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Work programme on long-term finance

Report on the workshops of the work programme on long-term finance*

Note by the co-chairs

Summary

This report contains information about the workshops and the web-based activities undertaken in the context of the work programme on long-term finance in 2012. It provides recommendations that may contribute to the ongoing effort to scale up the mobilization of financial resources from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources. The report also identifies possible areas in which the Convention can play a role in fostering scaled-up climate finance in the future and areas that will require further work.

* This report was submitted late due to internal review and co-chairs consultations.

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I. Introduction

A. Mandate

1. The Conference of the Parties (COP), by decision 2/CP.17, paragraph 127, decided to undertake a work programme on long-term finance in 2012, including workshops, to make progress on long-term finance in the context of decision 1/CP.16, paragraphs 97-101.
2. It also decided, in paragraph 130 of that decision, that the aim of the work programme is to contribute to the ongoing efforts to scale up the mobilization of climate change finance after 2012 by analysing options for the mobilization of financial resources from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources and relevant analytical work on the climate-related financing needs of developing countries.
3. Furthermore, the COP, in paragraph 129 of the same decision, invited the President of the COP to appoint two co-chairs, one from a developing country Party and one from a developed country Party, for the work programme. After consulting with Parties, the COP President appointed Mr. Zaheer Fakir (South Africa) and Mr. Georg Børsting (Norway) as co-chairs of the work programme. The COP requested the co-chairs, supported by the secretariat, to prepare a report for its consideration at COP 18.

B. Scope of the note

4. This report contains information on the implementation of the long-term finance work programme, including on the workshops, webinars and additional web-based activities organized under the work programme. It also contains the findings and recommendations of the co-chairs. Further information is available at the dedicated web page of the work programme.¹
5. The work programme involved 279 participants in the two workshops and 280 for the webinars from over 90 countries and across the spectrum of stakeholder organizations involved in climate finance. In addition 50 policy experts from public and private sectors served as resource persons. The exchange of views through various social media channels, particularly during the workshops, resulted in more than 13 million Twitter impressions and about 1,100 webcast views. This is a clear indication of a broad interest in the climate finance issue, which reaches beyond the discussion that takes place within the context of the Convention.

C. Possible action by the Conference of the Parties

6. The COP may wish to consider this report, particularly its recommendations, and to agree on next steps through adoption of a decision.

II. Findings and recommendations of the co-chairs

7. The following are our findings and recommendations as co-chairs of the work programme on long-term finance, informed by inputs and discussions during the work programme:

¹ <http://unfccc.int/cooperation_support/financial_mechanism/long-term_finance/items/6814.php>.

8. Scaling-up, mobilization and catalysing of climate finance and investments for developing countries is a key component of the international community's current and future efforts to address climate change. While estimates of the scale of climate financing needs varies depending upon the assumptions and methodologies used, studies presented during the work programme show that the current scale of finance does not match the level required to fully address the adaptation and mitigation needs of developing countries. Substantial increases in financial resources are needed in order to help developing countries to limit and reduce GHG emissions, and to adapt to the impacts of climate change.

9. We are of the view that there is a need for a political process covering the scaling up and mobilization of climate finance, intensified and more structured work in processes under the Convention, and stronger efforts to enhance the implementation at the international and national levels. These processes should also feed into, and inform, the ongoing work of the Ad Hoc Working Group on the Durban Platform for Enhanced Action focused on climate finance for the post-2020 period.

10. The *political process* should focus on sources and options for mobilizing climate finance in the short, medium and long terms. In the context of the Convention, there is a need for clarity and predictability in the delivery of climate finance after the fast-start finance period (2010–2012). There is also a need to clarify how developed countries will deliver on their commitment to jointly mobilize USD 100 billion per year by 2020. Noting that it was in the context of meaningful mitigation actions and transparency on implementation and that, funding will come from a wide variety of sources (public and private, bilateral and multilateral, including alternative sources of finance), the commitment to mobilize this level of resources was made by Parties.

11. The work programme clearly showed that there are core areas where further work is needed, both within and outside the Convention, in order to strengthen climate finance governance. Enhanced and focused work is needed in order to increase and improve information on *climate-related financing needs* in developing countries. Methodologies need to be refined and improved in order to achieve greater precision in assessing and costing mitigation and adaptation needs. There is also a need to improve the capacity of developing countries to conduct their own assessments in accordance with their development priorities.

12. It is also our view that the *tracking of climate finance* – both public and private – must be strengthened. Improved information on how climate finance is channelled and used is an important element in monitoring, reporting and verifying climate finance flows to developing countries, and in evaluating its impact. A more comprehensive approach is required to address the transparency and consistency of information on support and climate finance flows to developing countries, while also keeping systems simple and manageable. Assessing the effectiveness of international climate finance requires a reliable and objective approach supported by clear and transparent guidelines and criteria on how to assess the scale and scope of climate finance, but is also an important component of learning lessons and replicating successful and innovative practices.

13. Intensified efforts are also needed in order to *enhance enabling environments* in many developing countries, recognizing that national policy, regulatory and governance frameworks play a crucial role in reducing investment barriers and using climate finance effectively. International policies can reinforce and support efforts to enhance enabling environments by setting ambitious targets and norms, increasing transparency and information, and fostering learning. There is a need to continue to build and strengthen national systems and institutions, and to sustain investments in human, institutional and technical capacities to use finance more effectively.

14. We believe that it is important to press ahead with concrete actions. The foremost of which is achieving demonstrable progress in reaching the agreed USD 100 billion per year goal by 2020. It is of paramount importance to maintain a close dialogue and information exchange within and across climate finance related processes under the Convention, and also with processes and actors outside this domain. In this regard, we recommend the *establishment of a regular climate finance forum* and a market place, bringing together all relevant actors - public and private sector and other stakeholders - to build an effective response and rapidly increase the deployment of finance for mitigation and climate resilient development.

A. Financing needs of developing countries and enabling conditions

15. It is our view that more structured and continuous work will assist the Convention and its bodies to support improved information on and assessments of financing needs, and to ensure a bottom-up process owned by Parties. In this regard, we recommend integrating work on climate finance needs assessment into the ongoing work programmes/plans of various bodies under the Convention, including related capacity-building needs.

16. The COP could consider providing guidance for more structured work on climate finance between and within relevant bodies under the Convention, such as the Standing Committee (SC), the Adaptation Committee (AC), the Technology Executive Committee (TEC), the Least Developed Countries Expert Group, and the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE). This guidance could include the following elements:

(a) A request to the SBSTA to establish a work programme on development of a common approach to national costing methodologies related to mitigation and adaptation;

(b) A request to the SBI, with the assistance of the CGE, to also develop a common approach to identification of climate risks and related costs in the preparation of non-Annex I national communications, including capacity-building requirements to fulfil this objective;

(c) A request to the SBI, in its consideration of issues related to the work programme on capacity-building, to identify a range of actions aimed at strengthening national capacities to access climate finance;

(d) A request to the AC, in its consideration of its work plan, to assess the adaptation financing needs of developing countries, and the options for costing adaptation needs;

(e) To request the TEC, in its consideration of its work plan, to assess the technology and research and development (R&D) financing needs, including options to stimulate R&D investments and deploying low-carbon technologies.

