

Public Disclosure Authorized

LOAN NUMBER 9074-BR

Loan Agreement

(Energy and Mineral Sectors Strengthening Project II)

(Projeto de Assistência Técnica dos Setores de Energia e Mineral – META – Fase II)

between

FEDERATIVE REPUBLIC OF BRAZIL

and

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

Public Disclosure Authorized

LOAN AGREEMENT

AGREEMENT dated as of the Signature Date between FEDERATIVE REPUBLIC OF BRAZIL (“Borrower”) and INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (“Bank”). The Borrower and the Bank hereby agree as follows:

ARTICLE I — GENERAL CONDITIONS; DEFINITIONS

- 1.01. The General Conditions (as defined in the Appendix to this Agreement) apply to and form part of this Agreement.
- 1.02. Unless the context requires otherwise, the capitalized terms used in this Agreement have the meanings ascribed to them in the General Conditions or in the Appendix to this Agreement.

ARTICLE II — LOAN

- 2.01. The Bank agrees to lend to the Borrower the amount of thirty-eight million Dollars, (\$38,000,000), as such amount may be converted from time to time through a Currency Conversion (“Loan”), to assist in financing the project described in Schedule 1 to this Agreement (“Project”).
- 2.02. The Borrower may withdraw the proceeds of the Loan in accordance with Section III of Schedule 2 to this Agreement. The Borrower’s Representative for purposes of taking any action required or permitted to be taken pursuant to this Section is the Executive Secretary of the MME.
- 2.03. The Front-end Fee is one quarter of one percent (0.25%) of the Loan amount.
- 2.04. The Commitment Charge is one quarter of one percent (0.25%) per annum on the Unwithdrawn Loan Balance.
- 2.05. The interest rate is the Reference Rate plus the Fixed Spread or such rate as may apply following a Conversion; subject to Section 3.02(e) of the General Conditions.
- 2.06. The Payment Dates are June 15 and December 15 in each year.
- 2.07. The principal amount of the Loan shall be repaid in accordance with Schedule 3 to this Agreement.
- 2.08. The Borrower may request the Conversions of Loan terms through its Secretariat of the National Treasury of the Ministry of Economy.
- 2.09. (a) If on any given day, the Total Exposure exceeds the Standard Exposure Limit (as said terms are defined in sub-paragraphs (b)(ii) and (b)(iii) of this Section), the

Borrower shall pay to the Bank a surcharge at the rate of one half of one percent (0.5%) per annum of the Allocated Excess Exposure Amount (as defined in subparagraph (b)(i) of this Section) for each said day (“Exposure Surcharge”). The Exposure Surcharge (if any) shall be payable semi-annually in arrears on each Payment Date.

- (b) For purposes of this Section the following terms have the meanings set forth below:
- (i) “Allocated Excess Exposure Amount” means for each day during which the Total Exposure exceeds the Standard Exposure Limit, the product of: (A) the total amount of said excess; and (B) the ratio of all (or, if the Bank so determines), a portion of the Loan to the aggregate amount of all (or the equivalent portions) of the loans made by the Bank to the Borrower and to other borrowers guaranteed by the Borrower that are also subject to an exposure surcharge, as said excess and ratio are reasonably determined from time to time by the Bank.
 - (ii) “Standard Exposure Limit” means the standard limit on the Bank’s financial exposure to the Borrower which, if exceeded, would subject the Loan to the Exposure Surcharge, as determined from time to time by the Bank.
 - (iii) “Total Exposure” means for any given day, the Bank’s total financial exposure to the Borrower, as reasonably determined by the Bank.

ARTICLE III — PROJECT

- 3.01. The Borrower declares its commitment to the objectives of the Project. To this end, the Borrower shall carry out the Project through MME, and shall cause the Participating Entities to carry out the Parts of the Project within their respective area of autonomy and competence, all in accordance with the provisions of Article V of the General Conditions, Schedule 2 to this Agreement and the respective Cooperation Agreements.

ARTICLE IV — REMEDIES OF THE BANK

- 4.01. The Additional Events of Suspension consist of the following:
- (a) Any Participating Entity shall have failed to perform any of its obligations under the relevant Cooperation Agreement and has not taken the necessary measures to mitigate such failure.
 - (b) A situation shall have arisen to materially and adversely affect, in the opinion of the Bank, the ability of any Participating Entity to carry out its obligations under the relevant Cooperation Agreement.
- 4.02. Notwithstanding the rights contained in Section 7.02 of the General Conditions, it is understood that, if any of the Participating Entities shall have failed to comply with any obligation under its corresponding Cooperation Agreement or a situation shall have arisen so as to materially and adversely affect, in the opinion of the Bank, the ability of any

Participating Entity to carry out its obligations under the relevant Cooperation Agreement, and the Borrower has been unable to remedy such lack of compliance, the Bank may, by notice to the Borrower, suspend in whole or in part the right of the Borrower to make withdrawals from the Loan Account for Eligible Expenditures attributable to the respective Participating Entity.

