



Preparatory study for an evaluation of climate change mitigation funding

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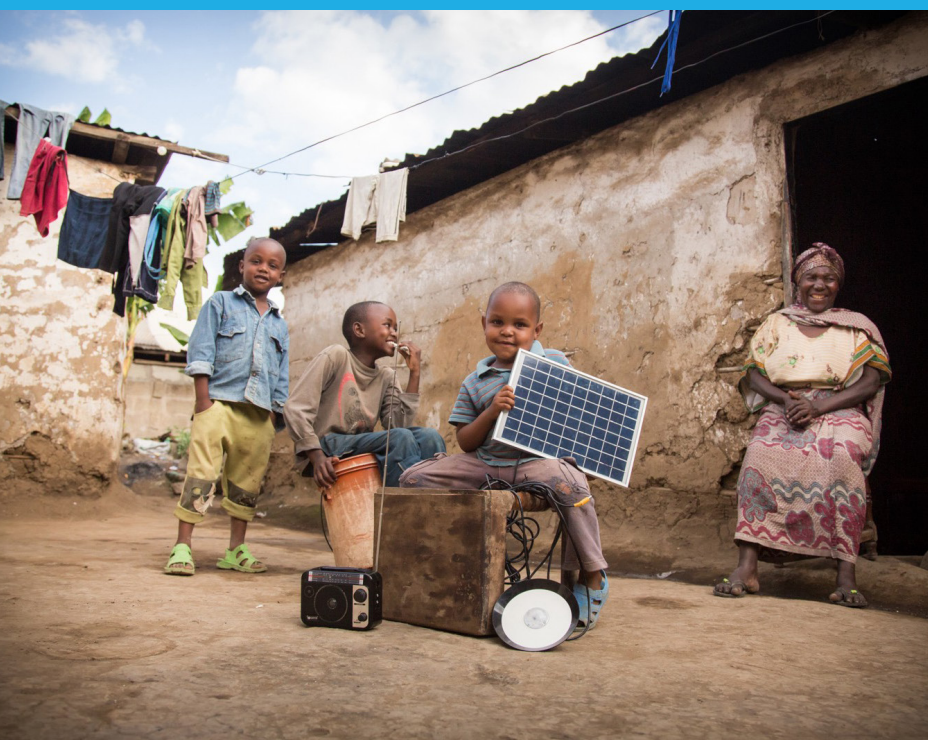
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PREPARATORY STUDY FOR AN EVALUATION OF CLIMATE CHANGE MITIGATION FUNDING



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PREPARATORY STUDY FOR AN EVALUATION OF CLIMATE CHANGE MITIGATION FUNDING

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LIST OF ACRONYMS

AFOLU	Agriculture, Forestry, and Land Use	MEUC	Ministry of Energy, Utilities, and Climate,
BAU	Business as Usual	MFA	Ministry of Foreign Affairs
CE	Climate Envelope	MOIT	Ministry of Industry and Trade
CIF	Climate Investments Funds	MONRE	Ministry of Environment and Natural Resources
CDM	Clean Development Mechanism	MPI	Ministry of Planning and Investment
CO₂	Carbon Dioxide	NAMA	Nationally Appropriate Mitigation Actions
COP	Conference of Parties to the UNFCCC	NDC	Nationally Determined Contribution
CPI	Climate Policy Initiative	NGO	Non-governmental Organisation
CTF	Clean Technology Fund	ODI	Overseas Development Institute
Danida	Danish International Development Agency	OECD-DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
EE	Energy Efficiency	PoA	CDM Programmes of Activities
EVAL	Evaluation Department of the Danish Ministry of Foreign Affairs (MFA)	RE	Renewable Energy
GCF	Green Climate Fund	REDD+	Reducing emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable management of forests, and enhancement of forest carbon stocks in developing countries
GDP	Gross Domestic Product	SDGs	Sustainable Development Goals
GEF	Global Environment Facility	UM	Foreign Ministry (Udenrigsministeriet)
GW	Gigawatts	UNFCCC	United Nations Framework Convention on Climate Change
IEA	International Energy Agency	WRI	World Resource Institute
IFIs	International Finance Institutions		
IPCC	Intergovernmental Panel on Climate Change		
IPPU	Industrial Process and Product Use		
LDCF	Least Developed Country Fund		
LDCs	Least Developed Countries		
LULUCF	Land use, land-use change, and forestry		
MDBs	Multilateral Development Banks		

INTRODUCTION

The study commences with an overview of the climate mitigation support provided in chapter 1. The overview is visualised in a figure showing country targeting, sector focus etc. The study continues in chapter 2, which covers three elements listed. The **first** element is the 2015 evaluation of the climate envelope and the follow up. It also relates to the overall strategic frame for the Danish climate mitigation funding, against which the support can be measured. The **second** element covers the priorities expressed in Nationally Determined Contributions, NDCs, the countries' climate ambitions, which are part of the Paris Climate Agreement. This includes a zoom-in on six countries as possible case study countries of the upcoming evaluation, and as such also relate to the bilateral climate mitigation support. The **third** and final element is climate finance including the finance flows and the climate funds, and as such relate to the multilateral climate mitigation funding. All of the elements are concluded with a set of questions to consider as part of the evaluation. The study ends in chapter 3 with considerations of design features for the upcoming evaluation.

The study builds upon a similar preparatory study of an evaluation of climate adaptation support, and specifically the data sets developed in relation to that study (DIIS, 2019). In general, establishing a reliable data set that describes the mitigation support in terms of volumes, countries and sectors covered, channels used etc. presents a challenge, and the overview of mitigation support provided in this study needs further work, e.g. verification of all entries in the data set and that nothing has been left out, possibly by the independent evaluation team. All reservations and caveats regarding the data presented in this study are outlined in chapter 1.

1. THE SCOPE OF MITIGATION FUNDING

The data set used in this study (and chapter) is originally based on UNFCCC and OECD-DAC reporting.¹ The data set includes both Climate Envelope (CE), and non-CE funding, all of which has been marked as climate relevant in the context of the DAC Rio Markers (see Box 1 below). The data set developed has been further refined and elaborated, compared to the DIIS Preparatory Study for 2019 Climate Evaluation focusing on adaptation (DIIS, 2019), in a collaboration with colleagues from EVAL in the Ministry of Foreign Affairs, MFA. It was agreed to focus on the years 2013-2018 (after the CE evaluation, which covered support until 2012 (Danida, 2015)). Extra details on country category, sector and type of support etc. have been inserted as columns. It also involves a column recording the Rio marking as “principal” or “significant” climate relevance, meaning whether the particular

finance has an explicit principal or significant (or none) climate objective. MFA counts funding marked “principal” as 100%, and funding marked “significant” as 50%. All the figures showing the volumes of climate mitigation finance in this chapter apply the same percentages. However, it was unfortunately not possible to obtain the Rio marking for every single entry in the data set, and the entries without marking have therefore been excluded in the visualisations shown in this chapter.

¹ The DAC link: https://public.tableau.com/views/Climate-relateddevelopmentfinance/CRDF-Donor?:embed=y&:display_count=no&%3AshowVizHome=no%20#3 provides a basic understanding of development cooperation climate support, however, it does not focus on mitigation, the amounts are listed in USD instead of DKK, and it does not provide a detailed overview.

Text Box 1. OECD-DAC Rio Marking

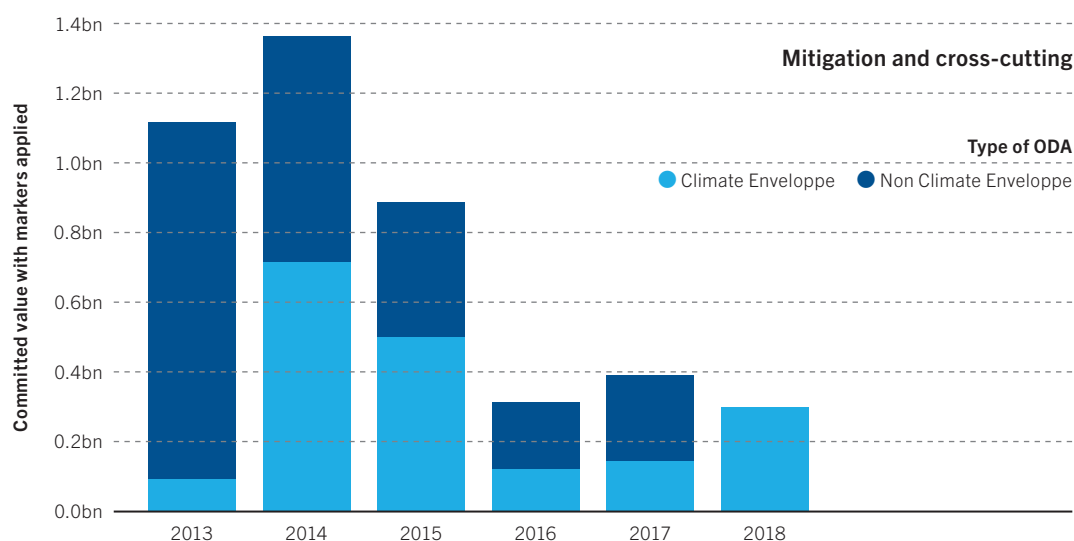
Since 1998, the OECD-DAC has monitored development finance flows targeting the objectives of the Rio Conventions on biodiversity, climate change and desertification using the so-called “Rio markers”, which require donors to mark their development assistance. Besides recording which convention(s) the finance programmes contribute to (if any), the finance marked as contributing to the climate conventions is marked as adaptation or mitigation. If it is marked mitigation, it is supposed to contribute “to the objective of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration”. Furthermore OECD-DAC defines such finance as: Mitigation of climate change by limiting emissions of GHGs or by the protection and/or enhancement of GHG sinks and reservoirs, or integration of climate change concerns with the recipient countries’ development objectives through institution building, capacity development, strengthening the regulatory and policy framework, or research.

If the finance is marked as contributing to both mitigation and adaptation, is it considered as “**cross-cutting**”. There is no further detailed definition of cross-cutting by OECD DAC, as it is not a category on its own. Cross-cutting presumably delivers multiple objectives e.g. forest restoration in an adaptation effort (creating climate change resilience), which at the same time enhances the GHG sink of the forest. From the data set of Danish finance it is impossible to objectively assess the cross-cutting finance’s relative contribution to the two objectives of mitigation and adaptation. Cross-cutting finance can thus have limited, but yet some, contribution to climate mitigation, or vice versa. In a Danish NGO report from 2017 assessing the overall Danish Climate Finance, it is stated: “The tendency is for the support to increasingly be classified as ‘cross-cutting’. Cross-cutting projects increased from approx. 40% in 2010/2011 to 71% in 2015. This tendency makes it increasingly difficult to assess whether Danish climate finance strikes a good balance between adaptation and mitigation.” In multilateral funds there is a similar tendency. ECO (UK based consulting company) which produces a newsletter called “GCF insight”, focused in 2016 on the cross-cutting finance: “The GCF’s portfolio and pipeline clearly show the importance of crosscutting projects, but it is unclear what that says about the adaptation-mitigation balance due to the lack of transparent, quantifiable rules for what counts as a crosscutting project. While the majority of the Fund’s stakeholders believe that their cross-cutting projects strike a good balance between mitigation and adaptation, they also realise that labelling a project as cross-cutting can give them a competitive advantage.” Here ECO refers to the fact that GCF has an imbalance between mitigation and adaptation, despite the intentions. By labelling a mitigation project with some elements of adaptation as cross-cutting, it might stand a better chance of approval.