17. The COP could also consider requesting the SC, in accordance with its mandate to assist the COP in exercising its functions with respect to the financial mechanism, to assess the provision of financial resources to developing countries, including assessing progress as part of the biennial assessment; to address the relationship between the availability of and channels for climate finance and the needs of developing countries as part of inputs into the fifth review of the financial mechanism; to examine the scale of financial resources that could be mobilized from alternative and innovative sources; to review progress made towards meeting the commitment by developed countries to jointly mobilize USD 100 billion dollars per year by 2020 as part of the biennial assessments of climate finance flows regularly; and to address options for engaging private investors in the forum for

communication and continued exchange of information among bodies and entities dealing with climate change finance.

18. The COP could further consider requesting the operating entities of the financial mechanism to report annually on efforts to support developing countries to strengthen national climate finance capacities and undertake national costing assessments, including on lessons learned and emerging innovative practices.

B. Scaling-up financial resources: making progress on the sources of finance

19. We underscore the importance of timely funding for the Green Climate Fund (GCF), including through an early and adequate replenishment process, as an important component of advancing the scaling-up and provision of climate finance.

20. Throughout the current work programme numerous options to raise additional financial resources have been proposed. These options can be categorized as four types of potential sources: funds provided by developed countries from national budgets, new sources that generate revenue through national budgets pursuant to either national decisions or international agreements, or funds collected internationally pursuant to international agreements.

21. Most of the proposals have been analysed in other processes, such as by the Secretary-General of the United Nations' High-Level Advisory Group on Climate Change Financing (AGF) and by the Group of Twenty (G20). We took note of the information provided indicating that no single source has been identified by any available analysis that would generate financial resources on the required scale, and thus that a combination or bundle of sources will likely be required. Furthermore, we noted that combining different public and private sources, and examining their role and scale should be subject to further international and national analysis and discussion. Some potential sources could be readily available in the near term while others might need more time to establish, depending on various factors such as degree of maturity and need for international collaboration.

22. The AGF emphasized the importance of a carbon price in the range of USD 20–USD 25 per tonne of carbon dioxide equivalent in 2020 as key in reaching USD 100 billion per year. We took note of concerns raised by several participants regarding the current low price of carbon and the impact this has on the ability and potential of the Adaptation Fund to generate revenues from the sale of certified emission reduction units. The carbon price would also impact the potential scale of resources that could come from any decision to extend a levy to other market-based mechanisms or from auctioning of emission allowances. Nevertheless, comprehensive carbon pricing policies is one of the most promising options for raising revenues while also broadly viewed as an effective mitigation instrument..

23. Removal of harmful and inefficient subsidies on fossil fuels has often been cited as an example of an action that already has broad political support, and as a potential source of climate finance that could be made available in the near term. Even starting out with reforms of fossil fuel subsidies that redirected only a part of the current level of support to climate finance would yield substantial amounts of resources per year.

24. In relation to utilizing innovative sources of finance arising from actions to reduce emissions of greenhouse gases from the maritime and aviation sectors, we take note of the ongoing work under the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO) to address the contribution of these sectors in reducing GHGs, including through the development of market-based mechanisms. We

recognize that continued work in these areas is necessary in order to catalyse climate change actions and potentially contribute to climate finance.

25. In progressing the work of the Convention on sources of climate finance, we recommend that the COP consider a more structured approach to assessing options for raising capital from alternative and innovative sources, and that the COP could:

(a) Propose that the heads of the secretariat, IMO and ICAO establish a high-level experts group in order to examine options for ensuring that revenues from the emissions levy or auctioning of allowances in emission trading regimes for international shipping and aviation can be used for climate finance;

(b) Request the GCF Board to address options for strengthening active participation by the private sector in leveraging resources for transformative action in developing countries as part of the implementation of the private sector facility of the fund.

26. We took note of a range of views that underscored that the scale of resources and type of investments required makes it necessary for governments to work more closely with the private sector. Private sector investors, such as banks, pension funds and insurance companies, already constitute important sources of climate finance. However, there is significant potential to increase their roles in mobilizing investments for projects and programmes in developing countries. The Convention, together with international financial institutions and multilateral development banks, can play an important role in engaging investors in directing finance towards mitigation and adaptation activities in developing countries, and in assessing the investment opportunities and risks posed by climate change. We recommend the establishment of a high-level interactive forum with private-sector actors, on an annual basis, to consider avenues and mechanisms for leveraging finance from the private sector, including the assessment of options for overcoming barriers to increased private-sector investment in mitigation and adaptation, and estimating the potential scale of international private investment.

C. Fast-start finance

27. We took note of the variety of views regarding the delivery and effectiveness of climate finance during the fast-start finance period (2010–2012). The relative increase of allocations to adaptation activities and the increase of climate finance in absolute terms during the period, according to reporting to date, suggest that scaled-up mobilization of financial resources, including public finance, is possible in the longer term. What seems clear, in reflecting on the fast-start finance period, is that while climate finance flows to developing countries have increased, a number of barriers still remain. Such barriers should be further analysed as part of learning lessons from the fast-start finance period. Information on climate finance flows has increased, but the multiplicity and complex web of delivery mechanisms and channels make tracking and reporting difficult. This has underscored the need for improved systems of monitoring, reporting and verification at the international and national levels.

III. Implementation of the work programme on long-term finance

28. In line with the aim of the work programme, and taking into account the feedback from consultations, the co-chairs identified the following thematic pillars that underpinned both the first and the second workshops:

(a) The analysis of options for the mobilization of financial resources from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources, and their linkages;

(b) The analysis of the relevant analytical work on the climate-related financing needs of developing country Parties;

(c) The integration of lessons learned from fast-start finance (FSF) and best practices from developing and developed country experiences in the analysis of sources and needs;

(d) The exploration of the interface between public and private finance, including approaches to leveraging private climate finance;

(e) The identification of enabling environments that can unlock and foster increased climate finance flows for mitigation and adaptation;

(f) The exploration of delivery mechanisms that could play a role in channelling climate finance.

29. The workshops and webinars were sequenced to enable continued analytical and technical discussions, supplemented by web-based interactive tools, which were made available throughout the lifespan of the work programme in 2012.

30. Funding for the work programme on long-term finance was provided by the European Union, and by the Governments of Norway, Spain and the United Kingdom of Great Britain and Northern Ireland. In hosting the second workshop, the Government of South Africa, supported by the United Nations Development Programme (UNDP), also provided logistical support.

A. Structure and process

31. To ensure a transparent, open and inclusive work programme, from the outset a series of consultations were held with Parties and relevant stakeholders. The first round of consultations was held during the thirty-sixth sessions of the subsidiary bodies held in Bonn, Germany. A second consultation was held during the special additional session of the ad hoc working groups held in Bangkok, Thailand, from 30 August to 5 September 2012. The aim of these consultations was to inform and to gather views in an open and transparent manner on the modalities and themes to be discussed in the context of the work programme.

32. A robust work programme was designed based on the feedback provided by Parties and relevant stakeholders during the first round of consultations consisting of two workshops and two webinars.

33. The analysis carried out under the work programme drew upon relevant reports, including that of the AGF and the report on mobilizing climate finance for the G20 and the assessment criteria in the reports, and also took into account lessons learned from FSF. In addition, other relevant analytical reports were considered during the workshops and webinars.

