Energy governance in Brazil: meeting the international agreements on climate change mitigation

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ACKNOWLEDGMENT

As I reflect on the completion of my PhD thesis, I find it essential to underscore the significance of research concerning climate change and international agreements aimed at mitigating this global crisis. Climate change is not just an academic pursuit for me; it is a matter of profound personal importance and a commitment to safeguarding our planet for current and future generations.

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ACRONYMS

ANEEL	Agência Nacional de Energia Elétrica (National Electric Power Agency)
ANP	Agencia Nacional do Petróleo, Gas Natural e Biocombustíveis (Brazilian National Agency of Petroleum, Natural Gas and Biofuels)
ABINEE	Associação Brasileira da Indústria Elétrica e Eletrônica (Brazilian association of the electrical and electronic industry)
ABRELPE	Associação Brasileira de Empresas de Limpeza Pública e Resíduos Especiais (Brazilian Association of Public Cleaning and Special Waste)
ABEEólica	Associação Brasileira de Energia Eólica (Brazilian Wind Energy Association)
ABEN	Associação Brasileira de Energia Nuclear (Brazilian nuclear energy association)
ABSOLAR	Associação Brasileira de Energia Solar Fotovoltaica (Brazilian Association of Photovoltaic Solar Energy)
ABRAGEL	Associação Brasileira de Geração de Energia Limpa (Brazilian Clean Energy Generation Association)
ABGD	Associação Brasileira de Geração Distribuída (Brazilian Distributed Generation Association)
ABIOGÁS	Associação Brasileira do Biogás (Brazilian Biogas Association)
BNDES	Banco Nacional de Desenvolvimento Econômico e Social (Brazilian National Development Bank)
CCEE	Câmara de Comercialização de Energia Elétrica (Electricity Trading Chamber)
CNAAA	Central Nuclear Almirante Álvaro Alberto (Almirante Álvaro Alberto Nuclear Power Station)
CGEE	Centro de Gestão e Estudos Estratégicos (Management and Strategic Studies Centre)
CTC	Centro de tecnologia Canavieira (Canavieira Technology Centre)

CDM	Clean Development Mechanism
CPDS	Comissão de Política de Desenvolvimento Sustentável (Sustainable Development Policy Commission)
CNEN	Comissão Nacional de Energia Nuclear (National Nuclear Energy Commission)
COES	Comité de Operación Económica del Sistema Interconectado (Nacional Economic Operations Committee of the Interconnected System)
CETESB	Companhia Ambiental do Estado de São Paulo (São Paulo State Environmental Company)
COMPERJ	Complexo Petroquímico do Rio de Janeiro (Petrochemical Complex of Rio de Janeiro)
COP	Conference of Parties
CEBDS	Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável (Brazilian Business Council for Sustainable Development)
CNPq	Conselho Nacional de Desenvolvimento Científico e Tecnológico (National Council for Scientific and Technological Development)
CNPE	Conselho Nacional de Política Energética (Brazilian National Council of Energy Policy)
CONAMA	Conselho Nacional do Meio Ambiente (National Environment Council)
DIAP	Departamento Intersindical de Assessoria Parlamentar (Inter-Union Parliamentary Advisory Department)
DIRUR	Diretoria de Estudos e Políticas Regionais, Urbanas e Ambientais (Regional, Urban and Environmental Studies and Policies Directorate)
INFRAERO	Empresa Brasileira de Infraestrutura Aeroportuária (Brazilian Airport Infrastructure Company)
EMBRAPA	Empresa Brasileira de Pesquisa Agropecuária (Brazilian Agricultural Research Corporation)
EPE	Empresa de Pesquisa Energética (Energy Research Agency)
FCN	Fábrica de Combustível Nuclear (Nuclear Fuel Factory)
FAO	Food and Agriculture Organization of the United Nations
FHC	Fernando Henrique Cardoso (thirty-fourth Brazilian president)

