

**Brazil – First Programmatic Development Policy Loan for  
Sustainable Environmental Management (P095205)  
Release of the Second Tranche – Full Compliance**

Tranche Release Document

**I. Background**

1. **The Board approved the two-tranche First Programmatic Development Policy Loan for Sustainable Economic Management (SEM DPL I, Loan No. 7660-BR) of US\$ 1.3 billion on March 5, 2009.** Following the Board decision, the Loan Agreement for the SEM DPL I was signed on June 10, 2010 by the Government of Brazil (GOB, the Borrower) and the International Bank for Reconstruction and Development (the Bank). The loan was declared effective on June 21, 2010, with the first tranche of US\$ 800 million being released upon effectiveness. Conditions for release of the second tranche have now been met in full and the Bank recommends that the second tranche be released.
2. **The SEM DPL I is the first operation in a programmatic series with two planned operations. The objectives of the SEM DPL I have been to support the GOB's efforts to:** (i) improve the effectiveness and efficiency of policies and guidelines of the Brazilian environmental management system, and (ii) further integrate principles of environmentally sustainable development in the development agenda of key sectors. The SEM DPL I has also treated climate change concerns at both the inter-sectoral level and within the targeted sectors (natural resources, water, sanitation<sup>1</sup>, and energy).
3. **By focusing on these sectors, the SEM DPL series has supported the GOB's commitment to implement a model of accelerated competitiveness and growth while assuring improved environmental and poverty outcomes,** which are pillars of the 2008-2011 Country Partnership Strategy (CPS). In this way, the SEM DPL series supports the GOB's concerted efforts to promote the sustainable management of agricultural lands, forests, and water resources; reduction of deforestation in the Amazon; reduction of the environmental degradation of land, water, and other resources which are key determinants of the well-being of the poor; and, promotion of renewable energy.
4. **The second tranche of the SEM DPL I was made conditional upon the attainment of three conditions as per the Tranche Release Conditions under Section II C 2 (i), (ii) and (iii) of Schedule 2 to the Loan Agreement:** (i) progress achieved by the Borrower in carrying out the Program is satisfactory; (ii) the macroeconomic policy framework of the Borrower is consistent with the objectives of the Program; and, (iii) specific policy actions have been taken. The policy actions identified in the Program aim at improving environmental and social management effectiveness in the National Bank for Economic and Social Development (BNDES), improving sustainability of natural resources management, improving management and quality of water resources, reducing environmental impacts through improved water supply and wastewater treatment, and, promoting renewable energy potential.

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<sup>1</sup> Sanitation hereafter refers to water supply, sewage treatment, and solid waste management

## II. Macroeconomic Policy Framework and Recent Economic Developments

5. **Condition 2 for release of the second tranche, “a macroeconomic policy framework consistent with the objectives of the Program”, has been fully met, as discussed in paragraphs 6-10.**

6. **The impact of the global financial crisis on Brazil’s economy was short-lived, and characterized by a shallow recession and rapid recovery.** The crisis hit Brazil on three main fronts: first, through an immediate contagion in financial markets; then, by a second round effect on the real economy; and lastly, by a deterioration of public finances. The global financial turmoil had an impact on domestic financial markets, reducing commodity prices, resulting in a depreciation of the exchange rate, curtailing the availability of external credit and causing a liquidity squeeze for Brazilian firms. Of note in the last quarter of 2008 were a 32 percent fall in the São Paulo Stock Market Index (Ibovespa), a 78 percent increase in sovereign spreads, a fall in main commodity exports prices by more than 30 percent, and a depreciation of the Brazilian real by 35 percent.

