Annex 9: Thematic (Climate Finance) Sub-Evaluation

A9: 1 Introduction

A9: 1.1 Objective of the evaluation

This thematic sub-evaluation on climate finance explores the coherence and effectiveness of Danish support to building the international climate finance architecture, supporting national climate finance efforts, and leveraging additional funds to help meet the USD 100 billion per annum target by 2020. The sub-evaluation seeks to answer the following questions:

Relevance

- What is Denmark's strategy towards mobilising climate finance and how has this developed since 2005?
- How consistent and coherent are Denmark's efforts in:
    - supporting the international climate architecture?
    - establishing climate finance capacity in developing countries?
    - leveraging third-party funds in its climate portfolio?
    - supporting innovative financing structures (for both public and private sectors)?

Efficiency

- How efficient have Danish efforts been in sourcing and developing climate finance projects?
- What have been the key operational barriers to developing a strong climate finance portfolio?

Effectiveness

- How does Denmark measure value for money of climate finance efforts (*e.g.* flows, leverage effects)?
- How effective have Danish efforts been in:
    - supporting the international climate architecture?
    - establishing climate-finance capacity in developing countries?
    - leveraging third-party funds in project portfolio?
    - supporting innovative financing structures (for both public and private sectors)?

Impact

- Is there evidence that climate finance outcomes have resulted in transformational impacts by:

  - encouraging the longer-term commitment and scale-up of other public funds?
  - crowding in private sector finance?
  - building sustainable climate-finance markets in a specific sector or region?
- Is there evidence that Denmark has achieved influence or results beyond the pro-rata provision of finance?

Sustainability

- How are results fed into the development of future climate-finance strategy and programme approaches?

A9: 1.2 Scope of the evaluation

A number of projects from the evaluation portfolio with specific climate finance relevance have been identified to form the core of this sub-evaluation. These include both those projects where Denmark has capitalised or supported the development of an international climate fund, as well as those where it has supported national climate-finance policy or innovation around specific instruments. A summary of the projects is set out below (in chronological order of first investment):

Least Developed Countries Fund (2002, 2010, 2013)

The Least Developed Countries Fund (LDCF) was established to address the special needs of the Least Developed Countries (LDCs) under the United Nations Framework Convention on Climate Change (UNFCCC). Specifically, the LDCF was tasked with financing the preparation and implementation of National Adaptation Programmes of Action (NAPAs). NAPAs use existing information to identify a country's priorities for adaptation actions. Consistent with the findings of the NAPAs, the LDCF focuses on reducing the vulnerability of those sectors and resources that are central to development and livelihoods. These sectors include: water; agriculture and food security; health; disaster risk management and prevention; infrastructure; and fragile ecosystems. In addition, NAPA implementation projects under the LDCF are designed entirely in accordance with country priorities and executed by national stakeholders, and involving active participation of vulnerable communities. This grant is one of four made by Denmark to the LDCF since 2002, totalling DKK 221.4m.

Danish Carbon Fund (2005):

The Danish Carbon Fund (DCF) is a private–public partnership that aims to mobilise new and additional resources to address climate change and promote sustainable development. The DCF was designed to purchase credits with the clean development mechanism and joint implementation mechanisms under the Kyoto protocol. A portion of the DCF capital (USD 5.125 million) was committed to the World Bank's Community Development Carbon Fund (CDCF). The DCF became operational in January 2005 with an initial capitalization of EUR 26.4 million contributed in equal parts by four Fund Participants – the Royal Danish Ministry of Foreign Affairs and the Ministry of

Environment and two private sector companies, Elsam Kraft A.S. and ENERGI E2. The fund was subsequently opened to other private sector entities, and closed at EUR 90 million in 2008.

Climate Investment Funds (2009, 2010, 2012)

The USD 7.6 billion Climate Investment Funds, managed by a secretariat in the World Bank, aim to provide a platform for scaling climate finance across a number of thematic areas (sustainable energy; adaptation; forestry). Together, the funds are providing 63 developing and middle-income countries with resources to mitigate and manage the challenges of climate change and reduce their greenhouse gas emissions. Denmark has made a total of six contributions totalling more than DKK 230 million to three of the four funds – the Pilot Programme for Climate Resilience (PPCR), the Forest Investment Programme (FIP), and the Scaling-up Renewable Energy in Low Income Countries Programme (SREP). The Climate Investment Funds have been the largest climate finance platform established to date and have offered an interim financing solution in the absence of an agreed climate finance structure.

Global Climate Partnership Fund (2011, 2014)

The Global Climate Partnership Fund (GCPF) contributes to a reduction of greenhouse gas (GHG) emissions by providing financing on commercially viable terms to small-scale energy efficiency and renewable energy investments in OECD/DAC countries with a focus on middle-income emerging economies. It does this primarily through loans via financial intermediaries although direct investments are also possible. The fund was established in 2010 by the KfW banking group and the German Ministry of Environment (GMoE). It offers shares to eligible investors (both public and private), and funds are managed by an investment manager.

