



# **BUILD YOUR DREAMS**

**SUSTAINABILITY REPORT 2023**



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## ABOUT REPORT

The BYD Brazil 2023 Sustainability Report reflects the company's commitment to promoting responsible and sustainable business practices across all operations, which are essential for advancing environmental, social, and corporate governance issues within organizations.

In this report, the company's performance in various areas is presented transparently and in detail, covering everything from environmental initiatives to governance practices. BYD believes that transparency is fundamental to strengthening stakeholder trust and driving progress toward a more sustainable future.

Throughout the document, there is information about efforts to reduce the carbon footprint, promote innovation and clean technology, and demonstrate how the company integrates sustainability into different business areas, creating long-term value for employees, customers, and communities.

The report is expected to be a valuable source of information on the commitment to sustainability and on how the company is working to build a better future for all.



## MESSAGE FROM THE PRESIDENT

Dear reader,

We are pleased to present the latest milestones achieved by BYD do Brasil through the 2023 Sustainability Report.

Our commitment to innovation and sustainability led us to achieve great results during 2023. We closed the year with leadership in the sale of 100% electric vehicles, selling more than twice as many vehicles as all competitors combined. We also attained leadership in the plug-in hybrid SUV segment across Brazil. Expanding our lineup, we offer more non-polluting car options to Brazilian consumers.

BYD is solidifying its presence as a Brazilian company through local investments. We are investing R\$ 5.5 billion in constructing a factory in Camaçari, which is progressing rapidly and will initially produce 150,000 vehicles per year, with capacity increasing to 300,000 in a later phase. Additionally, we will build a research and development center in Bahia to foster new solutions for our products. In 2023, the company also invested over R\$ 6 million in a new Research and Development

(R&D) laboratory for photovoltaic modules solely in Brazil, totaling more than R\$ 65 million in R&D investments. This underscores BYD's commitment in Brazil and globally to create sustainable solutions supported by research.

Furthermore, since the introduction of our automobiles into the Brazilian market, we have witnessed an encouraging response from consumers, winning a total of 17 awards in the Brazilian automotive segment in 2023. The BYD Dolphin was named Car of the Year 2024 by AutoEsporte, a publication of Globo, marking a significant achievement for an electric vehicle.

It is the first time that a Chinese company has received so much recognition from the Brazilian press and public opinion. BYD's successful strategy in investing in Brazil reinforces the change in paradigms and a new direction for the national industry, which motivates us even more to continue innovating and investing in research and new technologies.

This success is the direct result of the hard work and dedication of our employees, partners and supporters. Together, we are shaping a future where sustainable mobility is not just a vision, but a tangible reality. We are aware that there is much more to be done.

We take on the challenge of reducing the planet's temperature by 1°C and to this end we constantly seek new ways to improve

our practices, promote inclusion and diversity and strengthen our contribution to a more sustainable and equitable world. We provide a complete ecosystem where energy can be generated through our photovoltaic panels, stored in our batteries, and used in our vehicles.

Let this report be more than a record of achievements, but an encouragement to continue moving towards a future in which corporate prosperity and global well-being are harmoniously aligned.

Thank you very much for your attention and good reading.

“

*BYD's mission is to reduce emissions in the country and also to invest in research and development to modernize the industry in Brazil.”*

Tyler Li  
President of BYD Brazil





Headquarters of BYD Brazil,  
Campinas (SP)

### **ABOUT BYD BRAZIL**

Leader in the commercialization of electric vehicles in Brazil and established in the manufacture of solar energy technology, BYD has been expanding its presence in the country since its arrival in 2013.

Committed to caring for the planet and investing in the transition to non-polluting energy, the company has national facilities for assembling 100% electric bus chassis and producing photovoltaic modules, both located in Campinas (SP). It also has a unit in the Manaus Industrial Hub (AM) dedicated to the production of lithium iron phosphate batteries. Additionally, BYD imports forklifts, pallet trucks, tow tractors, and trucks to Brazil, all of which are 100% electric.

In November 2021, BYD began selling passenger cars in the country and already has various models and a consolidated network of dealerships in operation. Last year, the company initiated a project to construct the Camaçari Complex in Bahia, where it will establish its first car factory outside Asia.

The company is also responsible for a SkyRail (monorail) project in the city of São Paulo (SP) (Metro Line 17 – Gold). In March 2024, BYD launched a comprehensive charging solution that will bring even more convenience to users of electric vehicles. Named by the American magazine Time as one of the 100 most influential companies in the world, BYD is a member of the United Nations (UN) Global Compact, an initiative that provides guidelines for promoting sustainable growth and citizenship through committed and innovative corporate leadership.



# MISSION

Technological innovations  
for a better life.



## CORE VALUES

For BYD, sustainability is the foundation upon which the company builds its commitment to the world, and this is driven by its core values, which are disseminated among employees and all stakeholders in its value chain. With this, the company aims to perpetuate its philosophy, becoming unique, innovative, and socially responsible.

The dedication to sustainability is reflected not only in the company's products and operations but also in global initiatives that seek to address the most pressing environmental and social challenges. BYD believes that by integrating excellence, pragmatism, passion, and innovation into all facets of the business, it is not only contributing to a healthier planet but also shaping the future of urban mobility and energy in a sustainable manner. The company will continue to lead by example, promoting sustainable practices and working tirelessly to create a lasting positive impact in communities around the world.



### EXCELLENCE

Inspires our dreams through vitality



### PRAGMATISM

Turns our dreams into reality



### PASSION

Drives our dreams



### INNOVATION

Overcomes barriers in pursuit of our dreams



# BYD WORLDWIDE\*

Present in more than 400 cities across over 70 countries and regions.



## NORTH AMERICA

- Canada
- USA
- Mexico

## CENTRAL & SOUTH AMERICA

- |          |           |           |            |
|----------|-----------|-----------|------------|
| Colombia | Chile     | Cuba      | Curacao    |
| Ecuador  | Panama    | Bolivia   | Jamaica    |
| Peru     | Argentina | Paraguay  | Costa Rica |
| Brazil   | Antigua   | Bahamas   | Dominican  |
| Uruguay  | Barbados  | Guatemala | Republic   |

## EUROPE

- |             |         |          |
|-------------|---------|----------|
| Netherlands | Norway  | Portugal |
| UK          | Denmark | France   |
| Belgium     | Germany | Sweden   |
| Spain       | Ireland | Finland  |
| Romania     | Hungary |          |

## ASIA

- China
- Taiwan, China
- Hong Kong, China
- Macau, China
- Japan
- South Korea
- Philippines
- Indonesia
- Nepal
- India
- Thailand
- Laos
- Sri Lanka
- Malaysia
- Singapore
- Australia
- New Zealand
- French Polynesian

## AFRICA & MIDDLE EAST

- |              |         |
|--------------|---------|
| South Africa | Jordan  |
| Kenya        | Egypt   |
| Mauritius    | Lebanon |
| Zimbabwe     | Tunisia |
| Qatar        | Bahrain |

 **703.504**  
colaboradores

\*Source: BYD Corporate Social Responsibility Report 2023





# GLOBAL PERFORMANCE 2023

Annual revenue R\$ 421,85 billions

Annual charity expense R\$ 230,37 million

Sales of new energy passenger vehicles 3.012.906 units

Cumulative sales of new energy passenger vehicles over 6,3 million units

Annual export of new energy vehicles 252.000 units

Source: BYD Corporate Social Responsibility Report 2023



# GLOBAL AWARDS 2023



AWARD	ORGANIZER
TIME100 Most Influential Companies 2023	Time
Forbes China Top 50 Sustainable Development Industrial Enterprises 2022	Forbes China
Fortune Global 500 2023, ranking 212th	Fortune
Kantar BrandZ Top 50 Most Valuable Chinese Global Brands 2023	Kantar BrandZ
Kantar BrandZ Most Valuable Global Brands 2023	Kantar BrandZ
European Top Energy Storage Brand	EUPD Research
National Lithium-ion Battery Smart Manufacturing Demonstration Factory	Ministry of Industry and Information Technology of the People's Republic of China
Third Batch of Guangdong Province Intelligent Manufacturing Ecological Partners 2022	Guangdong Provincial Department of Industry and Information Technology
Provincial Exemplary Employment Assistance Base 2022	Guangdong Provincial Department of Human Resources and Social Security / Guangdong Provincial Bureau of Rural Revitalization
Provincial Exemplary Employment Assistance Base for 2022	Guangdong Provincial Department of Human Resources and Social Security / Guangdong Provincial Bureau of Rural Revitalization
Global Gold Supplier Award for 2022	Huawei Technologies Co., Ltd.
Best ESG Disclosure Award	Xincaifu
Most Admired Employer for Overseas Talents	Lockin China
NFuture Favorite Campus Recruitment Employer for Technology Talents	Nowcoder
Zhidequ Employer of Year	Maimai
China Top 10 Best Employers of Year	Zhaopin.com
Top 10 Employers Most Followed by College Students	Zhaopin.com
Best ESG Practice Award	CIIC ACMCODER
China New Trailblazing Growth ESG 2023 Innovation Practice List	China New Growth School
2023 China Automotive Golden Wrench Award - Service Recommendation Award	Chinese Automotive Market, Automotive and Driving Maintenance, and Sohu Auto



# HIGHLIGHTS 2023



BUILD YOUR DREAMS

**17.947**

BYD cars sold in  
Brazil in 2023

**100**

dealerships appointed  
in the country, two  
months ahead of the  
initial forecast

**R\$ 65 MILLION**

investment  
in R&D

**+ 90.000**

professionals in  
R&D worldwide

**2.300.000**

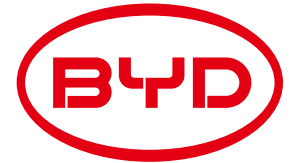
photovoltaic modules  
produced in Brazil

# PRESENT IN 6 BRAZILIAN STATES

- Photovoltaic Modules Factory - Campinas, SP
- Electric Bus Chassis Factory - Campinas, SP
- Solar Kit Factory - Campinas, SP
- Battery Factory - Manaus, AM
- Automobile Factory - Camaçari, BA
- Skyrail Project (Line 17) - São Paulo, SP
- Business Office - Rio de Janeiro, RJ
- Business Office - Vitória, ES
- Distribution Center - Cariacica, ES
- Distribution Center - São José dos Pinhais, PR



**644\***  
**EMPLOYEES**  
\*december 2023



# NATIONAL AWARDS 2023

## AWARD

Top 100 Most Influential Companies in Mobility  
10 Years of Intersolar South America - One of the pioneering companies to invest in the Brazilian solar market  
Finalist in the Smart City category  
BYD Dolphin - Car of the Year 2024  
Tyler Li, Executive of the Year  
BYD Dolphin - Highlight of the Year  
BYD Dolphin - Electric Compact  
BYD Dolphin - Best Electric Car  
BYD Dolphin - Car of the Year by Jornal do Carro  
BYD Dolphin - Electric Car  
BYD Dolphin - Electric under R\$ 200,000  
BYD Dolphin - Best Electric under R\$ 200,000  
BYD Dolphin - Best Electric Car  
BYD Dolphin - Best Electric under R\$ 200,000  
Seal, Most Desired Electric under R\$ 300,000  
Yuan Plus, Best Buy 2023  
Yuan Plus, Best Electric under R\$ 400,000  
BYD, Most Innovative Brand  
BYD, Brand of the Year  
Seal, Best Electric Sedan  
“Friend of Early Childhood” Seal and “Friend of Women” Seal  
“Human Rights and Diversity” Seal

## ORGANIZER

Connected Smart Cities in partnership with the Estadão Mobility section  
Intersolar South America  
Automotive Business 2023  
Auto Esporte Magazine  
Auto Esporte  
UOL Cars Award  
UOL Cars Award  
Estadão Mobility Award 2024  
Estadão Mobility Award 2024  
Trend Car 2023 (Terra/Guia do Carro)  
Purchase of the Year 2024 (MotorShow)  
L’auto Preferita (Portal Carsughi)  
Car Awards Brasil (Car Magazine)  
TopCar TV  
Exame  
Quatro Rodas  
MotorShow  
Portal Terra  
UOL Cars Award  
UOL Cars Award  
Prefeitura Municipal de Campinas (SP)  
Prefeitura de São Paulo (SP)