The excluded entries account for 817 million DKK, meaning on average 13% of the total climate mitigation and cross-cutting support in the years 2013-2015. The figures in this study should be viewed with this in mind.

1. THE SCOPE OF MITIGATION FUNDING

Figure 1. Amounts committed for CE and non-CE funding, 2013 to 2018 (in DKK)



Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

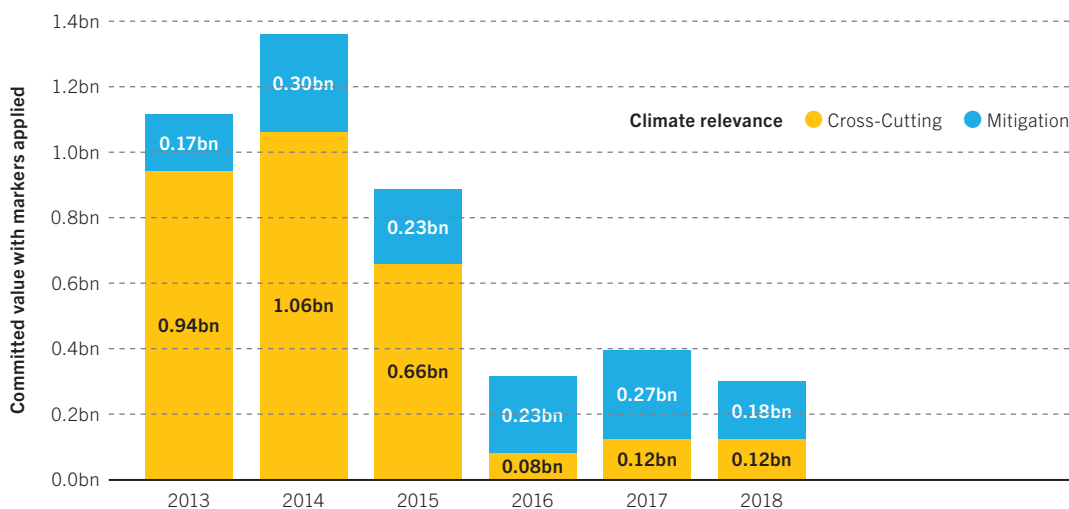
Figure 1 shows the CE and non-CE mitigation and cross-cutting support by year. The data set for 2018 includes only the CE support, as the non-CE support figures are not available yet.² The figure includes both mitigation and cross-cutting (see box above for definitions), because support marked cross-cutting has mitigation elements (as well as adaptation elements). As can be seen from the figure, the volume of mitigation and cross-cutting support has varied substantially over the years, both within CE and outside CE. There seems to be an overall tendency towards declining funding for mitigation and cross-cutting. Looking at figure 2, it is clear that specifically the support categorised as cross-cutting has been reduced in absolute terms

over the years, from more than 1 billion DKK in 2014 to approximately 0.1 billion DKK in 2016 and 17. Support marked Cross-cutting captures on average approximately 40% of the total climate finance from Denmark (according to the DIIS study (2019), but more in some years according to the NGO study referred to in the box above (DCA, OXFAM IBIS, Care: Analysis of Danish Climate Finance, 2017).

² The entire data set and all figures below are only including CE in the year of 2018.

1. THE SCOPE OF MITIGATION FUNDING

Figure 2. Share of cross-cutting and mitigation support over time

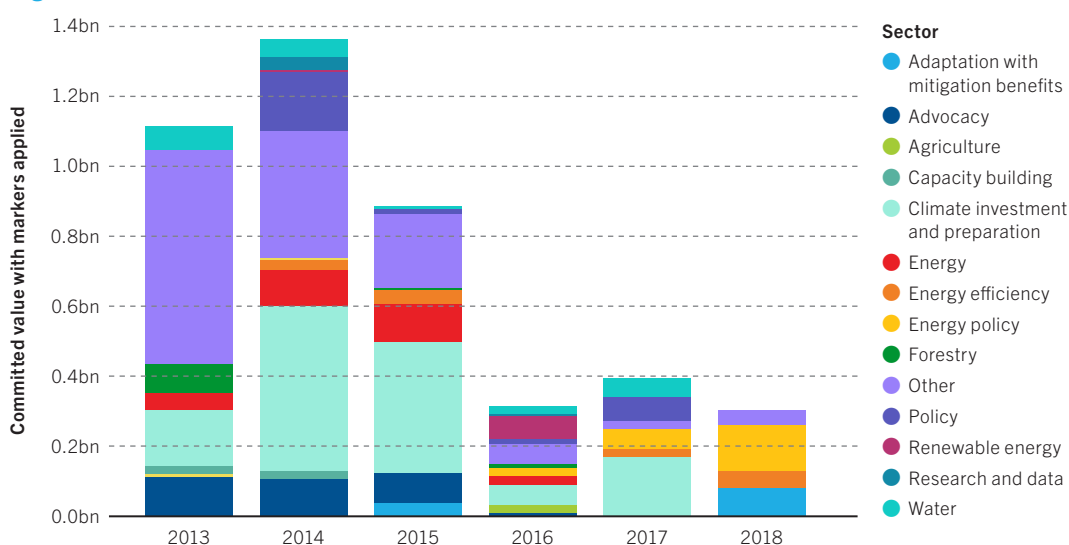


Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

Figure 3 shows the sectoral/activity type distribution of mitigation and cross-cutting support over time. The categorisation of the entries has been done subjectively by the authors of this study, based on pre-knowledge/information about the entries in the data set. As can be seen in the figure, the support has become less diversified: From 9 sectors/activity types in 2013, to the maximum of 12 sectors/activity type in 2014 and 2016, towards more concentration on a few sectors/activity types in 2017 and 2018 (while recalling that 2018 includes only CE, no non-CE). Support for activities categorized as other (light blue) has significantly decreased. “Other” covers a variety of activities incl. evaluations, conferences, and entries which are difficult to categorise.

Activities such as advocacy (the majority of it is civil society support), research and data, and general capacity-building are also diminishing over years. In the opposite end, energy-related activities (shown in different tones of pink) have steadily increased in importance. As explained in the next chapter, this may reflect, that the evaluation of the CE in 2015 (Danida 2015) and its follow up lead to a focus on the energy sector within the mitigation support. The numbers behind this figure shows that it is especially the support categorised as mitigation (not cross-cutting, which is decreasing in any case), and specifically the support from CE, which leads to the increase in energy support.

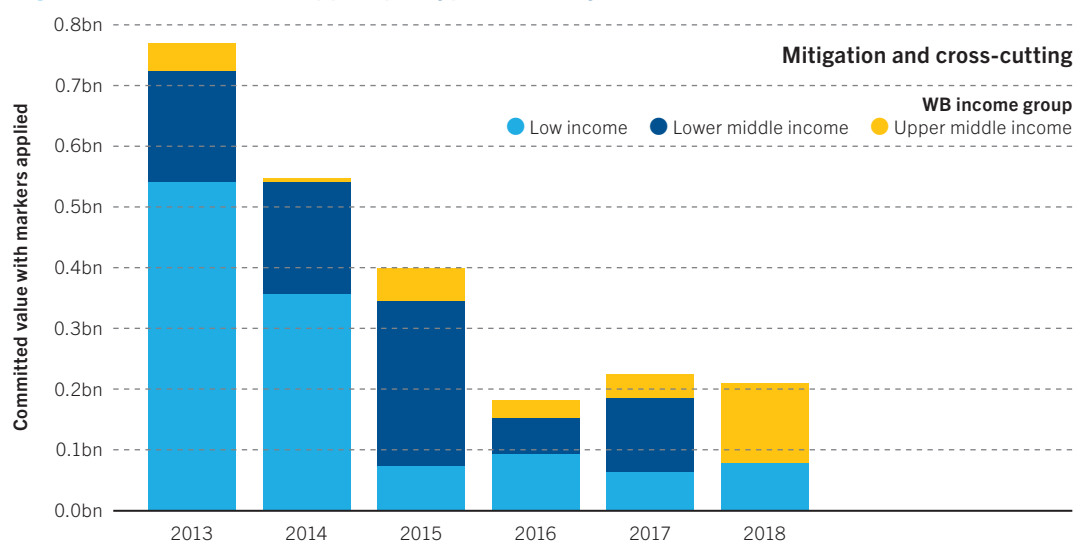
Figure 3. Sectoral distribution of committed values over time



Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

1. THE SCOPE OF MITIGATION FUNDING

Figure 4. Distribution of support per type of country over time



Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

Figure 4 illustrates the mitigation and cross-cutting support by country category by year, using the World Bank country categories. The support, which cannot be categorised by country, is not included. Some international/ multilateral support is included, if it is known what country category it targets. The figure shows that there is a diminishing targeting of LDCs, while the included entries are in general diminishing. It also shows that the upper-middle-income segment of countries is increasingly targeted. As mentioned in next chapter, the evaluation of the CE led to a focusing of the mitigation support on energy, and on the type of countries which emitted the most CO₂. This may be what the figure illustrates. The figure may also illustrate that during the later years Danida did not

facilitate substantial climate relevant mitigation support to the Danida partner countries categorised as LDCs.

Table 1 lists the top country recipients over the period 2013-15. This list includes only the support assigned to individual countries. The list does not capture support to a group or category of countries, if the countries are not named. That may be why several LDCs are high on the list, while the middle-income countries come lower in the list, despite the increasing support to middle-income countries. It should be noted that, from an evaluation and -learning perspective, the magnitude of support to a given country is not necessarily a key factor in the selection of case study countries.

Table 1. Top 10 country recipients of support (mitigation and cross-cutting).

Amounts are in thousands

Countries supported	2013	2014	2015	2016	2017	2018	TOTAL
Uganda	458,079	116,547	23,511	8,054			606,190
Kenya		7,074	259,342	3,000	28		269,444
Bolivia	95,000	77,330	4,218	1,396			177,944
Mali	43,600	48,389	4,622		967	35,000	132,577
Afghanistan	37,500	65,000	1	22,500			125,001
Ethiopia		27,500		46,500		45,000	119,000
Bangladesh		90,751	2,520	3,655			96,926
Indonesia	81,114	1,063	7,000				89,176
Mozambique	1,175	70,000	5,000	500	6,777		83,452
Burkina Faso			2,925	15,299	53,750		71,974

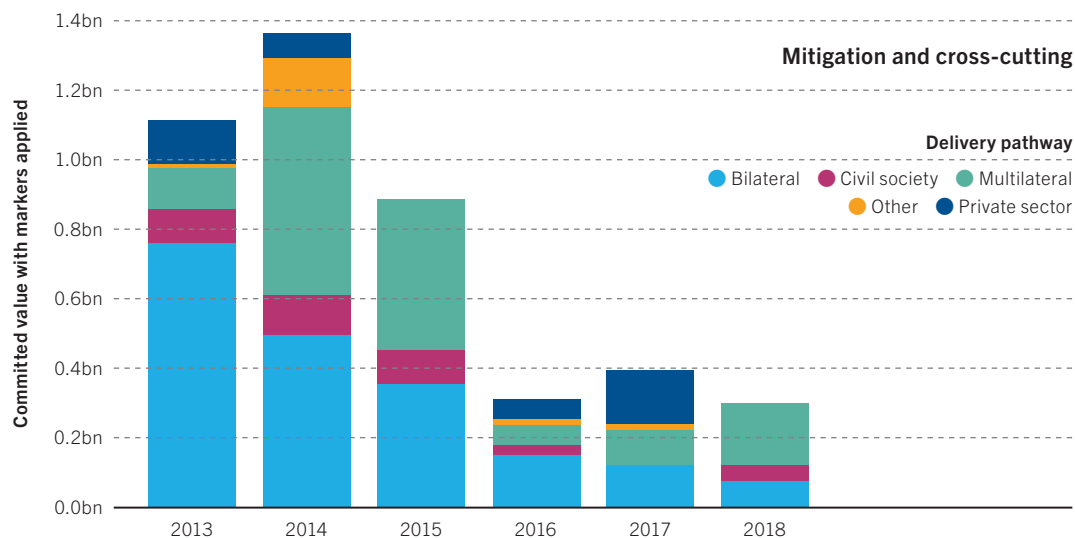
Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

1. THE SCOPE OF MITIGATION FUNDING

Of interest is also the delivery channel or the intermediates of support, and thus the balance between bilateral and multilateral mitigation and

cross-cutting support, as well as an overview of how much is channelled through Civil Society and Private Sector - see below, figure 5.