ARTICLE V — EFFECTIVENESS; TERMINATION

- 5.01. The Additional Conditions of Effectiveness consist namely that the Operational Manual has been adopted by the Borrower in a manner and with contents acceptable to the Bank.
- 5.02. The Effectiveness Deadline is the date one hundred twenty (120) days after the Signature Date.

ARTICLE VI — REPRESENTATIVE; ADDRESSES

- 6.01. Except as provided in Section 2.02 of this Agreement, the Borrower's Representative is its Minister of Economy.
- 6.02. For purposes of Section 10.01 of the General Conditions: (a) the Borrower's address is:

Ministério da Economia
Procuradoria-Geral da Fazenda Nacional
Esplanada dos Ministérios, Bloco "P" - 8º andar
Brasília, DF, 70048-900
Brasil

and

(b) the Borrower's Electronic Address is:

Facsimile: E-mail:
(55-61) 3412-1740 apoiocof.df.pgfn@pgfn.gov.br

With copies to:

SAIN - Secretaria de Assuntos Econômicos Internacionais do
Ministério da Economia
Esplanada dos Ministérios, Bloco K - 8º andar
Brasília, DF, 70040-906
Brasil

Facsimile: E-Mail:
(55-61) 2020-5006 seain@planejamento.gov.br

And to:

Ministério de Minas e Energia – MME
Esplanada dos Ministérios, Bloco "U" – 7º andar – sala 728

Brasília – DF, 70065-900
Brasil

Facsimile: (55-61) 3319-5240 E-mail: secex@mme.gov.br and aegp@mme.gov.br

And to:

STN - Secretaria do Tesouro Nacional
Ministério da Economia
Esplanada dos Ministérios - Bloco P – Edifício Anexo 1º andar
Brasília, DF, 70048-900
Brasil

Facsimile: (55-61) 3412-1461 E-Mail: codiv.stn@tesouro.gov.br

6.03. For purposes of Section 10.01 of the General Conditions: (a) the Bank's address is:

International Bank for Reconstruction and Development
1818 H Street, N.W.
Washington, D.C. 20433
United States of America; and

(b) the Bank's Electronic Address is:

Telex: 248423(MCI) or 64145(MCI) Facsimile: 1-202-477-6391 E-mail: panoscasero@worldbank.org

AGREED as of the Signature Date.

FEDERATIVE REPUBLIC OF BRAZIL

By *Ana Lúcia Gatto de Oliveira*

Authorized Representative

Name: Ana Lúcia Gatto de Oliveira

Title: Attorney of the National Treasury

Date: 21-jul-2021

**INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT**

By *Paloma Anos*

Authorized Representative

Name: Paloma Anos Casero

Title: The World Bank

Date: 21-Jul-2021

SCHEDULE 1

Project Description

The objective of the Project is to strengthen institutional capacity for market efficiency taking into consideration climate resilience in the energy and mining sectors in the Borrower's territory.

The Project consists of the following parts:

Part 1. Technical Assistance to Increase Efficiency, Long Term Infrastructure Adequacy and Climate Resilience in the Energy and Mining Sectors.

1. Carrying out analytical work to inform reforms in the power sector, including, *inter alia*: (a) the carrying out of technical studies to increase the climate change resilience in the sector by informing the revision of the planning and dispatch methodologies to adapt them to a system with higher share of variable renewable energy; (b) the provision of technical assistance to inform the revision and creation of electricity markets to increase competitiveness, attract investments, improve price formation and ensure the necessary reliability and security requirements; and (c) improvement of public policy or regulation for distributed energy resources.
2. Carrying out analytical work to inform reforms in the gas sector, including, *inter alia*: (a) the carrying out of studies supporting the design of a competitive gas market; and (b) the evaluation of natural gas storage potential.
3. Carrying out analytical work to implement reforms in the mining sector, including, *inter alia*: (a) analytical work to increase the climate change resilience in the sector by supporting: (i) the revision of the Borrower's *plano nacional de mineração* with a climate-smart mining approach and financing studies; and (ii) decision-making processes for a more climate-informed mining sector; and (b) analytical work to inform best practices in the mining sector.

