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The National Climate Budget and the first Nationally Determined Contribution to the Paris Agreement: To what degree are they aligned?

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The National Climate Budget and the First Nationally Determined Contribution to the Paris Agreement: To what degree are they aligned?

by

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The National Climate Budget and the First Nationally Determined Contribution to the Paris Agreement: To what degree are they aligned?

Abstract:

This paper explores whether and how well the Philippines' Nationally Determined Contribution (NDC) and National Climate Budget (NCB), derived from the national climate change expenditure tagging system (CCET), are aligned. The CCET was operationalized in 2015 to "provide line and oversight agencies with the means to plan, prioritize and monitor the national climate change response allocation and performance", with reference to the outputs and outcomes outlined in the National Climate Change Action Plan 2011-2028 (NCCAP). It finds that the share of climate change expenditures in the primary budget has not been higher than 9 percent and 12 percent, with and without personnel services respectively, undermining the claim that a whole-of-government approach to climate change has been adopted. It also finds that the links between the National Climate Budget and the NDC are tenuous: while the handful of unconditional programs and measures under the latter are supported by the former, the former is populated by climate change adaptation expenditures which are not yet accounted for in the latter but which are likely to have significant mitigation co-benefits. More fundamentally, there are a number of budget items in at least two key departments that are not tagged as CCEs, confirming that departments have a long way to go before the reality and requirements of climate change are properly embedded in planning and budgeting frameworks. One place to start to better integrate the NCCAP is to reformulate agency-level Sector Outcomes, Organizational Outcomes and Performance Indicators (found in Volume II of the GAA) so that these are explicitly climatealigned.

Key words: climate change, climate change expenditure tagging system, Nationally Determined Contribution, National Climate Budget, climate-aligned sustainable development

JEL codes: Q54, Q58, Q01, O20, O53

The National Climate Budget and the First Nationally Determined Contribution to the Paris Agreement: To what degree are they aligned?

Toby C. Monsod¹

I. Motivation and Objective

The Philippines submitted its first Nationally Determined Contribution (NDC) to the Paris Agreement in April 2021.² The NDC promised a "GHG emissions reduction and avoidance of 75 percent" in the next 10 years, of which 2.71 percentage points were "unconditional" (or guaranteed by government) and the rest "conditional" (or subject to the finance, technology and capacity-building support provided for in Art. 9, 10 and 11 of the Paris Agreement.) This was described as a progression from its 2015 "intended" contribution of a 70 percent emissions reduction/avoidance, all conditional. The NDC also stated that it shall "endeavor to peak its emissions by 2030" in line with "its sustainable development aspirations and in solidarity with ASEAN Member States" as well as "undertake adaptation measures across but not limited to, the sectors of agriculture, forestry, coastal and marine ecosystems and biodiversity, health, and human security, to preempt, reduce and address residual loss and damage."

Civil society groups universally welcomed the 75 percent emissions reduction and the aspiration to peak emissions by 2030 for their ambition. And, indeed, these turn out to be extraordinarily ambitious. Monsod, Ahmed and Hilario (2022) discuss how the sectoral estimates of potential emissions reduction from 2020 to 2030 presented during the February 2021 stakeholder's consultation only add up to an 11 percent reduction relative to the business-as-usual (BAU) scenario, begging the question where the balance of 64 percentage points in emissions reduction will come from. They also ask how emissions could feasibly peak in 2030 given the "mitigation scenario" curve presented in an earlier December 2020 consultation - at which time, estimates of emissions reductions actually added up to a greater 30 percent reduction - which showed net emissions steadily increasing, and not slowing down, well beyond 2030 and 2040.

More fundamentally, the alignment of the NDC with national climate change policy can be challenged. High-level climate change policy is articulated in the Climate Change Act of 2009 and its instruments - the *National Framework Strategy on Climate Change 2010 – 2022* (NFSCC) and *National Climate Change Action Plan 2011-2028* (NCCAP) ³ – and clearly states that climate change is to be addressed "in the context of sustainable development" with adaptation as the "anchor strategy" and mitigation "as a function of adaptation" to be pursued "whenever applicable". The criticality of adaptation is emphasized and "meant to be translated to all levels of governance alongside coordinating national

¹ Professor, UP School of Economics, supported by the Philippine Center for Economic Development (PCED). Thanks are due to Joyce Rivera for excellent data processing and research assistance as well as to Golda P. Hilario for indispensable feedback and insights. Special thanks are also extended to the Department of Budget and Management (DBM) for providing granular CCET data. All errors are mine.

² This section draws heavily from Monsod, Ahmed and Hilario (2022).

³ Information on the Climate Change Act, NFSCC and NCCAP may be downloaded from <u>https://niccdies.climate.gov.ph/</u> and <u>https://niccdies.climate.gov.ph/action-plans/national-climate-change-action-plan</u>

efforts towards integrated ecosystem-based management which shall ultimately render sectors climateresilient." (NFSCC: 3). Adaptation is prioritized over mitigation in the Philippines not only because the country is highly vulnerable to, and disproportionately at risk from, climate change impacts but because its carbon footprint per capita is relatively small. In other words, for a country like the Philippines, "climate actions that prioritize adaptation and the building of resilient systems are likely to do more, at the margin, for global efforts to reduce the extent of climate change and cope with its impacts than disparate measures to reduce GHG emissions *per se.*" (Monsod, Ahmed and Hilario 2022).