Shares are divided into three classes, with *A-Shares* intended to be held by private and institutional investors and having first call on dividends, *B-Shares* by development finance institutions (KfW, International Finance Corporation, Austrian Development Bank), and *C-Shares* by donors (Denmark, Germany UK). C-Shares can be reported as overseas development assistance (ODA) as they do not provide a commercial dividend to the shareholder and returns support a technical assistance facility. Denmark does not have a board seat on the GCPF. The GCPF has received two grants from the Climate Envelope totalling DKK 65 million in 2011 and 2014.

Partnership for Market Readiness 104.G.15-10 (2012)

The Partnership for Market Readiness (PMR) is designed to bring together developed and developing countries by way of a platform for sharing experiences, to foster new and innovative market-based instruments (*e.g.* carbon markets), and to build market-readiness capacity for countries to scale up climate change mitigation efforts. The PMR is designed to be a country-led initiative, with the implementing countries setting forth their own activities and plan for funding and implementation. The PMR is a grant-based global partnership mechanism. The PMR provides grant funding for market-readiness activities; to pilot and test new concepts for market instruments (*e.g.* carbon pricing, emissions trading, crediting mechanisms, and carbon taxes); to provide a platform for technical discussions; and to share best practice. Most of the major economies are participants. The PMR received one grant from the Climate Envelope of DKK 29.5 million in 2012.

Danish Climate Investment Fund (2012, 2013)

The Danish Government has established a climate investment fund to promote climate investments in developing countries and emerging markets, thereby contributing to reducing global warming and promoting transfer of Danish climate technology. The fund offers share capital to establish companies in collaboration with Danish businesses, or co-invests in major climate projects which include Danish technology and know-how. IFU, an investment fund for developing countries, is the fund manager of the Danish Climate Investment Fund (DCIF).

The fund was established as part of the Danish contribution to the international commitment to mobilising USD 100 billion annually from 2020, and in particular encouraging private sector investment. The DCIF has mobilised DKK 1.3 billion of public and private funds, of which the Danish Government and IFU have provided DKK 525 million (from both Climate Envelope and other contributions from the aid budget). Pension funds, investment funds, and foundations have provided a further DKK 775 million. The fund is expected to participate in investments with a total value of between DKK 8–10 billion.

NAMA Facility (2014)

The NAMA Facility established in 2013 is a UK–German partnership to finance Nationally Appropriate Mitigation Actions (NAMAs) in developing countries. The Green Climate Fund will become the main facility for financing NAMAs, but in the interim, the NAMA Facility remains one of the few options for direct support. The NAMA Facility selects its funding proposals through a competitive bidding process among countries. Technical assistance is provided, together with grants and loans for implementation. Three calls for developing country bids have been made to date, with a fourth expected in 2015-16. The UK and Germany have contributed EUR 119 million with both countries pledging additional funding for 2015/2016. Denmark joined the NAMA Facility as an additional donor providing financing amounting to DKK 73.8 million in 2014, together with the European Commission, which pledged EUR 15 million. The Climate Envelope 2015 is expected to provide further funding from the 2015 Climate Envelope which will be used towards a fourth call to be announced in 2015/2016.

Global Innovation Lab for Climate Finance (2015)

The Danish Government is proposing to support the Global Innovation Lab for Climate Finance (The Lab) and the Inter-American Development Bank (IADB) to develop and pilot test the Energy Savings Insurance (ESI) instrument that aims to overcome key financing barriers encountered by companies when investing in energy efficiency measures. The programme will develop an insurance model that underwrites minimum savings estimated for specifically defined energy efficiency measures. The project aims to overcome investor perceptions around risk and payback on energy efficiency measures. The model will be tested by IADB in Mexico, with a view to scaling up across Latin America, and through global outreach to other multilateral development banks globally.

In addition, Denmark has funded a number of other climate-related projects outside the Climate Envelope. These include a contribution to the Sustainable Energy Fund for Africa (SEFA). Danida has invested USD 55 million in the African Development Bank administered fund. This fund can make grants or equity to renewable energy projects, and has taken a position in the new African Renewable Energy Fund, which is managed as a private equity fund. Danida has also made an increased contribution to the Global Environment Facility (GEF) of USD 79.88 million for the Sixth Replenishment.

A9: 1.3 Methodology

The sub-evaluation was based on a review of available documentation (project documents, ex-ante appraisals, and mid-term/ex-post evaluations). Interviews were undertaken with the relevant project managers and management within the partner institutions, together with the responsible Danida project officers.

A9: 2 Context

Denmark has long had a commitment to support efforts to scale up climate finance. The country's position on climate finance is set out across a number of strategic frameworks. The 2012 'right to a better life' strategy discusses promoting financial solutions to energy and climate change. The 2013 'green growth for all' strategy recognises Denmark's commitment to supporting the Green Climate Fund and the GEF Sixth Replenishment. In the interim, it sets out a Danish commitment to provide support through other interim climate funds, such as the Climate Investment Funds. The strategy identifies that overseas development assistance will not be sufficient to meet financing challenges, and that it should be used as a catalyst for scaling up funds. It calls for new innovative sources of finance and incentives to support mobilising private sector funds and cites the Danish Climate Investment Fund in this regard. The strategy also calls for innovative approaches to developing at country level to scale up finance for green growth. In terms of energy, the strategy has a particular focus on fossil fuel subsidy reform, together with investments in sustainable energy through the main climate funds.

