Climate Investment Funds

Joint CTF-SCF/TFC.19/6 May 30, 2018

Joint Meeting of the CTF and SCF Trust Fund Committees Washington D.C. Tuesday, June 5, 2018

Agenda 6

DRAFT PROPOSAL

TECHNICAL ASSISTANCE FACILITY FOR CLEAN ENERGY INVESTMENT MOBILIZATION

PROPOSED DECISION

At the joint meeting of the Clean Technology Fund and Strategic Climate Fund Trust Fund Committees in December 2017, the committees endorsed the proposal Joint CTF-SCF.19/6, *Technical Assistance Facility for Clean Energy Investment Mobilization,* and requested Denmark, the CIF Administrative Unit, working with MDBs and the Trustee, to develop a full-scale proposal of the Facility and submit this to the SCF and the CTF Trust Fund Committees by March 31, 2018 for approval.

In response to the above decision, the CIF Administrative Unit, working closely with the Trustee and the MDBs, has prepared the proposal for the consideration by the CTF and SCF Trust Fund Committees.

The CTF and SCF Trust Fund Trust Fund Committees, having reviewed the document, CIF Technical Assistance Facility for Clean Energy Investment Mobilization, agrees to:

- 1. Establish the CIF Technical Assistance Facility for Clean Energy Investment Mobilization;
- 2. Create a special administrative budget under the SCF Trust Fund to fund activities under the Facility;
- 3. The recruitment by the CIF AU of a senior specialist to carry out specific roles in respect of the facility as set out in the proposal.
- 4. Establish an advisory group that will review proposals and make recommendations to the Senior Specialist for approval;
- 5. Delegate decision-making authority to the Senior Specialist as outlined in the Terms of Reference in Annex 1

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1. Background

- 1. At the joint meeting of the Clean Technology Fund and Strategic Climate Fund Trust Fund Committees in December 2017, the proposal titled "Technical Assistance Facility for Clean Energy Investment Mobilization" (Joint CTF-SCF.18/7) was presented for the consideration of the Trust Fund Committees. The joint meeting welcomed the proposal and requested Denmark, the CIF Administrative Unit, working with MDBs and the Trustee, to develop a full-scale proposal of the Facility and submit this to the SCF and the CTF Committees by March 31, 2018 for approval in written procedure.
- 2. Achieving the objectives of the Paris Agreement as well as Sustainable Development Goal 7 on energy will require rapid scaling up of investments in clean and efficient energy technologies, the majority of which will include the private sector as providers of finance, technologies and expertise. To achieve the Paris Agreement's goal, investment in renewable energy supply will need to reach a total of 20 trillion USD between 2015 and 2050, and demand-side investment the double of that¹.
- 3. Dramatic cost and technology developments are making mature technologies available for costeffective deployment at scale. With clean energy technologies becoming increasingly
 competitive, the focus is turning to policy incentives, regulatory frameworks and the ability to
 attract private investors and capital. This is particularly the case for middle income developing
 countries, since their demand for energy services is set to increase significantly in the coming
 years and will need to invest heavily in new energy supply and energy efficiency to meet the
 rising energy demand.
- 4. To meet the steep investment goals, governments are seeking to create markets and pipelines of investable, renewable energy and energy efficiency projects and taking steps to enhance the enabling environment and the domestic policy frameworks for investment with the aim to improve the risk-return profile of such investments.

2. Role of MDBs and other multilateral institutions

5. Support for the transition is being offered through multiple platforms. At the multilateral level, development banks, in addition to being an important source of funding, have a strong, continuous presence in partner countries that includes relationships with both private and public sector stakeholders. They have sectoral expertise and experience with technical assistance, institutional capacity building and project development, and are increasingly

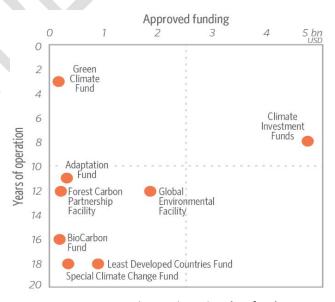
¹ IEA (2017), Chapter 2 of Perspectives for the energy transition – investment needs for a low-carbon energy system.

focusing on modalities for crowding in private finance. Furthermore, in response to the Paris Agreement and the SDGs, MDBs are committed to increasing clean energy and other green infrastructure investments and are increasingly focusing on their role in mobilizing domestic financial institutions and catalyzing private finance, including through previously untapped sources such as institutional investors.

6. Bilateral institutions as well as IRENA, IEA and other organizations are also engaging emerging and developing countries in support of energy policy and planning through a number of initiatives focused on the development of pipelines of investable projects and matchmaking with investors.

3. Relevance and experience of the CIF

- 7. The Climate Investment Funds is one of the most mature climate finance delivery vehicles. Its unique business model including a country driven, programmatic approach, collective MDB engagement and resources at scale, among other features has been serving the clean energy sector through the Clean Technology Fund (CTF) and Small scale Renewable Energy Program (SREP) windows since 2008.
- 8. A key multilateral climate finance delivery vehicle, the USD 5.6 billion CTF was established to provide developing countries with scaled-up financing to contribute to the demonstration, deployment, and transfer of low-carbon technologies with a significant potential for long-term greenhouse gas (GHG) emission savings through six partner multilateral development banks². As the only mitigation-focused multilateral fund built around the operating model of the MDBs, the CTF's model is designed to take full advantage of MDBs' key strengths, as well as their ability to leverage capital to attract large volumes of finance from both



CIF Experience vis-a-vis other funds

public and private sources. Some of its key features include its ability to provide resources at scale, emphasis on private sector engagement, innovative financial instruments and a flexible programmatic approach.

² Six MDBs include: African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), Inter-American Development Bank (IDB) and World Bank, including International Finance Corporation (IFC).

Since its inception, CTF has had long experience in delivering impact on the ground, with USD 5 billion in approved funding for clean energy and sustainable transport projects. Projects under implementation target more than 41 mtCO2 in GHG emission reduction annually from over 19 GW in new renewable energy capacity and over 10,500 GWh of energy saved. CTF-funded projects and programs are expected to attract over USD 47 billion in co-financing from MDBs, bilateral, and other public and private sources, implying a mobilization ratio of 1 to 9.5, with private sector being the largest source of co-financing.

9. To demonstrate the social, economic, and environmental viability of low carbon development pathways in the energy sector, the SREP works to create new economic opportunities and increase energy access through the production and use of renewable energy. The SREP, has committed 65 percent of its USD 760 million funding to 40 projects in 16 countries of which six are project concepts under *Private Sector Set Aside* with an indicative endorsed allocation of USD 87.3 million.

4. Lessons from prior experience

- 10. The CIF has a long and relevant track record of funding activities that offer technical assistance and support pipeline development, through the MDBs, in the Renewable Energy and Energy Efficiency space. The scope of experience covers both enabling environment / capacity building activities and project preparation to facilitate transactions (including feasibility studies, technical, financial and managerial project design). See Annex 4 for details.
- 11. The **CTF portfolio** includes the MENA CSP TA Program and country specific TA activities in Chile, Colombia, India, Indonesia, Kazakhstan, Mexico, Philippines, South Africa, Turkey, Ukraine and Vietnam. These activities are supporting countries both with enabling environment and enabling transactions interventions such as:
 - A comprehensive set of technical assistance and capacity building activities of crucial need to overcome non-financial barriers, to Foster Energy Efficiency in SMEs in Colombia,
 - (ii) Also in Colombia, promote **business models** and contractual practices that could **reduce risk perception** by private investors and IFIs and support in the development of the regulatory framework and in **capacity-building activities to foster sustainable private investment** in RE for the Non-Integrated Zones
 - (iii) **Risk mitigation measures**, such in the Utility Scale RE-Geothermal Financing and Risk Transfer facility in Mexico, where CTF resources are financing independent third-party expertise to provide advice on the technical validation of eligibility of projects and to carry out the required studies, as well as verifying success and failures on drillings.
 - (iv) **Support in developing a pipeline of subprojects** through supporting prefeasibility studies, site identification, social and environmental assessment, techno-commercial studies, and other preparatory activities, as in the Innovations in Solar Power and Hybrid Technologies in India.