An NDC is understood as a country's "climate action plan to cut emissions and adapt to climate impacts." ⁴ Each party to the Paris Agreement is required to establish an NDC and update it every five years. The idea is that NDCs are framed by a country's Long-Term Strategy. ⁵ Applied to the Philippines, the first NDC could have been nested within the NCCAP, which is already known as the country's "first long-term climate agenda" (WB 2013: 11, 27).

However, it was not. The NDC does not emphasize adaptation ambition much less state that any mitigation contribution – the targeted GHG emissions reductions/avoidance – will be a function of it. Instead, the NDC states a mitigation target that seems to be operationally detached from the NCCAP as evidenced by the tiny unconditional share of the target, the wholly conditional contribution of the agriculture sector, and the exclusion of the forestry sector. ⁶ If the NDC was framed and anchored by the climate-resilience and adaptation requirements of the country, then mitigation co-benefits would have necessarily been accounted for, increasing the NDC's unconditional share substantially, and delivered based on the trajectory of climate-aligned sustainable development described in the NCCAP. The NDC could have conditioned a faster delivery timeline for mitigation co-benefits on the support provided for in Art. 9, 10 and 11 of the Paris Agreement.

Monsod, Ahmed and Hilario (2022) suggest a resetting of the country's NDC into one that is operationally anchored on adaptation, with programs and measures chosen based on their expected impact on sustainable, climate-resilient development, rather than on their possible contributions to emissions reductions *per se.* Procedurally, this would involve identifying and costing the recurring and incremental public investment requirements of the NCCAP (which would be extended for another 3 or 4 planning cycles to 2050); estimating associated national and transnational adaptation and

⁴ See <u>https://www.un.org/en/climatechange/paris-agreement</u> and <u>https://www.un.org/en/climatechange/all-about-ndcs</u>. Pauw et al. go further and identify the NDC as 'the' national climate action plan. Plans are universal (each country formulates one), bottom up (countries set their own priorities and ambitions) and, while "contributions" rather than "commitments", are bounded by the notions of "progression and the highest possible ambition".

⁵ <u>https://www.wri.org/climate/what-long-term-strategy</u> Parties' long-term strategies are central to achieving the goal of reaching net-zero global emissions, limiting warming, and preventing some of the worst impacts of climate change. "These strategies set out long-term goals for climate and development and direct short-term decision-making to support the necessary shifts to limit global warming and lift people out of poverty."

⁶ Monsod, Ahmed and Hilario (2022) discuss how the exclusion of forestry is a puzzle. On the one hand, policy makers explained that FOLU was a negative emitter and therefore "there is nothing to mitigate" On the other hand, government's own estimates of BAU emissions from FOLU indicated that the sector was expected to transform from a net negative emitter to a net positive emitter by 2030. Then, forestry is mentioned as an adaptation measure in the NDC adding to the confusion.

mitigation co-benefits; programming these measures sequentially for inclusion in medium-term public investment programs up to 2050; and ensuring that measures are approved and included for in yearly national budgets (i.e., General Appropriations Acts or GAAs). In this way, programs and measures that would populate the NDC would not start with an accounting of GHG emissions, but would end with it, making emissions reduction a co-benefit rather than a criterion for inclusion.

This paper explores that suggestion further. In particular, it examines the role of the Climate Change Expenditure Tagging system (CCET), which was piloted in 2014 and operationalized in 2015, to "provide line and oversight agencies with the means to plan, prioritize and monitor the national climate change response allocation and performance." ⁷ A climate finance information system by design, the CCET was motivated by a 2013 Climate Public Expenditure and Institutional Review which observed that development plans (national, department and local) were only "partially" aligned with the NCCAP, and that unless this and other "missing elements" in the institutional framework were addressed, the country's climate reform agenda could not be properly executed nor realized (WB 2013). By requiring national government agencies to identify which expenditure items in their proposed annual budgets would contribute to climate change adaptation or mitigation, it was expected that the alignment between the development plans and programs/activities/ projects (or PAPs) and the NCCAP would improve, thereby strengthening and accelerating the implementation of the NCCAP across sectors and levels of government.

Specifically, this paper takes a look at expenditures tagged under the national-level CCET, known as the National Climate Budget, and asks to what extent these are in sync with the first NDC and vice-versa, i.e., does the National Climate Budget support the NDC, and does the NDC reflect what is in the National Climate Budget? The paper references official climate budget briefs published for FY 2015 and 2016 and, just recently, for FY 2021 (GAA) and 2022 (NEP) but provides a more complete picture by tracking the National Climate Budget as proposed by the President (in the NEP), appropriated by Congress (in the GAA), and obligated by national government agencies over the period from 2016 to 2021.⁸ The paper also takes a closer look at the CCEs of a couple of departments that are central to both the NDC and NCCAP.

The paper first observes that while the aggregate amount of the National Climate Budget has grown a respectable 61 percent between 2016 and 2021, the share of climate change expenditures in the primary budget has not been higher than 9 percent and 12 percent, with and without personnel services respectively, undermining the claim that a whole-of-government approach to climate change has been adopted; the average share of national government agencies under the Executive over the period is about 7.2 percent and 16 percent, with and without PS, respectively. Climate change expenditures are, moreover, spread out very unevenly, with two out of seven strategic priorities accounting for 80 percent of the climate budget, and three others sharing less than 5 percent.

⁷ See DBM-CC Joint Memorandum Circular No. 2015-01 and DBM-CCC-DILG Joint Memorandum Circular No. 2015-01. These and other references on the CCET are available at <u>https://niccdies.climate.gov.ph/climate-finance/ccet</u>

⁸ The NEP is the National Expenditure Program, which is the budget proposed by the President to Congress. What Congress approves and promulgates is referred to as the GAA. All CCET data used in this paper are as of 1 March 2022 and were obtained from the DBM.