Part 2. Institutional Strengthening of Energy and Mining Institutions to Establish and Implement Strategies, Policies and Regulation.

1. Strengthening the regulatory planning and operational capacity of the power sector through, *inter alia*: (a) the carrying out of activities aimed at improving climate change parameters in power sector planning; (b) the digitalization of accounting and settlement systems; and (c) the provision of support for the development and implementation of renewable energy forecasting models, control systems and other tools aimed at enhancing operational capacity.
2. Strengthening the planning, regulatory and monitoring capacity of key gas sector institutions.
3. Strengthening the planning and regulatory capacity of key mining sector institutions, including social and environmental aspects.

4. Carrying out institutional and management capacity building for MME and selected agencies' staff.

Part 3. Implementation Support, Monitoring and Evaluation, Knowledge Sharing and Dissemination.

1. Carrying out Project coordination and management activities, including procurement, financial management, safeguards management, including integrated environmental and social aspects for the Borrower's relevant institutions in the energy and mining sector, as well as monitoring and evaluation.
2. Carrying out the dissemination and knowledge sharing of Project findings, including through the provision of technical assistance and training, including public access to the information.

SCHEDULE 2

Project Execution

Section I. Implementation Arrangements

A. Institutional Arrangements.

1. The Borrower, through MME, shall operate and maintain, throughout the implementation of the Project:
 - (a) a Project Implementation Unit (the “PIU”) with functions, resources and staffing in numbers and with qualifications as set forth in the Operational Manual; and
 - (b) a Project Steering Committee (the “PSC”), to be responsible for overseeing Project implementation and coordination among the Participating Entities, and with structure and functions as set forth in the Operational Manual.
2. The Borrower, through MME, shall or shall cause, as applicable, all Participating Entities to operate and maintain, throughout the implementation of the Project, Project Co-executing units physically located in each of the Participating Entities (the “Project Co-executing Units”) with functions, resources and staffing in numbers and with qualifications as set forth in the Operational Manual.

B. Operational Manual.

1. The Borrower, through MME, shall carry out the Project in accordance with the provisions of a manual (the Operational Manual) satisfactory to the Bank, containing, *inter alia*:
 - (a) specific provisions on detailed arrangements for the carrying out of the Project;
 - (b) the composition and responsibilities of the PIU, the PSC and the Project Co-executing Units;
 - (c) the procurement, financial management and disbursement requirements thereof;
 - (d) the performance indicators; and
 - (e) the Anti-Corruption Guidelines.
2. The Borrower shall not amend or waive or fail to enforce any provision of the Operational Manual without the Bank’s prior written approval. In case of any conflict between the terms of the Operational Manual and those of this Agreement, the terms of this Agreement shall prevail.

C. Cooperation Agreement.

1. The Borrower, through MME, shall, prior to carrying out any Project activity under the administrative jurisdiction of a Participating Entity, enter into an agreement with said Participating Entity (the Cooperation Agreement), under terms and conditions approved by the Bank, which shall include, *inter alia*:

- (a) MME's obligation to:
 - (i) transfer to the Participating Entities, when applicable, on a non-reimbursable basis, part of the Loan proceeds necessary to carry out the Project activities under their responsibility; and
 - (ii) comply with the pertinent obligations under this Agreement, as applicable to the pertinent Project activity; and
 - (b) the Participating Entities' obligation to, when applicable:
 - (i) procure the goods, consultants' services, and Non-Consulting services under the Project in accordance with the provisions set forth in Section III of this Schedule; and
 - (ii) carry out the Project activities under their responsibility with due diligence and efficiency and to comply with the pertinent obligations under this Agreement, including with the provisions of the Anti-Corruption Guidelines, all as applicable to the corresponding Project activity.
2. The Borrower, through MME, shall exercise its rights and carry out its obligations under each Cooperation Agreement in such manner as to protect the interests of the Borrower and the Bank and to accomplish the purposes of the Loan. Except as the Bank shall otherwise agree, the Borrower shall not assign, amend, abrogate, terminate, waive or fail to enforce any Cooperation Agreement or any provision thereof.

