



Tax Intelligence

From complexity to execution



Tax Incentives for Energy Transition from Low-Carbon Hydrogen

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In early August, Law No. 14,948/2024 addressed the legal framework for low-carbon hydrogen in Brazil and also established incentives within the Special Incentive Regime for the Production of Low-Carbon Hydrogen (Rehidro). Recently published Law No. 14,990/2024 complemented the Legal Framework and established the Low-Carbon Hydrogen Development Program (PHBC). These initiatives aim to create conditions and regulations for the establishment of Hydrogen (H₂) production and consumption projects.

Below we summarize the main points of these incentives (Rehidro and PHBC).

Recap of Rehidro

Rehidro was established to foster technological and industrial development, competitiveness, and added value in national production chains. It will be active for 5 years starting from January 1st, 2025, for companies that:

- operate in the production of low-carbon hydrogen, as per regulations;
- are qualified for the production of low-carbon hydrogen, as per regulations;
- operate in the distribution or commercialization of low-carbon hydrogen;
- are dedicated to the generation of renewable electric energy for the production of low-carbon hydrogen and meet the stipulated criteria; or
- are dedicated to the production of biofuels (ethanol, biogas, or biomethane) for the production of low-carbon hydrogen.



Incentives

- Rehidro grants the same benefits provided under the Special Incentive Regime for Infrastructure Development (REIDI), thus suspending the incidence of PIS/Cofins on sales or importation of new machinery, devices, instruments and equipment, construction materials, and on the provision of services for use or incorporation in infrastructure works intended for fixed assets.
- Additionally, debentures issued by beneficiaries, aimed at raising funds to implement or expand projects, are exempt from individual income tax (IRPF) and have their rate reduced to 15% for corporate income tax.



Requirements

- Companies must have a minimum percentage of use of goods and services of national origin in the production process (this requirement is dismissed if there are no national equivalents or if the national supply is insufficient).
- Invest a minimum amount in research, development, and innovation (R&D&I) activities.
- Apply a minimum percentage in sustainable development projects for energy transition located in the country.
- Maintain regular tax compliance.
- The incentive can be used by companies located in Export Processing Zones (ZPEs).

PHBC

PHBC aims to establish a resource fund for energy transition through low-carbon hydrogen usage. It will last for 5 years as from January 1, 2028.

The program focuses on activities grouped into projects that meet at least one of the following requirements:

- develop low-carbon hydrogen and renewable hydrogen;
- support actions for energy transition;
- establish objective goals for the development of the domestic low-carbon hydrogen market;
- apply incentives for decarbonization in hard-to-decarbonize industrial sectors, such as fertilizers, steel, cement, chemical, and petrochemical industries;
- promote the use of low-carbon hydrogen in heavy transport.



Incentives

Granting of a Social Contribution on Net Profits (CSLL) tax credit corresponding to up to 100% of the difference between the estimated price of domestically produced low-carbon hydrogen and its derivatives and the price of substitute goods. The benefits will be granted through a competitive process, as per regulations yet to be issued, establishing minimum criteria for project eligibility to compete for the benefit.

From 2028 to 2032, tax credits will be limited to the following global amounts per calendar year: R\$ 1.7 billion in 2028; R\$ 2.9 billion in 2029; R\$ 4.2 billion in 2030; R\$ 4.5 billion in 2031; and R\$ 5 billion in 2032.



Eligible projects

The project must meet at least one of the following requirements:

- contribution to regional development;
- contribution to climate change mitigation and adaptation measures;
- incentive to technological development and diffusion; or
- contribution to the diversification of the Brazilian industrial park.

The eligibility phase of the competitive process must last a maximum of 90 days



Eligible companies or consortia

Companies or consortia of companies producing or purchasing low-carbon hydrogen, winners of the competitive procedure, are eligible for the tax credit if they:

- are or have been beneficiaries of Rehidro, in the case of producers; or;
- purchase low-carbon hydrogen produced by a company or consortium of companies benefiting from Rehidro, in the case of buyers.





Competitive procedure

After project eligibility, the granting of the tax credit will be preceded by a bid, yet to be regulated, which may include, among others:

- granting of tax credits in decreasing amounts over time;
- priority to projects that:
 - foresee the lowest greenhouse gas (GHG) emission intensity of the hydrogen produced or consumed; and
 - have the greatest potential for strengthening the national value chain.
- setting the credit value based on the difference between the price of hydrogen and the price of substitute goods;
- requirement to present a guarantee related to the implementation of the low-carbon hydrogen production or consumption project and its derivatives.

