

Technical Cooperation Document

I. Basic Information for TC

▪ Country/Region:	Regional
▪ TC Name:	Building Green Financial Instruments and Systems in LAC from the Experience of China
▪ TC Number:	RG-T3045
▪ Team Leader/Members:	Maria Netto (IFD/CMF), Team Leader; Enrique Nieto (IFD/CMF), Alternate Team Leader; Omar Villacorta (IFD/CMF); Isabelle Braly (IFD/CMF); Alexander Vasa (IFD/CMF), Giovanni Leo Frisari (CCS/CSD); Johan Arroyo (IFD/CMF); Margie-Lys Jaime Ramirez (LEG/SGO); and Alison Arauz Herrera (IFD/CMF)
▪ Taxonomy:	Research and Dissemination
▪ Date of TC Abstract authorization:	May 30 th , 2017
▪ Beneficiary:	National Development Banks (NDBs) or Financial Markets Regulators in IDB Borrower Members ¹
▪ Executing Agency:	Inter-American Development Bank (IDB) through IFD/CMF
▪ Donors providing funding:	Institutional Capacity Strengthening Thematic Fund (ICS)
▪ IDB Funding Requested ² :	US\$300,000.00
▪ Local counterpart funding, if any:	20% in kind
▪ Disbursement period:	36 months disbursement, 34 months execution
▪ Required start date:	01/09/2018
▪ Types of consultants:	Firm and individuals
▪ Prepared by Unit:	IFD/CMF
▪ Unit of Disbursement Responsibility:	IFD/IFD
▪ TC Included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Development challenge of productivity and innovation and the crosscutting issue of climate change and environmental sustainability

II. Objectives and Justification of the TC

- 2.1 The technical cooperation aims at supporting the institutional capacity of national development banks (NDBs) and financial market regulators of Latin America and the Caribbean (LAC) regarding the development of financial systems -regulation, capital markets, financial instrumentation and risk sharing mechanisms (guarantees and

¹ The need for the support from this TC was identified as part of a visit organized by IDB and the People's Bank of China of 21 regulators and representatives from NDBs to China in March 2017. See link: [Request from the client](#) and [Mission Report](#). The selection of NDBs and regulators to benefit from institutional capacity will be based upon demand and the following selection criteria: existing IDB operations with and institutional capacity of public banking institutions to prepare and structure green projects and strategies, as well as the size and sophistication of capital markets. Beyond these criteria, decisions will be made on a first come first served basis. The selection furthermore will be in accordance with the ICSF Operational Guidelines (GN-2697).

² The Technical Cooperation will actively pursue possibilities to leverage ICSF resources with additional resources, including the Chinese South-South Cooperation Fund.

insurance markets) to promote green finance.³ It aims, in particular, to support LAC institutions in learning from methodologies and policies developed by the Chinese government and financial institutions to promote green finance and to replicate similar initiatives. Many countries in LAC currently lack the level of depth and sophistication of capital market regulatory frameworks to implement green finance at scale. Furthermore, the lack of long-term credit in financial markets exacerbates limits on scaling-up green finance investments. The Chinese experience in developing such frameworks and financing,⁴ the exchange with financial regulators and Chinese banking institutions can provide valuable lessons to develop strategies in cooperation with LAC financial regulators and NDBs for the inclusion of green finance and risk elements in the financial system.

2.2 At the end of 2015 the government of China created a "[Chinese Green Finance Task Force](#)" led by the People's Bank of China (PBOC) and composed by a number of financial institutions (FIs), line ministries such as the Ministry of Finance and the Ministry of Environmental Protection. They jointly launched in August 2016 a "[Guidance on Building Green Finance System](#)" which included a package of financial markets regulations, incentives and funds, including:⁵

- Development of national green bond standards (catalogue), including requirement of mandatory environmental information disclosure system for companies and bond issuers
- Second tier / relending operations to FIs by the PBOC
- National and sub-national green funds offered through FIs
- Specialized green guarantee programs
- Interest subsidies for green loan supported loans
- Development of green insurance mechanisms and regulation requesting mandatory pollution liability insurance