D. Environmental and Social Standards.

- 1. The Borrower shall, and shall cause the Project Entities to, ensure that the Project is carried out in accordance with the Environmental and Social Standards.
- 2. Without limitation upon paragraph 1 above, the Borrower shall, and shall cause the Project Entities to, ensure that the Project is implemented in accordance with the Environmental and Social Commitment Plan ("ESCP"), in a manner acceptable to the Bank. To this end, the Borrower shall, and shall cause the Project Entities to, ensure that:
 - (a) the measures and actions specified in the ESCP are implemented with due diligence and efficiency, and as further specified in the ESCP;
 - (b) sufficient funds are available to cover the costs of implementing the ESCP;
 - (c) policies, procedures and qualified staff are maintained to enable it to implement the ESCP, as further specified in the ESCP; and
 - (d) the ESCP or any provision thereof, is not amended, revised or waived, except as the Bank shall otherwise agree in writing and the Borrower has, thereafter, disclosed the revised ESCP.

In case of any inconsistencies between the ESCP and the provisions of this Agreement, the provisions of this Agreement shall prevail.

3. The Borrower shall, and shall cause the Project Entities to:
 - (a) take all measures necessary on its part to collect, compile, and furnish to the Bank through regular reports, with the frequency specified in the ESCP, and promptly in a separate report or reports, if so requested by the Bank, information on the status of compliance with the ESCP and the management tools and instruments referred to therein, all such reports in form and substance acceptable to the Bank, setting out, *inter alia*: (i) the status of implementation of the ESCP; (ii) conditions, if any, which interfere or threaten to interfere with the implementation of the ESCP; and (iii) corrective and preventive measures taken or required to be taken to address such conditions; and
 - (b) promptly notify the Bank of any incident or accident related to or having an impact on the Project which has, or is likely to have, a significant adverse effect on the environment, the affected communities, the public or workers, in accordance with the ESCP, the instruments referenced therein and the Environmental and Social Standards.
4. The Borrower shall, and shall cause the Project Entities to, maintain and publicize the availability of a grievance mechanism, in form and substance satisfactory to the Bank, to hear and determine fairly and in good faith all complaints raised in relation to the Project, and take all measures necessary to implement the determinations made by such mechanism in a manner satisfactory to the Bank.

Section II. Project Monitoring Reporting and Evaluation

The Borrower shall furnish to the Bank each Project Report not later than forty-five days after the end of each calendar semester, covering the calendar semester.

Section III. Withdrawal of Loan Proceeds

A. General.

Without limitation upon the provisions of Article II of the General Conditions and in accordance with the Disbursement and Financial Information Letter, the Borrower may withdraw the proceeds of the Loan to: (a) finance Eligible Expenditures; (b) pay: (i) the Front-end Fee; and (ii) each Interest Rate Cap or Interest Rate Collar premium; in the amount allocated and, if applicable, up to the percentage set forth against each Category of the following table:

Category	Amount of the Loan Allocated (expressed in USD)	Percentage of Expenditures to be financed (inclusive of Taxes)
(1) Goods, works, non-consulting services, consulting services, Training and Operating Costs for the Project	37,905,000	100%
(2) Front-end Fee	95,000	Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 2.07 (b) of the General Conditions
(3) Interest Rate Cap or Interest Rate Collar premium	0	Amount due pursuant to Section 4.05 (c) of the General Conditions
TOTAL AMOUNT	38,000,000	

B. Withdrawal Conditions; Withdrawal Period.

1. Notwithstanding the provisions of Part A above, no withdrawal shall be made for payments made prior to the Signature Date, except that withdrawals up to an aggregate amount not to exceed seven million five hundred thousand Dollars (\$7,500,000) may be made for payments made prior to this date but on or after the date falling twelve months prior to the Signature Date, for Eligible Expenditures.
2. The Closing Date is December 31, 2025. The Bank may grant an extension of the Closing Date only after the Borrower's MoE has informed the Bank that it agrees with such extension.

SCHEDULE 3

Commitment-Linked Amortization Repayment Schedule – Bullet Repayment

The Borrower shall repay the principal amount of the Loan in full on December 15, 2039.

