Second Party OpinionBanco do Brasil's Sustainable Business Portfolio



SITAWI Finance for Good Rua Voluntários da Pátria, 301/301 – Botafogo 22270-003 – Rio de Janeiro/RJ contact@sitawi.net | +55 (21) 2247-1136



About SITAWI

SITAWI Finance for Good is a Brazil-based organization whose mission is to mobilize capital for positive environmental and social impact. We develop financial solutions for social impact and advise the financial sector on how to incorporate environmental and social issues into strategy, risk management and investment analysis. We are one of the 5 best environmental and social research houses for investors according to Extel Independent Research in Responsible Investment (IRRI 2019) and a pioneer in the green bond market in Brazil, Latin America and Caribbean.

Summary

Abo	out SITAŴI	1
l.	Scope	2
II.	Opinion	3
III.	Portfolio Assessment	5

I. Scope

This document aims to provide a second party opinion (SPO) regarding Banco do Brasil's sustainable business portfolio alignment to the best international sustainability standards.

SITAWI used its proprietary assessment method for portfolio assessment, which is aligned to the Green Bond Principles (GBP)¹, Climate Bonds Standards, European Union taxonomy for sustainable activities, Social Bond Principles, The Coolest Bond, Febraban's Green Taxonomy and other internationally recognized sustainability standards. The details of this method are available in section IV.

SITAWI's opinion is based on:

 Analysis of the alignment of the Banco do Brasil's sustainable business portfolio with climate and sustainability standards.

This analysis made use of information and documents provided by Banco do Brasil (some of them confidential), desk research, as well as other elements accessed via interviews with the bank staff. This process was carried out between November and December of 2020

SITAWI has had access to all request staff, however found technical and operational limitations from BB to extract granular data from their system within the proposed schedule. Therefore, this opinion has a limited level of assurance regarding completeness, precision and reliability.

^{1 &}lt;a href="https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Green-Bond-Principles---June-2018-140618-WEB.pdf">https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Green-Bond-Principles---June-2018-140618-WEB.pdf

II. Opinion

Based on the alignment of the credit operations with international sustainability standards, SITAWI has concluded that Banco do Brasil's sustainable business portfolio's additionality is mostly classified as **High (A)**. Most of the credit lines and funded projects within the Portfolio have positive contributions to sustainable development and to a transition to an inclusive and low carbon economy.

Additionality	Credit line and activities	Percentage of the portfolio	Balance in December/2020 (R\$ million)
High	- ABC Program - Pronaf - BB Accessibility Credit - FIES - Guided Productive - Microcredit for individuals and legal entities) - PESE Fopag - Pronampe - Corporate portfolio (1.9%) - Low Income Housing Levels 1, 1.5 and 2	52.66%	128,982
Moderate C 8	- Pronamp Investiments - Production Costing for No-Till Farming System (Pronamp and Traditional Agricultural Costing) - Inovagro - Moderinfra - Taxi Driver Support Fund - Funding for the public sector - Municipal Efficiency Program - Corporate Portfolio (92.4%)	42.50%	104,100
C Limited &	- PCA - Moderagro - Corporate portfolio (5.6%) - Low income housing level 3	4.82%	11,818
Insufficient C	PMAT (Tax Administration Modernization and Basic Social Sectors Management Program)	0.02%	46

Banco do Brasil's sustainable business portfolio lists credit lines to fund clients and projects with positive environmental and social externalities, which can be divided into four major lines: i) Low Carbon Agriculture; ii) Best Socio-Environmental Practices; iii) Company (operations/products for sectors of the Green Economy); iv) Social Loans. The assessment of each of these major lines are presented in the following section.

Technical team

Daniel Chaves ESG Analyst dchaves@sitawi.net Cristóvão Alves Lead Analyst calves@sitawi.net Gustavo Pimentel Quality Assurance gpimentel@sitawi.net

Rio de Janeiro, February 10^{th,} 2021.

Disclaimer

SITAWI is not a shareholder, invested or supplier of Banco do Brasil. In 2019, SITAWI has supported BB to develop its Sustainable Finance Framework, in technical cooperation with the Inter-American Development Bank. The aforementioned project has no direct relation with this SPO, which was performed by professionals from another area of SITAWI. Therefore, SITAWI declares to be able to provide an independent Second Party Opinion regarding the issuance of the Portfolio.

The analysis contained in this SPO is based on a series of documents, part of which are confidential, provided by the bank. We cannot attest their completeness, accuracy or reliability. Therefore, SITAWI² cannot be held responsible for the use of the information contained in this report.

² The final responsible for this report is KOAN Finanças Sustentáveis Ltda. (KOAN Sustainable Finance Ltda.), which operates under the assumed name of SITAWI Finance for Good.

III. Portfolio Assessment

SITAWI used its proprietary assessment method for portfolio analysis, aligned with the following references:

- Green Bond Principles (GBP), from the International Capital Markets Association
- Social Bond Principles (SBP), from the International Capital Markets Association
- The Coolest Bonds, from SITAWI Finance for Good³
- Climate Bonds Taxonomy⁴
- European Union taxonomy for sustainable activities⁵
- Febraban's Green Taxonomy (Taxonomia Verde da Febraban)⁶

The portfolio assessment is divided according to the credit lines included by Banco do Brasil, as follows:

- a) Low Carbon Agriculture;
- b) Good Agricultural Practices;
- c) Corporate Portfolio;
- d) Social Products;

Over the following pages, we will assess the alignment of each of these credit lines and products according to the aforementioned sustainability standards.

Low Carbon Agriculture

Programa ABC (ABC Program)

The Low Carbon Agriculture Program (ABC) is a credit line created by The Central Bank of Brazil in 2010, being part of the ABC Plan, and it aims to finance practices that contribute to the reduction of greenhouse gases (GHG) emissions from agriculture and cattle raising activities. Since 2010, the program has directed more than R\$ 17 billion to sustainable agriculture management⁷ through partner banks (Banco do Brasil, Banco da Amazônia e Banco do Nordeste)⁸

The program aims to increase agricultural productivity, reduce deforestation, promote soil and water conservation, adequate rural properties to legislation, expand the area of cultivated forests and recover degraded areas.

In 2019, agriculture was responsible for 79% of the Brazilian GHG emissions, according to the United Nations Framework Convention Climate Change (UNFCCC) and the Food and Agriculture Organization (FAO). Besides, Brazilian agriculture production is expected to continue to grow in the coming years.⁹

ABC Program has ten distinct credit lines with specific goals to each of them, as presented below. It is worth noting that the goals and results below refer to ABC Program as whole and not just to Banco do Brasil's credit operations.

