



E&S Risk Mitigation in Project Finance – Case Studies

This paper aims to share knowledge on the environmental and social (E&S) risks assessment process adopted by Itaú Unibanco for project finance deals.

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Itaú Unibanco Holding S.A.

Why do we do it?

For Itaú Unibanco, the client is at the center of everything. A significant part of the value our operations may give back to society – and, naturally, to our clients – depends on our commitment to build up a sustainable future through our businesses.

We understand that, by including the E&S dimension in our risk management, we assume the stance of agents of transformation, contributing to enhancing market's practices, creating value to our present society and future generations.

Regarding our project finance business, in which we have a specified use of proceeds, our responsibility may be even greater.

Therefore, our E&S due diligence is carried out before the deal is closed and, depending on the E&S risks level, a robust monitoring process, as part of the transaction's covenants, might take place and may include on-site visits.

Since 2004, we have been a signatory of the Equator Principles, a set of guidelines and criteria aimed at identifying and assessing E&S risks and impacts on advisory and project finance, bridge loans and project related corporate finance.

Additionally, even for project finance deals to which the Equator Principles are not mandatory, we conduct an E&S risks due diligence that comprises identification, mitigation, management, and, if applicable, monitoring phases.

We understand that part of our role as agents of transformation is sharing knowledge and good practices. With this purpose, we share our practices and what we have

learned from managing E&S risks in project finance deals.

How do we do it?

E&S risks management is applied to project financing, including bridge loans, and starts already in the prospecting phase. Credit approval as well as contract signing, and disbursements are conditioned upon prior E&S risks assessment.

When applying the Equator Principles we are guided by international market best practices to conduct a robust, transparent due diligence. In this sense, E&S screening comprehends risk categorization based on material and sensitive issues such as potential impacts on traditional populations, climate change, and human rights, in accordance with the IFC Performance Standards. The assessment continues in a deeper and more detailed level and, besides impacts, we also assess if a proper E&S management system is in place to address these impacts. All of this is then compared to standards set by both IFC and national legislation.

The E&S categorization of the project may vary from high to medium or low risk. In the case gaps between impacts and mitigation measures adopted by the client are identified, we require enhancements to the E&S management system of the project and a monitoring plan may be drawn up, to be inserted in the contract as a covenant and periodically monitored throughout the term of the financing.

Also, E&S drivers have a direct impact on the project's final credit risk rating and allows for more accurate pricing and better capital allocation based on the identified E&S risks or mitigating factors.

To find out more about our environmental and social due diligence process and get to know the number of project related deals closed in the last year, please see to our ESG Report.



Case 1 – E&S risk assessment for real estate development

Particularly in Brazil, in large cities and heavily populated regions, real estate developments are built on areas previously intended to industries or business in general on a recurring basis, since new areas for developments are scarce due to environmental restrictions or urban zoning impediment. This reutilization of areas may require a specific environmental control in the event of soil or groundwater contamination. This situation may generate risks and restrictions for the future users of the real estate developments, as well as to the construction workers who work in such conditions.

Aiming at mitigating this risk, Itaú requests the real estate developers to fill in an environmental and social form for each residential or commercial development it finances. The purpose is to gather information about the past and current use of the real estate intended to the development, and to analyze all the applicable technical and environmental documentation, on a case-by-case basis.

The responses in the E&S form are checked and internally verified if indicators of possible site soil or ground water contamination are found, not only in the property itself but also in the surrounding area. If necessary, we may, for example, consult public databases and use geolocation tools.

If the contamination is proven, management of contaminated areas, which is a set of actions to identify, characterize and apply intervention measures, must be implemented in order to make the safe use of the area and its environmental rehabilitation viable. This process may be simple, such as in areas where just removing the contaminated soil is sufficient to mitigate the associated risks, or more complex, in the event of gases and vapors in the soil culminating in the risk of explosion, that requires permanent monitoring, specific remediation techniques among other measures.

As mentioned above, this dynamic may become complex and, therefore, a case of a residential real estate financing in the city of São Paulo will be provided as an example. In this project, next to the area intended for the real estate development there was an old, contaminated area that had already been remediated and was being used by a gas station. However, this area had not impacted the environmental quality of the area intended for the project. Even so, preliminary environmental studies were carried out by our client, which indicated the presence of gases and vapors, particularly methane. Based on this information, some monitoring wells were found to have concentration levels that could generate an explosion if exposed to ignition sources during the construction works. Accordingly, on-site studies carried out showed that the methane gas in that area was actually not from migration of surrounding contamination, but from a natural source, due to the characteristics of the region's soil, although still potentially explosive.

Against this backdrop, before the financing, Itaú checked the intervention measures proposed by the client and confirmed the drastic decrease in methane concentration in the monitoring wells, thus enabling the project's financing approval. Additionally, we understood that the adjustment to the civil construction works allowed the gas to dissipate in a natural way, effectively reducing the explosion risk.