34. To maximize participation and to supplement the web-based tools, a social media component, including live webcasting, was added to the work programme. The use of social media in technical and analytical workshops was unprecedented and therefore constituted a novelty. The benefits were increased interactivity with a wide range of stakeholders and enriched discussions.

B. Proceedings of the activities of the work programme

1. Workshops held under the work programme

First workshop on long-term finance

35. The first workshop, which was held in Bonn, from 9 to 11 July 2012, brought together 141 participants from Parties, public and private financial institutions, international organizations, civil society, think tanks and academia.

36. The issues that were explored included the climate-related finance needs of developing countries; the potential sources of climate finance, including public, private, bilateral, multilateral and alternative sources; the options for mobilizing climate finance; and the lessons learned from FSF.²

Second workshop on long-term finance

37. The second workshop, which was held in Cape Town, South Africa, from 1 to 3 October 2012, brought together 138 participants from Parties, public and private financial institutions, international organizations, civil society, think tanks and academia. It furthered discussions from the first workshop, and explored possible sources of climate finance in the short-, mid- and long-terms and the enabling conditions that may contribute to scaling up climate financial flows to developing countries. The modalities for the workshop allowed for further input and discussion among participants in breakout groups on the key themes of the workshop.

38. Part of the analysis and discussions focused on the mobilization of financial resources and enabling conditions. The discussions analysed and focused on the current financial mechanisms, financing instruments and access modalities that can be considered as best practices in mobilizing, scaling up and catalysing new and additional climate finance with a view to enhancing the capacity of developing countries to access climate financing.

2. Webinars

39. The first webinar was held on 13 September 2012 and was conducted twice, once in the morning and once in the afternoon, to draw participation from across the globe. It was attended by 177 participants representing Parties and a wide range of stakeholder organizations. It dealt with various methodological approaches applied to the assessment of mitigation and adaptation costs in developing countries.³

40. The webinar contained four presentations covering national experiences, including those of Costa Rica and the Philippines. The analysis and discussions during the webinar suggest that bottom-up approaches offer greater precision in measuring the economic and social costs associated with climate change mitigation and adaptation activities.

41. The second webinar was held on 21 September and was also conducted twice.⁴ It was attended by 103 participants representing Parties and other relevant stakeholder organizations. It explored the sources of and options for adaptation finance. In particular, it analysed the support provided by multilateral and bilateral institutions on adaptation. It considered emerging lessons from these funds and examined key design features. It also

² <http://unfccc.int/cooperation_support/financial_mechanism/long-term_finance/items/6963.php>.

³ <http://unfccc.int/cooperation_support/financial_mechanism/long-term_finance/items/7022.php>.

⁴ <http://unfccc.int/cooperation_support/financial_mechanism/long-term_finance/items/7067.php>.

analysed the involvement of the private sector in the area of adaptation finance, including the participation and role of the insurance industry.

IV. Assessment of climate-related financing needs

A. Nature and scale of climate financing needs

42. Presentations and discussions throughout the work programme introduced several scales of climate-related financing needs. These estimates are based on different assumptions and methodologies, with separate estimations for mitigation and adaptation. Despite diverging estimates, the studies conclude that the scale of the climate financing needs in developing countries is high and exceeds the current climate finance flows. It is therefore imperative to harness both national and international financial resources to scale up climate financing to support the level of ambition and urgent action needed.

43. Several methodologies used to assess the needs of developing countries were presented at the workshops (see table 1 in annex I). Some use global frameworks or methodologies, others use country-led models, hence bridging top-down and bottom-up approaches. The models also use different approaches for assessing financing needs in terms of mitigation and adaptation given the diversity of economies, capacity and level of development. Global methodologies such as those used by the International Energy Agency's BLUE Map scenario,⁵ the Global Energy Assessment,⁶ RECIPE (Report on Energy and Climate Policy in Europe)⁷ and the World Bank⁸ estimated mitigation costs based on different scenarios. The main scenario used is based on a greenhouse gas (GHG) stabilization target at 450 ppm. However every model uses a different baseline (1992 or 2007) with varying timelines (ranging from 2020 to 2050).

44. The estimation of adaptation financing needs is more challenging than for mitigation due to factors such as high degrees of uncertainty in adaptation scenarios, omissions of certain costs, and a lack of good methods and tools to assess vulnerability.

45. Bottom-up approaches to finance needs assessment were presented and discussed based on the experiences of some developing countries under the secretariat's National Economic, Environment and Development Study (NEEDS) project and the Capacity Development for Policy Makers to Address Climate Change project of the UNDP. These projects have supported 29 developing countries in undertaking in-depth assessments of their financing needs either on a national or sectoral basis. One presentation highlighted how the NEEDS project has contributed to the development of a national framework for adaptation and called for an extension of the project to other developing countries. Other experiences of bottom-up finance needs assessments came from China, Costa Rica and India (for mitigation) and the Philippines, South Africa, and the United Republic of Tanzania (for adaptation).⁹

⁵ <<http://www.iea.org/techno/etp/etp10/English.pdf>>.

⁶ <<http://webarchive.iiasa.ac.at/Research/ENE/GEA/doc/GEA-Summary-web.pdf>>.

⁷ Edenhofer, O., C. Carraro, J.-C. Hourcade, K. Neuhoff, G. Luderer, C. Flachsland, M. Jakob, A. Popp, J. Steckel, J. Strophschein, N. Bauer, S. Brunner, M. Leimbach, H. Lotze-Campen, V. Bosetti, E. de Cian, M. Tavoni, O. Sassi, H. Waisman, R. Crassous-Doerfler, S. Monjon, S. Dröge, H. van Essen, P. del Río, A. Türk (2009),. *RECIPE, Report on Energy and Climate Policy in Europe, The Economics of decarbonization. Potsdam. Potsdam Institute.*

⁸ World Bank. 2010. *World Development Report: Development and Climate Change.*

⁹ The presentations that mentioned these examples are available on the same web page referred to in footnote 2 above.

B. Need for more information and improved methodologies

46. The following are some key insights from the discussions on climate-related finance needs:

(a) The importance of better information. The limited availability of data and information on emissions baselines, the projected growth in emissions and the associated costs per sector is a major barrier to assessing finance needs and identifying the support required. Despite this limitation, some workshop participants acknowledged that their countries now have a greater understanding of the scale of the estimates and assumptions behind the needs assessments. The importance of expanding support for bottom-up approaches, such as the NEEDS project,¹⁰ was emphasized by many. Participants also noted the fact that when information is available, it is often dispersed across different government agencies. Hence, several participants suggested the creation of inter-agency mechanisms to facilitate coherence and allow for a coordinated effort in compiling the data needed for cost analyses;

(b) Refining and improving methodologies. There needs to be greater precision in the methodologies used to assess finance needs and even more granularity in conducting sectoral studies. Presentations in the first webinar highlighted the problem with using different models to construct sectoral baselines, making cross-country comparison of cost estimates difficult. In addition, the use of varying discount rates and projected timelines add to the complexity. Aggregation of adaptation costing does not give sufficient insight into national vulnerabilities, and the assessment of the cost of the decrease in ecosystem services remains inadequate;

