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LAW NO. 14,948, OF AUGUST 2, 2024

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Establishes the legal framework for low-carbon hydrogen; provides for the National Policy of Low-Carbon Hydrogen; establishes incentives for the low-carbon hydrogen industry; establishes the Special Regime of Incentives to the Low-Carbon Hydrogen Production (Rehidro); creates the Low-Carbon Hydrogen Development Program (PHBC); and amends Laws No. 9,427, of December 26, 1996, and No. 9,478, of August 6, 1997.

CHAPTER I

GENERAL PROVISIONS

Article 1. This Law establishes the legal framework for low-carbon hydrogen, provides for the National Policy of Low-Carbon Hydrogen, its principles, objectives, concepts, governance, and instruments, establishes incentives for the low-carbon hydrogen industry, establishes the Special Regime of Incentives to the Low-Carbon Hydrogen Production (Rehidro), creates the Low-Carbon Hydrogen Development Program (PHBC), and amends Laws No. 9,427, of December 26, 1996, and No. 9,478, of August 6, 1997.

CHAPTER II

THE NATIONAL POLICY OF LOW-CARBON HYDROGEN

Section I

Principles and Objectives

Article 2. The National Policy of Low-Carbon Hydrogen is hereby established with the following principles:

I - respect for technological neutrality in the definition of incentives for the production and use of low-carbon hydrogen;

II - competitive inclusion of low-carbon hydrogen in the Brazilian energy matrix for its decarbonization;

III - predictability in the formulation of regulations and incentives for market expansion;

IV - rational use of the existing infrastructure dedicated to energy supply; and

V - promotion of research and development for low-carbon hydrogen.

Article 3. The objectives of the National Policy of Low-Carbon Hydrogen are:

I - preservation of the Brazilian national interest;

II - promotion of the various production routes for low-carbon hydrogen and its derivatives, to enhance the multiple national economic vocations;

III - promotion of sustainable development and expand the labor market for low-carbon hydrogen production chains and their derivatives;

IV - promotion of the energy applications of low-carbon hydrogen and its derivatives as a vector for energy transition in various sectors of the Brazilian national economy;

V - promotion of the use of low-carbon hydrogen and its derivatives to supply the domestic market and for exportation;

VI - protection of consumer interests in relation to price, quality and a stable and permanent supply of low-carbon hydrogen and its derivatives;

VII – protection of the environment, promotion of energy conservation and mitigation of greenhouse gas (GHG) and pollutant emissions in energy and industrial consumption;

VIII - promotion of the supply of low-carbon hydrogen and its derivatives in the Brazilian national territory;

IX – promotion of free competition;

X - attraction and promotion of domestic and foreign investment in the production of low-carbon hydrogen and its derivatives;

XI - increasing the country's competitiveness in the international market;

XII - promotion of the inclusion of low-carbon hydrogen and its derivatives in the national energy matrix, on an economic, social and environmental basis;

XIII - promotion of initiatives to produce low-carbon hydrogen and its derivatives for exportation or use in various production chains to add value to domestic products;

XIV – attraction of investments in infrastructure for transportation and storage of low-carbon hy-

drogen and its derivatives;

XV - promotion of research and development related to the use of low-carbon hydrogen and its derivatives for energy and industrial purposes;

XVI - promotion of the energy transition to meet the goals of the Paris Agreement under the United Nations Framework Convention on Climate Change and other similar international treaties;

XVII – promotion of national and international cooperation to implement actions aimed at meeting the commitments and targets for mitigating global climate change;

XVIII – promotion of the national supply chain for inputs and equipment for the manufacture of low-carbon hydrogen;

XIX - promotion of public-private partnerships to develop low-carbon hydrogen projects; and

XX - promotion of the development of domestic production of nitrogen fertilizers from low-carbon hydrogen to reduce external dependence and to ensure food security.

Sole paragraph. The National Policy of Low-Carbon Hydrogen is part of the National Energy Policy set out in Law No. 9,478, of August 6, 1997.