Credit line Description Goals

⁴ https://www.climatebonds.net/files/files/CBI Taxonomy Tables January 20.pdf

³ https://info.sitawi.net/thecoolestbonds

https://ec.europa.eu/knowledge4policy/publication/sustainable-finance-teg-final-report-eu-taxonomy_en

⁶ https://portal.febraban.org.br/pagina/3292/1103/pt-br/consulta-publica

⁷ https://wribrasil.org.br/pt/blog/2019/07/entenda-o-plano-abc-politica-brasileira-para-agricultura-de-baixo-carbono

⁸ https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/plano-abc/plano-abc-agricultura-de-baixa-emissao-de-carbono

⁹ https://www.ecodebate.com.br/2020/11/12/agropecuaria-respondeu-por-72-das-emissoes-do-brasil-em-2019/

ABC Recuperação (ABC Recovery)	Recover degraded pastures. The pasture degradation results in loss of vegetation coverage and organic matter in the soil, which leads to an increase in CO2 emissions into the atmosphere, the main greenhouse gas.	 Recover 15 million hectares of degraded pastures and mitigate from 83 to 104 million of tons of carbon equivalent (t CO2 eq). Between 2010 and 2018, 4.46 million hectares of degraded pastures were recovered (30% of the target), and 16.9 million t CO2eq were mitigated (18% of the target)
ABC Orgânico (ABC Organic)	Implementation and improvement of organic agricultural production systems.	-
ABC Plantio Direto (ABC No-Tillage Farming)	Implementation and improvement of no-tillage farming. Among the benefits of this system, are the soil, biodiversity and water conservation. In addition to increasing the fertilization efficiency, reducing the consumption of fossil fuels and the use of fertilizer.	Reach 8 million hectares of no-tillage farming and mitigate from 16 to 20 million t CO2 eq. Between 2010 and 2016, 9.97 million hectares of no-tillage farming were placed (125% of the target), and 18.25 million t CO2 eq. were mitigated (101% of the target).
ABC Integração (ABC Integration)	Implementation and improvement of integrated crop- livestock, crop-forestry, livestock-forestry or crop- livestock-forestry systems and agroforestry systems (SAF). SAFs combine forest species with traditional crops.	Implementation of 4 million hectares of ICLFS and mitigate from 18 to 22 million t CO2 eq. Between 2010 and 2016, 5.83 million hectares were converted to ICLFS (146% of the target), and 22,11 million t CO2 eq. were mitigated (111% of the target)
ABC Florestas (ABC Forests)	Implementation, maintenance and improvement of forests, including those intended for industrial use or charcoal production. The planted forests of native species (such as Paricá and araucaria) and exotic ones (such as pine and eucalyptus) contributes to CO2 capture. By increasing the wood supply, the cultivation of exotics species also reduces the pressure on native forests.	Foster the cultivation of 3 million hectares of economic forests and mitigate from 8 to 10 million t CO2 eq. Between 2010 and 2018, 1.1 million hectares of forests were planted (37% of the target) and 2 million t CO2 eq. were mitigated (25% of the target).
ABC Ambiental (ABC Environmental)	Adjustment or regularization of rural proprieties in face of environmental legislation, including recovery of legal reservation, permanent protection areas, recovery of degraded areas and implementation and improvement of sustainable forest management plans.	-
ABC Tratamento de Dejetos (ABC Waste Management)	Implementation, improvement and maintenance of systems for the treatment of animal waste and residues from animal production for energy generation and composting. Animal waste treatment reduces the methane emissions and produces organic fertilizer enabling reduction in the use of chemical inputs that contribute to GHG emissions. Besides, enabling the conversion of bio gas into energy.	Foster the treatment of 4.4 million cubic meters of animal waste and contribute to mitigate 6.9 million of t CO2 eq. Between 2010 and 2018, 1.7 million cubic meters of swine industry solid waste were treated (39% of the target), contributing to the mitigation of 2.67 million t CO2 eq (39% of the target)
ABC Dendê	Implementation, improvement and maintenance of "dende" palm forests, primarily in degraded productive areas.	-
ABC Fixação (ABC Fixation)	Encouraging the use of biological nitrogen fixation. The inoculation of seeds with bacteria capable of fixing atmosphere nitrogen into the soil reduces the use of fertilizer that contributes to GHG emissions.	Adopt BNF in 5.5 million hectares and mitigate 10 million t CO2 eq. Between 2010 and 2016, 9.97 million hectares were planted using BNF (81% of the target), and 18.25 million t CO2 eq were mitigated (182% of the target).
ABC Cultivos Permanentes (ABC Permanent Cultures)	Implementation, improvement and maintenance of açaí berry, cocoa, olive and walnut plantations.	-

According to the Climate Bonds Standards Agriculture Criteria, the adoption of climate-friendly agricultural practices may be considered eligible to climate bond issuance. Therefore, it could be considered a sustainable business. According to The Coolest Bond Report, the activities funded by the ABC Program are mostly aligned with 2°C scenario, recommended by the Paris Agreement. The European Union taxonomy for sustainable activities states that agricultural activities that have been proven to decrease or avoid GHG emissions can be classified as sustainable business. According to the Green Bond Principles, the ABC Program can be framed as sustainable agriculture within the category Environmentally Sustainable Management of Living Natural Resources and Land Use.

Therefore, we conclude that the credit operations within the ABC Program has **High (A)** additionality to a sustainable economy and are fully aligned to environmental and climate standards.

Production Costing for No-Till Planting

There are two credit lines for operating expenses in No-Tillage Farming Systems. They are:

- Traditional Agricultural Costing No-Tillage
- Pronamp (National Support Program for Rural Medium Producers) Costing No-Tillage

The lines can finance expenses such as inputs, crop handling, harvesting of the crop production cycle and the production of supervised and certified of seedings and seeds. While Pronamp can finance farmers with a revenue up to R\$ 2 million, the Traditional Agricultural Costing has no financing limits.

No-Tillage farming is an agricultural technique in which the seed or seeding is placed directly in the soil, without disturbing it through tillage. This system does not require the soil preparation in pre-planting, allowing to anticipate the sowing of the subsequent crop. This technique contributes to climate change mitigation by avoiding emissions from the stock carbon retained in the soil. It also inhibits erosion, protecting the soil against the disruptive action of the rain.

According to The Coolest Bond Report, No-Tillage system leads to a reduction of CO2 emissions above 50% when compared to the traditional system, and it is aligned with a 2°C scenario. Furthermore, according to the 2018 CBI report, No-Tillage farming avoid emissions from the soil carbon stock and reduce erosion.¹⁰

As reported by the Portfólio de Boas Praticas Agrícolas (Good Agricultural Practices Portfolio) – Programa Água Brasil (Brazil Water Program), no-tillage systems have the following benefits:

- Reduction of soil loss by erosion, once it is protected by a layer of straw. The straw makes the water penetrate slowly and avoids silting;
- Conservation and increase of organic matter in the soil, reducing the ploughing and accumulating of organic matter. Besides, when the straw is maintained, its degradation increases the soil fertility.
- Water conservation in the system, once the straw decreases the evaporation;
- Lower soil temperatures, as it is not exposed to direct radiation, even in the hottest periods of the day;
- Reduced production cost, mainly due the decrease in tillage, classification and labor used in these processes;
- Increased sowing time, once the soil is kept moist for longer after raining;

10 https://www.climatebonds.net/files/reports/brazil_agri_finance_briefing_cbi_sitawi_final_pt-web_0.pdf

- Greater stability and balance of the physical, chemical and biological proprieties of the soil, since it is less mobilized;
- Increased productivity associated to a higher humidity, especially during prolonged drought;
- Increased carbon storage in the soil.