Denmark has also been engaged in the international dialogue of climate finance. For example, in October 2013, Denmark hosted a high-level meeting on the topic with the UN Secretary General. At the summit, developed and developing countries and private sector representatives examined how governments can mobilise private climate finance through the enhancement of enabling environments and the use of financial instruments. At COP 19 of the same year, the MCEB minister chaired the High Level Dialogue on Climate Finance.

In December 2014, Denmark published its Organisational Strategy for the Green Climate Fund. The Green Climate Fund (GCF) plays a central role in Denmark's climate finance strategy going forward, and Denmark has consistently supported the development of a global financing mechanism in the UNFCCC negotiations. Denmark shares a board seat with the Netherlands on the GCF. A team consisting of staff from the Danish Ministry of Finance, the MCEB and the MFA advises the Danish representative on the GCF Board. The GCF has thematic funding windows for mitigation and adaptation and will also have a private sector facility that will allow it to directly and indirectly finance private sector activities. The GCF will not 'crowd out' potential financing from other public and private sources by monitoring its concessionality, and only revenue-generating activities that are financially robust will be supported through loans. It is envisaged that the majority of funds provided will be grants.

The GCF mobilised USD 9.3 billion at its first funding conference in late 2014, and is seeking contributions from both developed and developing countries, together with private institutional investors and foundations. Denmark and the Netherlands have worked to contribute to the principles for the private sector facility, and to promote transparency and reasonable administrative policies. Denmark has committed DKK 300 million from the Climate Envelope (split evenly between the two frames, and another DKK 100 million from other environmental contributions).

A9: 3 Findings

A9: 3.1 Relevance

This chapter explores Denmark's strategy towards climate finance in terms of its coherence and consistency over time. The evaluation has the following findings:

Finding 1: Denmark has a strong commitment to climate finance, with a broad range of initiatives, but lacks a detailed strategy in relation to using its funds in a catalytic way.

Denmark has made a clear commitment towards supporting the scaling-up of international climate finance. This reflects international commitments made in the Copenhagen Accord to scale up funding. This was further operationalised at COP 16 in Cancun by a commitment from industrialised countries to mobilise funds equivalent to USD 100 billion per year by 2020 from both public and private sources. The Climate Envelope evolved to become the vehicle to meet Denmark's fast-start commitment.

Denmark has also been an early supporter of the Green Climate Fund (also adopted in COP 16), which is intended to be the main fund for supporting global climate change finance.

Denmark's activities in relation to climate finance can be broadly categorised as follows:

- *Supporting interim global finance mechanisms*: This involves providing funds to global climate finance (Climate Investment Funds, Least Developed Countries Fund (LDCF), NAMA Facility, small island developing states (SIDS DOCK)) as the political negotiations have progressed, and more recently to the Green Climate Fund;
- *Providing assistance to climate finance capacity in developing countries*: This has been done both through developing in-country programmes whether through multilateral (Partnership for Market Readiness) or bilateral channels (country programmes);
- *Using Danish public capital to attract and leverage third party finance*: Denmark has deployed public capital with the aim of encouraging other public and private institutional investors to make commercially viable investments (Danish Carbon Fund, Global Climate Partnership Fund, Danish Climate Investment Fund);
- *Undertaking innovation around risk sharing*: Denmark has used funds to support the design and development of new mechanisms that address clear market failures and support the sharing of risk (Global Innovation Lab for Climate Finance).

However, Denmark's strategy in relation to climate finance – particularly within the Climate Envelope – remains poorly defined. There is a high-level commitment to support the international climate finance architecture and to mobilise finance, but little detail on how this should best be pursued, or how Denmark's limited funds might best be used in a way to leverage third-party capital most effectively (instruments, financing vehicles etc.). It should be noted that the MCEB has produced a general financing strategy in June 2014, but that this does not specifically cover the Climate Envelope.

Finding 2: Denmark has consistently supported the international climate finance architecture from before the development of the Climate Envelope.

Denmark has been making contributions to international climate-finance mechanisms since 2002 – when it supported the LDCF. In the absence of an internationally agreed climate-finance mechanism – during the run up to the Copenhagen COP in 2009 and in the context of the fast-start period – Denmark became an early backer of a range of multilateral instruments. It should be recognised, however, that the scale of the Danish contributions (while significant to Denmark) are relatively small in the context of the initiatives being supported. From this perspective, the importance of the Climate Envelope lies as much in its political signalling as in its financial impact. For example, the MFA staff often described the sizing of Climate Envelope contributions to specific funds as being based on Denmark's pro-rata share of GDP or population compared with other donors. The objective was that Denmark should do just enough to fulfil its international obligations, and to be present in as broad a range of political initiatives as possible. Denmark wished to be regarded as a good global citizen, doing its share in relation to meeting the USD 100 billion per annum climate finance target.

