



Second-Party Opinion on Banco do Brasil's Sustainable Business Portfolio

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SUMMARY

SCOPE	7
1. OPINION	9
2. PORTFOLIO ANALYSIS	11
2.1 LOW CARBON AGRICULTURE	12
2.1.1 Plano ABC (ABC Plan)	12
2.1.2 No-Till Farming - Costing	15
2.1.3 Pronaf – National Program to Strengthen Family Farming	17
2.2 GOOD SOCIO-ENVIRONMENTAL PRACTICES	18
2.3 CORPORATE PORTFOLIO - GREEN ECONOMY NATIONAL CLASSIFICATION OF ECONOMIC ACTIVITIES	35
2.4 SOCIAL PRODUCTS	38
2.5 DIRECT FINANCIAL LOAN WITH NEW DEVELOPMENT BANK (NDB) RESOURCES	55
2.6 BB RENEWABLE ENERGY CREDIT	62
2.7 BB MOBILITY CREDIT	64
2.8 BB TECHNOLOGIES CREDIT	65
APPENDIX A - EVALUATION METHOD	68
APPENDIX B - CLASSIFICATION CRITERIA	73
APPENDIX C - ALIGNMENT OF THE NEW CREDIT LINES TO THE REFERENCES USED	75
APPENDIX D - MITIGATION AND ADAPTATION CRITERIA AND RESILIENCE FOR AGRICULTURE PRODUCTION UNITS	87

LIST OF TABLES

TABLE 1 - CLASSIFICATION OF BB'S SUSTAINABLE BUSINESS PORTFOLIO (CLASSIFICAÇÃO DE NEGÓCIOS SUSTENTÁVEIS - CNS)	9
TABLE 2 - ABC PLAN CREDIT LINES	13
TABLE 3 - ALIGNMENT ASSESSMENT - ABC PLAN	14
TABLE 4 - ALIGNMENT ASSESSMENT - NO-TILL FARMING COSTING	16
TABLE 5 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET AUDIENCES THAT WILL ACCESS PRONAF RESOURCES	18
TABLE 6 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION FOR ACCESSING PRODECOOP RESOURCES	20
TABLE 7 - ASSESSMENT OF ALIGNMENT - CFF GREEN	22
TABLE 8 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS CFF RESOURCES REGIONAL TOURISM DEVELOPMENT PROGRAM	23
TABLE 9 - ALIGNMENT ASSESSMENT - CFF ECONOMIC INFRASTRUCTURE PROGRAM	24
TABLE 10 - ALIGNMENT ASSESSMENT - SUDENE	26
TABLE 11 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS PRONAMP RESOURCES	28
TABLE 12 - ALIGNMENT ASSESSMENT - IRRIGATION, WEIR AND DRAINAGE ITEMS	28
TABLE 13 - ALIGNMENT ASSESSMENT - AFFORESTATION, REFORESTATION, AND TREE STUMP REMOVAL FINANCING	29
TABLE 14 - ALIGNMENT ASSESSMENT - RESTORATION OF DEGRADED PASTURE FINANCING	30
TABLE 15 - ALIGNMENT ASSESSMENT - MODERNINFRA	31
TABLE 16 - ALIGNMENT ASSESSMENT - INOVAGRO	32
TABLE 17 - ALIGNMENT ASSESSMENT - MODERAGRO	33
TABLE 18 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS PCA RESOURCES	35
TABLE 19 - ALIGNMENT EVALUATION - GREEN ECONOMY NCEA	36
TABLE 20 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS FIES RESOURCES	39
TABLE 21 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS BB CREDIT ACCESSIBILITY RESOURCES	40
TABLE 22 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS MPO RESOURCES	42
TABLE 23 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS FAT TAX RESOURCES	43
TABLE 24 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS FOPAG COVID-19 RESOURCES	45
TABLE 25 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS BB CFF DECOUPLED WORKING CAPITAL RESOURCES COVID 19	46
TABLE 26 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS BB PUBLIC SECTOR FINANCING RESOURCES	47
TABLE 27 - EVALUATION OF THE MUNICIPAL EFFICIENCY PROGRAM, BASED ON ALIGNMENT WITH THE REFERENCES USED IN THE ERM NINT METHODOLOGY	48

TABLE 28 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL HAVE ACCESS TO FAT TAX RESOURCES	50
TABLE 29 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS MCMV RESOURCES	52
TABLE 30 - ALIGNMENT ASSESSMENT - FGTS ACQUISITION	53
TABLE 31 - ALIGNMENT ASSESSMENT - PRO-COTISTA	54
TABLE 32 - ALIGNMENT ASSESSMENT - HOUSING FINANCE SYSTEM	55
TABLE 33 - ALIGNMENT ASSESSMENT - SUSTAINABLE IRRIGATION PROJECTS	58
TABLE 34 - ALIGNMENT ASSESSMENT - STORAGE PROJECTS AND AGRICULTURAL WAREHOUSES	60
TABLE 35 - ALIGNMENT ASSESSMENT - RENEWABLE ENERGY PROJECTS	61
TABLE 36 - ALIGNMENT ASSESSMENT - BB RENEWABLE ENERGY CREDIT	63
TABLE 37 - ALIGNMENT ASSESSMENT - BB MOBILITY CREDIT	65
TABLE 38 - ALIGNMENT ASSESSMENT - BB TECHNOLOGIES CREDIT	67
TABLE 39 - CLASSIFICATION AND EXPLANATION OF FEBRABAN'S GREEN TAXONOMY	69
TABLE 40 - CNS CLASSIFICATION BY ERM NINT METHODOLOGY	70
TABLE 41 - ASG EVALUATION RULE AND FRAMEWORKS BY LEVEL OF ADDITIONALITY	71
TABLE 42 - PORTFOLIO CLASSIFICATION - ENVIRONMENTAL	73
TABLE 43 - PORTFOLIO CLASSIFICATION - SOCIAL	74
TABLE 44 - CLASSIFICATION JUSTIFICATIONS	75
TABLE 45 - CATEGORIES, GOOD PRACTICES AND EXCLUSIONS FOR AGRICULTURAL PRODUCTION UNITS	87
TABLE 46 - ADAPTATION AND RESILIENCE CHECKLIST FOR ASSESSING THE ENTIRE PRODUCTION UNIT	88

SCOPE

The purpose of this Second-Party Opinion is to provide an independent opinion on the alignment of Banco do Brasil's Sustainable Business Portfolio with the best national and international standards for sustainable projects. This is the third review of Banco do Brasil's Sustainable Business Portfolio carried out by ERM NINT.

ERM NINT applied its proprietary method for assessing the portfolio, referenced by the Green Bond Principles (GBP)¹, *Social Bond Principles (SBP)*², *Climate Bonds Standards*³, *Climate Bonds Taxonomy*⁴, EU Sustainable Finance Taxonomy⁵, "Não Perca esse Bond"⁶ e Febraban's Green Taxonomy⁷. The details of this method are available in the section APPENDIX A - EVALUATION METHOD.

The analysis used information and documents provided by Banco do Brasil, some of which were confidential. Also, has addressed desk research and interviews with bank staff. This process was carried out in November 2023.

ERM NINT had access to all the information requested but encountered technical and operational limitations from BB to extract granular data on its operations classified as sustainable. Therefore, this opinion has a limited level of assurance regarding completeness, accuracy, and reliability.

The assessment process was performed in accordance with relevant general principles and professional standards of independent auditing, and in line with the International Standard on Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (ISAE 3000), International Standard on Quality Control (ISQC 1, 2009) and the Code of Ethics for Professional Accountants of the International Ethical Standards Board for Accountants (IESBA, 2019).

¹ <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

² https://www.icmagroup.org/assets/documents/Sustainable-finance/2022-updates/Social-Bond-Principles_June-2022v3-020822.pdf

³ <https://www.climatebonds.net/standard>

⁴ https://www.climatebonds.net/files/files/CBI_Taxonomy_Tables_January_20.pdf

⁵ https://finance.ec.europa.eu/system/files/2020-03/200309-sustainable-finance-teq-final-report-taxonomy-annexes_en.pdf

⁶ <https://esg.nintgroup.com/nao-perca-esse-bond>

⁷ <https://portal.febraban.org.br/pagina/3292/1103/pt-br/consulta-publica>

RESPONSIBILITY STATEMENT


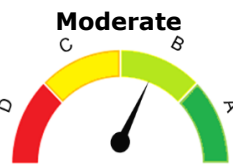
ERM NINT has been responsible for preparing other products for the company, such as consultancy services. **To mitigate the potential conflict of interest and ensure objectivity and impartiality, the professionals responsible for the consultancy project were not involved in the preparation of this Second-Party Opinion (SPO).** Accordingly, ERM NINT declares that it has no conflict of interest and is therefore able to issue a SPO on Banco do Brasil's Sustainable Business Portfolio on an independent basis.


The analyses contained in this opinion are based on a series of documents, some of which are confidential, provided by the bank. We cannot assure for their completeness, accuracy or even veracity. ERM NINT is therefore not responsible for the use of the information contained in this opinion.

1. OPINION

Based on the assessments and ratings carried out by ERM NINT regarding the social and environmental additionality of the credit lines and activities considered in Banco do Brasil's Sustainable Business Portfolio, it was concluded that the largest volume of the balance is associated with financial instruments with high social and/or environmental additionality. The summary of the portfolio's rating and balance, by additionality class, is illustrated in Table 1. The portfolio totaled BRL 323.71 billion (up to July 2023).

TABLE 1 - CLASSIFICATION OF BB'S SUSTAINABLE BUSINESS PORTFOLIO (CLASSIFICAÇÃO DE NEGÓCIOS SUSTENTÁVEIS - CNS)

Additionality	Credit lines and activities considered	Balance in July 2023 (BRL)	Balance (%)
 <p>A gauge with a semi-circular scale from 0 to 100. The scale is divided into four colored segments: red (0-25), yellow (25-50), green (50-75), and dark green (75-100). The needle points to approximately 85, labeled 'High'.</p>	<ul style="list-style-type: none"> • ABC Program • Green CFF • BB Crédito Energia Renovável (PF Renewable Energy Lines; Project Finance - Energy and PF Renewable Energy CFF) • Pronaf • BB Credit Accessibility • FIES • MPO PF and PJ • PESE Fopag • BB CFF Dissociated Working Capital Covid 19 • Pronampe • Corporate portfolio (High environmental contribution) • MCMV/ Green and Yellow House Program - Tiers 1 and 2 • Credit line operations with FGTS funding - Tiers 1 and 2 • Housing Finance System (SFH) - Tiers 1 and 2 • Moderinfra • Direct Financial Loan with NDB resources (Renewable Energy) 	<p>BRL 207,276,587,898.88</p>	<p>64%</p>
 <p>A gauge with a semi-circular scale from 0 to 100. The scale is divided into four colored segments: red (0-25), yellow (25-50), green (50-75), and dark green (75-100). The needle points to approximately 55, labeled 'Moderate'.</p>	<ul style="list-style-type: none"> • Pronamp Investments • Traditional Agricultural Funding - Direct Planting • Pronamp Funding - Direct Planting • Inovagro • Fat Taxista • BB Public Sector Financing • Municipal Efficiency Program • Corporate Portfolio (High social contribution and Moderate social and environmental contribution) • CFF Economic Infrastructure Program • Direct Financial Loan with NDB resources (Irrigation and Storage) • MCMV/ Green and Yellow House Program - Track 3 • Credit line operations with FGTS funding - Track 3 • Sistema Financeiro da Habitação (SFH) – Faixa 3 • Bilateral additionality operations Moderate* 	<p>BRL 99,516,197,744.54</p>	<p>31%</p>

	<ul style="list-style-type: none"> • PCA • Moderagro • SUDENE • Prodecoop • CFF Regional Tourism Development Program • BB Credit Mobility • BB Credit Technology 	<p style="text-align: center;">BRL 16.917.341.521.03</p>	<p style="text-align: center;">5%</p>
<p style="text-align: center;">Total portfolio balance in July 2023</p>		<p style="text-align: center;">BRL 323,710,127,164.45</p>	<p style="text-align: center;">100%</p>

*These operations consist of bilateral transactions between Banco do Brasil and companies that have been assessed by ERM NINT in accordance with the Second-Party Opinion methodology. No further information will be made available as it is confidential.

2. PORTFOLIO ANALYSIS

ERM NINT applied a proprietary assessment method, inspired by the following references and taxonomies:

- Green Bond Principles (GBP), from the International Capital Markets Association;
- Social Bond Principles (SBP), from the International Capital Markets Association;
- “*Não Perca esse Bond*”, by ERM NINT;
- Climate Bonds Taxonomy, by the Climate Bond Initiative;
- Sustainable Finance Taxonomy of the European Union;
- Febraban's Green Taxonomy

The evaluation of the portfolio was carried out following the lines of credit and financing defined by Banco do Brasil:

- ABC Program
- Green CFF
- BB Renewable Energy Credit
- Pronaf
- BB Credit Accessibility
- FIES
- MPO PF and PJ
- PESE Fopag
- BB CFF Dissociated Working Capital Covid 19
- Pronampe
- Corporate portfolio
- Minha Casa Minha Vida Program (MCMV)⁸/Casa Verde e Amarela Program (CVA)⁹
- Credit line operations with FGTS funding
- Housing Finance System (SFH)
- Moderinfra
- Direct Financial Loan with NDB resources (Renewable Energy)
- Pronamp Investments
- Traditional Agricultural Funding - Direct Planting
- Pronamp Costing - Direct Planting
- Inovagro
- Fat Taxista
- BB Public Sector Financing
- Municipal Efficiency Program
- CFF Economic Infrastructure Program
- PCA
- Moderagro
- SUDENE
- Prodecoop
- CFF Regional Tourism Development Program
- BB Mobility CreditBB Crédito Tecnologia

⁸ Original program name, in Portuguese.

⁹ Original program name, in Portuguese.

- PMAT
- Bilateral operations between Banco do Brasil and other companies (confidential information)

The alignment of each of these lines according to the aforementioned sustainability standards will be presented below.

2.1 LOW CARBON AGRICULTURE

The following credit lines associated with low-carbon agriculture were evaluated:

- ABC Plan
- Direct Planting - Funding
- Pronaf - National Program for Strengthening Family Farming

The details and analysis of each are shown below.

2.1.1 PLANO ABC (ABC PLAN)

In 2023, the Low Carbon Agriculture Program (ABC) was renamed as 'Program for Financing Sustainable Agricultural Production Systems (RenovAgro)'. The new Plano Safra¹⁰, launched in 2023, encompasses the financing lines of the ABC Plan, which are focused on finance technologies and production systems that promote climate adaptation of farms and the reduction of greenhouse gas (GHG) emissions from agricultural activities. Between 2010 and 2019, the program allocated more than BRL17 billion to sustainable agricultural practices¹¹ through credit lines from partner banks. The 2023/2024 Plano Safra provided funding of BRL364.22 billion for national agricultural production until mid-2024.¹²

The importance of the agricultural sector to the Brazilian economy is undeniable, accounting for around 80% of the total increase in the country's gross domestic product (GDP) from January to March 2023 compared to the same period last year, exceeding market forecasts¹³. Yet, despite the economic and social benefits linked to job creation, the sector is one of the main contributors to greenhouse gas emissions in the country. Following the Greenhouse Gas Emissions Estimates System (SEEG – Portuguese acronym) database, the agricultural sector was responsible for 73% of GHG emissions in Brazil in 2021, both directly and indirectly. Roughly 46% were generated as a result of the deforestation of natural areas.¹⁴

Agricultural production is expected to continue to grow. According to the Systematic Survey of Agricultural Production (LSPA – Portuguese acronym), the national harvest of cereals, legumes

¹⁰ Original program name, in Portuguese.

¹¹<https://wribrasil.org.br/pt/blog/2019/07/entenda-o-plano-abc-politica-brasileira-para-agricultura-de-baixo-carbono>

¹² <https://www.gov.br/agricultura/pt-br/assuntos/noticias/presidente-anuncia-plano-safra-2023-2024>

¹³ <https://globorural.globo.com/podcasts/cbn-agro/noticia/2023/06/o-pib-agropecuaria-e-os-beneficios-para-a-economia-do-brasil.ghtml>

¹⁴<https://www.sambiental.com.br/noticias/agropecuaria-brasileira-responde-por-73-das-emissoes>

and oilseeds is expected to set a new record in 2023, totaling 305.4 million tons.¹⁵ Likewise, agribusiness is expected to grow, having already broken records in 2023.¹⁶

The ABC Plan has ten different financing lines, with specific targets for each of them, as shown in the table below. It should be noted that the description and goals below refer to the ABC Plan as a whole, and not just to a section of Banco do Brasil's credit operations.

TABLE 2 - ABC PLAN CREDIT LINES

Line	Description	Goals ¹⁷
ABC Recuperação (ABC Recovery)	Recovering degraded pastures. Pasture degradation results in a loss of vegetation cover and organic matter in the soil, which leads to an increase in CO2 emissions into the atmosphere, the main greenhouse gas.	- Recover 30 million hectares of degraded pastures and mitigate 113.7 million carbon equivalents (CO2eq), through practices that restore soil cover and the vigor of forage plants, which serve as animal feed.
ABC Orgânico (ABC Organic)	Implementing and improving organic agricultural production systems.	-
ABC Plantio Direto (ABC No-Tillage Farming)	Implementing and improving no-till systems. Among the benefits of the system are soil, biodiversity and water conservation, as well as increased fertilization efficiency and reduced consumption of fossil fuels and fertilizer use.	Reaching 12.5 million hectares, with the potential to mitigate 12.99 million CO2eq through seeds placed directly in the soil, without the need to plow the land.
ABC Integração (ABC Integration)	Implementation and improvement of integrated crop-livestock, crop-forest, livestock-forest or crop-livestock-forest systems and agroforestry systems (SAF). SAFs combine forest species with traditional crops.	Adoption of 3 million hectares of Crop-Livestock-Forest Integration Systems and mitigate 50 million CO2eq. Animal husbandry, food planting and forestry production take place in the same space, reducing pressure for deforestation, as well as promoting animal comfort.
ABC Florestas (ABC Forests)	Implementation, maintenance, and improved management of commercial forests, including those intended for industrial use or charcoal production. The production of planted forests of native species (such as paricá and araucaria) and exotic species (such as pine and eucalyptus) contributes to CO2 capture. By increasing the supply of wood, planting exotic species also reduces the pressure on native forests.	Encourage the planting of 4 million hectares of economic forests and mitigate 510 million CO2eq from reforestation areas for environmental or commercial purposes, as is the case with pine and eucalyptus. Increases water capture at greater depths and creates habitat for animals and plants.
ABC Ambiental (ABC Environmental)	Adapting or regularizing rural properties in accordance with environmental legislation, including the recovery of legal reserves, permanent preservation areas, the recovery of degraded areas and the implementation and improvement of sustainable forest management plans.	-

¹⁵ <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/37135-estimativa-de-maio-preve-safra-recorde-de-305-4-milhoes-de-toneladas-em-2023#:~:text=Produ%C3%A7%C3%A3o%20agr%C3%ADcola,Estimativa%20de%20maio%20prev%C3%AA%20safra%20recorde%20de%20305,milh%C3%B5es%20de%20toneladas%20em%202023&text=O%20Levantamento%20Sistem%C3%A1tico%20da%20Produ%C3%A7%C3%A3o,305%2C4%20milh%C3%B5es%20de%20toneladas.>

¹⁶ <https://www.correiobraziliense.com.br/economia/2023/02/5076252-agronegocio-se-recupera-com-expectativa-de-crecimento-em-2023.html>

¹⁷ <https://g1.globo.com/economia/agronegocios/noticia/2021/11/11/plano-abc-entenda-metas-do-agro-para-reduzir-emissao-de-poluente-ate-2030.ghtml>

ABC Tratamento de Dejetos (ABC Waste Management)	The treatment of animal waste reduces methane emissions and produces organic fertilizer, potentially reducing the use of chemical inputs that contribute to the generation of GHG, as well as making it possible to convert biogas into energy.	Stimulate the treatment of 208.4 million cubic meters of animal waste and contribute to the mitigation of 277.8 million CO2eq. Animal faeces and urine, for example, go through treatments where they are transformed into energy or fertilizer, reducing dependence on these two inputs.
ABC Dendê	Planting, improving, and maintaining oil palm forests, primarily in degraded productive areas.	-
ABC Fixação (ABC Fixation)	Encouraging the use of biological nitrogen fixation. Inoculating seeds with bacteria capable of fixing the nitrogen available in the atmosphere in the soil reduces the use of fertilizers, which contribute to GHG emissions.	-
ABC Cultivos Permanentes (ABC Permanent Cultures)	Planting, improving, and maintaining açai, cocoa, olive and walnut plantations	-

The following table summarizes the assessment of the ABC Plan's credit lines in terms of their alignment with the national and international references, according to ERM NINT's own methodology.