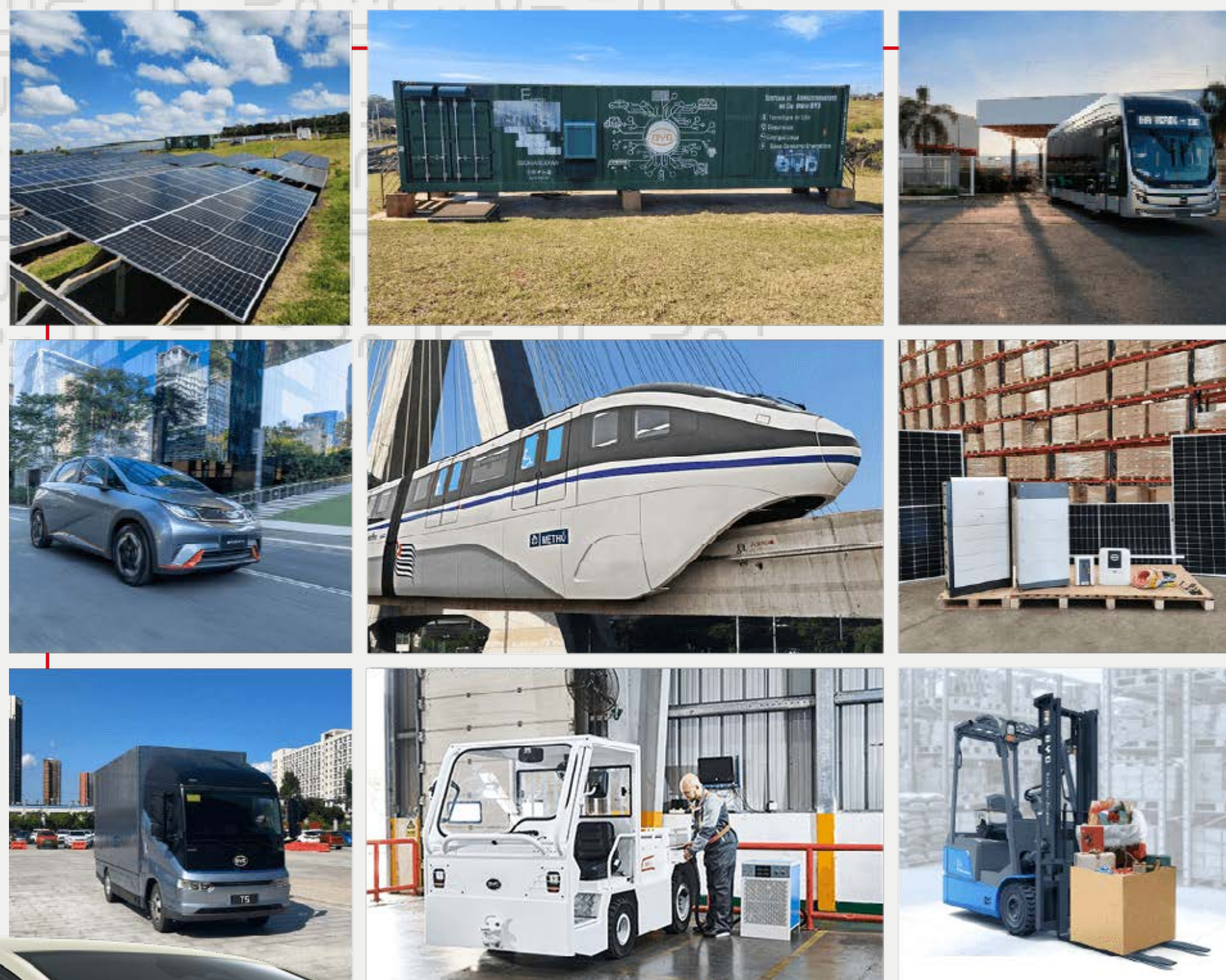
## BYD - SIGNATORY COMPANY OF THE GLOBAL COMPACT

As a signatory company of the Global Compact, BYD actively engages in the Brazilian Network, an initiative of the United Nations (UN) that mobilizes the business community to adopt and promote the Ten Principles universally accepted in the areas of human rights, labor, environment, and anti-corruption practices in their business operations. Additionally, the company maintains a sustainability committee composed of professionals from various fields with the aim of coordinating and driving sustainability initiatives within the organization.

As a company committed to sustainability, BYD actively incorporates the Sustainable Development Goals (SDGs) into its business approach. By being part of the Global Compact, the company commits to annually reporting progress towards the Ten Principles. This initiative not only highlights BYD's responsibility as a corporate citizen but also encourages continuous improvement in internal sustainability practices, reflecting the company's alignment with global goals and ethical commitments.

With this, BYD seeks to contribute positively to global sustainable development, aligning itself with the vision of a more prosperous, fair, and equitable world for all.





## PRODUCTS

BYD has maintained its commitment over the years, dedicating itself to the development of products driven by technological innovation. Through its expertise in technology, the company has been leading the advancement in clean energy-based transportation systems, with the goal of contributing to reducing global temperatures by 1°C.

The company's product portfolio includes a variety of sustainable solutions, ranging from photovoltaic modules and energy storage systems to electric vehicles and handling equipment.

Within this context, BYD has been a pioneer in integrating clean technologies across different sectors, promoting a more sustainable and efficient transition for mobility and energy generation. The company is committed to continuing to drive innovation and offering solutions that contribute to a greener future for generations to come.





THE USE OF BYD PRODUCTS  
HAS CEASED TO EMIT  
**48.406.698.138** kg  
CARBON UNTIL  
JANUARY 11, 2024

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EQUIVALENT TO  
**806.778.302**  
TREES IN CO<sub>2</sub> OFFSET

\*Value obtained through the EPA Greenhouse Gas Equivalencies Calculator.



## SOLAR ENERGY

BYD's vision aligns with the needs of humanity: to transform dependence on non-renewable energies into a commitment to clean energy sources. Our mission is to help countries and people overcome the energy crisis and reduce environmental pollution through the use of renewable energy sources.

With the R&D and manufacturing laboratory in Brazil, the photovoltaic energy technologies developed by BYD are applicable in solutions of different sizes, covering residential, commercial, industrial, rural, investor, utility, among other segments.

These innovations demonstrate BYD's commitment to offering sustainable and affordable solutions, making a significant contribution to the transition to a cleaner and more efficient energy landscape.



## NATIONAL LEADER IN PHOTOVOLTAIC MODULE PRODUCTION

BYD has consolidated its position as the national leader in photovoltaic module production, celebrating in 2023 the milestone of 2,300,000 modules produced in the country. It is the only company in the country to reach this milestone, emerging as a powerhouse in Brazil's solar energy industry.

Designed by the company's Research and Development department in Brazil, located in Campinas (SP), BYD's modules ensure energy efficiency and significant savings in investment and maintenance costs. With a combination of technological innovation, commitment to sustainability, and excellence in production, BYD has played a crucial role in expanding solar energy throughout the country.

The photovoltaic modules provide energy independence and guarantee significant savings, with an excellent cost-benefit ratio. They are easy to install, have a long lifespan, and require low maintenance. In addition to representing a 100% clean and renewable energy source, they come with a 10-year product warranty and a 25-year performance guarantee.

They have financing from BNDES and Finame and can be applied in urban and rural areas, industries, commerce, residences, condominiums, and power plants.

BYD's leadership in photovoltaic module production not only strengthens its position in the national market but also contributes to the advancement of solar energy as a clean and renewable energy source worldwide.



Celebration of the milestone of 2,300,000 modules produced in Brazil

### Nationally manufactured modules

All modules manufactured in Brazil have the FINAME code and are eligible for financing through BNDES credit lines, facilitating access to the world's most advanced technology.

**MGK-36 MONOFACIAL 445W - 455W** - Bifacial also available (MGTK)

**MLK-36 MONOFACIAL 530W - 550W** - Bifacial also available (MLTK)

**HRP72S MONOFACIAL 555W - 580W** - Bifacial also available (HRP72D 555W - 560W)

### Imported Modules

BYD also works with imported modules of different power capacities. All products brought to Brazil undergo internal testing to ensure efficiency and quality.

**MIK-36 MONOFACIAL 435W - 455W**

**MLK-36 MONOFACIAL 530W - 555W** - Bifacial also available (MGTK)

**PHX72D BIFACIAL 570W - 580W** - Double Glass

## INVESTMENT OF OVER R\$ 65 MILLION IN RESEARCH & DEVELOPMENT

Focused on further strengthening the clean energy market in Brazil, BYD has taken a new step in the sector by investing over R\$ 6 million in a new Research and Development (R&D) laboratory. Located in Campinas (SP), it is the first in Latin America to study the entire production cycle of photovoltaic modules from the beneficiation of silicon ore—the main



Inauguration of the new R&D Laboratory in Campinas (SP)

raw material. Thus, BYD's total investment in R&D in the photovoltaic sector in Brazil exceeds R\$ 65 million.

During the inauguration ceremony of the new laboratory in December 2023, BYD announced that it will bring the Battery Service Center to Brazil, which will support all operations involving BYD battery products in the country and throughout Latin America. This operation will ensure excellent service for the entire region.

BYD's Brazilian R&D center has partnered with leading universities and institutes in Brazil, such as Unicamp, Instituto Eldorado, CTI Renato Archer, and UFSC. This alliance is part of the Support Program for the Technological Development of the Semiconductor Industry (PADIS).

PADIS encourages technical and scientific productions through research, in which undergraduate, master's, doctoral, and postdoctoral students work on a predefined project aligned with BYD's technical interests.

### Photovoltaic Power Plant

BYD has already invested R\$ 7 million in equipment for its own power plant, which includes a comprehensive meteorological station dedicated to studying various types of photovoltaic modules in tropical soil.



1. R&D Laboratory in Campinas (SP)  
2. BYD Photovoltaic Power Plant



Production of the Harpia N-Type Topcon Module 555W – 575W

## **HARPIA N-TYPE TOPCON DE 555W-575W MODULE**

Developed by BYD Brasil’s R&D laboratory in 2023, the Harpia photovoltaic module features innovative N-Type Topcon technology with a power output of up to 575W. Designed entirely by the company’s Research and Development department in Brazil, located in Campinas (SP), this new photovoltaic module delivers higher energy efficiency. This translates into the need for fewer panels and a smaller installation area, resulting in significant savings in upfront investment and maintenance costs. Consequently, it

becomes possible to reduce the installation area while maintaining the same energy output. This advantage also reflects in reduced metal structures and leasing costs for the occupied area.

Another advantage of the Harpia N-Type TopCon module, ranging from 555W to 580W, is its low thermal coefficient, a crucial feature for Brazil’s tropical climate. The product also benefits from state-of-the-art SMBB

technology, which reduces certain module construction losses and thereby further enhances generation efficiency. It exhibits reduced rates of Light Induced Degradation (LID) and Potential Induced Degradation (PID) over time. Moreover, it boasts a low annual degradation rate of just 0.4%.

To achieve levels of reliability, quality, and efficiency, there were several stages of development and a long trajectory of experimentation. This included complex laboratory tests, evaluations of prototype reliability, and ultimately reaching the final product. Numerous samples were produced and adjustments made, leading to the readiness and production availability for the market.

The Harpia N-Type Topcon module brings much greater efficiency to the market, where customers are increasingly aware of the volume of investment and resources, as well as the cost-effectiveness of equipment.

Therefore, customers can reduce their costs with lower investment while substantially improving energy efficiency. This also leads to a reduction in the number of equipment needed and achieves lower operational costs overall.

