

Coaching Report Summary
for
Mainstreaming Climate Risks in BNDES'
Direct Financing Operations

Prepared for BNDES and GIZ

by

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INTRODUCTION

The Project *Public Investment and Adaptation to Climate Change in Latin America* (IPACC II BMUB/GIZ), with inputs and participation of the project *Supporting Brazil in the Implementation of its National Agenda for Climate Change Adaptation* (ProAdapta), focuses on improving the framework conditions for an effective implementation of Brazil's agenda for adaptation to climate change. The implementation of the IPACC II project is a task for the project Managing Committee which established a joint action plan with the Brazilian National Bank for Economic and Social Development (BNDES).

Based on this, SITAWI and CFA were hired to conduct the following activities:

- a) Developing a framework proposal: a process map containing the flow of the steps for the analysis of projects in which the climate risk management and its methodological instruments are inserted;
- b) Preparing a methodological guide: an orientation tool describing the step by step application of the framework developed for climate risk analysis in the assessment of infrastructure projects;
- c) Training BNDES staff and partners representatives of the IPACCII and ProAdapta for the proper understanding of the framework and application of the methodological guide;
- d) Providing coaching during the application of the methodological guide in pilot projects.**

This report summarizes the activities that were conducted during step d). That is, the coaching of bank staff in the application of the framework and methodological guide in the analysis of infrastructure projects. For this purpose, the consulting team and BNDES selected a water utilities company, located in the city of Fortaleza (State of Ceará), and metropolitan areas (CAGECE).

We divided the coaching activities according to BNDES procedural flow as reflected in the Methodological Guide. At each session we focused on one (or more) stages of BNDES' credit flow. At the beginning of each session, BNDES' Analysts presented their progress regarding the climate analysis for that stage, and then we discussed the results in order to enhance the process.

CFA and SITAWI led the coaching sections, represented by Karen Piñeros, Stacy Swann and James O'Connor (CFA) and Gustavo Pimentel, Julia Ferrato, Cristóvão Alves and Camilla Aguiar (SITAWI).

SITAWI and CFA conducted five sessions, which correspond to about 10h of coaching, as exposed at Table 1.

Table 1 – Summary of coaching sections

Day	Date	Time	Topics discussed
1	20/09/2019	11:00 - 13:00	Habilitação Stage
2	10/10/2019	10:30 - 12:30	Eligibility and Analysis Stages
3	18/10/2019	11:00 - 13:00	Contracting Stage
4	25/10/2019	11:00 - 13:00	Contracting Stage and Analysis Part 2
5	31/10/2019	14:00 - 16:00	Value at Risk



SESSION 1 / SEPT 20, 2019 / 11:00-13:00

Participants: Gustavo Pimentel, Julia Ferrato (SITAWI), James O'Connor, Karen Piñeros (CFA) and Rodrigo Tosta (BNDES).

In this part, BNDES filled out the proposed *Habilitação* Form on behalf of the company/project being assessed (CAGECE). The bank was able to answer all questions with public information and have a preliminary idea of their hazards and mitigation initiatives.

The main discussion was about the *Habilitação* Form's content, which is included in the Annex II of the Methodological Guide. According to BNDES, this phase was designed to be as simple as possible for the client to complete so as to not unduly burden the client at this early stage. For that reason, the bank has limited interaction with the company, and typically not information on the project to be finance. The proposed form was revised to limit the number of questions and information required of the client. BNDES also suggested to simplify the answers in order to reduce the time to fill the form. We addressed that by replacing some open questions with checkboxes.

We also created a climate risk categorization for the company, which can give a preliminary client classification of high, medium or low risk according to their answers to the *Habilitação* Form. This categorization will allow the bank to have a basic, but timely understanding of the company's capabilities to manage climate risks.

Regarding the company's climate risk mitigation plan, it is important to be aware that this depends on the size of the company. We also recommend BNDES to check the company's answers to the CDP (Carbon Disclosure Project) questionnaires, whenever available.

SESSION 2 / OCT 10, 2019 / 10:30-12:30

Participants: Cristóvão Alves, Camilla Aguiar (SITAWI), James O'Connor, Karen Piñeros (CFA) and Rodrigo Tosta (BNDES).

During session 2, BNDES presented their results regarding the Eligibility and Analysis phase, which correspond to the qualitative part of the project assessment. BNDES identified three main hazards, which were: droughts, sea level rise and changes in average precipitation.

Knowing that at this stage the bank still may not have complete information regarding the project, it was suggested that we adapt the eligibility form in order to have a more qualitative-driven assessment in this stage. Therefore, we divided the column about financial impact (formerly used to estimate financial losses) in three: financial impacts on assets, costs and revenues. For each of these columns, BNDES' Analyst will assign a positive, negative or neutral value, corresponding to the impact of climate hazards on the assessed assets of projects, discussions with the potential client, and the sector specific questionnaires.

During this assessment, BNDES also identified the potential need to make new investments to adapt to predicted climate hazards.

BNDES focused on high or medium risks during this stage. We suggested to also include risks classified as *low*, since they may become more material in the future. Although BNDES did not include low level risks in the eligibility form/table, some of them were discussed during the Analysis stage.