7. **The Brazilian economy has successfully rebounded from the crisis.** The Central Bank’s current economic growth forecast for 2010 is 7.5 percent (as of the end of October 2010). The slowdown in economic activity experienced in the second quarter of 2010 was moderate and can be considered the result of an exceptionally rapid acceleration in activity in the first quarter of 2010. The national accounts data from the Statistics and Geography Institute of Brazil (IBGE) for the second quarter of 2010 showed a slowdown in economic activity compared to the average growth rate since the second quarter of 2009. Yet, while quarter over quarter GDP growth was lackluster (1.2 percent), the year-over-year annual growth rate remained quite strong (8.8 percent in the second quarter compared to 9 percent in the first quarter). This outcome reflects the Brazilian economy’s deceleration compared to the previous three quarters when GDP posted average quarter-over-quarter growth rates of 2.4 percent per quarter. Tax collections continued to increase during the second quarter, signaling that the slowdown was less pronounced than had been estimated (up until the eve of the release of the new GDP data, analysts had predicted a year-over-year growth rate of 6.7 percent).

8. **Resumed growth in industrial production in July 2010, and increases in indicators of confidence in August point to improved growth stability.** The 0.4 percent increase in industrial production in July marked the end of three successive months of decreases and contrasted with the quarter-over-quarter deterioration observed in June. Employment indicators continued to show improvement, as the unemployment rate decreased to 6.9 percent in July and real payrolls increased by 2.2 percent. In August, the FGV (*Getulio Vargas Foundation*) consumer confidence index and the CNI (National Industry Confederation) business confidence indicators registered sharp increases.

9. **Much of Brazil’s growth has been driven by a notable expansion in consumption.** Despite its recent deceleration, the weighted contribution of household consumption to GDP growth played a prominent explanatory role. Domestic consumption expanded at a quarterly rate of 0.8 percent, posting a slower increase than

that experienced in the first half of 2009 when it rose by 1.4 percent in the first quarter and 3.1 percent in the second. In the second quarter of 2010, government spending increased at a quarterly rate of 2.1 percent compared to only 0.8 percent in the first quarter, and has become more significant since the beginning of the year.

**10. The opportunities and strengths of the thriving Brazilian economy are boosted by the higher level of macroeconomic stability achieved over the last decade.** Initiatives such as *Bolsa Família* have had a significant positive impact on reducing poverty. In addition, a dynamic labor market has led to a reduction in informality, the creation of more than 10 million jobs since 2003, and a deepening credit market. Improved macroeconomic conditions are also reflected in drastic reductions in debt and inflation, which benefited from a successful fiscal responsibility framework and inflation targeting measures put into place by the central bank. These factors strengthen the foundation for sustainable growth.

### **III. Progress in Implementing the Reform Program**

**11. Condition 1 for release of the second tranche, “the progress achieved by the Borrower in carrying out the Program” is satisfactory, has been fully met.** Overall progress in implementation of the Government of Brazil’s strategy for sustainable environmental management has been satisfactory. Beyond the policy actions supported by this Program (which have all been taken, as noted below), other important policies have been approved and are under implementation, among them: (i) an agro-ecological zoning for sugar-cane which prevents the expansion of plantations in sensitive areas such as the Amazon and Pantanal, (ii) a plan to prevent and combat deforestation of the Cerrado, which cover 25% of the country and is being deforested at a high rate; and, (iii) the adoption of a rural environmental cadastre as a mechanism to monitor the protection and rehabilitation of the legally defined forest set asides in private areas.

**12. Condition 3 for release of the second tranche, encompassing implementation of six specific policy actions, has been fully meet as per Section I B 1(a) and (b), 2 (a), (b), (c) and (d) of Schedule1 to the Loan Agreement.** The implementation of the policy actions under the Program’s two policy objectives progressed well, as discussed in detail in the remainder of this memorandum.

#### ***Policy Objective 1: Improving the Overall Environmental Management System***

**13. This policy objective is to support the continued evolution of Brazil’s environmental management policy framework.** Improvements in the effectiveness of government agencies in implementing mandated Brazilian environmental and social management procedures through institutional restructuring and improved staffing, adoption of a revised *Protocolo Verde* (Green Protocol – GP), and the balancing of command-and-control and economic instruments under the draft *Plano Nacional sobre Mudança do Clima* (National Climate Change Action Plan – NCCAP) were key achievements under these areas which constituted conditions for the first-tranche release.

**Tranche Release Policy Action 1: Mainstreaming Climate Change in Public and Private Sector Investments.** “The Borrower has approved the *Plano Nacional sobre Mudança do Clima* (National Climate Change Action Plan), after public consultation, in form and substance satisfactory to the Bank.” As described in paragraphs 14-16 below, this action has been fully implemented.

