

RESPOND

COP30: BELÉM





Prince Sultan Bin Abdulaziz
International Prize for Water

Recognizing Innovation



Winners for the 11th Award (2024)



Creativity Prize

[1] The team of Maria Cristina Rulli (Polytechnic of Milan, Italy) and Paolo D'Odorico (University of California, Berkeley, USA)

for spearheading novel analyses of the water-energy-food nexus that describe how numerous complex factors interact, providing for better freshwater stewardship in a changing, globalised world.



Maria Cristina Rulli



Paolo D'Odorico

[2] The team of Zhiguo He (Zhejiang University, China)

for developing working, versatile soft robots with unprecedented manoeuvrability that have the capacity for numerous underwater research and monitoring applications. Team members include: Pengcheng Jiao and Yang Yang.



Zhiguo He



Surface Water Prize

Qiuhua Liang (Loughborough University, UK) and his team

for developing innovative, open-source, multi-GPU hydrodynamic models to support real-time flood forecasting at fine temporal resolutions. Team members include: Huili Chen, Xiaodong Ming, Xilin Xia, Yan Xiong and Jiaheng Zhao.



Qiuhua Liang



Groundwater Prize

Chunmiao Zheng (EIT, Ningbo, China) and his team

for powerful management tools to understand groundwater processes in ecohydrologic systems under diverse hydrological and climatic conditions, considering environmental and socioeconomic factors at local and national scales.



Chunmiao Zheng



Alternative Water Resources Prize

Virender K. Sharma (Texas A&M University, USA) and his team

for the effective removal of antibiotics and pharmaceuticals from wastewater through advanced oxidative processes by activated ferrate, which work at high, even enhanced, efficiency in water containing commonly occurring natural organic matter. Team members include: Ching-Hua Huang, Chetan Jinadatha and Radek Zbořil.



Virender K. Sharma



Water Management & Protection Prize

Joseph Hun-wei Lee (Macau University of Science & Technology, China)

for developing unique and highly effective hydro-environmental modelling systems for the sustainable water management of smart cities.



Joseph Hun-wei Lee

Invitation for Nominations 12th Award (2026)

Nominations open online until 31 December 2025

www.psipw.org

e-mail: info@psipw.org



*COP30 President-Designate,
Ambassador André Corrêa
do Lago.*

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COP30 PRESIDENCY CALLS ON GLOBAL BUSINESSES TO LEAD THE CLIMATE TRANSITION

Positioning the private sector not just as a participant, but as the primary engine for building a new, climate-resilient global economy.

The incoming Presidency of COP30 released its seventh letter to the international community in September, focused on mobilizing the global private sector as a vital force for climate implementation and economic transformation. Addressed as an urgent call to action, the letter invites business leaders, investors and entrepreneurs to engage deeply with COP30, not only as a diplomatic milestone but as a catalytic moment for real-world delivery and co-creation of a new climate-aligned economy.

The letter underscores that the climate transition is already reshaping global markets, investment flows and innovation pathways, making it one of the most significant economic opportunities of our time. With its agility, scale, and capacity for innovation, the private sector is uniquely positioned to help shape the emerging climate economy. From renewable energy and regenerative agriculture to digital infrastructure and sustainable finance, companies that align early will be the ones to lead, and thrive, in this decisive decade.

"The time to act with urgency is now. The private sector has already accelerated the transition in many significant ways, however, it must now step forward, not back, increasing its engagement to make this transformation an exponential reality," wrote Corrêa do Lago.

The letter highlights the central role of the private sector in delivering on the goals of the Paris Agreement and urges companies to adopt credible transition plans, assess climate risks and engage meaningfully with governments and investors on long-term, climate-aligned strategies. As countries prepare to submit their 2035 Nationally Determined Contributions (NDCs), significant effort has been made by the COP30 Presidency to ensure these are not just political commitments but forward-looking instruments that guide development and provide predictability for the private sector, bridging negotiation with implementation and opportunity with investment.

To guide and structure this engagement, the COP30 Presidency is launching a strengthened Action Agenda, with 30 key objectives organized around six thematic axes, including energy transition, food systems, cities, biodiversity, social development, and enablers like finance and digital infrastructure. Activation Groups and Solution Acceleration Plans will drive collaboration, scale existing initiatives and ensure transparency through measurable outcomes.

As the world's largest climate convening moves to the heart of the Amazon, the Presidency is placing strong emphasis on building trust, transparency and opportunity across all sectors. This effort includes a direct invitation to the business community to attend and to co-create solutions.

COP30 will take place in Belém, Brazil, from November 10 to 21, 2025. The private sector is invited to participate in both formal negotiations and the Action Agenda through a variety of engagement platforms, high-level dialogues, and solution showcases.

By Presidency of COP30

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Building climate resilience through community-led sustainability initiatives



Published by: Responding to Climate Change Ltd
Thirleby Road, London, SW1P 1HG
+ 44 (0) 207 799 2222 | www.rtcc.org
Publisher: James Ramsey
Outreach: Nicole Serrij
© 2025 Responding to Climate Change Ltd

RESPOND MAGAZINE
Editor: Shaine Redden
Design & Production: Jo Hare
Finance: Shaine Redden

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SHOPPING CENTRES PLAY A MAJOR ROLE IN THE CLIMATE AGENDA

Unprecedented manifesto stated by Abrasce during COP30 opens a new chapter for the sector worldwide

THE GLOBAL SHOPPING CENTRES MARKET, CURRENTLY VALUED AT USD 6 TRILLION, HAS A ROLE IN THE CLIMATE AGENDA THAT IS PROPORTIONAL TO ITS IMPACT ON THE GLOBAL ECONOMY. MANY LATIN-AMERICAN COUNTRIES, INCLUDING BRAZIL, HAVE BEEN FOSTERING THE DEVELOPMENT OF RETAIL CENTRES AS A PATH TO BOOST THEIR ECONOMIES AND SOCIETIES. TO MAKE THIS GROWTH SUSTAINABLE, IT IS IMPERATIVE THAT THE INDUSTRY TAKES RESPONSIBILITY FOR ITS ENVIRONMENTAL EFFECTS WHILE ALSO CONTRIBUTING TO SOCIAL DEVELOPMENT, JOB CREATION AND ECONOMIC GROWTH.

Represented by Abrasce (Brazilian Association of Shopping Centres) since 1976 in Brazil, this sector has been pioneering in terms of advocacy and is also known for its commitment to the country and the sector's sustainable development and innovation. Its 50 years of leadership also made Abrasce a key representative in the Brazilian economy, with malls generating near R\$ 200 million in 2024.

An Unprecedented Manifesto

This commitment naturally led Abrasce to state a pioneering Manifesto during COP30. Glauco Humai, President of Abrasce and CLICC (Latin American Chamber of the Shopping Centre Industry), was the voice announcing this new chapter for the sector worldwide. He proposed actions divided into eight pillars:

- * **Sustainability in Operations:** Shopping centres should prioritize the use of materials with low environmental impact, while also adopting more sustainable technologies for waste treatment and recovery.
- * **Renewable Energy:** The industry is committed to increasing the use of renewable energy. This should include the expansion of negotiations on contracts for the supply of electricity using renewable sources.
- * **Water Efficiency:** Shopping centres can, through the implementation of low-consumption technologies and water reuse systems, reduce water consumption and waste.
- * **Education and Awareness:** The shopping centre industry also promotes awareness, highlighting issues such as climate change and the actions needed to minimize its impacts. Visitors, shopkeepers, employees and communities are the target audience of these education and awareness programs.
- * **Reduction of Carbon Emissions:** The Brazilian shopping centre industry is committed to setting targets to reduce emissions and adopting practices to reach carbon neutrality by 2050.
- * **Transparency and Accountability:** Regular reporting on the industry's progress towards sustainability is part of Abrasce's commitment to public projects and collective goals. Official communication channels with



Abrasce is the official sector representative in Brazil with the goal of developing the shopping centres' industry and conducting strategic advocacy and development. Founded in 1976, it represents an increasing sector of 648 malls. The association has been headed by Glauco Humai since 2015, who is also President of CLICC.



stakeholders and communities will be reinforced to keep these actors informed on potential externalities from operations they may be affected by.

* **Impact studies:** Shopping centres will take part and conduct climate risk studies focused on transition and adaptation to mitigate risks in the areas surrounding them.

* **Collaboration and Partnerships:** By recognizing their role in the climate agenda, shopping centres also acknowledge the role played by their value chain, social and environmental partners, civil society representatives, and governments, and are committed to engaging in a collective effort to develop innovative solutions and long-term strategies.

In Brazil, the sector is responsible for over 1 million job positions and accounts for the mobilization of 476 million people per month. By positioning itself as an active agent in the agenda for decarbonization and mitigation of climate change impacts, the sector creates value with all its stakeholders and can bring more players and industries to this commitment.



"This Manifesto goes beyond a presentation of broad goals. As the voice of 648 Brazilian malls, we reinforce our engagement with the climate resilience of our sector and our responsibility to society in general. As an unprecedented statement, we hope we can inspire more industries and markets towards a more sustainable future"

Glauco Humai

Largest Brazilian payment network brings tokenisation expertise to the carbon credit market

BLOCKCHAIN-POWERED PLATFORM BRINGS TRACEABILITY, GOVERNANCE AND SECURITY FROM THE ISSUANCE OF CARBON CREDITS TO THE FINAL REGISTRATION OF OFFSETS.

Brazil is establishing itself as one of the global leaders in the carbon credit market. With over 60% of its territory covered by native vegetation, the country approved Law 15.042/2024 in November 2024, which created the Brazilian Emissions Trading System (SBCE), regulating the national carbon credit market. According to a McKinsey report, Brazil holds 15% of the global potential in this sector by 2030.

However, despite its promising outlook, the market faces numerous challenges, such as fraud, lack of traceability, greenwashing and fragmentation. In light of these challenges, Elo, the largest 100% Brazilian payment network, saw an opportunity to help transform the sector.