The paper then finds that the links between the National Climate Budget and the NDC are tenuous. While the handful of unconditional programs and measures under the latter are supported by the former, the former is populated by climate change adaptation expenditures which are not yet accounted for in the latter but which are likely to have significant mitigation co-benefits. More fundamentally, there are a number of budget items in at least two key departments that are not tagged as CCEs, confirming that departments have a long way to go before the reality and requirements of climate change are properly embedded in their planning and budgeting frameworks.

The next section will provide more detail on the CCET and how it works, followed by a description of the National Climate Budget between 2016 and 2021. The fourth section looks more closely at the 2021 National Climate Budget and the first NDC, commenting on the extent and quality of their alignment. The fifth section closes.

II. The Philippine CCET

Climate budget tagging is a "government-led process of identification, measurement and monitoring of climate-relevant public expenditures" (WB 2021).⁹ Introduced internationally in 2012, it builds on previous budget tagging initiatives for other complex development challenges, such as gender or poverty, which require whole-of-government or, at least, cross-sectoral interventions. The Philippines, which has long practiced gender mainstreaming in public sector budgets, was one of the earliest adopters, along with Nepal, Cambodia, and Indonesia.¹⁰ In adopting the CCET, the government of the Philippines anticipated that it would improve the alignment of the NCCAP strategic priorities with public expenditures as well as "support the implementation of the country's Intended Nationally Determined Contribution (INDC)."

The Philippine version of the CCET consists of "policy-based definitions of CC response, a common method for tagging CC expenditure, a process of reviewing and reporting on results, and the assignment of roles and responsibilities to NGAs [National Government Agencies]" (CCC and DBM, June 2016) Definitions are adopted from the NCCAP, which classifies climate change response as either adaptation (CCA) or mitigation (CCM); a detailed CC typology of activities, encompassing the NCCAPs seven strategic priorities - *Food Security* (FS), *Water Sufficiency* (WS), *Ecological and Environmental Stability* (EES), *Human Security* (HS), *Climate-Smart Industries and Services* (CSIS), *Sustainable Energy* (SE) and *Knowledge and Capacity Development* (KCD) - is used to classify CC responsive actions. ¹¹ The national level CCET covers both recurrent and investment budgets of central government agencies, as well as *transfers* to government owned and/or controlled corporations (GOCCs), although it does not cover the entire corporate budgets of GOCCs. Local government units (LGUs) are encouraged to undertake CCET but are not obligated to do so.

⁹ The rest of this section draws heavily from WB (2021).

¹⁰ In 2021, a total of nineteen national and subnational governments had developed climate budget tagging methodologies (Ibid).

¹¹ The typology of activities are contained in Annex B of DBM-CCC Joint Memorandum Circular 2015-01, Revised Guidelines for Climate Change Expenditure Tagging (CCET) amending JMC No. 2013-01, as well as in the National CCET Typology Code Manual available at <u>https://niccdies.climate.gov.ph/climate-finance/ccet</u>

Tagging is performed by agencies and involves (i) determining whether agency Programs, Activities and Projects (PAPs) are climate responsive, (ii) if climate responsive, whether the entire PAP or only specific components are climate responsive, i.e., if at least one objective is a CCA or CCM, then the entire program or project budget is considered as a CCE, but if only specific components are involved, then only the budgets of those specific components are considered CCE; and (iii) classifying and coding the PAP - that is, eligible expenditures must map into a prescriptive positive list of 247 climate-relevant activities (DBM 2015, WB 2021). ¹² The final list of CCE is submitted to the DBM while a quality review and assurance (QAR) form is submitted to the Climate Change Commission which reviews the agency tagging.

According to the official climate budget reports for FY 2015 and 2016, ¹³ CCEs tagged in the 2015 GAA came from 43 NGAs and amounted to P140.4 billion, which increased to P176 billion from 45 NGAs in the 2016 GAA. ¹⁴ The amount tagged in 2016 represented 6 percent of the total national government budget (up from 5 percent in 2015) and 30 percent of the allocations to NGAs. Importantly, 87 percent of the National Climate Budget in 2015, and 89 percent of climate budget in 2016 were tagged as CCA; by NCCAP strategic priority, the biggest shares went to WS (at 41 percent in 2016, up from 34 percent in 2015) and SE (at 38 percent in 2016, down from 42 percent in 2015).

There were (or are) no targets or reference figures by which to gauge whether the amounts included in the 2015 and 2016 Climate Budget were (or are) reasonable. However, it was generally understood that climate action planning and budgeting could be strengthened by "further engagement" and "building on the lessons of the first two years of implementation." (DBM and CCC 2016) Specifically, engaging NGAs on internal policy was necessary to address "possible gaps in institutional arrangements", which included how some lead agencies were not tagging PAPs for the priorities they were leading, e.g. the Department of Agriculture, lead agency for EE, did not tag a PAP for it), while non-lead agencies were tagging significant amounts (e.g. 88 percent of the SE budget was due to the rehabilitation, reconstruction and upgrading of roads by the DPWH, not a lead agency. ¹⁵ In the meantime, lead agencies DOE, DOST and DENR did not tag PAPs to support "climate-resilient energy infrastructure."

The uneven distribution of climate-relevant PAPs was extreme and not only apparent under the SE strategic priority - where nearly all (93 percent) of the approved climate budget was concentrated in one PAP - but also under WS, where 97 percent of expenditures were dedicated to flood risk

¹² This prescriptive list may be updated periodically.