14. The draft NCCAP was approved by the Climate Change Inter-Ministerial Committee in October 2008 and subsequently submitted for public consultation. Over the course of 2009, through these consultations, consideration of the results of the Brazil Low Carbon Country Study,<sup>2</sup> and the GOB preparations for the COP-15 in Copenhagen, the draft NCCAP was revised to specifically establish an overall voluntary target of a 36.1-38.9 percent reduction of projected emissions by 2020. The revised NCCAP was approved by Law #12.187 of December 29, 2009 on Instituting a National Policy for Climate Change.

15. The finalized NCCAP presents a balanced set of command-and-control and economic instruments covering both adaptation and mitigation actions. On the adaptation side, NCCAP focuses on supporting increased resilience of potable water supply systems, enhanced monitoring and alert systems for extreme climate events, investments in preventive infrastructure for floods, institutional capacity building in communication, and risk and disaster management.

16. On the mitigation side, the finalized NCCAP focuses on supporting the Clean Development Mechanism and verifying emission reductions, capacity building, monitoring, and transfer of clean technologies. The finalized NCCAP targets the achievement nationally by 2015 of no illegal deforestation and no net deforestation (under which deforestation is fully offset by planting of new forest areas). In a subsequent policy announcement leading up to the UNFCCC COP-15 in Copenhagen (December 2009), the GOB has committed to reducing the rate of deforestation of the Amazon Forest by 80 percent by 2020. In 2009, the rate of deforestation was reduced to 740,000 hectares, equivalent to a fall of 53 percent from the 1.48 million hectare average annual level of the base period of 2005-2007. Given the large share of emissions accounted for by deforestation (over 40 percent in 2008), this reduction in deforestation is an early, important step towards meeting the NCCAP’s overall targeted national emissions reduction noted above.

**Tranche Release Policy Action 2: Improving Environmental and Social Management Effectiveness in BNDES and Other Financial Institutions.** “The Borrower has evidenced in form and substance satisfactory to the Bank that new environmental and social institutional policy, following, *inter alia*, the provisions of *Protocolo Verde* (the Green Protocol) has been approved by BNDES Board of Executive Officers, and is being applied to operations financed directly by BNDES.” As described in paragraphs 17-20 below, this action has been fully implemented.

17. The BNDES Corporative Plan for 2009-2014 specified that a revision of its operational policies and practices is necessary to better incorporate a three dimensional approach to sustainability emphasizing social, regional, and environmental

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<sup>2</sup> The final working draft of this World Bank study was made available to the GOB in September 2009.

considerations. As a result, a Code of Ethics was approved in April 2009, and a Declaration of BNDES Values was approved in December 2009. Both highlight the aims of environmental and social sustainability. In line with these new policies, one of the twelve Corporate Initiatives set out for definition and approval in 2010 was the Resolution 2023/10 “Social and Environmental Responsibility and Governance” (the SERG) for the entire BNDES system. This SERG has been developed following ISO 26000 and Green Protocol (GP) principles. The SERG (approved on November 12, 2010) strengthens the links among BNDES social, environmental, and corporate responsibility policies, aligning them with the BNDES Corporative Plan for 2009-2014. The SERG also guides the development or revision of other policies, aiming at further strengthening environmental and social responsibility in BNDES’ full portfolio.

18. In the framework of the SERG, a new Environmental and Social Policy (ESP) governing BNDES operations has been designed and approved (Resolution 2025/10). The ESP has twelve principles fully aligned with the SERG and the GP. Those principles include: (i) considering the social and environmental dimensions as strategic issues when analyzing any new operation and the risk for project beneficiaries; (ii) constantly developing and improving analytical methodologies and tools for monitoring and evaluation of social and environmental aspects of operation; and (iii) sharing information and experiences with beneficiaries, financial institutions and other organizations, and promoting the integration of the different efforts that treat the social and environmental dimensions as strategic issues. The ESP also presents an updated screening process regarding the social and environmental dimensions and guidance on operational supervision. The ESP establishes that operational supervision must include verifying compliance with environmental and social mitigation measures defined in the environmental license and the contract and tracking social and environmental indicators linked to the operations.