But what is the connection between the carbon credit market and a credit card network? The answer lies in the similarities between the two sectors' processes. A payment network's core role is to connect buyers and sellers, organising all the players in a complex ecosystem with both security and credibility.

Founded in 2011 focusing on debit and credit cards, Elo has in recent years expanded its role as a payment technology company into other areas, including tokenisation. Noting the lack of a player capable of validating the credentials of the entire transactional process in a carbon credit trade, Elo began developing a solution to bring its extensive expertise into this sector. It's worth noting that the company processes an average of over 4 billion card transactions every year, making it one of Brazil's leading payment networks.

This led to the creation of **Elo Eco**, a digital platform that uses blockchain to ensure traceability, governance and security from the issuance of carbon credits to the final registration of offsets. Elo acts as an intermediary in the trading of credits



Elo is one of Brazil's leading payment technology companies. Founded in 2011 with a focus on debit and credit cards, Elo has expanded over the years into areas such as tokenisation, fraud prevention and data consultancy



generated by third parties and offers integration with other partner platforms.

By entering this segment, Elo expects to transact 150 projects by 2030, with tokenisation potential of approximately 70 million tonnes of CO2 per year. The company estimates it could move more than R\$25 billion (~USD 4.6 billion) in credits by the end of the decade.

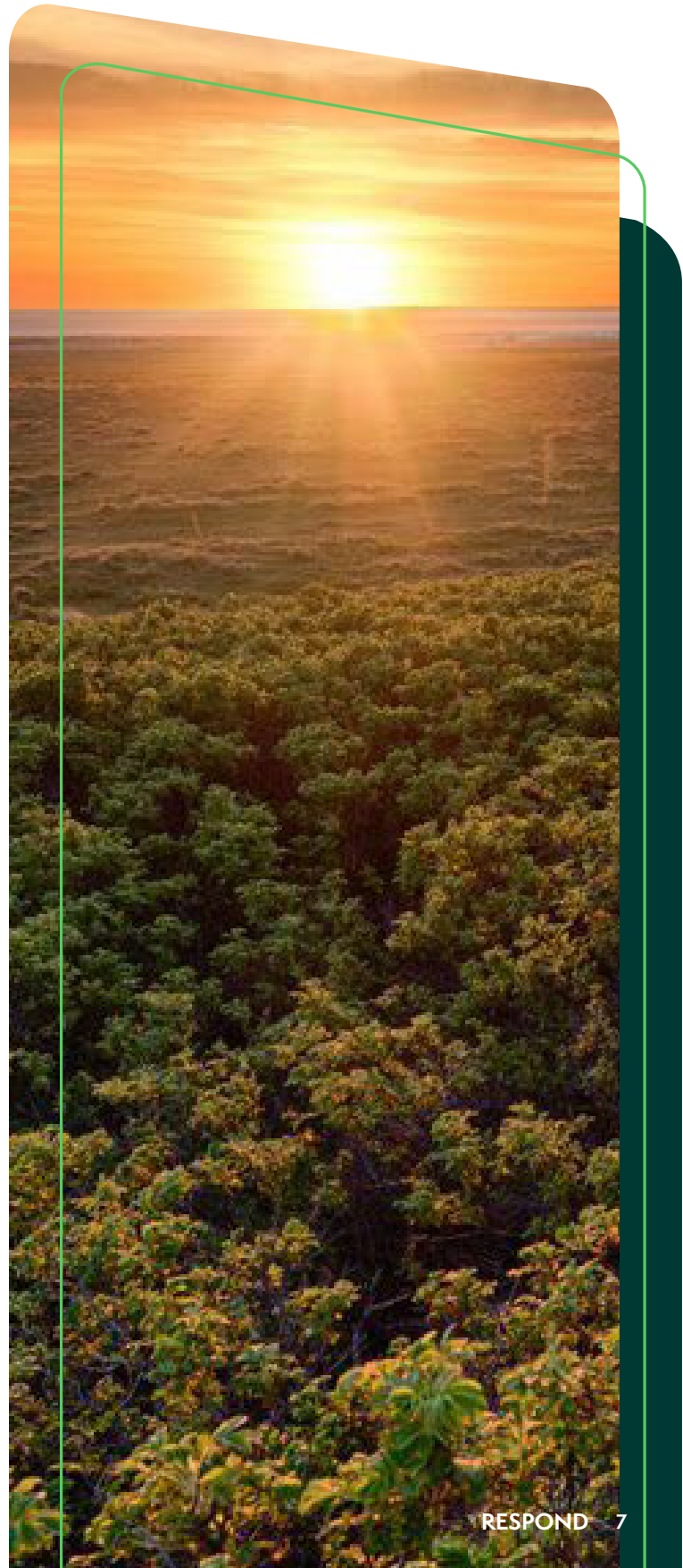
"We are applying our expertise in connecting buyers and sellers, developed in the card payments sector, to foster an efficient and transparent model for the carbon credit market. Tokenisation is crucial, as it guarantees traceability, security and scalability for operations."

Giancarlo Greco, CEO of Elo

The platform enables a fully digital and traceable lifecycle for carbon credits, from origination to final retirement. This comprehensive system includes the onboarding of both buyers and sellers, and supports every stage of the project journey - including the submission of essential documents and reports, rigorous project due diligence, and the secure registration and tokenisation of credits on the blockchain. By integrating these processes into a unified digital environment, the platform enhances transparency, reduces operational risks, and ensures the integrity of carbon offset transactions.

In July this year, the company carried out the first transaction on the Elo Eco platform, with assets generated by a forest preservation project in the Amazon. The credits had an A rating, indicating high reliability and positive environmental impact and originated from the Brazilian Amazon APD Grouped Project, an initiative led by BR Carbon.

By moving into this strategic sector of the green economy, Elo is expanding its role beyond payment methods, consolidating itself as a technology company committed to sustainability, with robust processes for verifying and certifying projects and the credits they generate — further strengthening the platform's transparency and credibility.



NBS: A STRATEGIC PATHWAY FOR CLIMATE ADAPTATION

with value creation and
socioenvironmental responsibility



VALE HAS INTENSIFIED ITS EFFORTS IN ADDRESSING THE CLIMATE CRISIS THROUGH AN INTEGRATED APPROACH THAT COMBINES INNOVATION, SOCIOENVIRONMENTAL RESPONSIBILITY AND TRANSPARENCY. ONE OF THE PILLARS OF THIS STRATEGY IS INVESTMENT IN NATURE-BASED SOLUTIONS (NBS), RECOGNIZED AS EFFECTIVE TOOLS FOR MITIGATING GREENHOUSE GAS (GHG) EMISSIONS, CONSERVING BIODIVERSITY, ADVANCING THE ADAPTATION AGENDA AND GENERATING SHARED VALUE WITH LOCAL COMMUNITIES. THIS INITIATIVE IS LED BY FUNDO VALE, THE COMPANY'S SOCIOENVIRONMENTAL INVESTMENT ARM, WHICH FOCUSES ON LAND RESTORATION, FOREST PROTECTION, SOCIOENVIRONMENTAL PUBLIC POLICIES AND THE PROMOTION OF SUSTAINABLE SYSTEMS AND BUSINESSES.

The 2030 Forest Goal, a voluntary commitment by Vale to protect and restore 500,000 hectares of land, is one of the largest ongoing voluntary forest restoration initiatives in Brazil. Between 2020 and 2024, over 18,000 hectares were restored through impact businesses and forest investments. In terms of protection, 85,000 hectares of forest in the Pará region of the Amazon were safeguarded through a REDD+ project, and another 115,000 hectares were protected in the Atlantic Forest through partnerships with seven conservation units—totaling over 218,000 hectares toward the 500,000-hectare goal.

These actions not only contribute to climate change mitigation but also stimulate the bioeconomy and promote job creation—approximately 450 direct jobs have been generated through supported initiatives. Forest restoration plays a crucial role in climate adaptation by both mitigating impacts and enhancing the resilience of ecosystems and communities. Restored areas can increase carbon absorption, improve hydrological cycles, protect biodiversity and reduce climate-related risks such as floods and droughts.

Vale

Vale is a mining company that exists to improve lives and transform the future together. One of the world's largest producers of iron ore and nickel and a major copper producer, Vale is headquartered in Brazil and operates around the globe. Its operations comprise integrated logistics systems, marine terminals and 20 ports worldwide.



Photo: © Rafael Araújo, Arquivo Fundo Vale

In addition, through its various programs, Fundo Vale has invested over BRL 430 million over 16 years, supported 660 socioenvironmental impact businesses and fostered 146 initiatives that have benefited more than 60,000 people. The institution also strengthens networks and alliances for the Amazon, promoting inclusion, diversity and sustainable territorial development. The diversity of initiatives supported by Fundo Vale enhances resilience and capacity-building within communities to face extreme climate events. Given the socioeconomic indicators of the Amazon region, this support also facilitates access to financial mechanisms tailored to the needs of forest and climate-related businesses, contributing to the climate justice agenda.

Since 2020, Fundo Vale has invested in strengthening strategic socioenvironmental impact businesses aligned with Vale's 2030 Forest Goal, such as Belterra Agroflorestas and Caaporã.

Belterra has restored approximately 2,000 hectares by replacing low-productivity pastures with agroforestry systems, focusing on value chains like cocoa. It operates in three regions of Pará: the southeast (São Félix do Xingu, Tucumã, Ourilândia do Norte, Canaã dos Carajás and Parauapebas), the Transamazon Highway (Altamira, Uruará and Medicilândia) and the northeast (Santa Luzia, Santa Izabel, Tomé-Açu and Peixe-Boi), promoting sustainable agriculture and improving the livelihoods of small and medium-sized producers.

In 2024, celebrating its 15th anniversary, Fundo Vale launched the "Semeando Futuros" campaign and highlighted progress in the 2030 Forest Goal, supporting businesses such as Belterra, Caaporã, Bioenergia, Corageous Land, Inocas, Futuro Florestal, Radix and CAMTA. The focus was on institutional strengthening, financial sustainability and market access. It also advanced the Sustenta.Bio project, in partnership with ICMBio, to strengthen value chains in 14 Conservation Units in the Amazon, involving over 30 organizations and with an expected investment of BRL 24 million by 2027.