TABLE 3 - ALIGNMENT ASSESSMENT - ABC PLAN

Credit Line	Alignment	CBI	UE	NPEB	GBP
ABC Recuperação (ABC Recovery)	Integral Environmental	✓	N/A*	✓	✓
ABC Orgânico (ABC Organic)	Partial Environmental	✓	N/A*	X	✓
ABC Plantio Direto (ABC No-Tillage Farming)	Integral Environmental	✓	N/A *	✓	✓
ABC Integração (ABC Integration)	Integral Environmental	✓	N/A *	✓	✓
ABC Florestas (ABC Forests)	Integral Environmental	✓	✓	✓	✓
ABC Ambiental (ABC Environmental)	Integral Environmental	✓	✓	✓	✓
ABC Tratamento de Dejetos (ABC Waste Management)	Integral Environmental	✓	✓	✓	✓
ABC Dendê	Integral Environmental	✓	N/A *	Unspecified	✓
ABC Fixação (ABC Fixation)	Integral Environmental	✓	N/A *	✓	✓
ABC Cultivos Permanentes (ABC Permanent Cultures)	Partial Environmental	X	N/A *	✓	✓

* The EU Taxonomy does not include agricultural activity as an economic activity or sector that makes a substantial contribution to an environmental objective based on its own performance, or as an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

X = not aligned

Nine of the ten credit lines were **fully environmentally aligned** because:

- ✓ They meet any of the eligibility criteria defined for the agriculture sector in the CBI Taxonomy.
- ✓ Substantially contribute to a climate change scenario that keeps the planet's temperature rise to between 2° and 1.5°, according to "Não Perca Esse Bond" publication.
- ✓ They fall into some of the categories considered eligible for GBP.

Only one credit line was assessed as **partially environmentally aligned** because:

- ✓ It complies with specific emission reduction legislation/policy or they are only capable of bringing about incremental emission reductions/stocks, according to the publication "Não Perca Esse Bond".

Therefore, we conclude that the financing within the ABC Plan lines are mostly fully aligned with national and international references for evaluating sustainable projects, assets, or operations and have a low socio-environmental risk and primarily support investment costs. Therefore, we classify its additionality as **high (A)**.

2.1.2 NO-TILL FARMING - COSTING

Included here are two financing lines aimed at defraying operating costs in the Direct Planting System. They are:

- *Custeio Agrícola Tradicional – Plantio Direto* (Traditional Agricultural Funding - No-till Farming)
- *Custeio Pronamp – Plantio Direto* (Pronampe Funding - No-till Farming)

The lines can finance expenses such as inputs, cultivation and harvesting during the crop's productive cycle, and the production of certified and inspected seedlings and seeds. While Pronamp can finance rural producers with annual gross revenue of up to BRL 2 million, Traditional Agricultural Funding has no financing ceiling.

Direct seeding is a farming method in which the seed or plant is placed directly into the soil without disturbance. The system eliminates the need for pre-plant tillage, allowing the next crop to be drilled earlier. This technique contributes to mitigating climate change by preventing emissions from the carbon stock retained in the soil. It also inhibits erosion, protecting the soil against the disintegrating action of rain.

According to the Portfolio of Good Agricultural Practices - Brazil Water Program (Banco do Brasil and WWF, 2015), no-till systems offer the following benefits:

- Reduced soil loss due to erosion, as it is protected by a layer of straw. The straw makes the water penetrate slowly and prevents siltation;
- Conservation and increase in the content of organic matter in the soil, reducing tillage and harrowing and providing an accumulation of organic matter. In addition, when the straw is maintained, the degradation of this material increases the fertility content of the soil;
- Water conservation in the system, as the straw reduces evaporation;
- Low soil temperature, as it is not exposed to radiation, even during the hottest periods of the day;
- Reduced production costs, mainly due to the reduction in plowing, sorting and labor used in these processes;
- More time for sowing, as the soil is kept moist for longer after the rain;
- Greater stability and balance of the soil's physical, chemical and biological properties, since it is less tilled;
- Increased productivity associated with greater humidity, especially during prolonged drought;
- Increased carbon storage in the soil.

The following table summarizes the assessment of the two credit lines in terms of their alignment with the national and international references used.

TABLE 4 - ALIGNMENT ASSESSMENT - NO-TILL FARMING COSTING

Credit Line	Alignment	CBI	UE	NPEB	GBP	SBP
Traditional Agricultural Funding - No-till Farming	Partial Environmental	X	N/A*	✓	✓	N/A
Pronampe Funding - No-till Farming	Partial Environmental Partial Social	X	N/A*	✓	✓	X

* The EU Taxonomy does not include agricultural activity as an economic activity or sector that makes a substantial contribution to an environmental objective based on its own performance, or as an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

X = not aligned

According to the Agriculture Criteria of the Climate Bonds Standards, eligible use of proceeds related to agricultural production systems may include operating and capital expenses related to inputs (e.g. land, seeds, fertilizers, energy, information); capital assets (e.g. land, equipment, real estate); agricultural transformation processes (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); and primary processing and storage before the point of sale. However, the same criterion eliminates the possibility of converting native vegetation after 2010, as well as requiring a climate risk assessment of rural properties, issues that are not guaranteed by the client selection procedures for BB's financing lines.

Based on the above justifications, we conclude that the two financing lines have partial environmental alignment because:

- ✓ Substantially contribute to a climate change scenario that keeps the planet's temperature rise between 2° and 1.5°, according to “*Não Perca Esse Bond*”.
- ✓ Fall into one of the categories considered eligible for GBP green bond financing.

Therefore, we conclude that, to issue a social or green loan based on these financing lines, it would be necessary to establish a deforestation cut-off date, such as the CBI does. Since the projects covered by the fundings are partially aligned with environmental standards based on the above justifications, we conclude that the two financing lines' additionality are classified as **moderate (B)**.

2.1.3 PRONAF ¹⁸– NATIONAL PROGRAM TO STRENGTHEN FAMILY FARMING

Pronaf is a financing program for family farming, aimed at setting up, expanding or modernizing the production, processing, industrialization and service structure of rural establishments or nearby rural community areas.

The program was created in 1995 by the Brazilian Federal Government to provide differentiated assistance to small farmers, i.e. those whose production is the result of their own labor force or family labor. The aim of this program is therefore to strengthen the activities of family farmers by integrating them into the agribusiness chain through the modernization of the production system. As a result, the product they produce will have added value, which will ultimately also increase their family income.

Family farming accounts for 77% of agricultural establishments in Brazil, according to the latest Agricultural Census, carried out by the Brazilian Institute of Geography and Statistics (IBGE – Portuguese acronym). The practice employs 10 million people, which corresponds to 67% of the workforce engaged in agricultural activities. Family farming is mainly responsible for producing the food consumed by the Brazilian population. In permanent crops, the segment accounts for 48% of the value of coffee and banana production; in temporary crops, they are responsible for 80% of the value of cassava production, 69% of pineapple and 42% of bean production. The management of the property is shared by the family and farming is the main source of income. Family farmers have a particular relationship with the land, their place of work and home. Productive diversity is also a striking feature of this sector, as it often combines subsistence production with production for the market.

Pronaf can be used to finance agricultural cooperatives, rural producers (individuals and companies) and their families, artisanal fishermen, aquaculture producers, mariculture producers, forestry producers, *quilombolas*, indigenous people, agrarian reform settlers and beneficiaries of the National Land Credit Program. To gain access to the program, the following requirements must be met:

¹⁸ Brazilian acronym to Programa Fortalecimento da Agricultura Familiar (Program to Strengthen Family Farming).

- Reside on the rural property or nearby, depending on the geographical characteristics of the region;
- Explore the land, whether as an owner, squatter, tenant, partner or concessionaire of the National Agrarian Reform Program (PNRA);
- Have their own family farming as the basis for their work;
- Have at least 50% of their gross family income coming from rural activities, whether farming or not;
- Have a maximum of 4 fiscal modules for agricultural activity or 6 for livestock activity;
- Use third-party labor only based on the seasonality of production (if employees are permanent, they must be fewer in number than family members).
- Have obtained a gross annual family income of up to BRL 500,000 in the last 12 months of normal production prior to applying for the Declaration of Aptitude for Pronaf (DAP – Portuguese acronym), taking into account the sum of the total gross production value (GPV), 100% of the value of the income received from the integrating company and other income from activities carried out inside and outside the company received by any member of the family, with the exception of social benefits and social security payments resulting from rural activities.

Therefore, considering the Brazilian context, we can classify Pronaf beneficiaries as a target population for social projects, according to the Social Bond Principles. The analysis is shown in the table below. That said, we conclude that the credit line was **fully socially aligned** because:

- ✓ The funded activity is aligned with the categories of the Social Bond Principles;
- ✓ The benefits are directed at a clearly defined vulnerable target population.

TABLE 5 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET AUDIENCES THAT WILL ACCESS PRONAF RESOURCES

Program	Credit Line	Alingment	SBP Categories	Target population
Good socio-environmental practices	Pronaf	Integral Social	Access to essential services such as finance and financial services.	Rural producers with gross family income of up to BRL500 thousand in the last 12 months of production and owners of up to 4 fiscal modules, considered small rural property.

Therefore, we conclude that the projects and activities financed by PRONAF are covered by the credit line can be classified as having social additionality according to the SBP, and the target population can be considered vulnerable. Thus, the additionality is classified as **high (A)**.

2.2 GOOD SOCIO-ENVIRONMENTAL PRACTICES

The Rural Socio-Environmental Program (Programa Rural Socioambiental) brings together a set of financing lines and programs aligned with Good Agricultural Practices defined by the bank. The lines included within this subdivision are as follows:

- Prodecoop¹⁹ - Cooperative Development Program for Adding Value to Agricultural Production;
- Green CFF - Constitutional Fund for Financing the Green Midwest;
- Corporate CFF - Constitutional Fund for Financing the Central-West Business;
- Sudene²⁰ - Northeast Development Superintendency;
- Pronamp²¹ - National Program to Support Average Rural Producers;
- Moderinfra²² - Program to Incentivize Sustainable Irrigation and Storage;
- Inovagro²³ - Incentive Technological Innovation in Agricultural Production Program;
- Moderagro²⁴ - Agriculture Modernization and Natural Resources Conservation Program;
- PCA²⁵ - Warehouse Construction and Expansion Program.

The above lines will be evaluated below according to the environmental and social standards adopted.

Prodecoop - Cooperative Development Program for Adding Value to Agricultural Production

The Prodecoop is a program aimed at financing the modernization of production and marketing systems within the agribusiness complex of Brazilian cooperatives. Established in 2003, Prodecoop is the primary investment policy for agricultural cooperatives in Brazil. The availability of resources for the 2022/2023 harvest was BRL 340.9 billion, an increase of BRL 89.6 billion (+36%) compared to the previous harvest.

Agricultural cooperatives comprise rural producers and are responsible for supporting the commercialization and storage of production, as well as providing technical assistance to their member cooperatives. Out of the total 5.1 million agricultural establishments in Brazil, 11.4% are part of a cooperative, totaling 579,500 agricultural establishments. Of these, 412,300 are family farming establishments, which represent 71% of the cooperative members²⁶.

There are more than 1,200 agricultural cooperatives operating in Brazil, generating approximately 207,000 jobs²⁷. According to the 2017 Agricultural Census (IBGE), 71.2% of agricultural cooperative establishments are family farms.

In line with the Social Bond Principles categorization, the credit line contributes to the empowerment and socioeconomic advancement of vulnerable populations by expanding access to financing for clients who are predominantly small and medium-sized rural producers. However, it cannot be guaranteed that the proceeds are directed towards rural producers in vulnerable conditions, such as family farmers, since Banco do Brasil does not monitor this allocation within the cooperatives.

¹⁹ Brazilian acronym to Programa de desenvolvimento cooperativo para agregação de valor à produção agropecuária

²⁰ Brazilian acronym to Superintendência do Desenvolvimento do Nordeste

²¹ Brazilian acronym to Programa Nacional de Apoio ao Médio Produtor Rural

²² Brazilian acronym to Programa de Financiamento à Agricultura Irrigada e ao Cultivo Protegido

²³ Brazilian acronym to Programa de Incentivo à Inovação Tecnológica na Produção Agropecuária

²⁴ Brazilian acronym to Programa de Modernização da Agricultura e Conservação dos Recursos Naturais

²⁵ Brazilian acronym to Programa para Construção e Ampliação de Armazéns

²⁶ <https://www.scielo.br/j/rbe/a/rKXVc7gfOrWYHBs6ZVRPnLq/#:~:text=Do%20total%20de%205%2C1,cooperativa%2C%20sendo%20579%2C5%202>

²⁷ <https://www.gov.br/agricultura/pt-br/assuntos/agricultura-familiar/cooperativismo>

The classification of the Prodecoop line is shown in the following table. Based on the above justifications, we conclude that **the social alignment is partial**, since:

- × It does not define a vulnerable population according to the guidelines of the Social Bond Principles (SBP).

TABLE 6 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION FOR ACCESSING PRODECOOP RESOURCES

Program	Alignment	SBP Categories	Target population
Prodecoop	Partial Social	Empowerment and Socioeconomic Advancement	Not defined

Therefore, we conclude that, since the credit line also does not stipulate a maximum income for the beneficiaries, it cannot be guaranteed that the benefiting population can be considered vulnerable. Because it is not possible to segregate the volume of funds directed to clients who are in conditions of social vulnerability, although it aligns with categories of social projects eligible under the SBP, we classify the social additionality of the credit line as **limited (C)**.

Green CFF - Constitutional Fund for Financing the Green Midwest

The Constitutional Fund for Financing the Green Midwest (Fundo Constitucional de Financiamento do Centro-Oeste - Green CFF) is aimed at financing environmental and land regularization of rural properties in the Midwest region, with the objective of implementing productive systems and technologies focused on mitigating greenhouse gases. It was established by the Brazilian Federal Constitution of 1988, with the goal of promoting the socioeconomic development of the region. The FCO Verde is part of the Rural FCO and is alternatively known as the "Nature Conservation and Crop-Livestock-Forestry Integration Financing Line."²⁸ Green CFF finances individual and corporate rural producers, as well as rural producer cooperatives, are the CFF beneficiaries.

In 2019, agriculture accounted for 72% of Brazilian greenhouse gas emissions, according to the United Nations Framework Convention on Climate Change (UNFCCC) and the Food and Agriculture Organization of the United Nations (FAO). Furthermore, Brazilian agricultural production is expected to continue growing in the coming years.²⁹

Among the items eligible for financing through the Green CFF, it is important to emphasize that all must necessarily align with agricultural and livestock practices aimed at mitigating greenhouse gas emissions. Many of the eligible items are similar to the objectives of the credit lines of the ABC program, and they will be listed below.:

²⁸ <https://www.gov.br/sudeco/pt-br/acao-a-informacao/perguntas-frequentes-1/fundo-constitucional-de-financiamento-do-centro-oeste-fco>

²⁹ <https://www.ecodebate.com.br/2020/11/12/agropecuaria-respondeu-por-72-das-emissoes-do-brasil-em-2019/>

- Recovery of degraded or altered areas through the implementation of agroforestry systems, afforestation or reforestation, establishment of regional nurseries, recovery of areas or pastures, regional permanent crops, and native species;
- Conservation and/or restoration of water bodies;
- Implementation of agroforestry systems, integrated or not;
- Treatment of agricultural and livestock effluents;
- Production of food with sustainable practices;
- Production of organic inputs, such as biopesticides, biofertilizers, organic compounds, seedlings, and seeds;
- Transition services from traditional to organic agriculture;
- Certification of carbon sequestration projects, greenhouse gas emission reduction, and forestry projects;
- Low-impact forest management;
- Implementation of environmental management systems;
- Oilseed crops for biodiesel production;
- Recovery of legal reserve areas and degraded permanent preservation areas;
- Implementation, expansion, and modernization of alternative energy projects, such as photovoltaic and biodigesters;
- Soil preparation with agricultural correctives;
- Acquisition of seeds and seedlings;
- Soil coverage with planting;
- Implementation of improvements for integration systems;
- Acquisition of machinery and equipment for integration of the financing object;
- Acquisition of bovine and ovine breeding stock;
- Milk production and acquisition of dairy breeding stock;
- Fruit farming for sale in natura or pulp;
- Acquisition of bovine and ovine breeding stock, semen, and embryos;
- Expenses with land regularization and environmental adaptation to current legislation.

According to the sectoral criteria of Agriculture set by the Climate Bonds Initiative, the adoption of climate-friendly agricultural practices may be considered eligible for the issuance of a climate bond.

According to the "*Não Perca Esse Bond*" Report, the practices financed by the Green CFF are mostly aligned with a scenario of temperature increase of up to 2°C as advocated by the Paris Agreement.

According to the Green Bond Principles, the Green CFF can be categorized as sustainable agriculture within the 'Environmental Sustainable Management of Living Natural Resources and Land Use' category.

Based on the above justifications, we conclude that the environmental alignment of the Green CFF credit line is integral, given that:

- ✓ They fulfill some of the eligibility criteria defined for the Agriculture sector in the CBI Taxonomy.

- ✓ Substantially contribute to a climate change scenario that keeps the planet's temperature rise to between 2° and 1.5°, according to “*Não Perca Esse Bond*” report.
- ✓ They fall into some of the categories considered eligible for GBP green bond financing.

TABLE 7 - ASSESSMENT OF ALIGNMENT - CFF GREEN

Credit Line	Alignment	CBI	UE	NPEB	GBP
Green CFF	Integral Environmental	✓	N/A	✓	✓

*The EU Taxonomy does not include agricultural activity as an economic activity or sector that substantially contributes to an environmental objective based on its own performance, or is an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

X = not aligned

Therefore, we conclude that Green CFF line is aligned with environmental and climate standards and it's additionality is classified as **high (A)**.

Corporate CFF - Constitutional Fund for Financing the Green Midwest (Fundo Constitucional de Financiamento do Centro-Oeste - FCO Empresarial)

Corporate CFF (FCO Empresarial³⁰) is a line of credit that seeks to finance enterprises linked to the industrial, agro-industrial, mineral, tourism, economic infrastructure, commercial and services sectors located in the Midwest region. This line of credit includes:

- CFF Regional Tourism Development Program;
- CFF Economic Infrastructure Program.

The origin of the Corporate CFF also goes back to the Brazilian Federal Constitution. It finances goods and services necessary for the implementation, expansion, modernization, renovation, environmental and sanitary adaptation or relocation of industrial, agro-industrial, economic infrastructure, tourism, commercial, service, science, technology, and innovation enterprises. Also, it finances working capital associated with investment projects and dissociated working capital to support general expenses related to the administration of enterprises (except for amounts related to loans and financing in the National Financial System)³¹.

Nowadays, the Central-West region is proving to be a success story in the integration of agro-industrial capital into the national economy ³², having gone from a “demographic vacuum” prior to the 1970s and 1980s to one of the regions with the highest regional GDP and a low social

³⁰ Original program name, in Portuguese.

³¹ <https://www.gov.br/sudeco/pt-br/aceso-a-informacao/perguntas-frequentes-1/fundo-constitucional-de-financiamento-do-centro-oeste-fco>

³² Silva, W. G., & Abrita, M. B. (2017). Políticas Públicas de Desenvolvimento Regional: uma análise a partir da atuação da primeira Superintendência de Desenvolvimento do Centro-Oeste (1967-1990). *Ateliê Geográfico*, 11(1), 235–256. <https://doi.org/10.5216/ag.v11i1.37387>

vulnerability index among its municipalities. According to the Atlas of Human Development in Brazil (IPEA/PNUD - 2016)³³ all the states in the Central-West region have a high human development index (with the exception of the Federal District, which is in the very high human development range), which makes the region belong to the same group as the states in the South and Southeast regions of the country, which also have all the states with a high human development index (HDI³⁴).

The Midwest region has seen considerable growth in its development, given that in 1991 around 94% of municipalities were in the very low human development bracket. In 2010, none of the region's municipalities are still in this bracket and 97% are in the medium and high human development brackets.

The beneficiaries of Corporate CFF are legal entities, and the credit line covers all sizes of business: individual entrepreneurs, micro and small businesses, and medium and large companies.

1) CFF REGIONAL TOURISM DEVELOPMENT PROGRAM

The regional tourism development line is aimed at modernization, opening up fixed credit, access to the goods and services needed to set up, expand and modernize tourism enterprises. There is national literature that correlates the socio-economic development of regions that have planned the development of the local tourism sector, generating an increase and redistribution of income through the sale of goods and services consumed by tourists.

However, it is important to note in this analysis that the amount directed by the line does not obey the criteria of target population considered vulnerable and can be accessed by legal entities of any size. Thus, as shown in the table below, the social alignment of the program is **limited** because:

- ✘ The access to credit is restricted to regional socio-economic development in a broader sense, with no target population to be benefited.

TABLE 8 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS CFF RESOURCES REGIONAL TOURISM DEVELOPMENT PROGRAM

Program	Alignment	SBP Categories	Target population
CFF Regional Tourism Development Program	Partial Social	Job and income generation	Not defined

³³ <http://repositorio.ipea.gov.br/bitstream/11058/6217/1/Desenvolvimento%20humano%20nas%20macrorre>

³⁴ HDI: HDI is a summary composite measure of a country's average achievements in three basic aspects of human development: health, knowledge and standard of living. Definition available at: [Human development index \(who.int\)](http://www.who.int)

Therefore, we conclude that the CFF Regional Tourism Development Program can contribute to the generation of employment and income in the Central-West region, according to the SBP social project categories. However, as it does not define a vulnerable target population, the level of socio-environmental additionality is classified as **limited (C)**

2) CFF ECONOMIC INFRASTRUCTURE PROGRAM

Similar to the BB Economic Infrastructure Program financing line, the CFF Economic Infrastructure Program is the same structure and financing conditions, but the CFF uses proceeds from the Midwest Fund. Both have the same additionality assessment.