Many of the facilities supported are multi-donor investment platforms such as the Climate Investment Funds (CIFs), where it has made six separate contributions to the sub-funds over the period 2009-2012. Denmark has supported a range of other international finance structures and has recently provided funds to the UK-German NAMA facility, which finances national mitigation plans. The breadth and regularity of Danish support for these platforms demonstrates a high level of consistency in Denmark's support of international climate finance structures. Where Denmark has supported more than one platform in a given thematic area (*e.g.* forestry through UN-REDD, the Forest Investment Programme (FIP), and the Forest Carbon Partnership Facility (FCPF)), this has reflected a desire to hedge the risk of backing a single untested initiative and the desire to address different stages in the climate finance supply chain (market readiness, direct investment, and carbon market support). Going forward, some of these facilities are likely to be absorbed by the more consolidated international architecture under the Green Climate Fund, or to evolve into innovation or implementing agencies under the Green Climate Fund. Denmark is turning its focus to support the GCF (to which is has made commitments of DKK 400 million), while continuing to explore ongoing support of existing initiatives.

Finding 3: Denmark has supported the development of national-level climate finance capacity through multilateral platforms, but sometimes support at country level has been through non-climate envelope funds.

Within the Climate Envelope, Denmark's focus on supporting climate finance capacity at a developing country level has primarily been through multilateral channels such as the Partnership for Market Readiness (PMR) and nationally appropriate mitigation actions (NAMA) facility. On the basis of the two country sub-evaluations (Kenya and Vietnam), there is limited evidence that Denmark has sought to develop climate finance structures as part of its climate envelope allocation. There were, however, contributions to a non-state financing facility (AECF-REACT) in Kenya. More broadly, in several countries Denmark has engaged on national structure for climate planning and finance outside of the climate envelope, such as the costed climate change action plans in Kenya prepared under the Natural Resource Management (NRM) programme. The Low Carbon Transition Unit (LCTU) also has a remit to support the development of market mechanisms in those countries where there are Danish country programmes (China, Mexico, South Africa, and Vietnam). Its remit includes investment planning, including the use of public–private partnerships (PPPs), finance leveraging, and other instruments that can help to minimise investment risk. Examples developed under the global frame include the development of the Green Investment Facility (GIF) in Vietnam, and the Energy Savings Insurance mechanism in Mexico.

Finding 4: Denmark has not developed a coherent approach in relation to expectations of co-finance and leverage on the basis of its own Climate Envelope contributions.

While a strategy of political signalling and multilateral engagement is important, it does not actively promote consideration of the effectiveness of these funds from a co-finance, leverage, or mobilisation perspective. Given the relatively modest scale of the Climate Envelope, this might be expected to be a central consideration in Denmark's approach. The Climate Envelope, however, lacks a clear strategy in this regard. Questions that might be considered are:

- How can the Danish contribution in mobilising additional co-finance be most catalytic?
- How can Danish funds best reduce risk perceptions of other public/private investors?
- How can the Climate Envelope best scale national climate finance efforts?
- How might the Danish Government define and measure leverage?

That is not to say that Danish contributions have not resulted in catalytic co-finance or leverage, and indeed many funding decisions have this at their core. Rather that it has been approached in an ad hoc manner, and these questions are not addressed in a systematic way during project design or appraisal.

Finding 5: There is a clear theme of innovation that can be recognised through Danish Climate Finance Contributions.

There is good evidence of strong innovative practice within the Climate Envelope. Both the MFA and the MCEB identified innovation as a key element of what was expected from their respective 'frames' within the climate envelope (global and poverty). For example, the DCIF created one of the first successful structured funds to blend public and private institutional capital at scale. The LCTU is promoting an innovative bilateral model for government-to-government cooperation on areas of Danish technical competence. In the 2015 Climate Envelope, the Global Frame is seeking to support the Climate Innovation Lab in developing innovative insurance mechanisms to address market failures in the financing of energy efficiency. While innovation is referenced in the strategic framework for natural resources, energy and climate, this concept of innovation in relation to climate finance is not explored in more detail.

A9: 3.2 Efficiency

Finding 6: Denmark has pursued a relatively efficient, if opportunistic approach to climate-finance initiatives, particularly in relation to funding vehicles.

The Danish Government has been relatively efficient in relation to developing and implementing climate finance initiatives. Both ministries continue to identify and oversee climate finance initiatives, with the Global Frame tending to support mitigation-orientated financing approaches, and the Poverty Frame supporting multilateral partnerships (*e.g.* World Bank-managed projects). Some initiatives have been proactive and required significant investment in terms of design (such as the DCIF). Others are third party initiatives that appear to have been identified for funding (*e.g.* Global Climate Partnership

Fund (GCPF), nationally appropriate mitigation actions (NAMA) facility) in a more opportunistic way. Funds have been disbursed by the MFA in a timely and efficient manner.

Where the Danish Government has selected a climate-finance mechanism, it has tended to provide support over time with multiple tranches of funding. This has helped improve management efficiency in terms of avoiding additional design and oversight costs associated with new programmes. For example, this has been the case with Pilot Program for Climate Resilience (PPCR), Forest Investment Programme (FIP), the Danish Climate Investment Fund (DCIF), and the GCPF. In some cases, Climate Envelope funds have been blended with other environmental funds (*e.g.* DCIF), thereby creating funding synergies.