According to the Climate Bonds Standards Agriculture Criteria, the eligible use of proceeds related to agricultural production systems may include OPEX and CAPEX related to inputs (e.g. soil, seeds, fertilizers, energy, information); capital goods (e.g. land, equipment, real estate); agricultural processing (e.g. plantations and reforested areas); agricultural products (e.g. grains, vegetables, fibers, meat, dairy products); waste management (e.g. composting, manure, agricultural waste processing, recycling); processing and storage before the point of sale. However, the same criteria eliminate the possibility of native vegetation conversion after 2010, as well as requires a climate risk assessment of the rural proprieties, themes that aren't guaranteed by the procedures of no-tillage farming of BB.

Furthermore, because the lines are focused exclusively on costing, the level of additionality, based on this framework is Moderate.

Therefore, we conclude that the projects and activities classified as No-Tillage Farming – Costing have a **Moderate (B)** additionality to a sustainable economy.

Good Agricultural Practices

This program consists of a set of credit lines and operations aligned with the Good Agricultural Practices defined by the bank. The lines within this subdivision are the following:

- Pronaf Programa Nacional de Fortalecimento da Agricultura Familiar (National Program to Strengthen Family Farming);
- Pronamp Investimentos Programa Nacional de Apoio ao Médio Produtor Rural (National Program to Support Average Rural Producers);
- Inovagro Programa de Incentivo à Inovação Tecnológica na Produção Agropecuária (Program to Incentivize Technological Innovation in Agricultural Production);
- PCA Programa para Construção e Ampliação de Armazéns (Program to Promote the Construction and Expansion of agricultural warehouse);
- Moderagro Programa de Modernização da Agricultura e Conservação de Recursos Naturais (Program for Agriculture Modernization and Natural Resources Conservation);
- Moderinfra Programa de Incentivo à Irrigação e à Produção em Ambiente Protegido (Program to Incentivize Sustainable Irrigation and Storage).

Below, the aforementioned lines will be evaluated according to the environmental and social standards adopted.

Pronaf –National Program to Strengthen Family Farming

Pronaf is program to fund family agriculture, aimed to implement, expand or modernize the production, processing, industrialization and services structure in rural establishments or in nearby rural community areas.

The program was created in 1995 by the federal government to providing a special service to small farmers. That is, those farmers whose production is a result of its own labor or family labor. The purpose of this program is, therefore, to strengthen the activities developed by the Family Agriculture, integrating it into the agribusiness value chain through the modernization of the production system. As a result, their production would increase its added value, which in turn would increase the family income.

Family Agriculture is the main responsible for the food production available to the Brazilian population, as reported by the last agricultural census conducted in 2017. In the permanent cultures, the segment accounts for 48% of the coffee and banana production values; in the temporary crops, it is responsible for 80% of the cassava production value, 69% of pineapple and 42% of bean production. The rural land management is shared by the family and the agricultural activity in the main source of income. The family farmer has a particular relationship with the land, his place of work and housing. Productive diversity is also a striking feature of this sector, as it often combines subsistence production with market destined production.

Through Pronaf, agricultural cooperatives, rural producers (individual and legal entities) and their families, artisanal fishermen, aquaculturists, marine farmers, foresters, quilombolas, indigenous, agrarian reform settlers and beneficiaries of the National Land Credit Program can be financed. In order to have access to the program, the following requirements must be met:

- live on rural propriety or nearby, depending on the geographical characteristics of the region;
- explore the land, whether as owner, squatter, tenant, partner or concessionaire of the National Agrarian Reform Program (PNRA)
- have in the family farming itself the basis of work to maintain it;
- have at least 50% of the gross family income coming from rural activities, whether agricultural or not;
- have gross Family income up to R\$ 360,000 over the last 12 months of production (in this amount it is not considered the social security benefits of rural activities and related revenues);
- have up to four fiscal modules for agricultural activity or six to livestock activity;
- use third-party labor only on a seasonal basis (if the employees are permanent, they should be fewer than the family members)

Thus, we can frame Pronaf beneficiaries according to the following categories and target population of the Social Bond Principles:

Table 1 – Definition of eligible categories and target population that will access Pronaf proceeds:

Target population
Farmers with gross Family income up to R\$ 360,000 in the last 12 months of production and owner of up to 4 fiscal
modules, considered as small rural propriety.

Therefore, we conclude that the projects and activities financed by Pronaf have **High (A)** additionality to a sustainable economy and are fully aligned with social standards (SBP).

Pronamp Investimentos - National Program to Support Average Rural Producers

Pronamp aims to finance investment projects for small and medium-sized rural producers. The program will benefit landowners, squatter, tenant, partner or concessionaire who meet the following criteria:

- at least 80% of its annual gross income originating from agricultural or plant extraction activity;
- annual gross income up to R\$ 2 million;
- compliance with labor legislation and with the Forestry Code.

The main goal of this program is to serve producers who do not fit into Pronaf's requirements, either because the annual gross income or the propriety size, therefore not being able to access the traditional agriculture financing lines.

According to the Social Bond Principles categorization, the beneficiaries of Pronamp's credit lines can be categorized in empowerment and socioeconomic advancement, due the access to financing lines for small and medium-sized rural producers.

On the other hand, we cannot be sure whether the resources are directed to vulnerable target populations. Thus, we classified the social additionality as **Limited.**

It is important to say that, among the nine categories of Pronamp's fundable items, three of them have environmental alignment with the above-mentioned standards:

1) Irrigation, damming e drainage:

Brazilian irrigated agriculture still represents a small share of the sector, with only 6.7% of the total cultivated area. However, it is responsible for 20% of the national production and 43% of the value produced (Braga, 2017 – EMBRAPA). These values demonstrate a clear competitive advantage of irrigated agriculture which therefore makes it necessary to stimulate investment in irrigation technology.

The Coolest Bond Report (SITAWI, 2018), shows that the irrigation systems contribute to productive energy efficiency, as they streamline energy and water consumption, framing the product in the 2°C scenario.

According to CBI (2020), irrigation systems and water reuse are eligible as green assets

2) Afforestation, reforestation and tree stump removal

Forests have a huge potential for carbon sequestration. Carbon sequestration occurs during the trees life cycle and contributes to greenhouse effect mitigation. Brazil has approximately 7.84 million hectares of planted forests, which stock around 1.7 billion t CO2 eq. The carbon capture potential of these forests – and hence of the forestry sector, varies according to species composition, age, soil composition, type of cut, among other elements.