The economic infrastructure line aims to implement, expand, modernize and renovate economic infrastructure by financing and opening up credit for services and goods needed in the waterway transport, sewage, water supply, domestic and industrial effluent treatment, composting and landfill sectors, and renewable energy generation sectors.

The items financed under this line and their alignment with sustainability standards are shown in the following table.

TABLE 9 - ALIGNMENT ASSESSMENT - CFF ECONOMIC INFRASTRUCTURE PROGRAM

Financeable item	CBI	UE	NPEB	GBP	SBP
Water supply and sewage	X	X	X	✓	✓
Effluent treatment domestic and non-domestic*	✓	X	X	✓	X
Composting plants or landfills	X	X	X	✓	X
Production and distribution of piped gas	X	X	X	X	X
Storage, transportation, communication, and energy logistics activities	X	X	X	X	X
Telecommunications	X	X	X	X	X
Electricity transmission lines**	✓	✓	X	✓	X
Road transportation***	X	X	X	X	X
Renewable energy generation (solar, PCH, CGH, biomass, biogas and wind)	✓	✓	X	✓	X

* Aligned with GBP and Climate Bond Standards as long as they meet energy efficiency criteria.

** Alignment with Green Bond Principles, Climate Bond Standards and European Union Taxonomy as long as it is connected to low-polluting sources.

*** Possible alignment with social criteria depending on socio-demographic issues and impacted population.

✓ = aligned

X = not aligned

Based on the above justifications, we conclude that the socio-environmental alignment of the credit line is partial, given that:

- ✓ One of the activities to be funded is a social project aimed at vulnerable populations;
- ✗ But only a small part of the items that can be financed are aligned with the criteria of the Climate Bonds Initiative, the European Union's Sustainable Finance Taxonomy and the "Não Perca Esse Bond" report;
- ✗ In addition, the line finances the implementation, expansion and modernization of gas pipelines, which limits the alignment of the credit line in its entirety, given the high socio-environmental risk of gas pipelines and their stimulation of the non-renewable energies necessary for their use, such as natural gas.

Although the purpose of the line is in line with the main sustainability standards, it is not exempt from generating socio-environmental risk. Therefore, we classify the program's additionality as **moderate (B)**.

Sudene³⁵ - Northeast Development Superintendence

The purpose of the SUDENE credit line is to promote regional development in the areas where the Northeast Development Superintendence (SUDENE) operates, guaranteeing resources for investments in infrastructure, public services and productive ventures.

IPEA's Social Vulnerability Index (Social Vulnerability Atlas in Brazilian municipalities) seeks to identify structural indicators related to urban infrastructure, human capital, income and work. The social vulnerability indicators reflect access to basic sanitation and urban mobility, health and education, and issues related to occupation and child labor, as well as other thematic aspects.

Even though the most recent data shows a drop in poverty and vulnerability between 2017-2018, around 22.3% of the population had some degree of poverty. There was a reduction in the Non-Monetary Multidimensional Poverty Index (NMI-MPI) in all regions, but the Northeast continues to have the highest NMI-MPI, falling from 12.4 to 4.3. In the two editions of the Family Budget Survey (POF – Portuguese acronym), the Northeast contributed more than half of the country's losses in quality of life. From 2008-2009 to 2017-2018, the indices of the Federation Units improved, albeit unevenly. In the period, no state in the Northeast had an MPI-NM below the national average.³⁶

The SUDENE credit line targets medium and large companies, including mixed-capital companies, and has a veto on projects linked to the arms trade, tobacco production and

³⁵ Superintendência do Desenvolvimento do Nordeste, in Portuguese.

³⁶ <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/37716-tres-novos-indices-mostram-queda-da-pobreza-e-da-vulnerabilidade-entre-2008-2009-e-2017-2018>

marketing and similar sectors and others defined by the Deliberative Council of the Northeast Development Fund (FDNE³⁷ – Portuguese acronym).

The credit line has a wide range of financeable items, which would require a more in-depth analysis of each one. According to the Strategic Axes of the Northeast Regional Development Plan (PRDNE), the Guidelines and Priorities for the application of FDNE resources³⁸ are divided in 5 dimensions: innovation, education, and human capacity development, productive dynamization, social and urban development, and water security and environmental conservation.

Based on the above justifications, we conclude that the **environmental alignment of the credit line is partial**, because:

- ✘ Although some financeable items are aimed at promoting and developing basic infrastructure, essential services, job creation and advancement and socio-economic empowerment, according to the categories of social projects defined in the SBP, the majority do not guarantee the generation of environmental additionality. Therefore, it cannot be confirmed that they are in line with the main sustainability benchmarks.

The table below shows the items that can be financed, as well as their alignment with environmental, climate and social sustainability standards, detailing which items are relevant.

TABLE 10 - ALIGNMENT ASSESSMENT - SUDENE

Financeable item	Alignment level	CBI	UE	NPEB	GBP	SBP
Financing industrial parks, ICT sectors, and the implementation of innovative processes and energy efficiency in the food, textile, pharmaceutical, health, electrometallurgical, agro-industrial, basic sanitation, energy, oil, gas, cement, metallurgical, steel and chemical industries.	Full alignment: basic sanitation structures and energy efficiency projects. Non-aligned: oil and gas	X	✓	X	X	N/A
Financing for technical and higher education institutions to improve their infrastructure; and student financing (FIES)	Integral alignment	X	X	X	X	✓
Financing renewable energy generation; energy transmission and distribution, financing projects in the natural gas distribution sector; LNG utilization projects and regasification terminals; financing sectors associated with telecommunications, fiber optic infrastructure, telephony and broadband; strengthening and densifying local productive arrangements (APLs) in agriculture; financing irrigation systems; financing highways; railroads; airports;	Full alignment: solar and wind energy production chain; irrigation; Non-aligned: Natural gas, oil and gas	✓	✓	✓	X	N/A
	Partially aligned: promoting tourism; telecommunications infrastructure; creative economy	N/A	N/A	N/A	N/A	✓

³⁷ Fundo de Desenvolvimento do Nordeste, in Portuguese.

³⁸ <https://www.gov.br/sudene/pt-br/centrais-de-conteudo/notatecnica211-2020.pdf>

<p>waterways; logistics terminals; ports and port terminals, including dredging port access channels; expanding and improving the region's tourist infrastructure; encouraging the expansion of the regional hotel network; financing producers and suppliers of equipment and services in the solar and wind production chain; financing projects associated with the internet of things; artificial intelligence; industry 4. 0; setting up data centers; boosting the creative economy based on the richness and diversity of regional culture; financing the biotechnology, pharmacochemical, biopharmaceutical, bioinsecticide, cosmetics and biomaterials industries; financing industrial ventures; activities associated with the development of the space sector at the Alcântara Space Center (CEA).</p>							
<p>Financing of projects aimed at the health sector; financing of projects associated with the implementation of technologies to improve public services; financing of projects associated with the implementation of infrastructure to integrate metropolitan regions; financing of projects associated with improving urban mobility; financing of projects related to water supply, sewage and solid waste treatment, including energy generation.</p>	<p>Integral alignment: urban mobility, water supply, sewage disposal and solid waste treatment</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>✓</p>	
<p>Financing of interventions authorized in the national water security plan (PNSH) under the PISF (São Francisco River Integration Project)</p>	<p>Integral alignment: water supply</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>✓</p>	

✓ = aligned
X = not aligned

Therefore, we conclude that in order to achieve higher levels of additionality, BB would need to define the items that can be financed or the credit operations, aimed at assets and/or target populations in line with sustainability standards. Therefore, we classify the program's additionality as **limited (C)**.

Pronamp³⁹ – 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;

³⁹ Programa Nacional de Apoio ao Médio Produtor, in Portuguese.

- Annual gross income up to BRL 2 million;
- Compliance with labor legislation and with the Forestry Code.

The main objective of the program is to assist producers who do not meet the requirements of PRONAF⁴⁰, either due to their gross annual income or the size of their property, and who are unable to access traditional agricultural financing lines, such as those supported by the Midwest Constitutional Fund (CFF).

Our assessment is that Pronampe's **social alignment is partial**, because:

- ✓ According to the Social Bond Principles categorization, Pronampe's credit lines can generate benefits in terms of empowerment and socio-economic advancement, by allowing access to financing lines for small and medium-sized rural producers.
- ✗ On the other hand, there is no way to guarantee that the resources are directed towards rural producers in vulnerable conditions.

The evaluation is summarized in the table below.

TABLE 11 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS PRONAMP RESOURCES

Credit Line	Alignment	SBP Categories	Target Population
Pronampe	Partial Social	Empowerment and socio-economic advancement	Not defined

It is important to note that of the nine categories of items that can be financed by PRONAMP, three are environmentally aligned with the standards, namely:

1) Irrigation, damming and drainage:

Irrigated agriculture in Brazil is still a minority production sector, accounting for only 6.7% of the total cultivated area, but is responsible for 20% of national production and 43% of the value produced (Braga, 2017 - EMBRAPA). These figures show that irrigated agriculture has a clear competitive advantage, which makes it necessary to encourage investment in irrigation technology.

The following table summarizes the evaluation of these fundable items against the national and international references used.

TABLE 12 - ALIGNMENT ASSESSMENT - IRRIGATION, WEIR AND DRAINAGE ITEMS

Credit Line	Financeable items	Alignment	CBI	UE	NPEB	GBP
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⁴⁰ Original program name, in Portuguese.

Pronamp	Irrigation, damming and drainage	Integral Environmental	✓	N/A*	✓	✓
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*The EU Taxonomy does not include agricultural activity as an economic activity or sector that makes a substantial contribution to an environmental objective based on its own performance, or as an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

X = not aligned

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 – Portuguese acronym), Legal Reserve areas (RL – Portuguese acronym) and Natural Heritage Private Reserve (RPPN – Portuguese acronym), collaborating to the conservation of local biodiversity.

O The following table summarizes the assessment of reforestation, afforestation and deforestation financing against the national and international references used.

TABLE 13 - ALIGNMENT ASSESSMENT - AFFORESTATION, REFORESTATION, AND TREE STUMP REMOVAL FINANCING

Credit Line	Financeable items	Alignment	CBI	UE	NPEB	GBP
Pronamp	Afforestation, reforestation, and tree stump removal	Integral Environmental	✓	✓	✓	✓

✓ = aligned

X = not aligned

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.

The following table summarizes the evaluation of pasture recovery funding against the national and international references used.

TABLE 14 - ALIGNMENT ASSESSMENT - RESTORATION OF DEGRADED PASTURE FINANCING

Credit Line	Financeable items	Alignment	CBI	UE	NPEB	GBP
Pronamp	Restoration of degraded pasture	Integral Environmental	✓	N/A*	✓	✓

* The EU Taxonomy does not include agricultural activity as an economic activity or sector that makes a substantial contribution to an environmental objective based on its own performance, or as an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

X = not aligned

Based on the above justifications, we conclude that the three types of fundable items were **fully environmentally aligned** because:

- ✓ They meet some eligibility criterion defined for the agriculture sector, defined in the CBI Taxonomy.
- ✓ They make a substantial contribution to a climate change scenario that keeps the planet's temperature rise between 2° and 1.5°, according to "Não Perca Este Bond" report.
- ✓ They fall into one of the categories considered eligible for GBP green bond financing.

Therefore, we conclude that although Pronamp includes items that can be financed in full alignment with the standards used, there is no way to guarantee that all of the program's proceeds are directed to these uses. In addition, it is not possible to segregate the volume of proceeds directed to clients of the program who are in a condition of social vulnerability. In order to issue labelled debt, it would be necessary to identify a more vulnerable target population. Pronamp's additionality was therefore classified as **moderate (B)**.

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 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:

- 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.

- 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.

The following table summarizes the evaluation of the financing of irrigation and production in a protected environment in relation to the national and international references used.

TABLE 15 - ALIGNMENT ASSESSMENT - MODERNINFRA

Credit Line	Alignment	CBI	UE	NPEB	GBP
Moderninfra	Partial Environmental	✓	N/A*	X	✓

* The EU Taxonomy does not include agricultural activity as an economic activity or sector that makes a substantial contribution to an environmental objective based on its own performance, or as an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

X = not aligned

Based on the above justifications, we conclude that Moderninfra presented **partial environmental alignment** because it complies with specific emission reduction legislation/policy or they are only capable of bringing about incremental emission reductions/stocks. Items 2 and 3 above can be considered as investments to adapt agriculture to climate change, classified as an NDC scenario in "Não Perca Este Bond" Report.

Therefore, we conclude Moderninfra is partially aligned with the standards of good environmental and climate practices adopted and the program's additionality is **moderate (B)**.

Inovagro - Program to Incentivize Technological Innovation in Agricultural Production

Inovagro is a credit line that aims to finance technological innovations in rural properties, 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).

Our assessment was that Inovagro's **environmental alignment is partial**, because:

- ✗ Some of the financeable items are not aligned with the CBI, GBP, NPEB or EU Taxonomy.
- ✗ In order to proceed with a labeled debt, it would be necessary to make a specific cut-off for the use of the resource.

The evaluation is summarized in the table below.

TABLE 16 - ALIGNMENT ASSESSMENT - INOVAGRO

Financeable Items	Alignment	CBI	UE	NPEB	GBP
Implementation of systems for generating and distributing alternative energy to conventional electricity	Integral Environmental	✓	✓	✓	✓
Livestock and precision farming equipment and services	Integral Environmental	✓	N/A*	✓	✓
Automation, adaptation and construction of facilities for the aquaculture, poultry farming, shrimp farming, pig farming, sheep farming, goat farming, fish farming and dairy farming sectors	No alignment	X	N/A*	X	X
Computer programs for management, monitoring or automation	No alignment	X	N/A*	X	X
Consultancy for technical and managerial training and capacity-building for the productive activities implemented on the rural property	No alignment	X	N/A*	X	X
Acquisition of genetic material (semen, embryos and oocytes)	No alignment	X	N/A*	X	X
Items that comply with the PI-Brazil Integrated Agricultural Production and Animal Welfare Systems ⁴¹ and the Safe Food Programs ⁴² of the various production chains, and Good Agricultural Practices for Beef and Dairy Cattle Farming.	Partial Environmental	X	N/A*	X	✓
Items or products developed under the Technological Innovation Program (Inova-Empresa) ⁴³ ;	No alignment	X	N/A*	X	X
Technical assistance needed to design, implement, monitor and execute the project	No alignment	X	N/A*	X	X
Costs associated with the investment project and the acquisition of breeding stock, with a pedigree registration certificate issued by institutions qualified for this purpose.	No alignment	X	N/A*	X	X

* The EU Taxonomy does not include agricultural activity as an economic activity or sector that substantially contributes to an environmental objective based on its own performance, or is an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

⁴¹ The Integrated Production System is focused on adapting production processes to obtain quality plant products and products of plant origin with levels of pesticide residues and contaminants in accordance with health legislation, through the application of good agricultural practices, favoring the use of natural resources and the substitution of polluting inputs, guaranteeing the sustainability and traceability of agricultural production at the primary stage of the production chain, which can be certified by the official "Certified Brazil" seal.

⁴² The Safe Food Program - PAS - aims to teach food safety techniques and implement Good Practices and the HACCP System (Hazard Analysis and Critical Control Points) in establishments that produce food. The program is a national action in partnership with Sistema S (Senac, Sesi, Sesc and Sebrae), Anvisa (National Health Surveillance Agency) and Embrapa (Brazilian Agricultural Research Corporation).

⁴³ Support for the development and densification of the production chains for agricultural inputs, food industry products and processes and agricultural machinery and equipment.

X = not aligned

Based on the above, Inovagro has financeable items that are aligned with the environmental standards adopted, however, it is not possible to guarantee that the proceeds will be fully directed to them. In addition, the credit line can support both investments and costing. Also, in order to issue labelled debt, it would be necessary to identify a more vulnerable target population. We therefore 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.

Animal traceability is a measure that guarantees livestock farmers and consumers that the animals come from legal sources and are not from illegally deforested areas. Health control can also be carried out more efficiently, since alerts about vaccinations and improvements to the handling area are passed on to the owner via the system.

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:

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

The summary of Moderagro's evaluation against the national and international references used is shown in the table below.

TABLE 17 - ALIGNMENT ASSESSMENT - MODERAGRO

Credit Line	Alignment	CBI	UE	NPEB	GBP
Moderagro	Partial Environmental	✓	N/A*	X	✓

* The EU Taxonomy does not include agricultural activity as an economic activity or sector that substantially contributes to an environmental objective based on its own performance, or is an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

X = not aligned

Based on the above justifications, we conclude that Moderagro showed **partial environmental alignment** because:

Comply with specific emission reduction legislation/policy or are only capable of bringing about incremental emission reductions/stocks, in line with the NDC scenario in "Não Perca Esse Bond" Report (2018).

Based on the analysis, it can be concluded that Moderagro is partially aligned with the uses of proceeds defined in the environmental standards considered in the methodology. However, there is no guarantee that the funds will be used exclusively for these purposes. In addition, some of the bankable items could not be used to issue labelled debt without further investigation. Therefore, we classify the program's additionality as **limited (C)**.

PCA⁴⁴ - Program to Promote the Construction and Expansion of agricultural warehouse

The PCA aims to support investments needed to expand, modernize, renovate and build new warehouses in agriculture contexts. The aim of the program is to meet the current supply of warehouses in Brazil, so that it is at the level considered ideal by the FAO (Food and Agriculture Organization of the United Nations).

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

According to Leidens (2019)⁴⁵, the model of building your own warehouses avoids logistical bottlenecks, reducing production costs and ensuring better grain trading strategies (choosing the best time or selling on the market in batches), where gains can vary from 9.3% to 15.4% compared to the over-the-counter market.

These facilities make it possible to control supply, improve the appearance of products and reduce costs, especially those related to transportation, resulting in increased income for rural producers. It's worth noting that all these improvements prevent food waste and increase the efficiency of farms without the need to expand their production area.

In addition, from an environmental point of view, improving producers' storage capacity also makes it possible to improve transportation logistics, with a concomitant reduction in greenhouse gas emissions. Reducing transport traffic on the roads helps to maintain their quality for longer, reducing the need to use machinery and asphalt inputs to maintain them.

⁴⁴ Programa para Construção e Ampliação de Armazéns, in Portuguese.

⁴⁵ <http://revistasafra.com.br/armazenagem-investimento-estrategico-para-o-produtor-e-para-o-pais/>

We believe that the social alignment of the PCA is partial, given that:

- ✓ According to the Social Bond Principles categorization, the beneficiaries of the PCA credit line can be categorized as those in vulnerability associated with food security and sustainable food systems: access to healthy and nutritious food and reduction of food waste.
- ✗ On the other hand, there is no way of guaranteeing that the resources are directed only at people exposed to this condition of vulnerability.

The evaluation is summarized in the table below.

TABLE 18 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS PCA RESOURCES

Credit Line	Alignment	SBP Categories	Target Population
PCA	Partial Social	Food security and sustainable food systems: access to healthy, nutritious food and reducing food waste	Not defined

Based on the above arguments, we can see that the PCA is aligned with the SBP's food security and sustainable food system category. However, the program is not aimed at a vulnerable target population. We therefore classify the social additionality as **limited (C)**.

2.3 CORPORATE PORTFOLIO - GREEN ECONOMY NATIONAL CLASSIFICATION OF ECONOMIC ACTIVITIES

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 – Portuguese acronym) codes aligned with the Green Taxonomy of the Brazilian Federation of Banks (Febraban – Portuguese acronym)⁴⁶.

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.

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.

⁴⁶ <https://portal.febraban.org.br/pagina/3292/1103/pt-br/consulta-publica>

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's Green Taxonomy, and their relation with the analysis of additionality in this opinion, are presented below.

TABLE 19 - ALIGNMENT EVALUATION - GREEN ECONOMY NCEA

Febraban's Taxonomy Classification	Criteria	Level of additionality according to ERM NINT
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
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

Activities that were not included in Febraban's new Taxonomy, but were still part of the previous one, were classified as Limited additionality level (C). These include sectors that, despite not being included in the new Taxonomy, are in line with the UNEP - United Nations Environment Programme classification of the green economy.⁴⁷

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 comprises credit operations that support both investments and clients' working capital. It is not known how much of the portfolio is allocated to investments, so it is not possible to make assessments based on the proportion.

Regarding exposure to socio-environmental risk, we consider that BB's socio-environmental risk management system is sufficient to mitigate any negative impacts of the activities financed, so

⁴⁷ 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.

it did not affect the analysis of the level of additionality in this opinion. In relation to the management of negative socio-environmental 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 most up-to-date version of which is from 2021. The policy promotes a series of sustainability principles in its operations, such as the promotion of human and labor rights, actions aimed at eco-efficiency and the reduction of pollutant emissions. The guidelines bring visibility to a series of socio-environmental issues considered in the credit process. In addition, the bank has a Human Rights Policy and Code of Ethics, establishing good practices in relations 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.

Based on the above justifications, 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.

Financing Micro and Small Enterprises, Microfinance and Financial Inclusion

(The following analysis does not refer to a specific line of financing, but to a target group that is eligible to receive Banco do Brasil proceeds because it is classified as a vulnerable population.)