Additionally, four key programs have been instrumental in strengthening socioenvironmental impact businesses: Jornada Amazônia, AMAZ Accelerator, Amazônia em Casa and Empreende Amazônia—benefiting over 200 enterprises and training around 2,000 talents. The Amazônia Já strategy was expanded with eight new initiatives focused on bioeconomy and sustainable territorial development. Complementing these efforts, Fundo Vale also contributed to the pilot project of Vale's Social Ambition, which aims to lift 500,000 people out of extreme poverty by 2030.

Vale views forests not merely as environmental liabilities to be protected, but as strategic assets for a just climate and energy transition. The company integrates its actions with territorial vocations and contributes to sustainable forest-based economic prosperity. It is committed to a regenerative forest economy, grounded in science, innovation and partnerships with local communities.

THE STRENGTH OF BRAZILIAN INDUSTRY FOR TRANSFORMATION AND THE GENERATION OF POSITIVE IMPACT

LUNELLI IS ONE OF THE LARGEST COMPANIES IN THE BRAZILIAN TEXTILE AND FASHION SECTOR, WITH OVER 40 YEARS OF HISTORY. FOUNDED IN JARAGUÁ DO SUL (SC) FROM A SMALL FAMILY-RUN SHOP, THE COMPANY HAS GROWN AND ESTABLISHED ITSELF AS A REFERENCE IN PURPOSE-DRIVEN FASHION. TODAY, IT OPERATES 14 UNITS ACROSS BRAZIL AND PARAGUAY, EMPLOYS MORE THAN 4,800 PEOPLE AND SERVES A PORTFOLIO OF OVER 21,000 CLIENTS NATIONWIDE.

With an integrated presence in both B2B and B2C markets, Lunelli manages leading brands in the fashion market. Through Lunelli Knits and Fabrics, we offer solutions for clothing manufacturers and major retailers throughout Brazil and abroad. Our brands – Lunender, Lez a Lez, Alakazoo, Hangar 33, Fico, and Vila Flor – are connected to a wide network of multibrand retail entrepreneurs and franchises, strengthening our presence in cities across the country. This portfolio reflects our commitment to offering products that meet diverse audiences and follow market trends. **We make meaningful fashion** by managing strong brands, combining advanced production technology, delivering solutions for the Brazilian fashion market, and maintains a vertically integrated business model that spans the entire production chain – from yarn procurement to final garment delivery in retail.

Guided by the purpose of “To promote the success of our customers through the happiness and satisfaction of our employees”, Lunelli grounds its operations on the values of simplicity, enthusiasm and obsession for results, always placing people at the centre of decision-making. Its commitment to sustainability is evident in how it integrates innovation, social responsibility and environmental management across its industrial and commercial operations. Aligned with ESG principles, the company adopts practices such as sourcing certified raw materials – including BCI cotton and responsible viscose – in addition to running social inclusion programmes, improving energy efficiency and actively participating in global initiatives such as the UN Global Compact.

This integrated vision propels Lunelli on its journey to becoming a Certified B Corporation – a movement that transcends certification and reflects engagement with a new development model that puts people and the planet at the heart of business decisions. By aligning purpose and performance, the company reaffirms its role as a driver of transformation, weaving more human relationships, more conscious choices and business practices committed to the common good. For Lunelli, becoming a B Corp means taking on the responsibility of building today the future we wish to share – a fairer, more inclusive and regenerative world.

In addressing the climate emergency, Lunelli recognises the urgency of limiting global warming to 1.5°C and achieving net zero emissions by 2050. As a step in this strategy, the company has advanced in the development of its Greenhouse Gas (GHG) Emissions Inventory, following internationally





Certified



Corporation

recognised methodologies from ISO and the World Resources Institute (WRI). The inventory covers 100% of Lunelli's operations and includes Scopes 1, 2 and 3. The data reveal that 87.61% of emissions are concentrated in scope 3, particularly in the categories of goods and services purchased, and upstream transport and distribution. These findings highlight the importance of an integrated and strategic approach to supply chain management — one capable of generating large-scale environmental and social benefits through supplier qualification, approval and development.

As a company that operates across nearly the entire textile production chain — from fibre transformation to fashion retail — Lunelli works with a complex network of suppliers and partners. This calls for a systemic perspective and an ongoing commitment to practices that minimise negative impacts and maximise positive effects throughout the value chain. In this context, Lunelli invests in product design projects focused on reducing environmental impact, implementing methodologies that identify sustainable attributes in developed items. In the Knits and Fabrics division, this process begins with the verification of the responsible origin of fibers, with this information incorporated into the registry of yarns and knit bases. In the Apparel division, the analysis also includes trimmings, denim washing processes and other fashion components, ensuring that accurate information reaches the end consumer in a transparent and accessible way.

These initiatives not only strengthen the company's communication with the market but also enhance internal supplier approval processes and Lunelli's capacity to innovate responsibly. By embedding sustainability into product design, raw material selection and supply chain governance, the company continues to advance steadily towards a more conscious and regenerative fashion industry.

We believe that it is through a systemic vision that we will be able to progress on this journey. What unites all these actions is our conviction that making meaningful fashion, promotes a positive impact in the world and for all. Lunelli remains firmly committed to transforming its operations, evolving with transparency and inspiring change that strengthens Brazilian industry as a key player in a new model of sustainable development.

Learn more about our sustainability journey at: [Lunelli Sustainability Report](#)

Lunelli is a textile company that has operated in both industry and retail for over 40 years. Through eight brands, it serves more than 21,000 clients, employs 4,800 people and runs 14 facilities across Brazil and Paraguay, producing over 15,000 tonnes of knitwear and 26.5 million garments per year.
www.lunelli.com.br



Certified



Corporation

Lunender

Lunelli

lez^alez

MAKAZOO

Ξ|E
HANGAR 33

FFICO

Vila flor



Spaces that transform your life and our future

AT ALLOS, BRAZIL'S LARGEST SHOPPING CENTRE ADMINISTRATOR, WE ARE BUILDING MORE THAN JUST RETAIL AND LEISURE DESTINATIONS. OUR SHOPPING CENTRES ARE COMMUNITY SPACES, COMMITTED TO DIVERSITY, EQUITY AND INCLUSION (DEI), PEOPLE'S WELL-BEING, LOCAL COMMUNITIES AND THE ENVIRONMENT.

We aim to serve and delight over 54 million visitors every month, creating positive impact. Our ESG strategy takes shape in the "Spaces that Transform" initiative, with commitments across four areas and 12 goals to be achieved by 2030, aligned with the United Nations' Sustainable Development Goals (SDGs).

Spaces that include

We strive to make our spaces welcoming and accessible to everyone. We invest in inclusive infrastructure and personalised support in our shopping centres to provide an inclusive and human-centred experience that respects each person's uniqueness. We also support and sponsor initiatives aligned with this cause, such as books and documentaries that amplify diverse voices, as well as sporting events like the Wheelchair Tennis Elite.

Within the company, 45.5% of our leadership is female and 40.7% is made up of Black employees. To strengthen this culture and broaden the diversity of our teams, we run training and



ALLOS is Brazil's most innovative platform for entertainment, lifestyle, services, and shopping. With 55 shopping centres across all five regions of the country, we connect people, businesses, and society. Our purpose is to serve and delight every day, creating moments that transform lives and help build a more sustainable and human future.

How we are transforming the retail experience by promoting sustainability and making positive impact on communities



awareness programmes on DEI and offer exclusive opportunities for underrepresented groups. In addition to our partnership with MOVER (Racial Equity Movement), our efforts have been recognised through ALLOS's inclusion in the Bloomberg Gender-Equality Index and the IDIVERSA Index on Brazil's B3 stock exchange.

Spaces that care

We lead efforts to create safe and healthy environments, focusing on human development. We have already set up individual development plans for 67% of our employees and invested in a learning ecosystem with initiatives that strengthen our culture and prepare our teams. We also prioritise well-being by providing support for physical and

mental health, as well as parental policies, ensuring a caring and supportive environment.

Spaces that conserve

We take action to reduce our environmental impact. With one of the highest sector scores on the Carbon Disclosure Project (CDP), a Gold Seal from the GHG Protocol, and a presence on the ICO2 B3 index, we reinforce our commitment to transparency and emissions reduction. In 2024, 84% of the energy we purchased came from renewable sources, with 20.1% certified by I-RECs.

We have already recovered 68.1% of the waste generated in our operations, significantly reducing the amount sent to landfill. In terms of water „



- » management, we act responsibly by optimising resources and promoting reuse. In 2024, we reused 526,630 cubic metres of water, equal to more than 200 Olympic-sized swimming pools.

Ahead of COP30, we are demonstrating leadership by bringing forward our environmental targets to 2025 for our four shopping centres in the Amazon region.

Spaces that develop

We drive our shopping centres as spaces for positive transformation in local communities. We have already invested over R\$20 million in social impact, benefiting more than 1 million people in the past two years.

Our social cause, “Education that Transforms,” guides projects such as the Bengui IT Park, a

partnership with Parque Shopping Belém (PA) that promotes digital inclusion for students from the Bengui community.

To encourage sustainable habits among our customers, we launched KARG, a company providing electric vehicle charging stations in our shopping centres, enabling the adoption of low-carbon practices.

Through all these efforts, we reaffirm our commitment to creating shared value. Our shopping centres are established as “Spaces that Transform,” benefiting the business, the environment, and society. We remain dedicated to running an increasingly sustainable operation, aligned with the challenges of today and tomorrow.