19. A supplementing resolution on the Structure and Use of Environmental and Social Guidelines (Resolution 2022/10) gives binding force to all the sectoral guidelines including those that BNDES has designed for three sectors under the scope of the SEM DPL I. These three sectoral guidelines are covered under the discussion of Policy Objective 2 below. According to the Resolution, the Guidelines should include chapters on existing legislation, good practices being used in the sector, and BNDES norms and resolutions governing the sector. Each individual Guideline is designed jointly by the relevant Operational Area, Planning Area, and Environmental Area.

20. The combination of the SERG, the ESP, and the set of relevant BNDES Resolutions fully reflect the principles of the GP in the following ways:

**(i) Principle 1 calls for the development of programs and credit lines in support of natural resources management and environmental protection.** BNDES addresses this principle through development programs that support sustainable forest management and renewable energy (as noted under Tranche Release Policy Actions 3 and 6 below).

**(ii) Principle 2 calls for the consideration of social and environmental impacts and costs in asset management and on the risk analysis of potential clients and operations.** BNDES addresses this principle through the strengthening of its screening

process in the new ESP, the establishment a new methodology to evaluate potential clients which also looks at the company's strategy and management of social and environmental dimensions, the establishment of sectoral guidelines to guide the preparation of operations, and the enactment of resolutions regarding livestock, sugar & alcohol (See Tranche Release Policy Action 3), and energy generation from fossil fuels.

**(iii) Principle 3 calls for the promotion of corporate sustainable consumption.** BNDES addresses this principle through a specific guideline in the SERG.

**(iv) Principle 4 calls for engaging and sharing information with stakeholders interested in the sustainability policies and practice of the organization.** BNDES addresses this principle through a specific guideline in the Corporative Plan for 2009-2014, further detailed in the SERG, the ESP, and the Resolution on Sectoral Guidelines. BNDES has an external portal which presents information of policies, programs, lines of credits, as well as approved and ongoing operations. In addition, BNDES has an *Ouvidoria* (Ombudsman) to address complaints from the public and provides internal training for all staff on social and environmental dimensions.

**(v) Principle 5 calls for promoting the harmonization of procedures, cooperation and integration of efforts amongst the financial institutions which signed the Green Protocol.** BNDES addresses this principle through its active participation in meetings coordinated by the Ministry of Environment and the Brazilian Federation of Banks (FEBRABAN) where the experience and knowledge generated by the participants are shared and common tools are discussed.

### ***Policy Objective 2: Integrating Principles of Sustainable Development in Key Sectors***

21. **This policy objective is to support the Government's efforts to integrate principles of sustainable development in key sectors.** The sectoral focus of the SEM DPL has been chosen to include key sectors in environmental management which satisfy the following criteria: (i) remove or help clarify and address critical institutional bottlenecks; (ii) involve policy reform that can serve as a catalyst for environmentally sustainable investments in the public and private sectors; (iii) demonstrate an ability for economic instruments to be applied in order to promote strong environmental benefits; and (iv) demonstrate strong linkages to climate change mitigation and adaptation.

22. **This approach to defining the sectoral scope of the policy reform program aimed to improve focus on policy implementation and involve BNDES in a virtuous circle of interaction with national policy makers.** This is to be achieved by targeting reforms that address policy bottlenecks encountered by BNDES in the pursuit of its lending in the targeted sectors. It also functions through direct input back to national policy makers from the development of BNDES sectoral guidelines, which supplement national sectoral regulations to achieve sustainable development.

**Tranche Release Policy Action 3: Improving Sustainability of Natural Resources Management.** "The Borrower has evidenced in form and substance satisfactory to the Bank that BNDES: (i) has restructured its lending programs on forest management, forest

plantations, agriculture and associated processing industries to provide incentives for long-term forest management and sustainable land use; and (ii) has designed three sub-sectoral guidelines and its special program on reforestation (*Refloresta*) to ensure coherence with the BNDES new environmental and social institutional policy, as referred to in Section I.B.1(b) of the Loan Agreement, and the Borrower's forest legal framework (i.e. the framework comprised of the Borrower's Law #11.284 of 2006; Law #11.428 of 2006; and Resolution #3545/CMN-BACEN of 2008)." As described in paragraphs 23-25 below, this action has been fully implemented.