2.3 This "Guidance" framework is currently being successfully implemented by all Chinese IFIs, which have developed dedicated green funds and guarantees, systems to assess their eligible portfolios and undertake stress testing and environmental and risk management measures to avoid negative environmental impacts. On the other hand, 2% of Chinese bond issuance in 2016 was for green bonds, accounting for more than one-third of the global green bond issuance in 2016. The number of issuances is expected to double in 2017.⁶ Finally, thought work to collect and test data is underway to refine and develop sophisticated green insurance mechanisms to be fully launched in 2017-18.

³ Green Finance incorporates finance dedicated to mitigate and adapt to climate change impacts, as well as to finance projects with positive environmental outcomes. Both China and some LAC countries, work through public banking structures to foster development and private sector investments, and regulatory guidance provides certainty for investors. The Chinese experience in structuring and deciding on regulation for green finance system is valuable for LAC countries so as to consider the benefits, costs, and challenges in the process.

⁴ China financed for instance over 500 GW of renewables (25% of world total) equivalent to over US\$1 trillion in green finance. IRENA 2017 [Renewables Dashboard](#).

⁵ See also PBOC & UNEP FI (2015) [Greening China's Financial System](#) and G20 (2016) Green Finance Synthesis Report.

⁶ RBC Capital Markets [Green Bonds Industry Note 2017](#).

- 2.4 While Latin America and the Caribbean (LAC) countries have great opportunities to promote “green” investments⁷ there is a lack of integrated financing strategies combining financial and non-financial instruments needed to address the different financial barriers and risks associated with low carbon and environmentally friendly technologies, which hinder local private investments. Direct investments and projects financed through FIs are still low in LAC due to a set of general barriers, including but not limited to:⁸ (i) limited availability of investment credit at adequate terms and conditions; (ii) lack of knowledge of LFIs on the risks and returns of green projects and on how to market, analyze, structure and finance them;⁹ (iii) lack of knowledge by potential beneficiaries about the economic benefits of green project investments; (iv) longer pay back periods of green projects as compared to normal activities funded by the banks; (v) the perception that these projects are not “business as usual” investments; and (vi) lack of financial capacity of local energy technology or service providers.
- 2.5 The IDB, through its Connectivity, Markets and Finance division (IFD/CMF) has been working increasingly with financial markets regulators and National Development Banks (NDBs) to address these barriers and integrate climate change and environmental concerns in their businesses through the development of financial strategies geared to promote green finance in the LAC region¹⁰ and eventually catalyze private investments in this area with the support of international climate finance.¹¹ As it is the case in China, financial markets regulators and NDBs in LAC are in a unique position to engage LFIs and private investors, align development financing with national priority mitigation actions, and canalize international climate funding to promote and scale up investments in green projects.
- 2.6 This project could also leverage the support that the IDB, through the Climate Change Division (CSD/CCS), is offering to countries’ Ministries of Finance in the

⁷ Vergara, Alatorre; Alves (2013) Rethinking Our Energy Future: A White Paper on RE for the 3GFLAC Regional Forum (see link: [Rethinking our energy future](#)); Flavin; Gonzalez; Majano; Ochs; Rocha; Tagwerker (2014) Study on the Development of the RE Market in LAC (see link: [Study on the Development of the Renewable Energy](#)); Gischler; Janson (2011) Perspectives for Distributed Generation with RE in LAC: Analysis of Case Studies for Jamaica, Barbados, Mexico, and Chile (see link: [Perspectives for Distributed Generation](#)); IDB & WB (2009) Implementing RE and EE Measures: Challenges and Opportunities for LAC (see link: [Implementing Renewable Energy](#)); German Ministry of Economy (see link: [German Energy Solutions](#)); and UNECLAC (2014): EE in LAC: Progress and Challenges of the past five years (see link: [Energy efficiency in Latin America and the Caribbean](#)).