Figure 5. Distribution of support per type of delivery pathway



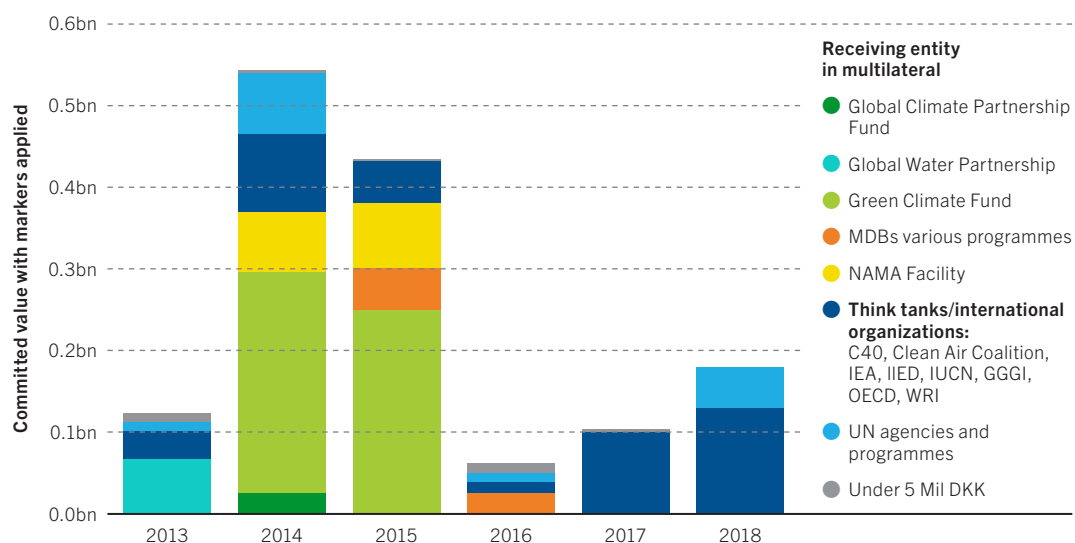
Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

The figure shows that the share of bilateral support is falling, though with a few fluctuations over time. The share of multilateral support, on the other hand, has increased, but likewise with fluctuations over time. Civil society and private sector support have fluctuated, with a less firm pattern, and account for a substantial share of the support in some years.

Looking at the numbers in the data set (behind the figure), it is clear that it is especially the mitigation (not cross-cutting support) support that uses private sector channels.

In figure 6, the multilateral support is elaborated in more detail in terms of the specific recipients.

Figure 6. Overview of receiving entities in multilateral support



Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

1. THE SCOPE OF MITIGATION FUNDING

As can be seen, the Green Climate Fund accounted for two big commitments in 2014-2015, following the initial resource mobilisation. GCF, together with the NAMA facility and the Global Climate Partnership Fund are recipients that deliver “proper” climate investments. MDBs received relatively little in this period, while a wide range of think tanks and other organisations that provide softer technical assistance inputs received an increasing and substantial share of support. UN, e.g. UNEP, UNEP-DTU Partnership and UNDP, also feature as a recipient, however, the amount varies over the years.

Summarising, these are some of the trends observed, while noting that the excluded entries may change the picture somewhat:

- The mitigation and (especially) cross-cutting funding seems to be declining. However, over the past years cross-cutting funding has constituted a substantial share of Danish climate support.
- The diversity of sectors and activities supported is declining. Energy sector focused support is increasing, especially delivered through the CE. Other sectors and types of activities tend to decline
- LDC targeting of the support is declining, while middle-income targeting is increasing. Still, some LDCs are on the top list of recipients, because not all middle-income country support is specified by country name, and especially the cross-cutting support (higher in the initial years), delivering both adaptation and mitigation outcomes, targets LDCs.
- Increasingly more support is channelled through multilateral intermediates, while the bilateral support is in decline. Support to civil society and private sector remains important.
- Within the multilateral support, think tanks and similar organisations delivering softer technical assistance are on the rise, while the more hard-core climate investments, especially the Green Climate Fund, feature strongly in some years.

While these changes may reflect a changing political priority in those years, it may be relevant to ask whether this direction of the mitigation and cross cutting support is more successful. Questions include:

- **Is it sound to focus only on high-emission middle-income countries? Would it be effective (and fair) to also target LDCs that need support to “leapfrog” carbon intensive technologies and engage in low-carbon development, thereby avoiding that they become future high emitters?**
- **As a small country, is Denmark gaining sufficient impact on mitigation in the targeted middle-income countries? Has the support provided scope for joint efforts on mitigation with the targeted countries on a more global scale, e.g. in the UN climate negotiations?**
- **Is the energy sector the best or the “only” relevant avenue for Denmark to address CO₂ emissions?**
- **Is cross-cutting support, with multiple objectives of mitigation and adaptation, a useful approach to address climate mitigation?**
- **To what extent have the supported interventions provided equitable and pro-poor socio-economic benefits within the targeted middle-income countries in accordance with the Sustainable Development Goals and the associated pledge of “Leaving no one behind”? Has planning of large scale projects been in support of the SDG 16 target on “responsive, inclusive, participatory and representative decision-making”?**
- **Do the multilateral channels deliver better mitigation impacts than bilateral support?**

2. KEY EVALUATION THEMES

2.1 DEVELOPMENTS SINCE THE 2015 EVALUATION

In 2015, an **evaluation** of the climate envelope, CE, was published. It was initiated in 2014, and encompassed the climate envelope support in the period 2009-2012, and included two focused assessments of partner institutions (CARE Denmark and World Bank), two thematic reviews (climate finance and energy³), and two country studies (Kenya and Vietnam).

The evaluation found that the CE portfolio was relevant and aligned with Denmark's international and national commitments, and that the scope, relevance and delivery of the portfolio appeared to compare favourably with other, similar organisations. However, the evaluation pointed to the need for a more formalised planning and reporting framework, leading to better results. Other recommendations were to develop consistent monitoring, evaluation and learning frameworks for all future CE projects, improve the structure and administration of the CE, maximise the impact of Danish climate change funding by building on the Danish stronghold and by defining policy-influencing strategies for the CE and in country programmes.

This resulted in a number of follow up actions by MFA. In 2015, a strategic frame in the form of Guiding Principles for the Climate Envelope was established. It includes a Theory of Change of the Envelope, and identifies the two core objectives of emission reductions and climate resilience. Emission reduction is the objective of the CE mitigation support. It furthermore establishes a set of outcomes - described as areas of support - and a number of principles, that on the one hand should guide the composition of the CE, and on the other hand guide the design of the individual interventions of the CE. The strategic frame constituted a narrowed focus of the climate envelope, as it emphasised an increased focus on energy - as a Danish stronghold - within the mitigation support.

During the course of 2016, a new development strategy for Danida, "The World 2030", was developed, reflecting the newly agreed Sustainable Development Goals (SDGs) as well as the political attention to migration, fragility and humanitarian challenges. The strategy did not place climate change at the centre, which was a departure from earlier Danida development strategies, which had environment and/or climate change as one of 3-5 core priorities. However, the strategy did refer to climate change in at least two broad contexts: 1) In relation to a focus on sustainable economic growth and on middle-income countries,

2) in the context of climate change as a contributing factor to instability and fragility that needs to be addressed. The framing of climate change support in the context of 1) sustainable economic growth and middle-income countries is relevant for this study on mitigation. "The World 2030" was not elaborated in sub-strategies, covering in more detail the specific areas of development cooperation, as had been the traditional approach. Thus, the guiding principles constitute the only document elaborating the strategic thinking within climate behind Danish development cooperation, whether within or outside CE.

As a further follow up to the CE evaluation of 2015, a note on indicators and monitoring of the CE was developed. The note stipulated that all new climate envelope support should "select" at least one of two/three core indicators - corresponding to the two overall objectives of emission reductions and climate resilience - and a set of quantitative and qualitative supportive indicators. The indicators were largely aligned with the indicators of climate finance institutions such as GEF and GCF, who also attempt to monitor emission reductions and improved climate resilience (albeit with some challenges, see later section). The note is well-aligned with the increased focus on results in MFA, but is not a formal part of the Aid Management Guidelines, and not publicly available.

In addition, a division of labour table, defining in more detail the administration and management of the climate envelope and the specific roles and responsibilities of the Ministry of Foreign Affairs and Ministry of Climate, Energy and Utilities" (MCEU), was negotiated and agreed - as a follow up to the CE evaluation of 2015. The role of MCEU is of particular importance for the climate mitigation support of the CE - much of which are identified, designed, and managed by MEUC - and this will be important for the upcoming evaluation.

3 As the 2015 climate envelope evaluation i.a. focused on energy and climate finance, the current climate mitigation evaluation could draw and build upon the earlier evaluation. Within the energy area, the evaluation noted the useful focus on middle-income countries (with learnings that could be adapted to poorer countries), noted the support to private sector and innovation with potential for transformational change, e.g. through the Climate Investment Fund in IFU.

2. KEY EVALUATION THEMES

In practice, the CE and especially the mitigation focus of the CE did alter after 2015. A few examples also illustrated in chapter 1:

- More focus on energy related support, and no new CE mitigation support to forestry and agriculture within the envelope
- Larger and fewer commitments, e.g. the four individual commitments regarding authority-to-authority energy sector cooperation in China, Mexico, South Africa and Vietnam, with the Danish Energy Agency as a key implementing partner, was merged into one new phase commitment in 2017. See below.