Afforestation and reforestation are strategic efforts to combat deforestation, strengthening the compliance with the Brazilian Forestry Code and compensating emissions associated with deforestation through sustainable management. The renewing planting and harvesting cycles restore areas that were previously anthropized by agricultural and extractive activities. This type of forestry production also contributes to maintain biodiversity in the area and prevents the progress of activities with a high deforestation potential, such as illegal logging and extensive farming. To each hectare

of planted forest for commercial purposes, the forestry sector allocates 0.7 hectare to Permanent Preservation Areas (APPs), Legal Reserve areas (RL) and Natural Heritage Private Reserve (RPPN), collaborating to the conservation of local biodiversity.

Furthermore, according to CBI, planted forests and forest restoration are examples of green projects and assets.

3) Restoration of degraded pasture

In Brazil, there are approximately 180 million hectares of pastures, however, more than a half is degraded. Yet, there are some systems that can contribute to sustainability in cattle raising, such as systems that help increase livestock productivity without clearing new areas. Given that, restoration of degraded pasture helps to reduce carbon emissions in rural sector.

According to the Coolest Bond (SITAWI, 2018), the restoration of degraded pasture is aligned with the scenario of 2°C. The study states that it can avoid from 25% to 35% or carbon emissions.

As stated by CBI, agriculture criteria, the "conversion of degraded land for agricultural production, or maintenance of climate friendly farming practices" can be considered eligible to a climate bond emission, thus, can be considered a sustainable business.

Although some of Pronamp credit lines are aligned with the sustainability standards adopted, we cannot ensure that 100% of the credit operations are directed to these uses. Additionally, it isn't possible to segregate the volume of credit operation directed to clients that belongs to vulnerable groups. Therefore, Pronamp was classified as **Moderate (B)** additionality.

Moderinfra - Program to Incentivize Sustainable Irrigation and Storage

Moderinfra is a credit product that aims to fund sustainable irrigated agriculture. Besides, it also aims to promote the use of production structures in protected environment and protecting fruit farming from the incidence of hail. The credit line can be accessed by rural producers and cooperatives from any size.

Banco do Brasil requires borrowers to comply with labor legislation and the Forestry Code in order to access this credit line. The eligible projects are related to irrigation systems (all infrastructure and operation), equipment for specific crops (olericulture, fruit, floriculture, coffee and other forest species) and meteorological stations and systems. The fundable items are investment projects or isolated acquisition of machinery and equipment listed below:

- 1) Irrigation systems (including electrical infrastructure, water reserve and equipment for monitoring soil moisture);
- Acquisition, implantation and recovery of equipment aiming to protect crops inherent to olericulture, fruit, floriculture, coffee and production of seedlings of forest species.
- 3) Meteorological stations and software required for its operation are subject to prior authorization by the final beneficiary of the financing, and must share the data produced by this equipment with public institutions.

According to CBI (2020)¹¹, irrigation and water reuse systems are eligible as green/climate projects. In addition, the second and third items above can be considered as adaptive agricultural investments to climate change, classified as NDC scenario in The Coolest Bonds (2018).

Based on the details above, Moderinfra is classified as a product with **Moderate (B)** additionality, due to its partial alignment with the environmental and climate standards.

Inovagro - Program to Incentivize Technological Innovation in Agricultural Production

Inovagro is a credit line that aims to finance technological innovations in rural properties, in order to increase productivity and enhance the management. The credit line can be accessed by rural producers (individual and legal entities) and rural cooperatives.

Technological innovation incentive is one of the main solutions proposed by the Brazilian government, which is fundamental to implement the ABC Program and to restore 15 million hectares of degraded pastures by 2030 (Brasil, 2015).

The Coolest Bonds (SITAWI, 2018) lists a set of projects that are eligible as sustainable projects. Since most of it has the technological character as fundamental for its implementation and success, the incentive for technological innovation in the agriculture can be recalled as a sustainable business.

The table below shows the fundable items by Inovagro, as well as their alignment with environmental and climate sustainability standards:

Fundable item	Related Sustainability Standard	Alignment Level
Systems for alternative power generation and distribution	Climate Bonds Standards The Coolest Bonds European Union taxonomy	Full
Livestock and agriculture precision equipment and services	Climate Bonds Standards	Full
Aquaculture, poultry, shrimp, swine, sheep, goat, fish and dairy farming segments facilities utomation, adaptation and construction	Not Aligned	Not Aligned
Softwares for management, monitoring and automation	Not Aligned	Not Aligned
Advisory/Education services for technical and management capacities	Not Aligned	Not Aligned
Genetic material acquisition (semen, embyos and oocytes)	Not Aligned	Not Aligned
Items complying with the Integrated Agricultural Production Systems PI-Brazil ¹² and Animal	Green Bond Principles	Partial alignment

 $^{^{11}\} https://www.climatebonds.net/resources/reports/unlocking-brazil\%E2\%80\%99s-green-investment-potential-agriculture$

1

¹² O Sistema de Produção Integrada é focado na adequação dos processos produtivos para a obtenção de produtos vegetais e de origem vegetal de qualidade e com níveis de resíduos de agrotóxicos e contaminantes em conformidade com o que estabelece a legislação sanitária, mediante a aplicação de boas práticas agrícolas, favorecendo o uso de recursos naturais e a substituição de insumos poluentes, garantindo a sustentabilidade e a rastreabilidade da produção agrícola na etapa primária da cadeia produtiva, que é passível de certificação pelo selo oficial "Brasil Certificado".

Welfare, and Safe Food Programs ¹³ from various production chains, and Good Agricultural Practices for Beef and Milk Cattle		
Items or products developed within the Technological Innovation Program (Inova-Empresa) ¹⁴ ;	Not Aligned	Not Aligned
Technical services for project preparation, implementation, monitoring and execution	Not Aligned	Not Aligned
Costing associated with investments and acquisition of sows and breeders, with genealogical registration certificate, issued by qualified institutions.	Not Aligned	Not Aligned

Although Inovagro has fundable items that are aligned with environmental standards, it is not possible to guarantee that the credit operations will be fully directed to them. Thus, we classify its additionality as **Moderate (B)**.

Moderagro - Program for Agriculture Modernization and Natural Resources Conservation

Moderagro is a fixed credit line for agricultural investments funded by the National Bank for Economic and Social Development (BNDES). It promotes animal welfare and animal traceability systems for human consumption .

The program also supports soil recovery, production, processing, industrialization and storage of beekeeping, aquaculture, poultry, chinchiliculture, rabbit farming, floriculture, fruit growing, horticulture, fishing, sheep farming, dairy farming, ranching, sericulture and pig farming.

Legal compliance requirements regarding the Forest Code, labor legislation and environmental licensing are the same as for all BB's rural financing lines. Moderagro's financeable items are described below:

- 1) Support for the production, processing, industrialization, packaging and storage of agricultural products;
- 2) Promotion of animal welfare and traceability for human consumption;
- 3) Soil recovery through funding for acquisition, transportation, application and incorporation of agricultural corrective;
- 4) Construction and expansion of agricultural machinery, and agricultural inputs facilities.