According to the Sustainable Financing Framework, companies, co-operatives and institutions with annual revenues of up to \$3 million would qualify for financing. According to a survey by the Brazilian Micro and Small Business Support Service, the small business sector was responsible for almost a million jobs between January and August 2023 and accounted for 71.2% of new jobs created in the country (988,000 out of 1.4 million)⁴⁸. The survey, based on data from the Ministry of Labor and Employment, shows the contribution that small businesses make in guaranteeing employment for a large part of the Brazilian population.

In Sebrae's⁴⁹ latest annual survey on the financing of small businesses in Brazil, from December 2020⁵⁰, it was clear that the problems associated with MSEs were still serious. In terms of the financing of these enterprises, the survey showed a decline in the various sources of finance

⁴⁸ <https://noticias.cancaonova.com/brasil/micro-e-pequenas-empresas-geraram-quase-um-milhao-de-empregos-em-2023/>

⁴⁹ Portuguese acronym for Serviço Brasileiro de Apoio às Micro e Pequenas Empresas

⁵⁰ [https://bibliotecas.sebrae.com.br/chronus/ARQUIVOS_CHRONUS/bds/bds.nsf/1e80ff73a6d15b1c2de020e8dd089bdf/\\$File/30582.pdf](https://bibliotecas.sebrae.com.br/chronus/ARQUIVOS_CHRONUS/bds/bds.nsf/1e80ff73a6d15b1c2de020e8dd089bdf/$File/30582.pdf)

available to small businesses. Not only the most traditional and representative, negotiating terms with suppliers, but also others such as loans from private banks, credit cards, post-dated cheques and overdrafts have declined. The survey also concludes that private banks lent more, but to a smaller base of companies. Loans through public banks, on the other hand, represented a positive share, being the only category to show an increase from 2019 to 2020.

Micro and Small Enterprises (MSEs) is classified as a vulnerable target population according to the Social Bond Principles. The amount of revenue defined by the bank follows the definitions of target sectors within IFC financial institutions.⁵¹ The definitions include micro, small and medium-sized enterprises (MSMEs), women-owned businesses, climate-related projects and housing finance. The IFC considers micro-enterprises to be those whose annual turnover is up to 100,000 dollars. For small businesses, the reference considers those with annual turnover of up to 3 million dollars.

Based on the above justifications, we conclude that the financing of Micro and Small Enterprises (MSEs) can be included in the employment generation category of the Social Bond Principles. In addition, the vulnerable target population is defined and eligible. With this, it can be classified as **high additionality (A)**.

2.4 SOCIAL PRODUCTS

Within the Social Products category, a series of programs and lines of offerings that are believed to have additionality from a social point of view, namely:

- FIES (Portuguese acronym) – 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 (Portuguese acronym) - 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.

SFF – Student Financing Fund

⁵¹ <https://www.ifc.org/en/what-we-do/sector-expertise/financial-institutions/definitions-of-targeted-sectors>

The Student Financing Fund (SFF)⁵², created by Law No. 10.260, of July, 2001, is an initiative of the Ministry of Education that finances non-free higher education courses. The course financed must have a positive evaluation in the National Higher Education Evaluation System (Sinaes – Portuguese acronym).

The funding is aimed at people in situations of financial vulnerability, within a range of monthly per capita family income of up to three minimum wages for full funding, and up to five minimum wages for partial funding.

This initiative seeks to provide access to people from highly vulnerable social classes who would normally be unable to invest in their family members' higher education.

According to the SFF 2023 enrollment report⁵³ published by the Ministry of Education (MEC – Portuguese acronym), FIES beneficiaries have the following characteristics:

- 66,83% are woman;
- 68,1% are between 20 and 30 years old;
- 54,79% identify themselves as black or brown;
- 38,39% are from the Northeast.

This illustrates how the program mainly serves the most vulnerable sections of the population with the least access to education. Among the main reasons for dropout are financial difficulties and the lack of consistent and continuous public policies⁵⁴. In this sense, the financing program aimed at low-income students is extremely relevant.

The evaluation is summarized in the table below. We assess the social alignment of FIES as integral because:

- ✓ According to the SBP, eligible social projects are those that promote access to basic services, such as education, and socioeconomic empowerment through the creation of opportunities, such as access to higher education.
- ✓ In addition, people who would not otherwise have access to higher education are target populations for the SBP. Therefore, the credit line is aligned with the SBP categories. Based on the socio-economic profile and restrictions of the program, we can conclude that the line of financing is aimed at a vulnerable target population.

TABLE 20 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS FIES RESOURCES

Credit Line	Alignment	SBP Categories	Target Population
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⁵² Fundo de Financiamento Estudantil, in Portuguese.

⁵³ <https://vestibular.brasilecola.uol.com.br/enem/fies-2023-2-109-mil-candidatos-se-inscreveram-na-selecao/354757.html> e <https://www.educamaisbrasil.com.br/educacao/fies/mulheres-sao-maioria-na-primeira-edicao-do-fies-2023>

⁵⁴ <https://www.correiobraziliense.com.br/euestudante/trabalho-e-formacao/2023/04/5085024-os-desafios-da-permanencia-estudantil.html>

FIES	Integral Social	Access to essential services (education and vocational training, financing) Socio-economic advancement and empowerment (equitable access to opportunities; equitable integration into the market and society, including reduction of income inequality), indirectly.	Defined
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Based on the above arguments, we can see that SFF is aligned with the Access to essential services and socio-economic advancement and empowerment of SBPs categories. In addition, the program is aimed at a vulnerable target population. It can therefore be classified as having **high additionality (A)**.

BB Accessibility Credit

This is a line of financing for assistive technology goods and services, aimed at promoting social inclusion and equal opportunities for people with disabilities. Among the items that can be financed are: wheelchairs, hearing aids, orthoses, prostheses, walkers, home adaptations, among other assistive technology products. Clients of this line are individuals only and financing is limited to BRL 30,000.

People with disabilities are those who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and moderate participation in society on equal terms with others.

The assessment is summarized in the table below. We assess social alignment as integral because:

- ✓ The funded activity is fully aligned with the Social Bond Principles, as it is linked to generating social benefits for a vulnerable target population, as defined in the principles.

TABLE 21 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS BB CREDIT ACCESSIBILITY RESOURCES

Credit Line	Alignment	SBP Categories	Target Population
BB Accessibility Credit	Integral Social	Socio-economic advancement and empowerment (equitable access to opportunities; equitable integration into the market and society, including reduction of income inequality), indirectly.	Defined

Based on the above arguments, we can see that the BB Accessibility Credit line can be included in the socio-economic empowerment category of the Social Bond Principles. In addition, it is aimed at a vulnerable target population (people with disabilities). It can therefore be classified as having **high additionality (A)**.

MPO⁵⁵ – Guided Productive Microcredit for individuals and legal entities

The Oriented Productive Microcredit (MPO – Portuguese acronym) is a product for financial inclusion and, consequently, for the bankarization of a significant niche of around eight million micro-entrepreneurs in Brazil, many of whom are still informal.

To access the credit line, the following criteria must be met:

- Be an informal entrepreneur with a monthly income of up to BRL 30,000.
- Be an individual micro-entrepreneur (MEI) with a turnover of up to BRL 81,000 per year or a micro-enterprise with a turnover of up to BRL 360,000 per year.

Targeted microcredit is a financial practice that is widespread across much of the planet, given its role in encouraging income generation, job creation and guidance for micro-entrepreneurs from recognized institutions (SEBRAE, 2018). Oriented productive microcredit is credit for small productive activities, which uses a methodology based on the direct relationship of micro-entrepreneurs with the credit agent, who is responsible for guiding and monitoring the financing.

All clients of this line can be considered vulnerable in certain respects. Firstly, with regard to the small business category (including MEI⁵⁶ and micro), this public faces difficulties in accessing credit, corresponding to the second most cited obstacle by small companies in the process of expanding their business in emerging markets and developing countries, according to data from the World Bank⁵⁷.

According to the president of *Trevisan Escola de Negócios*, micro and small companies have an average of 27 days of cash to honor their commitments. The high tax burden is also one of the difficulties faced by micro-enterprises (ME) and small businesses (EPP), in addition to winning over customers, according to the August 2019 “Profile of ME and EPP” survey carried out by the Brazilian Micro and Small Business Support Service (SEBRAE)⁵⁸.

According to the study “Participation of MSEs in the National and Regional Economy”⁵⁹, carried out by SEBRAE and the Getúlio Vargas Foundation (FGV), over the last three decades, micro and

⁵⁵ Portuguese acronym for Ministério do Planejamento e Orçamento.

⁵⁶ Portuguese acronym to Microempreendedor Individual.

⁵⁷ <https://www.worldbank.org/en/topic/smefinance>

⁵⁸ <https://www.infomoney.com.br/negocios/paradas-pequenas-empresas-nao-tem-folego-nem-para-um-mes/>

⁵⁹ <https://datasebrae.com.br/wp-content/uploads/2019/10/Pesquisa-Perfil-das-ME-e-EPP-2019-VF.pdf>

small companies will account for 30% of the country's Gross Domestic Product (GDP)⁶⁰, by 2023, with 70% of the jobs generated this year coming from micro and small businesses.⁶¹

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.

According to the 6th "MEI Profile" survey carried out by SEBRAE, the income earned by these entrepreneurs is the only source of income for 1.7 million families in the country. The data also shows that the MEI's per capita income is BRL1,375.00 per month, which is practically the same as the minimum wage.⁶²

The evaluation is summarized in the table below. We believe that the social alignment is integral because:

- ✓ The financed activity is fully aligned with the Social Bond Principles, as it is linked to generating social benefits for a vulnerable target population, as defined in the principles.

TABLE 22 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS MPO RESOURCES

Credit Line	Alignment	SBP Categories	Target Population
MPO	Integral Social	Job creation and programs designed to prevent and/or alleviate unemployment	Defined

Based on the above arguments, we can see that the MPO falls into the job creation category of the Social Bond Principles. In addition, the program is aimed at vulnerable target populations (MEIs, micro-enterprises and informal entrepreneurs). As a result, it can be classified as having **high additionality (A)**.

⁶⁰ <https://agenciasebrae.com.br/dados/pequenos-negocios-aceleram-emprego-e-pib-no-pais/#:~:text=30%25%20do%20PIB%20brasileiro%20%C3%A9%20gerado%20pelas%20micro%20e%20pequenas%20empresas.>

⁶¹ <https://exame.com/negocios/70-dos-empregos-gerados-este-ano-estao-nas-micro-e-pequenas-empresas/>

⁶² <https://www.al.sp.gov.br/noticia/?10/05/2023/alesp-aprova-salario-minimo-paulista-de-r--1-550-e-inclui-categoria-de-cuidadores-de-idosos#:~:text=Atualmente%2C%20com%20a%20Medida%20Provis%C3%B3ria,maio%2C%20de%20R%24%201.320.>

FAT⁶³ 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 BRL 60,000.

The funding helps to update the country's taxi fleet, replacing used vehicles with new models, including hybrids, which are more efficient and less intensive in terms of greenhouse gas emissions.

The national average salary for taxi drivers in Brazil is BRL4,462, according to 2023 data, which is equivalent to just over three times the minimum wage. Also in 2023, research by the Inter-Union Department of Statistics and Socio-Economic Studies (Dieese) showed that a monthly salary of BRL6,652.09 is needed to survive in a dignified manner in the country⁶⁴.

The evaluation is summarized in the table below. We believe that social alignment is partial because:

- ✘ The financed activity is partially aligned with the Social Bond Principles, as it is linked to generating social benefits, but there is no guarantee that these will be directed at a vulnerable target population, as defined in the principles.
- ✘ The CBI raises the possibility of certification for projects aimed at changing fleets to hybrid models, but there is a need to prove that the vehicle meets the metrics proposed by the IEA Mobility Model. However, it is not possible to verify the volume of resources that are directed towards financing hybrid models.

The evaluation is summarized in the table below.

TABLE 23 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS FAT TAX RESOURCES

Credit Line	Alignment	SBP Categories	Target Population
<i>FAT Taxista</i>	Partial Social	Job creation and programs designed to prevent and/or alleviate unemployment	Not defined

Based on the above arguments, the FAT Taxi Driver line could be included in the job and income generation category of the Social Bond Principles. However, it is not possible to guarantee that the resources will be fully directed towards the vulnerable target population. Therefore, the additionality of the product was considered **moderate (B)**.

⁶³ Portuguese acronym for Fundo de Amparo ao Trabalhador.

⁶⁴ <https://einvestidor.estadao.com.br/ultimas/pesquisa-cesta-basica-salario-minimo/#:~:text=De%20acordo%20com%20o%20Departamento,vezes%20o%20sal%C3%A1rio%20m%C3%ADnimo%20atual.>

Fopag Covid-19 - Emergency Employment Support Program (EESP)

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

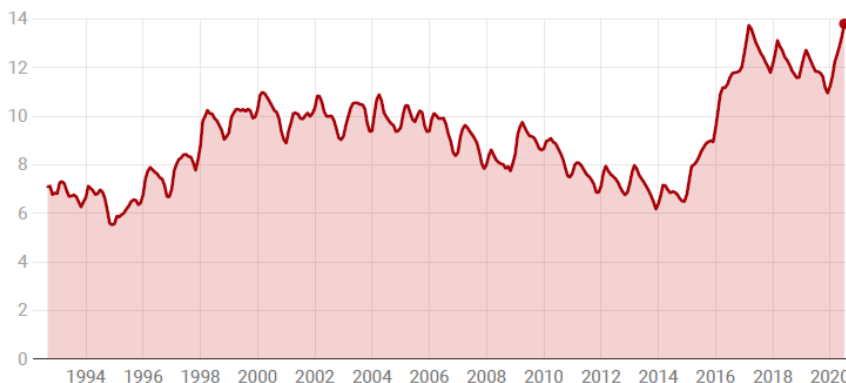
The line was created to mitigate the adverse effects of the Covid-19 pandemic. This line can finance up to 2 months of payroll for companies and cooperatives. Financing is limited to two minimum wages per employee, for each payroll processed.

According to data from July/2020, the Covid-19 pandemic has pushed the country's unemployment rate to the highest levels recorded since 1992: 13.8%⁶⁵, as Figure 1 shows. The number of unemployed reached 13.1 million people.

FIGURE 1 - UNEMPLOYMENT RATE EVOLUTION IN BRAZIL (%)

Unemployment Rate Evolution in Brazil (%)

History series prepared by researchers Bruno Ottino and Tiago Barreira, from the iDados consultancy, shows that unemployment in July is the highest in the last 28 years



Source: Bruno Ottoni/Tiago Barreira – iDados Consultancy/Pnad Contínua (IBGE – Portuguese acronym)

The assessment is summarized in the table below. We believe that **social alignment is integral** because:

- ✓ According to the Social Bond Principles, the “relief of unemployment resulting from socio-economic crises” can be considered an eligible category. Similarly, people who are unemployed or without temporary access to income of up to two minimum wages can be considered a vulnerable target population.

The evaluation is summarized in the following table.

⁶⁵ <https://oglobo.globo.com/economia/pandemia-faz-pais-ter-maior-taxa-de-desemprego-em-quase-30-anos-24669064>

TABLE 24 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS FOPAG COVID-19 RESOURCES

Credit Line	Alignment	SBP Categories	Target Population
Fopag Covid-19	Integral Social	Job creation and programs designed to prevent and/or alleviate unemployment resulting from socio-economic crises, including through the potential effect of SME financing and microfinance.	Defined

Based on the above arguments, we conclude that the Covid-19 PESE emergency line is fully aligned with the Social Bond Principles, and therefore has **high additionality (A)**.

BB CFF Dissociated Working Capital Covid 19

BB CFF's Covid 19 Dissociated Working Capital line of credit was created to support companies during the Covid-19 pandemic. Companies with an annual turnover of up to BRL4.8 million are eligible for financing under this line. Operations may not exceed the limit of 30% of the borrower's gross annual turnover.

The funds can be used for investments and working capital alone or associated with the investment, enabling the purchase of machinery or equipment and/or payment of operating expenses. The aim is to refinance companies' costs, mainly to avoid reducing salaries and cutting staff during the pandemic. The funds may not be used to distribute profits or dividends among the shareholders of the borrowing companies.

It should be noted that, as a result of the COVID-19 pandemic, 1.3 million companies closed down temporarily or permanently in the first half of June 2022. Of this total, 39.4% cited the restrictions imposed by the novel coronavirus pandemic as the cause, according to estimates by the Brazilian Institute of Geography and Statistics (IBGE). Still according to the IBGE, the pandemic was responsible for the closure of 4 out of 10 companies. Naturally, the impact was greater among small companies, with up to 49 employees, where 70.9% reported a reduction in sales⁶⁶.

According to the Social Bond Principles, "income generation and programs to alleviate unemployment resulting from socio-economic crises, including through the financing of small and medium-sized enterprises" are an eligible category. In addition, the line of financing benefits the following target populations:

- a. MEI (annual turnover of up to BRL 81,000.00);
- b. Micro-enterprises (turnover between BRL 81,000.000 and BRL 360,000.00);

⁶⁶ <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/28295-pandemia-foi-responsavel-pelo-fechamento-de-4-em-cada-10-empresas-com-atividades-encerradas>

c. Small companies (turnover between BRL 360,000 and BRL 4,800,000.00);

Based on the above justifications, we conclude that social alignment is **integral** because:

- ✓ According to the Social Bond Principles, the “relief of unemployment resulting from socio-economic crises” can be considered an eligible category. Similarly, people who are unemployed or without temporary access to income of up to two minimum wages can be considered a vulnerable target population.

The evaluation is summarized in the table below.

TABLE 25 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS BB CFF DECOUPLED WORKING CAPITAL RESOURCES COVID 19

Credit Line	Alignment	SBP Categories	Target Population
BB CFF Dissociated Working Capital Covid 19	Integral Social	Job creation and programs designed to prevent and/or alleviate unemployment resulting from socio-economic crises, including through the potential effect of SME financing and microfinance.	Defined

BB Public Sector Funding

The line of credit for the public sector has a significant scope and seeks to make financing possible for the public sector, whether with on lending of external funds or from the bank itself, for programs and actions set out in the strategic plans of states and municipalities, with the aim of generating social impacts by improving the quality of life of the population, through health, education, sanitation, and infrastructure.

Within this credit line, different credit lines are structured to support the States, the Federal District and the Municipalities in their investments, financing the investments included in the programs established in the planning instruments (PPA and LOA – Portuguese acronyms), which may include more than one project and/or more than one intervention.

These programs must represent a set of investments defined in long-term, multi-sector, integrated and sustainable strategic planning. Some priorities must be observed, such as regional and socio-environmental development, the reduction of social and regional inequalities and the promotion of work and income. Investments can be financed in accordance with the following priorities:

- 1) Regional and socio-environmental development;
- 2) Reducing regional and social inequalities on a sustainable basis;
- 3) Promoting work and income;
- 4) Improving the coverage and quality of public services provided to the community;
- 5) Institutional development and modernization of the management of federal entities.

Through the LDOs and PPAs drawn up by the states and municipalities, it is possible to set targets and budget guidelines, thus generating an investment agenda and creating the need for funding from public financial agents.

Thus, within the framework of possible financing, there are various projects involving activities and public services that are essential for the well-being of the population. It's important to point out that this funding goes directly to the public agents, but its beneficiaries are indirect and widespread, as it concerns society as a whole, rather than specific population groups.

According to the SBP, services that involve access to basic and essential services, such as housing, urban mobility, basic sanitation, environmental preservation, health, and safety, among others, are eligible for a sustainable business portfolio. As far as the target population is concerned, there is no possible measurement of vulnerability, given the widespread nature of these projects, and the impossibility of breaking them down into specific groups of beneficiaries.

According to the CBI and GBP, some of the projects financed are in line with certification requirements, such as those involving water treatment and sanitation (duly certified on reducing GHG emissions), bus rapid transit systems, cycle paths and pedestrian spaces. Since it cannot be assumed that all the projects financed by the credit line are certifiable, environmental compliance is partial.

The evaluation is summarized in the following table.

TABLE 26 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS BB PUBLIC SECTOR FINANCING RESOURCES

Credit Line	Alignment	SBP Categories	Target Population
BB Public Sector Funding	Partial Social	Access to essential services (e.g. health, education and vocational training, healthcare, financing and financial services)	Not defined

Based on the above justifications, we conclude that social **alignment is partial** because:

- ✓ The financed activity is partially aligned with the Social Bond Principles, as it is linked to generating social benefits.
- ✗ However, there is no guarantee that these will be directed at a vulnerable target population, as defined in the principles.

Based on the above justifications, we conclude that there is alignment with the environmental standards adopted, but there is no guarantee that the resources are fully allocated to eligible uses. As a result, the additionality was considered **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. Public lighting: reduce maintenance and energy costs, improve the lighting service quality and, consequently, municipal public safety;
2. Public buildings energy efficiency: 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. Basic sanitation: improve the quality of water supply and sanitary sewage systems;
5. Health and education: improve access to health and education services through vehicles, machinery and equipment;
6. Municipal public management modernization: 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. The European Union's Taxonomy has specific criteria for Energy Efficiency in Public Buildings and Road Infrastructure and Urban Mobility. However, both references establish a series of requirements that cannot be guaranteed to be met by the funding line, making alignment partial.

Depending on the specifics of the eligible asset, the “*Não Perca Esse Bond*” publication classifies them in line with a climate change scenario that keeps the rise in the planet's temperature to between 2° or 1.5°.

According to the Green Bond Principles, the categories (2) Energy Efficiency, (3) Road Infrastructure and Urban Mobility and (4) Sanitation are eligible for green financing.

