy 2. Green transport (e.g. electric vehicle, alternative fuel – CNG/LPG, Euro 4) 3. Solid Waste Management (e.g. sanitary landfill, composting facility, waste to energy, etc.) 4. Energy Efficiency (e.g. LED lighting) 5. Air pollution prevention and control facilities and equipment 6. Water pollution prevention and control facilities and equipment 7. Water sanitation 8. Green building (new construction, retrofitting) 9. Water supply DBP's credit evaluation process involves the assessment of the financial viability based on the projected cash flows of the project. Proposed loan tenor is typically cash flow based. **BDO**: Yes, but we check both of them. They cannot be separated.
2-3-3	What interest rates do banks charge for climate projects? Are interest rates floating or fixed? How do these compare to other project rates?	**DBP**: The interest rate offered by the bank follows the prevailing market rate but risk-based, taking into consideration the creditworthiness of both the borrower and the project. Currently, there is no difference between interest rates offered by the bank for other climate projects and for other types of projects. The client's preference of floating or fixed interest rate is usually taken into consideration as long as the terms of the loan are supported by the project's projected cash flow. **BDO**: We have both. We do not have a definite percent rate for climate projects, but the questions are who the proponent is and what kind the project is.
2-3-4	What differences in debt finance eligibility and collateral criteria exist for low-carbon investments?	**DBP**: At the moment, there is no difference in debt finance eligibility and collateral criteria for low carbon investments and for other investments. **BDO**: Same as the regular plus the project asset. But it really depends on who the project proponent is. If the project is very attractive and viable but the owner is not, we will not approve it.
2-3-5	Is the domestic debt structure for climate investments accessible to SMEs?	**DBP**: Yes **BDO**: Yes. We encourage lending to SMEs. That is why Sustainable Energy Finance (SEF) team is here. Usually the cost for evaluation is very high for SMEs. That's why BDO has a structure to support SMEs and promote their projects. We also guide them what to do and they are able to have savings

2-3-6	How many years are the tenors for energy efficiency, renewable energy and green infrastructure projects, respectively?	**DBP**: The term of the loan for energy efficiency, renewable energy and green infrastructure projects ranges from 1 to 15 years, depending on the projected cash flow of the proposed project and the loan purpose. **BDO**: It ranges from 5-10 years. The bank's standard tenor for long term loans is 7 years. Energy efficiency has a shorter tenor. For RE, it can be longer.
2-3-7	What is the discount rate that banks generally put on the fixed assets of EE and RE projects?	**DBP**: No available information. **BDO**: Between 7-9%. That is an assumption. Of course we are conservative on the 9. This discount rate is more or less the same as interest rate.
2-4	***Green bond***	
2-4-1	What is the size of corporate bond market?	**BSP**: We know the bond exposures of the bank but we cannot distinguish if it's a green bond or otherwise, at this point. We don't have data on this. **DBP**: As of April, 2017, the corporate bond market represents Php 708,640. **BDO**: We are pursuing green bonds. Right now, there's no green bond in South Asia. We hope BDO can lead first.
2-4-2	What is the share of bonds that are issued by non-state enterprises?	**DBP**: The corporate bond market or private debt securities' share is 11.37% (Php 708,640 / US$ 14,000) vs. 88.63% share of the public debt securities (Php 5,521,906 / US$ 110,000). **BDO**: N/A (Green bond)
2-4-3	Are there examples of green bonds (i.e., bonds that are issued for addressing climate change, sustainable development or environmental protection)?	**DBP:** The ADB has backed the issuance of the first Climate Bond in Asia and the Pacific for credit-enhancement to the Philippine firm AP Renewables, Inc., a subsidiary of Aboitiz Power Corp. It amounts to Php 10.7 Billion ($ 225 Million) for Tiwi-MakBan geothermal energy facilities. It guarantees the 75% of the principal and interest on the bond. **BDO**: N/A (Green bond)
2-5	***Gaps in capacity***	