¹³ *People's Climate Budget 2015* and *2016*, published by DBM and CCC, but which are undated. For purposes of this paper, they are referred to as DBM and CCC (2015) and DBM and CCC (2016), respectively.

¹⁴ In more recent data, the number of national government agencies (NGA) which submitted CCEs was 23 for both years, out of a total of 56 NGAs in the GAA. No GOCC or SUC submitted (E. Quitoriano, personal correspondence. Quitoriano's work is cited in footnote 28 of CCC and DBM (2022).

¹⁵ The rehabilitation, reconstruction and upgrading of roads falls can be classified under Sustainable Energy as a measure under "incorporate risks from climate change and climate variability in transportation system planning."

management and resiliency (again due to DPWH primarily ¹⁶) but just 1 percent was identified for output areas under the higher order outcome of 'sustainability of water supply and access to safe and affordable water'. Unevenness across strategic priorities was also apparent in the fact that a number of NCCAP strategic priorities had no significant allocations (e.g., CSIS was allocated 2 percent of total CCE, HS was allocated less than half a percent.)

DBM and CCC (2016) noted that by addressing these gaps, climate budgeting could be strengthened, and the country would "continue to improve its national response for climate change adaptation and mitigation." Indeed, it would have been timely to sort things out before the country ratified the Paris Agreement in March 2017 and started to formulate a legally binding NDC for submission in 2020. However, it seems these were not sorted out. The same institutional gaps observed in the climate budget for FY 2015 and 2016 have persisted.

III. National Climate Budget 2016 to 2021

The People's Climate Budget reports for 2015 and 2016 examined CC expenditures in both absolute and relative terms, where the latter was reckoned against the total national government budget, including interest payments. In this paper, however, and in order to get a better aggregate picture of climate-alignment in operational terms, it is the primary budget (i.e., national government budget without interest payments), with and without allocations to Personnel Services (PS), that is considered. ¹⁷ The paper also considers CC expenditures of national government agencies under the Executive (NGAE) alone, i.e., excluding Congress, the Judiciary, ARMM and the Constitutional Fiscal Autonomy Group (CFAG), as well as excluding Special Purpose Funds, such as Budgetary Support to Government Corporations (BSGC) and Allocations to LGUs (ALGU). The latter funds are excluded since the CCET system does not extend to the corporate budgets of government corporations and local governments are not obligated to join.

Figure 1 shows how the National Climate Budget has fared between 2016 and 2021. In absolute terms, the climate budget increased from about P175 billion in FY 2016 to about P282 billion in FY 2021 (green trend line). This corresponds to a 61 percent increase in the overall, although in 2019 appropriations dipped, before increasing again in 2020 and 2021. During the period, the actual obligation of funds by agencies (blue bars) was slightly less than what was appropriated (green bars) – meaning that appropriated funds were not used in full. Utilization rates ranged from a low of 78.34 percent in 2016, to high of 96.75 percent in FY 2017, averaging out at 88.75 percent for the period.

¹⁶ Majority were under DPWH's Flood Risk Management and Resiliency Program, which had two strategies: 'Implementing a river basin approach for effective flood control' and 'designing and constructing disaster-resilient public infrastructure facilities'. However only 8 percent of DPWH's flood management expenditures was expected to go to major and principal basins (DBM and CCC 2016)

¹⁷ Expenses are classified as Personnel Services (PS), Maintenance and Other Operating Expenses (MOOE), and Capital Outlays (CO), and climate change programs and measures are from MOOE and CO. Technically, one can estimate the share of PS that is allocated to CCEs, but that has not yet been done.



Figure 1. Climate Change Tagged Expenditures, FY 2016 to 2021 (in billions, nominal)

Source: Author's computation from CCET data obtained from DBM

An aggregate increase of 61 percent is respectable. However, as a share of the primary budget, CCEs never breached 9 percent, whether as proposed, appropriated, or obligated (Figure 2), and averaged out at 5.1 percent, 5.1 percent and 4.7 percent of the proposed, appropriated and obligated primary budgets, respectively, over the period (Figure 2). Of the non-PS primary budget, CCEs never breached 12.3 percent as proposed, appropriated or obligated (Figure 3), and averaged out at 9.8 percent, 10.4 percent, and 9.9 percent, respectively. ¹⁸

Figure 2. CC Expenditures as a Percentage of the Proposed, Appropriated and Obligated Primary Budget, FY 2016 to 2022



¹⁸ Of the primary budget, the share of CCEs over the period has been, on average, 5.10 percent, 5.08 percent, and 4.69 percent of the proposed, appropriated and obligated budget, respectively.



Figure 3. CC Expenditures as a Percentage of non-PS expenses in the Proposed, Appropriated and

Source: Author's computation from CCET data obtained from DBM

Having about 10 percent of the non-PS primary budget aligned with climate change imperatives does not quite signal a whole-of-government approach, although the share expectedly expands when one looks only at a smaller set of agencies – the NGAEs. For 2016-2022, the average share of CCEs in the total NGAEs budget is about 7.2 percent and 16 percent, with and without PS, respectively (Figures 4 and 5)¹⁹ – arguably small given the scale of the adaptation and resilience challenge faced by the country.



Figure 4. CC Expenditures as a Percentage of the Budget of NGAEs, FY 2016 to 2022

Source: Author's computation from CCET data obtained from DBM

¹⁹ The CCE share is an average of 7.4 percent, 7.9 percent and 6.5 percent of proposed, appropriated and obligated budget, inclusive of PS. The shares are 16.2 percent, 16.9 percent and 14.9 percent of proposed, appropriated and obligated budgets, excluding PS.