The European Taxonomy of Sustainable Finance states that soil improvement is a certifiable activity only when there is forestry and forestry systems recovery intention. According to the Climate Bonds Initiative, purchase, transportation, application and incorporation of agricultural correctives may be eligible to green financing, since it

¹³ O Programa Alimentos Seguros - PAS - tem como objetivo o ensinamento de técnicas sobre Segurança de Alimentos e a implantação das Boas Práticas e do Sistema APPCC (Análise de Perigos e Pontos Críticos de Controle) nos estabelecimentos que produzem alimentos. O programa é uma ação nacional em parceria do Sistema S (Senac, Sesi, Sesc e Sebrae), a Anvisa (Agencia Nacional de Vigilância Sanitária) e a Embrapa (Empresa Brasileira de Pesquisa Agropecuárias.)

¹⁴ Apoio ao desenvolvimento e ao adensamento das cadeias produtivas de insumos para a agropecuária, de produtos e processos da indústria de alimentos e de máquinas e equipamentos para agropecuária.

demonstrates reduced carbon emissions.

Beyond that, animal traceability is a measure that guarantees cattle ranchers and consumers that animals have legal origins, and that were not raised in illegal deforested areas. Sanitary control can also be done more efficiently, since alerts about vaccines and improvements regarding the management location are available

Based on the analysis above, we conclude that part of the credit operations from Moderagro are partially aligned with the adopted sustainability standards. However, it is not possible to ensure that all program resources are directed towards these credit operations. So, we categorize Moderagro's additionality as **Limited (C)**.

PCA - Program to Promote the Construction and Expansion of agricultural warehouse

PCA aims to support investments in warehouses expansion, modernization, renovation and construction. The program aims increase the availability of agricultural warehouses in Brasil, which is below the FAO's recommendations (United Nations Food and Agriculture Organization).

According to FAO, a country's static storage capacity must be 20% greater than its production. In quantitative terms, Brazil has a total available capacity for grain storage of around 175 million tons, while the ideal capacity should be approximately 300 million tons of grain.

According to Leidens (2019)¹⁵, building private warehouses avoids logistical bottlenecks, reduces production costs and ensures better grain negotiation strategies (being able to choose the best time or selling in the form of lots), in which gains may vary from 9.3% to 15.4% in relation to the spot market.

These facilities allow for supply control, improve products appearance and reduce costs, mainly related to transportation. As a result, rural producers may increase their revenue. It is worth mentioning that all these improvement actions avoid food waste and increase properties efficiency, reducing the need of new growing areas.

We can say that PCA is aligned with the Social Bond Principles, in the category "food security and sustainable food systems: access to healthy and nutritious food and reduction of food waste".

However, its funding is not directed to target populations in vulnerable conditions.

In addition, from an environmental point of view, the producers' storage capacity improvement also makes it possible to improve transport logistics, which reduced greenhouse gas emissions. The traffic reduction of transporters on the highways contributes to the maintenance of highways' quality for a longer period of time, reducing the need of maintenance.

Therefore, based on the presented arguments, we conclude that PCA is aligned with the SBP food security and sustainable food system category. However, the program does not address vulnerable target population. Thus, its additionality is classified as

5 http://revistasafra.com.br/armazenagem-investimento-estrategico-para-o-produtor-e-para-o-pais/

Corporate Portfolio (operations/products for sectors of the Green Economy)

The Corporate Portfolio consists in a series of credit operations directed to economic sectors which are believed to have positive environmental or social additionality. In order to select these sectors, it was considered the National Classification of Economic Activities (CNAE) codes aligned with the Green Taxonomy of the Brazilian Federation of Banks (Febraban)¹⁶.

These CNAE sectors include activities such as renewable energy, energy efficiency, sustainable construction, sustainable transport, sustainable tourism, water, fishing, forest, sustainable agriculture, waste, products with specific purposes and social activities, such as education, health, productive inclusion and regional development.

Banco do Brasil sent all CNAEs considered within the Corporate Portfolio. The initial screening made by BB considered those CNAE sectors included within the Febraban Green Finance Taxonomy, launched in 2015 and prevailing until 2020.

It is important to note that the aforementioned taxonomy was revised in 2020, submitted to public consultation and should have its final version released in 2021. For this assessment, we will adopt the new version of the taxonomy, which was available for public consultation between 10/28/2020 and 11/20/2020¹⁷.

The CNAE sectors informed by BB were tested to confirm whether they were still aligned with the new Febraban's Taxonomy.

The new version of Febraban's Green Taxonomy considers the alignment of economic activities with sustainability standards such as the European Union's Sustainable Finance Taxonomy, Climate Bonds Initiative, Green Bond Principles, Social Bond Principles and ISO 14.030. With that, we can affirm that all the activities included in the new Taxonomy are fully or partially aligned with the environmental and social standards already adopted in this opinion.

Febraban's taxonomy classifies environmental and social contribution level of activities between "High" and "Moderate", in relation to the social or environmental benefit delivered. It also indicates the environmental and social risk level to which a given activity is exposed. These definitions, constructed in the Febraban Green Taxonomy, and their relation with the analysis of additionality in this opinion, are presented below:

Febraban Taxonomy Classification	Criteria	Level of additionality according to SITAWI
Social High	Alignment with SBP categories and low exposure to environmental and social risk. Does not have a vulnerable target population.	Moderate
Social Moderate	Alignment with SBP categories and high exposure to environmental and social risk. Does not have a vulnerable target population	Moderate

 $^{^{16}\} https://portal.febraban.org.br/pagina/3292/1103/pt-br/consulta-publica$

Environmental High	Automatically eligible activity for CBI taxonomy or classified as enabling activity or own performance in EU Taxonomy. Low exposure to environmental and social risk.	High
Environmental Moderate	Eligible according to the CBI taxonomy, depending on the use of proceeds and classified as transition activity in EU Taxonomy. High exposure to environmental and social risk.	Moderate

The activities that were not included in the new Febraban Taxonomy but were still part of the previous one, were classified as **Limited additionality (C)**. These activities correspond to 5.7% of the business portfolio defined by Banco do Brasil. These are sectors that are not included in the current Febraban's Green Finance Taxonomy but are aligned to the classification of the UNEP - United Nations Environment Program as green economy¹⁸.

UNEP's methodology includes activities that improve the well-being of humanity and social equality, while reducing environmental risks and ecological scarcity, having as main pillars low carbon emissions, efficiency in the use of resources and social inclusion. In its Green Economy classification, it considers the following sectors: renewable energies, energy efficiency, sustainable construction, cities, sustainable transport, sustainable tourism, water, fishing, forest, sustainable agriculture, waste, products with specific purposes and also social nature activities, such as education, health, productive inclusion and regional development.

BB's corporate portfolio includes credit operations that support both investments and working capital for clients. Although the bank informed that about 90% of the value of the operations is destined for investments, it was not possible to verify this proportion.