Finally, we established contractual conditions and the documentation to be submitted over the financing to ensure safe conditions to the construction workers and the future users of the real estate development. Furthermore, it is important to point out that these measures not only generated an adequate environmental and social results, protected workers and future property owners, but also enabled a better financial performance, by reducing possible delays, in addition to mitigating any unfavorable media exposure to the reputation of both the project itself and Itaú in the event of an accident during the construction works.

Case 2 – E&S risk assessment for climate risk mitigation project

In spite of the Brazilian energy matrix being more renewable than the world energy matrix, since we use renewable sources for almost half of the energy generation, energy generated by thermal coal, oil and natural gas is still used.

Naturally, in a certain industry sectors, whose energy demand is high and where the operation of an exclusive power generation plant is required, the use of fossil fuels to this end have been the solution found so far. However, such solutions come from a time when people did not have the level of engagement with and concern about climate change and consequently with the environmental, social and climate impacts from this type of energy generation, which, in the world, is the main responsible for greenhouse gas (GHG) emissions.

Accordingly, as a financial institution responsible for duly supporting its portfolio's clients and, at the same time, fostering their engagement in ESG and energy transition issues, aligned with climate commitments assumed by Itaú and with their respective policies, Itaú seeks to support initiatives that positively contribute to a low-carbon economy, as described in the case below.

Aiming to meet universal targets of the group's headquarters regarding the reduction of GHG emissions in its operations, a company of the mining industry, owner of an alumina refinery in Brazil, sought to raise funds to finance a project to replace fuel used in its energy generation plant, which was heavy oil at that time, to liquefied natural gas (LNG). As long as LNG can be considered the first step in the energy transition process, since this change represents a reduction in the annual CO2 emissions in the refinery of 600,000 metric tons.

Itaú conducted a robust risk assessment, analyzing the local environmental and social context and the operational client's track record, as the project was intended to be developed in the Amazon, in a region known by historical environmental and social disputes. Therefore, a full E&S due diligence was carried out to assess the impacts of the project on the daily lives of traditional communities and on the local ecosystem. To this end, the adequacy of the environmental permits, as well as the existence of lawsuits arguing alleged environmental and social damages caused by the company in the past were carefully assessed.

The due diligence identified lawsuits claiming that the alumina plant had caused environmental damages due to an accident, which led to conflicts with the local population. However, it was verified that the company was not in fact directly responsible for the accident and that it had already invested R\$675 million in control systems to prevent other accidents. It was also verified that the company had always remained in good standing, obtaining all applicable permits, including those required to change the fuel used to generate energy to the plant. Finally, it was verified that the facilities had not been involved in recent environmental and social disputes in the region. Accordingly, Itaú proceeded to close the financial operation.

Considering that the initiative to replace heavy oil to LNG is the first step to the client's global strategy to transform the aluminum production into a Net-Zero Carbon process by 2050, this operation was classified as a Sustainability-Linked Loan, with an ESG rationale based on a target to reduce CO2e (scopes 1 and 2) by 41% by 2024, using 2017 emissions as the baseline.



Case 3 – E&S risk assessment for low risk projects

Itaú, as well as other Brazilian banks, voluntarily adopted the Equator Principles in 2004 and so far it keeps its commitment in force, since these Principles represent international financial industry good practices for greater effectiveness in E&S risks assessment and management, particularly in project finance.

The analysis under the Equator Principles is not limited to the contracting phase, but it is also carried out during the term of the financing. The adoption of mitigating measures for the E&S impacts and risks of the project by the client is monitored, at least annually, by the bank by means of an Action Plan that is a covenant.

It is worth mentioning that projects located in Non-Designated Countries, such as Brazil, must be compliant with the applicable Environmental and Social IFC Performance Standards and the World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines). However, not all IFC's Performance Standards are applicable to all projects, and the extension and depth of application of each guideline must be proportional to the impact and risk posed by each project.

Recently, we were exposed to a low-risk category real estate development project subject to the Equator Principles criteria. Accordingly, regardless of the risk category assigned, a full diligence was carried out, aiming to identify potential E&S risks to be handled, such as pollution, prevention and waste minimization, pollution controls (liquid effluents and air emissions), and waste management; protection of community health, safety and security; fire prevention and life safety.

Real estate developments, particularly in large cities and heavily populated regions usually are subject to soil and groundwater contamination, that may represent risks and restrictions to workers involved in its construction, as well as to the future users of the real estate development.

In this project, no contamination source was identified at the land where a residential tower would be built. However, on the land directly beside the project there was a pharmaceutical company with confirmed contamination by oil by-products. Based on preliminary studies, this contamination could affect the real estate development.

Based on the E&S risks assessment, before the financing, Itaú verified the intervention measures proposed by the client and approved by the environmental agency, the E&S risks management system and diligence adopted by the client to keep an active communication with the pharmaceutical company to achieve an effective solution to the contamination source. It is worth noting that, in addition to the previous actions, the construction of the real estate development was limited to part of the area, where it could technically be confirmed that no contamination migration would occur. Finally, through the Action Plan, we established contractual monitoring conditions based on the Equator Principles criteria, which require, for example, the periodical submission to Itaú of the applicable documents and measures adopted by our client to ensure safe labor conditions to workers, to future house dwellers, and a balanced environment.