Figure 5. CC Expenditures as a Percentage of the non-PS Budget of NGAEs, FY 2016 to 2022

Source: Author's computation from CCET data obtained from DBM

The good piece of news is that the National Climate Budget is overwhelmingly identified as CCA (or adaptation) which is consistent with state policy (Figure 6). CCA claimed between 90.41 percent and 97.37 percent of the total CCEs appropriated over the period, or an average of 95.48 percent. This left a balance of between 2.61 percent and 9.6 percent, or an average of 4.52 percent, for mitigation or CCM (Figure 7). Many adaptation activities are known to have significant mitigation co-benefits of course, for instance, the restoration of terrestrial or marine forests. However, the CCET does not separately identify or code such types of expenditures.



Figure 6. CC Adaptation as a Percent of Total CC Expenditures, FY 2016 to 2021

Source: Author's computation from CCET data obtained from DBM



Figure 7. CC Mitigation as a Percent of Total CC Expenditures, FY 2016 to 2021

Source: Author's computation from CCET data obtained from DBM

With respect to alignment with NCCAP strategic priorities, WS claimed the biggest share of the total climate budget over the period - about 57.9 percent - followed by SE, which had about 22.8 percent (Table 1 and Figure 8). This gives the impression that investments have been devoted to ensuring the sustainable and affordable supply of water in the context of grave climate change risk. However, the bulk of CC expenditures under WS - about 96.72 percent of the WS CCEs – were identified as DPWH's flood control PAPs (as they were in 2015 and 2016); the WS outcome areas of "sustainability of water supply" and "access to safe and affordable water" were allocated a negligible amount over the same period (Figure 9). In like manner, the bulk of expenditures under SE - about 98.79 percent of the total SE climate budget for the period – were identified as DPWH's National Road Network Service program (as they were in 2015 and 2016) rather than investments in climate resilient energy infrastructure, sustainable renewable energy, or energy efficiency (Figure 10).

Strategic Priority	2016	2017	2018	2019	2020	Average
1. Food Security	10.0%	7.1%	7.5%	13.9%	9.8%	9.6%
2. Water Sufficiency	41.0%	61.2%	65.0%	60.3%	62.0%	57.9%
3. Ecosystem and Environmental Stability	7.0%	7.2%	4.0%	3.3%	3.9%	5.1%
4. Human Security	0.5%	1.0%	2.7%	3.7%	2.4%	2.1%
5. Climate-Smart Industries and Services	2.0%	1.6%	0.9%	1.3%	2.0%	1.6%
6. Sustainable Energy	38.0%	20.3%	19.2%	17.0%	19.4%	22.8%
7. Knowledge and Capacity	1.0%	1.6%	0.6%	0.5%	0.5%	0.8%
8. Cross-cutting	0.6%	0.0%	0.0%	0.0%	0.0%	0.1%

Table 1 and Figure 8. Shares of NCCAP Strategic Priorities in the National Climate Budget, 2016 to 2021 (in percent)



Source: Author's computation from CCET data obtained from DBM





Source: Author's computation from CCET data obtained from DBM



Figure 10. Breakdown of Sustainable Energy Climate Budget by Outcome Area, FY 2017 to FY 2021 (in percent)

Source: Author's computation from CCET data obtained from DBM

This is not to say that the DPWH is the most invested in climate change action. DPWH may account for the bulk of CCEs in absolute terms, but the share of CCEs in DENR's budget, inclusive of PS, over the period has been the largest among agencies on average, at 44 percent (appropriated) and 36 percent (actual). See Annex1.

Table 1 and Figure 8 above also show how small the shares of the other five NCCAP strategic priorities have been. Food Security accounted for just 9.8 percent of the total CCETS over the period, Ecosystem and Environmental Stability, just 5.1 percent, and the others, less than 2.1 percent each. Annex 2 presents figures per NCCAP strategic priority.

IV. The National Climate Budget and the First NDC

As earlier mentioned, the first NDC submitted in April 2021 promised "GHG emissions reduction and avoidance of 75 percent" in the next 10 years, of which 2.71 percentage points would be "unconditional" and the rest "conditional". Table 2 shows the breakdown of what agencies had actually estimated as of the end of January 2021, which amounted to 11 percent (and not 75 percent). While a list of the actual programs and measures (PAMs) comprising the NDC was not included in the submission, some information was disclosed during stakeholder consultations in December 2020 and February 2021. Specifically, unconditional PAMs included (i) expanding wastewater treatment facilities in compliance with the Supreme Court Mandamus to rehabilitate manila bay (under the Waste sector), (ii) part of the effort for "clinker substitution with supplementary cementitious materials in cement production" and the "shift to low-global warming potential refrigerants in the RAC Industry" (under IPPU sector), (iii) the PUV Modernization Program, Motor Vehicle Inspection System Program,

and Rail and BRT Projects under the BBB (under Transport sector), and the (iv) "energy efficiency and conservation" (under the Energy sector). 20

	Cumulative GHG emissions (MtCO2e) 2020-2030										
	BAU**	Projected R	eduction/Avoidance	Unconditional	Conditional						
Sector		,									
		Total	% of sector BAU								
Agriculture	539.09	158.3	29.4	0.0	158.3						
Waste	e 286.09 6		22.7	8.0	56.9						
IPPU (+WHR)	279.84	53.9	19.3	13.9	40.0						
Transport	689.19	44.5	6.5	44.5	0.0						
FOLU	-113.42										
Energy	1659.52	45.9	2.8	25.1	20.8						
TOTAL	3340.31	367.5		91.4	276.1						
% of Total BAU		11.00%		2.74%	8.27%						

Table 2 N	IDC Estimates	as of 31	January	/ 2021*
		as 01 5 1	Januar	2021

Source: DENR, as presented 3 February 2021

On the one hand, with the exception of the IPPU items, the unconditional PAMs were (and are) supported by the National Climate Budget for 2020 and 2021 (Table 3). It is not clear however whether these are the full amounts submitted by agencies to DBM before the NEP was finalized. It is also not clear whether or why the DOTr, which has programs that are part of the NDC target, tagged no expenditures as CCE in 2022.