### **Comparative Advantages – Harpia N-Type Topcon vs Mono PERC**

- Power: > 6,3%
- Thermal coefficient: < 12,8%
- Efficiency: > 6%
- Reduced PID/LID
- Better performance in low irradiance conditions
- Lower annual degradation rate: – 0,4% per year
- Reduction in LCOE

## PHOTOVOLTAIC MODULES BIPV - BUILDING-INTEGRATED PHOTOVOLTAIC SYSTEM

BYD Energy Brasil began its research and development of Building-Integrated Photovoltaic (BIPV) modules in 2022. BIPV modules facilitate seamless integration into civil and architectural projects and allow customization in various colors for a harmonized and distinctive composition.

In 2023, the first real-world application was inaugurated in Brazil. The Federal University of Santa Catarina, the Ministry of Mines and Energy, and the Brazil-Germany Cooperation launched the first green hydrogen laboratory with full BIPV photovoltaic integration. The project aims to support the expansion of the green hydrogen (H2V) market in the country.

BYD provided the photovoltaic modules for the construction of the facility. The laboratory features 360 modules, with power outputs of 450W and 530W. The 530W Single Glass modules form the entire roof composition, while the Double Glass modules integrate into the lateral facade and surrounding areas of the laboratory.

In general, the architectural design of the laboratory incorporates Building-Integrated Photovoltaic (BIPV) integration, where modules serve as roofing tiles and sunshades on the facades, fulfilling the dual function of sealing and shading within the building. This means they provide both shading and energy generation, addressing a key requirement for the production of green hydrogen in the laboratory.

Additionally, one of the photovoltaic roofs acts as a shading element for the building's slab, significantly reducing thermal effects. This system provides a 61% reduction in thermal load, 71% savings in the air conditioning system, and a 52% reduction in installed lighting power.

Currently, energy generation from photovoltaic modules is one of the fastest-growing technologies in the global market, increasingly used as an integrated device in civil construction. They are employed not only on roofs but also on facades, sunshades, and walls, featuring various dimensions, geometries, and colors.

1. Federal University of Santa Catarina (UFSC)
2. Photovoltaic modules applied on the facade





**1.** Photovoltaic Power Plant - EPC - Betânia / Ceará | **2.** Photovoltaic Power Plant - EPC - Areia Branca, Rio Grande do Norte

## EPC - SOLUTIONS FOR LARGE SOLAR POWER PLANTS

BYD Energy began offering EPC (Engineering, Procurement, and Construction) services to the market in 2023, encompassing the full development of large-scale solar power projects from start to finish.

The service includes studies and sizing to understand local demand, the entire process of executive engineering, procurement planning, implementation, execution, and plant management. Operating as a service solution, the company handles everything from identifying the client’s energy needs to maintaining the plant throughout the technical warranty period, which can range from 6 to 12 months.

In the initial phase, the engineering team, equipped with project development expertise, provides customized solutions, studies, and sizing, complying with all regulations. They utilize appropriate software and tools to prepare specifications and quantities, ensuring precise execution and cost control. Support is also provided by consultants and BYD’s own R&D team.

During the procurement and acquisition planning phase, BYD Energy’s specialized supply chain team comes into play. They activate the supplier qualification system, engage experts in importation and localization, and manage logistics and supplies dedicated to the project.

Once this process is completed, construction is carried out by qualified partners with proven expertise in all disciplines (electrical, civil, and mechanical). This is followed by construction management, which includes monitoring and control through performance indicators, supply chain management, subcontractor execution, quality and risk management, site supervision, and legal oversight throughout the project lifecycle.

EPC is another service that expands the company’s portfolio of solutions, contributing fully to the country’s sustainability goals.

## BYD PACKAGING - ENSURING PROTECTION AGAINST MICRO-CRACKS

BYD Energy has pioneered the industry by conducting integrity tests on photovoltaic modules during transportation. To achieve this, the products underwent a road test spanning over 2,300 kilometers, traveling on highways under harsh conditions.

The route included the most severe road possibilities, passing through hard-to-reach areas with poor or even nonexistent pavement. This was necessary to simulate, as accurately as possible, the conditions encountered when accessing locations where energy generation plants are typically built, often in remote and challenging environments. These places require packaging that ensures product quality.

This unprecedented road test took place between Campinas (SP), where BYD Energy is headquartered, and Buritizeiro, located in the northern region of Minas Gerais. The goal was to simulate the worst possible transportation scenarios to assess potential module damage. At the end of the journey, it was found that 6% of the modules transported under less than ideal conditions exhibited micro-cracks.

Photovoltaic modules and inverters are highly sensitive electronic devices that require packaging to ensure their protection during transportation. In the test conducted, both non-ideal packaging and BYD's packaging were used. BYD's packaging serves a structural function that allows stacking without excessive pressure on the modules, thereby preventing micro-cracks.

Micro-cracks, which are invisible to the naked eye, can only be identified through electroluminescence testing conducted at the company's laboratory in Campinas (SP), the only one of its kind in Latin America with the technology and expertise to perform this evaluation.

In addition to compromising energy generation and the module's lifespan, over time, micro-cracks can evolve into hotspots—areas of elevated temperature that significantly impact the efficiency of photovoltaic modules. Depending on their intensity, hotspots can cause issues such as melted or burned junction boxes, module delamination, or, in extreme cases, the initiation of a fire.

## Robust Packaging

To prevent micro-cracks from appearing after long journeys and causing issues, BYD Energy relies on the most robust packaging in the Brazilian solar market, ensuring the complete quality of products shipped from the factory to end customers nationwide. BYD Energy's packaging is twice as thick as the industry standard, providing a resistance of 34 kgf.cm compared to the 15 kgf.cm used by other brands.



BYD Packaging - Ensuring Protection Against Micro-Cracks

## FAST CHARGERS FOR ELECTRIC VEHICLES

BYD Energy's pioneering efforts in sustainable solutions and clean energy have always been significant differentiators in Brazil. This commitment has been further strengthened through expanding into the market with the sale of fast and ultra-fast vehicle chargers in the country, initiating a new sales and business model. The primary objective is to contribute high-technology solutions to expand infrastructure in Brazil, promoting sustainability from energy generation to the final product, the electrified vehicle.

BYD's product lineup includes AC (alternating current) chargers of 7 kW and 22 kW, as well as DC (direct current) models ranging from 60 kW, 120 kW, 150 kW, 180 kW, up to the Grid Zero model reaching 210 kW, which utilizes BYD battery technology. These models are marketed in two market segments: residential and public installations.

### BYD Recharge App

The BYD Recharge app brings convenience to all users of electrified vehicles. Upon downloading the app, drivers gain access to over 2,800 charging points located nationwide and can make payments directly through the platform.

The BYD Recharge app is a white-label solution provided by Tupinambá, a company specializing in charging solutions.

### Partnership with Raízen Power

Another action that reaffirms BYD's investment in this segment is the partnership with Raízen Power, a brand dedicated to renewable electric power solutions under Raízen and licensed by the Shell Recharge network in Brazil, Argentina, and Paraguay. The alliance between the companies will establish 30 hubs dedicated to electric charging using the Shell Recharge solution in eight capital cities of Brazil, providing 100% clean and renewable energy over the next three years. This initiative will include approximately 600 new DC charging points, totaling an additional 18 MW of installed capacity nationwide.

The spaces will begin implementation in 2024 in the cities of São Paulo (SP), Rio de Janeiro (RJ), Belo Horizonte (MG), Brasília (DF), Curitiba (PR), Florianópolis (SC), Salvador (BA), and Belém (PA). The companies also anticipate offering competitive charging services for BYD drivers within the Shell Recharge network and renewable energy options for their dealerships.

### BYD Electric Vehicle Chargers

#### BYD-EVC-1SXP7 | BYD-EVC-1SXP22



#### BYD-EVC-2SXM60 | BYD-EVC-2SXM120



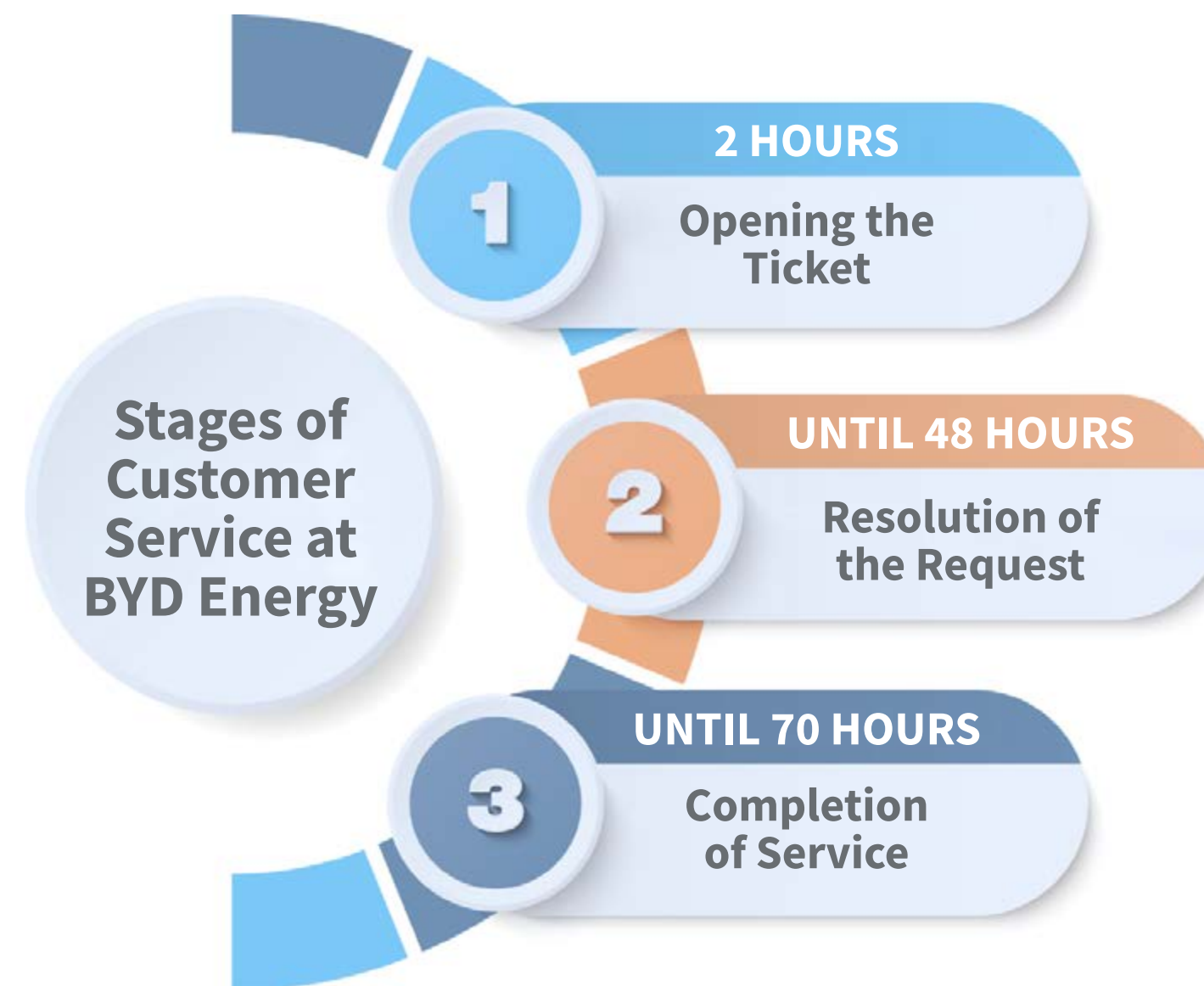
#### BYD-EVC-2SGZ GRID ZERO







- 1. Comprehensive Energy Generation and Storage Solution by BYD
- 2. Photovoltaic Modules



Stages of Customer Service at BYD Energy

## BYD ENERGY AFTER-SALES SERVICE

For the past ten years in Brazil, BYD has solidified its position as a global leader in electric vehicle production and an expert in solar energy generation and storage.

Seeking to provide the best post-sales service, the company has adopted the Desk Manager service tool, which includes operational licenses and integrates with WhatsApp, generating comprehensive reports and dashboards for the company's management team. The efficiency gains were immediate, with complete service now finalized within 70 hours.