The MFA and the MCEB are cooperating to provide joint contributions to the Green Climate Fund. This increasingly represents a significant share of the Climate Envelope. The joint contributions recognise that the GCF will meet the objectives of both Frames (with an intended balance between mitigation and adaptation). The GCF relationship is also being managed in a collaborative way, in cooperation with the Ministry of Finance.

Finding 7: There have been a number of operational barriers to developing a more efficient climate finance portfolio.

There is some evidence that the development of a coherent approach to climate finance has been hampered by the institutional arrangements around the Climate Envelope. Staff and expertise are disbursed across institutions. The separation of administrative and technical roles for Global Frame projects between the MFA and the MCEB creates additional layers of bureaucracy and may contribute to a lack of clarity in terms of oversight and governance. In one case, the MCEB and the Danish Energy Agency (DEA) seem to be leading on the governance of Poverty Frame initiatives (*e.g.* Partnership for Market Readiness (PMR)) with little evidence of engagement within the MFA. For the GCPF, which had been funded by both Poverty and Global Frames, it was not clear to the evaluation team which institution was taking the primary institutional relationship lead.

The number of climate finance initiatives funded has created a significant demand in terms of staff oversight. There is some evidence that the mismatch between the number of projects and staff resources is preventing Danish Government officers from engaging fully during programme implementation, with contact often restricted to annual governance or board meetings (*e.g.* CIFs). From a Global Frame perspective, the level of engagement varies, with greater engagement in those programmes where Denmark has a board seat (GCF, NAMA facility, Climate Change Adaptation Programme), than those where it does not (*e.g.* GCPF). The issue of coordination is not helped by regular staff rotation within both ministries, which results in institutional memory loss, particularly in relation to longer-term climate finance projects where the Danish contributions may already be 4–5 years old.

Efficiency may have become a more important consideration than effectiveness in some cases. For example, a second tranche of funding was provided to the GCPF on the basis of efficiency considerations, despite the technical advisory service (TAS) appraisal indicating that it would not have recommended providing the funds from an effectiveness perspective.

A9: 3.3 Effectiveness

Finding 8: Denmark has provided strong and consistent support to the international climate-finance architecture, and those funds supported have successfully mobilised co-finance.

The multilateral climate finance initiatives supported by Denmark have broadly been successful in attracting significant volumes of co-finance to address a range of climate issues, covering mitigation, adaptation, and forestry. For example, by the end of 2014, the Climate Investment Funds supported by Denmark had successfully mobilised more than USD 2.4 billion of donor funds for direct investment in climate-related projects and investments. The GCF remains under development and is only expected to be fully operational in late 2015. However, there are pledges in excess of USD 10 billion, of which Denmark has pledged and committed approximately USD 70 million.

Finding 9: The effectiveness of large climate-finance initiatives is difficult to measure due to the long timescales required for pipeline development and investment approval.

While the ability to attract funds has been relatively successful, the disbursement of funds by specific projects has been challenging in terms of timing. The reasons for this are not clear, but reasons may include the higher risk aversion of multilateral funds and intermediaries when compared to bilateral programmes and their overly optimistic target setting during design. For example, by late 2014 the Scaling-up Renewable Energy Program (SREP) had approved projects totalling USD 136 million (17% of pledges) but had made disbursements of only USD 10 million. As such, climate outcomes in many cases remain expected rather than actual (*e.g.* SREP expects to deliver 524MW of clean energy capacity and 5 million people with improved access to energy). Even where disbursement rates are higher (*e.g.* UN-REDD), this may in part be accounted for by the fact that disbursement occurs from the main fund to the respective UN agencies, rather than at project implementation level. Elsewhere, while the DCIF had funded four projects by late 2014, most of its investments remain at pipeline stage.

Elsewhere, progress has been quicker. For example, by the end of 2014, the GCPF had disbursed USD 160 million of sub-loans that were delivering in excess of 500 million MWh of energy savings per annum and more than 100 million tCO2e in greenhouse gas emission reductions, with a "cost" of USD 12.8 per tCO2e expected lifetime savings. For example, by the end of 2014, the GCPF had disbursed USD 160 million of sub-loans delivering lifetime savings of 15.9 million MWh of energy savings and more than 5.6 million tCO_2e in greenhouse gas emission reductions, with a "cost" of USD 12.8 per tCO2e expected lifetime savings. The GCPF Board assesses this to be good efficiency in the use of the public sector contributions.

Finding 10: Denmark has provided strong support to build climate finance architecture and capacity at the national level

The Climate Envelope has been relatively inactive in terms of supporting national-level climate finance initiatives through bilateral country programmes. At a multilateral level, the Climate Envelope is engaged through the Partnership for Market Readiness (PMR) in building capacity within the major emitting developing countries to develop financing mechanisms to support mitigation. These include carbon finance, emissions trading, carbon taxes, and other instruments. As with the global climate finance platforms, the PMR is a relatively slow moving process, with national strategies and plans only now being implemented.

As a result, the effects in terms of climate finance mobilisation are yet to be seen. Nonetheless, the PMR has been identified as an effective platform to build confidence among developing countries with regard to the feasibility of supporting investment in low carbon development. The nationally appropriate mitigation actions (NAMA) facility also provides support to develop national level mitigation finance mechanisms. It should be noted that the majority of national-level efforts to date have focussed on building capacity and infrastructure for financing mitigation. With the exception of the LDCF, there has been less focus on mobilising adaptation finance at the national level.