2-5-1	How well information/knowledge is shared between climate finance policy focus areas and bank strategic investment areas – do they align?	**DBP**: Being a government bank, DBP supports the climate finance policy of the Philippine Government. The bank's investment areas are aligned with that of the national government. Environmental protection including climate change mitigation and adaptation is one of its strategic thrusts. In 2011, DBP established Green Financing Program (GFP), which was designed primarily to assist strategic sectors in adopting environment-friendly processes and technologies such as pollution prevention and control, proper waste management, resource conservation, resource efficiency, cleaner production, renewable energy, among others as well as incorporating climate change adaption and mitigation and disaster risk reduction measures, by providing financing and technical assistance. Aside from the GFP, the bank also established the DBP Forest Program, a CSR program, and the Tree Plantation Program, a lending program. **BDO**: We need government support on climate finance policy. My suggestion is to have a quota in total portfolio for green projects, similar to the agri-agra law. Second, if a bank gives a loan to a green project, certain tax credit should be given to the bank and not just the borrower. BDO is leading in renewable energy. Each project size is quite big. In terms of carbon emission reduction, BDO is ahead. We have small number of projects but more carbon emission reduction.
2-5-2	Are banks aware of policies to incentivize investments at the national level?	**DBP**: No. **BDO**: No. There is an incentive for the project developer but not to the banks. The problem is banks are not equipped. That's the reason why IFC came in - to fill in the gap.

2-5-3	What are the key challenges faced in investing climate projects?	**BSP**: Based on the scoping study we did with IFC, banks said that they don't know how to do it and don't have the tools to do it. There's a mixed perception on the adoption because many see it as costly and a compliance burden if you mandate regulation (e.g. environmental clearance certificate). They would prefer that they get capacitated first and they decide if it is part of their risk appetite. In short, capacity is lacking, both on our side and the banks' side. **DBP**: 1. Financing a.Limited local funds for climate projects (e.g. bank's internal funds) b. Difficulty in accessing international funds (e.g. Green Climate Fund, Adaptation Fund, etc.) c. High cost of funds d. Difficulty of clients to submit environmental and climate requirements (e.g. Environmental Compliance Certificate (ECC), solid waste management plan, comprehensive land use plan, local climate change action plan, etc.) e. Difficulty of clients in preparing viable project proposals 2. Technology a. Few proven and tested green technologies implemented in the Philippines b. Inadequate knowledge on latest successful green technologies c. High cost of green technologies 3. Technical Assistance a. Limited technical assistance grants for developing climate project proposals. b. Difficulty in accessing grant funds 4. Capacity Building a. Limited local training on climate change b. Limited Readiness Assistance to access international funds
2-5-4	What are the priority areas that need support for capacity building to scale up low carbon, climate resilience investments?	**DBP**: • Energy efficiency technologies for the industrial, residential and transport sectors • Water supply for waterless communities • Climate adaptation strategies at LGU level **BDO**: We are covering everything. From energy efficiency to renewable energy, and also green buildings. Basically any environmental friendly project from small to large scale.

2-5-5	What kinds of capacity building support has the financial sector received?	**DBP**: DBP has received technical assistance (TA) grant from KfW as a component of the Credit Facility for Solid Waste Management availed by the bank in 2004-2009 as well as technical assistance loan from JICA as part of the Environmental Development Project in 2009-2016. Both TAs were utilized for the following purposes: 1. Promotion of the Credit Facility 2. Sub-project appraisal / evaluation 3. Sub-project monitoring 4. Preparation of project evaluation guides / toolkits 5. Capacity development **BDO**: None from the government. From IFC but we pay for it. It is not for free. There was partial subsidy in the first two years but for the rest it was fully paid by the bank.
2-5-6	Which institutions are providing capacity building support?	**DBP**: One of the institutions is Green Climate Fund (GCF). GCF's Readiness and Preparatory Support Programme seeks to build ongoing initiatives to strengthen developing capacity to make effective use of climate finance. **BDO**: Since the government does not have for financial institutions, the only incentive the government has is for the developers. That is why the IFC and other multilateral institutions like USAID and GIZ are supporting the private sector. IFC is very active in doing that since 2008. They are providing capacity building to us. The German government, thru RENAC, also offered free online training, but it is selective (not from everyone).
2-5-7	What kinds of capacity building support will be most effective?	**BSP**: It should address the questions of the banking industry on how to do it, very very basic. **DBP**: • Improvement of local knowledge on climate change and successful green technologies that can be adopted in the Philippines • How to prepare viable project proposals • How to access international funds **BDO**: Small group face to face training so that we can have more interactive Q&As.