(c) Building the capacity to assess needs and identify national priorities is an urgent imperative. There is the need to enhance the capacity of developing countries to conduct their own assessment of financing needs in accordance with their development priorities. Participants at the workshops and the webinar noted that costs that are difficult to measure, although critically important, are not captured in overall estimates. Some of these costs include skills upgrading, enhancing local implementation capacity, and costs of adapting technology to local conditions. FSF reports shows examples of technical assistance provided to developing countries in order to address information gaps and capacity needs which includes support for strengthening national institutions; improving resilience in local development plans; embedding ecosystem-based approaches into adaptation and introduction of innovative financing to help scale up investments in low-carbon projects at local levels;¹¹

(d) Assessment of needs is a dynamic process. The assessment of the climate-related financing needs is an evolving process and should be implemented in a way that takes into consideration changes in the expected impacts of climate change in developing countries. Many presentations emphasized the uncertainty involved in estimating the proportion of investments required due to changing circumstances caused by climate change;

(e) Engagement of multiple stakeholders is key. Participants emphasized the need to engage a variety of stakeholders from both the public and private sectors to facilitate access to the required information and stimulate dialogue on how to integrate climate change into national development plans. The role of the insurance industry was particularly emphasized in supporting low-income countries to assess their needs, specifically by assessing pricing risks; creating incentives for loss reduction and resilience building activities; and providing timely finance to recompense damage.

¹⁰ FCCC/SBI/2010/INF.7.

¹¹ For fast-start finance project list, please see the report to the COP: FCCC/CP/2012/INF.1.

V. Potential sources of climate finance

A. Sources of climate finance: individual sources

47. Comprehensive measurement of international climate financial flows to developing countries is necessary to better understand the multiplicity of sources of finance involved. One estimate of international financial flows to developing countries to address climate change amounts to USD 97 billion per year (2009–2010).¹² The landscape of these financial flows involves multiple sources of finance, intermediaries, instruments, disbursement channels and recipients. The financial resources are raised both nationally and internationally and are sourced from public, private and alternative sources of finance and take various forms: policy incentives, risk management, carbon offset flows, grants, concessional and non-concessional loans, and equity. A number of studies – reinforced by discussions during the workshops – have highlighted two sets of challenges arising from the complex web of financial flows. Firstly, the challenges involved with tracking, reporting and disclosure of climate financial flows both from public and private sources of finance on the supply side; and secondly, the suboptimal or non-existent national systems for monitoring, reporting and verification on the demand side (see section III.B).

48. Of the estimated current international climate financial flows, USD 55 billion per year was provided by private sources (the equivalent of approximately 8 per cent of the total capital flow to developing countries). Private climate finance is mobilized by public policies in both developing and developed countries, including carbon markets that allow the use of emission reduction credits generated in developing countries. Private finance is also mobilized through financial incentives offered by governments. Despite increased private climate financial flows, particularly in the renewables sector, a number of policy, market and institutional barriers, discussed during the first and second workshops, hamper increased climate financial flows from the private sector. These barriers represent stumbling blocks to scaled-up international climate finance for developing and developed countries alike and are particularly pronounced in least developed countries. Thus, increasing private finance ultimately requires targeted public policies to address these barriers or increase the paid-in capital of multilateral and bilateral entities.

49. Multilateral and bilateral entities play a significant role in mobilizing financial resources from private sources of finance by leveraging private funds to supplement their paid-in capital to increase the financial resources they can offer developing countries. Due to their ability to channel finance from private sources to climate projects by using leveraging instruments, multilateral and bilateral entities become a source of additional/new funds. Emerging insight from various national case studies, and the growing experiences of multilateral and bilateral banks and entities in mobilizing and delivering climate finance, which were discussed during the two workshops and the second webinar,¹³ merit further exploration in the light of the future international climate finance architecture within which the Convention and its financial mechanism and operating entities will operate.

50. The current public funding estimated at around USD 40 billion per year includes both climate finance delivered through the financial mechanism of the Convention and other channels and financing mechanisms. The latest summary reports from Parties included in Annex II to the Convention on the provision of climate finance, indicates a total of USD 58.4 billion for the period 2005 to 2010, an average of less than USD 10 billion per

¹² Buchner, B., Falconer, A., Hervé-Mignucci, M., Trabacchi, C., Brinkman, M., 2011. *The Landscape of Climate Finance*. Venice: Climate Policy Initiative.

¹³ As footnotes 2, 3 and 4 above.

year.¹⁴ The climate focal area of the Trust Fund of the Global Environment Facility (GEF), the Special Climate Change Fund and the Least Developed Countries Fund, and the Adaptation Fund disburse less than USD 1 billion per year. Numerous potential sources of climate finance have been analysed.¹⁵ Estimates of revenue-generating potential for some potential sources are summarized in annex II with sources broadly grouped into four categories based on the flow of funds.

51. Existing national budgetary resources: At present, public climate financial resources come mainly from developed country national budgets. Some Parties suggest that additional climate finance be provided by developed countries from their national budgets leaving it to each country's discretion as to how to raise its contribution. Developed country contributions could be assessment-based or voluntary. Developing countries have proposed assessed contributions of 1.5 per cent of GDP.

52. New sources generating revenue through national budgets pursuant to national decisions: Developed country governments could generate revenue from new sources – such as carbon taxes or auctioning allowances in an emissions trading scheme, lower fossil fuel subsidies, higher fossil fuel royalties, and a 'wires charge' on the carbon dioxide emissions generated by electricity consumed. The revenue generated would vary widely by country, depending upon, for example, its existing fossil fuel subsidies and fossil fuel production. Both the AGF and G20 reports assume that only a fraction of the revenue that could be generated would be dedicated to international climate finance.

53. New sources generating revenue through national budgets pursuant to international agreements: One example of such sources is a tax on international financial transactions, best implemented through an international agreement because many transactions can easily be moved to a different jurisdiction in order to avoid the tax. Two other such potential sources are different approaches to implementing border taxes on imports of GHG-intensive products by developed countries. The share of the revenue collected by each national government that would be devoted to international climate finance would be determined nationally. The potential of sources with links to trade and climate change were, however, not explored in detail during the work programme and represent an area for future analysis.

54. Funds raised internationally pursuant to international agreements: Funds also can be raised internationally pursuant to an international agreement as for instance in the case of the share of proceeds (2 per cent) of certified emission reduction units issued for most clean development mechanism projects, which is the main source of funds for the Adaptation Fund. The share of proceeds could be extended to joint implementation and international emissions trading, and the rate could be raised. Norway has proposed that emission allowances could be auctioned internationally as a source of revenue for new additional resources. The revenue-generating potential of such sources depends on the carbon-price levels.

55. Funds also could be generated through the international regulation of emissions from international aviation and shipping through an emissions levy or an emissions trading

¹⁴ FCCC/SBI/2011/INF.1/Add.2.