FINEP	Financiadora de Estudos e Projetos (Brazilian Funding Agency for Studies and Projects)
FGV	Fundação Getúlio Vargas (Getulio Vargas Foundation)
FGTS	Fundo de Garantia por Tempo de Serviço (Severance Premium Reserve Fund)
GIZ	German International Cooperation Agency (Deutsche Gesellschaft für Internationale Zusammenarbeit)
GDF	Green Development Fund
GHG	Greenhouse Gas
GDP	Gross Domestic Product
INB	Indústrias Nucleares do Brasil (Brazilian Nuclear Industries)
COPPE/UFRJ	Instituto Alberto Luiz Coimbra de Pós-Graduação e Pesquisa em Engenharia (Institute of Graduate Studies and Engineering Research of UFRJ)
IBP	Instituto Brasileiro de Petróleo e Gás (Brazilian Petroleum Institute)
IBAMA	Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis (Brazilian Institute of Environment and Natural Resources)
IEA	Instituto de Economia Agrícola (Agricultural Economics Institute)
IEMA	Instituto de Energia e Meio Ambiente (Institute of Energy and Environment)
INMETRO	Instituto Nacional de Metrologia, Qualidade e Tecnologia (National Institute of Metrology, Standardization, and Industrial Quality)
INPE	Instituto Nacional de Pesquisas Espaciais (National Institute for Space Research)
iNDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
LMTE	Linhas de Macapá Transmissora de Energia (Macapá Power Transmission Lines)
MP	Medida Provisória (Provisional Measure)
MDGs	Millennium Development Goals
MRE	Ministério das Relações Exteriores (Ministry of Foreign Affairs)

MME	Ministério de Minas e Energia (Ministry of Mines and Energy)
MMA	Ministério do Meio Ambiente (Ministry of the Environment)
MPF	Ministério Público Federal (Federal Prosecution Service)
NPT	Non-Proliferation Treaty
NAZCA	Non-state Actor Zone for Climate Action
OPEC	Organization of Petroleum Exporting Countries
PT	Partido dos Trabalhadores (Workers' Party)
PETROBRAS	Petróleo Brasileiro S/A (Brazilian Petroleum Company)
PAISS	Plano de Apoio à Inovação dos Setores Sucroenergético (Innovation Support Plan for the Sugar-Energy Sectors)
PND	Plano Nacional de Desenvolvimento (National Plan for Economic Development)
PNMC	Plano Nacional sobre Mudança do Clima (National Policy on Climate Change)
RENOVABIO	Política Nacional de Biocombustíveis (Brazilian National Biofuels Policy)
PPSA	Pré-Sal Petróleo S.A. (Pre-Sal Petroleum Business Corporation)
PAEG	Programa de Ação Econômica do Governo (Government Economic Action Programme)
PAC	Programa de Aceleração do Crescimento (Growth Acceleration Programme)
DETER	Programa de Detecção de Desmatamento em Tempo Real (Real Time Deforestation Detection programme)
PROINFA	Programa de Incentivo às Fontes Alternativas de Energia (Incentive Programme for Alternative Energy Sources)
PROMINP	Programa de Mobilização da Indústria Nacional de Petróleo e Gás Natural (Programme for the Mobilization of the National Industry of Oil and Natural Gas)
PMCMV	Programa Minha Casa Minha Vida (My House My Life Programme)
PROCEL	Programa Nacional de Conservação de Energia Elétrica (National Programme for the Conservation of Electrical Energy)

PNPB	Programa Nacional de Produção e Uso do Biodiesel (National Programme for the Production and Use of Biodiesel)
PROÁLCOOL	Programa Nacional do Álcool (National Ethanol fuel Programme)
PRODES	Projeto de Monitoramento do Desmatamento por Satélite (Satellite Deforestation Monitoring Project)
RENOVABR	Renova Brasil (Renew Brazil)
SEMAM/PR	Secretaria do Meio Ambiente da Presidência da República (Secretariat of Environment of the Presidency of the Republic)
SENAI	Serviço Nacional de Aprendizagem Industrial (Brazilian National Industrial Apprenticeship Service)
SINDIPETRO	Sindicato dos Petroleiros (Oil Workers Union)
SIGA	Sistema de Informações de Geração da ANEEL (Aneel's Generation Information System)
SIN	Sistema Interligado Nacional (National Interconnected System)
SISNAMA	Sistema Nacional do Meio Ambiente (National Environmental System)
STF	Supremo Tribunal Federal (Federal Supreme Court)
SDGs	Sustainable Development Goals
TAG	Transportadora Associada de Gás (Associated Gas Transportation Company)
UNICA	União da Industria de Cana-de-Açúcar (Sugarcane Industry Union)
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCSD	United Nations Conference on Sustainable Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNODA	United Nations Office for Disarmament Affairs
UFRJ	Universidade Federal do Rio de Janeiro (Federal University of Rio de Janeiro)
FEU-US	Universal Ecological Fund (FEU- Fundación Ecológica Universal)

WCED	World Commission on Environment and Development
WWF	World Wide Fund for Nature