APPENDIX

Definitions

1. “ANEEL” means *Agência Nacional de Energia Elétrica*, the Borrower’s Electricity Regulatory Agency, as existing and operating under the Borrower’s Law N° 9427, dated December 26, 1996.
2. “ANM” means *Agência Nacional de Mineração* the Borrower’s Mining Regulatory Agency, as existing and operating under the Borrower’s Law N° 13575, dated December 26, 2017.
3. “ANP” means *Agência Nacional de Petróleo, Gás Natural e Biocombustíveis*, the Borrower’s Oil, Gas and Biofuels Regulatory Agency, as existing and operating under the Borrower’s Law N° 9478, dated August 6, 1997.
4. “Anti-Corruption Guidelines” means, for purposes of paragraph 5 of the Appendix to the General Conditions, the “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants”, dated October 15, 2006 and revised in January 2011 and as of July 1, 2016.
5. “Category” means a category set forth in the table in Section III.A of Schedule 2 to this Agreement.
6. “CCEE” means *Câmara de Comercialização de Energia Elétrica*, the Borrower’s Electricity Trading Chamber, as existing and operating under the Borrower’s Law N. 10848, dated March 15, 2004.
7. “Cooperation Agreement” means any of the agreements referred to in Section I.C.1 of Schedule 2 to this Agreement.
8. “CPRM” means *Companhia de Pesquisa de Recursos Minerais – Serviço Geológico do Brasil*, the Borrower’s Company for Mineral Resources Research and Geological Survey, as existing and operating under the Borrower’s Law No. 8970, dated December 28, 1994.
9. “Environmental and Social Commitment Plan” or the acronym “ESCP” means the Borrower’s environmental and social commitment plan, acceptable to the Bank, dated January 28, 2020, which sets out a summary of the material measures and actions to address the potential environmental and social risks and impacts of the Project, including the timing of the actions and measures, institutional, staffing, training, monitoring and reporting arrangements, and any instruments to be prepared thereunder; as the ESCP may be revised from time to time, with prior written agreement of the Bank, and such term includes any annexes or schedules to such plan.
10. “Environmental and Social Standards” means, collectively: (i) “Environmental and Social Standard 1: Assessment and Management of Environmental and Social Risks and Impacts”; (ii) “Environmental and Social Standard 2: Labor and Working Conditions”; (iii) “Environmental and Social Standard 3: Resource Efficiency and Pollution Prevention and Management”; (iv) “Environmental and Social Standard 4: Community Health and

- Safety”; (v) “Environmental and Social Standard 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement”; (vi) “Environmental and Social Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources”; (vii) “Environmental and Social Standard 7: Indigenous Peoples/Sub-Saharan Historically Underserved Traditional Local Communities”; (viii) “Environmental and Social Standard 8: Cultural Heritage”; (ix) “Environmental and Social Standard 9: Financial Intermediaries”; (x) “Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure”; effective on October 1, 2018, as published by the Bank at <https://www.worldbank.org/en/projects-operations/environmental-and-social-framework>.
11. “EPE” means *Empresa de Pesquisa Energética*, the Energy Planning Agency, as existing and operating under the Borrower’s Law N° 10847, dated March 15, 2004.
 12. “General Conditions” means the “International Bank for Reconstruction and Development General Conditions for IBRD Financing, Investment Project Financing”, dated December 14, 2018.
 13. “MME” means *Ministério de Minas e Energia*, the Borrower’s Ministry of Mines and Energy.
 14. “MoE” means *Ministério da Economia*, means the Borrower’s Ministry of Economy, or any successor thereto acceptable to the Bank.
 15. “ONS” means *Operador Nacional do Sistema Elétrico*, the Electricity National System Operator, as existing and operating under the Borrower’s Law N° 9648, dated May 27, 1998.
 16. “Operating Costs” means reasonable cost of eligible expenditures incurred by the Borrower and/or the Project Entities in connection with the daily operation of the Project, including, *inter alia*, travel costs and *per diem*, maintenance of equipment, office supplies and materials, costs related to strengthening communication and disseminating results (events, communication plans, publications), which expenditures would not have been incurred absent the Project.
 17. “Operational Manual” means the manual acceptable to the Bank referred to in Section I.B.1 of Schedule 2 to this Agreement, as the same may be amended from time to time with the prior written agreement of the Bank.
 18. “Participating Entity” means, collectively, ANP, ANM, ANEEL, CCEE, CPRM, EPE and ONS.
 19. “PIU” or “Project Implementing Unit” means *Unidade Gestora do Projeto*, the unit referred to in Section I.A.1 (a) of Schedule 2 to this Agreement.
 20. “Procurement Regulations” means, for purposes of paragraph 85 of the Appendix to the General Conditions, the “World Bank Procurement Regulations for IPF Borrowers”, dated July 2016, revised November 2017 and August 2018.

21. "Project Co-executing Units" means any of the supervision units referred to in Section I.A.2 of Schedule 2 to this Agreement.
22. "Signature Date" means the later of the two dates on which the Borrower and the Bank signed this Agreement and such definition applies to all references to "the date of the Loan Agreement" in the General Conditions.
23. "Training" means reasonable cost of eligible expenditures incurred by the Borrower and/or the Project Entities in connection with the carrying out of workshops and training preparation and administration under the Project, including, *inter alia*, travel costs, and *per diem* of trainees, course fees, rental of training facilities, and purchase of training materials.