Table 3 Unconditional NDC PAMs with Support in the National Climate Budget (in '000s)

Sector	NDC PAMs	FY2020 GAA	FY2021 GAA	FY 2022 NEP
Waste	Expand wastewater treatment facilities in compliance with the Supreme Court Mandamus to rehabilitate Manila Bay	1,347,000	1,553,503	1,623,503
Energy	Assessment and baseline development of energy efficiency key indicators/National Energy Efficiency and Conservation program	139,966	45,160	160,102
Transport	Rail Projects under BBB	54,450,359	40,700,369	39,104,683
	BRT Projects in Cebu and Quezon Avenue	422,000	511,000	
	PUV Modernization Program		591,845	

Source: Philippines Climate Change Commission (personal correspondence) and Philippine Climate Budget Briefs of FY 2021 GAA level and FY 2022 NEP level

²⁰ As indicated in "Adjustments and Refinement in the NDC Measures from IPPU and Waste Sectors", "Transport Sector Nationally Determined Contributions", and "Energy Sector NDC", presented 3 February 2021 by DENR, DOTr and DOE, respectively.

On the other hand, there are a number of expenditures tagged as climate change mitigation in the National Climate Budget that are not indicated as unconditional PAMs in the NDC (Table 4).

Sector	РАР	Туроlоду	FY 2020	FY 2021
	Formulation, updating and monitoring of short, medium and long term national and regional energy policies, plans and programs	Strengthen regulatory and institutional framework to support expansion of renewable energy production and use	45,979	56,952
	Promotion of renewable energy (RE) resources	Sector reform and capacity building related to promotion of renewable energy	6,669	6,789
	Supervision and regulation of exploration, development and utilization of RE resources and technologies	Strengthen regulatory and institutional framework to support expansion of renewable energy production and use	39,248	44,308
	Detailed Wind Resource Assessment Project	Develop renewable energy project- based and service contracts-based portfolios to encourage potential investors in Identified sites	10,422	
	Biofuels Program	Review and integrate the National Biofuels Program	9,669	8,546
	Philippine Geothermal Resource Inventory	Develop renewable energy project- based and service contracts-based portfolios to encourage potential investors in Identified sites	21,315	157
	Access to Sustainable Energy Programme (ASEP) under European Union (EU) - GOP Counterpart	Sector reform and capacity building related to promotion of renewable energy	3,988	1,815
	Supervision, development and implementation of energy efficiency and conservation programs (EECP) and projects	Sector reform and capacity building related to energy efficiency and efficient energy pricing	3,902	8,838
	Promotion of EECP activities and projects	Sector reform and capacity building related to energy efficiency in energy sector, promotion of renewable energy and efficient energy pricing	11,541	11,749
Energy	Conduct of energy audit services	Sector studies, surveys, assessments and information systems on energy efficiency, efficient energy pricing, and promotion of renewable energy	678	
	Promotion of research, development, demonstration and utilization of alternative fuels and technologies	Strengthening capacity of institutions to plan for low- carbon growth and environmentally sustainable energy supply	12,234	
	Alternative Fuels for Transportation and Other Purposes	Research and development in low- carbon or non-fossil fuel transport technologies	16,590	
	Fishing gear/paraphernalia distribution	Improve energy efficiency in fishing fleets	55,606	31,230
Industry	Implementation of clean air regulations	Integrate monitoring of existing and new-climate smart industries and		155,101

 Table 4
 Examples of Climate Change Mitigation Expenditures in the National Climate Budget that are Not Indicated as Unconditional NDC PAMs (in '000s)

		services within existing business registration system		
Forestry	Natural Resources management arrangement/agreement and permit issuance	Avoided deforestation		809,410
	Forest Development, Rehabilitation,	Re-forestation and afforestation that increases vegetative cover or		
	Maintenance and Protection	sequesters carbon	3,152,437	3,158,109
	Implementation of ecological solid waste			
Waste	management regulations	Construction of sanitary landfill facilities	1,197,587	376,895

Source: Author's assessment from CCET data obtained from DBM

Importantly, there are also expenditure items tagged as climate change adaption in the National Climate Budget that will clearly have substantial mitigation co-benefits, but which are not considered as unconditional PAMs. Obvious examples come from the agriculture and forestry sector (Table 5). Indeed, a good number of items currently tagged as adaptation under the Department of Agriculture (DA), and which intend to deliver "climate-resilient crop and livestock production systems and technologies" or "construct/repair/rehabilitate national and communal irrigation systems, dams and water storage systems to manage changes in the water cycle due to climate change and climate variability", among others, will necessarily enable a reduction or avoidance of GHG emissions as new climate-aligned technology is adopted. Yet, the entire NDC from the Agriculture sector is currently conditional. Forestry as a whole was excluded as a NDC sector, as earlier mentioned.