BYD's customer service is structured into three stages. The first stage occurs when the customer opens a ticket, a process now reduced to 2 hours. The second stage, which involves resolving the customer's request, has been reduced to 48 hours. Consequently, the entire process, culminating in the third stage of service completion, is concluded within 70 hours.

Overall, BYD's After-sales department has access to a suite of 12 applications with various functionalities within a single system, ensuring support through ticketing and comprehensive business management.

## PASSENGER VEHICLES

A revolution in electric vehicles has firmly established itself as an undeniable reality in the automotive market, capturing an increasingly significant share in a sector previously dominated by combustion engine models. Gradually, Brazil is integrating into this transformative landscape, adapting to the growing demands for sustainable mobility.

As a global leader in electric mobility, BYD plays a central role in driving the transition to electrification in transportation on a global scale. By introducing high-quality, efficient, and technologically advanced electrified vehicles in Brazil, BYD not only strengthens its position as a protagonist in this transformation but also elevates the country to a new level in sustainable mobility.



## THE WORLD'S FIRST AUTOMAKER TO PRODUCE 6,000,000 ELECTRIFIED VEHICLES

BYD, the global leader in manufacturing clean energy vehicles and energy batteries, achieved a historic milestone in 2023 by surpassing 6 million units manufactured. This significant achievement highlights BYD's unwavering commitment to creating high-quality, technologically advanced, and efficient electric vehicles.

In addition to the Dynasty and Ocean lines, the company also owns the brands FANGCHENGBAO, Denza, and Yangwang. The global market witnessed a record monthly sales exceeding 300,000 electrified vehicles. BYD's commitment to technological leadership and a wide range of products has enabled the company to achieve such remarkable milestones.

The accelerated pace of BYD's vehicle production aims to meet the global demand for electric and hybrid cars, which is growing exponentially and setting new benchmarks in the automotive industry. The 6 millionth vehicle, a FANGCHENGBAO 5 super hybrid SUV, rolled off the production line at the Zhengzhou factory in China. To illustrate the market's speed, BYD took 13 years to produce

1 million cars, 18 months to reach 3 million, 9 months to reach 5 million, and now only 3 months to achieve 6 million clean energy vehicles.

To expand its global footprint, BYD has intensified its exports and ramped up production to accelerate the global presence of electric and hybrid passenger vehicles. Currently, BYD operates in 70 countries and has exceeded cumulative sales of 200,000 units of passenger vehicles, leading the electrified vehicle markets in Thailand, Brazil, and other countries.

BYD is at the forefront of technological advancements and has introduced significant innovations such as the Blade battery, DM-i Super Hybrid system, e-Platform 3.0, Cell to Body (CTB) technology, e4 platform, and BYD DiSus intelligent body control system.

The Off-Road Super Hybrid System (DMO) has set new industry standards. BYD remains committed to its aspirations of innovation and sustainability, aiming to provide non-polluting mobility experiences and contribute to the ambitious goal of cooling the planet by 1°C.



Super hybrid SUV FANGCHENGBAO BAO 5: BYD's 6,000,000th new energy model produced



6,000,000 electrified vehicle celebration in China



BYD Tan EV

## LEADER IN THE ELECTRIC VEHICLE SECTOR

BYD, the world's largest company in electric and hybrid vehicle production, solidified its leadership in the electrified vehicle market in Brazil in 2023. According to data from ABVE (Brazilian Association of Electric Vehicles), the company sold 17,947 cars during the year, marking an astronomical growth of 6,900%, nearly 70 times more than the 260 units sold in the entire year of 2022.

Among the 100% electric vehicles, known as BEVs (Battery Electric Vehicles), the BYD Dolphin led comfortably with 5,971 units sold throughout the year. In the top 5 best-selling models, the BYD Dolphin outsold the other four models combined (4,756 units). Looking at the top 10 models, BYD achieved a market share of 72%.

The Dolphin took the lead in sales and was crowned the best-selling electric car in Brazil for the fourth consecutive time in December. The brand achieved a record sales volume with 3,617 units in the last month of the year, capturing a 60% market share (BEV), marking a 72% increase from November sales (2,099 units).

In the top 5, BYD further appears with three additional models: BYD Yuan Plus (1,756), BYD Seal (1,040), and BYD Dolphin Plus (841). Among the top 10 cars in the annual ranking, BYD sold nearly three times more than the leading brands combined in 2023.

Throughout 2023, BYD achieved another record in sales of 100% electric vehicles, totaling 10,274 units and capturing a 52.3% market share of all electric cars sold (19,310 vehicles) in the Brazilian market. This result is particularly significant

considering that BYD's electric models (10,274 vehicles) outsold all other electric models combined (9,036 units).

In the PHEV vehicle segment, the plug-in hybrid BYD Song Plus DM-i was the best-selling model in the Brazilian market in 2023, with 7,669 vehicles sold. This represents 23.2% of all PHEV sales last year (33,049 units) and a 60% lead over the second-place model (4,605 units). The model also maintained a comfortable sales lead in its segment in December, selling a total of 1,883 units or 35.18% of the total sales that month (5,353 units).

BYD also achieved global sales of 3,024,417 electrified vehicles in 2023, marking an annual growth of 61.8%. More than 340,000 units were sold in December 2023 alone, representing a 45% increase compared to December 2022.



## BYD DOLPHIN ELECTED CAR OF THE YEAR 2024 IN BRAZIL

The BYD Dolphin was the most awarded electric vehicle of 2023 and was named the Car of the Year 2024, the main category of the traditional award by AutoEsporte magazine, published by Globo. This marks the first time that a clean energy vehicle has won one of the most prominent and prestigious awards in the country.

The award is given annually by AutoEsporte to models that excel in attributes such as design, engineering, safety, price, and technology throughout the year. The jury consisted of journalists and experts, all with significant professional representation in the automotive sector.



Car of the Year 2024 Award - AutoEsporte

Tyler Li, President of BYD Brazil, was also honored by AutoEsporte, receiving the award in the Executive of the Year category, making him the first Chinese recipient in the award's history. Tyler Li has led BYD's operations in Brazil since the company's arrival in the country in 2013.

Launched in Brazil in June, the BYD Dolphin has been setting consecutive sales records in the Brazilian market and was the standout performer.

In just 6 months since its launch in Brazil, the BYD Dolphin has received 10 major recognitions. A sales record holder in 2023 with over 5,000 units sold, the model is making history by putting electric cars on the radar of Brazilians, who are finally considering the real possibility of purchasing a non-polluting car.

In the overall ranking of electric cars, BYD's compact model is leading by a wide margin and demonstrates that it is possible to combine design, cutting-edge technology, comfort, range, and agility with a more affordable price than what was previously offered in the market.



BYD Dolphin - AutoEsporte's Car of the Year 2024

Besides the title granted by AutoEsporte magazine, the Dolphin also stood out at the Car Magazine event held in São Paulo. The model was named "Best Electric Car" at the tenth edition of the "Car Awards Brasil 2024." Another award won by the model was announced by Portal Terra / Trend Car 2024, where it won in the "Electric Car" category.



1. Ceremony for the launch of the BYD factory in Camaçari, Bahia  
 2. The factory in Bahia will be BYD's first outside Asia

## THE BYD FACTORY IN CAMAÇARI WILL BE THE COMPANY'S FIRST OUTSIDE ASIA

BYD, the world's largest manufacturer of clean energy vehicles, firmly established itself in Bahia with the announcement of the opening of its newest industrial complex. With the presence of the founder and CEO Wang Chuanfu, Executive Vice President and CEO for the Americas Stella Li, and BYD Brazil President Tyler Li, BYD inaugurated its future production units at the Camaçari industrial complex in October 2023. The ceremony was also attended by the Vice President of Brazil, Geraldo Alckmin, ministers Rui Costa (Chief of Staff) and Juscelino Filho (Communications), the Governor of Bahia, Jerônimo Rodrigues, and other federal, state, and municipal authorities.

BYD increased its investment in Brazil from R\$ 3 billion to R\$ 5.5 billion, making it BYD's largest industrial hub outside China. Five residential buildings will also be constructed for the factory employees. These developments, located 3.5 km from the complex in an area of approximately 81,000 m<sup>2</sup>, will accommodate up to 4,230 people.

The increased investment strengthens support for regional development, anticipates local economic activity, and aims to enhance community well-being. Soon, with the creation of 10,000 jobs, both direct and indirect, and BYD's investment, Camaçari will regain its status as a significant automotive industrial hub, attracting investments from various sectors.

By the end of 2024, the first BYD vehicles will begin assembly at the complex. Full-scale production of cars in Bahia is expected to start between 2024 and 2025, with an initial phase production capacity of around 150,000 vehicles per year.

The entire complex covers a total area of 4.6 million m<sup>2</sup>, purchased from the Government of Bahia for R\$ 287,816,458. In the first phase of construction, there will be 26 new facilities, including production warehouses, a test track, and other structures, occupying an area of about 1 million m<sup>2</sup>.

BYD believes that local production is a way to stimulate even more competitive prices in the market and to create opportunities for more Brazilians to have a BYD electric car in their garages.



### **SUSTAINABLE URBAN MOBILITY**

The intersection of urban mobility and sustainability is a crucial and widely debated topic in the Brazilian context, particularly concerning the development of urban areas and the quality of life of the population.

In this context, BYD is committed to developing smart and sustainable solutions to promote a zero-emission public transportation system aimed at improving the quality of life for residents of large cities. This reflects BYD's dedication to providing innovative and environmentally responsible alternatives to the challenges of urban mobility in Brazil.

## 100% ELECTRIC BUS

BYD's mission is to change the world by reducing our dependence on fossil fuels through the development and advancement of battery and electric vehicle technology. The company develops smart and sustainable solutions to promote a zero-emission public transportation system. For the Brazilian market, BYD offers 100% electric bus chassis with bodies manufactured by local partners. These buses are safe, quiet, and can reduce operational costs by up to 70%.



Electric bus chassis factory in Campinas (SP)

BYD's electric buses are in service in over 400 cities across more than 70 countries and regions around the world, totaling more than 105,000 electric commercial vehicles globally, with a total mileage of over 16 billion kilometers.

Each 100% electric BYD bus prevents, on average, 118.7 tons of CO<sub>2</sub> emissions per year from entering the atmosphere, equivalent to planting 847 trees per vehicle (based on an average of 72,000 km driven annually).

### In Brazil, BYD produces five models of chassis:

- **D9W:** Low-floor for body applications up to 13.2 meters in length.
- **D9A:** High-floor for body applications up to 12.8 meters in length.
- **D9F:** For charter operations and short to medium-distance intercity routes.
- **D11A:** Articulated high-floor for urban applications (especially for BRT projects) with body lengths up to 23 meters.
- **D11B:** Articulated low-floor for urban applications with body lengths up to 22 meters.



1. 100% electric bus BYD — D11B  
2. 100% electric bus BYD — D9W

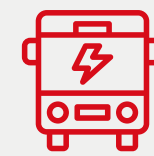


## TRAINING FOR DRIVERS ON OPERATING ELECTRIC BUSES

Electric buses, known for not polluting the environment, also offer greater safety and comfort for drivers and passengers. To ensure total safety in operating its vehicles, BYD conducted training in 2023 for drivers of companies that purchased its buses. In 2023, BYD had 100 buses in operation in Brazil, and more than 200 drivers had been trained.

The training began with general instructions, such as safe driving practices, debunking myths about electric vehicles (EVs), curiosities about the technology, and an introduction to the location of components, functions, and access points. This was followed by practical driving training, focusing on safety and efficiency to achieve greater battery range, as well as the specific characteristics of the vehicle. The training also covered knowledge of onboard technologies, such as the bilateral kneeling system (which facilitates passenger boarding and alighting), electronic suspension control system (which can be raised to overcome obstacles), electronic mirrors and cameras, ASR (traction control), and EBS (braking control).

## BENEFITS OF ELECTRIC BUSES



The 100% electric buses are great allies in reducing local pollutants and greenhouse gases. In addition to low noise emissions, they prevent the emission of 125,000 kg of CO<sub>2</sub> per year, equivalent to planting 892 trees.