SPACES THAT TRANSFORM

ALLOS ESG Platform 2030 Commitments¹

SPACES THAT INCLUDE

Achieve 50% participation of women in leadership positions, promoting the engagement of the entire value chain

Achieve 48% participation of black people in leadership positions², promoting the engagement of the entire value chain

100% of the shopping malls committed with accessibility

SPACES THAT CARE

Maintain or exceed 85% employee engagement

100% of employees with development plans

Raise awareness and implement tangible actions to promote the wellbeing of our employees and customers

SPACES THAT CONSERVE

Achieve 100% renewable electricity by 2030, reaching carbon neutrality by 2040³ and constantly investing in energy efficiency

Recycle of 90% of the total waste generated by our operations

Reduce water intensity by 5%⁴, reaching 100% of shopping malls with water reuse

SPACES THAT DEVELOP

100% of shopping malls promoting and creating solutions to enable our clients to adopt circular and low-carbon practices

100% of shopping malls supporting at least one strategic local development project

Progressively increase the number of people benefiting from local development projects

¹ The 2030 commitments consider owned and controlled enterprises

² In accordance with the criteria established with MOVER

³ Scopes 1, 2 and 3 (waste)

⁴ m³/m² of common area, excluding store consumption

FROM ESG TO CLIMATE STRATEGY: COP30 and the business opportunity

By Luciana Nicola (*Institutional Relations & Sustainability Director at Itaú Unibanco*)

COP30 COULD MARK A HISTORIC TURNING POINT FOR BOTH THE GLOBAL CLIMATE AGENDA AND BROADER SUSTAINABILITY DISCUSSIONS. 2024 WAS ONCE AGAIN THE HOTTEST YEAR ON RECORD, WITH EXTREME WEATHER EVENTS OCCURRING ACROSS MANY PARTS OF THE WORLD. THESE EVENTS CLEARLY DEMONSTRATE THE DEEP CONNECTION BETWEEN CLIMATE CHANGE AND SOCIETY AND THE ECONOMY. THE CLIMATE TRANSITION HAS BECOME A CRITICAL FACTOR IN THE DEVELOPMENT OF PUBLIC POLICY, BUSINESS STRATEGIES AND INVESTMENT DECISIONS.

The transition to a low-carbon economy is about more than just reducing emissions; it also opens up new markets, drives innovation and creates more resilient, skilled jobs. Key topics in this transformation include renewable energy, regenerative agriculture, green infrastructure and sustainable finance.

This transition requires joint action. Although governments set the rules, incentives and frameworks, it is the private sector that is on the front line, financing, producing and delivering the solutions that transform climate commitments into tangible progress. Mobilising private capital is essential if we are to meet the goals of the Paris Agreement and unlock the trillions of dollars needed for climate adaptation and mitigation.

Brazil has a unique opportunity to lead this transformation, given its mostly renewable energy mix and strong potential in low-carbon agriculture. COP30 will provide a platform for Brazil and other Latin American countries to share their experiences and contribute to solutions that combine economic development with environmental sustainability.

At Itaú Unibanco, we believe that the financial system plays a vital role in achieving this.

Our strategy is built on three pillars:

- 1. our commitment to the climate transition and our aim to achieve net zero by 2050;**
- 2. our ambition to mobilise R\$1 trillion in sustainable finance by 2030;**
- 3. and our dedication to diversity and inclusive development.**

These goals demonstrate our conviction that, as a financial institution, we can have a positive impact on society.

Over the past few years, we have made progress by setting decarbonisation targets for key sectors in our portfolio and the wider economy, including electricity, steel, aluminium, cement, transport and agriculture. We have always considered the specific context of each client and market



when doing so. We have also made advances in sustainable finance by building strong partnerships with our clients and offering ESG products and services that support the transition of businesses in the real economy.

COP30 is more than just a diplomatic event; it is a call to action. The Brazilian private sector has a unique opportunity to demonstrate to the world that it is possible to transform climate ambition into shared prosperity by building the sustainable future we all want to live in today.



NATURE-BASED SOLUTIONS: PSA CARBON AGRO PERENE

Regenerative Agriculture in Brazilian Citriculture

IN BRAZIL'S CITRUS BELT, WHERE CITRICULTURE SERVES AS BOTH A SOCIOECONOMIC ENGINE AND A CULTURAL SYMBOL, A NEW APPROACH IS EMERGING TO ALIGN PRODUCTIVITY WITH ECOLOGICAL RESPONSIBILITY. AT CITROSUCO, ONE OF THE WORLD'S LARGEST ORANGE JUICE PRODUCERS, WE ARE EMBEDDING SUSTAINABILITY INTO OUR OPERATIONS THROUGH A METHODOLOGY THAT RECOGNISES AND REWARDS ECOSYSTEM SERVICES ACROSS BOTH FORESTED AND CULTIVATED AREAS.

CASE STUDY:

Citrosuco's pathway to carbon credits through the PES Carbon Agro Perennial methodology

This case study presents our implementation of the PES Carbon Agro Perennial Methodology, developed by ECCON Soluções Ambientais with contributions from Citrosuco and Reservas Votorantim. Designed in line with the guidelines of Brazil's Federal Law 14.119/2021 on Payments for Environmental Services (PES), the methodology adapts international standards to value nature-based solutions in the context of citriculture and other perennial agricultural systems.

Our pilot project in São Paulo state integrates over 20k hectares of citrus orchards with preserved native forest areas. Using remote sensing, field inventories and community monitoring, we are not only generating high-integrity C+ carbon credits, but also delivering broader co-benefits: enhanced

biodiversity corridors, improved soil management, and strengthened local capacity.

The sustainable practices implemented in our agricultural systems focus on soil conservation, reduced agrochemical input, efficient irrigation and technology. We also measure indicators of ecosystem services and good agricultural practices. These actions support carbon sequestration while promoting water retention, pollinator habitats and greater ecosystem connectivity.

All data collected undergoes a rigorous validation and monitoring cycle, including the Methodology Adequacy Report (MAR) and regular Monitoring Reports (MR). The project will also be subject to independent third-party audit, with active participation from local workers and farmers as field agents, reinforcing their role as stewards of the landscape.



Photos: Citrosuco Farms for the Agro Carbon PES Pilot Project

This methodology offers an innovative pathway for climate finance to reach the rural sector, particularly in developing countries where perennial crops like citrus are central to livelihoods. By linking citriculture to tangible ecosystem service outcomes, we demonstrate that agriculture — when managed sustainably — can be a driver of climate solutions and environmental service payments.

From a policy perspective, this approach broadens the scope of carbon markets and enables producers to be compensated not only for preserving forests, but also for maintaining and enhancing environmental assets on productive land. The credits generated are measurable, verifiable and incorporate social co-benefits, such as environmental education, knowledge exchange and sustainable rural development.

As global discussions advance at COP30, we believe the Brazilian experience of integrating citriculture, ecosystem preservation and carbon market innovation offers valuable insights. It shows that effective nature-based solutions are not limited to untouched ecosystems — they can be designed and scaled within working agricultural landscapes.

Citrosuco is one of the world's largest producers of orange juice and derivatives. With operations in over 100 countries, the company is committed to embedding sustainability and innovation across its entire value chain, with a strategic focus on regenerative agriculture, ecosystem preservation, and climate resilience.

www.citrosuco.com.br

MORE SUSTAINABLE EVENTS IN SHOPPING CENTRES: JCPM Group implements guidelines with best practices

Written by Thayara Paschoal – Sustainability Manager at JCPM Group



BRAZIL IS THE FOURTH LARGEST GENERATOR OF MUNICIPAL SOLID WASTE IN THE WORLD, PRODUCING MORE THAN 82 MILLION TONNES PER YEAR, OF WHICH ONLY 4% IS RECYCLED. IN THE NORTHEAST REGION, WHERE JCPM GROUP OPERATES, GENERAL SELECTIVE WASTE COLLECTION IS PRESENT IN ONLY 38% OF MUNICIPALITIES, COMPARED TO THE NATIONAL AVERAGE OF 60.5%. ONE OF THE MAJOR CLIMATE CHALLENGES IS THE CONSTANT DEMAND FOR NATURAL RESOURCES, WITH LOW REUSE OF RAW MATERIALS, SOMETHING DIRECTLY RELATED TO THE INCORRECT DISPOSAL OF WASTE, CAUSING GLOBAL PROBLEMS THAT AFFECT PEOPLE, ESPECIALLY IN URBAN CENTRES.

We began to reflect on our role as a shopping centre company that hosts up to 1,000 events a year, with teams spread across four states. Medium- and large-scale entertainment activities can generate up to 5 tonnes of waste per day, as well as being responsible for significant emissions related to the transport of people, equipment and materials, accounting for as much as 80% of the total carbon footprint of these activities.

This led us to conduct an in-depth analysis with our teams on the impacts and opportunities such occasions present. As part of our sustainability

strategy, and as a result of this reflection, we created a guidance document, aligned with our Materiality Matrix, featuring initiatives capable of maintaining the dynamism of entertainment while also pointing to viable ways to reduce environmental impacts, promote inclusion and stimulate decarbonisation – without undermining the prominence and positive effects that events have.

Attractions are extremely important for the sector, but it is also necessary to turn these moments into an opportunity to establish a position that



Shopping centres managed by the group receive over 130 million visitors per year and host 1,000 events.

With 90 years of history, JCPM Group is a leading company in the shopping centre sector in the Northeast and ranks among the four largest in Brazil, with 11 shopping centres. It is also a reference in the real estate and communications sectors and plays a strong social role through the JCPM Institute and the Pedro Paes Mendonça Foundation. Together, its businesses generate more than 40,000 direct and indirect jobs.



70% of all recyclable waste generated on the premises is sent to local cooperatives.

can mitigate climate impact and make them a conducive environment for developing initiatives with positive environmental and social effects.

The document introduced guidelines and commitments covering everything from the conscious hiring of professionals and companies, including human rights due diligence with an assessment of conduct history, through to prioritising local suppliers, impacting local development and contributing to decarbonisation through reduced travel; sustainable design planning, with the choice of eco-efficient materials and fewer short-term printed materials; and strengthening and contributing to the training of recycling cooperatives.

Network transformation for integrated sustainable development

The engagement of teams throughout the process contributed to a greater normalisation of sustainable practices in all operational routines, going beyond events. That is why the training of the team was so important in this process. Bringing a new perspective to gatherings, rethinking the materials used, and even reconsidering supplier choices were fundamental to achieving the established goals. With the potential to be adapted for diverse audiences, the publication, entitled *Good Practices in Sustainable Events*, could become a reference point for companies and organisations from various sectors interested in promoting initiatives aligned with the principles of sustainable development.