- The MENA CSP TA program aimed to lay the foundation for scaling up CSP technologies, by addressing sector-wide weaknesses such as regulatory framework and lack of capacity and knowledge.
- 12. The CIF has also gained experience with enabling environment activities developed in low income countries under the **SREP program**, where a number of countries in different regions are benefiting from *Capacity Building and Advisory Services to Support Delivery and Result*, including development of energy policies and legislation, assessment of technical resource potential for various renewable energy sources, strengthening governance and institutional capacity, improved planning and regulation and incentive schemes to improve financial viability of renewable energy technologies.
- 13. Interesting lessons can be drawn from some of these projects, such as:
 - (i) In Honduras, on adaptation to specific needs of the sector, as rapid changes in the Honduran context—in particular the approval and implementation of the Power Sector Framework Law—asked for a revision of the activities that were originally planned. Execution of this project is ongoing and will support the preparation and implementation of the secondary regulations of the new Law, which seek to enable the country to continue increasing the share of renewable energy, considering the recent growth in wind and solar capacity.
 - (ii) In Ethiopia, where the TA was able to achieve results in terms of supporting the Ethiopian government in developing a geothermal strategy that has subsequently been used to guide various actions and activities to develop the market for geothermal energy in the country. More specifically, the geothermal strategy was transformed into a road map that was shared with the authorities and development partners, who later provided support for activities identified in the strategy and road map. In addition, the project supported the development of licensing regulations, resulting in a draft that is ready to be promulgated by the authorities.
- 14. The Business Development Facility (BDF) under the **Dedicated Private Sector Program (DPSP)**III will more specifically support project preparation to enable transactions. The projects and programs to be developed will complement the existing CTF portfolio and will target the next generation of technologies and or sectors and mechanisms where CTF support has not covered. CTF support in these areas could unlock investment opportunities that could generate significant savings of long-term greenhouse gas emissions. The 18 proposals submitted (on Feb 28, 2018), requesting project preparation grants totaling USD 13.82 million in CTF funding, included 11 country-specific proposals, five regional/multi-country, and two global. The country-specific proposals cover the following countries: India (three proposals, one together with Indonesia), Brazil (2), Kazakhstan (2), Ukraine (2), Bangladesh (1), and Cambodia (1).

15. The proposals cover investment areas and technologies that tend to go beyond what the CTF has financed in the current portfolio. For example, most of the renewable energy proposals will focus on new-generation low-carbon technologies, such off-shore wind, floating solar PV, energy storage, and advanced grid systems, while most of the transport proposals will target electric buses/vehicles as well as mass rapid transit. The five regional/multi-country proposals (all from ADB) will cover countries such as India, Indonesia, Kazakhstan, the Philippines, Thailand, and Vietnam. There are also two global proposals (from the World Bank) that will support mechanisms for climate auctions for the buildings sector and a common risk mitigation mechanism for solar energy, respectively.

5. Strategic considerations and justification

- 16. A number of barriers throughout the investment cycle constrain the scaling up of markets for clean energy. Lack of a supportive enabling environments, real and perceived risks as well as capacity constraints limit both the supply of investable projects with appropriate risk-return characteristics and the supply of finance to realize them, constraining the wider scale up of clean energy technologies.
- 17. MDBs, in addition to being important sources of funding, have a strong, continuous presence in partner countries that includes relationships with national finance and planning ministries as well as financial institutions. They have sectoral expertise and experience with technical assistance, institutional capacity building and project development, and are increasingly focusing on modalities for crowding in private finance. In response to the Paris Agreement and the SDGs, MDBs are committed to increasing clean energy and other green infrastructure investments and are increasingly focusing on their role in mobilizing domestic financial institutions and catalyzing private finance, including institutional investors.
- 18. The proposed facility will support the MDBs in mainstreaming climate considerations in their operations and help developing countries attract investments and mobilize private capital. MDBs also play a key role in mobilizing climate finance and make finance flows consistent with the low-carbon transition.
- 19. The proposal is to establish a Facility within the CIFs that will focus on technical support for establishing investment-friendly regulation and other investment-relevant framework conditions for renewable energy and energy efficiency, including by increasing predictability and security for investors, thereby enabling accelerated scale-up of investments in clean energy at lower costs of capital.
- 20. The MDBs play an important role not only in financing clean energy investments but also in supporting the enabling conditions for mobilizing investments, which increasingly will come

from private sources. The proposed Facility will encourage and enable MDBs to strengthen their role in this regard by providing technical assistance at the country level and will aim to result in additional investment in clean energy with private sector participation.

- 21. The planned support will complement existing efforts at multi- and bilateral levels such as those through the MDBs, IEA, IRENA and others to support the clean energy transition in emerging economies and developing countries with an aim to unlock large scale investment. Existing TA often focuses either on relatively "upstream" energy policy analysis and advice or on project-specific regulatory and capacity constraints. The intention of this proposal is to enable MDBs to complement their investment-oriented technical support taking an integrated approach to the elements in the "value chain" from policy through development of investable projects. Such additional MDB support will complement the existing bilateral and multilateral cooperation on energy policy and planning and help accelerate low-carbon transformation by scaling up clean energy investments in a short timeframe and avoid locking in high-carbon energy supply.
- 22. The Facility will help mobilize investments funded from various sources such as the GCF or the commercial market, and the success of the initiative will not be measured mainly by the financing provided on the MDBs' own balance sheet, but by its contribution to broader market transformation and ability to catalyze investment by crowding in private investment financed from various sources.
- 23. The envisaged support is aligned with and will complement international cooperation taking place in several forums and through various channels, including:
 - Work on clean energy investment and green finance in the context of Clean Energy Ministerial and G20.
 - Work by other international organizations such as the IEA's Clean Energy Transition Programme, the OECD's work with partner countries on climate and clean energy investment, IRENA, and GGGI.
 - Investment focused initiatives by MDBs such as Invest4Climate, NDC Invest etc.
 - The international Partnership for Green Growth and the Global Goals 2030 (P4G)
 - The Paris Agreement, esp. related to the development and implementation of ambitious NDCs as well as the objective of making finance flows consistent with low-emissions development;
 - Financing for implementation of SDGs (SDG7 on energy);

6. Priority themes

24. As a point of departure, the main focus will be on 1) Renewable power generation; 2) Energy efficiency in buildings and industry with its large untapped, cost effective emission mitigation potential; and 3) Systems integration of renewable power, e.g. network investments (e.g. smart

- grids), storage, and distributed generation.
- 25. While the costs of many clean technologies have declined, barriers continue to exist at various levels across the value chain "from policy to project" that increasing the cost of capital and discourage private sector participation, delaying the scale-up of clean energy technologies.
- 26. The support will take a country-focused approach, as country level demand, priorities and circumstances are essential to effectively enabling investments in clean energy.
- 27. In certain cases, countries have attracted less investment in renewable energy, even though the growth in the demand for electricity could result in sizeable markets. This may reflect unclear policy, legal and regulatory frameworks that hamper the development of markets and investable projects with appropriate risk-return characteristics. In a number of cases, capacity constraints at the technical and institutional level including among financial institutions prevent the wider uptake of proven technologies like solar.
- 28. In the above context, the proposed Facility aims to provide strategic support to address specific barriers and help create enabling conditions that support the development markets and investable projects, helping to scale up clean energy technologies in the host country/ region.
- 29. The support will enable MDBs to strategically deploy the most relevant and effective measures along the "value chain" of investment enablers (see Figure 1), helping to bring down the cost of capital and accelerate clean energy markets development and investments. This may include technical support in relation to the following:
 - Policy and regulatory frameworks conducive to clean energy investment and market development, including policy and regulation that either targets the energy sector directly or addresses broader areas but with an impact on investment in and financing of clean energy.
 - Measures that enable transactions through e.g. new business models, standardization of project documentation, or design of de-risking instruments using blended finance instruments
 - While development of pipelines of investable projects and matching of these with finance is a major issue, it is also being addressed by a number of initiatives and will thus not be the main focus of the initial contribution to the Facility. Support for this may be included if additional funding contributions are made.