⁸ Sarkar & Singh (2010): Financing EE in developing countries – lessons learned and remaining challenges. Energy Policy 38 (10), 5560-5571. IRENA (2012) Financial Mechanisms and Investment Frameworks for RE in Developing Countries. See link: [Journal Article. Financing Energy Efficiency in Developing Countries](#).

⁹ Projects promoting clean and environmentally friendly technologies may also confront ‘financial modeling’ or ‘pricing’ issues for lenders as well as difficulties in accessing finance because of the lack of collateral.

¹⁰ This TC will make use of exiting knowledge sharing mechanisms IFD/CMF has been promoting, dedicated knowledge sharing web interfaces (see link: [Latin American and Caribbean Green Finance](#)) and networks of NDBs and regulators, including ALIDE and acknowledging adequately the participation of the ICSF. It will also complement and use lessons learned from other TC activities underway (RG-T2160, RG-T2159, RG-T2166, RG-T2335, RG-T2338, RG-T2340, RG-X1258 and RG-X1244) with which the IDB has been supporting NDBs on green finance programs. Lessons learned specifically include the role of national development banks for achieving green finance, renewable energy expansion and sustainable development goals, the inclusion of environmental and social safeguard management systems for NDBs, the [role of guarantees](#), experience from [structuring](#) (see link: [financial and non-financial instruments energy savings investment projects](#)). The experiences are the basis for improving existing and preparing new IDB loan operations.

¹¹ Examples include blending IDB and NDB resources with the CTF, the FIP, the GEF, and bilateral donors, such as KfW and AFD, in structuring programs (for more information see: [IDB. Financial Innovation Lab](#), [IDB-BK-116](#), chapter 6, [IDB-MG-148](#) and [IDB-TN-437](#)).

implementation of the NDCs and the delivery of their goals, through the NDC Invest platform and its technical assistance to developing financial strategies to be implemented. Supporting capital markets and financial institutions in increasing the resources available to low carbon investments could prove instrumental in fulfilling the goals of the countries' NDC and then provide a key political motivation for governments and institutions in LAC to act promptly on the example of the Chinese counterparties.

- 2.7 Learning from the experience of PBOC to develop an integrated approach to incorporate green finance in the national financial system and the specific methodologies being applied by Chinese banks to promote green finance would be strategic and key elements to enhance and scale up the IFD/CMF's current activities to promote financial market regulators and NDBs' efforts on green finance in the region. This project aims to do that through: (i) promoting knowledge sharing between Chinese and LAC financial markets regulators and NDBs; and (ii) supporting up to 3 NDBs/regulators in developing institutional capacity and piloting the potential replication of methodologies and principles developed in China adapted to the local contexts.
- 2.8 This technical cooperation (TC) is aligned with the development challenge of productivity and innovation and the cross-cutting issues of institutional capacity and rule of law as well as climate change and environmental sustainability of the Updated IDB Institutional Strategy 2010-2020 (AB-3008) by aiming to enhance the capacity of regulators and NDBs to promote green finance. Further the TC fulfills the following criteria of the Institutional Capacity Strengthening Fund: promotion of high impact institutional development, including instruments for dialogue, and knowledge exchange between China and LAC stakeholders.¹²

III. Description of activities/components and budget

- 3.1 **Component 1. Knowledge Sharing:**¹³ This component will promote the collection and sharing of best practices and experiences among Chinese stakeholders (Financial institutions and financial regulator) and LAC financial regulators and NDBs in promoting green finance in LAC. This work will take advantage of ongoing IDB partnership with PBOC and already existing information sharing tools IDB is supporting for knowledge exchange on green finance by NDBs and financial markets stakeholders including a dedicated web interface¹⁴ and regional networks such as the Association of Latin America Financial Institutions (ALIDE). It will finance the development of analytical studies, presentations, and newsletters, and the organization of 2 global events¹⁵ bringing together representatives from LAC NDBs and financial regulators¹⁶ as well as Chinese stakeholders and a series of webinars