The battery has two life cycles. In the first cycle, it is used for transportation applications. In the second cycle of life, batteries are repurposed into modules for energy storage and management applications. At the end of their life, they are recycled.



The average cost to recharge electric batteries can be up to 64% less than the cost of diesel fuel.



Electric motors have an efficiency of around 90% compared to 30% for combustion engines.



Practical and theoretical training for drivers operating electric buses



The lifespan of electric buses reaches 15 years, while diesel buses last around 10 years on average, with a useful life of about 5 years.



Maintenance of electric buses is much simpler, costing about 50% of what is required for a diesel bus.

## SKYRAIL — SOLUTION FOR URBAN TRAFFIC CONGESTION

Urban mobility and sustainability are fundamental themes for the socio-economic development of cities. That's why BYD develops solutions in non-polluting, comfortable, and silent public transportation. Designed to assist in improving urban traffic, Skyrail is a suspended monorail system that is 100% electric and elevated, adapting to the geographical environment of cities with lower construction time and costs. With no emissions of polluting gases, its low environmental impact during operation is one of its most notable benefits, providing a return in quality of life for the population and integration among existing transport modes. Skyrail makes urban transport smarter by optimizing passengers' time and mobility.

With an investment of 1 billion dollars, the model was developed by a Research & Development team comprising over a thousand professionals. Skyrail offers lower costs, shorter construction periods, and greater adaptability to terrain compared to competing technologies, while being energy-efficient with zero emissions and silent operation.



BYD Skyrail was created to develop urban mobility projects that will improve the quality of life for the populations of large cities, reinforcing its mission to reduce dependence on fossil fuels and contribute to building a truly sustainable world.

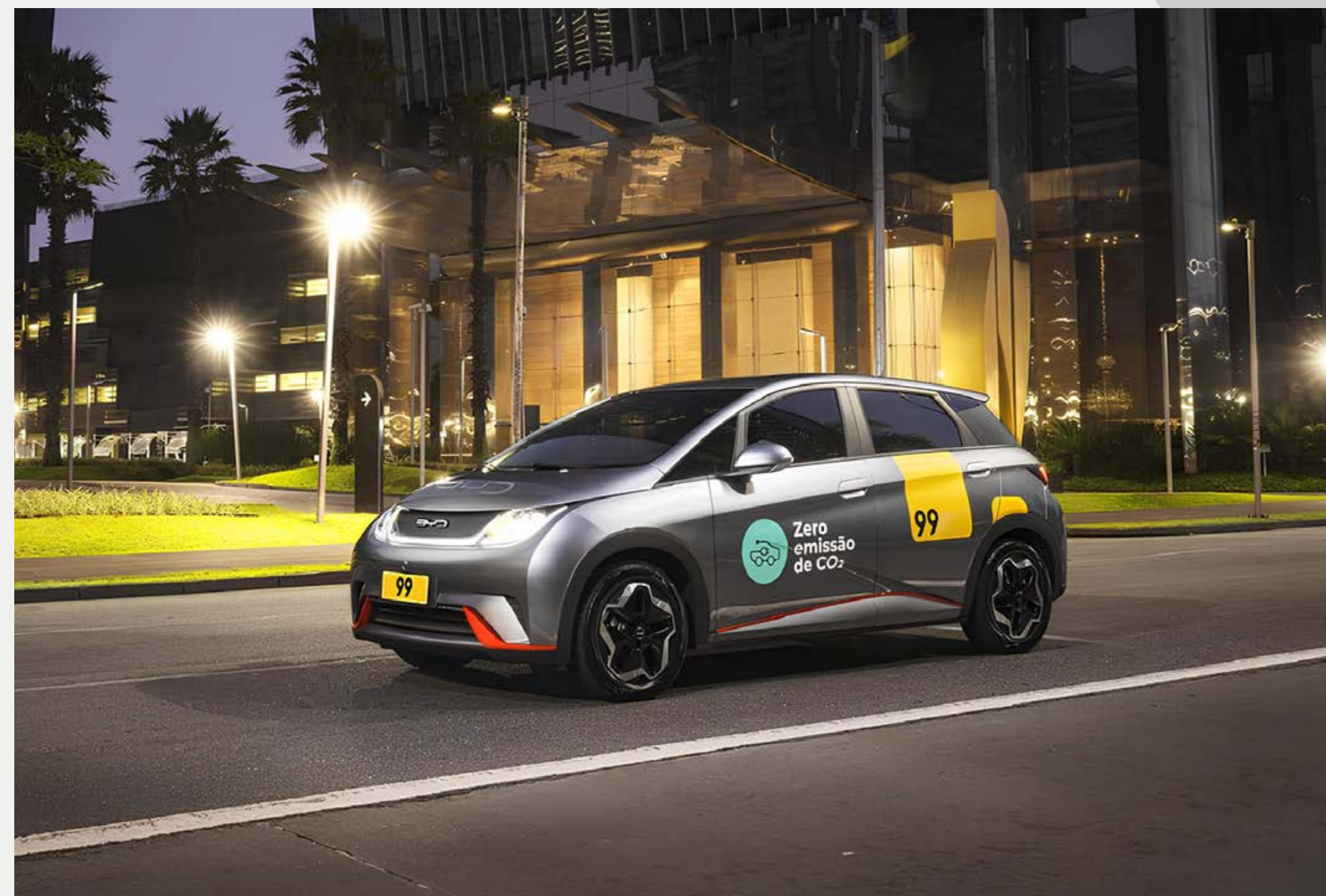
In 2020, BYD Skyrail São Paulo and São Paulo Metro signed a contract for the supply of trains for the Line 17 (Gold) Project. BYD Skyrail will provide 14 train sets for the Skyrail system, each with five cars, designed to accommodate a daily flow of up to 185,000 passengers upon full completion of the line. The contract also includes the installation of platform doors at eight stations on the line, equipment for the electrical power supply system, track switching devices, train maintenance equipment, and a central control system. The completion of Line 17 is expected to significantly alleviate traffic congestion between Congonhas Airport and other sections of the city. The adoption of Skyrail in São Paulo will result in improved urban mobility, making it a benchmark for clean energy and sustainability.

## CORPORATE VEHICLES

In a world where the pursuit of sustainable practices to mitigate the emission of polluting gases and contribute to the decarbonization of the planet is increasingly urgent, companies are adopting 100% electric corporate fleets as part of their environmental commitment.

In addition to significantly reducing carbon footprint, this transition to electric vehicles brings tangible benefits such as lower maintenance and fueling costs.

BYD's corporate vehicles not only adhere to rigorous environmental standards but also offer a safe and comfortable driving experience for both drivers and passengers, making them a smart and sustainable choice for companies concerned about the future of our planet.





1. Signing of the strategic agreement between Arval Brasil and BYD Brasil
2. BYD Brasil and 99 Partnership



## EXPANSION OF OFFERINGS AND BENEFITS FOR CONSUMERS

### BYD and the Alliance for Sustainable Mobility

A landmark in fleet electrification for passenger transport in Brazil. 99 (a ride-hailing company) and BYD have forged an unprecedented partnership where 300 corporate vehicles of the BYD D1 EV model now serve passengers in the State of São Paulo.

This partnership, part of the actions of the Alliance for Sustainable Mobility created and led by 99 alongside 12 other companies from various sectors, now offers the

largest fleet of electric vehicles in the country, with São Paulo as the pioneering city for this initiative.

A total of 300 vehicles were made available for rental, with a portion of the rental cost subsidized by the platform to make the initiative more accessible. The project involves direct collaboration from Dahruj Rent a Car, the rental company responsible for acquiring the 300 vehicles; Santander, which financed the operation; and IturanMob, the global mobility

arm of Ituran Brasil, a global leader in vehicle monitoring, which will manage fleet and charging logistics.

### ARVAL BNP Paribas

In 2023, Arval, a BNP Paribas Group company specializing in corporate mobility and vehicle leasing, announced a strategic agreement with BYD aimed at boosting the electrification of corporate fleets and also expanding the leasing model for individual customers in Brazil.

This partnership aims to enhance the availability of electric and hybrid models (BEV and PHEV) for fleets operated by clients, aligned with Arval Beyond's strategic focus on energy transition. Moreover, it will create increasingly favorable financial conditions for consumers by combining Arval Brasil's fleet management expertise with BYD's leadership and specialization in electric vehicles.

Additionally, it will support the establishment of the new brand BYD Mais, a white-label rental program, with Arval Brasil managing all requirements for BYD model subscriptions so that the brand's network can offer this option to end consumers.



## GREEN LOGISTICS

Green logistics comprises a set of actions aimed at minimizing the environmental impacts resulting from activities in the logistics sector. BYD directs investments towards developing technologies for logistics, including trucks, forklifts, pallet trucks, and tow tractors, all 100% electric.

Upon entering this market, BYD established three fundamental objectives: the use of long-lasting batteries, the pursuit of energy efficiency, and environmental preservation. This commitment guided the development of BYD's battery-powered logistics equipment, marking a transformation in the habits and applications previously dominated by traditional machines and vehicles.

## **POLLUTION-FREE FREIGHT TRANSPORT**

The acceptance of sustainable freight vehicles among companies is growing in the Brazilian market. In addition to providing cleaner and more efficient mobility solutions, BYD Brazil offers options that meet the specific needs of the freight transport market, while also contributing to the reduction of carbon emissions and environmental preservation.

### **100% Electric Trucks**

BYD Brazil's electric trucks represent a revolution in the freight transport industry. With a perfect combination of innovation, efficiency, and sustainability, these vehicles are leading the shift towards a cleaner future.

BYD Brazil offers two models of multi-purpose electric trucks, the eT5 7,200 and the eT18 21,250. Equipped with lithium iron phosphate batteries, they ensure impressive range while also providing total safety and adaptation to the specific needs of each fleet. Moreover, they offer silent operation and zero emissions, contributing to environmental preservation and improving quality of life in urban areas. By choosing BYD's electric trucks, companies not only invest in cutting-edge technology but also demonstrate a serious commitment to sustainability and environmental responsibility.



#### **BYD eT5 7.200**

The eT5 7,200 100% electric truck represents a versatile and efficient solution for urban cargo transport. With a range of 185 km (C-WTVC) and a capacity to carry up to 3900 kg, this model is ideal for last-mile logistics operations.



#### **BYD eT18 21.250**

The eT18 21,250 100% electric truck is versatile and has a range of up to 165 kilometers (C-WTVC). In addition to its ability to carry up to 13,300 kg, the model has a gross vehicle weight of approximately 21 tons.

## HANDLING EQUIPMENT - PIONEERING IN LITHIUM BATTERIES

Recognizing the environmental challenges and demands for operational efficiency, BYD has been investing in innovative technologies to offer cargo handling solutions that not only boost productivity but also significantly reduce carbon emissions and promote safer and more sustainable work practices.

### BYD battery-powered forklifts

BYD has more than 2,000 forklifts with lithium iron phosphate batteries operating in Brazil. Each 100% electric handling equipment sold by BYD provides significant environmental benefits, as it avoids emitting an average of 51 tons of CO<sub>2</sub> per year, equivalent to planting about 364 trees. Renowned for its lithium iron phosphate battery, BYD's 100% electric forklifts ensure autonomy for three shifts without battery replacement, with partial recharges (no memory effect), allowing a full recharge in up to two hours, compared to eight hours for the traditional lead-acid battery.

BYD's logistics equipment line serves various segments, such as aerospace, automotive, pulp and paper, metallurgical, food, beverages, pharmaceuticals and cosmetics, chemicals, and refrigerated and frozen foods, with a battery warranty of 5 years or 10,000 hours.



### Key Differentiators

- Robustness and durability under heavy use provide greater availability.
- Fast battery charging. Opportunity charging in just a few minutes between shift changes, with no memory effect.
- Average output of 3 kWh per hour, while comparable LPG units have an output of 2.2 kg per hour of work.