Sector	PAP	Туроlоду	FY 2020	FY 2021
Agriculture	Climate Resilient Farm Productivity Support	Develop climate-resilient crop and livestock production systems and technologies	298,423	301,012
	Protected areas development and management	Conserve and protect existing watershed and protected areas	1,246,039	696,249
	Management of Coastal and Marine Resources/Areas	Retain or re-establish mangrove forests, wetlands, and other ecosystems considerations to as protection against floods risks	243,834	243,834
	Pasig River Rehabilitation	Retain or re-establish mangrove forests, wetlands, and other ecosystems considerations to as protection against floods risks	93,618	93,618
Forestry and	Soil Conservation and Watershed Management including River Basin Management and	Improve resilience of infrastructure (bridges, water supply, community infrastructure, water storage, coastal defense, etc.) to account for climate change and climate variability related extreme weather and climate variability that could increase flood risks in	250,000	

Table 5 Examples of Climate Change Adaptation Expenditures in the National Climate Budget with Significant Mitigation Co-Benefits Not Considered as Unconditional PAMs (in '000s) (partial list only)

Integrated Natural Resources and Environmental Management Project (INREMP)	Conserve and protect existing watershed and protected areas	367,006	60,000
Forestland Management Project	Conserve and protect existing watershed and protected areas	811,359	649,944

Source: Author's assessment from CCET data obtained from DBM

The preceding observations show a lack of alignment between the National Climate Budget and the NDC, begging a further question: are there PAPs in the regular budget of key agencies that can be, but are not, tagged as either CCA or CCM?

A quick look at the budgets of the Department of Agriculture (DA) and Department of Environment and Natural Resources (DENR), which are central to the FS and EES priorities, indicate that there are (Table 6). In fact, some PAPs (done right) should have substantial impact on both adaptation and mitigation. The Rice Competitiveness Enhancement Program, for instance, has an annual appropriation of PHP 10 billion for next 6 years, covering 57 provinces and involving 1.89 million registered rice farmers, and includes the mechanization of post-harvest machinery, rice seed development including local seed production, rice credit assistance, and rice extension services (e.g., farm schools). Given that the agriculture sector is the second-largest emitting sector in the country, contributing 26 percent of total emissions, and that rice paddy cultivation accounts for 51.87 percent of that, efforts to transform current cultivation practices into climate-smart rice production, which the DA claims it is doing, should advance both resilience and low-carbon development.

Other items listed in Table 6 are obviously climate-responsive (e.g., water resources management, water resources enforcement, mainstreaming climate-resilient agriculture in regional programs and projects, pollution research and laboratory services) and need not be discussed further, except to question why these were not been tagged by their respective agencies.

Department of Agriculture	Department of Environment and Natural Resources
 Mainstreaming Climate -Resilient Agriculture (CRA) in Regional Programs and Projects Rice Competitiveness Enhancement Program Rainwater Harvesting System/Small Water Irrigation System Sustainable Agriculture and Improved Farming Systems in Upland Communities for Indigenous Peoples, <i>Kabuhayan at Kaunlaran ng Kababayang Katutubo</i> (4Ks) Program 	 Pollution Research and Laboratory Services Environmental Management and Pollution Control Environmental Impact Assessment Irrigation Systems Water Resources Management Program (under the NWRB) Water Resources Enforcement and Regulatory Program (NWRB)

Table 6 Examples of PAPs in the Budgets of DA and DENR which are not tagged as Climate Change Expenditures

Source: CCET data obtained from DBM, GAA 2020 and 2021, and NEP 2022

The failure to tag obvious items indicates that incentives to mainstream the NCCAP into planning frameworks and/or utilize the CCET have so far been weak. Perhaps, then, integration must happen at a deeper level, one that makes the mainstreaming of NCCAP salient to measures of agency performance *per se.* For instance, under the Performance-Informed Budgeting (PIB) system of the DBM, agency performance is measured against their stated Sector Outcomes (SO), Organizational Outcomes (OO) and Performance Indicators (PI).²¹ If the operational goal of the CCET is to facilitate the alignment of agency plans and programs with the state policy on climate change adaptation and mitigation, one would expect that SOs, OOs and PIs are reformulated to reflect the reality and requirements of climate change.

It seems this has not yet taken place, however – at least, not for the Department of Agriculture (DA). The SO and OO of DA Office of the Secretary continue to read "*Economic opportunities in Agriculture and Fisheries expanded and access to economic opportunities by small farmers and fisherfolk increased*" and "*Productivity in the Agriculture Sector increased*". Its PIs also seem to be completely divorced from the reality of climate change, e.g. "*number of provinces and cities provided with production support services*", "*number of hectares of service area generated from the establishment and installation of small scale irrigation projects*", "*number of kilometres of farm-to-market roads validated for construction*/ *rehabilitation*", "*number of agriculture and fishery based enterprises assisted*", and so forth. ²²

Unless agency performance indicators are reformulated to explicitly require climate-alignment, it is hard to imagine how the country's climate reform agenda will be realized.