Section II

Concepts and Definitions

Article 4. For the purposes of this Law and its regulations, the following are considered:

I - life cycle analysis: methodology used to measure GHG emissions, considering all the consecutive and linked stages of a product, service or system;

II - chain of custody: a model which establishes the minimum requirements for tracking the attributes of hydrogen throughout the supply chain;

III - hydrogen carriers: substances or materials that carry hydrogen for the purposes of storage, packaging, transportation or transfer, and which release it on site in its original form;

IV - certification: a set of procedures and criteria in which the certification company assesses the conformity of the measurement of aspects relating to hydrogen production based on life cycle analysis;

V - hydrogen certificate: a document issued exclusively by an accredited certification company as a result of the hydrogen certification process, which shall include at least the contractual characteristics of the inputs used, the location of production, information on the life cycle and the amount of carbon dioxide equivalent emitted;

VI - purchaser: consumer of the hydrogen produced in the national territory subject to the certification process;

VII - accreditation: procedure by which the accrediting institution assesses, qualifies, accredits, and registers the qualification of a certification company to carry out hydrogen certification;

VIII - hydrogen derivatives: products of industrial origin that have hydrogen, collected or obtained in the ways provided for in this article, as an input in the production chain;

IX - scope of emissions: categorization of the operational limits for accounting for GHG emissions from a production activity, including direct and indirect emissions;

X - Risk Analysis Study (EAR): an integral part of the environmental study which includes assessing the vulnerability of the project and the region in which it is located, including techniques for identifying hazards, estimating the frequency of abnormal occurrences and risk management;

XI - certification system boundaries: stages of the hydrogen production chain, based on life cycle analysis, which will be covered by hydrogen certification;

XII – low-carbon hydrogen: hydrogen fuel or industrial input produced from different sources and with GHG emissions, according to life cycle analysis, with an initial value less than or equal to 7 $kgCO_2eq/kgH_2$ (seven kilograms of carbon dioxide equivalent per kilogram of hydrogen produced);

XIII - renewable hydrogen: low-carbon hydrogen fuel or industrial input produced as natural hydrogen or from renewable sources, including hydrogen produced from biomass, ethanol, and other biofuels, as well as electrolytic hydrogen, produced by electrolysis of water, using renewable energies such as solar, wind, hydraulic, biomass, ethanol, biogas, biomethane, landfill gas, geothermal, and others to be defined by the public authorities;

XIV - green hydrogen: hydrogen produced through the electrolysis of water, using renewable energy sources, such as those provided for in item XIII of the main section of this article, and others that may be recognized as renewable;

XV - emissions intensity: relation of GHG emissions, based on life cycle analysis, computed throughout the hydrogen production process, per unit of energy;

XVI - Emergency Action Plan (PAE): a document part of the Risk Management Plan of the project, which establishes the responsibilities of the entrepreneur in the event of an emergency situation and identifies the agents to be notified;

XVII - Risk Management Plan (PGR): document that describes how the risk management of the project will be carried out, monitored and controlled;

XVIII - producer: economic agent authorized to carry out the activity of hydrogen production in the national territory;

XIX - certification label: label attributed to certified hydrogen due to the compliance with the minimum requirements established for certification; and

XX - certifiable units: metric that will be considered for measuring the GHG emissions related to the hydrogen produced and that will be reported on the certificate.

§ 1. The definition of the scale of emissions referred to in item XII of the main section of this article shall preserve the initial value provided in this Law until December 31, 2030, and may be revised in future regulations.

§ 2. Future regulations shall provide for circumstances that water, electric power, natural gas and the inputs used in the production chain shall be considered raw materials for the production of low-carbon hydrogen and renewable hydrogen.