THE GLOBAL RELEVANCE OF WELLNESS

Fabiano Zettel, founder and CEO of Moriah Asset

IN A WORLD WHERE 733 MILLION PEOPLE GO HUNGRY, ACCORDING TO THE UN, AND WHERE GLOBAL WARMING LEADS TO DEVASTATING CLIMATE EVENTS, TO SPEAK ABOUT HEALTH AND WELL-BEING MIGHT SEEM SECONDARY OR EVEN ELITIST.

We live a paradox. While a significant portion of the global population has nothing to eat, those who do are falling ill and aging poorly. Deaths from heart conditions have never been so frequent. Physical inactivity weakens social security systems. Obesity has become an epidemic, overburdening healthcare systems already strained by the rising costs of the pharmaceutical industry.

The repercussions go far beyond the individual level, impacting what can be called “social health,” with consequences for the economy, public spending and social inclusion. When the population is healthier and lives longer, governments can save on healthcare and pensions, freeing up resources to combat hunger.

A recent study published by *Nature Medicine* analyzed data from 492,000 people and concluded that environmental factors – such as physical activity, sleep and diet – have a greater influence on longevity than genetics. Supporting these habits helps people live longer and better. It also contributes to workforce productivity and relieves pressure on hospitals.

Obesity, which affects one in eight people, causes 3.7 million deaths per year from chronic diseases, according to the UN. If no action is taken, it will cost USD 3 trillion annually by 2030.

The UN has declared the 2020s the Decade of Healthy Ageing – and with good reason. Promoting wellness could raise global GDP by 0.4% per year, according to the IMF. Keeping skilled professionals active for longer, alongside training older and healthier people to manage new technologies, could expand the labour force and reduce strain on pension systems.

Wellness companies are playing their part. New products are being launched daily to meet the needs of a market worth USD 6.3 trillion, growing at 5.9% annually, according to GWI. These range from low-sugar, functional foods and alcohol-free drinks to clothing, sleep improvement apps, dietary supplements and gyms.

While it's true that many of these companies still serve mainly higher-income consumers, they are also increasingly reaching vulnerable communities. And they prove that it is possible to generate profit while promoting well-being, inclusion and development.

In the Amazon rainforest, companies such as Oakberry are transforming supply chains. They support riverside communities who collect raw materials like açai fruit by helping them set up cooperatives, improve processing methods and obtain export certifications such as Gluten-Free and No GMO.



Naturanic and Haoma run separate programmes that train cocoa producers in agroforestry systems, in southern Bahia.

“A growing commitment to health and well-being is sparking transformation from the individual level to entire societies.”

Fabiano Zettel

In southern Bahia, Naturanic and Haoma run separate programmes that train cocoa producers in agroforestry systems – some of them organic. This ensures reliable supply while preserving dignity for workers. Naturanic also works in other biomes, using native fruits and helping to protect biodiversity.

In São Paulo, Solo Snacks is addressing food waste through the Salve Project. It rescues misshapen fruits, rejected by retailers but perfectly edible, and turns them into freeze-dried products. This helps tackle one of the world’s most urgent challenges. According to the UN, food waste generates 8–10% of global greenhouse gas emissions. Solving it could feed 1 billion people and end hunger. The rising concern for health and well-being is still an emerging movement. Yet it remains a powerful and transformative force. Fortunately, it is moving beyond lifestyle and becoming culture – especially among the young. Because health also means avoiding waste, extending a hand and protecting the planet.

Fabiano Zettel is the founder and CEO of Moriah Asset, Brazil’s first wellness-focused investment vehicle. He holds a law degree, a master’s from UFMG and an MBA from FGV. Before becoming an entrepreneur and investor, he worked as a lawyer, professor and executive in the financial and construction sectors.

Moriah Asset is a Brazilian investment firm pioneering the wellness market. Its expansion strategy is driven by behavioural shifts towards healthier lifestyles. Founded in 2019, it focuses on dynamic, innovative companies with strong potential for synergy and growth within the wellness sector.

Rystad Energy: achieving a sustainable and resilient energy system

Written by Jon Ødegård Hansen, Senior Vice President and Head of Energy Scenarios

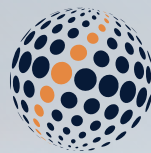


AS THE GLOBAL COMMUNITY CONVENES IN BELÉM FOR COP30, THE URGENCY OF THE ENERGY TRANSITION HAS NEVER BEEN GREATER. GOVERNMENTS, INDUSTRIES AND CIVIL SOCIETY ARE UNDER INCREASING PRESSURE TO ACCELERATE CLIMATE ACTION WHILE ENSURING ENERGY REMAINS ACCESSIBLE, AFFORDABLE AND RELIABLE. FOR RYSTAD ENERGY, PARTICIPATION IN THIS MILESTONE CONFERENCE IS BOTH NATURAL AND NECESSARY. AS A LEADING INDEPENDENT ENERGY RESEARCH AND CONSULTING COMPANY, RYSTAD ENERGY PROVIDES THE INSIGHTS, DATA AND FORESIGHT REQUIRED TO SHAPE PRACTICAL STRATEGIES FOR REACHING NET-ZERO. OUR PRESENCE AT COP30 REFLECTS OUR ROLE AS A TRUSTED ADVISOR IN NAVIGATING ONE OF THE MOST COMPLEX CHALLENGES OF OUR TIME: ACHIEVING A SUSTAINABLE AND RESILIENT ENERGY SYSTEM.

At the heart of our engagement at COP30 is the launch of our flagship *Global Energy Scenarios 2025* report. This comprehensive analysis outlines the strategic roadmap for a low-carbon future, focusing on what it will take to align with the targets outlined in the nationally determined contributions (NDCs). The report emphasizes three critical tasks: **decarbonizing the power sector, electrifying key end-use industries and addressing residual emissions in hard-to-abate sectors**. Together, these measures highlight the unprecedented transformation required to realign the global energy system and offer actionable guidance for policymakers, investors and industry leaders attending COP30.

One of the most striking findings in our analysis is the scale of change needed in the power sector. Renewable energy deployment—particularly solar and wind—remains the cornerstone of deep decarbonization. Solar power, which added a record 460 GWAC in 2024, exemplifies clean energy technologies' speed and scalability. Coupled with battery storage and advances in grid resilience, the foundation for a renewable-driven energy system is rapidly materializing. These insights are central to COP30 discussions, where accelerating renewable adoption is critical to meet emission reduction targets.





RystadEnergy



Electrification across transport, buildings and industry represents another decisive shift. The rapid rise of electric vehicles, projected to capture nearly a quarter of global passenger car sales in 2024, underscores how consumer markets are embracing cleaner alternatives. Yet electrification is not merely about replacing combustion engines—it is about efficiency. Technologies like EVs and heat pumps demonstrate how electrification maximizes “useful energy,” reducing waste inherent in fossil fuel systems. These lessons resonate strongly at COP30, where scaling electrification is viewed as essential for balancing economic growth with climate commitments.

For the emissions that remain, solutions such as carbon capture, utilization and storage (CCUS), green hydrogen and sustainable biofuels are indispensable. COP30 provides the forum for governments and industry to create the policies and investments that will make these high-risk, high-reward technologies viable. Rystad Energy’s

analysis offers an evidence-based lens through which these decisions can be assessed and prioritized.

Rystad Energy’s participation at COP30 is therefore more than symbolic—it is integral. With a global team of over 800 experts across more than 25 offices, we bring unparalleled, data-driven insights to the climate dialogue. Our mission is to ensure that the energy transition is guided by facts, grounded in realism and ambitious enough to deliver results. As the world charts its course toward net zero, Rystad Energy stands ready to illuminate the path forward.

ENERGY WITH EQUITY: SCATEC'S BLUEPRINT FOR A JUST TRANSITION



How to drive gender equity in the global shift to renewable energy.

AS THE WORLD ACCELERATES TOWARDS A LOW-CARBON FUTURE, THE ENERGY TRANSITION MUST NOT LEAVE ANYONE BEHIND. AT SCATEC, WE RECOGNISE THAT TRUE SUSTAINABILITY ISN'T JUST ABOUT RENEWABLES – IT'S ABOUT INCLUSION, EQUALITY AND SHARED OPPORTUNITY. THAT'S WHY GENDER INCLUSION IS NOT JUST A COMMITMENT – IT'S A STRATEGIC DRIVER OF HOW WE POWER PROGRESS ACROSS ALL OUR GLOBAL OPERATIONS.

We've taken bold steps to ensure our projects contribute to a **just transition**, one where women are empowered as active participants and leaders in the renewable energy sector. From Brazil to Ukraine, South Africa to Pakistan, we've implemented dedicated gender actions that translate values into tangible impact – creating new jobs, developing skills and improving community resilience.

These plans address structural challenges such as underrepresentation in recruitment, inadequate safety infrastructure for women on remote worksites, and gender-biased stakeholder engagement. Each project receives a tailored

GAP: Gender Action Plan, with targets tracked across employment, training, safety and human rights metrics.

Through a powerful mix of **capacity building, career development and inclusive recruitment**, we're unlocking untapped potential and driving productivity where it matters most: on the ground.

Our actions reflect more than corporate responsibility – they are strategic. Studies continue to show that **diverse teams perform better**, and our own field experience confirms it: female workers often bring exceptional reliability, attention to detail and leadership to technical roles.



Scatec is a leading renewable energy company accelerating access to clean, affordable and reliable power worldwide. We develop, build, own and operate solar, wind, hydro and battery storage solutions. With sustainability at our core, we deliver long-term value to communities, partners and investors across emerging and developed markets.

SOME GENDER ACTIVITIES IN MOTION:



Mendubim, Brazil:

At our Mendubim site, 120 women received solar module assembly training. 20 months after graduation, 76% have secured jobs in the energy sector, with 52% still employed in technical or related roles. Today, they work side-by-side male colleagues – with **zero recorded accidents** involving female workers, proving inclusion enhances both safety and performance.