Similarly, the Social Bond Principles recognize access to affordable basic infrastructure as items that have social benefits. This category would encompass items 1, 2, 3, 4 and 5 above. However, it is not possible to guarantee full alignment from a social point of view, since there is no proof that the resources are directed exclusively at the vulnerable target population.

The summary of the funding evaluation is shown in the table below.

TABLE 27 - EVALUATION OF THE MUNICIPAL EFFICIENCY PROGRAM, BASED ON ALIGNMENT WITH THE REFERENCES USED IN THE ERM NINT METHODOLOGY

Financeable Items	Alignment	CBI	UE	NPEB	GBP	SBP
Public lighting	Partial environmental	X	X	✓	X	N/A

Energy efficiency in public buildings	Partial environmental	X	X	✓	✓	N/A
Road infrastructure and urban mobility	Partial environmental	X	X	✓	✓	N/A
Basic environmental and social sanitation	Partial environmental and social	X	X	✓	✓	N/A
Health and education	Integral Social	N/A	N/A	N/A	N/A	✓
Modernization of municipal public management	Not aligned	X	X	X	X	N/A

✓ = aligned
X = not aligned

Based on the above justifications, we can conclude that the Municipal Efficiency Program is partially aligned with the SBP, with no guarantees that the funds will be directed exclusively to a vulnerable population. Similarly, the uses of proceeds are partially aligned with the environmental standards adopted. We therefore conclude that the additionality generated by the program is **moderate (B)**.

Tax Administration Modernization and Basic Social Sectors Management Program

The Tax Administration Modernization and Basic Social Sectors Management Program is a credit line that aims to improve efficiency in 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.

We did not identify any alignment of the financing line with the main sustainability standards, so it was not possible to assess the level of socio-environmental additionality. The summary of the financing assessment is shown in the table below.

TABLE 28 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL HAVE ACCESS TO FAT TAX RESOURCES

Credit Line	Alignment	CBI	UE	NPEB	GBP
Tax Administration Modernization and Basic Social Sectors Management Program	Not aligned	X	X	X	X

✓ = aligned
X = not aligned

Based on the objectives of the financing line and the items that can be financed, there is no clear alignment with the environmental and social standards adopted. Therefore, the additionality of this line can be considered **insufficient (D)**.

In this context, it is worth noting that Banco do Brasil excludes the lines classified as insufficient socio-environmental additionality from its sustainable business portfolio.

MCMV - “Minha Casa Minha Vida” Program range 1, 2 and 3

The *Minha Casa Minha Vida* (MCMV) or *Programa Casa Verde e Amarela*⁶⁷ is a federal government program aimed at financing residential real estate. It was created in 2009 to facilitate access to housing in Brazil. The program subsidizes the purchase of a home for low-income families and offers lower interest rates on property financing for families with a monthly income of up to BRL8,000, according to the salary Ranges below:

- a) Urban Range 1 - gross monthly family income of up to BRL 2,640.
- b) Urban Range 2 - gross monthly family income from BRL 2,640.01 to BRL 4,400.
- c) Urban Range 3 - gross monthly family income from BRL 4,400.01 to BRL 8,000.
- d) Rural Range 1 - annual gross family income of up to BRL 31,680.
- e) Rural Range 2 - annual gross family income of BRL 31,680.01 to BRL 52,800.
- f) Rural Range 3 - annual gross family income of BRL 52,800.01 to BRL 96,000.

The new rules for Minha Casa, Minha Vida (MCMV), in force from 2023, reduce the interest rate for low-income families in Ranges 1 and 2 of the program. The subsidy for low-income families - with a monthly income of up to BRL2,640 (Range 1) and up to BRL4,400 (Range 2), went from BRL47,000 to up to BRL55,000. In 2023, Track 1 returned, now aimed at families with a gross income of up to BRL2,640 (previously, the required income was BRL1,800). In the last four years, people in this income bracket were excluded from the program. Now, the idea is that up to 50% of the financed and subsidized units will be destined for this public.

The subsidy is a kind of discount applied according to the family's income and the location of the property. Now, the ceiling for properties in Ranges 1 and 2 of the program will be BRL264,000

⁶⁷ It is configured as a line of credit with access criteria identical to those of the Minha Casa Minha Vida Program but framed within another line of credit depending on the nomenclature of the Program and the time of contracting the operation.

for municipalities with a population of 750,000 or more; BRL 250,000 for cities with a population between 300,000 and 750,000; BRL 230,000 for those with a population between 100,000 and 300,000; and BRL 200,000 for cities with a population of less than 100,000.

By December 2018, the program had generated 3.5 million direct jobs, which represents an average of 390,000 jobs per year⁶⁸. The forecast from 2023 onwards is that, if the two million homes intended by the program are built, Minha Casa, Minha Vida will generate 8 million jobs in four years, five times more than the previous annual average.

According to a technical report by FGV for Abrainc (Brazilian Association of Real Estate Developers), Minha Casa Minha Vida has helped to reduce the number of families living in precarious housing.

The families in the worst situation are those earning less than the minimum wage (up to BRL1,320 in 2023). The MCMV finances families earning up to 2,640 reais a month, thus providing access to the basic right of housing and, in a way, opportunities, especially for the most vulnerable since low income is an inducer of vulnerability and a determining variable for access to quality home ownership.

For social operations, the SBP requires a guarantee that the investment has taken into account the fact that the project's target population is classified as vulnerable, guaranteeing the relevance of the project. Some examples of proxies/indicators that could be used to define the vulnerability of the financed clients could include annual turnover, geographical location (municipal or state HDI), participation of women or black and brown population in the leadership of the borrowing companies, among others.

ERM NINT considered, based on the economic classification of the Brazil Criteria, that even families included in Range 2 of the PMCMV (monthly income of up to BRL4,400) can be considered vulnerable. It is not known how much of Banco do Brasil's *Minha Casa Minha Vida* financing portfolio is allocated to clients in Ranges 1 and 2, which is how far ERM NINT believes there would be social additionality.

The assessment is summarized in the table below. Based on the above justifications, we conclude that social alignment is partial because:

- ✘ The percentage of the MCMV portfolio that is aligned with the SBP's vulnerability categories and criteria cannot be assessed. The amount earmarked for financing track 3 of the program, for families with a monthly income of up to BRL8,000, cannot be included in the same vulnerability criteria.
- ✘ The financed activity is partially aligned with the Social Bond Principles, as it is linked to generating social benefits, but there is no guarantee that these will be directed at a vulnerable target population, as defined in the principles.

⁶⁸ <https://economia.uol.com.br/reportagens-especiais/minha-casa-minha-vida-dez-anos/#page11>

TABLE 29 - DEFINITION OF ELIGIBLE CATEGORIES AND TARGET POPULATION THAT WILL ACCESS MCMV RESOURCES

Credit Line	Alignment	Categorias SBP	Target populatin
MCMV/ Casa Verde e Amarela	Partial Social	Affordable housing	Partially defined

Based on the above arguments, MCMV operations can fall under the affordable housing category of the Social Bond Principles. However, it is not possible to guarantee that the funds will be fully directed to a vulnerable population. Therefore, we conclude that, as a result, its additionality is considered **high (A)** for the portion of the portfolio destined for ranges 1 and 2. For the rest of the portfolio, aimed at families in range 3, the additionality is considered **moderate (B)**.

Credit line transactions with FGTS funding

Credit line operations using funds raised from the FGTS – Portuguese acronym - are developed from Housing and Social Programs established by the Federal Government and are intended for the borrowers' own homes. These operations are also aimed at legal entities, for the financing of projects.

The financing has criteria that limit access to borrowers and direct it only to the target population, especially those in the lower income brackets. The FGTS, like the savings funds, is raised at historically lower rates than other sources of funds. Furthermore, its application is limited to the criteria established by the FGTS Board of Trustees and the FGTS Operating Agent, which prevent the application of these resources at market rates to borrowers.

In addition to the social purpose of FGTS resources, there are two other relevant considerations for operations contracted with FGTS funding in BB's Sustainable Business Portfolio:

FGTS acquisition

This is a line of credit with conditions and criteria similar to those of the Minha Casa Minha Vida Program, i.e. access to these lines is conditional on the family income presented at the time of contracting the loan and the purchase price of the property, the limits of which are also set by the FGTS Operating Agent.

Depending on income, the borrower benefits from subsidies and discounts and, because they use FGTS resources, they cannot own another property, which allows us to say that these operations are helping to reduce the country's housing deficit.

The FGTS Acquisition line of credit differs from the Minha Casa Minha Vida Program lines in that it allows the acquisition of used properties, while in the MCMV, only the acquisition of new properties is allowed.

Thus, in the same logic as the assessment made for the Minha Casa Minha Vida Program, it provides real estate financing for families with a monthly income of between BRL2,640 and BRL8,000. As explained in the evaluation of the MCMV Program, in the Social Products section, ERM NINT established families with an average monthly income of up to level 2 as the eligible target population.

As such, we have assessed that only financing for customers in Ranges 1 and 2 has social additionality. However, **the alignment with the SBPs is partial** as it is not specified how much of Banco do Brasil's portfolio is earmarked for these income categories.

TABLE 30 - ALIGNMENT ASSESSMENT - FGTS ACQUISITION

Credit line	Alignment	SBP categories	Target population
FGTS acquisition (Credit line operations with FGTS funding)	Partial Social	Affordable housing	Partially defined

Based on the above arguments, we note that "FGTS Acquisition" operations (credit line operations with FGTS funding) can be included in the affordable housing category of the Social Bond Principles. However, it is not possible to guarantee that the resources will be fully directed to the vulnerable target population. Therefore, we conclude that, as a result, its additionality is **high (A)** for the portion of the portfolio earmarked for ranges 1 and 2. For the rest of the portfolio, aimed at families in range 3, the additionality is considered **moderate (B)**.

Pro-Cotista

It is a line of credit financed by the FGTS, the social purpose of which is to direct resources only to the target population, especially those in the lower income brackets. In this case, the borrower cannot own another property, thus contributing to reducing the country's housing deficit.

Interest rates are limited, since the regulations limit the spread to be applied by financial institutions. The purpose of this limitation is to establish a policy of lower interest rates and contribute to access to housing for those who don't have it. The maximum value of the property that can be purchased in this line of credit is BRL 1.5 million - here we reinforce the SFH⁶⁹ regulations that establish the social nature of this system.

The *Pro-Cotista* line of credit differs from the Minha Casa Minha Vida and FGTS Acquisition Program lines in that there is no limit on family income. It is necessary for the borrower to have deposits in their FGTS account, i.e. the line can be accessed by formal workers. Although there is no income limit, the FGTS Operating Agent defines "Popular Housing" as financing for families with a gross monthly family income of up to BRL8,000.00. There is also a prioritization of resources for the acquisition of properties up to BRL 500,000.00. Thus, in the same logic as the

⁶⁹ Portuguese acronym to Sistema Financeiro de Habitação.

assessment made for the Minha Casa Minha Vida Program, it provides real estate financing for families with a monthly income of between BRL2,640 and BRL8,000.

As explained in the evaluation of the MCMV Program, ERM NINT established families with an average monthly income of up to level 2 as the eligible target population. As such, we believe that only financing for clients in Ranges 1 and 2 generates social additionality. However, for the context of this line of credit, there is no specification as to what proportion of Banco do Brasil's Pro-Cotista portfolio is earmarked for this target population.

The summary of the assessment is shown in the table below. Social alignment is partial due to lack of clarity in the target definition of the credit line.

TABLE 31 - ALIGNMENT ASSESSMENT - PRO-COTISTA

Credit Line	Alignment	SBP Categories	Target Population
Pro-Cotista (Credit line operations with FGTS funding)	Partial Social	Affordable housing	Partially defined

Based on the above arguments, we note that Pro-Cotista operations (credit line operations with FGTS funding) can be included in the affordable housing category of the Social Bond Principles. However, it is not possible to guarantee that the resources will be fully directed to the vulnerable target population. Therefore, we conclude that, as a result, its additionality is **high (A)** for the portion of the portfolio earmarked for ranges 1 and 2. For the rest of the portfolio, aimed at families in range 3, additionality is considered **moderate (B)**.

Housing Finance System (SFH)⁷⁰

The credit line is intended to finance the purchase or construction of exclusively residential properties, with the aim of facilitating and promoting the purchase of a home or housing, especially by the lower income classes of the population. The SFH is governed by the rules of the Federal Government, with financing conditions between institutions and borrowers having defined limits.

Operations under the SFH must comply with the following specific conditions: (i) a maximum limit of BRL1,500,000.00 (one million five hundred thousand reais) on the appraised value of the property financed; (ii) a maximum effective cost for the borrower, including interest, commissions and other financial charges of 12% p.a. (per year).

In the SFH it is possible to use funds from the borrower's own Severance Indemnity Fund (FGTS) account and, in accordance with Law 8.036/1990, FGTS funds can only be used by purchasers who do not own another property.

⁷⁰ Sistema Financeiro de Habitação, in Portuguese.

The summary of the assessment is shown in the table below. The financed activity is partially aligned with the Social Bond Principles, as it is linked to generating social benefits, but there is no guarantee that the defined target population can be considered vulnerable, as defined in the principles.

TABLE 32 - ALIGNMENT ASSESSMENT - HOUSING FINANCE SYSTEM

Credit Line	Alignment	SBP Categories	Target Population
Housing Finance System	Partial Social	Affordable housing	Partially defined

Based on the above arguments, we can see that the line of financing can be classified under the affordable housing category of the Social Bond Principles. However, it is not possible to guarantee that the resources will be fully directed to the vulnerable target population. Therefore, we conclude that, as a result, its additionality is **high (A)** for the portion of the portfolio earmarked for ranges 1 and 2. For the rest of the portfolio, aimed at families in range 3, additionality is considered **moderate (B)**.

2.5 DIRECT FINANCIAL LOAN WITH NEW DEVELOPMENT BANK (NDB) RESOURCES

The Direct Financial Loan operations with funds from the New Development Bank (NDB) are aimed at sustainable agribusiness infrastructure projects, with the target population being Foreign Trade and Corporate Bank (DICOR), Corporate & Investment Banking (CIB) and Private clients.

Eligible activities include sustainable irrigation projects, agricultural storage and warehouse projects and renewable energy projects. Each category will be described and assessed individually in the subsections below. First, it should be noted that the exclusion criteria adopted by BB are the same for all three categories. Part of the justification for the line's level of socio-environmental additionality is based on these criteria.

Projects must not be related to undertakings involving the following activities:

- Agricultural activities involving agricultural commodities are produced in areas of the Amazon Biome deforested after July 22, 2008, the reference date of the Forest Code, and in areas of the MATOPIBA region deforested after January 2010, according to the MapBiomias database;
- Direct implementation of projects located in the states of Acre, Amapá, Amazonas, Pará, Rondônia and Roraima. For the state of Mato Grosso, activities in deforested areas based on the above will not be eligible.
- Located on rural property and used to store third-party production;
- When it consists of production on land claimed or under adjudication by Indigenous Peoples;

- Sugarcane plantations for the production of ethanol and other derivatives located in areas prohibited by the Agroecological Zoning of Sugarcane or new sugarcane areas after October 28, 2009, in the Amazon and Pantanal biomes or in the Upper Paraguay river basin;
- Conversion of land with a high carbon stock, such as High Density Forest, Medium Density Forest, Low Density Forest, Young Regenerating Forest in accordance with Brazilian environmental regulations, and as defined through the MapBiomias database.
- Involving the removal of woody vegetation over 3m in height to increase the area of pasture or crop land. Removal to build agricultural infrastructure such as agricultural storage facilities, roads, dams, fences or other infrastructure is permitted.
- Located in Priority Areas for Biodiversity Conservation and in Integral Protection Conservation Units classified in accordance with Brazilian environmental regulations.
- Located in watersheds with high water stress, as assessed through Banco do Brasil's geographic information system.
- Operations using pesticides categorized as 1A or 1B by the World Health Organization (WHO), substances banned by the Stockholm Convention on Persistent Organic Pollutants ("POPs"), or substances listed in Annex III of the Rotterdam Convention - applicable to the producer.

Regarding the monitoring of the points listed, as BB explained, the analyses that involve databases, such as deforested areas, embargoed areas, and Conservation Units, are carried out through an internal diagnosis by the bank, with the involvement of the directorates. The data needed to monitor and report on the socio-environmental impacts of projects is contained in the project's formalization documents. The documents required are: (i) the specific technical project drawn up by a qualified professional for one of the eligible activities listed in the bank's regulations and (ii) the documents listed in the criteria for selecting borrowers in the bank's regulations.

It is also worth noting that projects carried out in rural areas, involving agricultural enterprises, are subject to a specific internal analysis. Agricultural storage and warehouse projects must also submit additional information, such as the storage capacity of the facilities in tons, the type of grain stored, the average moisture content of the stored grain when it arrives, the average moisture content of the stored grain when it leaves, the average storage time in months, the fuel used for drying and the type of facility, silo, or warehouse.

In ERM NINT's assessment, given the above, it should be noted that the bank only specifies a cut-off date for verifying legal deforestation in the Amazon Biome and MATOPIBA region, without specifying the same for the rest of the biomes. However, the bank states that in cases of illegal deforestation in any of the biomes, the operation is not carried out. No information on how the bank ascertains this has been provided.

According to the Agriculture Criteria of the Climate Bonds Standards, eligible resource uses related to agricultural production systems can include operating and capital expenses related to inputs (land, seeds, fertilizers, energy, information), capital goods (land, equipment, real estate); agricultural transformation processes (plantations and reforested areas); agricultural products, waste management (e.g. composting, manure, agricultural waste processing, recycling), and primary processing and storage before the point of sale. However, the same

criterion eliminates the possibility of converting native vegetation after 2010, as well as requiring a climate risk assessment of rural properties, issues that are not guaranteed by the procedures of BB's direct planting funding lines. As reported by the bank, only legal deforestation is assessed for the Amazon and MATOPIBA regions. For the other biomes, there is only an assessment of illegal deforestation, which leaves them without satisfactory processes for assessing the suppression of native vegetation.

In this way, we automatically classify the projects included in the Direct Loan with NDB Resources line as, at most, Moderate additionality (B) for a sustainable economy, since the projects included in the line have partial alignment with environmental standards, and in order to issue labeled debt, it would be necessary to create a cutoff for projects with full alignment.

Sustainable irrigation projects

Sustainable irrigation projects include: micro-irrigation technologies and systems (drip, sprinkler and center pivot irrigation) and other precision agriculture sub-projects that result in at least a 15% reduction in water use.

The Climate Bonds Initiative classifies drip, flood and pivot irrigation systems as eligible provided that: (i) no net GHG emissions are expected, and the issuer discloses supporting documentation reporting this or (ii) negative net GHG emissions are expected, and the issuer estimates and presents the GHG mitigation impact delivered over the operational life of the project/asset.

Also, according to the Climate Bonds Standard, for water distribution systems, projects to install or improve water irrigation systems, such as high-efficiency drip, flood and pivot irrigation systems, are eligible. Water infrastructure assets used in the Land Use sector, such as irrigation systems for agriculture, are subject to the requirements of the Forestry/Agriculture Criteria, also from the CBI (available in APPENDIX D Mitigation and adaptation and resilience criteria for agricultural production units).

The GBP include as a resource use "Environmentally sustainable management of natural resources and land use", which includes drip irrigation.

The EU Taxonomy does not include agricultural activity as an economic activity or sector that substantially contributes to an environmental objective based on its own performance, or as an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity). However, the taxonomy highlights that GHG emissions from energy, as in the case of irrigation, can constitute a significant proportion of GHG emissions on the farm. It therefore requires that when GHG emissions from energy are greater than 20% of farm emissions, they must be reduced by 20% through efficiency requirements and energy sources.

The publication "*Não Perca Esse Bond*" highlights that the increase in demand for electricity in the agricultural sector is related, in considerable part, to irrigation systems in agriculture. Irrigation related to energy efficiency in production, exemplified in "*Não Perca Esse Bond*" report by intermittent irrigation in rice cultivation, made by suspending irrigation, is aligned with the 2°C climate change scenario, as it consists of a project and/or asset that represents a step

towards a low-carbon economy. More specifically, the reference only highlights that improvements to center pivot irrigation systems can generate energy efficiency in agricultural production. And that the drip irrigation technique brings benefits related to water efficiency, by reducing water consumption by up to 40%. Irrigation related to water efficiency is considered to be in line with nationally determined contributions (NDCs – Portuguese acronym), as a project and/or asset that complies with specific emission reduction legislation/policy or is only capable of bringing about incremental emission reductions/stocks.

The summary of the assessment is shown in the table below. The projects in the irrigation category of the credit line under analysis are **partially environmentally aligned**, since:

- ✗ Not aligned with the issue of the cut-off date for verifying legal deforestation, as required by the CBI and explained above, although it is a category of assets with climate additionality, according to the Taxonomy.
- ✗ They do not meet the eligibility criteria for neutrality or reduction of GHG emissions, as defined in the CBI Taxonomy.
- ✗ They do not demonstrate alignment with the requirement to prove GHG emissions in the European Union Taxonomy.
- ✗ Do not include specific requirements for energy efficiency gains in order to fit into the climate change scenario that keeps the planet's temperature rise between 2° and 1.5°, according to "Não Perca Este Bond" publication.
- ✗ They fall into one of the categories considered eligible for GBP green bond financing.