V. Closing Remarks

This paper takes a look at the National Climate Budget over the period 2016 to 2021 and asks to what extent it is in sync with the country's first NDC – which is meant to be the country's climate action plan and contribution to the Paris Agreement - and vice-versa. It finds that while the aggregate amount of the National Climate Budget has grown a respectable 61 percent between 2016 and 2021, the share of climate change expenditures in the primary budget has not been higher than 9 percent and 12 percent, with and without personnel services respectively, undermining the claim that a whole-of-government approach to climate change has been adopted; the average share of national government agencies under the Executive over the period is about 7.2 percent and 16 percent, with and without PS, respectively. It also finds that the National Climate Budget has provided highly uneven support across the seven strategic climate change priorities of the country - two strategic priorities claim 80 percent of the climate budget, while three strategic priorities share less than 5 percent – and the unevenness is apparent even across outcomes within a priority, e.g. under Water Sufficiency, "sustainability of water supply and access to safe and affordable water" was afforded 1 percent while "flood risk management" claimed upwards of 97 percent of the WS climate budget.

²¹ Information about the PIC can be found in <u>https://www.dbm.gov.ph/wp-content/uploads/2016/PREXC/PREXC.pdf</u>. Volume II of the GAA contains the SOs, OOs and PIs of all agencies.
²² The SO, OOs and PIs of the Office of the Secretary are detailed here: <u>https://dbm.gov.ph/wp-content/uploads/GAA/GAA2021/VolumeII/DA/A.pdf</u>.

Finally, it finds that the links between the National Climate Budget and the NDC are tenuous. While unconditional programs and measures under the latter are supported by the former, the former is populated by climate change adaptation expenditures which are not yet accounted for in the latter but which are likely to have significant mitigation co-benefits. More fundamentally, there are a number of budget items in at least two key departments that are curiously not tagged as either CCA or CCM, confirming that departments have a long way to go before the reality and requirements of climate change are properly embedded in their planning and budgeting frameworks.

To speed things up, the institutional gaps already observed in official 2015 and 2016 climate budget reports should be attended to. Incentives faced by agencies must also be strengthened. For instance, agency outcomes and performance indicators under the PIB system of the DBM (found in Volume II of the GAA) can be leveraged, perhaps by reformulating them to be explicitly climate-aligned.

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2015	Actual	2016	Actual	2017	Actual	2017	GAA	2018	Actual	2018	GAA	2019	Actual	2019	GAA	2020	Actual	2020	GAA	2021 GAA	
DENR	51.4%	DENR	46.0%	DENR	45.3%	DENR	50.7%	DENR	45.6%	DENR	49.6%	DA	48.6%	DA	46.6%	DPWH	32.7%	DENR	40.7%	DENR	37.5%
DA	28.3%	DA	38.9%	DPWH	25.9%	DPWH	36.1%	DPWH	32.1%	DPWH	36.2%	DENR	37.6%	DENR	36.5%	DENR	30.4%	DPWH	32.8%	DPWH	34.6%
DPWH	26.5%	DPWH	23.9%	DA	25.0%	DA	32.0%	DA	30.5%	DA	25.3%	DPWH	32.2%	DPWH	35.5%	DA	16.4%	DA	27.3%	DA	27.5%
DOST	24.6%	DOST	19.5%	DOE	14.4%	DOST	16.8%	DOE	12.4%	DOE	16.8%	DOE	9.5%	DOE	10.5%	DICT	10.1%	DOE	13.8%	DOE	12.9%
DOE	21.0%	DOLE	10.4%	DOST	6.2%	DOE	15.4%	DOST	9.6%	DOST	10.8%	DAR	5.53%	DOST	9.1%	DOE	9.2%	DOST	5.7%	DOST	4.6%
DOTC	5.1%	DOE	3.5%	DOLE	3.9%	DOLE	9.3%	DOLE	8.4%	DOLE	9.4%	DOST	5.5%	DTI	5.0%	DOST	6.3%	DOLE	4.4%	DAR	3.39%
DOLE	2.7%	OEO	0.4%	DAR	2.86%	OEO	0.4%	DICT	4.8%	DAR	6.10%	DTI	4.8%	DAR	4.46%	DAR	3.58%	DICT	3.7%	DICT	2.8%
DTI	0.5%	DND	0.2%	OEO	0.3%	DND	0.3%	DAR	4.48%	DICT	4.6%	DOLE	1.8%	DOLE	4.1%	DTI	2.9%	DAR	3.13%	DSWD	0.9%
OEO	0.3%	DAR	0.18%	DND	0.3%	NEDA	0.1%	DOF	0.8%	DOF	1.3%	DICT	1.1%	DICT	3.0%	DOLE	2.0%	DTI	2.4%	OEO	0.1%
DND	0.2%	NEDA	0.1%	NEDA	0.0%	DOF	0.1%	OEO	0.8%	OEO	0.5%	OEO	0.3%	DND	0.3%	DOT	0.9%	DOT	0.7%	DILG	0.0%
DOT	0.0%	DOT	0.0%	DILG	0.0%	DILG	0.1%	DND	0.1%	DOT	0.4%	DOT	0.1%	OEO	0.2%	PCOO	0.1%	OEO	0.2%	DND	0.0%
NEDA	0.0%	DILG	0.0%	DFA	0.0%	DOT	0.0%	NEDA	0.1%	DND	0.2%	PCOO	0.1%	PCOO	0.1%	OEO	0.1%	PCOO	0.1%	DFA	0.0%
DFA	0.0%	DFA	0.0%	DOT	0.0%	DICT	0.0%	PCOO	0.1%	DILG	0.0%	DILG	0.0%	DOT	0.0%	DFA	0.0%	DFA	0.0%	DOLE	

Annex 1. National Government Agencies, by Share of Agency Budget Tagged as CCE

Source: Author's computation. These are shares of agency budget inclusive of PS.



Annex 2: Climate Budget Tagged Per Strategic Priority, 2015 to 2022