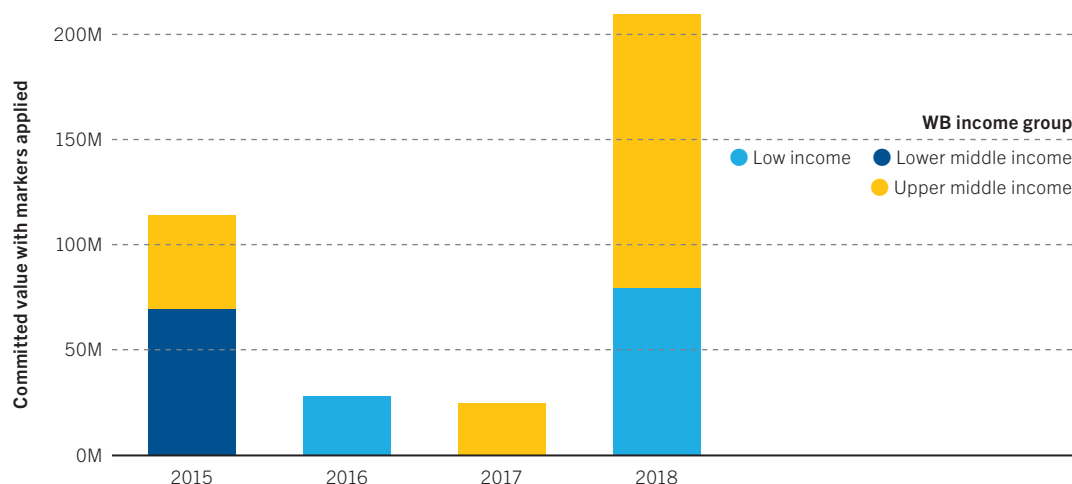
- Increased attention both in the multilateral and bilateral mitigation support to private sector, leverage potential, and investment preparation in its broadest sense e.g. enabling policy framework for Renewable Energy (RE) investments in Ethiopia, support through IEA, OECD and others on framework conditions for energy investments.
- Increased focus on emerging economies and middle-income countries within the CCE mitigation support, as can partly be seen below.

Table 2. Focus of funding of the climate envelope over time

Year	Nr. of appropriations	Min value	Max value	Total amount
2015	7	4,500,000	250,000,000	430,000,000
2016	8	5,000,000	28,000,000	119,000,000
2017	3	25,000,000	60,000,000	142,500,000
2018	4	40,000,000	130,000,000	265,000,000

Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

Figure 7. Focus of funding in the climate envelope over time by country classification



Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

Based on this overview of the past evaluation, the follow up, and the knowledge about the Danish support from chapter 1, key questions the evaluation could consider are:

- How have the Guiding Principles been operationalised in practice, how has the indicator and monitoring note been operationalised in practice? Is Danida measuring results of its mitigation (especially CE) support?

- How can/has the Guiding Principles been used as a frame for the non-CE climate mitigation support? What else has guided the design of non-CE mitigation support?
- Have the new strategic frame and the above trends delivered better results?

2. KEY EVALUATION THEMES

2.2 GLOBAL OVERVIEW OF NDC AND MITIGATION PRIORITIES

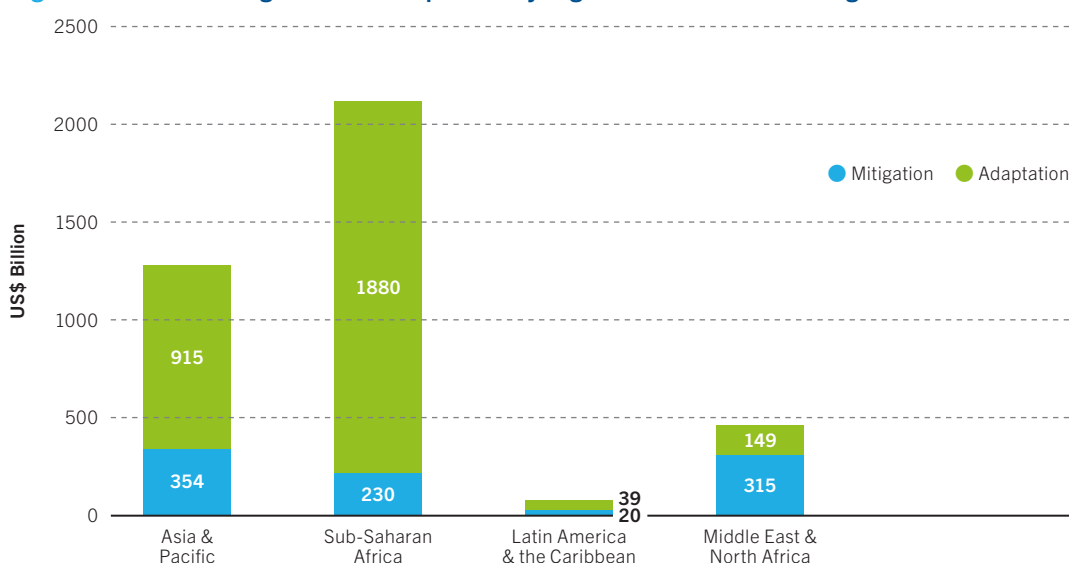
2.2.1 GLOBAL OVERVIEW

The Nationally Determined Contributions, expressing countries' climate ambitions, are the cornerstone of the Paris Agreement. The first generation NDCs, mainly from 2015, vary in quality (choice of baseline, type of target etc.), and do not reflect in all cases a full governmental and cross-sectorial process, let alone based upon a transparent and open process, involving private sector and civil society. However, they provide a useful starting point, that has subsequently been followed up by more specific policies in the countries. 184 countries (developing and developed) have submitted their NDCs to UNFCCC. However, the NDCs delivered do not express a sufficient level of ambition for the world to stay on

track to achieve a 2 degree, let alone a 1.5 degree target. 58 of 139 the developing-country NDCs only express ambitions that are conditional on external support, such as development cooperation/finance. Other NDCs express a mixture of unconditional ambitions, in other words, ambitions that the countries can achieve without additional external support, and conditional ambitions. Only 14 developing countries express ambitions with no conditions.

62 developing countries estimate the costs of their mitigation ambitions in their NDCs. The countries estimating the highest costs are in Sub-Saharan Africa, followed by Asia and Pacific, Middle East and North Africa, and Latin America and the Caribbean. The total cost of the mitigation ambitions is USD 2,984 billion, which is more than three times higher than the total estimated cost of adaptation ambitions (USD 918 billion) (UNEP DTU Partnership, 2017).

Figure 8. Costs of mitigation and adaptation by region and sectoral coverage of NDCs



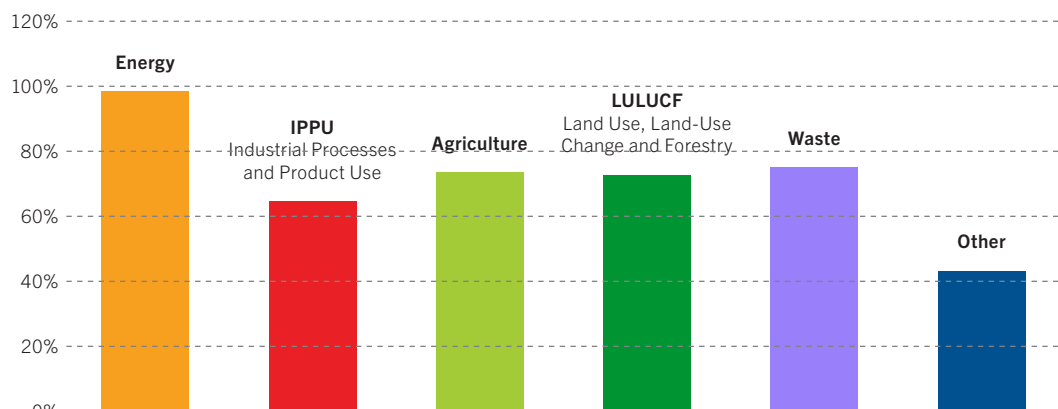
Source: UNEP DTU Partnership, 2017

As can be seen from figure 9, the energy sector is by far the most prominent sector in the NDCs, included in 99% of the NDCs. Waste, Agriculture, and Land Use, Land-Use Change and Forestry (LULUCF) are included in approximately 75% of NDCs, followed by Industrial Process and Product Use (IPPU) (65%). Other sectors (44% coverage) represent sub-sectors⁴ of national priority.

⁴ The sub-sectors can represent one or more sectors, or even cross-sectoral measures, e.g. transport, building/construction, shipping and aviation, mining, tourism and water.

2. KEY EVALUATION THEMES

Figure 9. Sector Coverage in the NDCs



Source: UNEP DTU Partnership, 2017

Table 3 reveals some of the sector differences across the regions. The prominence of the energy sector in the NDCs reflect the fact that the energy sector is the main source of emissions in all regions, except in Sub-Saharan Africa. LULUCF has the highest share of emissions (46%) in Sub-Saharan Africa, but does not appear with the highest coverage, but only the second highest coverage (90%) after energy in the NDCs of the region. It is

significant that the energy sector is a much lower emitter in Sub-Saharan Africa (than LULUCF), but is nevertheless included in 99% of the NDCs. The waste sector represents the lowest source of emissions, while being relatively well represented in the NDCs. All of this indicates that NDC sector coverage is not solely derived by the volume of emission (UNEP DTU Partnership, 2017).

Table 3. Comparison of regional sector emissions data (CAIT, 2013 Sector Emissions) and (I) NDC coverage (NDC Explorer 2017) by region

	Energy	Transport	Agriculture	Land use and Forestry	Waste
Asia and Pacific					
Emissions Share	72%	9%	11%	6%	2%
(I)NDC Coverage	100%	79%	52%	62%	69%
Sub-Saharan Africa					
Emissions Share	28%	5%	16%	46%	5%
(I)NDC Coverage	99%	69%	81%	90%	75%
Latin America and the Caribbean					
Emissions Share	35%	17%	23%	19%	6%
(I)NDC Coverage	97%	66%	69%	81%	53%
Middle East and North Africa					
Emissions Share	70%	20%	4%	2%	14%
(I)NDC Coverage	100%	82%	65%	47%	76%
TOTAL					
Emissions Share	62%	11%	12%	12%	3%
(I)NDC Coverage	99%	73%	68%	74%	68%

Source: UNEP DTU Partnership, 2017

2. KEY EVALUATION THEMES

NAMAs, Nationally Appropriate Mitigation Actions, constitute the pre-Paris mitigation framework for developing countries, aimed at achieving a reduction in emissions in 2020. NAMAs can provide additional information on sectoral priorities for developing countries. 185 NAMAs have been submitted to the UNFCCC by November 2019, 97 seeking support for implementation, 74 for preparation, while 14 were submitted for recognition. Most NAMAs submitted were from

the Latin American region, followed by Africa, Asia & Pacific, Europe & Central Asia and the Middle East. The global NAMA sectoral priorities (sector classification is different from the sectors communicated in the NDCs), seem to converge with sectoral priorities of the NDCs. Renewable energy (Renewable Energy + Solar + Wind + Geothermal) accounts for 38 of the 185 NAMAs, followed by transport with 27, and demand-side Energy Efficiency (EE) with 22 NAMAs.

Table 4. Sectoral overview of NAMAs submitted to the UNFCCC

Sector	Number	Sector	Number	Sector	Number
Transport	27	Waste	12	Fugitive	3
EE demand side	22	Forestry	11	All sectors	3
EE supply side	17	Methane avoidance	9	Biomass energy	2
Renewable energy	16	Wind	7	Geothermal	2
EE service	15	EE industry	4	Tourism	1
Agriculture	14	Fossil fuel switch	4		
Solar	13	Cement	3		

Source: Fenhann, 2019b

2.2.2 PRIORITIES OF SELECTED COUNTRIES

Zooming in on the countries proposed as possible case studies for the evaluation (see Terms of Reference), it is evident that NDC targets, sectoral priorities and mitigation policies differ. All the selected countries present reduction targets relevant to business as usual (BAU) scenarios except South Africa, which presents a peaking, plateau and decline contribution. Ethiopia is the only country presenting its contribution also as net emission reductions. Mexico indicates 2026 as its year for peaking of emissions, informs about its reductions also in terms of emission intensity per unit of GDP. Only Ethiopia and Ghana provide information of the cost of their mitigation

actions. Looking at sectoral priorities (see Table 5), renewable energy is not surprisingly the sector most countries specify as focus area. Land use and forestry is the second most important sector. In table 6, “considered” means included, while “focus area” means identified as a priority. NDCs vary in nature, and some countries may have many priorities, some none, which explains the uneven impression of the NDCs.