SESSION 3 / OCT 18, 2019 / 11:00-13:00

Participants: Rodrigo Tosta, Ligia (BNDES), Cristóvão Alves, Camilla Aguiar (SITAWI) Karen Piñeros (CFA).

In this session we discussed possible ways to integrate climate related issues in the loan contracts. To support this discussion, Ligia, BNDES Lawyer, participated in the session.

BNDES defended the idea of not creating standardized clauses for climate issues, since it would demand several internal approvals in the bank. As an alternative, BNDES suggested to create a climate risk action plan, similar to the environmental and social action plan, which is currently adopted in the bank. In these action plans, the client is not obliged to strictly follow all recommendations. Instead, those can be negotiated among the parties to optimize efforts and results.

BNDES made clear that the bank no longer has the most attractive loan conditions for clients, therefore imposing many clauses and demanding additional CAPEX could have an adverse effect on the bank's business.

Offering better payment/loan conditions, or even lower interest rates for companies/projects that have plans and initiative to prevent the impact of climate hazards was seen as an interesting alternative also. In Brazil, there is a strong societal dimension of disaster damage. It means adaptation is very important. This can be done by setting targets and metrics for the adaptation plan. The risk management initiatives agreed during the disbursement can change during the loan tenor.

SESSION 4 / OCT 25, 2019 / 11:00-13:00

Participants: Rodrigo Tosta (BNDES), Cristóvão Alves and Camilla Aguiar (SITAWI), James O'Connor and Karen Piñeros (CFA).

During this session we discussed some points regarding the clauses to be included in the contract and climate tools for the analysis (both qualitative and quantitative).

BNDES highlighted that the clauses and actions to be included in the contract and in a Climate Action Plan cannot be too complicated, otherwise the bank may not have the expertise to assess them during the project monitoring stage. In addition, as stated in Brazilian Law, the Tribunal de Contas da União (TCU) will audit BNDES in order to make sure that the bank is properly supervising compliance with all covenants and clauses of its contracts.

After that, BNDES showed us the results of the analysis of the climate tool provided by Acclimatise. The tool seemed to be useful to identify climate risks at sectoral level and conduct qualitative assessment. However, it did not provide project-level information nor quantitative analysis, such as value-at-risk.

BNDES informed that they'd present other climate tools in the following weeks.

SESSION 5 / OCT 31, 2019 / 14:00-16:00

Participants: James O'Connor, Stacy Swann (CFA), Cristóvão Alves and Camilla Aguiar (SITAWI), Rodrigo Tosta (BNDES) and Alexandre Gross (Climate Consultant to the GIZ)

During this session, BNDES presented the complete analysis of CAGECE, including a quantitative assessment of potential losses related to climate hazards.



BNDES adjusted the Eligibility Form (Preliminary Risk Assessment of the Project), including a more detailed qualitative assessment of climate hazards. The bank was able to identify additional (low risk) hazards such as desertification and increased air dryness, providing qualitative assessments for each of them.

Rodrigo also structured the analysis stage in six steps. This structure was incorporated in the Methodological Guide (Annex VI) for the next assessments.

For the quantitative assessment, BNDES informed that it was not possible, at this moment, to select a climate tool or service provider that met all requirements. Those tool providers who were able to give a more detailed quantitative and VaR analysis at project level needed to be sent information about the potential client to conduct this appraisal. BNDES mentioned that it is unlikely they will be able to send client information out of the bank since, at this stage the bank still does not have a non-disclosure-agreement with the potential client. The bank committed to keep looking for a service provider that offered an open platform to run the analysis. In the meantime, the climate risk assessment to be conducted by the bank will have a qualitative bias.

Regardless the obstacles to obtain a quantitative assessment from service providers, BNDES conducted a quantitative exercise to estimate potential losses associated to climate hazards. The bank concluded that the main risk in this case was revenue interruption due to variation in water supply, caused by droughts and warmer days. The potential losses estimated by the bank sum up BRL 3.9 Million per day.

Besides being an interesting exercise, we recommended BNDES to avoid this type of manual analysis, since it would take too much time and potentially lead to inconclusive or incomplete outcomes.

KEY TAKEAWAYS

1. Assessing climate risk is a function of (i) qualitative and (ii) quantitative analysis at each stage of the project cycle. It should be integrated into the financing approval cycle of BNDES in similar ways to how other risks are integrated into the process. Assessing and quantifying climate risk is important to inform investment decision making.
2. Climate risk assessment and management is a continuous learning process, whose success will depend on creating internal capabilities in the bank to conduct this process. Many other development financial institutions are trying to overcome this challenge with different methodologies and quantitative tools and there is no one-size-fits-all-approach.
3. Whenever quantitative information is not available, the bank should make efforts to utilize a high-quality qualitative information approach and work with the potential client on quantifying risk in their financial projections.
4. Since many internal processes are changing in the bank, it is a good option to have a flexible approach to assess and manage climate risks. This flexibility will allow the bank to adapt this approach to its needs in the future.