The PHBC Law establishes as a minimum selection criterion: the lowest credit value per unit of the measured product.



Utilization of credits

The CSLL credit will be recognized in the operating result and may also be subject to:

- offset with own debts, due or overdue, related to taxes regulated by the Brazilian Federal Revenue Service (RFB); or
- refund in cash within up to 12 months from the date of the request.

Amounts not used in the respective calendar year may be used in subsequent years.

The RFB may issue a Normative Instruction to regulate this matter.

The tax credit will only be granted for the commercialization of low-carbon hydrogen and its derivatives, produced in national territory **from January 1st, 2028, to December 31, 2032.**



Non-implementation of the project or its implementation in disagreement with the legislation will subject its owner to penalties.

Takeaways

Given the climate changes observed due to global warming, the 28th United Nations Climate Change Conference – COP28 – concluded in December 2023 with the celebration of an agreement on energy transition, aiming to gradually reduce the use of fossil fuels in favor of adopting low or zero carbon emission energy matrices.

Hydrogen (H₂) is currently one of the most prominent bets of energy source, chemical input, and carbon sequestrant in industrial processes. Companies should evaluate the opportunities these incentives bring, directly and indirectly. In this context, examples of application in projects include:

- producing gas through renewable energy (solar, wind, hydroelectric) or other low-carbon emission sources;
- promoting carbon capture and storage from chemical processes;
- developing gas reforming processes, where H₂ promotes the sequestration of harmful components in high-emission industries;
- producing energy through fuel cells for vehicles or industrial processes;
- using H₂ as a component or raw material in industrial processes, such as in the production of fertilizers, chemicals, and petrochemicals;
- creating renewable energy storage systems through the H₂ carrying process, allowing energy reserve or compensation for fluctuations in solar and wind energy production;
- investing in infrastructure for production, storage, transportation, and distribution, such as new industrial facilities, pipelines, and refueling stations.

Brazil has one of the cleanest energy matrices in the world and naturally positions itself as a strong protagonist in the generation of low or zero carbon emission hydrogen. Although Laws No. 14,948/2024 and 14,990/2024 still require regulation, this energy transition agenda shared by countries such as the USA, European Union members, China, and Japan, brings a new regulatory environment that may enable projects in this area, as well as develop new applications – some of which are still not obvious to many industry sectors. Few countries have already outlined this new type of regulation, with Brazil's being developed with these two important incentive programs.



Rehidro and PHBC aim to create the foundations of a transformation process for sectors of the economy and their businesses, where there are opportunities and direct financial credits. Additionally, companies will indirectly benefit from cost reduction, development of new technologies, and achievement of goals in important ESG aspects: emission reduction, use of renewable energy, conservation of natural resources, air quality improvement, attraction of conscious investors, new controls, and governance.

On the other hand, the large-scale use of hydrogen (H2) is still new and requires investment in Research, Development, and Innovation (R&D&I) activities for the development of new technologies (Rehidro), also requiring usage drivers and an entirely new infrastructure. This can become a bottleneck, a risk to be mapped, or an opportunity, depending on the specific context. Another important point refers to the annual macro limits on the use of incentives, in the case of PHBC, reason why it is recommended that companies anticipate to make the best use of the credits, optimizing its usage based on the availability in each year.

We are facing an opportunity that will initially require in-depth technical and economic studies, evaluating the feasibility of new technologies and their new uses, with the possibility of application in different businesses as early as 2025 and which can be complemented as from 2028.

In this context, it is recommended that companies already develop a case study considering in detail the criteria, deadlines, benefits, and obligations. Additionally, for the use of incentives, the company will need to develop a broad governance process with controls dedicated for ongoing projects, detailing the expenses involved, controlling the achievement of goals, and the use of incentives and tax credits. For this, it is important to consider a detailed monitoring structure that analyzes the indicators and facilitates strategic decision-making.

This process must be validated through audit and verification of compliance with obligations (still to be regulated), similar to what already occurs in programs like Mover (on the subject, see our [Tax Intelligence No. 36](#)).



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