TABLE 33 - ALIGNMENT ASSESSMENT - SUSTAINABLE IRRIGATION PROJECTS

Financeable Items	Alignment	CBI	UE	NPEB	GBP
Micro-irrigation technologies and systems	Partial Environmental	X	N/A*	X	✓
Mdl. Micro Irrigation Project - Sustainable Finance	Partial Environmental	X	N/A*	X	✓
Other precision agriculture irrigation sub-projects that result in at least a 15% reduction in water use.	Partial Environmental	X	N/A*	X	✓

* The EU Taxonomy does not include agricultural activity as an economic activity or sector that substantially contributes to an environmental objective based on its own performance, or is an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

✓ = aligned

X = not aligned

Therefore, we conclude that the financing for sustainable irrigation projects under the Right Loan line with NDB resources is partially aligned with the references listed and has **moderate additionality (B)**.

Storage Projects and Agricultural Warehouses

Agricultural Storage and Warehousing projects include: low carbon agriculture, food security and sustainable food systems, organic agriculture production and certified agriculture, with any organic agriculture certification or certified agriculture that is widely accepted by the market being accepted.

It is also worth mentioning that, for agricultural storage projects, BB requires borrowers to make a public commitment, prior to signing the contract, to the following sustainable agriculture initiatives (where applicable): Soy Moratorium Guidelines; Bonsucro Certification and Equator Principles.

The Climate Bonds Initiative includes agricultural and livestock production and infrastructure as eligible if they demonstrate significant carbon sequestration, emissions reduction or compatibility with 'low carbon agriculture' targets and/or adaptation and resilience activities. The CBI establishes certain criteria for good agricultural practices, based on the recommendations of the EU's Specialized Technical Group (STG) and the analyses of the CBI's Technical Working Group. These criteria are separated into mitigation criteria for agricultural production units and adaptation and resilience criteria for agricultural production units. The criteria do not mention the two themes (Food security and sustainable food systems and Organic farming and certified agriculture) specifically. The specific mitigation and adaptation and resilience criteria for agricultural production units are available in APPENDIX D (Mitigation and adaptation and resilience criteria for agricultural production units).

The EU Taxonomy does not include agricultural activity as an economic activity or sector that contributes to an environmental objective. Nor does it indirectly address the issues of low-carbon agriculture, organic agriculture and certified agriculture, or food security and sustainable food systems.

The publication "*Não Perca Esse Bond*" indicates that depending on the project/activity within the agricultural sector, there are contributions to a climate change scenario of 1.5 °C, 2°C, alignment with NDC or, in some cases, no alignment. This assessment depends on the scope of the project and on whether it meets legal requirements and complies with specific emission reduction legislation or is only capable of bringing about incremental emission reductions/stocks. In the case of the line of financing evaluated here, it is not possible to affirm alignment with the publication due to lack of clarity.

According to the GBP, the resource use "environmentally sustainable management of natural resources and land use" includes sustainable agriculture, ecologically sustainable animal husbandry and sustainable agricultural inputs. The Social Bonds Principles include "Food security and sustainable food systems (e.g. physical, social and economic access to safe, nutritious and sufficient food that meets dietary needs and requirements; resilient agricultural practices; reduction of food loss and waste; and improved productivity of small-scale producers".

However, as there is a lack of information and clarity about the use of the warehouses, we consider that there are gaps that prevent an assertive assessment of the additionality of the credit line. The summary of the evaluation is shown in the table below. The projects included in the agricultural storage and warehouses category of the credit line under analysis are **partially environmentally aligned**, because:

- ✘ There is no proof of compliance with the eligibility criteria defined for the Agriculture sector in the CBI Taxonomy.
- ✘ Does not fall into an eligible category according to the European Union Taxonomy.
- ✘ There is no way of verifying whether there is a contribution to any climate change scenario, according to "Não Perca Este Bond" Report.
- ✘ There is not enough information to verify whether it falls into any of the categories considered eligible for GBP green bond financing.
- ✘ It does not define a target population as required by the SBP, so it is not possible to guarantee that the resources will be fully directed to the vulnerable target population.

TABLE 34 - ALIGNMENT ASSESSMENT - STORAGE PROJECTS AND AGRICULTURAL WAREHOUSES

Financeable Items	Alignment	CBI	UE	NPEB	GBP	SBP
Low-carbon agriculture	Partial Environmental	X	N/A*	✓	N/A**	N/A**
Model Proj. Arm. Agricultural - Sustainable Finance	Partial Environmental	X	N/A*	✓	N/A**	N/A**
Food security and sustainable food systems	Not aligned	X	N/A*	X	N/A**	N/A**
Other activities, such as organic farming and certified agriculture	Partial Environmental	✓	N/A*	N/A	N/A**	N/A**

*The European Union Taxonomy does not include agricultural activity as an economic activity or sector that makes a substantial contribution to an environmental objective based on its own performance, or is an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).

** It was not possible to assess additionality.

✓ = aligned

X = not aligned

Therefore, we conclude that the financing for agricultural storage and warehousing projects' additionality, under the NDB resources, is considered **insufficient (D)**.

Renewable Energy Projects

Renewable Energy Projects include:

- a. Construction, development, operation and maintenance of solar-powered electricity generation plants, provided they are associated with agribusiness operations and/or households.
- b. Construction, development, operation and maintenance of wind-powered electricity generation plants, provided they are associated with agribusiness operations and/or rural residences.
- c. Construction, development, operation and maintenance of residual biomass/waste to energy conversion plants;
- d. Installation of associated equipment and technology systems necessary for the implementation of energy projects.

- e. Energy efficiency projects in agricultural storage facilities and warehouses that provide at least a 20% improvement over the baseline, taking into account the previous year's energy consumption.

The Climate Bond Taxonomy includes various renewable energy generation assets and facilities as eligible, as long as they do not have more than 15% of their electricity generated from non-renewable sources. Specifically for bioenergy projects, the CBI requires that:

- The emissions from the electricity generated are less than 100gCO₂/kWh;
- The emissions from the biomass or biofuel used must be 80% lower than the fossil fuel baseline, and the energy efficiency achieved must be at least 80%; and
- The biofuel must be obtained from a sustainable raw material (the only wood raw material allowed is waste wood).

With regard to these points, there is no guarantee that the requirements will be met by the financing line under evaluation, despite the fact that the projects will be assessed by BB's technical team to validate the level of environmental additionality that will be obtained.

The Green Bond Principles include renewable energy production, transmission, equipment and products as eligible for the green investment label, due to the environmental benefits that the category presents.

The European Union's Sustainable Finance Taxonomy presents investments in the renewable energy category as contributing to climate change mitigation, with any renewable energy generation technology being aligned as long as it can be demonstrated that life cycle emissions are less than 100gCO₂e/kWh and are reduced to net emissions of 0gCO₂e/kWh by 2050. In ERM NINT's view, even if BB's investments are specific to sustainable agribusiness infrastructure projects, and the European Union Taxonomy does not include the category of agricultural activity, the assessment is applicable.

The "*Não Perca Esse Bond*" publication emphasizes that Solar Photovoltaic Power Plant, Wind Power Plant, Biomass Thermal Power Plant Cultivated for Energy Purposes, Biomass Residual Thermal Power Plant are aligned with the 1.5°C climate change scenario, as they consist of a project and/or asset that has the potential to contribute systematically and in the long term to a low carbon economy.

The assessment is summarized in the following table.

TABLE 35 - ALIGNMENT ASSESSMENT - RENEWABLE ENERGY PROJECTS

Financeable Items	Alignment	CBI	UE	NPEB	GBP
Solar Energy	Partial environmental	✓	X	✓	✓
Wind Energy	Partial environmental	✓	X	✓	✓
Bioenergy	Partial environmental	X	X	✓	✓

Associated equipment	Partial environmental	✓	X	✓	✓
Energy efficiency	Partial environmental	✓	X	✓	✓

✓ = aligned
X = not aligned

Based on the above justifications, we conclude that the projects included in the renewable energy category of the credit line under analysis have **partial environmental alignment**, since:

- ✓ They meet the criteria required by the Climate Bond Taxonomy (except for bioenergy).
- ✓ They fit into the categories of the European Union's Taxonomy, even if they do not meet the requirement to prove GHG emissions.
- ✓ Substantially contribute to a climate change scenario that keeps the planet's temperature rise between 2° and 1.5°, according to the publication "Não Perca Este Bond".
- ✓ They fall into one of the categories considered eligible for GBP green bond financing.

Therefore, we conclude that the financing for sustainable renewable energy projects in the Right Loan line with NDB resources is sufficiently aligned with the references listed to be classified as **high additionality (A)**.

2.6 BB RENEWABLE ENERGY CREDIT

Banco do Brasil has a series of credit lines aimed at financing renewable energy sources (wind, solar, biomass and hydroelectric), divided between the Wholesale, Agribusiness, MSE (micro and small enterprises), Government and Individual (PF – Portuguese acronym) portfolios.

The July 2023 portfolio includes the following lines:

- BB *Crédito Energia Renovável* PF (BB Credit Renewable Energy PF), a credit line that finances solar energy for individuals;
- BB *FCO Energia Renovável* PF (BB CFF Renewable Energy PF), a credit line that finances solar energy for individuals with resources from the Midwest Financing Fund; and
- Project Finance - Energy.

Project Finance - Energy is a type of financing aimed at large ongrid renewable energy generation projects⁷¹ for sale, whether centralized solar, distributed micro and mini-generation⁷², wind, hydro or biomass. Financing under this line is intended for companies with a wholesale profile, served by Banco do Brasil's Corporate Banking offices. According to the bank, as these are customized operations, each project is assessed on a case-by-case basis.

⁷¹ Connected to the public electricity distribution network.

⁷² Centralized solar energy is generally generated by a few units of large power plants that produce electricity for many people. Distributed micro- and mini-generation consist of energy generated by generating systems that are close to or even in the consumer unit itself, usually small generation plants. Micro-generation are plants with an installed capacity of 75 kW or less and mini-generation are plants with an installed capacity of more than 75 kW and less than or equal to 5 MW. More details are available at <https://www.alemdaenergia.engie.com.br/entenda-a-diferenca-entre-energia-solar-centralizada-e-distribuida/>

The assessment of eligible assets encompassed within solar, wind and biomass energy is the same as that carried out in the item above, for renewable energy projects associated with agribusiness and/or residential operations, within the scope of the Direct Financial Loan with resources from the NDB (New Development Bank).

Therefore, since it is the same assessment, with the same eligible criteria, the justifications also remain the same:

- ✘ Are in line with the criteria required by the Climate Bond Taxonomy (except for bioenergy, where there is no guarantee that the requirements relating to (i) CO2 emission limits, (ii) energy efficiency and (iii) the origin of the biofuel being a sustainable raw material are met by the financing line under assessment).
- ✓ They fall within the categories of the European Union's Taxonomy, although they are not in line with the requirement to prove GHG emissions.
- ✓ Substantially contribute to a climate change scenario that keeps the planet's temperature rise between 2° and 1.5°, according to "Não Perca Este Bond" report.
- ✓ They fall into one of the categories considered eligible for GBP green bond financing.

Thus, projects falling into these renewable energy categories are partially environmentally aligned.

For hydroelectric power generation, in addition to the criteria for renewable energy that must be met regardless of the category within renewable energy, there is a specific CBI requirement: the power density must be greater than 10 watts per square meter (W/m² of flooded area) or have an emissions intensity of less than 50g of carbon dioxide equivalent per kilowatt hour (CO₂e/kWh). There is no guarantee that the bank is aligned with this issue since it is not known whether the portfolio may include plants with reservoirs, nor is there any information on energy density. Therefore, for hydroelectric power:

- ✘ Partially aligned with the criteria required by the Climate Bond Taxonomy.

The evaluation is summarized in the table below.

TABLE 36 - ALIGNMENT ASSESSMENT - BB RENEWABLE ENERGY CREDIT

Financeable Items	Alignment	CBI	UE	NPEB	GBP
Solar Energy	Partial environmental	✓	X	✓	✓
Wind Energy	Partial environmental	✓	X	✓	✓
Bioenergy	Partial environmental	X	X	✓	✓
Hydroelectric power	Partial environmental	X	X	✓	✓

✓ = aligned
X = not aligned

Therefore, we conclude that Project Finance's financing for renewable energy projects is sufficiently aligned with the references listed to be classified as **high additionality (A)**.

2.7 BB MOBILITY CREDIT

The purpose of the Mobility credit line is to finance new mobility items such as bicycles, scooters, scooters and electric or combustion motorcycles up to 125cc, with no financing of used goods. The target population for the line are customers belonging to segments with certain income limits or investment balances.

The Climate Bonds Initiative includes electric and/or hybrid passenger and cargo vehicles among eligible assets, even for private transport, provided that the vehicle meets the universal limit of gCO₂/p-km (passenger per kilometer), from 0 to 2026, and for category L vehicles (motorized vehicles with two or three wheels, such as motorcycles, mopeds, etc.), zero emissions are accepted.

In the GBP, clean transport is one of the eligible categories, which includes electric, hybrid, public, rail, non-motorized, multimodal transport, infrastructure for clean energy vehicles and the reduction of harmful emissions. The reference does not address the question of whether it is private or public transport. On the other hand, the criteria established by the EU taxonomy for low-carbon transport infrastructure, which includes electric vehicles, are aimed at public transport.

Regarding the "*Não Perca Esse Bond*" reference, when it comes to transportation (and considering the examples of assets eligible by BB), depending on the project/asset within the transportation sector, the reference classifies it as aligned with the 1.5°C climate change scenario, in the case of a structure for bicycle use (construction of bicycle lanes, bicycle racks and provision of systems that facilitate the use and sharing of bicycles), whether public or private. This scenario also includes electric vehicles and/or vehicles powered by, for example, hydrogen, sugarcane ethanol/biogas, electric-ethanol hybrids and others. The following are aligned with the 2°C climate change scenario: Diesel Engine with Hydrogen Additive, 100% Biofuel Cargo Vehicles and Electric and Fossil Fuel Hybrid Vehicles. The following are aligned with the NDC climate change scenario: Corn Ethanol vehicles, Natural Gas Vehicles (NGV) and Mixed Fuels - Gasoline and Ethanol or NGV and Kerosene and Biokerosene.

The SBP does not include a category for technology devices in its taxonomy. In addition, for operations of a social nature, it is important to ensure that investments are aimed at meeting a need of a vulnerable target population, justifying the social relevance of that project. Some examples of proxies/indicators that could be used to define the vulnerability of the financed clients are annual turnover, geographical location (municipal or state HDI), participation of women or black and brown population in the leadership of the borrowing companies, among others. Thus, in terms of social additionality, the line has no benefit, since there is no guarantee that the target population for which the financing is intended is in a situation of vulnerability, even though the line is aimed at people with an income bracket with a defined limit.

Thus, the alignment of the BB Mobility Credit line is as follows.

TABLE 37 - ALIGNMENT ASSESSMENT - BB MOBILITY CREDIT

Financeable Items	Alignment	CBI	UE	NPEB	GBP	SBP
BB Mobility Credit	Partial Environmental	✓	X	✓	✓	X

✓ = aligned
X = not aligned

Considering the above, it is possible to conclude that, in terms of environmental additionality, the line is partially aligned, since it could fit into the categories of clean transportation (free of GHG emissions), even if it is individual/passenger, but it does not fit in with references that require it to be public transportation.

However, in terms of social additionality, it is not aligned, given that the target population it is aimed at does not guarantee that the resources will in fact go to people in vulnerable situations.

Thus, the line of financing under analysis is **partially environmentally aligned**, since:

- ✓ They fall within any of the Climate Bonds Initiative's categories of eligible assets.
- ✗ They do not fall within the eligible assets established by the European Union Taxonomy.
- ✓ Substantially contribute to a climate change scenario that keeps the planet's temperature rise between 2° and 1.5°, according to "Não Perca Este Bond" report.
- ✓ They fall into one of the categories considered eligible for GBP green bond financing.
- ✗ It does not define a target population as required by the SBP, so it is not possible to guarantee that resources will be fully directed to the vulnerable target population.

Therefore, we conclude that financing from BB Mobility Credit line is partially aligned with the references listed, and therefore the social and environmental additionality is has **limited (C)**.

2.8 BB TECHNOLOGIES CREDIT

The purpose of the BB Technologies credit line is to finance technology, electrical, electronic, telephony and gamer items. Some examples of items that can be financed are:

- (i) technology/electronic items: notebooks, desktops, tablets, projectors, scanners, webcams, printers, home theaters, high-performance computers (PC Gamer), gaming chairs, headsets, consoles, games; telephony items such as smartphones, headsets, headphones, and others.
- (ii) photography items such as: professional cameras, lenses, softbox, ring light, strobist, drone and others.
- (iii) white goods such as: refrigerators, microwaves, stoves, wine cellars, washing machines, air conditioners, freezers, etc.

The target audience is BB's own client segmentation, based on income and relationship level, among other factors. Eligible customers are individuals who are account holders, first-time holders, from segments A, B, C and D, with a credit limit available under sub-limit 119 (BB Financing of Goods and Consumption) and a margin of sufficient amount for the proposal.

In addition to the proposed social additionality, the aim was to achieve environmental additionality in terms of energy efficiency through the purchase of new, efficient and less energy-intensive equipment. However, no evidence of this was submitted.

The Climate Bond Initiative includes the following eligible assets in the "Information and Communication Technology" category: fiber optic and cable networks, such as internet exchange points, teleconferencing and telecommuting software and services, including data storage centers, such as hardware and hardware manufacturing, remote solutions for device energy management, and renewable energy load balancing, including automatic exchange systems, energy and data monitoring. The reference does not include criteria for the category.

The EU Taxonomy does not include criteria for the electronic equipment category. It is worth noting, however, that the reference stresses the importance that, when electrical and electronic equipment reaches the end of its useful life, waste electrical and electronic equipment should be collected and managed by an authorized operator and treated in accordance with the waste hierarchy.

Concerning the "*Não Perca Esse Bond*" reference, when it comes to technology, there is mention of the category "Migration to Industry 4.0", a concept associated with a set of technologies that allow the physical, digital and biological worlds to merge. The main technologies are 3D printing, artificial intelligence, the internet of things, synthetic biology, and cyber-physical systems. These technologies involve, for example, accurate measurements and process automation. The introduction of these technologies has the potential to increase productivity as well as reduce energy and material consumption (ABDi). The migration to Industry 4.0 is a process improvement that leads to a reduction in GHG emissions and can be applied by various industrial sectors. In this case, what is set out in the publication is not aligned with the projects/activities described as eligible by the BB Technologies credit line.

The SBP does not include a category that includes technology devices in its taxonomy. In addition, for operations of a social nature, it is important to ensure that the investment has considered the issue of the project's target population being classified as vulnerable, guaranteeing the relevance of that project. Some examples of proxies/indicators that could be used to define the vulnerability of the financed clients could include annual turnover, geographical location (municipal or state HDI), participation of women or black and brown population in the leadership of the borrowing companies, among others. Thus, in terms of social additionality, the line is not aligned, since there is no guarantee that the target population for which the financing is intended is in a situation of vulnerability, even though the line is aimed at people with a defined income range.

Thus, the alignment of the BB Technologies Credit line is as follows.

TABLE 38 - ALIGNMENT ASSESSMENT - BB TECHNOLOGIES CREDIT

Financeable Items	Alignment	CBI	UE	NPEB	GBP	SBP
BB Credit Technologies	Partial Environmental	✓	N/A	✓	✓	X

✓ = aligned
 X = not aligned

Based on the above justifications, we conclude that the line of financing under analysis has **partial environmental alignment**, since:

- ✓ They fall into one of the categories of eligible assets of the Climate Bonds Initiative.
- ✗ Not applicable in the categories established by the European Union Taxonomy.
- ✓ Substantially contribute to a climate change scenario that keeps the planet's temperature rise between 2° and 1.5°, according to “*Não Perca Este Bond*” publication.
- ✓ They fall into one of the categories considered eligible for GBP green bond financing.
- ✗ Does not define a target population as required by the SBP, so it is not possible to guarantee that the resources will be fully directed to the vulnerable target population.

Therefore, we conclude that the BB Credit Technologies line does not meet the social standards mentioned or other references in the literature and has an insufficient contribution to a sustainable economy. Therefore, the social and environmental additionality is **limited (C)**.