Sukkur, Pakistan:

At the Sukkur solar plant, Scatec and FMO partnered to tackle gender inequality head-on. Women received equal land and housing rights in the process of moving to a new land and the female heads of all the 82 households involved were supported with vulnerability allowances – 42% used it to start businesses. A robust gender action plan ensured **zero incidents of gender-based violence**, setting a benchmark for inclusive, safe development.



Power Women, Ukraine:

In war-impacted Ukraine, the Power Women Program officially unveiled by Ukraine's Ministry of Economy at the Ukraine Recovery Conference in Rome and launched in partnership between Scatec, FMO, IFC, Swedfund and EdEra, is training 22 women in solar plant operations. With site visits, leadership coaching, and paid internships, the project not only bridges a labour gap caused by conflict – it fosters **gender resilience in national energy recovery**.



Kenhardt, South Africa:

By embedding inclusive recruitment at the Kenhardt solar project, Scatec showed how women boost productivity and culture. The RMI Hybrid Cluster Project employed 489 women – 13% of its workforce, surpassing national gender averages. With inclusive hiring and support for women-led businesses, the project uplifted communities. Women's earnings contributed to higher household incomes, improving access to education and healthcare, while their performance set a benchmark for quality and workplace transformation.

At Scatec, we're proving that when you invest in women, you invest in the future of energy. Our gender initiatives aren't pilots – they're platforms for lasting inclusion, opportunity and transformation – delivering real impact on the lives of those who need it most.

And as COP30 evolves, we call on peers and partners to join us in making the transition **not just green – but just**. Because powering the planet means empowering its people.

FASHION AND CLIMATE:

Lojas Renner S.A. promotes the use of agroforestry cotton as a regenerative solution in the Brazilian Cerrado

COP30, TO BE HELD IN BRAZIL, IS AIMING TO HIGHLIGHT THE VITAL ROLE OF NATURE-BASED SOLUTIONS IN ORDER TO FACE THE GLOBAL CLIMATE CRISIS. IN TUNE WITH THIS AGENDA, LOJAS RENNER S.A. IS IMPLEMENTING A PIONEERING PROJECT TO GROW AGROFORESTRY COTTON IN THE CERRADO BIOME, PROMOTING ENVIRONMENTAL REGENERATION, SOCIAL INCLUSION AND SUSTAINABLE INNOVATION IN THE FASHION CHAIN.

In a scenario where fashion urgently needs to rethink its practices in the face of a climate emergency and the loss of biodiversity, Lojas Renner S.A. is betting on a transformative model: growing cotton in agroforestry systems. In partnership with startup company FARFARM and the Federal University of Mato Grosso (UFMT), Lojas Renner S.A. is the first retailer in Brazil to invest in the development of a productive chain based on regenerative principles from agroforestry systems (AFS).

This initiative, being implemented in the Cerrado biome, one of the most threatened ecoregions in

the planet and strategic for climate regulation, combines scientific research, agricultural innovation and positive social impact. The project started with the creation of an experimental farm at the Federal University of Mato Grosso, in the municipality of Santo Antônio do Leverger, by training 193 people, 77 of whom were women, in three in-person events, with participants from five traditional communities in the area.

Regenerating the soil, treasuring communities and mitigating emissions

In the agroforestry systems implemented as part of the Lojas Renner S.A. project, cotton cultivation combines different kinds of plants, whether agricultural, forest, or fruit plants, in the same location, with arrangements planned in time and space. These systems seek to emulate the operation of natural ecosystems, promoting ecological balance and increasing the resilience of agricultural production. Instead of homogeneous monocultures, as in a conventional cotton crop, these agroforestry systems focuses on species diversity, which creates a healthier environment for soil, water, crops, and people. This model allows for an increase in biodiversity, improvements in terms of soil health and carbon sequestration, in direct alignment with the climate commitments that will be at the center of the discussions taking place at COP30.

Among the main discoveries of the research efforts carried out in the last few years is the finding that agroforestry systems sequester 18.37 tons of CO₂ per hectare on average (both below and above the soil), with a projected increase in the coming years, taking into account the natural growth of the trees and biomass accumulation. Another important finding was the increase in soil microbiological biodiversity. Lab analyses indicated an average growth of 163% in the presence of carbon-sequestering microorganisms when compared to the initial situation in these areas. Diversity was also reflected above ground, as approximately 238 trees were planted per hectare, creating intercrops with agricultural, fruit, and native species.





The implementation of agroforestry systems also tends to require less irrigation, thanks to the diversity of species, structural improvements and greater water retention in the soil. This contributes to a more resilient system during periods of drought, which is especially relevant in the Cerrado biome. Despite being known as the birthplace of Brazilian freshwater, as it is the home of important springs and aquifers, the Cerrado has been facing increasingly severe droughts, which are worsened by climate change.

In addition to the environmental benefits, research also observed relevant socioeconomic results. The experimental harvest conducted at UFMT showed that agroforestry cotton is economically viable, even on a small scale. With an average yield ranging from 1.3 to 2 tons per hectare, this model has proven capable of generating significant income for farming families, especially when combined the sale of food produced between the rows.

A step forward in the transition to regenerative fashion

Building the fashion of the future requires collaboration, innovation and scalability. Betting on regenerative solutions such as agroforestry systems is essential for a textile chain that is more resilient, fairer, and more planet-friendly. In our view, when companies invest not only in products, but also in ecosystems and the people behind them, it is possible to turn Brazil into a global example of sustainable development.

Commitments beyond the chain: climate, biodiversity and COP30

This initiative is directly connected to the public commitments undertaken by Lojas Renner S.A., such as the goal of having 100% of clothing items produced with more sustainable raw materials by 2030, reducing emissions per item by 55% by 2030 when compared to 2019 and our adaptation agenda. Currently, 78.2% of the company's textile products already feature more sustainable raw materials or processes.

Furthermore, the company was the first fashion retailer in the country to join the corporate commitment to preserving biodiversity, launched by CEBDS. This document, prepared in light of the Global Biodiversity Framework and the Paris Agreement, will be an important reference for the discussions to be held at COP30.

Structural change: the role of companies in the climate transition

With over 680 stores and an international presence in South America, Lojas Renner S.A. is showing that it is possible to combine business and a positive climate impact. Its agroforestry cotton project shows that companies play a key role in not only reducing their impacts, but also in regenerating the ecosystems on which they depend.



SCALING CLIMATE SOLUTIONS IN BRAZIL: The role of technology in combating climate change

DRIVING THE TRANSITION TOWARD A LOW-CARBON ECONOMY REQUIRES INNOVATIVE TECHNOLOGICAL SOLUTIONS THAT CAN ACCELERATE THE MEASUREMENT, PLANNING AND IMPLEMENTATION OF EMISSION REDUCTION INITIATIVES. ALTHOUGH SUCCESSFUL CASES OF CORPORATE DECARBONIZATION EXIST AMONG LARGE FIRMS, SCALABLE TOOLS CAPABLE OF REPLICATING THESE SUCCESSES ACROSS DIVERSE ORGANIZATIONS ARE STILL SCARCE. IN THIS LANDSCAPE, BRAZILIAN INNOVATION STANDS OUT BY PROVIDING IMPACT MEASUREMENT TECHNOLOGY SPECIFICALLY TAILORED TO THE COUNTRY'S UNIQUE CONTEXT, EMPOWERING COMPANIES OF ALL SIZES AND SECTORS TO BEGIN THEIR DECARBONIZATION JOURNEY WITH CONFIDENCE AND ACCURACY.

At the heart of this effort is the understanding that measuring greenhouse gases (GHGs) is the foundational step in decarbonization. The insights gained from a detailed inventory serve as the basis for identifying major emission sources and generating targeted reduction strategies. Leveraging tools like the Marginal Abatement Cost Curve (MACC), organizations can then evaluate and prioritize initiatives based on their potential impact relative to cost, ensuring that reduction efforts are both effective and economically viable. This quantitative approach allows companies to optimize resource allocation, delivering meaningful emissions reductions with sustainable financial investment.

The “Decarbonization Journey” project, a strategic collaboration between startup DEEP ESG and Comerc Energia, exemplifies how this approach can transform corporate climate action. Since 2023, over 500 carbon inventories have been produced, each providing detailed insights that guide bespoke decarbonization solutions tailored

to different industries. Its main advantage lies in automating the complex calculations, enabling a comprehensive inventory to be completed in approximately 30 days, a significant leap from traditional methods that are often manual and time-consuming.

The core technology powering this acceleration is Carbon AI, a Brazilian-developed platform built upon artificial intelligence. It simplifies emissions calculation for companies, regardless of their ESG expertise, by automatically analyzing fiscal data, classifying expenses, and calculating emissions across all categories, including Scope 3 from supply chains. This spend-based method automates data collection, reduces manual effort, and enhances data completeness and credibility – key elements for trustworthy, rapid impact measurement.

From the results of these inventories, companies can precisely target their most significant emission sources and prioritize actions. When integrated

DEEP ESG is a Brazilian technology company specialized in the measurement, reporting and monitoring of ESG data. We develop technological solutions for sustainability management designed for small and large companies, industries and financial institutions.



with analytical tools like MACC, this data enables organizations to identify high-impact, low-cost mitigation strategies, ultimately supporting more effective and financially sustainable decarbonization pathways.

The project's influence has been substantial. With an inventory produced nearly every business day, its scalability is clear. Compared to the data reported in Brazil's Public Emissions Registry, the "Decarbonization Journey" already accounts for approximately 34% of national emissions, highlighting its critical role in the country's climate strategy. This Brazil-specific technological solution demonstrates that advanced, accessible impact measurement can be democratized, empowering

companies of all sizes to participate actively in reducing their carbon footprint and contributing meaningfully to national sustainability goals.