23. BNDES has expanded and improved its programs to promote sustainable forest management, which should contribute to the effective implementation of the government's forest concession policy aimed at supplying sustainably-sourced timber. The Resolution 1894/10 (Operational Policies) created the BNDES *Florestal* program which replaced the *Refloresta* program. The improvements focus on three issues: geographically eligible area, lending terms, and financeable items. BNDES *Florestal* can support projects anywhere in Brazil, while *Refloresta* was restricted to the Carajás area and its buffer zone in the Amazon. BNDES *Florestal* offers 11 to 15-year loans and can now finance 100 percent of an operation, including the forest certification process, compared to 12-year loans and 80 percent of an operation under *Refloresta*. Finally, BNDES can now finance natural forest management or forest plantations for charcoal/fuel wood.

24. BNDES has also developed two other programs for medium and small landholders. PROPFLORA (Resolution 1960/10) can lend up to R\$300,000 to medium-size farmers or cooperatives in support of forest plantations or forest restorations. The operations can receive up to 12-year loans with payments taking place only six months after the first harvest. PRONAF ECO (Resolution 1970/10) provides concessional funds to small farmers in support of several activities including forest plantation for timber and non-timber products. Interest rates vary from 1 p.a. (for loans up to R\$10,000) to 4 p.a. (for loans between R\$20,000 and R\$50,000) with loan periods varying from 5 to 12 years.

25. BNDES has also expanded programs and adopted policies to promote sustainable agriculture and to restore deforested areas in private lands. Resolution 1998/10 submits all sugarcane and alcohol operations to the recently launched agro-ecological zoning regulations that ban any new plantations in the Amazon and Pantanal regions. BNDES requests its clients to maintain a database of its sugarcane suppliers including the respective environmental licenses. In addition, Resolution 1854/09 defines the measures to be adopted by all meat producers and processors supported by BNDES (loans or equity participations). Those measures focus on ensuring environmental compliance in the entire productive chain from the breeding farms to the processing plants. In addition, BNDES has launched the Forest Compensation Program (Resolution 1801/09) which provides concessional loans to farmers and companies interested in regularizing the status of their Legal Reserve by renting or buying forested areas to compensate for the deficit of Legal Reserves within their own properties. BNDES has also designed three Environmental and Social Guidelines for soy, livestock, and sugar-alcohol sectors. These Guidelines follow the principles and structure defined in Resolution 2022/10 (described in paragraph 19 above).

**Tranche Release Policy Action 4: Improving Management and Quality of Water Resources.** “The Borrower has evidenced in form and substance satisfactory to the Bank that its national water agency (*Agência Nacional de Águas, ANA*) has executed cooperation agreements with five States in the Borrower’s territory for the purpose of implementing the *Programa Nacional de Avaliação da Qualidade da Água*, at the state level.” As described in paragraph 26 below, this action has been fully implemented.

26. The ANA signed agreements with the states of Pará (003/09), Pernambuco (005/09), Rio de Janeiro (007/09), Mato Grosso (008/09) and Sergipe (010/09). These agreements have as their objective the implementation of the National Water Quality Evaluation Program in each state. These agreements are important to develop a decentralized national water quality monitoring system, with standard assessment criteria and procedures, and to increase availability of water quality information to the public.

**Tranche Release Policy Action 5: Reducing Environmental Impacts through Improved Water, Wastewater Treatment, and Solid Waste Services.** “The Borrower has evidenced in form and substance satisfactory to the Bank that BNDES ensures that its lending program for water and environmental sanitation is consistent with the Borrower’s Law #11.445 of 2007 and with the BNDES new environmental and social institutional policy.” As described in paragraphs 27-29 below, this action has been fully implemented.