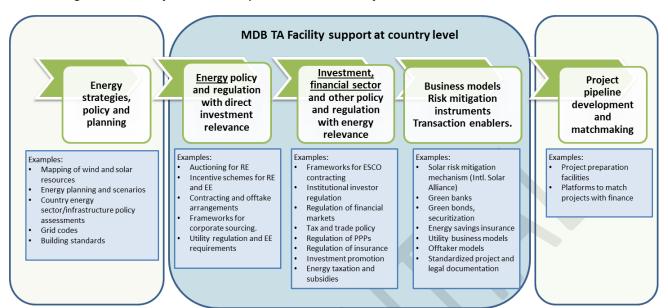


Figure 1: Focus of the TA Facility in the value chain of measures to enable investments:

30. Barriers and potentials are always country specific. While the TA Facility is not expected to be resourced to be able to address all of the potential barriers in a given country context, the facility will support addressing critical issues in the context of existing country level support, thus serving to "connect the dots" and "fill the gaps" identified. There will be particular focus on integrated approaches involving both public and private sectors. Involvement by both public and private sector arms of the MDBs will be important to ensure that issues at the interface of public and private are not overlooked. Partnerships with other international partners will be encouraged with a view to making complementary competencies available at the country level. Examples of potential partners include IEA and IRENA, GGGI, OECD and other relevant actors.

7. Objective and theory of change

31. The overall objective of the Facility is:

To assist countries in accelerating investments and market development of clean energy in support of their clean energy and low emission transformation.

32. The intervention logic is to focus on policy and regulatory frameworks as well as other targeted measures that are key in mobilizing private investments in clean energy, making expertise available to emerging economies. By providing an additional, even more investment oriented layer of technical assistance and capacity building support in line with demand from partner country governments, the vision is that the clean energy transition will accelerate and the potential for impact of the existing partnerships increase, and in addition create further opportunities for clean energy investment. The fact that the Facility provides resources for TA that goes beyond addressing the regulatory frameworks and capacity linked to specific CIF

investment projects will allow MDB support to become even more transformational and comprehensive.

33. The intervention logic and *theory of change* underpinning the Facility can be broadly described in the following way:

Provided that the following measures are taken:

- A thorough analysis of the country context is carried out, including existing support and expressed demand,
- The full value chain of investment enabling measures is considered and critical initiatives identified that may unlock investments,
- Targeted opportunities for strengthened technical support by MDBs are identified in a dialogue with key government entities on enabling policy, regulation and other measures that affect investment in and financing of clean energy,
- Technical support is efficiently deployed, improving the conditions for cost-effective investments and mobilization of finance by addressing risks and transaction costs, bringing down the cost of capital,

Then:

- Investments in and markets for clean energy may be scaled up, accelerating the transition to a clean energy development pathway, accompanied by reductions in energy related GHG emissions as well as socioeconomic and environmental benefits.
- 34. The Facility and the supported TA interventions will make a contribution to the desired outcomes of increased investments in renewable energy and energy efficiency in the host countries/ regions, and increased mobilization of private sources of finance. It is obvious that this rests on a number of assumptions. It is equally clear that in light of the resource constraints and the Facility's focus on "connecting dots" and complementing existing work, each funded TA initiative will make a contribution to the objective without presuming that resulting outcome can be attributed to the Facility alone.
- 35. Each supported TA intervention will contribute toward the overall objective, and will have its own specific objective. Similarly, each supported TA intervention will include a specific theory of change explaining the logic behind the proposal (see Annex 2).

8. Assumptions and risks

- 36. Achievement of the objective of the Facility rests on assumptions such as:
 - That international commitments to climate change mitigation as well as national targets for clean energy continue to drive country level action.

- That clean energy technologies continue to be increasingly competitive against fossil fuel alternatives.
- That the MDBs have the necessary access and policy leverage to influence partner countries at the key policymaking levels.
- That focus on climate and clean energy among MDBs will remain strong.
- 37. Assumptions and a risk assessment will be elaborated by the MDBs for each of the proposed interventions, and included in the format for funding proposals (Annex 2)

9. Selection criteria for supported TA initiatives

- 38. The following criteria will apply in the selection of TA initiatives:
 - Reflecting country commitment and demand as well as alignment with national priorities
 - Undertaken and implemented by one of the six partner MDBs
 - Contribution to stronger policy framework and local capacity that facilitates scaling up of clean energy technologies by eliminating key barriers.
 - Additionality of the Facility support. While the specific TA should be additional, it is
 welcome that TA is integrated with and complementary to existing support programs of
 the MDBs.
 - Contribution to increased mobilization of private sector investment and finance in clean energy.
 - Contribution to the mainstreaming of clean energy finance mobilization within the MDBs, also contributing to making finance flows consistent with the low-carbon transition.
 - Use of integrated approaches that involve both public and private sector.
 - Use of integrated approaches that support market transformation.
 - Active partnership approaches that harness the competencies of national and international energy, investment and finance institutions.
 - Alignment with development goals including appropriate consideration of social impacts and the need for a just transition to a low-carbon economy.

10. Country Focus

- 39. Recipient countries may benefit from the Facility provided they:
 - meet Official Development Assistance (ODA) eligibility criteria according to OECD/DAC guidelines;
 - have an active MDB country program (for this purpose, an "active" program means that an MDB has a lending program and/or on-going policy dialogue with the country).

40. The initial phase of the Facility will focus on countries and interventions with the most significant mitigation potential. With additional funding from other interested contributors, a wider group of beneficiary countries and interventions may be included.

11. Contributions and budget outline

- 41. The Joint meeting of the CTF and SCF Trust Fund Committees has welcomed this initiative, proposed by Denmark during their joint meeting in December 2017³. The TA Facility would be open to additional funding contributions channeled through the SCF Trust Fund.
- 42. The main focus will be to provide funding in support of activities that target the country level, either for single or multiple country interventions. An indicative share of 85% of the Facility's resources should be allocated for this purpose, while around 15% could be allocated to cross-country exchange and learning with relevant partners as well as analytical work to identify and communicate best practice.
- 43. The median size of individual technical assistance interventions/proposal is expected to be USD 0.5-1 million each, with a minimum of USD 0.1million and a maximum of USD2 million except for exceptional cases. These may be adjusted in light of additional funding contributions.
- 44. The administrative and operating costs of the Facility will be fully covered through the "special administrative budget" of the SCF approved by the SCF Trust Fund Committee, while ensuring that administrative costs are kept at a minimum.
- 45. The Facility is expected to be operational through December 2022, by which time it may be extended through a decision by the Joint meeting of the Trust Fund Committees.

12. Implementation arrangements and Governance

46. While benefiting all CIF countries, the proposed Facility will be embedded within the overall governance and structure of the SCF. In addition to the governance structures, policies, procedures and environmental and social safeguards of each MDB, the CIF partnership has a well-established governance structure that provides for stakeholder engagement with i.a. civil society organizations, indigenous peoples, private sector entities, UN agencies, GEF, bilateral development agencies, and scientific and technical experts. A specific Gender Action Plan has been developed to mainstream gender in CIF policy and programming.

³ The Government of Denmark has expressed its intention – subject to successful finalization of domestic approval procedures - to make an additional contribution of DKK 95 million to the SCF, using part of Danish climate finance that is mandated to support climate change mitigation and the clean energy transition in middle income and emerging economies, with an emphasis on mobilization of private finance.