2. KEY EVALUATION THEMES

Table 5. Sectoral coverage of NDCs in proposed countries

Country	Renewable energy	Energy efficiency	Transport	Agriculture	Land use and forestry	Waste	REDD+
Ethiopia	Considered	Considered	Considered	Considered	Considered	Considered	N/A
Ghana	Focus area	Focus area	Focus area	Considered	Focus area	Focus area	Specified
Indonesia	Considered	Considered	Considered	Considered	Considered	Considered	Specified
Mexico	Considered	Considered	N/A	Considered	Considered	Considered	N/A
South Africa	Focus area	Considered	N/A	Considered	Focus area	Considered	N/A
Vietnam	Focus area	Considered	Considered	Considered	Considered	Considered	Specified

Source: Pauw, W.P et. al., 2016

Looking at the number of NAMAs submitted to the UNFCCC can give a slightly different view on specific sub-sectoral priorities (table below) in the proposed countries⁵. Energy is a recurrent mitigation-action priority for most of the countries, although with a different focus within the energy sector. While South Africa mainly focuses on the power sector,

Mexico focuses on both energy supply and energy efficiency, while Indonesia has only one energy-efficiency related NAMA. Ethiopia is the exception, without any energy-related NAMAs. Transport is represented in all the selected countries' NAMA priorities.

Table 6. NAMA sectoral priorities for selected countries

Country	Number and typology ⁶ of support requested	Sector focus
Ethiopia	1 NAMA seeking support for preparation 2 NAMAs seeking support for implementation	Transport (3)
Indonesia	2 NAMAs seeking support for preparation	Transport (1) EE Service (1)
Mexico	10 NAMAs seeking support for preparation 6 NAMAs seeking support for implementation	Energy Supply (6) Forestry (1) Residential (4) Residential & Service (1) Transport (2) Service (1)
South Africa	3 NAMAs submitted for recognition	Power sector (1) Industry (1) Transport (1)
Vietnam	3 NAMAs seeking support for implementation	Agriculture (1) Energy Supply (1) Transport (1)

Source: Fenhann, 2019b

⁵ Ghana has so far not submitted any NAMAs to the UNFCCC NAMA Registry

⁶ NAMA for recognition refers to mitigation actions implemented without external support, NAMA for preparation refers to NAMA concepts seeking support for preparation, while NAMA for implementation refers to mitigation actions which are fairly developed and seeking support for implementation

2. KEY EVALUATION THEMES

The following sections analyse each country's specific NDC and provide deeper insights. All the countries have received Danish mitigation finance, and have experienced different developments in the Danish cooperation in terms of volumes, sector and sub-sector focus, channels etc. At this point, the study does not relate this to the Danish mitigation finance, while that may be the job of the evaluation to come.

2.2.2.1 ETHIOPIA

Ethiopia's NDC target is one of the few that the Climate Action Tracker⁷ rates as "2°C compatible". Ethiopia has committed to a long term goal of becoming carbon neutral, although with no target year. The emission reduction target is expressed as

a 64% reduction in emissions compared to a BAU scenario and net emission reduction compared to 2010, although conditional on finance, technology transfer and capacity building support. The majority of emission reductions are envisioned in the forestry sector, followed by agriculture, industry, transport and buildings. While the country prioritizes the forestry sector as the main mitigation contributor, it also has a large focus on power generation, mainly envisioned through hydropower, aiming at providing enough power to fulfil growing domestic electricity demand, and electricity exports, which will also require grid investments. Ethiopia's Climate Resilient Green Economy Strategy, integrated in the national development 'Second Growth and Transformation Plan' is the basis for the NDC.

Table 7. Ethiopia's NDC and emission profile

Climate Action Tracker profile	2°C compatible
Paris Equity Check⁸ Climate Indicators	<ul style="list-style-type: none"> • Change of per-capita emissions from 2010 to 2030 (average): -3% • Per-capita emissions in 2030 (average): 1.2 tCO₂e • Global rank of national emissions excl. land use (out of 195 countries): #51 in 2010 and #45 in 2030.
Central Policies	Climate Resilient Green Economy Strategy Second Growth and Transformation Plan
Mitigation Sectors	Agriculture (livestock and soil) Forestry Transport Electric Power Industry (including mining) Buildings (including Waste and Green Cities)
Sub-sector activities	Improving crop and livestock production practices, 90 MtCO ₂ e Protecting and re-establishing forests, 130 MtCO ₂ e Expanding electric power generation from renewable energy Leapfrogging to modern and energy efficient technologies in transport (10 MtCO ₂ e), industry (20 MtCO ₂ e) and building (5 MtCO ₂ e) sectors
Other Priorities	Under the CRGE: <ul style="list-style-type: none"> • Renewable energy, e.g. construction and operationalization of the Ethiopian Grand Renaissance Dam, USD 4 Billion from domestic sources. • Efficient stoves • Expand forest cover • Maximise adaptation and mitigation synergies, e.g. in forestry and agriculture

⁷ The Climate Action Tracker is a collaboration between Climate Analytics and New Climate Institute, providing an analysis of governments' climate action, measuring it against the Paris Agreement 2°C - 1.5°C target. Ghana's and Vietnam's NDCs have yet not being analysed by the Climate Action Tracker. <https://climateactiontracker.org/about/>

⁸ The Paris Equity Check provides a quantitative assessment of the NDCs, and 'Factsheets' for all countries, providing indicators assessing their current emissions, and estimations of future indicator values, based on their submitted NDCs. <http://paris-equity-check.org/the-science.html>

2. KEY EVALUATION THEMES

2.2.2.2 GHANA

Ghana's NDC target also respective to a BAU scenario and compared to a baseline of 2010. Its unconditional mitigation contribution is a 15% reduction by 2030. The conditional mitigation contribution (depending on external support) is up to 45% emission reductions compared to the BAU scenario. This average contribution of the two scenarios would lead to a 67% increase in per

capita emission by 2030, although still keeping Ghana on relatively low emission levels per capita. Ghana lists a number of policy actions to achieve its implementation goals, including 9 programmes in the energy sector, 5 in AFOLU (Agriculture, Forestry, and Land Use), 3 in Waste, 1 in transport and 1 in industry. Ghana also lists the required investments in mitigation, reaching 9.81 billion USD in 2030, of which Ghana is prepared to mobilize 21% from national sources.

Table 8: Ghana's NDC and emission profile

Climate Action Tracker profile	Not yet analysed
Paris Equity Check Climate Indicators	<ul style="list-style-type: none"> • Change of per-capita emissions from 2010 to 2030 (average): +67% • Per-capita emissions in 2030 (average): 1.4 tCO₂e • Global rank of national emissions excl. land use (out of 195 countries): #118 in 2010 and #90 in 2030.
Central Policies	Ghana Shared Growth Development Agenda II—GSGDA 2
Mitigation Sectors	Energy
	Transport
	AFOLU
	Waste
	Industry
Sub-sector activities	Scale up RE Penetration by 10% in 2030
	Promote clean rural households lighting
	Expand the adoption of market-based cleaner cooking solutions
	Double energy efficiency improvement to 20% in power plants
	Scale up sustainable mass transportation
	Promote Sustainable utilization of forest resources through REDD+
	Adopt alternative urban solid waste management
	Double energy efficiency improvement to 20% in industrial facilities
	Green Cooling Africa Initiative

2. KEY EVALUATION THEMES

2.2.2.3 INDONESIA

The NDC target is respective to a BAU scenario and is divided into an unconditional and a conditional target. With the unconditional target, Indonesia would reduce emissions by 29% in 2030, and could reduce emissions by 41% under a conditional scenario. The unconditional contribution would result in a doubling of Indonesia's emission levels⁹. Indonesia's NDC is rated as "Highly insufficient" by Climate Action Tracker, and its contribution average of the two scenarios is expected to lead to a 3% increase in per capita emissions by 2030

(excluding LULUCF, a large source of the national emissions). Indonesia emits substantial emissions in the forestry sector, and a substantial coal-fired power generation pipeline is contributing further. Indonesia is also an exporter of coal, oil, and gas, upon which about half of the country's non-tax revenue revenues depend. Mitigation activities in the forestry sector are envisioned to contribute to a significant share of emission reductions. Other sectoral priority activities include the energy sector, increasing the share of renewable energy and decreasing the share of fossil fuels.

Table 9: Indonesia's NDC and emission profile

Climate Action Tracker Profile	Highly insufficient
Paris Equity Check key numbers	<ul style="list-style-type: none"> • Change of per-capita emissions from 2010 to 2030 (average): +3% • Per-capita emissions in 2030 (average): 3.6 tCO₂e • Global rank of national emissions excl. land use (out of 195 countries): #9 in 2010 and #10 in 2030.
Central Policies	National action plan on GHG emissions reduction as stipulated in Presidential Regulation (PERPRES) No. 61/2011
	GHG inventory through Presidential Regulation (PERPRES) No. 71/2011
	Moratorium on the clearing of primary forests and by prohibiting conversion of its remaining forests
	Government Regulation No. 79/2014 on National Energy Policy
	National Action Plan on Climate Change Adaptation (RAN-API)
Mitigation Sectors	Forestry (REDD+)
	Energy
	Waste
Sub-sector activities	New and renewable energy at least 23% in 2025 and at least 31% in 2050
	Oil should be less than 25% in 2025 and less than 20% in 2050
	Coal should be minimum 30% in 2025 and minimum 25% in 2050
	Gas should be minimum 22% in 2025 and minimum 24% in 2050

⁹ Emission levels compared to the latest GHG inventory data from the year 2000

2. KEY EVALUATION THEMES

2.2.2.4 MEXICO

Mexico's NDC target compared to a BAU scenario envisions a peaking target by 2026, an emission intensity of GDP reduced by 40% by 2030, and a long term goal of 50% emission reduction by 2050 (target embedded in the national climate change law), compared to 2000. The target is deemed as "Insufficient" according to Climate Action Tracker. Mexico presents an unconditional target of reducing emissions by 25% compared to the BAU scenario. The conditional scenario includes a 50% GHG reduction by 2030. Average per-capita emissions

of the two scenarios in 2030 are expected to represent a 29% reduction. In addition to being one of the first countries to pass a climate change law, establishing a long-term target, Mexico introduced an Energy Transition Law, including a clean energy target of 25% in electricity generation by 2018, 30% by 2021, and 35% by 2024. The current government has indicated a less ambitious climate mitigation direction, with recent decisions allocating budget to coal, diesel, gas and oil-fuelled power plants, scheduled for retirement by the former administration.