27. BNDES ensures that programs for environmental sanitation are coherent with the new legal framework and with BNDES’ new ESP by applying the National Guidelines Law for Basic Sanitation #11.445 of 2007, with which BNDES is requiring compliance in projects related to concession agreements and planning in the environmental sanitation sector. The Law states that concession contracts signed after the approval of Law #11.445 of 2007 should ensure: (i) adherence to a local plan for basic sanitation; (ii) economic viability as documented through preparatory studies for the services; (iii) issuance of a local delegating law authorizing the services’ contracting; and, (iv) a public consultation process. BNDES has established screening procedures to track the observance of all of these four principles.

28. In addition, BNDES is fully implementing the National Monetary Council (CMN) resolution regulating credit operations for the environmental sanitation sector (CMN Resolution #2827 of 2001). In particular, BNDES is requiring that all borrowers, concessionaires, or service providers sign Performance Improvement Agreements with the Ministry of Cities, setting efficiency targets linked to any credit operation regulated by this CMN Resolution.

29. These requirements and additional elements under the BNDES ESP subject environmental sanitation to the general guidelines and procedures set by the Resolution 1894/10 (Operational Policies). With regard to financing conditions, costs are similar among operations for water supply, sanitation and solid waste, but longer maturities have been allowed for the last two, as defined by BNDES operational procedures. There are also special financing conditions for the sector for the less developed North and Northeast regions of the country.

**Tranche Release Policy Action 6: Promoting Renewable Energy Potential.** “The Borrower has evidenced in form and substance satisfactory to the Bank that BNDES ensures that its lending program for energy efficiency and renewable energy is consistent with BNDES new environmental and social institutional policy.” As described in paragraphs 30-32 below, this action has been fully implemented.

30. In the area of renewable energy, BNDES Resolution 1894/2010 targets the sustainable development of the sector by applying the concepts of the ESP and giving preference to renewable energy projects over fossil fuel based projects. Following this resolution, BNDES established a credit line for greenfield renewable energy projects, under which 80 percent of the value of these projects can be financed, with a term of 14 years at the long-term interest rate (TJLP) plus a risk fee of 0.9 percent p.a. Small hydro (<30 MW of installed capacity), wind power, biomass cogeneration and solar are eligible for an even longer amortization period of 16 years. These terms are substantially better than those offered for fossil fuel based generation (where the margin above TJLP ranges 1.8-2.5 percent, and the financeable shares of the project are lower).

31. By keeping fossil fuel based generation under stricter loan terms, BNDES provides a competitive edge to renewable energy, as set out by the ESP. As a result, BNDES increased the number of renewable energy operations from 16 in 2006 to 75 in 2009. Currently, BNDES has a pipeline of 20 wind projects distributed in over 90 wind farms with total installed capacity of 2,400 MW. The small hydro (<30 MW) pipeline includes 23 projects, totaling an additional 2,450 MW of new installed capacity. Overall, this expansion of the portfolio represents incremental renewable energy generation capacity of 165,000 TJ/year (almost three times the level of the outcome indicator target for this area under the SEM DPL Program).

32. In promoting energy efficiency, BNDES is pursuing the elements of the ESP by promoting loans which yield demand-side energy efficiency by requiring high standards for new equipment which are energy efficient. A leading example of this is under the recently launched BNDES program, Support for World Cup Tourism and World Cup Stadiums, which requires that loans for hotels and stadiums adhere to higher energy efficiency standards for construction or refurbishing and operation of their facilities.

#### **IV. Conclusion and Recommendation**

33. Based on the information provided above, the Bank concludes that:

- Condition 1 is met: the progress achieved by the Borrower in carrying out the Program is satisfactory.
- Condition 2 is met: the Borrower’s macroeconomic policy framework is consistent with the objectives of the Program.
- Condition 3 is met: all of the six policy actions designated in the Loan Agreement as part of the second tranche release conditions have been fully carried out.

34. In view of the overall performance and progress with the implementation of the Program supported by the Loan, and in compliance with the specific conditions of release as described in paragraph C (2) of Section II of the Schedule I of the Loan Agreement, Section II, **it is recommended that the second tranche be released.**