- 47. The proposed implementation model will be as follows:
 - Donors' contributions will be made to the SCF and a "special administrative budget" will be used to fund the activities of the Facility within the annual SCF Business Plan and Budget.
 - An Advisory Group will be established to review funding proposals and provide strategic guidance on the Facility (see Annex 1 for draft Terms of Reference).
 - A Senior Specialist on energy investment and finance will be appointed to lead the management of the Facility and be responsible for approving proposed activities on the basis of recommendations from the Advisory Group, consolidating reporting received from MDBs and presenting it to the joint meeting of the TFCs.
 - Annual work plans and reports will be presented to the Joint meeting of the Trust Fund Committees, elaborated by the Senior Specialist/CIF AU with input from the Advisory Group.
 - The Senior Specialist will engage with MDBs and institutional partners to facilitate exchange and learning and to strengthen collaboration and coherence across TA initiatives, helping to increase the impact of the support provided.

Execution and expenditures

- All activities of the TA Facility funded through the Special Administrative Budget will be executed or supervised by the MDB in order to ensure compliance with its operational policies and procedures, including procurement and financial management guidelines.
- All the aforementioned activities will be completed no later than 24-months from the
 date of approval of the funding. Eligible expenditures for Facility financing include: (i)
 consultants' services, local training, workshops and seminars, and (ii) operating costs
 for the implementation management of the activities.
- The following expenditures will not be eligible: (i) salaries for civil servants in recipient countries hired as consultants or otherwise; (ii) purchase of vehicles and other equipment.

Approval process

- 48. The MDBs will propose activities based on the priority areas and the funding criteria using a combination of submission of proposals on a rolling basis and thematic calls in priority areas with a high potential for impact and learning (e.g. energy efficiency in buildings). The MDBs will submit proposals in accordance with the *proposal template* (see Annex 2) for the Advisory Group's consideration. The template shall include, among others:
 - Brief description of the proposed initiative, including expected outcome, justification based on a clear theory of change.

- Description of the proposed outputs and activities to be undertaken by the MDB, including scope of work and timelines.
- Assumptions and risks.
- Budget covering the key activities and outputs as well as operating costs related to the implementation identified in the proposal.
- Results framework including core indicators.
- 49. The Advisory Group will provide comments and recommendations on the proposals based on the funding criteria. Following their recommendations, the Senior Specialist will approve requests and inform the Joint TFCs. Any exceptional funding approval of initiatives above USD 2 million will be approved by the Joint TFCs on a no-objection basis.

Partner network on clean energy investment and finance

50. It is important to pursue coherent international efforts and "connect the dots" across the different bi- and multilateral actors and initiatives on clean energy investment. As a contribution to this, regular communication with bi- and multilateral actors will be ensured, including through one yearly thematic meeting with MDBs and partners, to be held in connection with an international event. Among the Institutions and initiatives that will be engaged are IRENA, IPEEC, IEA/OECD, Clean Energy Ministerial, GGGI, SE4ALL EE Accelerators, PRI, IIGCC and P4G (Partnering for Green Growth and the Global Goals).

13. Results Framework and Monitoring

- 51. The CIF was designed to be implemented through existing MDB systems, including those on monitoring and evaluation⁴. Under the CIF, annual monitoring and reporting on core indicators is embedded in the CTF, PPCR and SREP. All MDBs have in place mandatory systems for monitoring and reporting on project implementation as well as systems for independent evaluation. The emphasis on monitoring, evaluation and learning in the CIF is illustrated by the creation of the *Evaluation and Learning Special Initiative*.
- 52. Each proposed TA intervention will be required to present a results framework with core indicators as well as supplementary indicators as relevant. At the Facility level, the monitoring of core indicators on impact and outcomes will aggregate the monitoring of each TA Initiative. Annual reporting to the Joint meeting of the TFCs will include an aggregated presentation of the monitoring.

⁴ The document, CTF-SCF/TFC.12/4/Rev.1 "Approaches to Evidence-Based Learning in the CIF Project Cycle", June 16, 2014 in its chapter IV includes a comprehensive stock take of the wide-ranging evidence-based learning activities already undertaken by the MDBs.

53. The following table provides illustrative examples of indicators, which will be further elaborated during the planning and inception phase of the Facility.

Examples of Outcome	Examples of Indicator
Policy and Regulatory Framework enhanced	 # of policies, laws or regulatory frameworks updated or changed to support private sector investments (removed barriers, limits risks) # of people trained / technical assistance provided to government officials in ministries and regulators responsible for economic development, finance and planning
Robust pipeline of investable de-risked projects/	# of projects developed# of new and adapted risk mitigation tools and instruments developed
Increased private capital mobilization	 Amount of total funding mobilized Increase in funding mobilized from private capital sources (absolute and share of total) Increase in number of projects under development with private sector participation

14. Implementation schedule

2nd quarter of 2018:

- Approval by Joint TFCs of TA Facility in written procedure
- Appraisal by initial donor (Govt. of Denmark)

3rd quarter of 2018:

- Finalized framework for TA proposals, including formats and assessment criteria.
- Finalized procedures for monitoring and reporting.
- Formalization of agreement with initial donor(s).

4th quarter of 2018:

- Advisory Group established.
- First annual workplan and budget presented to Joint TFCs.
- First proposal(s) for TA submitted by MDBs.

1st quarter of 2019:

- Inception report submitted to Joint TFC.
- Partner network on clean energy investment and finance established.
- First thematic call for proposals.

Annex 1: Draft Terms of Reference of the Advisory Group Purpose and tasks

- To provide advice to ensure that activities are strategic and consistent with the goals of the Facility.
- To review TA funding proposals and make recommendations to the Senior Specialist on approval of funding based on the established criteria.
- To engage in an ongoing dialogue on good practice measures that can help achieve the objective of the Facility with the Senior Specialist in the CIF AU, CIF management and the CIF Core MDB Committee.
- To identify thematic high impact areas suitable for thematic calls.
- To promote collaboration, learning and knowledge exchange amongst the MDBs and with other parties and initiatives that focus on clean energy investment mobilization.
- To work closely with the Senior Specialist and provide strategic guidance to support the development of an annual work plan.

Structure and meetings

- The Advisory Group will be established with an initial one-year term.
- The Advisory Group will elect a Chair from among its members.
- The Senior Specialist will act as secretary to the PRG.
- The Advisory Group will meet in person at least once a year to take stock of the Facility's operation and discuss thematic and other priorities.
- The Advisory Group will provide comments and recommendations regarding TA funding requests through electronic communication including virtual meetings.

Membership

The membership will consist of individuals with expertise in clean energy investment and finance:

- Two MDB members (on a rotating basis), representing the public and private sector arms of MDBs;
- One member from each *donor* country if necessary supplemented by another contributor country to reach a minimum of two.
- An equivalent number of members from CIF recipient countries;
- On a case-by-case basis, advice may be sought from 1-2 external experts in the fields of clean energy investment and finance.

Annex 2: Draft Template for Proposal Submission

	A Facility e for Funding Request
CIF Project ID	3 - 1, 1
Country/ Region	
Public/ Private	
Project title	
Implementing MDB(s)	
National implementing agency	
MDB focal point	
Brief Description of Project/Program	
Justification and theory of change,	
including:	
How the proposal reflects national	
context and challenges.	
How the proposal helps mobilize	
private sector investment and finance.	
How the proposal complements existing	
work.	
Consistency with funding criteria	
Budget	
Implementation plan and timeline	
Stakeholder engagement and partnerships	
Results frame including:	
 Specific objective, outcome(s) and 	
outputs	
• Indicators	
Assumptions and risks/risk management	
Co-financing, if any	
Gender considerations, if any	

Annex 3: Illustrative examples of possible TA initiatives for Support

54. MDBs have provided a number of indicative examples of TA initiatives that they could present to the TA Facility for support.

World Bank illustrative examples

Renewable energy proposals for an amount of \$4 million

Geothermal

De-risking development of geothermal projects to unlock financing for projects leveraging a significant amount of public and private capital,

Assessing regulatory framework, tendering processes, use of risk mitigation facilities for exploration drilling, cost-sharing approaches between the public and private sector or other types of private sector participation.