Table 10: Mexico's NDC and emission profile

Climate Action Tracker Profile	Highly insufficient
Paris Equity Check key numbers	<ul style="list-style-type: none"> • Change of per-capita emissions from 2010 to 2030 (average): -29% • Per-capita emissions in 2030 (average): 4.1 tCO₂e • Global rank of national emissions excluding land use (out of 195 countries): #12 in 2010 and #16 in 2030.
Central Policies	General Climate Change Law. 2012
	National Strategy on Climate Change, 10-20-40 years. 2013
	Carbon tax.2014
	National Emissions and Emission reductions Registry. 2014
	Energy reform (laws and regulations). 2014
	Ongoing process for new set of standards and regulations
	Special Program on Climate Change 2014-2018
Mitigation Sectors	Energy, IPPU, Agriculture, Waste, LULUCF
	Reach a rate of 0% deforestation by the year 2030
Other Priorities	Prioritizes synergies between mitigation and adaptation

2. KEY EVALUATION THEMES

2.2.2.5 SOUTH AFRICA

South Africa's NDC express a peaking target between 2025 and 2030, equivalent to a 19–82% increase compared to 1990 levels (excluding LULUCF). The emissions will then plateau for approximately a decade, before declining. The NDC target is deemed as “Highly Insufficient” by the climate action tracker. Average emissions per capita will decrease by up to 13% in 2030. The current administration's Integrated Resource Plan (IRP 2018), includes a shift away from coal,

increase in renewable energy and gas, and stopping the expansion of nuclear power. The plan would lead to decommissioning 35 GW out of a total 42 GW of coal-fired power capacity by 2050, while adding current coal projects in the pipeline of 6 GW currently under construction, and 1 GW of new capacity by 2030. The plan's increase in renewable energy foresees 8.1 GW of wind, 5.7 GW of solar and 8.1 GW of gas capacity additions by 2030. The South African Parliament approved a carbon tax in 2019, although giving tax exemptions for up to 95% of emissions until 2022.

Table 11: South Africa's NDC and emission profile

Climate Action Tracker Profile	Highly insufficient
Paris Equity Check key numbers	<ul style="list-style-type: none"> • Change of per-capita emissions from 2010 to 2030 (average): -13% • Per-capita emissions in 2030 (average): 8.8 tCO₂e • Global rank of national emissions excl. land use (out of 195 countries): #19 in 2010 and #22 in 2030.
Central Policies	National Development Plan(NDP)(NPC,2012)
	2011 National Climate Change Response Policy(NCCRP)
	National Sustainable Development Strategy
	Integrated energy and electricity plans(IEP and IRP)
	industrial policy action plans (IPAP)
	the new growth path (NGP)
Mitigation Sectors	Energy is highlighted (and all sectors covered)
Sub-sector activities	Renewable Energy Independent Power Producer Procurement Programme (REI4P), approved 79 RE IPP projects, 5243MW, with private investment totalling approx. US\$ 16 billion, another 6300 MW are under consideration.
	Investment in public transport infrastructure was US\$0.5 billion in 2012, expected to continue growing at 5%/y.
	South African Green Fund with an allocated US\$ 0.11 billion in 2011 to 2013 budgets to support catalytic and demonstration green economy initiatives.
	Incremental costs required: <ol style="list-style-type: none"> 1. Estimated incremental cost to expand REI4P in next ten years: US\$3 billion per year. 2. Decarbonised electricity by 2050-estimated total of US\$349billion from 2010. 3. CCS: 23 Mt CO₂ from the coal-to-liquid plant-US\$0.45 billion. 4. Electric vehicles -US\$513 billion from 2010 till 2050. 5. Hybrid electric vehicles: 20% by 2030-US\$488 billion
	Technologies to further reduce emissions: Energy efficient lighting; variable speed drives and efficient motors; energy efficient appliances; solar water heaters; electric and hybrid electric vehicles; solar PV; wind power; carbon capture and sequestration; and advanced bio-energy
Other Priorities	Prioritizes synergies between mitigation and adaptation

2. KEY EVALUATION THEMES

2.2.2.6 VIETNAM

Vietnam's NDC presents an unconditional emission reduction respective to a BAU scenario of 8% by 2030, while reducing the intensity per unit of GDP by 20%, and increasing forest cover by 45%. The conditional scenario would see emission reductions of 25%, and a reduced intensity per unit of GDP of 30%. Achieving the average target of the conditional and unconditional, would result in an 85% increase in per capita emissions, which is not deemed

in line with the achievement of the goals of the Paris Agreement. Vietnam has various policies on energy efficiency, including the “National Target Programme on Energy Efficiency” (2006), the Law on “Economical and Efficient use of Energy” (2010), and has made efforts in the forestry through REDD+. Vietnam was very active in the Clean Development Mechanism (CDM), with 255 projects and 10 Programmes of Activities (PoA) registered (Fenhann, 2019c, Fenhann, 2019d).

Table 12: Vietnam's NDC and emission profile

Climate Action Tracker profile	Highly insufficient
Paris Equity Check key numbers	<ul style="list-style-type: none"> • Change of per-capita emissions from 2010 to 2030 (average): +85% • Per-capita emissions in 2030 (average): 6 tCO₂e • Global rank of national emissions excl. land use (out of 195 countries): #32 in 2010 and #15 in 2030
Central Policies	National Climate Change Strategy 2011
	National Green Growth Strategy 2012
	Law on Natural Disaster Prevention and Control 2013
	Law on Environment 2014
	National Target Programme on Energy Efficiency”(2006)
	Law on “Economical and Efficient use of Energy” (2010)
	REDD+
	Resolution No. 24-NQ/TW on “Pro-actively responding to climate change, enhancing natural resource management and environmental protection” (6/2013)
	Decision 1775/QĐ-TTg on “Management of GHG emissions; management of carbon credit trad-ing activities to the world market” (11/2012)
	Law on Natural Disaster Prevention and Control(2013)
	National Target Programme to Respond to Climate Change(2008, 2012)
	Action plans at the national, ministerial, sectoral and local levels on climate change response and disaster risk prevention and reduction.
Mitigation Sectors	Energy, Agriculture, LULUCF, Waste
Sub-sector activities	Strengthen the leading role of the State in responding to climate change
	Improve effectiveness and efficiency of energy use; reducing energy consumption
	Change the fuel structure in industry and transportation
	Promote effective exploitation and increase the proportion of new and renewable energy sources in energy production and consumption
	Reduce GHG emissions through the development of sustainable agriculture; improve effectiveness and competitiveness of agricultural production
	Manage and develop sustainable forest, enhance carbon sequestration and environmental services; conservation of biodiversity associated with livelihood development and income generation for communities and forest-dependent people
	Waste management
	Communication and awareness raising
	Enhance international cooperation

2.3 PARIS ALIGNMENT

The Paris agreement sets three clear objectives: Limiting the temperature increase to well below 2 degrees (and pursuing efforts to limit the rise to 1.5 degrees); adapting to adverse climate change impacts; and making financial flows consistent with these efforts. How to align to the Paris Agreement is discussed in various fora incl. among governments, the International Finance Institutions (IFIs), and private sector companies etc. and there are many tools, concepts and advice available e.g. science based targets¹⁰. OECD-DAC has published a report on aligning development cooperation with the objectives of the Paris agreement. It underlines that as a whole, development cooperation providers are not yet sufficiently integrating climate change across their portfolios. It likewise emphasises that the Paris agreement objectives are aligned with the SDGs and are central to the mandate of development cooperation. OECD-DAC characterise a Paris aligned development cooperation as:

- A development cooperation that does not undermine the Paris Agreement commitment, but instead **contributes to the required system-wide transformation**. Not all development cooperation has principal climate objectives, but it is critical that underlying assumptions, conditions and objectives supports a systematic transformation. Development finance continues unfortunately to support the production and consumption of fossil fuels in developing countries.
- A development cooperation that **catalyses countries' transition**. This means deploying targeted finance, policy support, and capacity development interventions that trigger broader changes, **while ensuring this supports the developing countries and groups in the countries that need it most**. It also includes using development cooperation to leverage finance and private sector engagement.
- A development cooperation that **supports short and long-term processes e.g. both the NDCs, as well as the long-term strategies with a 2050 timeline**, that are also part of the Paris agreement. This also implies an increased ambition over time, as it is recognised that the current NDCs are too weak/insufficient, and longer-term strategies rare. It is also recognised that climate action is still too "silo'ed", and assistance is required to connect climate-centric processes with other development oriented processes and planning.
- A development cooperation that **pro-actively responds to evidence** and opportunities, including the emerging and evolving evidence on the pace and scale of climate change and its impacts e.g. from IPCC.

OECD-DAC talks about the alignment "at home" in development cooperation providers' institutions; alignment in development countries, that the providers can promote and support; and alignment in the development cooperation "system". In the home arena this concerns establishing a clear mandate commensurate with the Paris Agreement ambition, aligning performance and incentive systems, building capacity to execute the mandate, and developing and deploying tools for alignment. It talks about a top-down approach that can be applied, e.g. by setting finance targets, establish investment criteria, mainstream etc. but also more bottom up-approaches.

Based on this overview of NDCs globally, the NDCs of the selected countries, the on-going discussions of Paris-aligned development cooperation, and knowledge about the Danish support from chapter 1, some of the key questions for the evaluation are:

- **How is Denmark interpreting and reflecting Paris alignment in its mitigation support, while considering both the climate and poverty (in its broadest sense) challenges?**
- **Is the mitigation support reflecting the Paris aligned development cooperation as interpreted by OECD-DAC?**
- **How well is Denmark supporting the climate ambitions and meeting the funding needs expressed in "conditional" targets in the NDCs of developing countries - is this informing the prioritisation of Danish climate mitigation support?**
- **How well is Danish mitigation support tackling the "emissions gap" or the gap in ambitions, and promoting and assisting countries to increase their ambitions?**
- **Is Denmark prioritising the ambitious countries and/or incentivising increased ambition for less ambitious countries, or both and how?**
- **How is the design of the Danish mitigation support to the selected case-countries reflecting their emission profiles (the main emitting sector challenges), their NDCs' expressions of ambitions, and their national climate related sectoral priorities and strategies?**
- **What has been the overall lessons learned from implementing the Paris agreement through the mitigation support?**

¹⁰ Science-based targets use a trajectory/pathway approach aligning to the temperature target of the Paris Agreement, and are currently applied in private companies, while approaches for financial institutions, e.g. asset managers such as IFU, are under development and testing.

2. KEY EVALUATION THEMES

2.4 CLIMATE FINANCE LANDSCAPE

2.4.1 CLIMATE FINANCE OVERVIEW

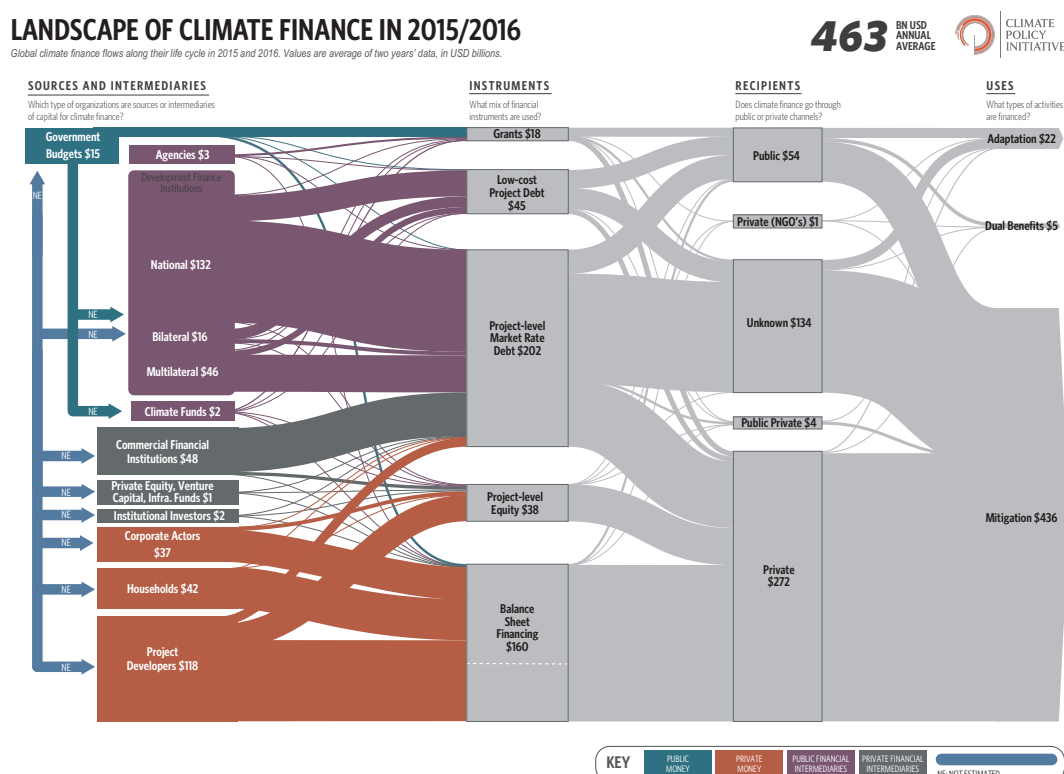
Figure 10 from Climate Policy Initiative provides an overview of the climate finance sources, intermediaries and vehicles, as well as instruments used, recipients and the climate change challenge addressed. It is an overview of global finance, not development-oriented climate finance to developing

countries. CPI notes that the overall volume of climate finance is increasing, and that private investments continue to account for the major share of the finance. CPI also notes that a majority of the public climate finance continues to be (generated and) spent domestically. In other words, the relative share of international public climate finance, such as development finance continues to be low. Still flows from developed to developing countries are increasing.