Looking ahead, the potential is promising. The ongoing partnership between DEEP ESG and Comerc, combined with the continued expansion of this pioneering platform, positions Brazil to lead momentum in corporate climate impact management. Its scalability could unlock a new era: transforming small and medium-sized enterprises into vital drivers of national decarbonization efforts, fueling innovation, and fostering a resilient, sustainable economy that stands as a global benchmark.



CLIMATE, INEQUALITIES AND TERRITORY: A CALL FOR CORPORATE CO-RESPONSIBILITY

Katia Mello, Co-president of Diagonal

THE CLIMATE EMERGENCY IS NOT JUST AN ENVIRONMENTAL ISSUE — IT IS ALSO DEEPLY SOCIAL. ITS IMPACTS MANIFEST LOCALLY, BUT WITH UNEQUAL INTENSITY — NOT ONLY DUE TO PHYSICAL GEOGRAPHY, BUT ESPECIALLY DUE TO SOCIAL GEOGRAPHY. IN MOST CASES, IT HITS HARDEST THOSE LIVING IN VULNERABLE TERRITORIES MARKED BY A LACK OF DECENT INFRASTRUCTURE AND EXCLUSION FROM STRUCTURAL PUBLIC POLICIES.

The data is alarming. According to UN-Habitat, over 1.1 billion people currently live in slums or informal settlements — and by 2050, this number could reach 3 billion. These are, for the most part, peripheral territories that lie outside what we call urban resilience. In these places, climate risk intersects with economic and social vulnerabilities, creating fertile ground for climate collapse to turn into a social — or even humanitarian — crisis.

World Bank studies warn that, without territorial adaptation measures, climate impacts could triple the exposure of vulnerable urban populations to disasters by 2050. In other words: climate change does not create inequalities, but it deepens and accelerates them.

In this context, tackling the climate crisis is not just an environmental challenge. It is, above all, a political, urban and ethical challenge. And it demands an approach deeply rooted in the territories.

It is from this standpoint that Diagonal advocates that ESG must also evolve.

It is with this lens that ESG, when structured through the Territorial Approach, becomes a powerful strategic tool for building urban resilience. This approach, developed by Diagonal, is based on the understanding that companies are rooted in specific urban and social contexts — and these

contexts shape their ability to operate, expand, and remain legitimate.

By adopting this perspective, companies:

- **Reformulate the “E”**, connecting their environmental strategies not only to emissions and efficiency, but also to the climate resilience of the urban ecosystems in which they operate;
- **Reclaim the “S” as a commitment** to care, equity and social security within their territories of influence;
- **Expand the “G”**, by integrating climate risk and territorial instability into governance and decision-making processes.

Territorial ESG is not just a new layer of responsibility. It is a new way of operating, positioning, and generating value in a world in transition. It is where care meets strategy, and where resilience and business reinforce each other. It is the shift from a logic of impact mitigation to a logic of territorial regeneration, activating the capacity of places to heal, reinvent themselves, and sustain life with dignity and ecological balance.

From an urban perspective, to regenerate means to reconfigure territory so it can absorb climate impacts, promote spatial justice, and strengthen social and institutional ties. This includes restoring

Diagonal is a socio-environmental consultancy, pioneer in Social Management and a reference in Social Urbanism, with over 35 years of experience. Over the years, the company has helped positively impact the lives of more than 6 million people in 23 countries, through over 1,500 projects. Diagonal supports private companies, governments, third sector organizations, and international development agencies in designing and executing solutions to generate positive socio-environmental impact in the communities where they operate. www.diagonal.social



degraded areas, recovering watersheds and springs, reconnecting ecological corridors — but also weaving social alliances, activating networks, ensuring public presence, and creating lasting intersectoral pacts.

Facing the climate crisis by rebuilding ties, strengthening communities, and turning global challenges into opportunities to build a fairer, safer and more resilient future, for all. This is the logic we believe in.

There is no corporate sustainability possible in a collapsed territory. And no business strategy survives in cities undergoing climate, social or infrastructure collapse.

Katia Mello, Co-president of Diagonal



What if a company's greatest competitive advantage in the 21st century is not in its products, but in how it transforms the territory in which it operates?





WILSON SONS IS ON THE WAY TO TRANSFORMING REALITIES AND DELIVERING A BETTER FUTURE

WILSON SONS IS COMMITTED TO INTEGRATING SUSTAINABILITY INTO ITS BUSINESS, AIMING TO REDUCE NEGATIVE IMPACTS WHILE CREATING INCREASINGLY POSITIVE OPPORTUNITIES FOR SOCIETY AND THE ENVIRONMENT. SUSTAINABLE GROWTH AND LONG-TERM VALUE CREATION ARE BASED ON THE UNITED NATIONS (UN) 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT.

In line with this commitment, Since 2009 the Company has publicly pledged to implement the Ten Principles of the UN Global Compact in its business strategies, actively contributing to sustainable development progress. Reaffirming this commitment, the Company established an operational model that integrates sustainability management into its strategic objectives, aligned with the adoption of best ESG (Environmental, Social and Governance) practices into business operations. The Company's ambition is to be recognized as a leader in ESG initiatives in the maritime and port sector, contributing to the prosperity and sustainability of the logistics industry in Brazil.

Key Challenges on the Horizon

Climate change is one of the most challenging material issues in Wilson Sons's sustainability strategy. The increasing concentration of greenhouse gases (GHG) threatens the planet's climatic balance, leading to more severe and recurrent events that impact global supply chains. The maritime logistics sector is very committed to the transition to a low-carbon economy, having set through the International Maritime Organisation (IMO) targets to achieve net-zero by around 2050, and is currently the mode of transport with the lowest greenhouse gas emissions. On the other

hand, climate change affects the entire value chain of the sector, imposing significant and comprehensive technical, economic and logistical challenges for an industry that connects the entire planet. It imposes a profound strategic shift.

Far from being just another sector facing environmental pressure, maritime logistics, traditionally reliant on fossil fuels, is emerging as a pioneering force in this transformative journey. Decarbonization is not only mitigating climate risks but is actively fostering a positive vision for the future, exemplified by leading companies like Wilson Sons. Known for its extensive experience spanning more than 187 years, Wilson Sons has recognized this imperative early. Since 2013, the company has monitored its GHG emissions, publishing annual inventories and utilizing tools like the Marginal Abatement Cost (MAC) curve since 2022 to guide project decisions. Wilson Sons continues to advance its climate management strategy, with a focus on transparency, operational decarbonization and alignment with a low-carbon economy. In 2025, the company publicly disclosed its Scope 3 emissions for the first time through the Brazilian GHG Protocol Program, marking a key milestone in its climate journey. The company's climate governance is aligned with global frameworks like the TCFD and CDP, supported by



Wilson, Sons

ongoing climate risk and opportunity assessments integrated into enterprise risk management.

Wilson Sons evaluates both physical and transition climate risks across short-, medium- and long-term horizons, leveraging the UN Intergovernmental Panel on Climate Change (IPCC) climate scenarios to test strategic resilience. Physical risks include sea level rise and extreme weather events, while transition risks relate to regulatory shifts, the transformation of the energy matrix and market pressures for decarbonization. These risks may impact operations, revenue and infrastructure, while also creating opportunities such as increased demand for low-carbon logistics and growth in cargo related to renewable energy. Overall, Wilson Sons views climate challenges as a driver of innovation and competitiveness, positioning itself as a sustainable partner across the logistics value chain.

Seizing the Opportunities: Innovation and Collaboration

Operational efficiency and decarbonization are core to Wilson Sons' strategy. For instance, the company introduced electric yard tractors in its container terminal in Salvador, becoming the first maritime terminal in Latin America to use this technology, which nowadays represents around 50% of horizontal operations per year. In the container terminal in Rio Grande, the use of certified renewable energy helped the company to reduce its scope 2 by around 40%. The use of Onshore Power Supply (OPS) in tugboats is increasing year after year, and the company is now innovating its fleet with the series of twin-fin hull tugboats, which can reduce carbon emissions by up to 14% due to enhanced hydrodynamic efficiency. The towage operations centre optimizes positioning and maneuvering of the tugboats, increasing efficiency and saving fuel. To engage its clients, Wilson Sons is developing an insetting scheme, where its clients will be able to abate its indirect emissions based on the use of renewable sources, such as biofuels.

A significant step to energy transition is the biodiesel integration. Wilson Sons' main engines are compatible with up to 30% of conventional

biodiesel blends without significant adaptations, offering substantial emission reductions across nearly all ports they operate in, and the company is already testing blends in some of its tugboats. A significant development is Wilson Sons' pioneering use of hydrotreated vegetable oil (HVO), or "green diesel," in the Brazilian maritime sector. HVO is a 100% renewable drop-in fuel, meaning it can replace fossil diesel completely in existing engines without modifications, while maintaining performance indicators, and it's even safer than diesel. It offers a reduction of more than 80% in life cycle GHG emissions. In an unprecedented move in Brazil's maritime history, Wilson Sons initiated a pilot project in 2025, to test HVO in five of its tugboats. This initiative not only reduces Wilson Sons' direct emissions, but also contributes to the indirect emissions reduction of its partners, impacting the entire maritime logistics value chain.

Conclusion

The challenges facing the maritime sector in achieving net-zero emissions are indeed complex and multifaceted, demanding an integrated approach that combines technological innovation, cross-sector collaboration, and supportive regulation. However, the opportunities are equally substantial. By embracing new technologies, enhancing operational efficiency, and fostering partnerships, the maritime sector can not only significantly reduce its environmental impact but also lead the way towards a more sustainable global economy. Wilson Sons' commitment to sustainability, exemplified by their pioneering in biofuels based solution in its tugboats fleet, underscores Brazil's potential to play a protagonist role in this crucial climate agenda. The evolution of the maritime sector in response to climate change will be a critical test of resilience and innovation, with profound implications for the future of global trade and the environment. Wilson Sons is committed to take part in it. That is a way to deliver better futures.