APPENDIX A - EVALUATION METHOD

ERM NINT's assessment is based on a proprietary methodology, founded on internationally recognized standards:

- **Social Bonds Principles (SPB):** Guidelines developed by the International Capital Markets Association (ICMA) with criteria for characterizing projects and activities as eligible for issuing social bonds. Social bonds are debt instruments aimed at financing projects with a positive social impact, based on the general criteria of projects with social externalities and the vulnerable target population benefiting from these projects⁷³.
- **Green Bond Principles (GBP):** Guidelines developed by ICMA, like the SBP, but with the aim of identifying categories of projects eligible to issue green bonds. Green bonds are debt instruments aimed at financing projects that have positive environmental impacts⁷⁴.
- **Climate Bonds Taxonomy:** Taxonomy created to identify and certify projects and activities in line with a 2°C global warming scenario and the goals of the Paris Agreement (COP 21)⁷⁵.
- **European Union Sustainable Finance Taxonomy:** A report drawn up by the member countries of the European Union, aimed at certifying sustainable financial instruments, which includes a list of projects that can be classified as sustainable, and projects that are considered "transitional".
- **"Não Perca Esse Bond" (NPEB):** A report produced by ERM NINT (at the time part of SITAWI's Sustainable Finance Program) provides a Brazilian taxonomy for activities and projects aligned with a low-carbon economy. These activities are graded in 3 levels: 1.5°C scenario, 2°C scenario and the scenario corresponding to the NDC of the Paris agreement.
- **Febraban's Green Taxonomy:** The taxonomy proposes a classification of the economic activities present in banks' credit portfolios according to their environmental and social additionality. According to this taxonomy, it is possible to classify socio-environmental additionality as "high" or "moderate", based on its CNAE (National Classification of Economic Activities) code. The list of activities is made up of sectors such as renewable energy, energy efficiency, sustainable construction, sustainable transportation, sustainable tourism, water, fishing, forestry, sustainable agriculture, waste, products with specific purposes and social activities such as education, health, productive inclusion and regional development. The new version of the taxonomy was built in conjunction with the banks associated with Febraban and put out for public consultation between October 28 and November 20, 2020. It 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.

⁷³ <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2020/Social-Bond-PrinciplesJune-2020-090620.pdf>

⁷⁴ <https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/>

⁷⁵ <https://www.climatebonds.net/standard/taxonomy>

The taxonomy classifies the level of socio-environmental contribution of activities between “High” and “Moderate”, in relation to the social or environmental benefit presented. The analysis also takes into account the level of social and environmental risk to which a given activity is exposed, as described in the “criteria” column in the table below.

TABLE 39 - CLASSIFICATION AND EXPLANATION OF FEBRABAN'S GREEN TAXONOMY

Febraban Taxonomy Classification	Criteria
High Social	Alignment with SBP categories and low exposure to socio-environmental risk. No vulnerable target population.
Moderate Social	Alignment with SBP categories and high exposure to socio-environmental risk. No vulnerable target population cut-off.
Environmental High	Activity automatically eligible for the CBI taxonomy or classified as an enabling activity or own performance in the EU Taxonomy. Low exposure to socio-environmental risk.
Moderate Environmental	Activity eligible for the CBI taxonomy depending on the use of resources and classified as a transition activity in the EU Taxonomy. High exposure to socio-environmental risk.

Based on the categories of projects, assets and economic activities that generate credible and tangible socio-environmental benefits, as specifically presented by each of the references used, ERM NINT structured the classification of the portfolio in 2 stages, the first being the evaluation of the items or projects financed by the credit lines that make up BB's portfolio and, finally, the evaluation of the portfolio.

More details are below:

1) Evaluation of financed items and projects:


Based on the above standards, we classified the alignment of the activities financed by Banco do Brasil from an environmental and social point of view. This alignment was divided according to the following criteria:

- **Full environmental alignment:** The activity financed by the credit line in question is aligned:
 - ✓ To the EU Taxonomy, as it is considered an economic activity or sector that substantially contributes to an environmental objective based on its own performance, or is an economic activity that, through the provision of its products or services, enables a substantial contribution to other activities (enabling activity).
 - ✓ To the Climate Bonds Taxonomy, because it meets some eligibility criterion defined for the related sector of activity defined in the Taxonomy.

- ✓ To the document “*Não Perca Esse Bond*”, as it contributes substantially to a climate change scenario that keeps the rise in the planet’s temperature between 2° and 1.5°.
 - ✓ To the Green Bond Principles, as it falls into one of the categories considered eligible for green bond financing.
 - ✓ To the Febraban Taxonomy, as it is an activity with a moderate socio-environmental contribution, and therefore has low exposure to socio-environmental risk.
- **Partial environmental alignment:** The activity financed by the credit line is aligned:
 - ✓ To the EU Taxonomy, as it is considered a transition activity/which contributes to the transition to a low carbon economy.
 - ✓ To the document “*Não Perca Esse Bond*”, as it complies with specific emission reduction legislation/policy or is only capable of bringing about incremental emission reductions/stocks.
 - ✓ To the Green Bond Principles, as it falls into one of the categories considered eligible for green bond financing.
 - ✓ To the Febraban Taxonomy, as it is an activity with a moderate socio-environmental contribution, given that it has high exposure to socio-environmental risk.
 - **Full social alignment:** The activity financed by the credit line is aligned:
 - ✓ To the Social Bond Principles, as it is linked to generating social benefits for a vulnerable target population, as defined in the principles.
 - **Partial social alignment:** The activity financed by the credit line is aligned:
 - ✓ To the Social Bond Principles, but the benefits are not guaranteed to the vulnerable target population, as this is not defined.
 - **No alignment:** The activity financed by the credit line is not aligned:
 - ✗ To the Climate Bonds Taxonomy, as it meets none of the eligibility criteria defined for the related sector of activity defined in the Taxonomy.
 - ✗ The Green Bond Principles, as it does not fall into any of the categories considered eligible for green bond financing.
 - ✗ The “*Não Perca Esse Bond*” document, as it does not contribute to climate change.

The summary of this classification is shown below.

TABLE 40 - CNS CLASSIFICATION BY ERM NINT METHODOLOGY

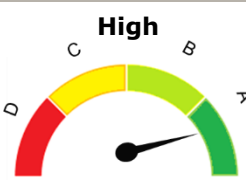
Alignment	UE Taxonomy	Climate Bonds Initiative	Green Bond Principles	“ <i>Não Perca Esse Bond</i> ”	Social Bond Principals	Febraban's Green Taxonomy
 Environmental integral	<ul style="list-style-type: none"> • Own performance • Enabling activity 	There are eligibility criteria	Aligned with eligible categories	Scenarios 1,5° and 2°	-	High Contribution

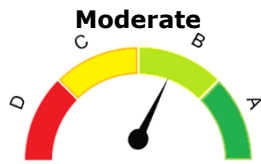
● Environmental partial	• Transitional	There are no eligibility criteria	Aligned with eligible categories	NDC scenarios	-	Moderate Contribution
● Social integral	-	-	-	-	Aligned with vulnerable target population	-
● Social partial	-	-	-	-	Aligned without targeting vulnerable populations	-
● No alignment	-	There are no eligibility criteria	Not aligned with eligible categories	Not aligned	-	-

2) Evaluation of financed operations:

Based on the classifications of the financed activities, inspired by the standards for classifying green and social sectors and activities above, we assessed the operations in an integrated manner, classifying them according to their level of ESG additionality. Thus, each of the bank's operations was classified according to the level of socio-environmental benefit generated, and could be classified as: High (A), Moderate (B), Limited (C) or Insufficient (D), as shown in the table below. It is worth noting that this assessment of socio-environmental issues using the ESG assessment rule takes into account the level of alignment with international and national standards and the intrinsic socio-environmental risk. More information can be found in Appendix B.

TABLE 41 - ASG EVALUATION RULE AND FRAMEWORKS BY LEVEL OF ADDITIONALITY

Additionalities	Environmental framework	Social framework
	<ul style="list-style-type: none"> - All the projects included in the line are fully aligned with environmental standards. They are those classified as “Full environmental alignment”. - Socio-environmental risk considered low (corporate portfolio). - Lines and projects included here should primarily support investments. - Projects included here would automatically be eligible to issue labeled debt. 	<ul style="list-style-type: none"> - All the projects included in the line are fully aligned with the SBP categories and target population. They are those classified as “Integral social alignment”. - Projects falling under this heading would automatically be eligible to issue labeled debt.



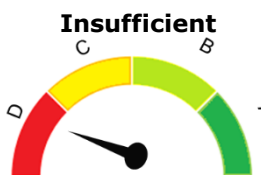
- All the projects included in the line are partially aligned with environmental standards, or part of the fundable items are fully aligned with environmental standards. These are classified as **“Partial environmental alignment”**.
- Projects and lines of financing can support both investment and costing.
- Project risk considered high (corporate portfolio).
- To issue labeled debt, it would be necessary to create a cut-off for projects with full alignment.

- Projects and fundable items are aligned with the SBP categories, but resources are partially directed to the vulnerable target population.
- For the issuance of labeled debt, it would be necessary to create a cut-off for the vulnerable target population.



- Resources are partially directed to items with partial alignment. Projects or items may be classified as “Partial environmental alignment”.
- Environmental benefits cannot be proven based on the standards used.
- They could not be used to issue labeled debt without further investigation.

- Fundable items fall into categories eligible under the SBP, but resources are not directed at vulnerable target populations.
- They could not be used to issue debt labeled social.



Insufficient contribution to a sustainable economy. Does not meet the environmental and social standards cited or other references in the literature. Projects included here could not be used to issue labeled/sustainable debt.

APPENDIX B - CLASSIFICATION CRITERIA

The tables below provide details on the classification of the portfolio for credit lines with environmental and social additionality, respectively. The "Reference standards for evaluation" column shows which standards for evaluating green projects, assets and/or activities were used as a basis for defining the criteria. The "ESG Theme" column explains which dimension of the ESG agenda the criterion seeks to achieve.

TABLE 42 - PORTFOLIO CLASSIFICATION - ENVIRONMENTAL

Rate	Criteria	Benchmarks for evaluation	ESG Theme
High	<ul style="list-style-type: none"> All the projects included in the line are fully aligned with environmental standards. They are those classified as "Full environmental alignment". 		Environmental
	<ul style="list-style-type: none"> Socio-environmental risk considered low (corporate portfolio). 	EU Taxonomy, CBI Taxonomy, Febraban Taxonomy, GBP, NPEB	Environmental
	<ul style="list-style-type: none"> Lines and projects included here should primarily support Investments. 		Environmental and Governance
	<ul style="list-style-type: none"> Projects included here would automatically be eligible to issue labeled debt. 		Environmental and Governance
Moderate	<ul style="list-style-type: none"> All the projects included in the line are partially aligned with environmental standards, or part of the fundable items are fully aligned with environmental standards. These are those classified as "Partial environmental alignment". 		
	<ul style="list-style-type: none"> Project risk considered high (corporate portfolio). 	EU Taxonomy, CBI Taxonomy, Febraban Taxonomy, GBP, NPEB	Environmental
	<ul style="list-style-type: none"> Projects and financing lines can support both investment and costing. 		Environmental and Governance
	<ul style="list-style-type: none"> For the issuance of labeled debt, it would be necessary to create a cut-off for projects with full alignment. 		Environmental and Governance
Limited	<ul style="list-style-type: none"> Resources are partially directed to items with partial alignment. Projects or items may be classified as "Partial environmental alignment". 		EU Taxonomy, Febraban Taxonomy, GBP, NPEB
	<ul style="list-style-type: none"> Environmental benefits cannot be proven based on the standards used. 	Environmental	

	<ul style="list-style-type: none"> • Could not be used to issue labeled debt without further investigation. 	Environmental and Governance
Insufficient	<ul style="list-style-type: none"> • Insufficient contribution to a sustainable economy. 	Environmental
	<ul style="list-style-type: none"> • Does not meet the environmental standards cited or other references in the literature. 	EU Taxonomy, CBI Taxonomy, Febraban Taxonomy, GBP, NPEB Environmental
	<ul style="list-style-type: none"> • Projects included here could not be used to issue labeled/sustainable debt. 	Environmental and Governance

TABLE 43 - PORTFOLIO CLASSIFICATION - SOCIAL

Rate	Criteria	Benchmarks for evaluation	ESG Theme
High	<ul style="list-style-type: none"> • All the projects included in this line are fully aligned with social standards. These are those classified as "Full social alignment". 	SBP	Social
	<ul style="list-style-type: none"> • Projects falling under this heading would automatically be eligible to issue labeled debt. 		Social and Governance
Moderate	<ul style="list-style-type: none"> • Projects and fundable items are aligned with the SBP categories, but resources are partially directed to the vulnerable target population. 	SBP	Social
	<ul style="list-style-type: none"> • For the issuance of labeled debt, it would be necessary to create a cut-off for the vulnerable target population. 		Social and Governance
Limited	<ul style="list-style-type: none"> • Fundable items fall into categories eligible under the SBP, but resources are not directed at vulnerable target population. 	SBP	Social
	<ul style="list-style-type: none"> • Project could not be used to issue debt labeled social. 		Social and Governance
Insufficiente	<ul style="list-style-type: none"> • Insufficient contribution to a sustainable economy. 	SBP	Social
	<ul style="list-style-type: none"> • Does not fit the social standards cited or other references in the literature. 		Social
	<ul style="list-style-type: none"> • Projects included here could not be used to issue labeled/sustainable debt. 		Social and Governance

APPENDIX C - ALIGNMENT OF THE NEW CREDIT LINES TO THE REFERENCES USED

The following table provides a more detailed and non-exhaustive justification for each line of financing (or bankable item within each line) that was included in this version of the Independent Opinion on Banco do Brasil's Sustainable Business portfolio. In other words, the lines of financing that were already included in the first assessment of the portfolio have not been included below, for the sake of objectivity.

TABLE 44 - CLASSIFICATION JUSTIFICATIONS

Financing Line	Description of the financeable item	Justification
Right loan with resources from the NDB (New Development Bank)	Sustainable irrigation projects: a. Micro-irrigation technologies and systems (drip, sprinkler, and center pivot irrigation) b. Mdl. Micro Irrigation Projects - Sustainable Finance	<p>According to the water infrastructure criteria of the Climate Bonds Standards, within water storage, management and distribution some examples of eligible assets are: use of rainwater for irrigation in harvesting systems; and installation or modernization of water collection and storage infrastructures. According to the Climate Bonds Taxonomy, drip, flood and pivot irrigation systems are eligible as long as no net GHG emissions are expected, and the issuer discloses the justification for this decision with supporting documentation OR as long as negative net GHG emissions are expected, and the issuer estimates and presents the GHG mitigation impact, which will be delivered over the operational life of the project or asset. Also according to the Climate Bonds Standard, for water distribution systems, projects to install or improve water irrigation systems, such as high-efficiency drip, flood and pivot irrigation systems, are eligible. Water infrastructure assets used in the Land Use sector, such as irrigation systems for agriculture, are subject to the requirements of the Forestry/Agriculture Criteria, also of the CBI.</p> <p>The GBP include as a resource use "Environmentally sustainable management of natural resources and land use", which includes drip irrigation. It is therefore understood that the resource use is eligible.</p> <p>The EU Taxonomy points out that, in some cases, GHG emissions from energy, as in the case of irrigation, can constitute a significant proportion of on-farm GHG emissions. Given this</p>

context, the proposed good practices include that when GHG emissions from energy are greater than 20% of the farm's emissions, these should be reduced by 20% through efficiency and energy source requirements. As reported by the bank, there are no specific requirements for energy efficiency gains for irrigation projects, however there is an item that allows the financing of energy efficiency projects in agricultural storage facilities and warehouses that provide at least a 20% improvement over the baseline, considering the previous year's energy consumption.

In the publication "*Não Perca Esse Bond*", in relation to irrigation in general, the reference highlights that the increase in demand for electricity in the agricultural sector is related, in considerable part, to irrigation systems in agriculture. Irrigation related to energy efficiency in production, exemplified in "*Não Perca Esse Bond*" report by intermittent irrigation in rice cultivation, made by suspending irrigation, is aligned with the 2°C climate change scenario, as it consists of a project and/or asset that represents a step towards a low-carbon economy. More specifically, the reference only highlights that improvements to center pivot irrigation systems can generate energy efficiency in the agricultural sector's production. And that the drip irrigation technique brings benefits related to water efficiency, by reducing water consumption by up to 40%. Irrigation related to water efficiency is in line with nationally determined contributions (NDCs), as a project and/or asset that complies with specific emission reduction legislation/policy or that is only capable of bringing about incremental emission reductions/stocks.

Precision agriculture irrigation sub-projects that result in at least a 15% reduction in water use.

According to the land use and marine resources and water infrastructure criteria of the Climate Bonds Taxonomy, "Water-saving technologies" are eligible. The CBI makes no mention of other types of precision agriculture projects/ sub-projects that result in at least a 15% reduction in water use.

With regard to GBP, although "reduction of water consumption in irrigation sub-projects" is not specifically mentioned, in ERM NINT's view, it would also be aligned with the category of

		<p>Environmentally sustainable management of natural resources.</p> <p>The European Union's Sustainable Finance Taxonomy includes among the specific digitalization solutions for resource efficiency, in the case of agriculture, "digital solutions for precision agriculture", which make it possible, for example, to determine the right amount of water for irrigation or fertilizer use. In relation to reducing water consumption in irrigation sub-projects, the EU taxonomy points out that actions that can generate significant climate change mitigation include irrigation modernization/reform (sometimes mitigation, sometimes adaptation), resulting in energy or resource efficiency or land management. It is worth noting that the reference makes no specific mention of a 15% reduction in water use.</p> <p>The "<i>Não Perca Esse Bond</i>" publication makes no mention of anything beyond what is described in the item above.</p>
<p>Right loan with resources from the NDB (New Development Bank)</p>	<p>Storage projects and agricultural warehouses for:</p> <p>a. Low-carbon agriculture, as defined by BB's Sustainable Business Portfolio methodology, according to IN 397 item 8.4 and institutional website ri.bb.com.br/sustainability.</p> <p>b. Proj. Arm. Agricultural - Sustainable Finance.</p>	<p>According to the Agriculture criteria (including mixed production systems) of the Climate Bonds Taxonomy, crop and livestock production and Infrastructure are eligible as long as they demonstrate significant carbon sequestration, emissions reduction or compatibility with 'low carbon agriculture' targets AND/OR adaptation and resilience activities.</p> <p>According to the GBP, sustainable agriculture; ecologically sustainable animal husbandry and sustainable agricultural inputs are included in the resource use of environmentally sustainable management of natural resources and land use.</p> <p>The EU taxonomy does not specifically mention Low Carbon Agriculture, Organic Agriculture and Certified Agriculture, nor Food Security and Sustainable Food Systems.</p> <p>It is worth mentioning that other sub-themes within the CNAE, which are more specific and, in our opinion, less relevant, were not mentioned.</p> <p>In relation to the "<i>Não Perca Esse Bond</i>" reference, when it comes to agriculture, the following points (and respective assessments) are mentioned:</p>

		<p>Low-carbon agriculture/ Food security and sustainable food systems: Depending on the project/asset within the agricultural sector, the reference classifies it as aligned with the climate change scenario of:</p> <ul style="list-style-type: none"> • 1.5 in the case of Biofertilizers, Composting for the Treatment of Agricultural Waste and Biogas Generation by Agricultural Waste. • 2°C, in the case of Energy Efficiency in Production, Localized Fertilization, Biological Nitrogen Fixation, Intermittent Irrigation in Rice Cultivation, Recovery of Degraded Pasture (RPD), Reduction of Enteric Emissions, Agroforestry Systems (SAF) in the Amazon Biome and Atlantic Forest and Direct Planting Systems. • NDC, in the case of Adaptation to Climate Change, Agricultural Environmental Certifications, Crop-Livestock-Forest Integration (iLPF), Zero Deforestation Production (conservation above that required by law), Localized Spraying, Agroforestry Systems (SAF) in the Cerrado, Caatinga, Pampa and Pantanal Biomes. • And without alignment with climate change scenarios in the case of agricultural production with only Legal Reserves and APPs conserved and agricultural production with deforestation, even if legalized. <p>The “agricultural environmental certifications” category is aligned with nationally determined contributions (NDCs), as a project and/or asset that complies with specific emission reduction legislation/policy or is only capable of bringing about incremental emission reductions/stock. The reference explains: Agricultural environmental certification seeks to guarantee that the agricultural producer implements a socio-environmental and product quality management system. The reference lists the main certifications as Rainforest Alliance, Fair Trade, Organic and Global G.A.P.</p>
Right loan with resources from the NDB (New	Storage projects and agricultural warehouses for:	The CBI establishes certain criteria for good agricultural practices, based on the recommendations of the EU's

Development Bank)

c. Food security and sustainable food systems in line with the Social Bond Principles.
d. Other activities, such as organic farming and certified agriculture.

Specialized Technical Group (STG) and the analyses of the CBI's Technical Working Group. These criteria are separated into mitigation criteria for agricultural production units and adaptation and resilience criteria for agricultural production units. The criteria do not mention the two themes (Food security and sustainable food systems and Organic farming and certified agriculture) specifically but are general criteria for agriculture itself.

The Social Bonds Principles include Food security and sustainable food systems (e.g. physical, social and economic access to safe, nutritious and sufficient food that meets dietary needs and requirements; resilient agricultural practices; reduction of food loss and waste; and improved productivity of small producers.

In relation to the "*Não Perca Esse Bond*" reference, when it comes to agriculture, the following points (and respective assessments) are mentioned:

Low-carbon agriculture/ Food security and sustainable food systems: Depending on the project/asset within the agricultural sector, the reference classifies it as aligned with the climate change scenario of

- 1.5 in the case of Biofertilizers, Composting for the Treatment of Agricultural Waste and Biogas Generation from Agricultural Waste.
- 2°C, in the case of Energy Efficiency in Production, Localized Fertilization, Biological Nitrogen Fixation, Intermittent Irrigation in Rice Cultivation, Recovery of Degraded Pasture (RPD), Reduction of Enteric Emissions, Agroforestry Systems (SAF) in the Amazon Biome and Atlantic Forest and Direct Planting Systems.
- NDC, in the case of Adaptation to Climate Change, Agricultural Environmental Certifications, Crop-Livestock-Forest Integration (iLPF), Zero Deforestation Production (conservation above that required by law), Localized Spraying, Agroforestry Systems (SAF) in the Cerrado, Caatinga, Pampa and Pantanal Biomes.