¹⁵ UNFCCC. 2007. *Investment and Financial Flows to Address Climate Change*. Bonn: UNFCCC, table IX-66 (p. 186) and annex IV; Advisory Group on Climate Change Financing. 2010. *Report of the Secretary-General's High-level Advisory Group on Climate Change Financing*. New York: United Nations; World Bank Group, IMF, OECD, and regional development banks (G20), 2011. *Mobilizing Climate Finance*, Paper prepared at the request of G20 Finance Ministers, World Bank, Washington, D.C. See also Sterk, W., Luhmann, H.-J., and Mersmann, F. 2011. *How Much Is 100 Billion US Dollars?* Berlin: Friedrich-Ebert-Stiftung.

scheme with auctioned allowances.¹⁶ Underpinning the estimates is the assumption that a share of the revenue generated would be used to compensate adversely affected developing countries for the economic impact of the measure and that the rest of the revenue would be transferred to climate funds such as the GCF. The implementation of this source of financial resources requires international collaboration and coordination, including with aviation and shipping sectors. Whether the implementation of this source of finance is feasible in the short to medium term remains a subject for further exploration.

56. Some of the potential sources of public funding are substitutes; for example, the approaches to implementing border taxes on emission-intensive imports. Several potential sources rely on international agreements outside the UNFCCC Convention, including arrangements for internal emissions trading.

57. Sources that put a price on greenhouse gas emissions are particularly well suited during periods of low economic growth. They increase the overall efficiency of the economy and are countercyclical so they have a modest impact on prices during periods of crisis. They would also generate much needed revenue beyond that required for climate finance for the national treasuries of developed countries. The treasuries could use this revenue to help to reduce national deficits and debt or existing distortionary taxes and so help to stimulate economic growth.

58. There is a need to advance the understanding of the options used to raise new sources of international climate finance and to engage policymakers and stakeholders to make the case for scaling up predictable finance. There is also a need to increase national debates on how to operationalize innovative sources of climate finance. Implementing carbon taxes or reforming fossil fuel subsidy arrangements will be both technically and politically complex. Similarly, there may be a need for a more coordinated process for deliberation.

B. Sources of climate finance: bundling of sources

59. Based on discussions during the workshops there is a growing recognition of the need for the mobilization of financial resources from multiple sources of finance to achieve a long-term finance goal such as the USD 100 billion in 2020. No single source has been identified by any of the available analyses that would generate funds on this scale. Thus a portfolio or bundle of sources is likely to be required. In addition, ‘bundling’ sources of finance provides the necessary flexibility in mobilizing scalable financial resources from individual developed countries whilst enhancing the predictability of the contributions for international climate finance to developing countries in the longer term. Underpinning this approach is a closer alignment of private financial flows with climate change policy whereby public finance continues to play a key role.

60. Bundling of sources of climate finance with mutually supportive and consistent financial flows from private and alternative sources of finance has a number of potential advantages. Bundling of sources can be designed around different principles, such as economic efficiency, and can address equity concerns. Carbon pricing in developed countries, a border adjustment mechanism, and pricing of emissions from international aviation and shipping, with rebates for adverse economic impacts on developing countries, would be an example of such bundling.

¹⁶ Alternatively, these emissions might be regulated through national policies with the revenue accruing to national treasuries and the funds dedicated to international climate finance being determined by national budgetary processes.

61. Carbon pricing can take the form of a carbon tax, which sets a known price but leaves emission reductions uncertain or emissions trading, which limits total emissions but allows the market to set the price. The volatility of carbon prices, however, presents a number of challenges and opportunities for implementation. The impact of low-carbon prices on the revenue-generating ability and potential of the Adaption Fund in mobilizing and delivering adaption finance to developing countries is a testimony to this. But the current low levels of carbon prices represent a possible opportunity to extend the coverage of emissions trading schemes in a manner that takes into consideration the weak economic circumstances of many developed countries.

VI. Enhancing enabling environments

62. All countries are taking action to finance activities that respond to climate change. Policy, regulatory and governance frameworks within countries play a crucial role in reducing barriers to climate finance (see table 3 in annex III).

Getting the fundamental signals right

63. Energy and carbon pricing need to continue to be reformed, in all countries, to reflect the real cost of climate change. Such efforts may have financial and economic costs, and political implications (recognizing that high-carbon industries play a central role in many economies). Investments that support low-carbon development, however, may also result in net savings over time through greater efficiency and reduced operating costs. Savings may be as high as USD 100 trillion by 2050. Detailed information on the costs and benefits of action in different country contexts may be a helpful contribution. Developed country ambition on these difficult issues is particularly needed, and can send positive signals in enhancing actions by developing countries.

Finding strategic vision and purpose

64. Countries are investing in long-term climate change action plans and frameworks that will allow them to integrate mitigation and adaptation concerns into their national development processes. They are enacting legislation to promote investment in low-carbon technologies and approaches, and regulatory frameworks that seek to reduce the up-front costs of investment in low-carbon technologies and options (such as renewable energy laws and industrial development policies that promote low-carbon technology). Many countries have introduced pricing and contracting methods such as auctioning and competitive tendering, to drive down the costs of low-carbon technologies and make them more competitive than conventional options. See examples from the African region contained in table 4 in annex III.

65. Long-term planning in the energy, transport and agricultural sectors can incorporate low-carbon options and policies to incentivize such a transition. Local institutions in many countries have begun to engage in participatory adaptation planning processes. There is a need for a strategic vision that grounds such efforts to respond to climate change in national development aspirations. Transboundary and regional programmes may present an additional means of scaling up finance and move from project-based planning and implementation to multisectoral programmes. Transboundary and regional approaches would complement rather than replace national efforts.

Adaptation and mitigation may be closely linked in practice

66. Efforts to extend access for the poor to energy, transportation and water can greatly enhance their resilience to the impacts of climate change. In many developing countries – including those in Africa – closing the infrastructure gap can greatly strengthen resilience. There are many opportunities to find low-carbon solutions to developing countries' infrastructural needs that thereby link mitigation and adaptation interventions in practice, and maximize synergies.

Coordination and inclusiveness

67. Coordination is necessary and challenging in many cases, although there are many countries in which high-level political leadership has created institutional structures that bring different government departments together (including finance, energy, water and infrastructure) so that climate change becomes more than just an environmental issue. Plans can be developed in ways that identify real needs (for finance, and technical assistance, capacity and other forms of support), and reinforce alignment with national development priorities. Inclusive processes can help to foster rigorous debate on options, and encourage broad-based ownership at the national level. Furthermore, the promise of substantial predictable long-term finance for the programmes that result from such planning processes can help to create incentives for cooperation in their implementation.

Multiple forms of finance

68. A variety of forms of finance are likely to be needed to deliver climate change mitigation and adaptation outcomes. To date, public climate finance has largely been provided as grants or loans. Grant finance has played a crucial role in technical cooperation, bridging information barriers and efforts to strengthen underlying institutions. Grants play a critical role in addressing the barriers to investment in climate-compatible development. Concessional finance can be used to help meet and reduce the costs of climate change related interventions. Taking a portfolio approach may unlock more efficient and transformative approaches, rather than piecemeal projects, which have been common in climate finance in the past.