CHAPTER III

INSTRUMENTS OF THE NATIONAL POLICY OF LOW-CARBON HYDROGEN

Section I

General Provisions

Article 5. The instruments of the National Policy of Low-Carbon Hydrogen are:

I - the National Hydrogen Program (PNH2);

II - the Low-Carbon Hydrogen Development Program (PHBC);

III - certification of low-carbon hydrogen;

IV - the Special Regime of Incentives to the Low-Carbon Hydrogen Production (Rehidro);

V - technical and financial cooperation between the public and private sectors for the development of research into new products, methods, processes and technologies for the production of low-carbon hydrogen;

VI - legally instituted tax, financial, credit, and regulatory incentives.

Article 6. The authorities responsible for the implementation of the National Policy of Low-Carbon Hydrogen are the public bodies of the Union, the States, the Federal District, and the Municipalities that have competencies related to achieving its objectives, in addition to the bodies provided for in this Law.

Sole paragraph. The direct federal public administration body responsible for the conduction of energy policy shall propose to the National Energy Policy Council (CNPE):

I - the technical and economic parameters to prepare the foundations of the National Policy of Low-Carbon Hydrogen; and

II - the work plan to the implementation, supervision and evaluation the instruments referred to in Article 5 of this Law.

Section II

The National Hydrogen Program

Article 7. The National Hydrogen Program (PNH2) shall have competencies, guidelines and attributions established in regulations and CNPE's guidelines, which shall include the execution of the National Policy of Low-Carbon Hydrogen referred to in this Law.

Article 8. The Management Committee of National Hydrogen Program (Coges-PNH2), in addition to the competencies, guidelines and attributions established in regulations and CNPE's resolutions, is responsible for:

I - establishing the guidelines for implementing the National Policy of Low-Carbon Hydrogen, in compliance with the provisions of CNPE's guidelines and of this Law;

II – participating in and coordinating actions and public policies to promote the development of the low-carbon hydrogen industry;

III - issuing superior guidance on production policies and the uses and applications of low-carbon hydrogen and its derivatives.

Article 9. The Coges-PNH2 will be made up of up to 15 (fifteen) representatives of executive branch bodies, in accordance with the regulations, as well as:

I - 1 (one) representative from the States and the Federal District;

II - 1 (one) representative of the scientific community; and

III - 3 (three) representatives of the productive sector.

Sole paragraph. The choice of Coges-PNH2 representatives that are not members of the federal executive branch will be defined in regulations.

Section III

Risk Management Guidelines

Article 10. The projects and activities referred to in this Law shall adopt measures to manage the risk of accidents or disasters.

§ 1. The following are instruments for managing the risk of accidents or disasters in projects and activities:

I - EAR;

II - PGR; and

III - PAE.

§ 2. Regulations shall define the requirements and criteria to create the instruments provided for in § 1 of this Article, to be required by the regulatory body for hydrogen production, use and application activities and by the bodies responsible for environmental licensing.

Section IV

Hydrogen Production

Article 11. The production of hydrogen, its derivatives and carriers shall be carried out by companies or consortia of companies incorporated under Brazilian law, with headquarters and administration in the country, and authorized by the competent regulatory body.

§ 1. Authorization for the production of the hydrogen referred to in this Law will be granted by the Brazilian Agency of Petroleum, Natural Gas and Biofuels (ANP), respecting the attributions of the other regulatory agencies according to the sources used in the production chain.

§ 2. Regulations shall observe the powers of the regulatory agencies to establish the powers referred to in § 1 of this Article.

§ 3. The transfer of ownership of the authorization is allowed, subject to prior and express approval by ANP, provided that the new holder meets the requirements set out in this Law.

§ 4. Regulations shall establish the circumstances that the authorization referred to in the main section of this article may be waived, especially with regard to the volumes produced and the use of hydrogen a productive input, provided that the activity is registered with the competent regulatory body.

Article 12. Regulatory sandbox, referred to in item II of the main section of art. 2 of Complementary Law No. 182, of June 1, 2021, may be used to draw up regulations related to the activities provided for in this Law.