¹² This TC is further complemented by the analysis on the role of financial regulations and monetary policies in supporting low carbon investments and reducing financial instability- by mitigating the risk of stranded asset – being developed in the ESW RG-E1352 led by CSD/CCS with IFD/CMF; the work on investors and local capital markets in LAC for the financing of sustainable infrastructure with a TC analyzing both investors' strategies for sustainable investments and regulatory responses to remove barriers and reduce challenges (RG-T2956).

¹³ The Project team will procure non-objection letters from the respective Bank's liaison office(s) prior to the execution of knowledge sharing events.

¹⁴ See the Green Finance LAC Knowledge Platform: greenfinancelac.org

¹⁵ These events will take place in two different countries in the region, with the possibility to organize one in China. The organization of these events will be coordinated with PBoC and ALIDE, and will follow IDB procedures with national authorities.

¹⁶ These events will be open to interested LAC NDBs and financial regulators and is independent of the selection of institutions to be selected for institutional capacity building under Component 2.

with Chinese FIs and stakeholders to exchange knowledge, based on revealed demand, about the following issues:

- Development of green bond markets in LAC and linkages between LAC and Chinese markets
- Development of green financial instruments and business models
- Stress testing in financial risk management of environmental impacts
- Green insurance

Results from these events will be disseminated widely, in coordination with PBoC and ALIDE using the Green Finance LAC platform.

3.2 **Component 2. Institutional capacity building:** This component will support up to 3 LAC beneficiaries (NDBs and/or financial regulators) in receiving training and getting support to develop institutional strategies to pilot replication of experiences from Chinese institutions, including promoting exchange visits between Chinese experts and LAC experts. Learning from methodologies applied by Chinese regulators and FIs in the development and implementation of green financing strategies. Support would be provided in piloting the replication in one of the following areas:

- Development and implementation of green financing strategies: (i) identify and design dedicated green financial instruments, including risk sharing mechanisms; (ii) assess and classify their portfolios to identify their environmental footprinting; (iii) develop criteria and key performance indicators that would be applied by the NDBs to demonstrate environmental benefits; and (iv) assess opportunities blending finance and accessing international finance for development of green finance products.
- Stress testing in financial risk management: (i) assess their portfolios and develop tailored environmental and social risk management systems; and (ii) develop criteria and methodologies that could be used for stress testing of riskier projects and promote forward-looking risk management practices. Green insurance: (i) collect data and the develop risk assessment tools and score boards for strategic economic sectors; (ii) develop tailored insurance other risk sharing mechanisms (such as guarantees and contingent lines); and (iii) develop regulation and instruments that can enhance participation and capacity of local insurance markets.

3.3 The selection of countries and institutions to receive support under component 2 of this TC will be based on the existence of national capital markets, the identification of a focal point within the beneficiary institution to develop a joint sustainable strategy, as well as on a first-come-first-serve basis. To further ensure continuity beyond the TC support, in collaboration and in alignment with financial regulator and national development processes, the TC as part of its activities develops recommendations for participating institutions and support based on country-demand in the implementation of these recommendations.

Indicative Budget

3.4 The total amount of this TC is approximately US\$375,000. The amount of US\$300,000 will be provided by the Institutional Capacity Strengthening Fund. There will be an in-kind counterpart contribution from beneficiaries for a total of US\$75,000. The technical cooperation will actively pursue possibilities to leverage ICSF resources with additional resources, including the Chinese South-South Cooperation Fund.

- 3.5 For the execution of component 2, IDB will establish letters of agreement with each of the beneficiaries to disburse resources.