ESMAP is currently assisting several geothermal engagements, including those supported by the CIF in Armenia, Turkey, Indonesia, Nicaragua and the Caribbean.

<u>Grid integration of VRE</u> Supporting grid and regulatory environment (regulation and market design, planning and grid integration studies, new business models) for scaling up variable renewable energy (VRE), including utility-scale and distributed generation. ESMAP has already supported country engagements on grid integration of VRE, including in India, Vietnam, Pakistan, and Central America.

Offshore wind

Resource assessment and mapping: building on the success of the Global Wind Atlas launched in 2017, enhanced data and tools to provide better offshore coverage.

Pipeline development: engagement with key clients to start building a pipeline of pilot offshore wind projects, working closely with IFC, and exploring opportunities for regional cooperation.

Solar power

Supporting the development and implementation of an enabling environment -- including policy and institutional framework, project structuring (such as auctions, solar parks, etc.), market assessment -- attracting private sector investment. ESMAP is currently supporting a number of countries, including India, Pakistan, Vietnam, and Egypt.

Energy Efficiency in buildings proposals for an amount of \$2 million

<u>Creating an enabling policy and regulatory environment for EE in buildings</u> based on a pilot project for Central America that is being developed in Panama. This initiative will focus on (i) implementing green building codes, (ii) developing energy standards and labels for key appliances and (iii) strengthening capacity building in institutions as well as (iv) designing of an energy efficiency fund to mobilize private capital, such as a de-risking facility mainstreaming private investment in EE.

<u>Integrating EE in urban slum transformation</u> including through informed design of new low-income housing considering energy and water savings as being implemented in Buenos Aires, as well as capacity building and training.

<u>Supporting market transformation for cooling equipment</u> to assist the host country manage projected significant increase in cooling demand, supporting passive energy efficiency solutions (including design, insulation, shading) as well as transform the market for cooling equipment used in buildings (e.g. hospitals) integrating energy efficiency and climate-friendly refrigerants in line with the Kigali Agreement.

ESMAP's buildings program is supporting country engagements in several countries, including India, Indonesia, Mexico, Turkey and Brazil.

IDBG illustrative examples

Example 1: Green Finance Innovation Laboratory

Summary. The Green Finance Innovation Laboratory (GFIL) is a multi-country Facility focused on developing four national platforms to stimulate the debate and development of financial instruments and mechanisms that allow the advance on sustainable development and green finance in Argentina, Chile, Colombia, and Mexico. GFIL targets renewable energy and energy efficiency projects for private sector investment and includes components of risk assessments for the financial sector to adapt to climate change impacts such as via climate stress testing. The Lab is a space for discussing actionable international experiences and building an intersectoral dialogue with the participation of development financial institutions (IFDs), private financial intermediaries, investors, insurances specialists, central bankers, regulators of financial, capital and insurance markets, and representatives of key sectors of the economy including, for instance, energy, industrial, technology and housing development. The aim is to foster the creation of investment instruments and financial structures to achieve the following complementary outcomes in the short-term: (i) create bankable pipelines of de-risked projects, and in the long-term (ii) increase the rate of private capital mobilization as a result by illustrating actual risk-return characteristics of green finance investments, and (iii) enhance the enabling environment and support policy and regulatory frameworks changes to allow for

growth of sustainable finance and green finance investment. The proposal was designed based on a successful experience in Brazil.

Justification. Mobilizing private capital at scale requires financial mechanisms and instruments to incentivize investment decision makers to opt for green investments as an option for portfolio diversification. Current demand for green finance in adequate terms exceeds current supply due to various factors, including a lack of technical capacity to develop a pipeline of bankable projects by project developers and assess these projects within the financial sector. This leads to higher than actual perceived risks that are not matched by adequate returns, thereby posing a barrier to investment. As a result, despite the large potential for green investment, the uptake has been marginal compared to the ambitions of the national climate, renewable energy and energy efficiency goals in the Nationally Determined Contributions (NDCs) of Argentina, Chile, Colombia, and Mexico.

Example 2: TA for market creation and project preparation

Country eligibility. Eligible LAC countries / sectors with the greatest potential for avoiding/reducing GHGs emissions. The selection would be informed by countries' priorities / NDCs.

Target investors: financial intermediaries, manufacturing companies, utilities, real estate companies, transport-related companies

Activities covered:

- Activities supporting the origination and preparation of bankable projects pipeline and informing capital allocations decision-making processes, including through innovative financing vehicles/instruments;
 - Identification, profiling and evaluation of eligible investment opportunities through market studies, feasibility studies, energy audits, consultations with relevant national/sub-national stakeholders.
 - Capacity building activities at the sponsor/ executing agency level, to integrate climate risks / sustainability standards/principles/best practices at the project level and/or sponsor/financial
 - Support clients to earn energy-relevant certifications e.g. EDGE, LEED, STAR
- Activities supporting the identification of possible regulatory/policy gaps affecting the risk/return dynamics of eligible investments in renewable energies / energy efficiency; engagement in policy dialogues to address such gaps and thereby strengthen the enabling environments for such investments
- Activities fostering market creations and clean energy technology innovation by supporting
 e.g. clean tech early-stage companies and promoting non-traditional renewable energy and
 energy efficiency commercial available technologies.

- Activities supporting financial intermediaries and/or corporations in the issuance of certified green bonds
- Cost-sharing support mechanisms for due diligence costs (e.g. when the size of the transaction could not fully bear them).

Example 3: Design of a Green Energy Regional Guarantee Facility

The Regional Guarantee Facility (RGF) seeks to mitigate private sector risks in financing green energy projects in Latin America and the Caribbean (LAC). The resources from the CIF Technical Assistance Facility for Clean Energy Mobilization would be utilized to craft the regulatory model of the RGF and associated contractual arrangements that would make the guarantee structure viable and operational for the mobilized private sources of financing (e.g. private banks, equity investors, debt holders and/or institutional investors).

The RGF would be structured as follows:

- A commercial debt mobilization guarantee to directly support commercial lenders for
 green energy projects in the event of a debt repayment default caused by the public
 utility's failure to make undisputed payments under contractual arrangements or in
 case of any early termination of the power purchase agreements (PPA). Under the
 guarantee agreement, IDB would make (partial) payments to the lenders as defined by
 specific triggering events. Payments by IDB under the guarantee mechanism would
 then activate the repayment of the sovereign obligation by the host country.
- A credit enhancement guarantee provided to backstop certain payment obligations undertaken by the public utility (utility) under long-term PPAs. The credit enhancement guarantee will support a revolving standby letter of credit (LC). Under the LC structure, the utility would provide security under the PPA in the form of a LC, issued through a commercial bank, in favor of the private sector investors for an agreed amount to cover payment obligation under the PPA. In case of non-payment of obligations under the PPA, the LC could be drawn for any undisputed and unpaid amounts. Following a drawing, the utility would be obligated under its agreement with the LC issuing bank to make a repayment for the amounts drawn and reinstate the LC. If the utility fails to repay the LC bank, the LC bank would have recourse to the IDB credit enhancement quarantee for a part of the drawn amounts. Payments by IDB under the guarantee mechanism would trigger the obligation of the host government to repay IDB for the corresponding payments amount. In case a LC is not issued by the utility for payment obligations under the PPA, a direct guarantee can be provided by IDB to the private investors. In this case, the IDB may make a payment directly to them, when called upon the guarantee and seek repayment from the government.
- Background. An estimated 22 million people in LAC still lack access to electricity, and the
 countries of the region need to increase their installed power capacity by 2030 to meet
 customer demand. While over 60% of the region's electricity, on average, comes from
 renewable sources, many countries are still highly dependent on fossil fueled power

plants and there is an opportunity to further diversify the fuels use mix and expand the use of green energy through renewable energy (RE) sources such as solar, wind, biomass and small hydropower plants. Significant challenges to increased use of green energy in the region remain with key financial risks and barriers associated with low creditworthiness of public utilities, low market capitalization and lack of appropriate credit mitigation products, amongst others.