Finding 11: Many of the programmes report strong leverage and mobilisation effects, but there is no clear picture on what leverage means or how it should be measured.

Denmark had early success in mobilising private climate finance through the Danish Carbon Fund managed by the World Bank, which began in 2005 and attracted four major private sector investors alongside the Ministry of Climate and Energy. A number of the current Climate Envelope financed programmes report strong co-finance and leverage effects. The Climate Investment Funds report mobilisation ratios of 1.6:1 (PPCR), 3.2:1 (FIP), and (SREP) 8:1 with up to 20:1 for private sector projects. The DCIF has leveraged DKK 744 million of private institutional funds alongside DKK 525 million of public funds, and expects to take positions in projects with a value of between DKK 8–9 billion. At a country programme level, however, there is limited evidence of projects mobilising private finance, despite this being a stated, if poorly defined, objective of several of the projects funded.

Despite the impressive claims of some projects, it is often not clear to what extent funds are actually being leveraged, whether they can be considered truly additional, and what share is public versus private. For example, within the Climate Investment Funds (CIFs), leveraged funds are often provided by the multilateral development banks themselves as part of their commitment to leverage their investment pipelines, and are in this sense not truly additional. On other occasions, the intention to generate (private sector) leverage has yet to be achieved. For example, within the GCPF, the original concept was that Danish C Shares would be able to leverage private capital by a factor of up to 5:1. However, to date there has been limited investment by the private sector (only 10% of the funds as of end 2014), and Denmark's position in the fund is covering the risk of multilateral development banks and development finance institutions (DFIs), who, it could be argued, should be covering their own risk. We understand that the MFA are initiating work to explore the leverage effects of the climate envelope portfolio.

Finding 12: Denmark can demonstrate some track record in developing innovative climate financing structures.

Denmark has some track record in respect of climate finance innovation. The Danish Carbon fund, established in 2005, was an early attempt to help scale climate change finance flows to support the Kyoto Protocol architecture. Denmark also established the DCIF in 2012, which has been identified as one of the first climate At the UN Climate Summit in September 2014, the Danish Government announced its support to an insurance mechanism guaranteeing the investments returns on energy savings, the so-called "Energy Savings Insurance" (ESI).

Denmark is providing funds for an ESI pilot program in Mexico and further scaling up in the Latin American and Caribbean region in collaboration with the Inter-American Development Bank (IADB). The ESI instrument was initiated by the MCEB and developed in context of the Global Innovation Lab for Climate Finance. Mostly, Denmark has bought into innovative funding facilities developed by others (*e.g.* the GCPF share capital structure).

A9: 3.4 Impact

Finding 13: It is too early to judge the overall impact of Denmark's climate-finance efforts, but there is some early evidence that transformational change is possible.

Given the stage of implementation of climate-finance-oriented projects, it is too early to make a judgement with regard to the overall long-term impact of the projects financed from a development outcomes perspective. However, more can be said about the impact on the development of climate finance itself. The evaluation finds that the Danish Government's steady contribution to the multilateral climate finance architecture has provided an important statement of support, even where the scale of Danish funds has been relatively small in relation to overall donor contributions.

Denmark has been an early investor in both UN- and World Bank-managed funds, and has similarly made early commitments to the Green Climate Fund. While not solely attributable to Danish efforts, the international climate-finance architecture has relied heavily on the commitment of like-minded donors, and the Green Climate Fund appears to be making progress towards a global consolidated financing mechanism that draws upon the experience of existing climate funds supported by Denmark. However, the timetable associated with the development of large climate funds means that their longer-term impacts are slow to emerge (as evidenced by the 2014 mid-term evaluation of the Climate Investment Funds (CIFs), which found evidence of their transformational effects to be weak).

Finding 14: Denmark has supported a number of private sector finance and innovation mechanisms that have the potential to result in transformational change.

Danish support to funds and instruments that are seeking to attract private sector capital have the potential to result in significant long-term impact where their operating models are proven to be effective, and where they can be adopted by other financing mechanisms. The Danish Climate

Investment Fund (DCIF) is considered a leading early example of a national public sector fund that has succeeded in attracting private institutional investment. The climate envelope continues to back innovative financial instruments. For example, the Climate Innovation Lab supported in the 2014 and 2015 envelope is pioneering risk insurance mechanisms to address market failures in energy efficiency financing. It should be noted that the transformational value of this work depends on the demonstration effect, and the ability to communicate and transfer best practice.

At a national level, the PMR provides a forum and resources to support developing countries to introduce best practice and innovative approaches to climate finance mobilisation. Both of these aspects have the potential to be transformative in a national context. Such activities may also provide more comfort to developing countries to adopt a higher level of ambition in relation to their own mitigation targets. The Climate Investment Funds, while focussed on project investment, have also helped countries to build capacity and develop their climate finance governance architecture in order to engage with larger-scale financing flows, but present development outcomes remain expected as investment plans are still under implementation (see World Bank sub-evaluation).

Finding 15: A lack of thematic and/or geographic focus may limit the attributable impact of climate finance initiatives.