### Green Tug – Electric Tow Tractor

One of BYD's highlights is the Green Tug tow tractor. With a transport capacity of up to 25,000 kg, the 100% electric tow tractor can operate for three shifts, has a total recharge time of 2.5 hours, and does not require a battery room. In addition to its economy and autonomy, a standout feature of the equipment is the comfort it offers, including ergonomic seats and the One Pedal Driving system, where the driver uses only the accelerator pedal (KERS), with minimal use of the service brake.

## COMMITMENT TO SUSTAINABILITY IN LOGISTICS



BYD actively participates in the Green Logistics Program Brazil (PLVB), a strategic initiative that demonstrates the company's commitment to corporate social and environmental responsibility. This program aims to capture, integrate, consolidate, and apply knowledge with the purpose of reducing greenhouse gas emissions (GHG), especially carbon dioxide (CO<sub>2</sub>), and decreasing atmospheric pollution. Additionally, the PLVB seeks to enhance logistics and freight transport efficiency in Brazil through the progressive development of a national sustainability program in logistics. This participation underscores BYD's dedication to building a more sustainable and environmentally responsible future.

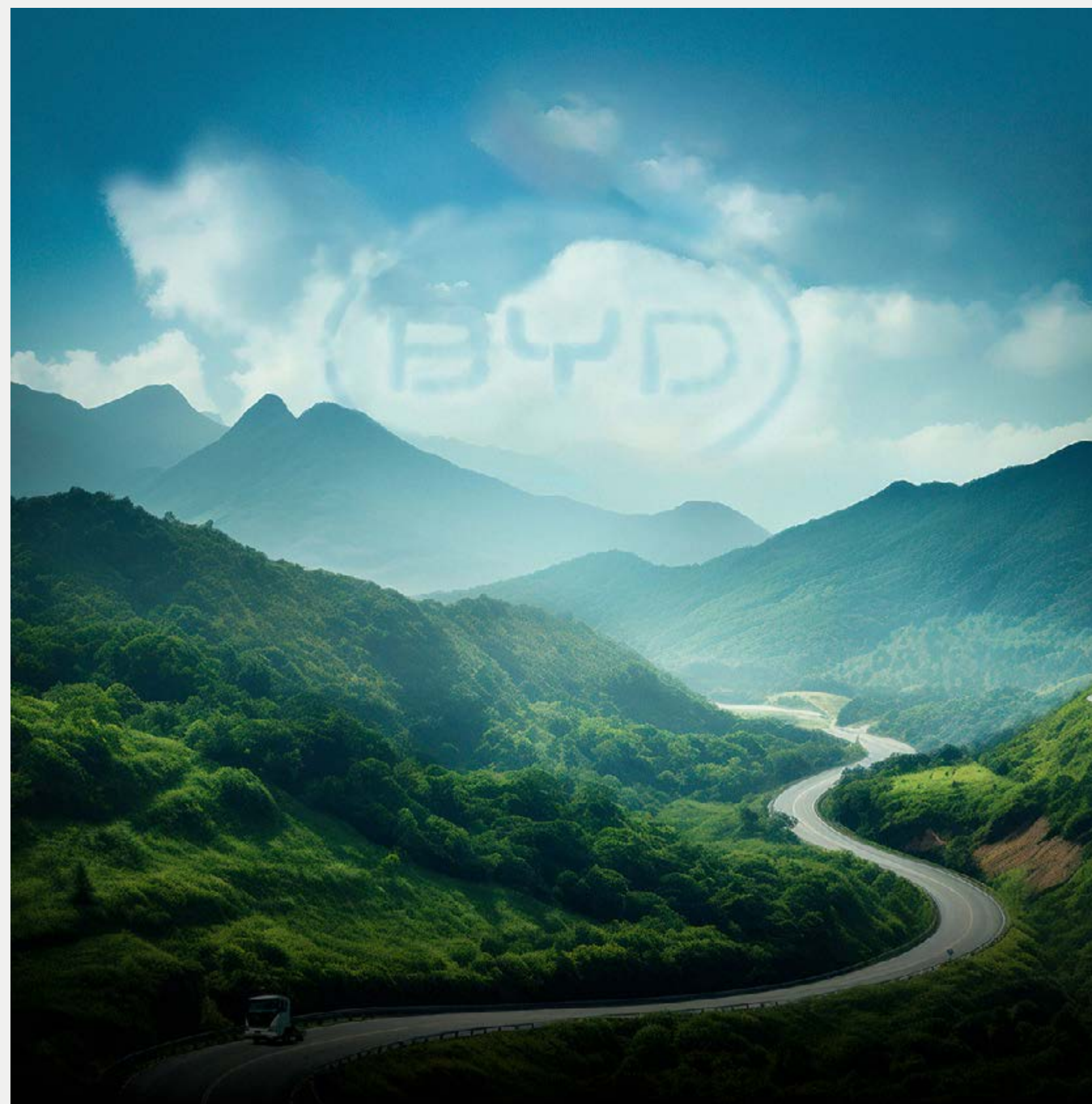


BYD is also an active member of the Brazilian Association of Wholesalers and Distributors (ABAD), a national entity that represents wholesalers and distributors operating across various commercial segments. ABAD's mission is to foster the development of the supply chain in the Indirect Channel throughout Brazil, promoting integration between industry, independent retail, service providers, and sector companies. BYD's participation in ABAD underscores its commitment to collaboration and strengthening the Brazilian market, demonstrating its dedication to contributing to sustainable growth and enhancing the country's economy.



## ENVIRONMENTAL MANAGEMENT

BYD's sustainable approach is integrated into every phase of its production chain. The company sets goals and guidelines aimed at minimizing environmental impacts throughout the production process. This includes responsible waste management, promoting energy efficiency, conscientious water use, effluent treatment, and minimizing atmospheric emissions. These initiatives reflect BYD's ongoing commitment to sustainability, highlighting its contribution to environmentally responsible business practices.





# BYD

## ACTIONS ALIGNED WITH THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

BYD Brasil reaffirms its commitment to the UN Global Compact by aligning its environmental management actions with the Sustainable Development Goals (SDGs). In line with SDGs 6 (Clean Water and Sanitation), 7 (Affordable and Clean Energy), 9 (Industry, Innovation, and Infrastructure), 12 (Responsible Consumption and Production), 13 (Climate Action), and 17 (Partnerships for the Goals), BYD Brasil implements initiatives focused on preserving water resources, promoting clean

and affordable energy sources, developing innovative and sustainable technologies, reducing resource consumption and waste, combating climate change, and strengthening strategic partnerships. Through sustainable production practices, energy efficiency, and responsible waste management, the company aims not only to fulfill the SDGs related to environmental management but also to contribute to building a more sustainable future for future generations.

## ENVIRONMENTAL MANAGEMENT

A BYD is fully committed to building a sustainable future driven by electricity, ensuring harmonious coexistence between urban areas and nature while safeguarding air quality. Since its foundation in 1995, this philosophy has been the guiding pillar of all company activities.

In practice, BYD incorporates environmental preservation practices into all its operations. This includes not only developing pollution-free products but also implementing sustainable strategies across all spheres of its activities.

With the aim of minimizing its environmental impact, BYD establishes comprehensive environmental goals and guidelines in its production processes. This encompasses effective waste management, responsible water use, continuous pursuit of energy efficiency, and proactive reduction of atmospheric emissions.

Furthermore, as part of its sustainability approach, BYD invests in awareness and training programs for its employees to foster a corporate culture centered on environmental responsibility.

A BYD aims to increase awareness of the importance of conserving natural resources and adopting sustainable practices across all its operations through educational initiatives and team engagement. This strategy not only strengthens the commitment to sustainability but also encourages innovation and the continuous pursuit of environmentally responsible solutions in our daily practices.

### ISO 14001:2015 and ISO 9001:2015 Certification

In 2023, all four BYD factories in operation underwent recertification for ISO 14001:2015 and ISO 9001:2015 standards. These standards guide and establish requirements for implementing a robust Environmental Management System.

These actions demonstrate BYD's strong commitment to sustainability and its determination to be a leader in environmentally responsible corporate practices.



## ENERGY EFFICIENCY AND REDUCTION OF ATMOSPHERIC EMISSIONS

BYD promoted the replacement of 230 400W sodium vapor lamps with 50W Light Emitting Diode (LED) lamps in the production warehouses of its branch in Brazil, located in Campinas. This project aimed to minimize environmental impacts associated with sodium vapor lamps, such as reducing greenhouse gas (GHG) emissions and decreasing electricity costs. With the complete replacement of sodium vapor lamps by LEDs, energy consumption was reduced by approximately 70%, leading to a corresponding reduction in GHG emissions from this energy use.

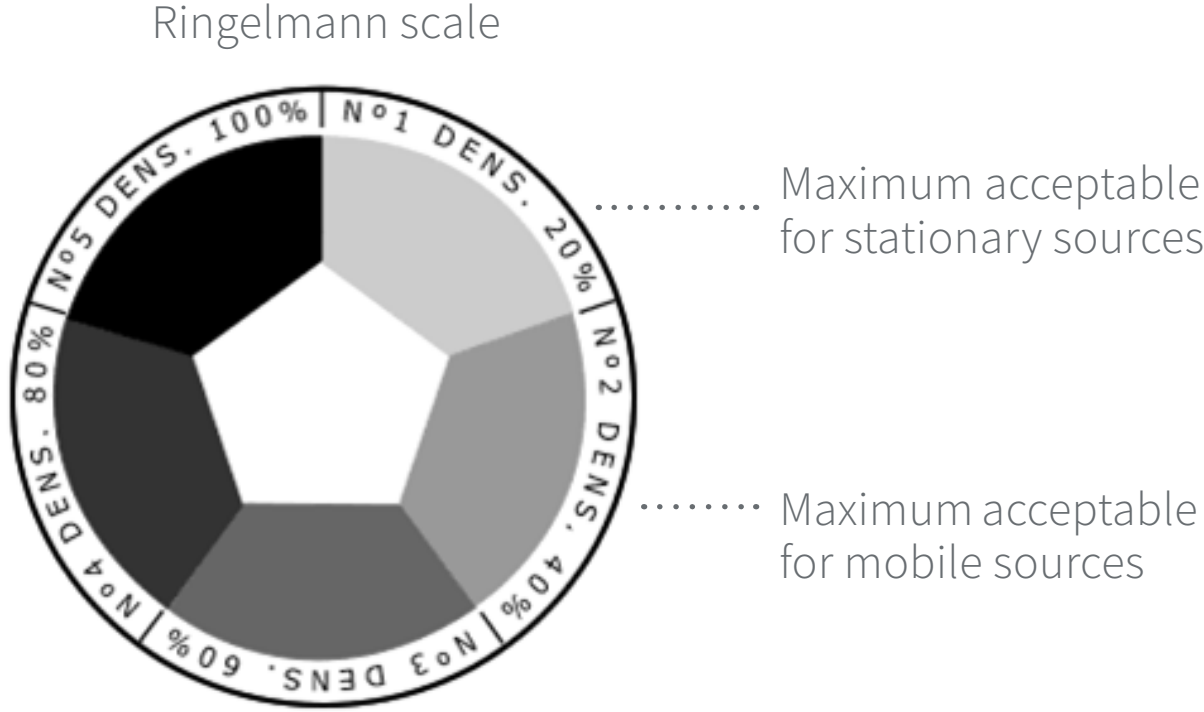


LED lamps installed at the BYD Energy factory in Campinas, São Paulo

Additionally, BYD concluded the year 2023 with 14 forklifts in operation across its Energy, Automotive, After-sales, and Solar Kit units. Since their introduction in 2015, these forklifts have prevented the emission of over 900 tons of CO<sub>2</sub>, equivalent to planting 6,300 trees. Moreover, the company operates a fleet of 100% electric cars to meet internal demands, resulting in lower daily emissions of pollutants. Another initiative to reduce pollutant emissions is the encouragement of carpooling among employees.



BYD Electric Forklifts



### Smoke Emission Monitoring

BYD recognizes the importance of monitoring smoke emissions as part of its efforts to protect air quality and public health. Therefore, effective measures have been implemented to reduce its carbon footprint and preserve the ecosystems where it operates. This includes standardizing actions related to the control and monitoring of black smoke emissions from diesel vehicles used by suppliers and service providers, as well as from the power generators supplying the company.