ADB illustrative examples

1. Project Title: Integrated High Impact Innovation in Sustainable Energy Technology **Country/Region:** ADB CIF countries

Project objective/rationale for support (2-3 lines): 1. The proposed knowledge and support technical assistance (TA) will prepare energy system development scenarios, technology roadmaps and support the scale up of innovative energy technologies in developing member countries (DMCs). The TA is aligned with ADB's energy policy and will support DMCs in meeting the 2030 Sustainable Development Goals (SDGs) and their Nationally Determined Contributions (NDCs) as part of the Paris Agreement on climate change.

Est. amount to be requested: \$1M

Timeframe for implementation: 4th Quarter 2018-2023

2. Project Title: Promotion of Solar Energy (ADB-ISA Cooperation Program)
Country/Region: ISA Countries which are ADB Developing Member Countries

Project objective/rationale for support (2-3 lines): To support ADB's collaboration with the International Solar Alliance (ISA). The areas of collaboration include identification of innovative financing instruments and modalities, capacity building, and upstream action to identify potential investment projects.

Est. amount to be requested: \$1.0 - \$2.0 Million [larger amount if floating solar is bundled with ISA]

Timeframe for implementation: 2 years

3. Project Title: Floating Solar Development Program

Country/Region: ADB CIF countries

Project objective/rationale for support (2-3 lines): Support large-scale floating solar development and related grid upgrades which enable larger-scale regional power trading, e.g., in the Greater Mekong Subregion and South Asia subregion

Est. amount to be requested: \$1.0 - \$2.0 Million [\$1 million per subregion]

Timeframe for implementation: 2 years

Annex 4: Examples of activities supported by CTF/ SREP

Country	Activities
Chile	This component supports the generation and dissemination of information about the performance, lessons learned, and impacts (in terms of substitution of fossil fuels, GHG emission reductions, benefits to the local economy, etc.) of the solar projects in Chile. It also supports other solar power-related activities, including the creation of a clearinghouse on solar microsystems in the context of the net metering regulations, and the effective transfer of solar energy knowledge, experiences and technologies for the training of human capital and for the development of local supply chains. Finally, the component assists the GoC in managing the tender and knowledge management processes.
Chile	The TC component will support LFIs and their clients as well as equipment providers and other lenders of this program in the eligible sectors. The objective is to support the implementation and scale-up of this program by providing: a. Independent technical advisory services for eligible projects: (i) project origination through reviewing existing client portfolio and identifying new potential customers; (ii) project evaluation through feasibility studies and technical due diligence; (iii) development of new financial products, potentially including models for small scale project finance and the required standard documentation; (iv) support for improving energy related design criteria for new building developments; (v) provide energy ratings for new and existing buildings, and (vi) training activities for LFIs including strategy setting and specific training for FI staff from various areas. It will include an introduction to PEEERA technologies and finance needs and benefits. b. Support on transaction costs: This will entail (i) payment of fees for any additional technical, legal and environmental consultants which might be required to implement new financial products within LFIs and with different stakeholders in the local market. c. Marketing and dissemination: This will entail (i) marketing activities for new financial products, and (ii) dissemination of information and lessons learned through conferences and seminars.
Chile	a. Development and implementation of social & environmental best practices: In order to address the issues raised by Chilean society in past years regarding the social and environmental impacts of power generation projects (hydro, coal, and in a couple of cases also geothermal), a component focused on these aspects in envisioned. This would include but not be limited to: (i) educational campaign and awareness raising on the benefits and risks associated to geothermal development, including web materials and workshops; (ii) addressing any needs on environmental regulation related to geothermal development; (iii) development of a best practices handbook for the different stakeholders (Ministry of Energy, developers); (iv) establishment of a consultation protocol and implementation of it in the projects. b. Independent geothermal advisory services: This will entail the contracting of independent geothermal advisors to assist in —among other- determining the eligibility of the projects, defining success and failure criteria for drilling campaigns (as required by specific projects, for the cases where guarantees or insurance may be implemented), and advising on resource and project development risks. The activities would include: (i) defining the technical documentation required to conduct due diligence; (ii) technically evaluating geothermal projects, in terms of available resource information, reservoir modeling, and other aspects contributing to technical and financial feasibility of the proposed project; (iii) analyzing drilling programs indicating whether (a) the procedures for drilling and safety systems are implemented to achieve the correct safety requirements and environmental protection, (b) the specific objectives, the minimum expectations and expected outcomes are consistent with the proposed preliminary geothermal model. Geothermal expertise will also need to be transferred and shared in order to maintain the sustainability of the program in the long term and ensure the demonstration effect of the Prog

Country	Activities
	such price/market risks when no PPAs are available.
	c. Knowledge Management. In order to be able to catalyze investment and share lessons learned
	from the design and implementation of the MIRIG, a series of activities are envisioned, such as: (i)
	knowledge exchange with countries in the Region (such as Mexico); (ii) training and development
	of materials for government agencies, developers, other financial institutions on aspects such as
	regulation, risk management, simulation software; (iii) development of materials for the
	dissemination of lessons learned.
	Under this program, CTF resources will be combined with IDB/MIF investment and grant
	resources with the following objectives:
	a. Funding a comprehensive set of technical assistance and capacity building activities of crucial
	need to overcome non-financial barriers; and
	b. Sharing the first loss position in the facility (either as guarantees or equity) to allow for a
	significant level of debt leverage (over 80:20 debt/equity ratio) that would allow the facility to
	increase its scale (USD 20M+) and reduce the cost of funding to be able to provide adequate
	financing terms for borrowers, and
	c. Allowing sufficient demonstration across a number of technologies, applications and financing
Colombia	models, including the use of Energy Performance Contracts (EPCs). The proportion of grant
	resources proposed under this program is significant, given a) the critical importance of the
	capacity building activities across a number of stakeholders, b) the need to buy down the most of
	feasibility studies of pilot projects in order to catalyze investment and demonstration, and c) the
	need to buy down the facility's management/operational costs, given the smaller-than-optimal
	size associated with its pilot nature. The additionality of the relatively small USD 4M CTF
	allocation hereby proposed resides precisely in mitigating— along with the IDB/MIF's
	concessional/patient capital—the higher risks and costs of supporting this highly demonstrational
	first-mover structure and program.
	CTF grant resources will be used (i) to promote business models and contractual practices that
	could reduce risk perception by private investors and IFIs, and (ii) to support the Ministry of
Colombia	Mines and Energy in the development of the regulatory framework and in capacity-building
	activities to foster sustainable private investment in RE in the underserved ZNI.
	The grant funding requested may be used to pay for the contractual and legal documentation
	necessary for the establishment of this business model and for its acceptance by local agents.
	Once this business model is established, it is expected that legal and due diligence costs will
	decrease for future projects. Supply chain challenges and risk derived from the availability of
Colombia	engineering services, which under current conditions could translate into project delays, cost
	overruns, and completion/performance risk, will be addressed by assisting companies with
	independent engineers and procurement as part of the engineering studies supported by the
	Program's grant funding.
	A complementary TC will help to build up the awareness and capacities of Bancóldex, LFIs and
Calant	other relevant market actors on the structuring, financing, monitoring and evaluation of
Colombia	competitiveness-enhancing, EE projects. The project includes a semi-experimental impact
	evaluation to be carried out as part of the TC.
	This component will provide technical support to manage project risks though two
	Subcomponents. In the first place, Subcomponent II.1 will focus in improving subproject
	evaluation and surveillance. The activities under this subcomponent will provide a credible
	mechanism for proper technical implementation. In this regard, resources will be used to:
	a. finance an independent third party to provide expert advice to Bancóldex in order to evaluate
Colombia	the technical requirements of each subproject, as well as to provide independent verification
	services of the success and failure on the drillings and arbitrage services if needed; and
	b. analyze the environmental and social impact of the subprojects in order to attend potential
	gaps between the projects assessment and required international standards. Secondly,
	Subcomponent II.2 will provide the national authorities with technical support to update the
L	23335 Mponent in provide the national authorities with technical support to abaute the