To date, Denmark's approach to climate finance has been relatively broad, with support provided to a number of mechanisms (adaptation; mitigation; forestry) and across a range of countries (OECD/DAC). Over recent years, Climate Envelope funds have tended to flow more heavily into energy efficiency (GCPF, Climate Innovation Lab, and DCIF) and renewable energy (Scaling up Renewable Energy Program (SREP), DCIF). Some of the mechanisms (Global Climate Partnership Fund (GCPF), Danish Climate Investment Fund (DCIF)) invest across a broad range of countries, and it is doubtful whether there has been any transformation effect from a single energy-efficiency credit line or a single resource-efficiency investment in a given country. The value of these mechanisms, therefore, is derived from their demonstration effect and their ability to attract funds at scale.

While we recognise the value of scaling climate-finance flows as an end in itself, the limited size of Danish climate contributions, and the overall scarcity of climate finance would seem to suggest that the climate envelope is used in ways that solve market failures, unlock private sector flows, and complement other funds most effectively. However, Denmark has not explicitly set out a strategy for how it should prioritise these efforts, nor has it formally identified how different instruments (debt, equity, risk instruments, and policy support), and different modalities (multilateral, bilateral) might be the most suitable to address market failures in a given sector or geographic context. Achieving greater impact will depend on pursuing a more focussed and nuanced strategy within a given sub-sector or geography, and then scaling the model to other contexts.

A9: 3.5 Sustainability

Finding 16: Many climate finance initiatives funded by Denmark are interim solutions, and the focus is now switching towards consolidating financial flows through the GCF.

Many of the international climate finance platforms supported by Denmark have been deliberate interim solutions (CIFs, NAMA facility) in expectation that the Green Climate Fund will eventually integrate or replace the existing mechanisms in a consolidated global finance architecture. This creates a challenge in that the several years of experience and insight gained by these instruments could potentially be lost. The evaluation finds that the Danish Government is well aware of this and is encouraging the transfer of this experience to the GCF.

The Danish Government is also aware that given its significant mandate, the GCF may require a period of time to become operationally effective and, therefore, it is sensible for the Climate Envelope to continue to support other climate-finance platforms as a risk-mitigation strategy. It should also be noted that climate-finance innovation is likely to emerge from outside of the GCF structure, and this will provide opportunities to continue to engage with other institutions in addressing new leverage and risk-management approaches.

Finding 17. There is little evidence that lesson learning from climate finance is being captured and consolidated in a structured way in order to inform decisions about Danish policymaking and programming.

The evaluation finds that there is little consolidated effort to systematically assess the impact of the Climate Envelope from the perspective of its effectiveness in mobilising co-finance, its success in leveraging additional public and private finance, and the wider impact of funds on mobilising developing country financing flows (*e.g.* through policy frameworks). We understand that this is being addressed. For example, the MCEB developed an analysis of lessons learned from Danish climate-finance initiatives funded by the Climate Envelope to support the Danish GCF board member. The MFA is also considering a review of private sector leverage effects resulting from the Climate Envelope portfolio. However, while there is some good expertise and institutional capacity in Technical Advisory Services, the DEA, and the MCEB, this is not currently treated as an integrated resource; with the two-Frame structure of the Climate Envelope not helpful in this regard.

A9: 4 Conclusions

The evaluation draws the following conclusions:

- **Conclusion 1:** While the Danish Government has provided consistent support of climate-finance initiatives through the Climate Envelope, it does not have a detailed strategy for how Danish contributions might be most effectively used, beyond a commitment to supporting a global climate-finance target, multilateral climate-finance initiatives, and the scaling of private sector funds. The MCEB did produce a wider financing strategy in 2014, but not specifically in the context of the climate envelope. The Climate Envelope has provided funds for a broad portfolio of climate finance activities, including capitalising international climate-finance mechanisms, building national climate finance capacity, developing structured funds to attract additional public and private capital, and innovating around specific financial instruments. Although Danish funds are important from a political signalling perspective, Denmark remains a relatively small contributor in the multilateral context and it is therefore important that it takes a proactive view on the relative effectiveness of different climate-finance modalities.

