TRANSITION TO A
LOW-CARBON ECONOMY

CNI
Brazilian National Confederation of Industry
THE FUTURE OF INDUSTRY

PUBLIC POLICIES AND BUSINESS STRATEGIES

Brazil is well positioned to lead the worldwide mobilization towards sustainable development, with clear benefits for the entire planet. And industry is a key part of this solution.

The next few years will be critical in determining what kind of economy and society we will have, not only in Brazil, but around the world. Countries around the world are focusing on the threat of climate change and ways to achieve a low-carbon economy while harnessing the innovations needed to develop and implement new technologies and energy strategies.

In this context, Brazil stands out as a leader and champion of the low-carbon economy with actions towards a more sustainable economy.

We have about 58% of our land covered by native vegetation and the highest water availability in the world, accounting for 12% of the planet's reserves. 92% of our electricity mix comes from renewable sources and we are the second largest producer of biofuels.

As a result, we are well positioned to lead the worldwide mobilization towards sustainable development, with clear benefits for the entire planet. In this context, in order for the country to be among the nations with a high economic and social development standard, the Brazilian industry presents itself as part of the solution and is able to promote a virtuous cycle of job and income creation towards a low-carbon economy.

58% land covered by native vegetation

12% planet's water reserves

92% renewable sources of electricity

CONTEXT

- The energy scenario has changed radically in recent years;
- Food and energy security play a fundamental role in the world;
- The Sustainable Development Goals, the Paris Agreement on climate change, and national policies of countries have set ambitious targets for reducing greenhouse gas (GHG) emissions;
- The aim is to reduce GHG emissions through measures needed to adapt to the impacts of extreme weather events, while respecting the emission reduction targets set in the Paris Agreement;
- The global trend is for this agenda to affect access to finance, foreign investment, and product acceptance in international markets;
- Countries and companies are pledging to achieve net zero emissions by 2050; and
- Sustainable finance offers an opportunity to redirect financial resource flows to achieve the Sustainable Development Goals and help countries, particularly emerging economies, to resume resilient, low-carbon economic growth.

A GLOBAL COMMITMENT

Climate change is a global challenge that affects markets and governments differently depending on a country's level of development. To reverse its devastating impacts, we need a new economic logic that combines global thinking with local transformative actions.

In addition to an environmental integrity agenda, climate change requires industry adaptive capacity and coordinated and multidisciplinary government action.

TRENDS FOR THE CLIMATE CHANGE AGENDA

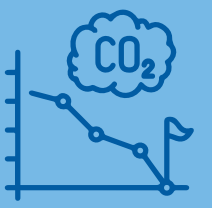
- CO_2 as a new global commodity;
- Central banks and the financial sector start measuring environmental risks;
- Expansion of renewable energies;
- New low-carbon energy sources and new clean technologies, such as hydrogen and carbon capture, utilization and storage (CCUS);
- Electrification of vehicle fleets;
- End of fossil fuel subsidies;
- Carbon pricing systems;
- Carbon border tax (European Union);
- Increased disputes over natural resources, particularly water, food, and energy sources;
- Increased mining of critical mineral resources such as rare earths, graphene, copper, and titanium; and
- Consolidation of the circular economy.

THE CHALLENGE FOR GOVERNMENTS

Governments have been pressured to publicly acknowledge the urgency of this agenda and present more ambitious measures to limit global warming by 2030, with the aim of becoming carbon neutral by mid-century. The Paris Agreement was signed in 2015 and ratified by 195 countries, with the primary goal of limiting the rise in the planet's temperature to 1.5°C.

Carbon must become a new global commodity. The global trend points to significant changes in infrastructure services, access to financing, conditions for attracting foreign investment, and admission requirements for international consumer markets, taking into account the entire value chain of products.

Brazil has set ambitious targets under its Nationally Determined Contribution (NDC) to curb warming by 2030 and achieve climate neutrality by 2050. This will require the adaptation of economic sectors and coordinated and multidisciplinary action between governments and sectors.



Target by 2025: Reduct **37%**
Target by 2050: Reduct **50%**
GHG emissions reduction
(base year 2005)

NECESSARY TOOLS FOR DECARBONIZATION

We need policies aimed at reducing carbon emissions in industrial processes, with financial instruments that encourage this, such as creating a regulated carbon market.

Other financial instruments should be structured and promoted, such as a taxonomy and specific funding lines for low-carbon technologies. For example, one of the paths that the international market has taken is to reduce emissions in the energy sector. In this context, low-carbon hydrogen has emerged, particularly in Europe, as the fuel of the future that can ensure energy security and industrial growth in the countries of the European bloc.