Sole paragraph. The regulatory body referred to in article 11 of this Law may adopt individual solutions aimed at complying with the provisions of this Law, respecting its decision-making process, until specific regulations are issued.

Article 13. The ANP is responsible for the regulation, authorization, and supervision of the exploration and production of natural hydrogen in the national territory.

Sole paragraph. Regulations will establish the granting modalities for the purposes of exploration and production of natural hydrogen in the national territory.

Article 14. Activities related to the loading, processing, treatment, importation, exportation, storage, warehousing, packaging, transportation, transfer, resale, and trading of hydrogen, its derivatives and carriers may be carried out by companies or consortia of companies incorporated under Brazilian law, with headquarters and administration in the country, authorized by the ANP.

Sole paragraph. Authorized agents to produce hydrogen under Article 11 of this Law will have priority in the processing of authorization requests under the main section of this article.

Section V

The Brazilian Hydrogen Certification System

Subsection I

General Provisions

Article 15. The Brazilian Hydrogen Certification System (SBCH2) is hereby established to promote the sustainable use of hydrogen through information provided in the certificate issued by a certification company to hydrogen and its derivatives.

§ 1. The certificate will be issued to inform the intensity of emissions related to the hydrogen product chain.

§ 2. The certification system referred to in the main section of this Article shall be voluntary for producers of hydrogen or its derivatives produced in the national territory and may be used for reporting and disclosure purposes.

§ 3. The governance rules established in SBCH2 will be mandatory for all economic agents in the hydrogen value chain aiming to issue certification for hydrogen or its derivatives produced in the national territory.

§ 4. For any use of imported hydrogen, regulations will establish the procedures for recognition of certification standards adopted in the origin.

Subsection II

Structure, Governance and Powers

Article 16. SBCH2 will have the following structure:

I - competent authority;

II - regulatory authority;

III - certification company;

IV - accrediting institution;

V - record manager;

VI - producer; and

VII - purchaser.

Article 17. The SBCH2 competent authority shall establish public policies related to hy**drogen certification in the national territory.**

Article 18. The regulatory authority shall oversee SBCH2, with the following powers:

I - definition of the regulations for implementing the guidelines for hydrogen certification, as established by the CNPE;

II - definition of minimum standards and requirements for the hydrogen certification process;

III - definition of responsibilities and obligations of accredited certification companies;

IV - monitor the flow of hydrogen on the market to verify its suitability for certification;

V - supervision of accredited certification companies; and

VI - definition and application of appropriate administrative and financial penalties, as provided for in regulations.

Article 19. The accrediting institution shall be responsible for accrediting certification companies for the hydrogen certification process, with the following competencies:

I - to establish the procedures for the accreditation of certification companies;

II - to proceed with the accreditation of certification companies by an administrative act or by means of a specific instrument;

III - to make available and keep updated the list of accredited certification companies on its website; and

IV - auditing the hydrogen certificates issued by the certification companies.

Article 20. A private institution that meets the requirements established by the regulatory authority and is accredited by the accrediting institution may be a certification company, responsible for issuing the hydrogen certificate.

§ 1. Once accredited by the accrediting institution, the certification companies shall carry out the conformity assessment to verify that the hydrogen produced complies with the established standards.

§ 2. Certification companies shall send information on each hydrogen certificate to the SBCH2 records manager.

Article 21. The SBCH2 records manager shall manage the national database with hydrogen certificate records.

§ 1. In addition to the responsibility described in the main section of this Article, the records manager shall be responsible for recording, keeping, accounting for, and making available information on the certificates issued for auditing purposes.

§ 2. The records manager shall maintain a computerized system and a public electronic platform for accessing the database.

§ 3. The records manager shall ensure the verification of the authenticity of the hydrogen certificate records.

Subsection III

Hydrogen Certification

Article 22. For the purposes of this Law, hydrogen certification shall adopt the GHG emissions intensity associated with hydrogen produced in the national territory as an attribute, based on a life cycle analysis.