Annex G

Answers to Questions for the Private Sector and Relevant Government Agencies

Interviewee: Department of Environment and Natural Resources, Climate Change Office

Engagement of the private sector		
	Question	Response
3-1	***Small and medium enterprises (SMEs)***	
3-1-1	In what ways do policies incentivize SMEs to make low carbon investments?	• The Board of Investments (BOI) introduced tax incentives that benefit SMEs and large industries • that entitles them for income tax holidays especially energy efficiency. • **RA 9513 (Renewable Energy Act)** section 15 enumerates the general incentives. • **Executive Order No. 528**, reducing the rates of duty on capital equipment, spare parts and accessories imported by the BOI and shall be subjected to zero (0%) duty. **Non-Fiscal Incentives (DTI website)** • Employment of Foreign Nationals • Simplification of customs procedures • Importation of consigned equipment • Privilege to operate a bonded manufacturing/ trading warehouse • Generate savings • Increase social image being actively participating in climate change thru carbon reduction initiatives • Awareness to come up with mitigation measures in their own company
3-1-2	What are the key challenges faced by SMEs for low carbon investments?	• Access to cost effective low carbon technology • Lack of capacity to develop proposal to access investment finance • Access to finance due to voluminous and stringent requirements • Vulnerable to ASEAN economic integration on the aspect of non-tariff barriers measures • Production of high value products to make local SMEs more competitive despite of high electricity cost

3-1-3	What policies/incentives do SMEs expect/propose the government to provide to encourage low carbon investments?	• Government to promote/facilitate development of low carbon technology thru DOST, DOE for them to invest in renewable energy (inter-agency concentrated effort) • Economic benefit for low carbon technology • DOE introduced Feed-in Tariff rates to lower cost of renewable energy technology to consumers • Non-fiscal incentives (Employment of Foreign Nationals) • As provided in RA 9513 and EO 528
3-2	***Foreign direct investment (FDI)***	
3-2-1	What are the sectors that attract most FDI?	• Energy sector • Transport sector • Waste sector (methane capture from landfill converted to bio-fuel; waste-to-energy generation)
3-2-2	Do low carbon projects enjoy certain tax exemptions?	Yes.
3-2-3	Are there any examples of importing low carbon technologies from other countries?	• Yes, windmill (renewable energy technology) • Solar (parts and machineries)
3-2-4	What are the barriers to importing low carbon technologies from other countries?	• Bilateral/multilateral agreements • ASEAN Integration (Non-tariff barriers)
3-3	***Gaps in capacity***	
3-3-1	What are the key challenges faced in investing in domestic climate projects?	Through the engagement of the Private Sector, DENR provide capacity building initiatives in the conduct of GHG inventory to ensure application of updated methodologies (EO 174)
3-3-2	What are the priority areas that need support for capacity building to scale up low carbon investments?	• Renewable energy –to do away fossil fuel based energy or carbon (wind, geothermal, hydrology, etc) • Energy Efficiency sector • Waste-to-energy generation (bio-mass)
3-3-3	Which institutions are providing capacity building support?	• DOE • DTI-BOI
3-3-4	What kinds of capacity building support will be most effective?	Technology and policy instruments to promote low-carbon investments to encourage SMEs with incentives
3-3-5	Is and how is the country planning to utilize GCF's PSF?	• Submission of climate related projects thru DENR as NDA • Proposals will undergo approval process
3-4	***Additional question for government agency***	
3-4-1	To what extent are they engaged with the private sector and financial institutions. In what way and how?	• Through the issuance of Executive Order No. 174-Institutionalizing Philippine Greenhouse Gas Inventory Management and Reporting System • EMB as regulatory body ensures environmental quality. They collaborate with Private Sector especially in environmental laws which they have to comply.
3-4-2	Are they interested in improving this engagement, and do they have any suggestions for how this should happen?	• Streamline processes • Facilitate processing of clearances/permits (on-line permitting/approval)