Figure 10: Overview of climate finance flows

LANDSCAPE OF CLIMATE FINANCE IN 2015/2016

Global climate finance flows along their life cycle in 2015 and 2016. Values are average of two years' data, in USD billions.



Source: CPI, 2018

In the context of the UNFCCC, and specifically in COP15 in Copenhagen in 2009, a commitment of 100 billion USD annually from 2020 for climate action was born. The amount includes not only public finance, but also mobilised private finance flows. Thus, the leverage factor of the relatively limited share of development finance (in the CPI figure) becomes important. How best to mobilise private finance, and thereby increase the importance of the relatively small share the development finance occupies, is key. A 2016 OECD survey on amounts mobilised in 2012-15 (through development finance) from the private sector, was able to establish an initial picture of private finance

mobilised, 26% of which is also climate-related. More than two-thirds of these climate-related mobilised private funds (69%) are allocated to the energy sector. The majority of the mobilised climate funds (81%) is allocated to mitigation actions, with adaptation only representing 3%, and 16% allocated to both. Guarantees represent the instrument that mobilised the largest amount of financing (41%) followed by syndicated loans (27%). Finally, Asia is the largest recipient region (34%) of mobilised private finance followed by Americas (27%) and Africa (22%) last.

2. KEY EVALUATION THEMES

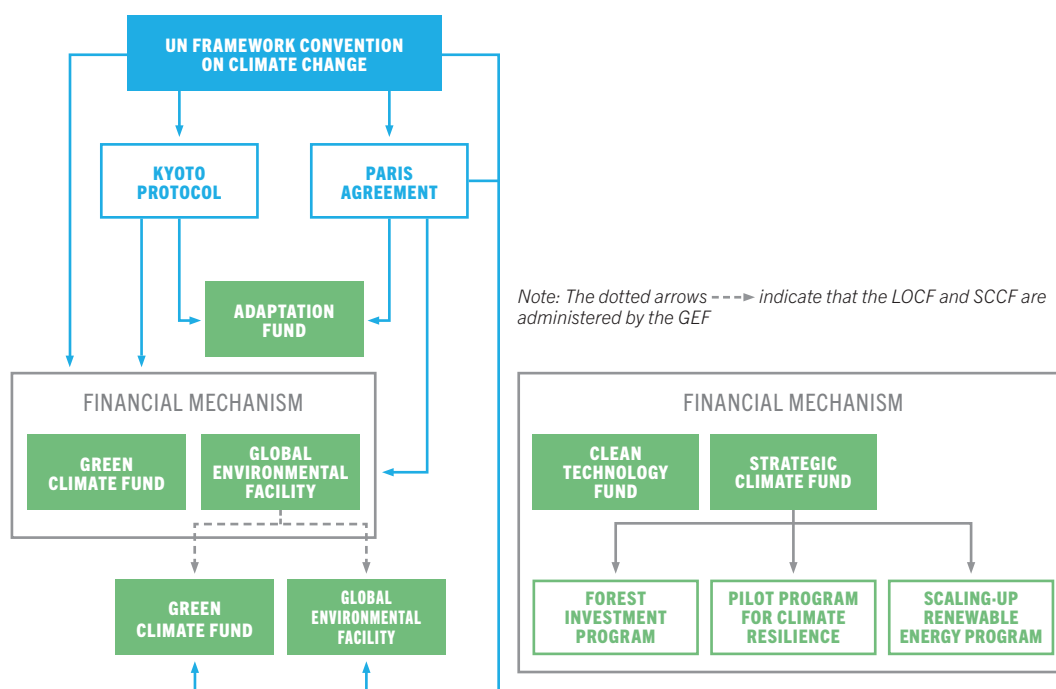
Within climate mitigation and the energy sector, the rise of private finance investment reflects the increasingly convincing business case. Renewable energy investments e.g. in solar, can in many cases compete against fossil-fuel investment returns. This on the other hand implies that there is less need for public funding, such as the development finance from Denmark to mobilise and “de-risk” these investments. However, the business case is less clear for investments within energy efficiency, which tend to be of a smaller nature and more long-term, and where the full life-cycle costs and returns need to be considered to make them profitable. For investments within energy efficiency, as well as forestry, water, (climate-smart) agriculture etc. public funding, such as development finance, is still needed to mobilise, leverage and “de-risk” private finance. The fact that Africa is mobilising the least, according to the OECD study mentioned above, is probably not surprising, as the perceived

investment risk - whether climate or non-climate investments - of Africa is high.

2.4.2 OVERVIEW OF THE FUNDS, THEIR NICHES, AND COMPLEMENTARITY

The following outline zooms in on the public finance flow, and the part that is provided through climate finance facilities, meaning a small share of the flows according to the CPI figure above. Many of the funds are associated and recognised by the UNFCCC. The figure below from the 2017 WRI report “The future of funds” illustrates the major multilateral climate funds, their relationship to UNFCCC and to each other. Denmark supports the Green Climate Fund, The Global Environment Facility, its Least Developed Country Fund (LDCF), and the Climate Investments Funds (CIF) (hosted and established by the Multilateral Development Banks, MDBs).

Figure 11: Relationship of climate funds to international climate agreements



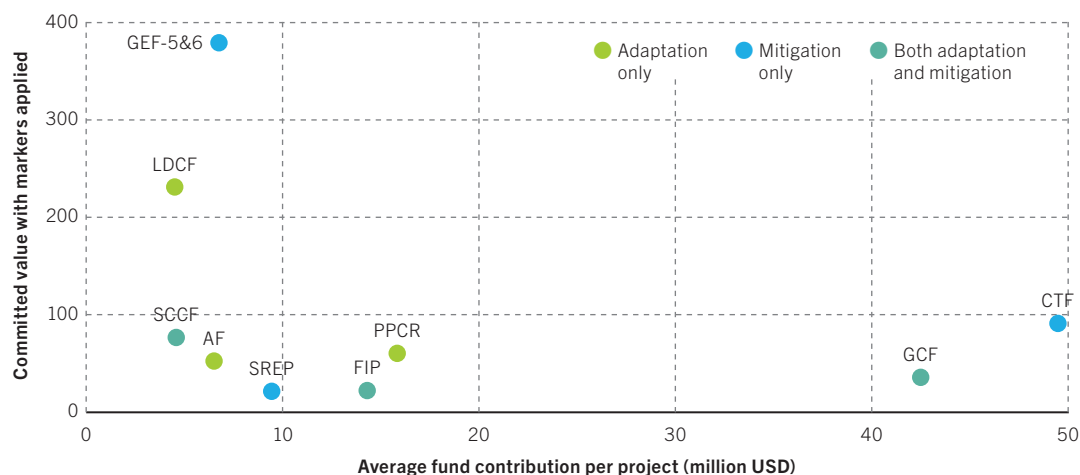
Source: WRI, 2017

The funds occupy different niches in terms of size, focus, access etc., though there is a continued discussion of overlaps and inefficiencies. Figure 12, from the same report, shows the thematic focus of

the funds, and the number of projects approved, and average size of projects (2017 figures) and illustrates some respective niches:

2. KEY EVALUATION THEMES

Figure 12: Climate finance funds, thematic focus, size of projects, number of projects



Note: AF, Adaptation Fund; CTF, Clean Technology Fund; FIP, Forest Investment Program; GCF, Green Climate Fund; GEF, Global Environment Facility; LDCF, Least Developed Countries Fund; PPCR, Pilot Program for Climate Resilience; SCGF, Special Climate Change Fund; SCF, Strategic Climate Fund; SREP, Scaling-Up Renewable Energy Program

Source: WRI, 2017

GEF is the oldest fund and delivers on all the environmental conventions, including UNFCCC. Countries are assigned a predictable envelope of funding through the so-called STAR system, which can be accessed through well-known implementing agencies primarily from the UN and MDB family. It operates primarily with grants. GEF itself address climate mitigation, while its sub-facilities, such as LDCF, address climate adaptation (in LDCs). GCF is on the other hand a relatively new fund, with as of yet a smaller portfolio, that caters for relatively larger-scale mitigation and adaptation projects, to be implemented through a variety of national government and non-government accredited entities, as well as international entities ranging from UN, MDBs, to private sector banks and NGOs.

There is no fixed country envelopes of funding, and GCF use the full range of financial instruments. CIF is the MDB's climate finance facility, established as an interim measure in 2008, with contributions from 14 donors, held in a trust in the World Bank. The funds finance both mitigation and adaptation investments of the MDBs, using a range of financial instruments, and sometimes as a CIF financed climate element of a larger MDB investment. The funds are accessed by developing countries through an expression of interest to the MDBs, and using a programmatic approach. CIF has four windows, with the Clean Technology Fund being the largest.

Below is a comparison table, comparing the GCF, GEF, and CIF.

Table 13: Comparison of features between selected climate funds

Criteria	GCF	GEF	CIF
Access and programming	First come, first serve. challenging access procedures and practice Increasing emphasis on country programming	Predictable envelope, STAR, depending on development, size of country etc. Programming in replenishment periods	Access through expression of interest to the MDBs. Programmed by the MDBs with the countries
Financial instruments	A wide range of instruments, however equity and guarantees under-utilised	Mainly grants, but increasing non-grant window	A wide range of instruments

2. KEY EVALUATION THEMES

A multitude of funding channels increases the possibilities of finance, seen from a recipient point of view, but it can also make the process more complicated, as underlined by Overseas Development Institute (ODI) (Climate Funds Update, version of November 2017). However, efforts are ongoing to ensure complementarity between the funds, based on decisions from the UNFCCC Conferences of the Parties, promoted by the UNFCCC Standing Committee on Finance, and in the respective board/councils of the funds (e.g. [*The GCF Operational Framework on complementarity and coherence*](#)).