		<p>And without alignment in the case of agricultural production with only the Legal Reserve and APP conserved and agricultural production with deforestation, even if legalized.</p>
<p>Right loan with resources from the NDB (New Development Bank)</p>	<p>Construction, development, operation and maintenance of solar and wind-powered electricity generation plants, and residual biomass/waste to energy conversion plants, provided they are associated with agribusiness operations and/or rural residences (must include other activities, e.g. agricultural product processing plants).</p>	<p>Within the Electricity and heating production category, the Climate Bond Taxonomy includes, among other assets: Solar, wind, geothermal, biofuel, biomass and hydroelectric power generation facilities, provided that the facilities do not have more than 15% of their electricity generated from non-renewable sources.</p> <p>Specifically for bioenergy, with regard to the selection criteria, the CBI requires that:</p> <ul style="list-style-type: none"> (i) Emissions from electricity generated must be less than 100gCO₂/kWh, (ii) The emissions from the biomass or biofuel used must be 80% lower than the fossil fuel baseline, and the energy efficiency achieved must be at least 80%, and (iii) The biofuel must be obtained from a sustainable raw material (the only wood raw material allowed is waste wood). <p>The renewable energy category is aligned with the Green Bond Principles, which include the renewable energy category (including production, transmission, equipment and products) as eligible for the green investment label due to the environmental benefits that the category presents.</p> <p>The European Union's Sustainable Finance Taxonomy presents investments in the renewable energy category as contributors to climate change mitigation. Any renewable energy generation technology is aligned with the taxonomy if it can be demonstrated, using a Product Carbon Footprint (PCF) assessment according to ISO 14067 or the GHG Protocol, that the lifecycle impacts of producing 1 kWh of electricity are below the following threshold: installations operating with lifecycle emissions of less than 100gCO₂e/kWh and being reduced to net emissions of 0gCO₂e/kWh by 2050.</p> <p>"<i>Não Perca Esse Bond</i>" report points out that for Solar Photovoltaic Power Plant, Wind Power Plant, Biomass Thermal Power Plant Cultivated for Energy Purposes, Residual Biomass Thermal Power Plant are aligned with</p>

		<p>the climate change scenario of 1.5°C, because they consist of a project and/or asset that has the potential to contribute systematically and in the long term to a low-carbon economy (for example, activities that neutralize emissions or bring about reductions of over 90% throughout their life cycle, or that store a significant volume of carbon, over 50 tons per hectare).</p>
<p>Right loan with resources from the NDB (New Development Bank)</p>	<p>Associated equipment (installation of associated equipment and technology systems necessary for the implementation of energy projects).</p>	<p>The manufacture of products, key components and machinery essential to eligible renewable energy technologies (Hydropower, Solar Photovoltaics, Wind Energy, Ocean Energy, Bioenergy technologies that meet the conversion efficiency requirements set out in the European Union's Renewable Energy Directive (2018/2001/EU). The EU taxonomy does not establish eligibility criteria but highlights some good practices that are relevant given the context. For example, for solar energy projects, the installation and operation of solar panels must not cause damage due to their location (impacts on ecosystems and biodiversity of the site) and potentially significant environmental impacts associated with the management of the solar panel at the end of its useful life.</p> <p>The “<i>Não Perca Esse Bond</i>” publication does not specify equipment and technologies associated with renewable energy projects.</p> <p>It is worth noting that the good practices given above as examples, as well as the other practices addressed by the taxonomies as suggestions and not as requirements, are ERM NINT's recommendation so that projects can mitigate potential associated negative impacts.</p>
<p>Right loan with resources from the NDB (New Development Bank)</p>	<p>Energy efficiency projects in agricultural storage facilities and warehouses that provide at least a 20% improvement over the baseline, considering the previous year's energy consumption</p>	<p>In relation to energy efficiency, the EU Taxonomy points out that the manufacture of products, key components, equipment and machinery that are essential for various key renewable energy technologies (concentrated solar power (CSP), solar photovoltaic (PV) technology, wind power, manufacture of energy efficiency equipment for low carbon technologies that result in substantial reductions in GHG emissions are considered low carbon activities by the taxonomy. The BB includes with eligibility energy efficiency projects in agricultural storage facilities and warehouses that provide at least a 20%</p>

		<p>improvement over the baseline, considering the previous year's energy consumption.</p> <p>The “<i>Não Perca Esse Bond</i>” highlights Energy Efficiency in Agricultural Production as eligible, in line with the 2°C scenario. Within energy, Smart Grid is also eligible, but without the specificity of agricultural storage facilities and warehouses. The NPEB publication does not include a minimum percentage of achievement in this case either.</p>
<p>Project Finance - Energy</p>	<p>Large-scale on-grid renewable energy projects for sale, whether centralized solar, distributed micro and mini generation, wind, hydro or biomass. It is aimed at companies with a wholesale profile, served by Banco do Brasil's Corporate Banking offices.</p>	<p>Within the Electricity and heating production category, the Climate Bond Taxonomy includes, among other assets: Solar, wind, geothermal, biofuel, biomass and hydroelectric power generation facilities, provided that the facilities do not have more than 15% of their electricity generated from non-renewable sources.</p> <p>In addition, specifically for hydroelectric power generation, one of the CBI's selection criteria is that the power density must be greater than 10 watts per square meter (W/m² of flooded area) or have an emissions intensity of less than 50g of carbon dioxide equivalent per kilowatt hour (CO₂e/kWh).</p> <p>As for the selection criteria specifically for bioenergy generation, the CBI requires that:</p> <ul style="list-style-type: none"> (i) Emissions from electricity generated must be less than 100gCO₂/kWh, (ii) The emissions from the biomass or biofuel used must be 80% lower than the fossil fuel baseline, and the energy efficiency achieved must be at least 80%, and (iii) The biofuel must be obtained from a sustainable raw material (the only wood raw material allowed is waste wood). <p>The renewable energy category is aligned with the Green Bond Principles, which include the renewable energy category (including production, transmission, equipment and products) as eligible for the green investment label due to the environmental benefits that the category presents.</p> <p>The European Union's Sustainable Finance Taxonomy presents investments in the renewable energy category as contributors to climate change mitigation. Any renewable</p>

		<p>energy generation technology is aligned with the taxonomy if it can be demonstrated, using a Product Carbon Footprint (PCF) assessment according to ISO 14067 or the GHG Protocol, that the lifecycle impacts of producing 1 kWh of electricity are below the following threshold: installations operating with lifecycle emissions of less than 100gCO₂e/kWh and being reduced to net emissions of 0gCO₂e/kWh by 2050.</p> <p>“<i>Não Perca Esse Bond</i>” report points out that for Solar Photovoltaic Power Plant, Wind Power Plant, Biomass Thermal Power Plant Cultivated for Energy Purposes, Residual Biomass Thermal Power Plant are aligned with the climate change scenario of 1.5°C, because they consist of a project and/or asset that has the potential to contribute systematically and in the long term to a low-carbon economy (for example, activities that neutralize emissions or bring about reductions of over 90% throughout their life cycle, or that store a significant volume of carbon, over 50 tons per hectare). In addition, the publication includes investments in Small Hydroelectric Plants (SHPs) as a potential contribution to limiting average global warming to below 2°C, following the same logic.</p>
<p>BB Mobility Credit</p>	<p>Financing for new mobility items such as bicycles, scooters, scooters and electric or combustion motorcycles up to 125cc.</p>	<p>The CBI includes, within the transport category, “Passenger, freight and support infrastructure”, which includes electric and/or hybrid passenger and freight vehicles among the eligible assets, even if they are for private transport, as long as the vehicle meets the universal gCO₂/p-km (passenger per kilometer) limit of 0 by 2026.</p> <p>For passenger cars and light commercial vehicles:</p> <ul style="list-style-type: none"> - Zero tailpipe emission vehicles (including hydrogen, electric) are automatically eligible. - Vehicles with an exhaust emission intensity of no more than 50 g CO₂/km (WLTP) are eligible until 2025. - From 2026, only vehicles with an emission intensity of 0g CO₂/km (WLTP) are eligible. <p>For category L vehicles (motorized vehicles with two or three wheels, such as motorcycles, mopeds, etc.), zero emissions.</p>

		<p>In the GBP, clean transport is one of the eligible categories, which includes electric, hybrid, public, rail, non-motorized, multimodal transport, infrastructure for clean energy vehicles and reduction of harmful emissions. The reference does not address the question of whether transportation is private or public.</p> <p>On the other hand, the criteria established by the EU taxonomy for low-carbon transport infrastructure, where electric vehicles fit in, are aimed at public transport.</p> <p>In relation to the Do Not Lose This Bond reference, when it comes to transportation (and considering the examples of eligible assets given by BB), depending on the project/asset within the transportation sector, the reference classifies it as aligned with the 1.5°C climate change scenario, in the case of a structure for bicycle use (construction of bike lanes, bike racks and provision of systems that facilitate the use and sharing of bicycles), whether public or private. This scenario also includes electric vehicles and/or vehicles powered by, for example, hydrogen, sugarcane ethanol/biogas, electric-ethanol hybrids and others.</p> <p>The following are aligned with the 2°C climate change scenario: Diesel Engine with Hydrogen Additive, 100% Biofuel Cargo Vehicles and Electric and Fossil Fuel Hybrid Vehicles.</p> <p>Aligned with the NDC climate change scenario: Corn Ethanol vehicles, Natural Gas Vehicles (NGV) and Mixed Fuels - Gasoline and Ethanol or NGV and Kerosene and Biokerosene.</p>
BB Technology Credit	<p>Financing for technology, electrical, electronic, telephony and gamer items, such as: notebooks, desktops, tablets, projectors, scanners, webcams, printers, home theaters, high-performance computers (PC Gamer), gamer chairs, peripheral components, headsets, consoles, games; telephony items such as: smartphones, headsets, headphones; photography items such as: professional cameras, lenses, softboxes, ring lights, strobists, drone, etc. White goods such as: fridge, microwave, stove, wine cellar, washing machines, air conditioning, freezer, etc.</p>	<p>The CBI includes in the "Information and Communication Technology" category the following eligible assets: fiber optic and cable networks, such as internet exchange points, teleconferencing and telecommuting software and services, including data storage centers, such as hardware and hardware manufacturing, remote solutions for device energy management, and renewable energy load balancing, including automatic exchange systems, energy and data monitoring.</p> <p>The EU Taxonomy does not include criteria for the electronic equipment category. It is worth noting, however,</p>

that the reference stresses the importance that when electrical and electronic equipment reaches the end of its useful life, waste electrical and electronic equipment should be collected and managed by an authorized operator and treated in accordance with the waste hierarchy.

The SBP does not include a technology category in its taxonomy. It is worth noting, however, that for operations of a social nature, it is important to ensure that the investment has taken into account the issue of the project's target population being framed as vulnerable, guaranteeing the relevance of that project. Some examples of proxies/indicators that could be used to define the vulnerability of the financed clients could include annual turnover, geographical location (municipal or state HDI), participation of women or black and brown population in the leadership of the borrowing companies, among others.

In relation to the "*Não Perca Esse Bond*" reference, when it comes to technology, there is mention of the category "Migration to Industry 4.0", a concept associated with a set of technologies that allow the physical, digital and biological worlds to merge. The main technologies are 3D printing, artificial intelligence, the internet of things, synthetic biology and cyber-physical systems. These technologies involve, for example, accurate measurements and process automation. The introduction of these technologies has the potential to increase productivity as well as reduce energy and material consumption (ABDi). The migration to Industry 4.0 is a process improvement that leads to a reduction in GHG emissions and can be applied by various industrial sectors. In this case, what is set out in the publication is not aligned with the projects/assets described as eligible by the BB Crédito Tecnologia line.

<p>Credit line operations with FGTS funding (Pro-Cotista and FGTS Acquisition)</p>	<p>Financing through funds raised from the FGTS, aimed at Housing and Social Programs established by the Federal Government and intended for the borrowers' own homes.</p>	<p>Social Bond Principles include the affordable housing category as linked to generating social benefits, as long as the vulnerability of the target population is measurable and defined.</p> <p>In this case, the portfolio finances families with a monthly income of between BRL2,640 and BRL8,000. The portion of the portfolio earmarked for Ranges 1 and 2 is fully aligned, as the target population is considered vulnerable, according to ERM NINT's assessment. For the rest of the portfolio, aimed at families in Range 3, alignment with the SBP is partial.</p>
<p>Housing Finance System (SFH)</p>	<p>Financing the purchase or construction of exclusively residential properties</p>	<p>The Social Bond Principles include the category of affordable housing as linked to generating social benefits, provided that the vulnerability of the target population is measurable and defined.</p>

APPENDIX D - MITIGATION AND ADAPTATION CRITERIA AND RESILIENCE FOR AGRICULTURE PRODUCTION UNITS⁷⁶

TABLE 45 - CATEGORIES, GOOD PRACTICES AND EXCLUSIONS FOR AGRICULTURAL PRODUCTION UNITS

Category	Principal practices	Optional practices	Exclusions
Fertilizer use	<ul style="list-style-type: none"> • There is a nutrient management plan that identifies the correct rate of N fertilizer use on the production unit; <p>As well as at least three optional practices.</p>	<ul style="list-style-type: none"> • The nutrient management plan also identifies the right source of fertilizer; • The nutrient management plan also identifies the right time to apply fertilizers; • Correct fertilizer application; • Application of urea (deep or in another layer of the subsoil); • Agronomic practices that generate yields in the upper 25% range for the agro-ecosystem; • Fertilizers produced with energy-efficient methods (e.g. steam methane reforming (SMR), green ammonia, or a process that uses < 36 gigajoules/t of ammonia); • Controlled release fertilizer; • Biological N fixation as a source of nitrogen inputs; • Any practice that reduces or offsets N₂O emissions by 20%. 	-
Soil management for net carbon sequestration	<ul style="list-style-type: none"> • Project duration of at least five years; • Reduced planting; • Erosion avoided; • No open burning; • Proof that soil carbon sequestration is likely to be maintained for 20 years or more (secure land rights, low threat of conversion, contractual commitments), or demonstration of a 50% higher level of sequestration; plus at least one optional practice. 	<ul style="list-style-type: none"> • Increase in above-ground biomass (cover crops, agroforestry and residue retention); • Changes in organic matter in the soil (composting); • Any practice that increases soil organic carbon (either above or below ground) by 20% over ten years. 	-
Biomass management for net carbon sequestration	<ul style="list-style-type: none"> • Increase in above-ground biomass (productivity of fields/pastures, cover crops, agroforestry) by at least 20%; • Proof that soil carbon sequestration is likely to be maintained for 20 years or more (secure land rights, low 	-	-

⁷⁶ <https://www.climatebonds.net/files/files/standards/agriculture/documento-de-referencia-de-agricultura.pdf>

	threat of conversion, contractual commitments), or demonstration of a 50% higher level of sequestration.;		
Energy, including energy	<ul style="list-style-type: none"> • Energy efficiency of traction, irrigation and storage (energy efficiency rates among the top 25% for equipment available in the country; or • Use of renewable energies only. 	-	Use of wood or coal-based energy sources.
incorporated into inputs	<ul style="list-style-type: none"> • Sustainable use of waste 	-	-
Waste management	<ul style="list-style-type: none"> • No mycotoxins or other contaminated growing conditions that could result in reduced yields. 	-	-
Waste	<ul style="list-style-type: none"> • Flooding days reduced by 10%. 	-	-
Food loss	<ul style="list-style-type: none"> • Peatland restoration. 	-	-

TABLE 46 - ADAPTATION AND RESILIENCE CHECKLIST FOR ASSESSING THE ENTIRE PRODUCTION UNIT

Verifiable items for adaptation and resilience to assess the entire agricultural production unit

1. Clear boundaries and critical interdependencies are identified between the farm and the system in which it operates

1. 1 The boundaries of production units are defined using (1) a list of all farms, as well as the activities and assets associated with the use of title resources; (2) a map of their location; and (3) the identification of the expected useful life of the activity, asset or project.

1.2 Critical interdependencies are identified between the farm and the system in which it operates. The identification of these interdependencies must consider the potential for adverse impacts arising from:

- (1) the effects of water use or pollution on other water users, or erosion in the watershed;
- (2) the relationship of the asset/project with nearby flood zones;
- (3) the introduction of pests and diseases;
- (4) a drop in the number of pollinating birds and insects;
- (5) reduction in biodiversity or High Conservation Value habitat;
- (6) damage to or reduction in the value of neighboring properties due to bordering trees, other structures that present a risk of falling during storms or other extreme events, agricultural pests and diseases;
- (7) burning and other practices that affect air quality;
- (8) market influences, such as an oversupply that reduces prices;
- (9) the appropriation of land or economic assets from local vulnerable groups;
- (10) excessive use of inputs.

2. An assessment was carried out to identify the main physical climatic risks to which the production unit will be exposed and vulnerable throughout its useful life.

2.1 The main physical climate risks and the indicators of these risks are identified according to the following guidelines:

Risks are identified on the basis of (a) a range of climatic hazards and (b) information on risks in the current local context, including references to any relevant hazard zones. previously identified, such as flood zones.

As a minimum, risks relating to each of the following categories should be considered:

1. Temperature: high/low temperatures, variation in the number of warm nights, length of the heat period, cold waves, frost.

2. Water

2.1 Precipitation: high levels of precipitation, heavy rainfall, waterlogging, flooding, drought, freezing rain (hail, freezing rain, ice).

2.2 Water stress: crop water stress (reflecting the combination of temperature, rainfall and wind), ratio between water abstraction and availability.

2.3 Sea level: floods or storms, salinization due to saltwater intrusion or unstable water regimes.

2.4 Glacial melt and glacial lake outbursts: floods caused by glacier outbursts or glacial melt.

3. Wind: cyclones (hurricanes, tornadoes, typhoons), sand and dust storms, blizzards, wind patterns.

4. Soil: erosion (including coastal erosion), landslides, avalanches, degradation.

5. Seasonality: onset of rains, changes in sowing dates, length of growing season, changes in frost-free days in the season, other phenological risks specific to each crop.

6. Pests and diseases: new pest and disease patterns, changes in pest and disease vectors.

7. Fire: increase in the incidence and extent of forest fires, or control of fires.

8. CO₂ concentrations: generally expected to generate positive effects (due to the fertilizing effect of CO₂) and stimulate growth and carbohydrate production; however, there is a risk of changes in the nutritional content and density (proteins, sugars and essential minerals) of wheat, rice and potatoes.

3. The measures that have been or will be adopted to deal with these risks can mitigate them, making production units suitable for climate change conditions throughout their lifetime.

3.1 Risk reduction measures are implemented for all the main risks affecting the production unit. These measures must enable the production unit to reach an average annual productivity threshold for a series of climatic risks expected during the investment period. The minimum productivity threshold is determined by the average level of yield loss compared to the five-year production average, for at least three comparable agricultural enterprises with five or more years of production. In cases where there are no comparable enterprises, the minimum productivity threshold will be calculated as 10% less than the average annual productivity of the previous five years, provided there have been no extreme weather events.

3.2 Risk reduction measures must be tolerant of a range of climate risks and must not impose conditions that could result in maladaptation.

4. The measures that have been or will be taken do not jeopardize the resilience of the defined system in which they operate, as indicated by the boundaries and critical interdependencies with that system, identified in item 1 of this checklist.

4.1 An assessment is carried out to demonstrate that the production unit does not present a significant risk of damaging the natural, social or financial assets of third parties, according to the principle of the best evidence available during the investment period, taking into account the limits of the production unit and critical interdependencies. Damage is understood as any adverse effect in any of the following cases:

(1) effects of water use or pollution on other water users, or erosion in the watershed;

(2) increased risk of flooding;

(3) introduction of pests and diseases;

(4) decrease in the number of pollinating birds and insects;

(5) reduction in biodiversity or High Conservation Value habitat;

(6) damage to or reduction in the value of neighboring properties due to bordering trees, other structures that present a risk of falling during storms or other extreme events, agricultural pests and diseases;

(7) burning and other practices that affect air quality;

(8) market influences, such as an oversupply that reduces prices;

(9) appropriation of land or economic assets from local vulnerable groups;

(10) excessive use of inputs;

(11) a decline in the productivity of an asset; or

(12) decline in conditions to levels below applicable policies; and

(13) non-use of chemicals listed in the Stockholm Convention, or in items 1a or 1b of the WHO classification of pesticides by risk, or non-compliance with the Rotterdam Convention.

5. The issuance of the permit must demonstrate that there will be continuous monitoring and evaluation of the relevance of resilience and risk containment measures, and any adjustments related to such measures will be made as necessary.

5.1 Indicators are provided for the risks identified in item 2 of this checklist.

5.2 Indicators are provided for the resilience measures identified in item 3 of this checklist.

5.3 "No harm" indicators are provided for the relevant system assets identified in item 3 of this checklist.

5.4 Issuers have a feasible plan to annually monitor (a) climate risks linked to the production unit, (b) climate resilience performance and (c) the adequacy of climate resilience interventions, adjusting them as appropriate to address variations in climate risks.

5.5 The emitters have a monitoring and evaluation process, which is carried out annually.

5.6 A grievance redress mechanism is in place to allow stakeholders to identify unforeseen adverse impacts, including investment biases in high-risk locations and assets.

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