Activity/Component	Description	IDB/Fund Funding	Counterpart Funding**	Total Funding
Component 1	Knowledge sharing	150,000	37,500	187,500
Component 2	Institutional capacity Building	150,000	37,500	187,500
Total		300,000	75,000	375,000

**In kind resources from beneficiaries: will consist on staff time, facilities for the development of planned promotional workshops and events, and office space for consultants supporting the design of the different products envisioned under this TC.

IV. Executing agency and execution structure

- 4.1 Given the diversity of actors that this TC aims at supporting and its regional scope, it is appropriate for the IDB, through the IFD/CMF Division, to directly execute it in order to provide a centralized coordination of the various studies and ensure their proper dissemination in the countries and the region. The administrative and technical supervision of the proposed technical assistance program will be under the responsibility of IFD/CMF.¹⁷
- 4.2 The funding for this operation will be used to hire consultancy services as well as to pay for travel costs and the organization of dissemination and training events. The Bank will contract individual consultants, consulting firms and non-consulting services in accordance with the Bank's current procurement policies and procedures.¹⁸ Bank staff travel costs will not be covered with these funds.

V. Major issues

- 5.1 Given that the work proposed in this TC is highly technical, there is a risk of not obtaining good quality results if the work carried out by consultants is not properly monitored. The TC will ensure that the materials developed are peer reviewed. Ensuring close technical follow up and quality control of the support provided is also one of the reasons why the TC is executed by IDB (IFD/CMF) with methodological support from CCS/CSD. This TC requires also a strong ownership of the beneficiaries and continuous involvement of financial market regulators and NDBs investment officers to keep promoting green finance strategies. To that effect, the program will ensure continuous training of those officers. It is also expected that the counterparts will dedicate the appropriate staff time and the necessary logistical resources for the implementation of the TC. The Bank will ensure that beneficiaries agree on these conditions, through jointly signed letters of agreement, as a pre-condition to receive support from this initiative.
- 5.2 The success of execution of the TC will also depend on ensuring that Chinese FIs and stakeholders are engaged in participating and promoting knowledge exchange. This

¹⁷ While the TC is focused on Public Sector National Development Banks, the team will seek actively the knowledge exchange and collaboration with other IDBG divisions working on capital markets.

¹⁸ The following procedures shall apply: (a) Individual Consultants – Human Resources procedures (AM-650); (b) Consulting Firms –the Policies for the Selection and Contracting of Consultants firms for Bank-Executed Operational Work (GN-2765-1); and (c) Non-consulting Services –Corporate Procurement Policy and procedures (GN-2303-20).

will be ensured by working closely with PBOC in identifying key Chinese FIs and stakeholders and in having technical focal points in the Chinese FIs for day to day follow up of the project execution.

VI. Exceptions to Bank policy

6.1 No exceptions are expected.

VII. Environmental and Social Strategy

7.1 The TC is not expected to generate negative environmental and social (E&S) impacts. The following IDB policies have been triggered: OP-703- B.1, B.2 and B.3. OP-710, OP-765, OP-704, OP 761, OP-102 have not been triggered. Consequently, this project is classified in category C, which means that environmental and social assessments are not necessary. See links; [Safeguard Policy Filter Report \(SPF\)](#) and [Safeguard Screening Form \(SSF\)](#).

Required Annexes:

- [Request from the client](#)
- [Results Matrix](#)
- [Terms of Reference for activities](#)
- [Procurement Plan](#)

BUILDING GREEN FINANCIAL INSTRUMENTS AND SYSTEMS IN LAC FROM THE EXPERIENCE OF CHINA

RG-T3045

CERTIFICATION

I hereby certify that this operation was approved for financing under **Institutional Capacity Strengthening Thematic Fund (ICS)** through a communication dated June 1, 2017 and signed by Kai Hertz (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$300,000** in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, represent a risk that will not be absorbed by the Fund.


CERTIFIED BY:



Sonia M. Rivera
Chief
Grants and Co-Financing Management Unit
ORP/GCM

09/21/2017
Date

APPROVED BY:



Juan Antonio Ketterer
Division Chief
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09/22/17
Date