A few joint efforts at country programming are underway. Likewise, there are examples of concepts being piloted through GEF or CIF funding, later seeking to upscale with GCF funding. At country level, efforts are likewise ongoing in some countries to facilitate a coordination of climate finance, but with numerous national recipients of external funding, and unclear coordination mandates of national institutions, it remains a challenge, amongst others mentioned in the DIIS working paper: 3 of 2018. An example is a country like Vietnam, where the UNFCCC and NDC work is anchored in the Ministry of Environment and Natural Resources, MONRE; while the Ministry of Planning and Investment, MPI, holds the mandate on SDG implementation, as well as overall strategic planning. Finally, the Ministry of Industry and Trade, MOIT, is where the energy sector and the powerful monopoly on energy production and supply - key for mitigation efforts - is anchored. The NDC partnership, <http://ndcpartnership.org/>, established in 2016 based on a German initiative and hosted by World Resources Institute (and supported by Denmark), is envisaged to establish a coordinated implementation of the NDCs. The partnership aims at fast-tracking climate and development action, and increasing alignment, coordination, and access to resources for NDC implementation. The NDC Partnership works at country level and globally, and may provide part of the solution regarding inefficiencies, overlaps etc.

2.4.3 PREVIOUS EVALUATIONS OF THE FUNDS

The funds are largely reviewed and evaluated by their own independent evaluation offices.

One of the 32 sub-evaluations as part of the **evaluation of GEF** 6th replenishment in 2018 conducted by GEF's independent evaluation office focused on the climate change mitigation area. It found that the GEF mitigation portfolio offers clear comparative advantage within the finance landscape. It highlighted GEF's role in the upstream work of developing supporting policy or regulatory framework conditions. It also highlighted GEF's ability to pilot approaches to be scaled up by other funds. It pointed at GEF's opportunity to combine the climate area with other challenges within environment (due to its broad convention mandate), leading to larger impacts. However, it found that many projects failed to install and/or report on the emission reductions, and no systematic tracking of results was taking place.

As a young fund, GCF does not yet have a lot of emission reductions to track, however, the 2019 **"forward looking performance review of GCF"**, conducted by the GCF independent evaluation office, highlights that GCF targets countries hit most by climate change and the sectoral needs expressed in the NDCs, especially within energy and food (less within transport, forests and ecosystems). However, the review also points to a number of challenges: The time it takes to be accredited, the time it takes to get a funding proposal approved by the board, and the time it takes to initiate implementation after board approval. In addition, the review zoom in on the quality of proposals: More than half of the proposals have no plan for baseline data collection, and 63% have no theory of change. There is furthermore an imbalance between mitigation and adaptation, where 44% of GCF's committed funds go to mitigation, 32% to cross-cutting, and only 23% to adaptation. Furthermore, GCF's co-finance ratio is relative low, and the use of non-grant financial instruments, especially guarantees, has not taken off to a sufficient degree.

2. KEY EVALUATION THEMES

CIF hosts an **Evaluation & Learning Initiative**, guided by an independent board, but not working as an independent evaluation office per se. Focus is on strategic and demand driven studies, which can act as applied learning, both for CIF and beyond. For instance an evaluation of transformational change in CIF, with recommendations for the broader application of climate finance, was recently concluded. **CIF itself was (semi-independently) evaluated in 2014**, where an Evaluation Oversight Committee consisting of MDB staff together with an International Reference Group, selected a consultant to conduct an evaluation. The evaluation, which is already five years old, aimed at providing lessons learned, which could also be used in the establishment of GCF. The evaluation recognised that CIF was newly established and different (at that point) in terms of scale e.g. having larger programmes at country level. It pointed at initial governance/bureaucratic challenges and challenges in the country programming, it revealed that transformational change (despite being the objective) was not consistently pursued, that scale up and replication was often lacking, and hints that leverage numbers were not solid. Some of these themes were later addressed in dedicated evaluations by the Evaluation & Learning Initiative.

Based on this overview of climate finance flows and the leveraging of private finance, of the climate funds with Danish support, of their challenges identified in their evaluations, and the knowledge about the Danish support from chapter 1, some of the questions the Danida evaluation could include are:

- **How has Denmark strategically placed itself in the finance landscape in terms of use of “intermediates” e.g. climate finance mechanisms?**
- **How has Denmark leveraged private finance and de-risked climate investments incl. reflected the market developments, which makes energy efficiency, forestry and others areas more suitable targets for public finance de-risking?**
- **How has Denmark prioritised its engagement (including human resources) with the respective funds it support, what have been the key agendas of Denmark (especially from a mitigation point of view), and what has Denmark gained from its engagement with the funds?**
- **How has Denmark promoted the division of labour and respective niches of the funds? How has Denmark supported the coordination, complementarity and coherence between the funds?**
- **How has Denmark supported partner countries in accessing and establishing coordination of climate finance? How has Denmark contributed to a “bi-multi approach” to climate finance at country level?**
- **At an overall level, what has worked well, less well and why?**

3. DESIGN OF THE EVALUATION

The study provides a first overview of the mitigation support, with some reservations, and identifies a few trends. It also covers to a degree the context of the mitigation support - both the Danish context in the form of the strategic frame for support (which was established as a follow up to the earlier CE evaluation), and the global context of the Paris Agreement, the NDCs, as well as the trends and developments in climate finance and funds.

The study has highlighted a number of possible questions for the evaluation to explore. They can be summarised into **four overall key questions which seem critical for the evaluation to address:**

- 1) Has the **mitigation support delivered results aligned to the Danish** strategic direction of climate development cooperation (provided the direction is clearly defined, also for the non CE support)?
- 2) Has the **mitigation support responded well to the needs of, and positively influenced**, the global and developing country ambitions, challenges, and the developments in climate science and finance (with a focus on developing countries)?
- 3) Does **the support deliver successful and effective overall results** in terms of climate change mitigation and sustainable development, good and “fair” results at an overall level and is the strategic direction a good fit with Denmark’s comparative advantages and strategic position in terms of influencing the global mitigation agenda?
- 4) What **are the lessons learned** and what are the strategic and operational implications for Denmark’s future support to mitigation?

The study is packed with **sub-questions supporting these broad questions:**

In chapter 1 a list of questions critically addressed the mitigation support provided (as revealed in trends), and asked whether the support lead to better results than its alternative e.g. a more broad sector, more LDC oriented, and more bilateral focused support, that could potentially be captured as a pro-pro low carbon development.

In chapter 2, three lists of questions are covered in three different themes: First, a list of questions about the strategic frame for the support, and its operationalisation including its monitoring framework. Secondly, a list of questions about the Paris alignment of the mitigation support, including the overall design of the support so that it delivers on the transformational change required, but also whether Denmark’s supports fits the delivery on the specific country ambitions expressed in NDCs, and support to increase ambitions. Thirdly, a list of questions about the strategic prioritisation of Danish engagement in climate finance, both when it comes to “increasing the pie”, i.e. mobilising and leveraging more climate finance, as well as and ensuring the best possible use (and channelling and coordination) of climate finance which exists, whether engaging in fund boardrooms or in-countries.

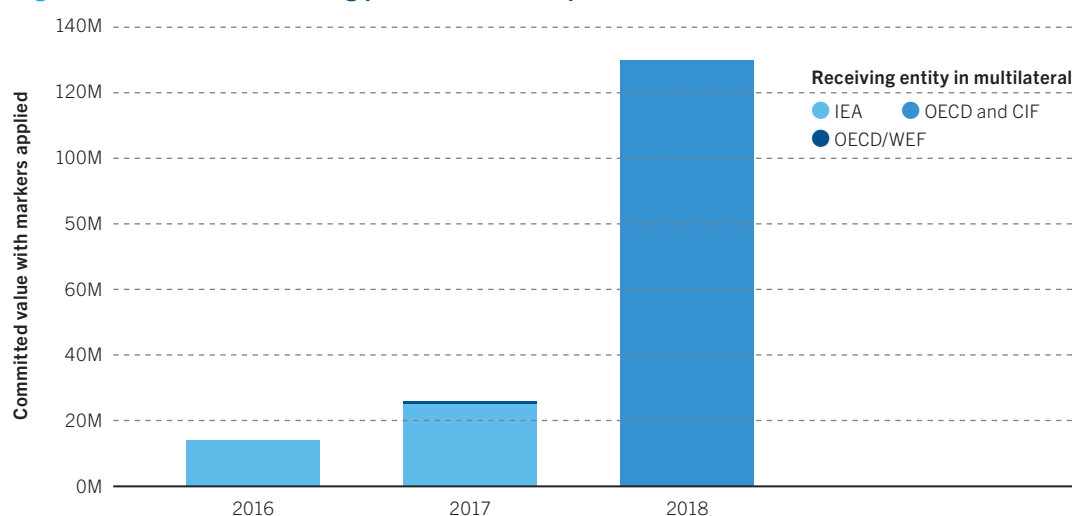
In addition to the evaluation questions and themes above, a **set of more methodological elements stands out:**

Firstly and foremost, the evaluation could usefully establish a more solid overview of the volumes of mitigation (and cross-cutting) support, than has been possible in this study. This includes obtaining the Rio marking of all entries in the data set, as well as verifying the data set.

Secondly, in terms of case country choice, six potential countries, out of which a few will be selected for the evaluation. The countries proposed will certainly provide interesting insights, and it may be important to identify a set of countries (out of the six), which allows some focus on non-energy mitigation support. When selecting the final set of countries, it seems prudent to first and foremost select countries on the basis of strategic learning opportunities. With regard to **partners of focus**, it could be relevant to zoom in on some of the newer recipients of Danish climate finance, such as IEA, OECD, and IRENA. These institutions are not traditional development-aid recipients, less used to handle fixed development programmes and implementation in development countries, but nevertheless interesting intermediates in facilitating enabling frameworks for mitigation action. Figure 13 shows the development in the support to OECD and IEA.

3. DESIGN OF THE EVALUATION

Figure 13: Overview of funding provided to focus partners



Source: Own analysis based on Ministry of Foreign Affairs data set described in chapter 1

It is suggested that the evaluation should also assess the support to **civil society**, i.e. it could be interesting to focus on selected Danish NGOs with a firm focus on mitigation, and which have received framework support throughout the years. This could include (i) Vedvarende Energi, who work on citizen engagement in renewable energy schemes (current projects in Denmark, Mali, Burkina Faso, Kenya and Mozambique), and (ii) Verdens Skove who work on forest carbon schemes (current projects in Denmark, Honduras, Nicaragua, Ethiopia and Uganda – the latter two since 2017). Even if the project countries of these NGOs may not be included in the evaluation's target countries, their specific mitigation approach and the relative successfulness could be useful to understand.

Particular issues of interest for the evaluation could be the success and lessons learnt from efforts to promote broad based citizen engagement and advocacy in mitigation schemes specifically and global climate debates more generally.

Finally, it should be noted that the evaluation should build upon and coordinate with other recent or on-going evaluations, e.g. the evaluation of IFU (especially with a view to leverage private finance for climate impact, and the use of public funds where de-risking is necessary), the adaptation evaluation.

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USEFUL LINKS AND RESOURCES

OECD DAC External Development Finance Statistics for Climate Change: <http://www.oecd.org/dac/financing-sustainable-development/development-finance-topics/climate-change.htm>

Climate Action Tracker: <https://climateactiontracker.org/>

Paris Equity Check - Country NDC fact Sheets: <http://climatecollege.unimelb.edu.au/ndc-indc-factsheets>

INDC/NDC & Pledges Pipeline: <https://wedocs.unep.org/bitstream/handle/20.500.11822/21739/PledgesPipelineToWeb.xlsx?sequence=2&isAllowed=y>

NAMA Pipeline: <http://www.namapipeline.org/>

NDC Partnership: <http://ndcpartnership.org/>

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