Sole paragraph. Hydrogen certificates issued for hydrogen produced in the national territory shall preserve environmental integrity, without double counting.

Article 23. Seals for hydrogen produced in the national territory may be issued by certification companies, in accordance with criteria established in regulations.

Article 24. The certification of hydrogen produced in the national territory shall be based on the PBCH2, which will be established by future regulations and shall include, at least:

I - the chain of custody model to be ;

II - the scope of GHG emissions to be considered;

III - the boundaries of the certification system;

IV - the certifiable units to be reported on the certificate;

V - the criteria for the suspension of issued hydrogen certificates;

VI - the criteria for the cancelation of issued hydrogen certificates;

VII - the flexibility mechanisms to be adopted in cases of temporary non-compliance with hydrogen specifications; and

VIII - information on negative emissions in the production chain, if applicable.

Article 25. The regulatory authority shall establish provisions of interoperability and harmonization mechanisms with international hydrogen certification standards and may establish rules for the recognition of certificates for hydrogen and its derivatives subject to importation, under the objectives of the National Energy Policy.

Section VI

The Special Regime of Incentives to the Low-Carbon Hydrogen Production

Article 26. The Special Regime of Incentives to the Low-Carbon Hydrogen Production (Rehidro) is hereby established to promote the technological and industrial development, the competitiveness and to add value to national production chains, in accordance with this Law.

§ 1. The Executive Branch shall regulate the qualification process for Rehidro.

§ 2. Regulations shall establish the following as eligibility requirements for Rehidro:

I – a minimum percentage of goods and services of national origin used in the production chain, unless that good or service has no national equivalent, or when the production is insufficient to satisfy domestic demand;

II – a minimum investment in research, development and innovation.

§ 3. The tax incentives for Rehidro beneficiaries are valid for 5 (five) years, starting from January 1, 2025.

§ 4. The Executive Branch shall establish goals and objectives to be achieved by Rehidro beneficiaires.

§ 5. The Executive Branch shall designate a management body responsible for monitoring and evaluating the tax benefit in relation to the established goals and objectives.

Article 27. A Rehidro beneficiary shall be a legal entity that, within a period of up to 5 (five) years, from January 1, 2025, is qualified as producer of low-carbon hydrogen, in accordance with the regulations.

§ 1. Subject to the deadline referred to in the main section of this article and the requirements set forth in the regulations, a legal entity may be a Rehidro beneficiary if acts on:

I - the packaging, storage, transportation, distribution or trading of low-carbon hydrogen;

II - the generation of renewable electricity to produce low-carbon hydrogen and meets the criteria set forth in this Law; or

III - the production of biofuels (ethanol, biogas or biomethane) to produce low-carbon hydrogen.

§ 2. Legal entities that are already act on the production of low-carbon hydrogen as of the date of publication of this Law may also apply for Rehidro accreditation, in accordance with the regulations.

§ 3. Legal entities that have opted for the Special Unified Regime for the Collection of Taxes and Contributions owed by Micro and Small Businesses (*Simples Nacional*), as referred to in Supplementary Law No. 123, of December 14, 2006, shall not be eligible to participate in Rehidro.

§ 4. Enrollment in and participation in Rehidro shall be conditional on the legal entity's tax compliance with respect to taxes and contributions administered by the Special Secretariat of the Federal Revenue of Brazil under the Ministry of Finance.

§ 5. Companies operating in Export Processing Zones (ZPEs) shall be permitted to participate in Rehidro and benefit from this regime, without prejudice to the benefits established in Law No. 11,508, of July 20, 2007.

§ 6. Rehidro beneficiaries shall be required to invest a minimum percentage, as defined by regulation, in sustainable development projects supporting the energy transition within the country.

Article 28. The tax benefits referred to in Articles 3, 4 and 5 of Law No. 11,488, of June 15, 2007, shall apply to Rehidro beneficiaries.