Measurements are conducted using the Ringelmann Scale, a graphical scale for colorimetric evaluation of smoke density. When smoke density reaches 60% to 100%, the driver is fined, and the company is notified to perform the necessary maintenance to bring the vehicle into compliance. Upon the second offense, the vehicle is prohibited from entering BYD premises.

## RATIONAL WATER USE

Recognizing the vital importance of preserving water resources, BYD has established and maintains a permanent program to ensure rational water use in all its operations. A fundamental pillar of this commitment is the responsible management of effluents generated during the company's daily activities.

BYD has a Effluent Treatment Plant (ETP) that processes all effluents from the company's toilets and restaurant. The functionality and efficiency of this ETP are rigorously monitored through monthly analyses, based on parameters outlined in Decree 8,468 - Article 19A - Effluent Discharge in Sewage Systems, conducted by an accredited laboratory. These analyses not only ensure compliance with environmental standards but also demonstrate BYD's commitment to sustainability.

In the first half of 2023, the Effluent Treatment Plant (ETP) at the BYD Campinas/SP unit (Auto/Energy) underwent resizing. The equipment originally had the capacity to treat effluents from 420 employees per day.

Positively, due to the increase in the number of employees, the need to expand the station was identified, and it was redesigned to meet a demand of 800 employees per day. This allows the company to continue complying with current regulations and respecting the environment.

In addition, BYD has a rainwater harvesting system at its facilities. A collection system installed in the factory buildings in Campinas/SP gathers rainwater, which is then directed to a reservoir with a capacity to store up to 500m<sup>3</sup>. This water is subsequently used to supply the fire fighting system and for outdoor tap water, significantly reducing the demand for potable water.

To ensure efficiency in water usage, BYD adopts proactive monitoring and maintenance practices. Regular measurements are conducted in all company warehouses to identify and address leaks and potential overconsumption. Additionally, regular audits and awareness programs are conducted for employees, encouraging responsible water use.

Effluent Treatment Plant (ETP) at the BYD factory in Campinas, São Paulo



## RESIDUE MANAGEMENT

The BYD Brasil is committed to sustainability in all its operations, and waste management plays a crucial role in this mission.

The entire company complies with the National Solid Waste Policy – Law 12.305/2010 – and Resolution SIMA No. 27/2021, which establishes the Waste Transport Manifest (MTR) of the State Online Solid Waste Management System and the Certificate of Final Destination (CDF). Currently, the majority of waste generated at BYD is sent for recycling or other treatment processes. Only factory sweeping and sanitary waste are disposed of in landfills.

### Recycling

A BYD has a standardized methodology for handling its waste and a systematic approach to monitor the entire production process with the aim of generating fewer rejects and producing in a greener manner.

Selective collectors, standardized by CONAMA Resolution 275/2001, are distributed to meet the needs of each sector within the company.

The BYD also has monthly outreach programs through various channels, both online and offline, covering

current events, answering questions, and promoting environmental awareness.

Another point of compliance and respect for the environment is adhering to state legislation regarding reverse logistics programs for plastic and cardboard packaging in all states of the Federation.



Selective waste bins at the BYD unit in Campinas, São Paulo

### Biomass

In 2023, 122.12 tons of wooden pallets were diverted from landfills and instead used as biomass.

### Coprocessing

Wastes classified as Class I require special attention when being disposed of; therefore, they undergo coprocessing, an environmentally approved technique by official bodies that reuses industrial solid waste as a source of energy in cement kilns. This process helps reduce CO<sub>2</sub> emissions and decreases the amount of waste in Class I landfills.

### Composting

The food waste generated at BYD is directed to composting to be transformed into organic fertilizer. In 2023, 48.65 tons of this type of waste were diverted from landfills.

### Reuse

Another reuse process that BYD's Solar Kit factory has developed over this year is the reuse of wooden pallets so that they can be used again for storing and shipping finished products.



1. SANASA - CASA Project - Water Cycle in Sanitation - Interactive Van  
 2. SANASA - CASA Project - Water Cycle in Sanitation

## ENVIRONMENT WEEK

During the 2023 Environmental Week, employees at BYD in Campinas/SP and Manaus participated in a series of activities and initiatives dedicated to environmental awareness and preservation. On the first day, collaborators engaged in a creative activity where they wrote positive messages about the environment on leaf-shaped paper, contributing to the construction of a fictional tree. This activity prompted reflections on important environmental issues and underscored the significance of collective engagement for sustainable development.

During the week, the Water Supply and Sanitation Society of Campinas/SP - SANASA was present with an interactive van, known as the CASA Project - Water Cycle in Sanitation, to present information to employees and the local community about conscientious water usage and basic sanitation. The presence of a nearby school allowed children to be involved as well, expanding the reach of knowledge about sustainability.

A team of employees visited a supplier approved by BYD, responsible for the collection and analysis of water and effluents, to understand the process and the importance of the service provided. Additionally, a session of BYD University was conducted by the CSO consultancy, addressing the ESG (Environmental, Social, and Governance) topic, reinforcing BYD's commitment to sustainable practices.

In Manaus, AEGEA (Águas de Manaus) delivered a lecture on the importance of water, emphasizing the relevance of this resource for the environment and society.

Throughout the week, a variety of environmental topics were displayed on the company's notice boards, covering aspects such as Environmental Week, responsible water and energy consumption, and selective waste collection. These initiatives underscore BYD's dedication to fostering environmental awareness and advocating for sustainable practices across all its operations.



## PEOPLE

At BYD, realizing dreams is fostered by a corporate culture that prioritizes continuous development. In doing so, the company strives to sustain an innovative work environment capable of creating unique value for society and customers alike. From this perspective, BYD understands and acknowledges that its most valuable asset is its people.



## ACTIONS ALIGNED WITH THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

BYD Brazil recognizes the importance of promoting actions aligned with the United Nations Sustainable Development Goals (SDGs), especially concerning the well-being and development of people. In line with SDGs 3 (Good Health and Well-being), 5 (Gender Equality), 8 (Decent Work and Economic Growth), and 10 (Reduced Inequalities), BYD Brazil invests in initiatives that promote physical and mental health and fosters gender equality at all levels of the organization, creating opportunities for decent work. Through diversity and inclusion policies and partnerships with educational and community institutions, the company is committed to building a workplace that values and respects diversity, thereby contributing to human and social development.





1. Employees at the BYD Auto factory in Camaçari | 2. Integration of Chinese employees at the BYD Auto factory in Camaçari

## PEOPLE: DEVELOPMENT

BYD believes that the pursuit of dreams is the driving force behind each individual's ability to face challenges and achieve great accomplishments. This belief underpins BYD's human resources policy, leading the company to invest in the attraction, care, retention, and development of its people, fostering a workplace with sustainable relationships.

As of the end of 2023, BYD had a total of 644 employees, comprising 243 women and 401 men. The company also includes employees with disabilities and expatriates in its workforce, recognizing the importance of providing opportunities for everyone and acting inclusively to promote diversity internally.

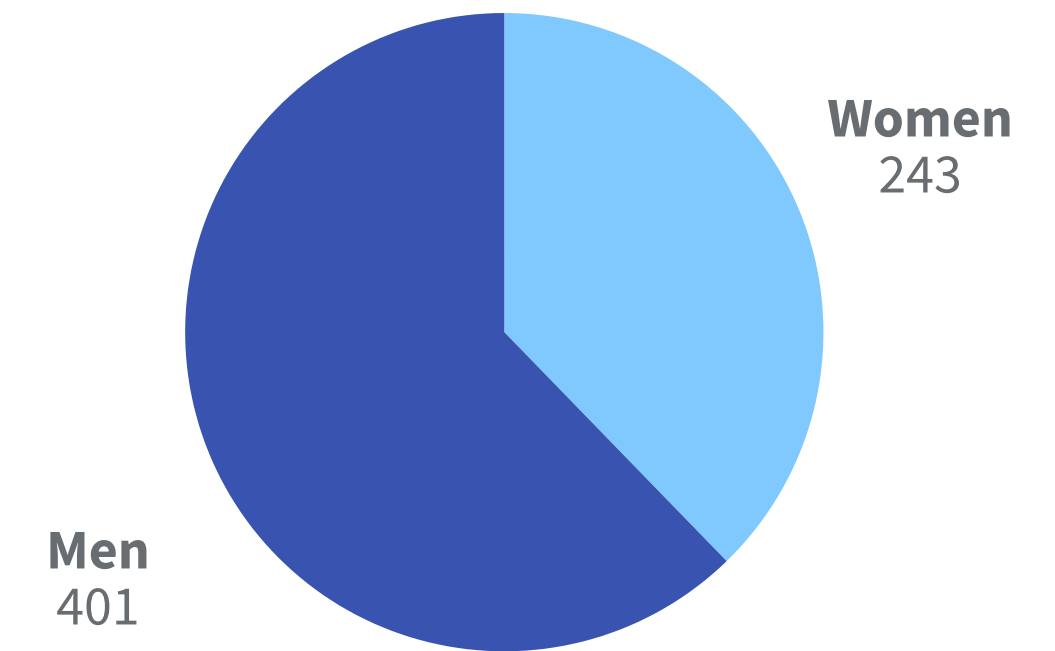
Expatriate Chinese employees who come to work at BYD Brasil receive comprehensive support during their stay in the country, including assistance with housing, documentation procedures, and necessary follow-up to ensure their adaptation to Brazil proceeds smoothly. Throughout 2023, BYD maintained 18 expatriates across its corporate and industrial plants in Brazil.

### Leadership Development

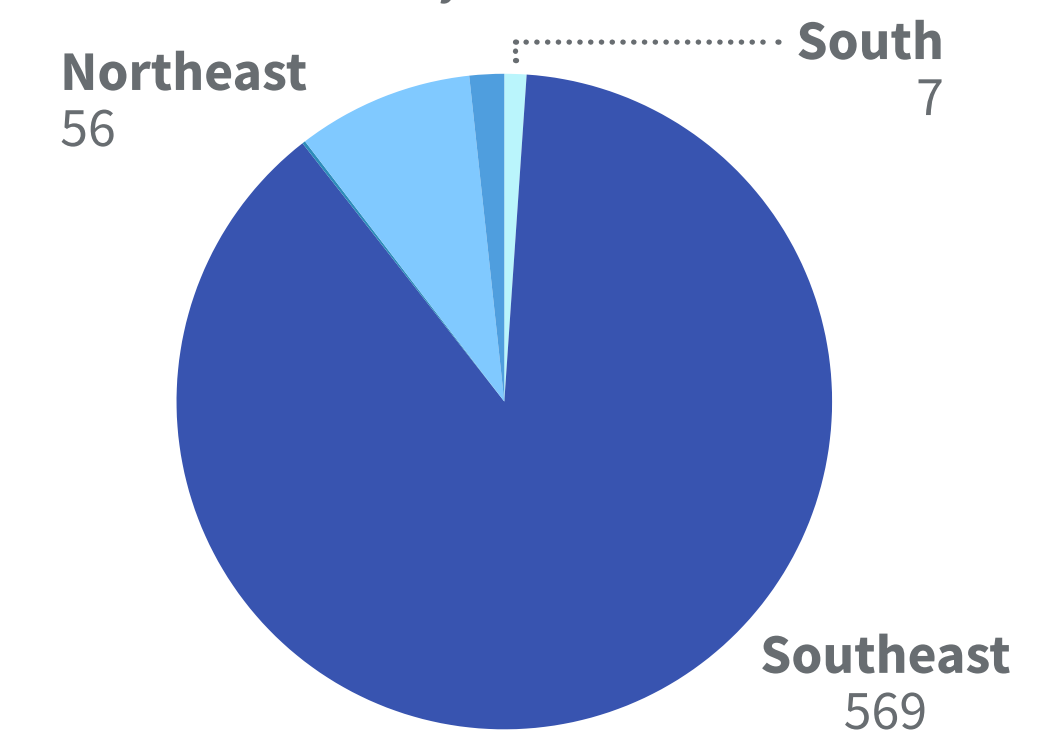
The company aims to develop its leadership to enhance people management. To achieve this, BYD has created the Leadership Development Plan, a program designed for employees promoted to managerial positions. The program includes a series of training sessions and incorporates the DISC behavioral profile assessment, enabling leaders to formulate an Individual Development Plan.