Regarding environmental and social risk exposure, we consider that BB's social and environmental risk management system is sufficient to mitigate negative impacts from the funded activities. Therefore, it did not affect the level of additionality defined in this assessment. Regarding the management of negative environmental and social risks, the following elements were considered:

Social and Environmental Policies: Banco do Brasil has a Social and Environmental Responsibility Policy and Credit Sustainability Guidelines. The policy defines several sustainability principles in its operations, such as promoting human and labor rights, ecoefficiency and reducing pollution. The guidelines define several environmental and social issues considered in the credit process. In addition, the bank has a Human Rights Policy and Code of Ethics, establishing good practices in the relationship with internal and external stakeholders.

Environmental and social Projects Assessment: For projects that represent environmental and social risks, BB conducts assessments and develop action plans to address such risks. Depending on the result of this assessment, the operation may be vetoed. Alternatively, it may also have to include specific monitoring and management clauses. BB also has a responsible Risk Committee, which is responsible for advising its executives on the exposure to environmental and social risk.

ESG Global Standards: BB has been a signatory to the Equator Principles since 2005. In addition, the bank is also a signatory to the Green Protocol and the Principles for Responsible Investment. The bank has adhered to the International Finance Corporation (IFC) Performance Standards and the World Bank's Health, Safety and Environment Guidelines.

_

¹⁸ United Nations Environment Programme (UNEP), Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication - A Synthesis for Policy Makers [Rumo a uma economia verde: caminhos para o desenvolvimento sustentável e a erradicação da pobreza - uma síntese para os formuladores de políticas], 2011. Disponível em: www.unep.org/greeneconomy.

Based on these credentials, we conclude that Banco do Brasil has sufficient internal capacity to manage potential environmental and social risks arising from activities financed by its corporate portfolio.

Finally, based on the above arguments, we can conclude that the balance of operations of Banco do Brasil's Corporate portfolio can be classified according to the following levels of additionality:

Environmental and social additionality	Active operations balance in December/2020 (R\$ million)	% of portfolio
High	421	1.9%
Moderate	19,756	92.4%
Limited	1,169	5.7%
Total	21,346	100%

Based on the assessment above, we conclude that the Corporate Portfolio of Banco do Brasil has **High (A)** additionality for 1.9% of its portfolio, **Moderate (B)** for 92.4% of its portfolio and **Limited (C)** for 5.7% of its portfolio.

Social Products

Among the Social Products category, BB has included the programs and credit lines that are believed to have social additionality, which are:

- FIES Student Financing Fund
- BB Accessibility Credit
- Guided Productive Microcredit for individuals and legal entities
- Low Income Housing Levels 1 1.5, 2 and 3
- Taxi Driver Support Fund
- Fopag Covid-19 Emergency Employment Support Program
- Pronampe Covid-19 Working Capital National Support Program for Micro and Small Business Covid-19
- BB Public Sector Funding
- Municipal Efficiency Program
- PMAT Tax Administration Modernization and Basic Social Sectors Management Program

The social additionality of each credit line and product will be assessed below, based on the Social Bond Principles.

FIES – Student Financing Fund

FIES is an education program from the federal government that finance undergraduate courses in private universities. The funded courses must have a positive evaluation in the National Higher Education Assessment System (Sinaes).

The funding is directed to people in financial vulnerability, which earn up to 10 minimum wages per family (up to 3 minimum wages per person). Depending on the family income, the program will fund different percentage of the courses.

This initiative seeks to provide access for people in high vulnerability conditions, who would normally be unable to invest in higher education.

According to a study by the Brazilian Association of Higher Education Maintainers (ABMES)¹⁹, the FIES beneficiary has the following characteristics:

- 66% are women;
- 77% attended high school in public schools;
- 75% belongs to C, D and E social classes;
- 44% are 25 years old or younger:

In addition, the same study concluded that 36% of dropout in private higher education is associated with financial reasons, being its main cause. For FIES students, this percentage is three times lower.

According to SBP, eligible social projects are those that promote access to basic services, including education and socioeconomic empowerment through the creation of opportunities, such as access to higher education. In addition, SBP's target populations are people who would not have access to higher education otherwise. Therefore, the credit line is aligned with SBP's categories. In addition, based on the program's socioeconomic profile and restrictions, we can conclude that the line of financing is directed to vulnerable target population. Thus, the credit line can be classified as High additionality (A).

BB Accessibility Credit

Credit line for assistive technology goods and services, aimed to promote social inclusion and to allow equal opportunities for people with disabilities. Among the financeable items are: wheelchairs, hearing aids, orthoses, prostheses, walkers, adaptations in a residential property, among other assistive technology products. The customers in this line are only individuals and financing are limited to R\$ 30,000.

People with disabilities are those who have long-term physical, mental, intellectual or sensory impairments, which can obstruct their plain and moderate participation in society on equal terms with other people.

BB Accessibility Credit line can be included in the SBP's socioeconomic empowerment category (equitable participation and integration into market and society). In addition, people with disabilities are considered a vulnerable population. Therefore, we can characterize this credit line additionality as High (A).

Guided Productive Microcredit for individuals and legal entities

MPO is a product for financial inclusion, which provides banking services for a niche of approximately eight million microentrepreneurs in Brazil, being many of them with informal business. To access MPO credit line, the clients must meet the following criteria:

- Being an informal entrepreneur with a max monthly income of R\$ 30,000;
- Being an individual microentrepreneur (MEI) with revenues up to R\$ 81,000 per year or microenterprise with revenue up to R\$ 360,000 per year;

¹⁹ https://abmes.org.br/abmes-pesquisas/detalhe/18/financiamento-estudantil-impacto-na-educacaosuperior-e-perfil-do-estudante-beneficiado

Guided microcredit is a widespread financial service with an important regarding income generation, job creation and guidance for micro-entrepreneurs from recognized institutions (SEBRAE, 2018). Guided productive microcredit is a credit line provided to small business, which uses a methodology based on the direct relationship of microentrepreneurs and credit agents, who are responsible for guiding and monitoring the funding.

All MPO clients can be considered, at some level, vulnerable. Firstly, regarding to small companies (including MEI and micro), these clients face difficulties to access traditional credit lines, corresponding to the second larger obstacle by small companies in the business expansion process in emerging markets and developing countries, according to World Bank Data²⁰.

According to Trevisan's Escola de Negócios, micro and small companies have approximately 27 days of working capital to honor their commitments. The high tax burden is also a difficulty faced by micro-enterprises (ME) and small companies (EPP), in addition to compete for customers, as indicated by the "ME and EPP Profile" survey, published in August 2019, prepared by the Brazilian Support Service for Micro and Small Enterprises (SEBRAE)²¹.