Article 29. The provisions of Article 2 of Law No. 12,431, of June 24, 2011, shall apply to debentures issued by a Rehidro beneficiary for the purpose of raising funds to implement or expand projects related to the activities described in the main section and § 1 of Article 27 of this Law.

Section VII

(VETOED)

Subsection I

(VETOED)

Article 30. (VETOED).

Subsection II

(VETOED)

Article 31. (VETOED).

Subsection III

(VETOED)

Article 32. (VETOED).

Article 33. (VETOED).

Article 34. (VETOED).

Article 35. (VETOED).

CHAPTER IV

AMENDMENT TO OTHER LEGISLATIONS

Article 36: The main section of art. 3 of Law No. 9,427, of December 26, 1996, is amended as follows:

“Article 3. .....

.....

XXIII - provide contributions to the Brazilian Agency of Petroleum, Natural Gas and Biofuels (ANP) for the regulation, under the legal framework for low-carbon hydrogen, of the authorization process for hydrogen production activities. Such activities may be carried out by any company or consortium of companies incorporated under Brazilian law, with headquarters and administration in the country, in compliance with the operational limits established by regulations.

.....”

Article 37. Law No. 9,478, of August 6, 1997, is amended as follows:

“Article 1. .....

.....

XVIII - mitigate greenhouse gas and pollutant emissions in the energy and transportation sectors, by using biofuels, low-carbon hydrogen, and its derivatives; and

XIX - promote the production and competitiveness in domestic and international markets, and also attract investments in infrastructure related to the low-carbon hydrogen industry and its derivatives.”

“Article 2. .....

.....

XV - establish guidelines for the development of the low-carbon hydrogen industry.

.....”

“Art. 8 ANP shall regulate, oversee, and manage the contracting of economic activities in oil, natural gas, biofuels, and hydrogen industries, in accordance with the law, and also shall:

.....

VIII - declare public utility for the expropriation and the establishment of administrative easements of areas required for the exploration, development, and production of oil and natural gas; the construction of refineries, natural gas processing units, underground storage facilities, pipelines, and terminals; as well as the construction of infrastructure necessary for hydrogen production;

.....

XVIII - establish specifications for the quality of oil derivatives, natural gas and its derivatives, biofuels, and hydrogen;

.....

XXXVI - regulate and authorize activities related to the production, loading, processing, treatment, importation, exportation, storage, packaging, transportation, transfer, distribution, resale, and trading of hydrogen, as well as conformity assessment and certification of its quality, and oversee such activities directly or through agreements with Federal, State, Federal District, or Municipal authorities;

XXXVII - regulate and authorize, within the scope of its jurisdiction, activities related to the production of renewable hydrogen and low-carbon hydrogen using electricity, by future regulations;

XXXVIII - regulate and authorize, in coordination with other regulatory agencies, activities related to the production of renewable hydrogen and low-carbon hydrogen that utilize inputs regulated by such agencies in the production chain, as established by regulations.

.....”

CHAPTER V

FINAL PROVISIONS

Article 38. The areas required for power transmission and distribution facilities that are of restricted interest to the granting agent and are not intended for access to the transmission or distribution system may be declared of public utility by the National Agency of Electric Energy (ANEEL), pursuant to Article 10 of Law No. 9,074, of July 7, 1995, provided that such areas are exclusively dedicated to the supply of low-carbon hydrogen production projects.

Article 39. Authorizations for the production of low-carbon hydrogen and its derivatives that are in force on the date of publication of this Law shall remain valid, subject to a compliance assessment by the competent regulatory authority referred to in Article 11 of this Law.

Sole paragraph. The compliance assessment referred to in the main section of this article shall be conducted within 180 (one hundred and eighty) days from the date of publication of this Law.

Article 40. This Law shall enter into force on the date of its publication.

Brasília, August 2, 2024.

(This text, prepared by Rolim Goulart Cardoso, is a non-official translation of the version published in the Brazilian Official Gazette).