- **Conclusion 2:** The Danish Government has originated and managed its climate finance portfolio with moderate efficiency. In terms of project origination, this appears to have been somewhat ad hoc and opportunistic at times. Both the DCIF and the GCPF were funded at the same time, without a clear rationale as to how they differed and why both were important. Denmark does have good technical expertise within the MFA Technical Advisory Services, but it is not clear whether this is well exploited, particularly given the institutional split and the lead role now played by the MCEB on mitigation-focused finance initiatives. The MCEB has its own financing strategy, however, this does not span the Climate Envelope as a whole. Staff resource constraints have prevented full engagement with the ongoing work of the climate finance portfolio (*e.g.* GCPF, CIFs), and operational responsibility for the portfolio seems highly dispersed among a large number of people.
- **Conclusion 3**: Whilst it is too early to judge the effectiveness of many of the climate finance initiatives in terms of the investments that they are making, more can be said about the co-finance and leverage achievements of the funds themselves. A number of funds have been able to attract a significant amount of co-finance alongside donor funds, including public funds (such as multilateral development bank (MDB) contributions in the (Climate Investment Funds) CIFs and the GCPF) and private funds (such as the institutional investors in the DCIF). CIF funds also report significant private-finance leverage ratios. However, in general there is significant lack of clarity around the differences between co-finance, leverage, and mobilisation. There are also concerns that Danish funding is being used to compensate risk for other public investors (MDBs, development finance institutions (DFIs)), rather than mobilising new and additional finance (*e.g.* GCPF).
- **Conclusion 4**: It is possible that Danish efforts will have longer-term impacts on climate-finance scaling and instruments. Denmark has consistently supported the international architecture, although its funds have been more important as a signal of political commitment than financially. The DCIF is being held up as a potentially successful model of public–private partnership which could be adopted by other countries. However, there are some concerns that funds are too geographically disbursed in their investments to create transformational change at a country level. Denmark is supporting innovation (*e.g.* around the new energy-efficiency insurance mechanism), which if successful, may result in long-term transformational impact in a challenging area of market transformation. However, it remains too early to tell whether Danish funds will be catalytic in this regard.
- **Conclusion 5:** The sustainability of Denmark's efforts depends to a great extent on the ability to transfer experience from its existing climate finance portfolio (CIFs, Least Developed

Countries Fund (LDCF), and NAMA facility) to the Green Climate Fund. There is a risk that much of the learning and experience will be lost if this is not done in an effective way. We understand that the MCEB has recently prepared a note for the GCF board member on this topic. There is weak evidence that Denmark captures lessons from its climate-finance initiatives in a systematic or coherent way, or that the experts residing within the different institutions engage on the issue of effectiveness (modalities; instruments; measurement) as a group.

A9: 5 Indicative recommendations

Indicative Recommendation 1: Denmark should develop an explicit guidance in relation to climate finance, both in relation to the Climate Envelope and more broadly. This strategy should provide more detail than that set out in the strategic framework for natural resources, energy, and climate (NEC) strategy. This strategy should set out clearly Denmark's expectations around co-finance and leverage, explain how Denmark will measure measuring the effectiveness of its climate finance efforts, and explore the varying approaches by sector and geography (instruments; modalities; risk appetite).

Indicative Recommendation 2: Denmark should encourage greater national-level engagement and capacity building on climate-finance initiatives. While this happens through multilateral platforms, country programmes should be expected to set out how their programmes will encourage co-financing, leverage additional public, and private funds, and build national capacity around climate finance or support innovation.

Indicative Recommendation 3: The Danish Government should ensure that the structure of the Climate Envelope does not create barriers to cross-ministerial cooperation on climate finance issues (which are cross-cutting), and in particular promote collaboration around the effectiveness of Danish funds from a co-finance and leverage perspective. In particular, Denmark should be more focussed on how its limited resources might be best deployed to support innovation and scale-up, avoiding excessive risk coverage for other multilateral development banks or development finance institution investments.

A9: Annex 1: Interviews

Name	Responsibility/position	Organisation
Henrik Jepsen	Special Advisor	DEA
Marianne Ramlau	Advisor, Centre for Global Cooperation	DEA
Peter Aarup Iversen	Senior Advisor, Centre for Global Cooperation	DEA
Ulla Blatt Bendtsen	Acting head of LCTU/Senior Advisor	DEA
Ben Green	Climate and Environment Department	DFID
Roland Sundstrøm	Climate Change Specialist	GEF
Jacob Klingemann	Investment Director, DCIF	IFU
Caroline Kronberg	Advisor, International Department	MECB
Hans Jakob Erikssen	Special Advisor	MECB
Nina Egebjærg Clausen	Advisor, International Department	MECB
Rasmus Kristensen	Head of International Department	MECB
Anders Ørnemark	Minister Counsellor for Development, Royal Danish Embassy Washington	MFA
Anders Rømer Skøtt	Head of Section, Green Growth	MFA
Christoffer Bertelsen	Minister Counsellor (retired), Green Growth	MFA
Flemming Winther Olsen	Senior Advisor, Natural resources and agriculture	MFA
Hans Hessel-Andersen	Senior Technical Advisor, Technical Advisory Service (TAS)	MFA
Jakob Haugaard	Chief Advisor	MFA
Jakob Roglid Jakobsen	Chief Advisor, Green Growth	MFA

Jens Lorentzen	Senior Technical Advisor, TAS	MFA
Jørn Olesen	Senior Advisor, TAS	MFA
Niels Egerup	Chief Advisor	MFA
Rikke Hoyer Hughes	Head of Section, Green Growth	MFA
Morten Holm-Hemmingsen	Head of Section	Ministry of Finance
Katrine From Hoyer	Special Advisor	Prime Minister's Office
Mike Speirs	Senior Advisor	UN-REDD Programme Secretariat
Adrien de Bassompierre	Senior Carbon Finance Specialist, PMR	World Bank
Christine Roehrer	Senior Monitoring & Evaluation Specialist, Climate Investment Funds (CIF)	World Bank
Mafalda Duarte	Manager, CIF	World Bank
Zhihong Zhang	Senior Programme Coordinator, CTF and Scaling up Renewable Energy Program (SREP), CIF	World Bank

A9: Annex 2: References

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