According to the Fundação Getúlio Vargas and SEBRAE's study named "Participation of MSEs in the National and Regional Economy" micro and small enterprises accounted for 30% of the value added to the Gross Domestic Product (GDP) in the country and for more than half of formal jobs in the last three decades.²³

MEIs are entrepreneurs who own a small business and run it on their own. MEI was officially created by the Federal Government under Complementary Law No. 128/2008 in order to reach professionals who developed their activities informally, allowing them to formalize their business and to have access to benefits such as retirement, maternity leave, banking services, among others. However, this public face adversity situations in the context which they operate, such as income generation.

As indicated by SEBRAE's "Perfil do MEI" (6th edition), the income obtained by these entrepreneurs is the only revenue source for 1.7 million families in Brazil. In addition, the survey shows that an average household income in this segment was equivalent to four minimum wages (or R\$ 4,400).

Based on the justifications above, we can conclude that MPO credit line is aligned to the SBP category "Job creation and programs that aims to prevent and alleviate unemployment". In addition, the target population - MEI, microenterprises and informal entrepreneurs - can be categorized as vulnerable. Therefore, we conclude that the credit line additionality is **High (A)**.

²⁰ 20 https://www.worldbank.org/en/topic/smefinance

²¹ https://www.infomoney.com.br/negocios/paradas-pequenas-empresas-nao-tem-folego-nem-para-ummes/

²² https://datasebrae.com.br/wp-content/uploads/2019/10/Pesquisa-Perfil-das-ME-e-EPP-2019-VF.pdf ²³ http://www.agenciasebrae.com.br/sites/asn/uf/NA/pequenos-negocios-ja-representam-30-do-produto-

 $interno-bruto-dopais, 7b965c911da51710VgnVCM1000004c00210aRCRD\#: \sim : text = Pequenos\%20neg\%C3\%B3cios\%20j\%C3\%A1\%20representam\%2030\%25\%20do\%20Produto\%20Interno\%20Bruto\%20do\%20pa\%C3\%ADs$

^{,-}Estudo% 20elaborado% 20pelo&text=Nas% 20% C3% BAltimas% 20tr% C3% AAs% 20d% C3% A9cadas% 2 C% 20as, adicionado% 20ao% 20PIB% 20do% 20pa% C3% ADs.

MCMV - Low Income Housing Levels 1, 1.5, 2 and 3

MCMV is a Federal Government program focused on funding low income housing. It was created in 2009 to facilitate housing access in Brazil. The program subsidizes the purchase of houses for low-income families and offers lower interest rates (compared to private banks and other financial institutions) on financing the property for families with monthly income up to R\$ 9,000.

MCMV is divided into 4 income brackets or levels, measured by the current minimum wage. Bracket 1 includes families with a monthly income up to R\$ 1,800. The 1.5 bracket includes beneficiaries who make between R\$ 1,801 and 2,600 per month. Bracket 2 includes families with a gross monthly income up to R\$ 4,000, and bracket 3 covers families with a month income up to R\$ 9,000.

Each program bracket has a benefit, that goes from the payment of 90% of the property value by the government (bracket 1) to subsidized funding.

Between 2009 and 2019, the program contracted 5.7 million units. In the image below, we can see the income brackets proportion of units delivered:

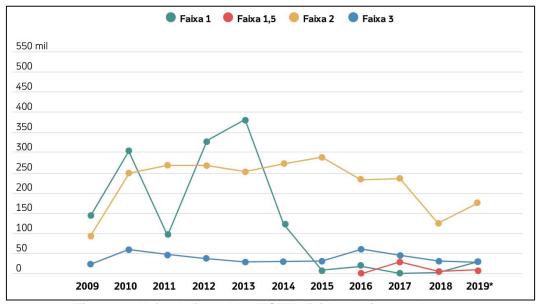


Figure 1 - Units delivered by MCMV divided by income bracket

Until December 2018, the program generated 3.5 million direct jobs, which represents an average of 390 thousand jobs per year²⁴.

According to an FGV technical report requested by Abrainc (Brazilian Association of Real Estate Developers), MCMV helped to reduce the number of families living in precarious housing.

MCMV worst-off financial families are those which earn less than one minimum wage (less than R\$ 998 in 2019) or between one and three minimum wages (between R\$ 998 and R\$ 2,994 in 2019). These families represent 91.7% of the total housing deficit in brazil and 100% of them spend too much on rental or live in improvised places.

²⁴ https://economia.uol.com.br/reportagens-especiais/minha-casa-minha-vida-dez-anos/#page11

According to information from Banco do Brasil, about 93% of MCMV financing portfolio is driven to clients in brackets 1, 1.5 and 2. In other words, the intention is to finance families with monthly income up to R\$ 4,000. Thus, we have considered that 93% of the MCMV portfolio is aligned with SBP's vulnerability categories and criteria.

The remaining 20% is directed to bracket 2, for families with monthly income up to R\$ 9,000, which cannot be classified under the same vulnerability criteria.

According to the analysis above, we can conclude that MCMV's operations are categorized as affordable housing. However, it is not possible to guarantee that the resources will be fully directed to vulnerable target population. Thus, its additionality was considered **High (A)** for 93% of the portfolio. The remaining 7% of the portfolio was categorized as **Limited (C)**.

FAT Taxista - Taxi Driver Support Fund

FAT Taxista credit line aims to generate and maintain income and employment for taxi drivers through financing of car renewal. The eligible cars must be manufactured in Brazil, powered by renewable fuel (ethanol) or flexible (ethanol and gas). The product allows the financing of up to 90% of vehicle's value, limited to R\$ 60,000.

FAT contributes to the renewal of Brazil's taxi fleet, replacing used vehicles with new models, which are more efficient and less intensive in greenhouse gases emissions.

CNT's (National Transport Confederation) survey carried out in 2015, identified that the taxi driver's profile and showed that the monthly net income is R\$ 2,675.42, without fuel costs deduction.

SBP includes projects that aims to generate income and create jobs. However, it is not possible to guarantee that the resources are fully directed to a vulnerable target population.

Based on the above argumentation, we can conclude that the FAT Taxista is aligned with SBP's generation of employment and income eligible category. However, there are no guarantees that the credit operations are fully directed to vulnerable target population. Therefore, we conclude that the additionality is **Moderate (B)**.

Fopag Covid-19 - Emergency Employment Support Program

PESE is an emergency credit line for companies which 2019 revenues were greater than R\$ 360,000 and lower or equal to R\$ 50 million. The proceeds must be used exclusively to for employees' payroll payment and labor costs settlement.

The Fopag Covid-19 was created to mitigate the Covid-19 pandemic economical adverse effects. Companies were allowed to finance up to 2 months of payroll. Financing is limited to two minimum wages (R \$ 2,090.00) per employee.

In July/2020 Brazil's unemployment rate reached the highest levels recorded since 1992 due to the Covid-19 pandemic: 13.8%²⁵. The number of unemployed people reached 13.1 million.

14 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020

Figure 1 - Unemployment rate in Brazil (%) from 1994 to 2020

Fonte: Bruno Ottoni/Tiago Barreira - Consultoria iDados/Pnad Contínua (IBGE) • Descarregar estes dados •

The SBP states that "unemployment relief due to socioeconomical crises" can be considered an eligible category. Likewise, unemployed people or those who were temporarily without access to income can be considered a vulnerable target population.