## EMPLOYEES BY GENDER AND STATE

By gender



By state



## PEOPLE: DEVELOPMENT

### BYD University

BYD University is an internal training program led by employees and special guests. Every two weeks, online training sessions on various topics are offered to all administrative staff.

In 2023, “BYD University: Employs + Women” was highlighted, held in partnership with the Legal department, focusing on Law 14.457/2022 - Employs + Women Program. The Women’s Committee, Wise In Search of Excellence, was established to support female leadership within the company.

### Careers

BYD values developing its employees, which is why hiring is based on individuals with the capacity and desire to make a difference, regardless of age, race, color, religion, gender identity, sexual orientation, or background.

You can explore job opportunities on BYD’s career portal at: <https://bydbrasil.gupy.io/>

### Referral Programs

In 2023, BYD launched the Referral Program, allowing all employees to participate. It aims to encourage and reward qualified referrals.

Job openings are periodically shared with employees and are also available on the career portal.

### Onboarding Program

The Onboarding process is a planned integration that helps new employees socialize and gradually perform their roles efficiently. Each new employee is assigned a “buddy” who assists them in their daily activities.

The program also includes evaluations at 45 and 90 days of employment, where the manager conducts feedback sessions with the new team members.

### Performance Evaluation

The annual performance evaluation, conducted by the manager, aims to assess organizational competencies and provide feedback to the employee. It’s an opportunity to discuss the actions outlined in the Individual Development Plan (IDP) to be achieved.

In the last cycle, the process was enhanced and divided into operational and administrative levels. Organizational competencies were derived from the Company’s values, with specific goals set for each level. HR also developed a list of suggested actions and training for each evaluated competency.

### Communication and Employee Relations

BYD maintains transparent communication to foster a loyal and harmonious relationship between the organization and its employees. The means for this communication include bulletin boards, emails, a magazine, and meetings. Additionally, the company celebrates holidays such as Mother’s Day, Father’s Day, Easter, Christmas, Chinese New Year, among others.

### Suggestion Box

We consider employees’ opinions crucial in building an ever better work environment, which is why the company provides suggestion boxes in all areas and a digital version via Google Forms for employees to contribute ideas for process improvements, implementing benefits, and other practices.

In 2023, based on received suggestions, the Gympass benefit was implemented, offering discounts at gyms and studios, promoting employee well-being and quality of life.

## PEOPLE: DEVELOPMENT

### Mom's Corner

BYD values and supports its mother employees, recognizing the importance of breastfeeding for the well-being of babies and mothers themselves. Therefore, it provides a dedicated space called "Mom's Corner," where mothers returning from maternity leave have a comfortable and appropriate environment for expressing breast milk.

This space is carefully equipped and designed to provide privacy, comfort, and hygiene, allowing mothers to undergo this important process with peace of mind and safety.

### Childcare assistance

BYD provides daycare assistance for all eligible employees based on the following criteria:

- The benefit is up to 20% of the lowest normative salary in the category per child aged up to 24 months.
- Daycare assistance is also granted to a widowed, separated, adoptive, or biological father who holds legal guardianship of the child or who maintains economic responsibility and dependence on the child. It is also extended to a married father, provided that his wife or partner is employed and does not receive this benefit.

### Recognition program

BYD recognizes employees who excel in their activities through recognition programs such as the BYD Ambassador. This tool values internal talents and contributes to the organizational climate.

In 2023, the program was enhanced to include recognition by managers of their subordinates. Now, there is a quarterly Outstanding Employee award, which makes them eligible for the Employee of the Year and People who Make a Difference awards.



Employees of the Year 2023

### Year-end party

The BYD Brazil end-of-year party was a moment of celebration and recognition, offering a unique opportunity to participants: a test drive in the company's vehicles.

During the event, employees had the chance to experience the innovation and technology present in the electric cars, strengthening their connection with the brand, creating lasting memories, and fostering enthusiasm for the upcoming year.



Year-end Party - Test Drive

## WOMEN'S COMMITTEE - WISE IN SEARCH OF EXCELLENCE

The Women's Committee at BYD was created in 2023 with the aim of suggesting best practices to achieve gender equity and providing support for the development of BYD's female employees.

### Main activities

- Study group on the Emprega + Mulheres Program Law and other developments such as the creation of the Women's Committee.
- Dissemination of the parental support measures already adopted at BYD, throughout the company.
- Alignment with CIPA (Internal Commission for Accident Prevention), to include the agenda for combating harassment in the schedule.
- Promotion of the parental support questionnaire, aiming to understand the needs and suggestions of employees to improve family time quality.
- Opportunity for all employees to suggest names for the Committee.
- Adherence to the Empresa Cidadã Program granting 6 months of maternity leave and 20 days of paternity leave.
- Regular meetings with female employees for training, debates, and discussions;

- Creation of a WhatsApp group so that all women can interact and share their daily experiences.

### Results Achieved

- Women's inquiries to HR and Legal seeking more information about measures already available at BYD.
- Engagement of women interested in joining the committee, as well as participation in the parental support questionnaire, where women, mothers, and fathers could provide their suggestions.
- Campaign to support the Women's National Team in the 2023 World Cup.
- Intersolar South America Fair - Highlighting BYD's actions in recognizing women in the solar energy sector.
- The Committee secured approval for a budget for 2024 to implement better conditions and invest in women's development.

### Awards

In 2023, the company was recognized with the 'Childhood Friendly Company' Seal and 'Women's Friend' Seal by the City Hall of Campinas, as well as with the 'Human Rights and Diversity' Seal by the City Hall of São Paulo.



1. "Human Rights and Diversity" Seal
2. "Early Childhood Friendly Company" Seal



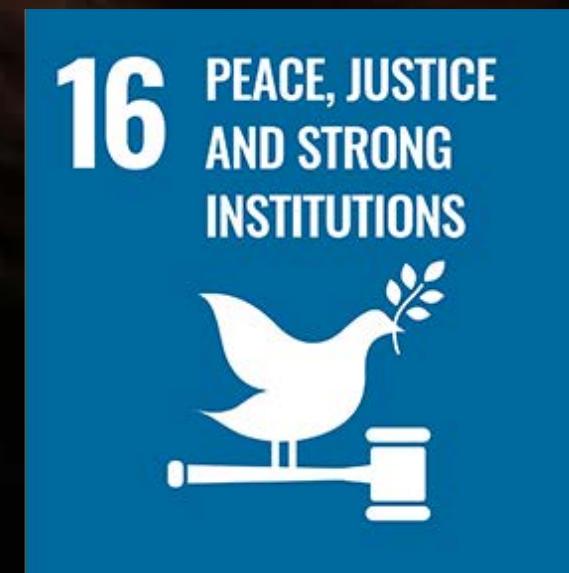
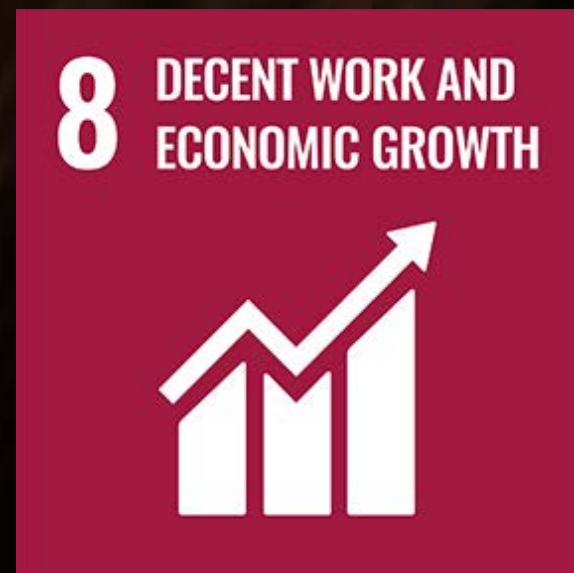
## COMPLIANCE

The approach and organizational culture permeate BYD's business conduct, guiding interactions with employees, clients, partners, service providers, suppliers, and the community. These guidelines establish the framework to define criteria and practices to be followed in all operations related to BYD Group companies. They are fundamental principles that must be respected by all who maintain any type of relationship with BYD.



## ACTIONS ALIGNED WITH THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

BYD Brazil recognizes the importance of compliance with the principles of the UN Global Compact and is committed to promoting actions aligned with the Sustainable Development Goals (SDGs) related to compliance and corporate governance. In line with SDGs 5 (Gender Equality), 8 (Decent Work and Economic Growth), 10 (Reduced Inequalities), and 16 (Peace, Justice, and Strong Institutions), BYD Brazil seeks to ensure gender equality in all its practices and promote fair and safe working conditions. Through robust compliance policies, regular training, and monitoring and reporting systems, BYD aims to ensure that all operations comply with applicable laws, regulations, and ethical standards. In doing so, the company reaffirms its commitment to integrity, transparency, and accountability in all its activities.



## COMPLIANCE

BYD supports its actions based on standards that must be observed by all acting on its behalf, therefore, it seeks to establish ethical relationships with various stakeholders. The Compliance area at BYD encourages compliance with current legislation, internal norms, and the Code of Conduct. To achieve its goal, investigations and analyses of reports are conducted through anonymous channels or personal reports.

Additionally, the Code of Conduct also serves as a reference for business partners, being a document integrated into both employment and business contracts, with full access provided to employees and partners, who declare their knowledge and consent from the first day of work or the start of negotiations.

### Functions of BYD Compliance

- Periodic analysis of company risks. Access should be available to both shareholders and employees.
- Involvement in labor relations aimed at reducing the risks of workplace accidents, occupational illnesses, improving working conditions, as well as investigating acts of violence, particularly regarding any form of harassment or prejudice.

### Implemented Measures

- Creation of company rules and procedures: BYD provides its Code of Conduct to all employees.
- Communication: BYD sends periodic communications via email to its employees, conducts training, and provides materials in commonly accessible areas, such as meeting rooms, social spaces, cafeterias, and others.
- Reporting Channels: Employees and partners have various channels at their disposal for reporting concerns, such as a specific email, an online form, physical drop boxes, and in person with a member of the Compliance team. Additionally, the receipt of reports is confidential and can even be anonymous if the reporter prefers.
- Disciplinary Measures: BYD has internal guidelines for applying disciplinary sanctions, aimed at preventive measures.
- Publication of the BYD Compliance Manual (<https://www.byd.com.br/wp-content/uploads/2022/08/Manual-compliance-BYD-imagens-resolucao.pdf>). A PDF version is made available to all employees who have an email, and a physical copy is provided to those who do not.
- In all commercial relationships, suppliers and partners expressly declare their awareness of the terms of the BYD Compliance Manual.



BYD has been working to enhance the reliability of its Compliance Program to ensure the effective adherence to internal standards and procedures.





## **PARTICIPATION IN TRADE ASSOCIATION**

Trade associations play a pivotal role in advocating for and fostering public discourse around the interests of the categories they represent and society as a whole.

BYD participates actively in ABVE (Brazilian Association of Photovoltaic Solar Energy) and ABGD (Brazilian Association of Distributed Generation). Additionally, it is an associate member of ABAD (Brazilian Association of Wholesalers and Distributors of Industrialized Products), ABINEE (Brazilian Electrical and Electronics Industry Association), and ABEIFA (Brazilian Association of Importers and Manufacturers of Automobiles).



## **CORPORATE CREDITS AND INFORMATION**

BYD Group companies: BYD do Brazil Ltda, BYD Energy do Brazil Ltda, Metrogreen do Brazil Ltda, BYD Indústria de Baterias Ltda, Consórcio BYD Skyrail São Paulo

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Overall Coordination of the Sustainability Report:  
Marketing and Sustainability Department of BYD Brazil

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