Country	Activities
,	required regulation, including legal comparative studies, drafting regulatory proposals, and
	training agencies personnel on geothermal project evaluation. These resources will help
	guarantee a sound and efficient program, while also ensuring local capacity building regarding
	geothermal power projects financial assessment.
	ADB provide support for infrastructure planning for the subsequent phase of the Bhadla solar
	park, community development initiatives around the solar park and to support institutional
111	capacity development of RRVPNL and RREC on the master-plan for Phase 2 of the Bhadla solar
India	park, system strengthening studies for the implementation of the RE integration roadmap,
	identification of enterprise resource planning tools, asset accounting and also for pilot water
	schemes for remote communities located near the solar park in Western Rajasthan.
	A grant of US\$20 million will be required to set up the storage part of the energy storage project.
	Technical assistance:
	a. Capacity building and institutional strengthening to enhance SECI's core competencies that will
India	enable it to maintain sustainability of the investments made under the project;
	b. Prefeasibility studies, site identification, social and environmental assessment, techno-
	commercial studies, and other preparatory activities to support pipeline development;
	c. Developing policy and regulatory proposals to support scale-up of innovative technologies.
	The CTF grant will improve institutional strengthening and technical capacity improvement of
	PNB on rooftop solar financing, particularly on loan origination and risk assessment. It will help
India	develop building blocks under the first tranche and associated technical assistance, with
India	important non-lending covenants to be followed by subsequent tranche(s) focusing on on-lending
	of funds. For replication, lessons learned during early implementation will be captured to help
	and inform other local commercial banks establish similar lending facilities.
Indonesia	Funding for risk mitigation models from the Clean Technology Fund (CTF).
	As part of the development of Kazakhstan Energy Infrastructure Program, IFC is engaged with the
Kazakhstan	government of Kazakhstan and private sector clients to develop a CTF-eligible projects. At this
Kazakiistaii	time, IFC will implement an advisory services project aimed at improving the regulatory and
	business environment for private sector RE developers.
	The MENA-CSP TA Program will lay the foundation for scaling up CSP technologies, by addressing
MENA	sector-wide weaknesses such as regulatory framework and lack of capacity and knowledge. The
IVILIVA	projects are expected to avoid over 1.5 million tons of CO2 emissions per annum from the energy
	sector over 20 years.
	CTF resources will finance independent third party expertise to provide advice on the technical
	validation of eligibility of projects and to carry out the required studies, as well as verifying
	success and failures on drillings. These resources will help guarantee a sound and efficient
Mexico	program, while also ensuring local capacity building so that a permanent mechanism remains in
	place after its conclusion. SENER is committed to establishing an office with the technical capacity
	and competence over future activities. Resources for information sharing, project structuring
	(supporting CFE in its search for a new PPP business model), technical studies and other minor
	costs are also considered in this envelope.
	A \$1.6 million technical cooperation with FIRA, the agricultural financing arm of the Mexican
	government, to promote more efficient energy and water use in the country's food processing
	industry. CTF grant resources will be used to support the implementation of the EE sub-
	component of the Program by addressing informational and technical barriers and other real or
NA	perceived risks that have prevented the supply of and the demand for financing for EE investment
Mexico	projects. In particular, they will support the implementation of the Strategy by:
	a. providing technical and coordination support to FIRA, training relevant stakeholders, and
	actively promoting the strategy among food processing firms, energy service and EE equipment
	providers, and local financial intermediaries (LFIs);
	b. offering independent, technical capacity for validation of project proposals, of energy service
	and EE equipment providers, monitoring systems as well as verification of actual investments;

Country	Activities
•	c. stimulating the demand for EE investments through dedicated demand incentives.
	This sub-component will be included to address capacity building needs required to successfully
	implement the component. This support will include capacity strengthening of the geothermal
	team at the GDRE to supervise implementation of the RSM. This will include short trainings to
	cover geosciences, exploration, reservoir engineering, and principles of drilling. Other areas of
	training will include planning and budgeting, accounting, financial reporting, external auditing,
	funds flow, internal controls, procurement, and environmental and social safeguards.
	Consultancy support to GDRE to facilitate implementation of the RSM. GDRE will hire a consultant
	to establish and operate the RSM, and to help ensure that MENR is technically capable take over
Turkey	RSM operations before the end of the project. The "RSM Consultant" will provide specialized
Turkey	financial and geothermal expertise to the RSM, specifically regarding interpretation of surface
	exploration data, development of conceptual models, drilling and testing, and assessments of
	development and business plans provided by potential beneficiaries. The RSM consultant will
	carry out detailed design of the RSM, prepare the required draft legal documents beneficiary
	agreements, forms and websites, and be responsible for its implementation on a day to day basis
	and prepare the GDRE team to eventually taking over the management of the RSM. The RSM
	consultant will carry out the first two application rounds semi-annually for the RSM, evaluating
	applications, negotiating contracts with successful applicants, monitoring drilling progress,
	verifying drilling and well testing results, and assessing whether the success criteria were met.
	The facility will promote best practices in the development of geothermal resources for power
Turkey	and heat generation, particularly at early stage. This will include supporting developers during
	their exploration and production drilling campaigns to minimize technical and financial risks.
Turkey	Policy Dialogue, Marketing, Capacity Building, Knowledge Management, Gender
	The objective is to assess and analyze the impact of the CTF funding for RE/EE market
	development projects. Along with strong government policy and support, the projects catalyzed
Turkov	market creation for the advanced technologies, and increased sustainable energy lending
Turkey	capacity for participating FIs. The impact assessment specially focuses on leveraging private
	sector capital, introduction of new RE technologies and entrants, EE investments encouragement. Knowledge products are designed to capture and share lessons learned from the overall CTF
	experience, contributing to CIF's broader knowledge capital, as well as wider replication.
	a. Provision of technical assistance to and capacity building of ERAV for improvement of efficiency
	in electricity tariffs, enhancement of efficiency of and incorporation of smart grid technologies in
	the grid and distribution codes, integration of renewable energy in the grid and distribution
	codes, development of demand response and smart grid programs, and Project management and
	monitoring and evaluation.
Vietnam	b. Provision of technical assistance to the PCs for: (a) effective and timely Project
	implementation, capacity building in relation to financial modeling and planning, and carrying out
	of customer surveys and instituting of other such measures to improve customer satisfaction; and
	(b) implementation of advanced metering infrastructure systems, carrying out of programs
	promoting efficient electricity use such as a customer awareness campaign and demand response
	programs, and Project monitoring and evaluation.
	CTF DPSP 3 Business Development Facility
	The Climate Auctions Program, in conjunction with EDGE and the World Bank's Energy Sector
	Management Assistance Program (ESMAP) has been exploring the opportunity of combining the
Global	Climate Auction Model with EDGE voluntary certification to catalyze the green building sector in
	developing countries and to avoid lock-in to energy inefficient, polluting, and expensive assets.
	Under this approach, the Climate Auctions Program would offer an innovative, results-based