Based on the justifications above, we concluded that the emergency credit line Fopag Covid-19 has full alignment with the SBP and is considered to be have High (A) additionality.

Pronampe Covid-19 Working Capital - National Support Program for Micro and **Small Business Covid-19**

Pronampe Covid-19 was created to support companies during the Covid-19 pandemic. Financing is eligible for companies with annual revenues up to R\$ 4.8 million. Transactions may not exceed 30% of the borrower's gross annual revenue.

Funding can be used for investments, working capital or working capital associated with investment, enabling the purchase of machinery or equipment and/or operating expenses payment. Pronampe's objective is to refinance company costs, mainly to avoid wage and workforce cuts during the Covid-19 pandemic. The funding cannot be used to generate profits and dividends distribution for shareholders.

It is worth pointing out that due to the COVID-19 pandemic, 522,000 companies had to shut down in Brazil until June's 2020 first half (temporarily or permanently), 99.2% with up to 49 employees, 0.78% with 50 to 499 employees and 0.02% with more than 500 employees, according to IBGE (Brazilian Institute of Geography and Statistics)²⁶ estimates.

SBP states that "employment generation, and programs designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, including through the

²⁶ https://www.ibge.gov.br/estatisticas/sociais/saude/28291-pesquisa-pulso-empresa-impacto-da-covid-19-nas-empresas.html?edicao=28717&t=downloads

²⁵ https://oglobo.globo.com/economia/pandemia-faz-pais-ter-maior-taxa-de-desemprego-em-quase-30anos-24669064

potential effect of SME financing and microfinance" is an eligible category. In addition, the credit line benefits the following target population:

- a. MEI (with max annual income of R\$ 81,000);
- b. Microbusiness (with income between R\$ 81,000 e R\$ 360,000);
- c. Small business (with income between R\$ 360,000 and R\$ 4.8 million);

Based on the justification above, we conclude that Pronampe emergency credit line, which was created to tackle the socioeconomic effects caused by Covid-19 pandemic is fully aligned with SBP and its additionality is classified as **High (A)**.

BB Public Sector Funding

BB Public Sector Funding has a relevant scope, and seeks to enable funding for the Public Sector, both with resources from the bank or other sources. This credit product is directed to States and Municipalities strategic planning programs and actions aiming to generate social impact through improvement of well-being, health, education, sanitation and infrastructure.

BB Public Sector Funding includes several credit lines to support investments by the States, Federal District and municipalities. It provides funding for capital expenses included in the government pluriannual plan and the law of budgetary guidelines (PPA and LOA).

These programs represent a set of investments defined in a long-term strategic planning, with a multisectoral, integrated and sustainable character. Some priorities must be observed, such as regional environmental and social development, reduction of social and regional inequalities and promotion of work and income. Financing must include the following priorities:

- 1) Regional environmental and social development;
- 2) Reduction of social and regional inequalities, based on sustainability;
- 3) Promotion of work and income;
- 4) Improvement in public services quality and coverage;
- 5) Institutional development and modernization of federated entities management.

Through the LDOs and PPAs prepared by states and municipalities, it is possible to outline budgetary goals and guidelines, consequently an investment agenda for the public entities.

Therefore, within the fundable items, there are several projects involving activities and essential public services that promotes well-being of the population. It is important to point out that these credit operations are directed to public agents, however, the beneficiary is the society as a whole, and not specific population groups.

SBP states that projects that involve basic and essential services access, such as housing, urban mobility, basic sanitation, environmental preservation, health, safety, among others, are eligible for a sustainable business portfolio. Regarding target population, it is not possible to measure the vulnerability, given the fragmentation of the target population;

According to CBI and GBP, some of the projects financed have positive environmental impacts, such as those involving water treatment and sanitation, rapid transit bus

systems, cycle paths and sidewalks for walking pedestrians. Since it is not possible to assume that all projects financed by BB Public Sector Funding are certifiable, adherence to environmental standards is partial.

Based on the justifications above, we conclude that BB Public Sector Funding has partial alignment with the SBP. However, it is not possible to confirm whether the credit operations are fully directed to vulnerable target population. Likewise, the credit line is aligned with the adopted environmental standards, but there is no guarantee that the credit operations are fully aligned. Thus, additionality was considered to be **Moderate (B)**.

Municipal Efficiency Program

Municipal Efficiency Program aims to finance solutions that support investments in infrastructure that result in better provision of public services, contributing to local socioeconomic development, improving well-being and enabling proceeds for the implementation of public policies with environmental benefits. The following items are included in the credit line:

- 1) <u>Public lighting</u>: reduce maintenance and energy costs, improve the lighting service quality and, consequently, municipal public safety;
- 2) <u>Public buildings energy efficiency</u>: adoption of new materials, equipment and technology to reduce waste;
- 3) Road infrastructure and urban mobility: enhance accessibility and mobility for urban and rural areas, and improve road safety;
- 4) <u>Basic sanitation</u>: improve the quality of water supply and sanitary sewage systems;
- 5) <u>Health and education</u>: improve access to health and education services through vehicles, machinery and equipment;
- 6) <u>Municipal public management modernization</u>: furniture and utensils, technical training, software, among others, aligned with PPA, LDO and LOA (public budget).

According to the GBP the categories Energy Efficiency (2), Road infrastructure and urban mobility (3) and Basic Sanitation (4) are eligible to receive green funding.

Similarly, SBP recognizes that access to affordable basic infrastructure has social benefits. This category would include items 1, 2, 3, 4 and 5 above. However, it is not possible to ensure full social alignment with the adopted standards, since there is no evidence that the credit operations are directed exclusively to vulnerable target population.

Finally, the Climate Bond Standards has specific criteria for items 2 (public passenger transport), 3 (buildings) and 4 (water treatment) certification.

Based on the above reasons we conclude that the Municipal Efficiency Program has partial alignment with SBP, since it is not possible to ensure that the credit operations are directed to vulnerable target population. Likewise, these credit operations are partially aligned with the adopted environmental standards. Thus, we conclude that the additionality generated by the credit line is **Moderate (B)**.

PMAT - Tax Administration Modernization and Basic Social Sectors Management Program

The PMAT is a credit line that aims to improve efficiency in the municipal administrations. These are the potentially fundable items:

- Construction, assembly and installations;
- New national produced machinery and equipment, such as IT equipment, operation, support and inspection equipment, and computer and automation goods;
- Furniture and utensils;
- National software;
- Motorcycles and passenger vehicles;
- Technical and managerial training of effective public servants;
- Specialized technical services;
- Information technology services, including software customization, data creation and updates, which may include georeferencing, aero photogrammetry and other related expenses;

Based on the financing objectives and its financeable items, there is no clear alignment with the environmental and social standards adopted. Therefore, the additionality of this credit line can be considered as **Insufficient (D)**.