Creative partnerships with the private sector

69. Fostering partnerships between the public and private sectors may allow for short-term action and unlock creative solutions to long-term finance needs. The private sector, however, plays different roles in different contexts. It will often be easier to work with the private sector in some areas (notably energy) than in others (such as public transport and water). There are creative ways to unlock private and institutional finance even in public-sector-run areas: for example the European Bank for Reconstruction and Development (EBRD) was able to mobilize finance from institutional investors and bond markets for an energy efficiency programme with the Russian rail network. By the same token, different instruments of private finance may be less viable in some countries than others: for example, many least developed countries struggle to attract private equity or institutional investors. There is growing interest in the potential to use public finance to guarantee or protect against the risks that private investors face, and thereby reduce barriers to investments.

70. The role of financial institutions based in developing countries in supporting national efforts to deliver climate finance is particularly important. Many development banks have worked with local financial institutions to build their technical understanding of

the renewable energy and energy-efficiency investment opportunities and the various risk profiles of such investments, and to extend lines of credit to these local private-sector banks that allow them to scale up their support for low-carbon programmes in developing countries. Local banks may be better placed to navigate the country's private sector and landscape if their ability to recognize and realize low-carbon investment opportunities can be strengthened, and measures can be taken to enhance understanding of risks. Grants and technical cooperation has been essential in helping to raise awareness within these banks of the potential to invest in climate change solutions. Substantial investments have been made in such programmes during the FSF period, including by multilateral development banks such as the EBRD and the International Finance Corporation. It is, of course, difficult to target concessional finance to the private sector appropriately, and further work needs to be undertaken to understand whether funds have been used effectively in this regard to maximize climate change outcomes and attract additional investment.

Building on national systems and institutions

71. There is substantial interest in the potential for direct access to climate finance for institutions based in developing countries to act as a conduit for the development of institutional knowledge and communication exchange between governments. Both the Adaptation Fund and the GEF have explored new modalities that give recipient national institutions direct access to climate finance. Developing countries that have sought direct access through these channels have also taken steps to assess or strengthen their capacities.

72. A growing number of developing countries have also established national climate change trust funds through which both international and national resources to support action to address climate change are channelled (see table 5 in annex III). Early experience with many of these efforts is encouraging. For example, the USD 1 billion Amazon Fund has an inclusive multi-stakeholder governance arrangement for funds that are managed by the Brazilian National Development Bank. International finance is contingent on the demonstration of credible emission reductions and other social and environmental benefits. Systems to measure, report and verify the carbon and the environmental and social impact of the fund are being developed, including with the support of the German Agency for International Cooperation.

Strengthening transparency and monitoring

73. Experiences from the FSF have reinforced the need to improve the transparency of climate finance at the international level while keeping systems simple and manageable. While the reporting by contributors have been valuable,¹⁷ methodologies and type of information that countries provided in the reports varies substantially, and it is difficult to synthesize and compare how financial resources have been spent. The lack of a consistent reporting approach compounds misunderstandings on how finance is being spent.

Some key insights from the workshop discussions

74. Sustained investment in human, institutional and technical capacity. Support for institutional processes can strengthen understanding, enhance skills, and raise standards to enable the financing of programmes that will deliver mitigation and adaptation outcomes. Excessive reliance on external expertise is unlikely to allow for the local institutionalization of the human and technical capacity needed to manage climate finance. While international exchange can be helpful, institutional capacities at the national and subnational levels need

¹⁷ For example, developed countries have collaborated to establish the website <www.faststartfinance.org>.

to be developed so that interventions can be tailored more effectively to countries' specific needs and circumstances.

75. The tracking of climate finance at the international and national levels needs to be strengthened. More accurate information on how developed countries are channelling their climate finance in a comparable way is needed. More detailed information on how finance is used within countries can be an important first step in monitoring, reporting and verifying how finance is used, and in evaluating the impact of this finance. Civil society and independent research groups are also making important contributions to monitoring climate finance delivery and strengthening accountability.¹⁸ The secretariat's prototype of the nationally appropriate mitigation action registry has the potential to help to increase the transparency of support and impact.

76. Enhanced systems to understand the impact of climate finance on mitigation and adaptation are needed. GHG emission reduction is an obvious consideration in assessing impact. However, a narrow focus on emission reductions and cost-effectiveness without considering the potential for programmes to also foster innovation and catalyse sustainable development is likely to disincentivize the creative and ambitious action that is needed. Many developing countries are already beginning to establish monitoring and evaluation systems as they put in place new policies and strategies to respond to climate change.

77. Climate finance has a political and developmental interface. Climate change has implications for multiple aspects of society and development and is not a narrow environmental issue. There is a need to maximize the synergies between the development processes and efforts to address climate change. Incorporating climate change into national development planning can help to support the formulation of a clear strategic vision on how to respond to climate change. Clear political commitment to these issues will also help to address the concerns of private investors regarding political and regulatory risks.

78. The subsidiary bodies under the Convention and expert and thematic bodies under the Convention can play an important role in establishing norms and standards that guide domestic action in response to climate change. However, the lack of access to predictable climate finance can often be a major impediment, in many developing countries, to implementing the programmes and approaches that may be identified through a national climate finance planning process.

79. The relevant bodies under the Convention can provide guidance that seeks to maximize the synergies and comparative advantages of different actors and institutions in the current climate finance architecture. Table 6 in annex III presents an overview of key actors currently involved in delivering climate finance, and their respective roles and core competencies.

80. It is imperative to build on progress made in increasing the efficiency and responsiveness of existing multilateral climate finance institutions, so that they can programme funds more efficiently; an example of this is the progress is being made in expediting the GEF project cycle. There is scope to strengthen complementarity between the activities of different actors with diverse competencies, rather than sustaining the present dynamic where many institutions seek to do quite similar things, and there may be substantial duplication of effort at the national level while significant needs remain unfulfilled.

¹⁸ Several independent initiatives to compile and analyse FSF pledges and contributions have emerged, including the Overseas Development Institute and World Resources Institute analysis through the Open Climate Network of Japan, the United Kingdom of Great Britain and Northern Ireland and the United States of America FSF contributions.

81. There is also a clear need to foster learning at both the international and national levels, including from the FSF experience. A stronger empirical and evidence base is required to assess the roles and effectiveness of different institutions. There is a growing body of research on this topic, including from non-governmental actors, and official evaluations of climate funds such as the GEF, the LDCF, and the forthcoming official evaluation of the Climate Investment Funds which Parties and relevant actors may benefit from.