During COP-27, progress was made in the negotiations on **Article 6 of the Paris Agreement**, which deals with the implementation of the global carbon market, although still insufficient for its operationalization. The advances made include creating rules, procedures, and concepts for the application of appropriate adjustments, the use of CDM credits, among others.

In order for countries to take part in the above Article, they must ensure that they meet specific conditions, such as **"preparing, communicating, and maintaining a Nationally Determined Contribution (NDC)"**. In this sense, it is important for **Brazil to have an implementation strategy for the NDC**, as transparent communication of the sectoral actions and policies to be adopted for this purpose is essential, allowing stakeholders to get involved and ensuring strong, inclusive governance.

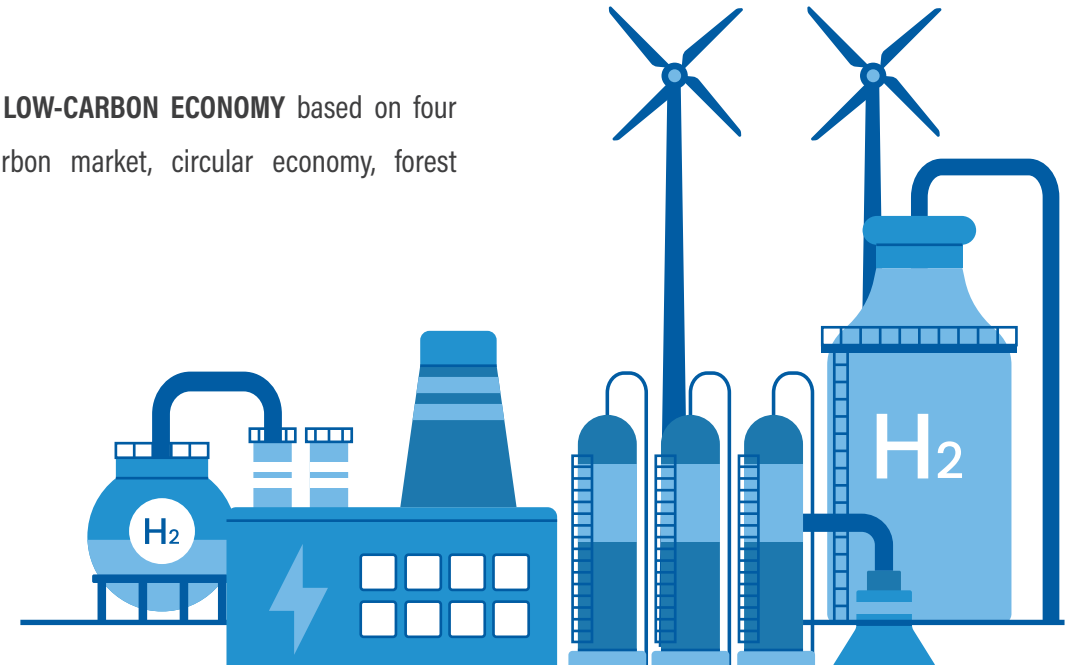
WHILE A COMMON GLOBAL MARKET POSITIONING IS NOT ACHIEVED...

... the Brazilian National Confederation of Industry (CNI), as the main representative of Brazilian industry, is working to improve the business environment and increase the competitiveness of both the sector and the country.

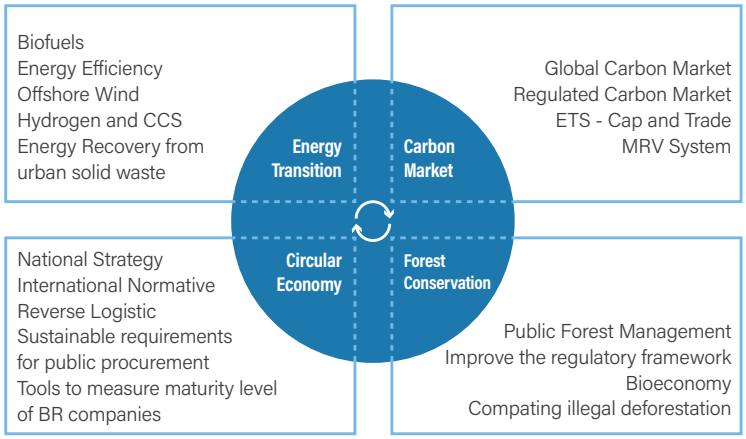
CNI represents 27 state federations of industry, 1,306 unions, and 930,000 companies throughout Brazil, all of which understand that we must continue our mission of monitoring and proposing public policies that encourage the expansion of industrial production and business investment, particularly in relation to key corporate sustainability agendas, such as the transition to a low-carbon economy. In our vision:

SUSTAINABLE CARBON AND HYDROGEN will make up this new economy and will be part of countries' strategy to fulfill commitments made in international agreements.