Country	Activities
Country	approach to incentivizing private sector investment. The EDGE certification would provide a
	metric against which to disburse funds.
	The proposed activities and areas of support would include the following:
	a. Commercial market sounding. With solar IPP developers, investors and financiers, market sounding will be conducted in a systematic manner to test and validate the CRMM and to prepare
	a detailed design of the mechanism.
	b. Stakeholder consultations. A wider group of stakeholders will be consulted while advancing the
	preparation of the CRMM. It would include national governments of developing and developed
	countries to create and reinforce support and to identify potential demand for the pilot phase of
	the CRMM. It would also include discussions with solar industry associations and civil society
	organizations. An external CRMM working group will be formed, which includes ISA, the task
	force, AFD, etc., to incorporate feedback into the detailed design.
	c. Detailed feasibility study. Based on the advanced concept and design, validated by market
	sounding and stakeholder consultations, a feasibility study will be conducted to i) assess technical
	and financial feasibility; ii) design detailed implementation arrangement to operationalize it; iii)
Global	due diligence, for issuing risk mitigation policies by the Guarantor Entity to beneficiaries across
	borders and reinsuring risk portfolio to traditional and non-traditional reinsurers; and iv) identify
	and assess potential risks to the CRMM and design a risk management framework.
	d. Legal Structuring. External counsel will need to be engaged to examine different structures by
	which a majority public funds could capitalize an incorporated entity in a form that would
	facilitate an external credit rating and allow it to issue insurance/guarantees. An analysis of
	various jurisdictions and relevant regulations would be undertaken for this separate legal entity.
	e. Pipeline development. To prepare the pilot phase of the CRMM, based on demand identified
	from developing ISA member countries through consultations, pipeline development activities
	will be supported across at least 4-5 countries, incl. identification of potential sites, preliminary
	feasibility study and environmental and social impact assessment to shortlist promising sites, and
	grid integration study to evacuate electricity generated and to identify any bottleneck.
	f. Capacity building of ISA. Necessary support will be provided to ISA for technical assistance and
	capacity building for the development of the CRMM and outreach for stakeholder engagement.
	The proposed areas of support/ scope of work include:
	a. Assessment of the offshore wind development globally and identifying enabling factors as well
	lessons for India to learn to scale-up its offshore wind sector.
	b. Preparing a Vision document and a Roadmap for achieving offshore wind targets by India (to
	include and not limited to the below): i. Stakeholder mapping ii. Clearances, approval and
	systems assessment iii. Value chain assessment for Supply and Services Market globally and for
	India iv. Risk matrix (including technology, skills and equipment, balance of systems, evacuation
	infrastructure and offtakers, long-term operation and maintenance system, etc.) v. Pan out
	business models to facilitate opening up of the sector for commercial investments vi. De-risking the deal for commercially financed projects vii. Assessment of policy and regulatory ecosystem
India	c. Preparation of model regulations for offshore wind sector
IIIula	d. Environment and Social Management Framework
	e. Developing standard documents and manuals (for instance, site selection checklist,
	interconnection manual, Environment and Health Safety Manual, operations and maintenance
	system best practices manual, etc.)
	f. Training, knowledge exchange, study tours/technical visits and sensitization workshops to
	promote this sector g. Designing and planning roll-out of demonstration project in the country:
	MNRE is already planning two 100 MW (about) of pilot-scale projects in the country off the coast
	of Gujarat and Tamil Nadu. The Bank will support definition and early preparation of these
	projects (for instance, feasibility analysis) for helping build a pipeline of such projects by MNRE
	towards meeting their offshore targets in a sustainable and scalable manner.

Country	Activitaios
Indonesia and India	a. Technical and financial feasibility of grid-scale battery storage systems at the HV substation level for grid ancillary services such as Frequency Regulation Ancillary Services (FRAS) and renewable energy capacity firming. b. Analysis of the technical and financial potential of utility-scale hybrid solar and wind-storage projects in medium and small island grids. The PPG will perform an initial pre-feasibility assessment of the potential for the utility-scale battery storage systems for ancillary services in India (which has a significant amount of renewables and where curtailment and grid stability needs to be currently addressed to further increase the adequacy of the system to incorporate more renewables); and support the preparation of potential World Bank investment support to Indonesia focusing on innovative ways to use storage in medium and small island grids. Storage is still considered a new and expensive technology and thorough preliminary work need to be conducted prior to any investments. The Government of Indonesia ("Gol") expect to identify a long-list of potential wind and solar-hybrid sites, the most suitable of which would be further prepared for subsequent development – most likely using a public-private-partnership ("PPP") concept. Early stage support is needed to determine RE resource potential, and to conduct dispatch diagnoses and load flow studies for all the longlist sites to assess the technical viability and financial implications of high RE penetration including the need for storage to support the grid stability and improve grid absorption. Provided a good case can be made for supporting investments in wind and solar hybrid systems in medium and small island grids, it is expected that a blend of IBRD and CTF concessional financing will be necessary to buy down system costs and reduce the risk associated with storage. The objective of such support would be to enable a better and larger integration of variable renewable energy ("VRE") as a substitute for diesel in island grids.
Kazakhstan	a. Technical due diligence – technical specifications, investment cost estimation, project implementation plan, construction schedule, commissioning requirements, ability of project to achieve commercial operation date and operation and maintenance program; b. Environmental and social due diligence – project-related environmental and social impacts and risks, baselines, compliance with EBRD performance requirements, stakeholder engagement plan, environmental and social action plan, needs analysis of other studies e.g. biodiversity; c. Legal and integrity due diligence – confirmation on the ultimate beneficial ownership, report on any integrity concerns or suspicions, overview of regulatory framework in relation to construction, operation and power off-take, status of necessary licences and permits, design of procurement plan, contracts for offtake, supply/installation of equipment, works and services, operation and maintenance.
Regional (India, Kazakhstan, Indonesia, Philippines, Thailand, Vietnam, etc.)	The funds will co-finance the following activities: a. Project identification through country-level programming and engagement with private sector developers; specific attention will be paid to translating DMCs' Nationally Determined Commitments under the Paris Climate Accord into viable investment opportunities b. South-South dialogue to disseminate regional experience and best practices c. Pre-feasibility studies d. Pilot or prototype projects which can be readily replicated and scaled up e. Identification of funding models and sources including concessional co-financing f. Initial due diligence and preparation of internal concept papers
Regional (Indonesia, Philippines, Thailand, Vietnam, etc.)	The funding will be allocated towards market assessment, private and public-sector outreach, identifying and screening project opportunities, performing initial due diligence and submission of programmatic funding proposals to CTF and CIF. Specific activities will include: a. Screening of opportunities, market mapping of new and existing clients, benchmarking and diligence to prioritize bankable opportunity sets b. Develop understanding of country specific barriers to private sector participation in next

Country	Activities
	generation RE projects in consultations with ADB's regional departments and developing member country (DMC) resident missions in target countries, and developing potential solutions c. Conduct outreach to identify potential project pipeline and associated cost and risk barriers d. Source funds from ADB to allow for project structuring e. Dissemination of lessons learned
Ukraine	To broaden the scope of local banks' sustainable energy lending activities, TC funding of USD 2 million is sought from the CTF to establish a CTF-EBRD Green Energy Financing Facility in Ukraine targeted primarily at corporate clients, as well as SMEs. The funding will be used to establish Facility implementation and monitoring functions, capacity building for local banking staff, product marketing, advisory services for end-borrowers, assessment of eligible technologies for PFIs and sub-borrowers, and support for local financial institutions to comply with monitoring and reporting obligations. At least three prospective Partner Financial Institutions (PFIs) have expressed interest in developing a tailored green finance product to scale up corporate investment in RE/EE. The successful implementation of GEFFs at 2-3 PFIs, supported by a local currency hedging facility, is expected to unlock between USD 50 – 70 million of EBRD financing and, by addressing the perceived and actual risks in the sector, catalyse a self-sustaining local lending market for RE/EE investments in the corporate and SME sectors over time. The TC package is envisaged to consist of four components, which may be revised in line with country and client requirements during the project preparation process: a. Facility implementation and monitoring – establish work plan, agree roles and responsibilities, develop operational procedures manual and agree reporting protocols for portfolio monitoring; b. Training and capacity building - deliver training and capacity building to PFIs to build their inhouse capacity to support green economy investments; c. Marketing - raise awareness of green investments amongst stakeholders and general marketing of the Facility; d. Sub-project origination and assessment - provide assistance to sub-borrowers and PFIs to develop sub-projects under the Facility and ensure compliance with eligibility criteria.