Annex I

[English only]

Summary of the needs assessment methodologies and estimates

Table 1
Summary of the needs assessment methodologies and estimates

<i>Reports and studies assessing needs</i>	<i>Methodology/stabilization scenario</i>	<i>Annual costs in USD billion</i>	<i>Time frame</i>	<i>Area</i>	<i>Year of estimation</i>
RECIPE (<i>Report on Energy and Climate Policy in Europe</i>)	Structural energy-economy models exploring the roadmaps towards a low-carbon world economy	(a) 480–600 (globally) (b) 1,200 (globally)	(a) 2030 (b) 2030–2050	Mitigation	2009
McKinsey (<i>Pathways to a Low-carbon Economy</i>)	2 °C	(a) 600 (globally) (b) 1,000 (globally)	(a) 2020 (b) 2030	Mitigation	2009
UNFCCC (<i>Investment and Financial Flows to Address Climate Change</i>)	450–550 ppm	300–1,000 (developing countries)	2030	Mitigation	2009
International Energy Agency	BLUE Map Scenario / 2 °C (450 ppm)	(a) 750 (globally) (b) 1,600 (globally)	(a) 2030 (b) 2030–2050	Mitigation	2010
World Bank (<i>World Development Report</i>)	Estimation based on the climate-related financial flows towards developing countries / 450 ppm	140–175 (developing countries)	2030	Mitigation	2010
Global Energy Assessment report	Comprehensive analysis of the major global challenges to sustainable energy and greenhouse gas mitigation	1,700 –2,100 (globally)	2010–2050	Mitigation	2011

<i>Reports and studies assessing needs</i>	<i>Methodology/stabilization scenario</i>	<i>Annual costs in USD billion</i>	<i>Time frame</i>	<i>Area</i>	<i>Year of estimation</i>
United Nations Department of Economic and Social Affairs (World Economic Social Survey)	Global investments for energy transformation	1.800 (globally)		Mitigation	2011
Stern Review	Integrated assessment model (IAM) / 500 ppm	1.5 trillion (globally)	Next decade	Adaptation	2006
UNFCCC Investment flows report	450–500 ppm	24–66 (developing countries)	2030	Adaptation	2007
Parry et al: Assessing the costs of climate change	IAM with adjusted discount rate and measures of vulnerability, plus added costs for adaptive capacity (soft costs)	1.9 trillion (globally)	2030	Adaptation	2009
World Bank Development Report	Estimated costs of climate proofing “climate-sensitive” investment flows	70–100 (developing countries)	2030	Adaptation	2010
United Nations Development Programme, Human Development Report	450 ppm	86	2015	Adaptation	2010

Annex II

[English only]

Summary of potential sources of public funds for international climate finance

Table 2

Summary of potential sources of public funds for international climate finance

	<i>Amount</i> <i>(USD billion/year)</i>		
	<i>AGF</i>	<i>G20</i>	<i>UNFCCC</i>
1. Funds provided by developed country governments from national budgets:			
Assessed contributions		Could be needs-based	
2. Sources that contribute to developed country national budgets, dependent on national decisions:			
Domestic carbon taxes	30	25	
Phase out of fossil fuel subsidies	8	10	
Increase in fossil fuel royalties			
3. Sources that contribute to national budgets, dependent on international agreements			
Financial transactions tax	7–16		15–20
Border carbon cost levelling			
4. Funds collected internationally pursuant to an international agreement			
Extension of the “share of proceeds”	1–3		
Auctioning a portion of AAUs	5–12		
Carbon pricing for international aviation	1–3	13	10–25
Carbon pricing for international shipping	3–9	15	10–15

Annex III

[English only]

Enabling environments: policies, instruments and delivery mechanisms

Table 3
Policy barriers and opportunities to enhance enabling environments for climate finance

	<i>Policy and regulatory</i>	<i>Market and technology</i>	<i>General financial</i>
Barriers	<p>Uncertainty and complexity</p> <p>Enforcement of policy and pricing incentives</p> <p>Transaction costs</p> <p>Terms for public and private sector participation in relevant sectors (e.g. energy, water, agriculture, transport)</p> <p>Land allocation, access and security of ownership;</p> <p>Subsidies and policy support for high carbon solutions</p> <p>New or weak institutions entrusted with climate change policy and a lack of coordination</p> <p>A lack of information, transparency and inclusiveness</p>	<p>Relatively high upfront costs</p> <p>Information barriers and asymmetries</p> <p>Human and operational risks (lack of trained people)</p> <p>Limitations of support infrastructure (e.g. grid connectivity)</p> <p>Immature supply chains</p> <p>Context for grid</p> <p>Lack of track record and high perceptions of risk (whereas risks of high carbon options are not well recognized)</p>	<p>Country risk e.g. defaults; inflation</p> <p>Currency risk</p> <p>Transaction costs</p> <p>Complexity of climate change relevant investments</p> <p>Financial viability of proposed investments</p> <p>Compounded by concerns about the financial viability of many state owned entities in key sectors (especially energy and water utilities, public transport)</p>

	<i>Policy and regulatory</i>	<i>Market and technology</i>	<i>General financial</i>
Opportunities	<p>Reform policy and governance to redirect investment towards low carbon and climate resilient options:</p> <p>Early and inclusive engagement of a diversity of stakeholders (public and private sectors and civil society)</p> <p>Support “adaptive governance” and invest in better information and understanding of the risks that climate change will pose</p> <p>Engaging potential investors in low carbon development in integrated and coordinated planning processes</p> <p>Increase transparency and buy in around low-carbon policy</p> <p>Establish coordinated frameworks across government and other stakeholders for planning and monitoring implementation</p> <p>Explicit or implicit carbon pricing (feed in tariffs, taxes)</p> <p>Increase transparency of subsidies for fossil fuels, and introduce processes to rationalise and reduce</p>		

Table 4
Examples of national policies in the African region

<i>Country</i>	<i>Feed-in tariff</i>	<i>Capital subsidies, grants, rebates</i>	<i>Investment or other tax credits</i>	<i>Sales tax, energy tax, excise tax or value added tax reduction</i>	<i>Public investment, loans or financing</i>	<i>Public competitive bidding</i>
Algeria	X		X	X		
Egypt				X		X
Ethiopia				X		
Ghana		X		X	X	
Kenya	X		X			
Mauritius		X				
Morocco			X	X		
Rwanda	X				X	
South Africa	X	X		X	X	X
Tunisia		X		X	X	
Uganda	X	X		X	X	
Zambia				X		

Table 5
Examples of national trust funds

<i>Fund</i>	<i>Aim</i>	<i>Resources</i>	<i>Programs</i>
Climate Fund Programme (Brazilian Development Bank (BNDES) and the Ministry of the Environment (MMA)) – Brazil ^a	The aim of the new fund is to provide support for projects related to efforts aimed at reducing greenhouse gas emissions and in adapting to climate change	<p>The resources from the National Climate Change Fund – the climate fund – come from the 60 per cent portion of the Special Participation of Oil, received by the MMA. Such resources are split into two modalities: reimbursable, which will be operated by the BNDES, and non-reimbursable, which is to be directly managed by the MMA</p> <p>In 2011, some BRL 230 million was earmarked for the two modalities. Of this amount, some BRL 30 million was for non-reimbursable, which became effective last year, and BRL 200 million for the reimbursable modality, which will be made available as of now, with the launch of the credit line. For 2012, the reimbursable portion will total BRL 360 million</p> <p>The new line, aimed at encouraging private, municipal and state investments, deemed more efficient in terms of the climate, has more attractive interest rates than those currently applied by the BNDES. The new rates vary according to the subprogrammes, starting at 2.5 per cent per annum</p> <p>Terms of loans, also variable depending on the application, can reach up to 25 years — the maximum term for undertakings in urban railway transport. The participation of the BNDES may be as high as 90 per cent of the eligible items in all the subprogrammes</p>	<p>Efficient transport modals – aimed at projects that contribute to reducing greenhouse gas emissions and local pollutants in collective urban passenger transport, and improvements in urban mobility in metropolitan regions</p> <p>Efficient machinery and equipment – financing for new and nationally-produced machinery and equipment with higher energy efficiency</p> <p>Renewable energy – aimed at energy generation using wind power in isolated systems, using biomass, from oceans and solar radiation, besides technological development projects and the production chains within these sectors</p> <p>Waste with energy potential – support for projects that structure urban cleaning and waste deposits to generate energy in cities that are to host the 2014 World Cup or in metropolitan regions</p> <p>Vegetal charcoal – earmarked for investments aimed at improving energy efficiency in the production of vegetal charcoal</p> <p>Combating desertification – projects for restoring biomes and sustainable</p>