WE ACT TO CONSOLIDATE A LOW-CARBON ECONOMY based on four pillars: energy transition, carbon market, circular economy, forest conservation and bioeconomy.



STRATEGIC PILLARS



Source: CNI.

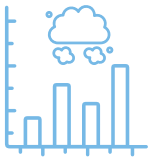
This is our strategy for dealing with the challenges of climate change and being part of the solution to restore sustainable growth. For it to gain momentum, we need joint actions by government and industry to implement technologies and programs aimed at reducing greenhouse gas emissions (GHG) in the short and medium-term and achieving climate neutrality by 2050. Among the actions needed, there are a few priorities.

SIX PRIORITIES TO TURN THESE PILLARS INTO RESULTS

PROPOSAL

Carbon Market regulation

Registration and governance tools and instances are needed to ensure better compatibility between the model proposed for the Regulated Carbon Market and international best practices. The establishment of a regulated market, linked to a voluntary market, with a system of capping and trading in allowances based on a National Allocation Plan is the most effective approach to build a robust and reliable emissions trading system. This model could unlock the resources needed to promote investment in the technologies necessary for a low-carbon economy.



PROPOSAL

Measurement, Reporting and Verification (MRV) of greenhouse gas emissions

The consolidation of a national system for Measuring, Reporting And Verification (MRV) of greenhouse gas emissions is crucial for Brazil to define policies related to the management of GHG emissions. MRV is an enabling mechanism for any climate policy instrument, whether it is an economic instrument, a steering and control instrument, or even a communication and awareness-raising instrument. One of the biggest challenges in implementing MRV protocols is the absence of a harmonized set of methods and parameters that are generally applicable across jurisdictions. This lack of standardization hinders the integration of data and information across borders and creates barriers to the implementation of mitigation and reduction measures. In fact, there is not a single internationally recognized method that can be adopted by Brazil. Therefore, the rules vary horizontally between sectors and vertically within the same sector.

PROPOSAL

Incentives for sustainable hydrogen

Due to its strategic location, Brazil has the potential to produce hydrogen for both domestic use and export. The renewable characteristics of the Brazilian energy mix are a competitive advantage for the country. The energy use of sustainable hydrogen represents an effective alternative for decarbonizing the global economy. To this end, it is necessary to regulate the production and use of hydrogen for energy purposes and to encourage research and innovation by making credit lines available to the sector.

PROPOSAL

Legal framework for exploiting offshore energy potential

Brazil has favorable conditions both for the installation of offshore wind farms and for the development of an equipment industry in the country. In order to take advantage of this scenario, an instrument is required that regulates the granting of licenses for the use of offshore energy potential, providing the legal certainty required by the market, without being limited to offshore wind power generation, leading the way for solar, tidal, and other emerging technologies.

PROPOSAL

Establish the Legal Framework for the Issuance of Environmental Permits

The lack of a framework and predictability in issuing environmental permits is one of the structural problems affecting competitiveness and increasing investment costs in the country. It is necessary to have a set of general rules that ensure greater predictability and rationality of the environmental licensing process, with rules that preserve the progress promoted by states and municipalities and ensure the preservation of their administrative powers provided by law.

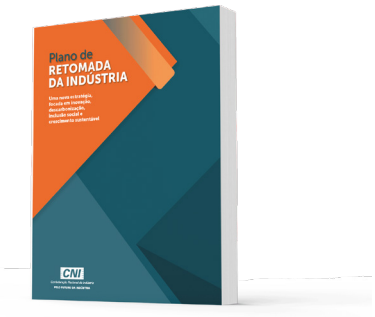
PROPOSAL

Establishment of the National Circular Economy Policy

The circular economy is a broad concept that includes changes in the processes of production of goods and recovery of materials with the aim of improving economic efficiency and reducing the impact on the environment. In this sense, it is important to have a set of tools to promote the transition from a linear economy to a circular economy, with focus on the use of public procurement, the promotion of technological development to optimize the use of materials, and the introduction of the Fair Transition Mechanism to support the sectors most affected by the changes promoted by the circular economy.

READ OUR PROPOSALS IN FULL

Brazil's Industrial Plan - A new strategy focused on innovation, decarbonization, social inclusion, and sustainable growth



Industry Proposal for the Regulated Carbon Market

Industry Proposal for the 2022 Elections – Environmental Licensing Industry

Climate Financing: Global Framework and Information Guide on Financing Sources for Brazilian Industry

Sustainable Hydrogen: Prospects and Potential for Brazilian industry