<i>Fund</i>	<i>Aim</i>	<i>Resources</i>	<i>Programs</i>
People's Survival Fund (PSF) – Philippines ^b	PSF to implement local climate change action plans and make communities more resilient to climate-induced disasters	The funds will be sourced internationally and domestically. Domestically, sources of fund includes, but not limited to the following: (a) the General Appropriations Act; (b) part of the cash dividends declared by all government-owned and controlled corporations; (c) a portion of the certified emission reduction earned under the clean development mechanism; and (d) a portion of the Motor Vehicle User's Charge Internationally, it will include but not limited, to compensatory financial mechanism under international climate change adaptation mechanism	production activities involving native timber, fibre and fruits in the northeast region Used for the management of water resources, land, agriculture and fisheries, health, infrastructure development and natural ecosystems It would also be used in guaranteeing risk insurance needs for farmers and agricultural workers and for community adaptation support programs of local organizations
Indonesia Climate Change Trust Fund (ICCTF) – Indonesia ^c	To pool and coordinate funds from various sources such as international donors and the private sector, to finance Indonesia's climate change policies and programs. The ICCTF is led and managed by the Government of Indonesia to ensure that international and private sector support are harmonized and are aligned with national development plans, in accordance with the principles of the Jakarta Commitment (2008) Two main objectives of the ICCTF are: <ul style="list-style-type: none"> • To achieve Indonesia's goals of a low carbon economy and greater resilience to climate change; • To enable the Government of Indonesia to increase the effectiveness and impact of its leadership and management in addressing climate change issues; The ICCTF also aims to be an important policy dialogue forum for Development Partners and	The United Nations Development Programme (UNDP) has received USD 8,514,883 from Department for International Development (DFID) and Australian Agency for International Development as contributions to the ICCTF, where UNDP is acting as Interim Fund Manager. The mechanism for receiving and delivering these funds follows standard UNDP programming, whereby a Project Document has been signed with the Government Implementing Partner Ministry (Bappenas), under the National Implementation Modality. The ICCTF Steering Committee decided on 18 June 2010 to approve three climate change initiatives to be implemented by submitting the line ministries under the ICCTF. Since then, in the beginning of 2011, UNDP received an additional USD 2,407,704.65 from DFID and will soon receive SEK 1,000,000 (1 million, what would represent, according to the April United Nations official exchange rate USD 165,865) from the Swedish International Development Cooperation Agency	Primary – mitigation: energy and mining, forestry; adaptation: agriculture, coastal area (incl. small islands, marine life and fisheries) Secondary – mitigation: road infrastructure, water, health, waste management, transportation, industry In order to reach its goal of reducing emissions, moving Indonesia toward a low-carbon economy and adapting to the impact of climate change, the ICCTF is focused on the following three windows priority areas Window 1: Land based mitigation The ICCTF aims to contribute to Indonesia's efforts to reduce emissions from land-use change, land-cover change and peatland degradation while advancing efforts

<i>Fund</i>	<i>Aim</i>	<i>Resources</i>	<i>Programs</i>
	Government of Indonesia on climate change issues. Further guiding principles behind ICCTF design include mainstreaming sustainable development, mainstreaming good governance, and mainstreaming civil society participation and local community empowerment	The total budget required to conduct these initiatives is USD 4,633,198. Therefore, in addition to the USD 848,499 already allocated in the Preparatory Arrangements for ICCTF project document under operational trust fund expenses and capacity building purposes, signed between the Government and UNDP on December 2009, the total allocated budget amounts to USD 5,481,698. The remaining available of funds USD 5,606,755 will be programmed and reflected in the project budget upon further approval of project proposals by the ICCTF Steering Committee	toward optimizing land use and sustainable forest resources, agriculture and peatland management Window 2: Energy Aims to contribute to the improvement of energy security in Indonesia and reduction of greenhouse gas emissions from the energy and industry sectors. Window 3: Adaptation and Resilience Aims to anticipate the negative impacts of climate change and respond to the risks and uncertainties of climate disruption to ensure Indonesia's progress toward sustainable development and balanced economic growth
Bangladesh Climate Change Resilience Fund (BCCRF) – Bangladesh ^d	The aim is to contribute to the implementation of Bangladesh's Climate Change Strategy and Action Plan. The Climate Change Resilience Fund is managed by the World Bank and is a complement to Bangladesh's own national fund for climate change adaptation	The BCCRF is set up to receive public national, bilateral and multilateral contributions. Current donors include Denmark, Sweden, the European Union and the United Kingdom The uniqueness of the fund is that it is based on a coordinated donor effort which is aimed at maximising the outcome of the efforts that are required; something that is not often the case for development cooperation with Bangladesh in the area of environment and climate change The Government of Bangladesh manages the fund, where a special climate change unit of the Ministry of the Environment will deal with project applications from other departments and authorities	The fund will be used to finance the implementation of the national strategy and action plan, within the following six pillars: (1) food security, social security and health, (2) disaster management, (3) infrastructure, (4) research and knowledge management, (5) reducing greenhouse gas emissions and a conversion to low-carbon development,

<i>Fund</i>	<i>Aim</i>	<i>Resources</i>	<i>Programs</i>
		throughout the country. The World Bank is currently the trustee of the fund, but the intention is that the Government of Bangladesh, in due course, will take over that responsibility through strengthened capacity in the Ministry. In addition to the projects that will be implemented by line Ministries and other governmental institutions, 10 per cent of the fund will be able to support project proposals from the civil society	(6) capacity development

^a <http://www.bndes.gov.br/SiteBNDES/bndes/bndes_en/Institucional/Press/Noticias/2012/20120213_fundo clima.html>.

^b <<http://www.erintanada.com/component/content/article/8-environment/168-hb-3528-peoples-survival-fund-for-climate-change.html>>.

<<http://www.ejeepney.org/home/climate-policy/people-s-survival-fund-bill>>.

^c <<http://www.icctf.or.id>>.

^d <http://www.undp.org/content/dam/undp/library/Environment%20and%20Energy/Climate%20Change/Capacity%20Development/Blending_Climate_Finance_Through_National_Climate_Funds.pdf>.

Table 6
Institutions and roles in the current climate finance architecture

	<i>UNFCCC institutions (GEF, LDCF, SCCF)</i>	<i>United Nations agencies</i>	<i>Bilaterals</i>	<i>MDBs</i>	<i>Export credit agencies</i>
Technical assistance e.g. power sector reform; adaptive capacity	X	X	X	X	
Incremental cost financing	X	X		X	
Supply of low cost debt			X	X	X
Risk management instruments e.g. political risk guarantees and insurance			X	X	X

Abbreviations: GEF = Global Environment Programme, LDCF = Least Developed Countries Fund, MDBs = multilateral development banks, SCCF = Special Climate Change Fund.