BRAND TÊTIL: SUSTAINABLE FASHION WITH PURPOSE AND INNOVATION

WITH TWO DECADES OF HISTORY, BRAND TÊTIL IS ONE OF THE LEADING FASHION PRINTING COMPANIES IN BRAZIL. BASED IN AMERICANA, A KEY TEXTILE HUB IN SÃO PAULO, THE COMPANY COMBINES EXCLUSIVE DESIGN, INNOVATION AND SUSTAINABLE PRACTICES TO SHAPE THE FUTURE OF CONSCIOUS FASHION.

At Brand Têtil, the pursuit of innovation is constant. The company offers exclusive prints, trend research, and personalized service, with great flexibility and a wide variety of fabrics. With a production capacity of over 1 million meters per month, it delivers quality and agility without compromising environmental responsibility. All of this is supported by a modern infrastructure equipped with cutting-edge technology.

Sustainability is at the core of Brand Têtil's decisions. To ensure cleaner and safer processes, the company developed Ecoprint – an environmentally responsible printing system that covers every stage, from pre-treatment to final finishing. It uses non-toxic inputs and inks, certified by the ZDHC (a global initiative for chemical safety), ensuring respect for the environment and for those involved in the production process.

The washing system saves up to 50% of water and energy, making a concrete contribution to reducing environmental impact. The company also holds international certifications that attest to the use of low-impact fibers and responsible practices throughout the entire production chain.

Currently, about 90% of the bases used by Brand Têtil are certified and sustainable, reflecting an ongoing commitment to responsible innovation. The company invests in research and development to offer products with a lower environmental footprint, without compromising performance or quality.

Among the raw materials used are banana fibers – derived from agricultural waste – and hemp, a highly durable natural fiber that consumes up to 60% less water than cotton and offers excellent strength.

Brand Têtil also incorporates bamboo fiber fabrics, a fast-growing natural fiber with a low environmental impact, known for its soft touch and antibacterial properties.

Another highlight is the use of recycled polyester (PET), produced from repurposed plastic bottles, helping reduce waste and promote a circular economy.

In the field of viscose fibers, the company works with LENZING™ ECOVERO™, derived from certified and responsibly managed renewable wood sources. It also uses FSC-certified viscose, which ensures that the wood used in its production comes from forests managed in an environmentally appropriate, socially beneficial and economically viable manner.

Complementing this portfolio, Brand Têtil adopts BCI (Better Cotton Initiative) cotton, grown with more sustainable practices that promote efficient resource use and better conditions for farmers.

These choices reflect Brand Têtil's commitment to creating fabrics that go beyond aesthetics, actively contributing to a more conscious, collaborative and circular textile supply chain.

In line with its mission to transform fashion, Brand Têtil shows that innovation and environmental responsibility can go hand in hand. By combining cutting-edge technology, responsible practices and sustainable raw materials, the company proves it is possible to create high-quality products with a positive impact.

At COP30, Brand Têtil reaffirms its commitment to a more ethical, collaborative and sustainable textile industry – inspiring brands, creators and consumers to rethink the future of fashion.

ecoprint[®]

conscious printing from start to finish



PRE TREATMENT
certified chemical
inputs (ZDHC)

PRINTING & DYEING
non-toxic inks (ZDHC)

WASHING SYSTEM
50% savings in water
and energy

SOFTENING
recycled silicone softener,
certified (ZDHC)



COP30: FROM SPEECH TO CLIMATE ACTION

Brazil at the centre of energy transition

THE TIME HAS COME TO TURN CLIMATE AGREEMENTS INTO CONCRETE ACTIONS AND URGENTLY CONFRONT GLOBAL ENVIRONMENTAL EMERGENCIES.

WITH A PREDOMINANTLY RENEWABLE ENERGY MATRIX, A STRONG TRACK RECORD OF EXPANDING CLEAN ENERGY SOURCES, AND VAST POTENTIAL IN GREEN HYDROGEN, BRAZIL POSITIONS ITSELF AS A GLOBAL CATALYST FOR SUSTAINABLE SOLUTIONS.

The world's largest climate event, COP30, taking place in Belém (Pará, Brazil) in November of this year, is a historic opportunity for Brazil to reinforce its role as a key player in climate change discussions. Hosting the conference allows the country to demonstrate its contribution in mobilizing governments, the private sector and society around a global environmental agenda. The importance of COP30 lies in its role in driving concrete progress and strengthening international collaboration on the urgent global environmental agenda.

Following pivotal negotiations like the Paris Agreement (2015), Brazil leads the way in taking action. Topics such as renewable energy, climate change, low-carbon solutions, emissions reduction and clean energy financing for emerging markets will be deepened. It's no coincidence that COP30 is being called the "Implementation COP," focused on achieving previous commitments.

As the host country, Brazil has a strategic opportunity to lead by example. It will be able to show progress in renewables, biofuels and ongoing deforestation reduction, while promoting effective public policies, attracting investment and driving innovation in the clean energy sector.

Brazil: A Clean Energy Force

With around 87% of its electricity matrix derived from renewable sources, Brazil stands out on the global stage. A recent report from the World Economic Forum (June 2025) ranks the country as a leader in Latin America's energy transition. Wind and centralized and distributed solar power already represent 21% of the installed capacity in the National Interconnected System (SIN),

consolidating their role as pillars of Brazil's energy matrix (ONS, July 2025).

Pioneering Decarbonization

Brazil's energy transition is driven by companies such as Casa dos Ventos, a leader in renewable energy projects and a recognized pioneer in the field. The company leads extensive wind measurement campaigns and has developed a robust portfolio of wind projects across Brazil. Its wind, solar and hybrid parks total 4.3 GW in capacity, with plans to reach 10 GW in the coming years, further expanding the use of clean energy in the country.

Fueled by data, knowledge and innovation, Casa dos Ventos is at the forefront of the decarbonization process. Among its initiatives is the production of synthetic molecules such as green ammonia, green fertilizers and e-methanol, derived from green hydrogen generated through renewable energy. These solutions aim to support the decarbonization and fossil fuel substitution in

Casa dos Ventos is recognized for its pioneering spirit, leadership and excellence in the energy transition. It develops wind, solar and hybrid complexes and offers a broad and innovative portfolio of renewable energy solutions—covering generation, supply and commercialization—all aligned with global decarbonization goals and the planet's sustainable future.

Learn more at: casadosventos.com.br

industries such as manufacturing, transportation and agribusiness—serving both domestic and international markets.

A standout example is Casa dos Ventos' green ammonia project in the Pecém Complex, Ceará. With a projected investment of approximately US\$5 billion, the venture includes the ammonia plant and the renewable energy facilities to power it. Set to begin commercial operations in 2029, the plant will produce up to 900,000 tons of green ammonia per year.

Casa dos Ventos plays a direct role in advancing solutions that enhance energy efficiency, improve competitiveness, reduce carbon emissions and mitigate climate risks.

**Green Hydrogen:
Towards Carbon Neutrality by 2050**

The Brazilian Association of the Green Hydrogen Industry (ABIHV) estimates that H2V projects in Brazil could generate R\$800 billion (approximately US\$ 45 billion) in government revenue by 2050 and boost GDP by R\$7 trillion (approx. US\$1.25 trillion), promoting regional development especially in the Northeast.

Globally, decarbonization demands massive investments. Supplying green hydrogen will require over US\$9 trillion to achieve carbon neutrality by 2050, in line with the Paris Agreement. Industries such as steel, chemicals, aviation and shipping are expected to consume nearly 600 million tons of green hydrogen in the next 25 years. In developing countries embracing the climate economy, this could result in the creation of 2 million jobs (*Deloitte data*).

These figures demonstrate the scale of green hydrogen's role in decarbonization. It's an urgent environmental necessity—and a transformative opportunity for Brazil and other nations to foster innovation, attract investment, create jobs and drive sustainable economic and social development while combating global warming.

COP30 could, indeed, mark a turning point in climate negotiations—by transforming commitments into real action and consolidating Brazil's position as a global leader in sustainability.



THE ROLE OF LIGHTING IN SMARTER, MORE EFFICIENT BUILDINGS



Mario Giordano, Global Head of Public & Government Affairs, Signify

Why smart LED lighting is a cornerstone of sustainable building design

Globally, buildings—both residential and commercial—account for nearly 30% of all energy use and approximately a quarter of energy-related emissions, according to the IEA. In the U.S., that figure rises to 40% of total energy consumption, largely because much of the current building infrastructure is outdated and energy-inefficient.

One of the most impactful steps toward decarbonizing the built environment is transitioning to connected LED lighting systems. These systems significantly curb energy use, reduce emissions and enhance the quality of indoor environments where people live, learn and work.

Lighting's influence on net zero goals

Lighting in buildings contributes to up to 27% of global end-use electricity consumption. A significant factor behind this high percentage is the continued reliance on inefficient, legacy lighting technologies in nearly half of all buildings worldwide.

The IEA's Net-Zero Energy (NZE) scenario outlines that building energy demand must fall by 25%, and fossil fuel reliance must drop by 40% by 2030. Upgrading to LEDs—and further, to connected LED systems—offers a fast, cost-efficient route to achieving those targets.

Renovation: a window of opportunity

In Europe, 85% of structures were constructed before the year 2000, and 75% lag behind in energy efficiency. Renovation is therefore a strategic priority. With the adoption of the updated Energy Performance of Buildings Directive (EPBD) in May 2024, the EU is leading the charge with stringent goals, such as:

- Net-zero emissions for all new public buildings by 2026
- Enhanced energy performance requirements for existing buildings
- This framework positions energy-efficient lighting solutions as a central enabler in meeting those objectives.

Beyond energy savings: broader benefits of LED upgrades

For both households and businesses, investing in smart lighting systems delivers multifaceted advantages:

- Lower energy bills and maintenance needs due to the long lifespan of LEDs
- Better illumination quality for comfort, health and well-being
- Intelligent automation that adapts to occupancy and daylight levels
- Versatile lighting control that enhances focus, mood and efficiency



is immense,” says **Mario Giordano, Global Head of Public and Government Affairs at Signify**. “Shifting rapidly to energy-efficient, networked LED lighting can meaningfully reduce electricity consumption and emissions, while strengthening the resilience of our energy systems.”

With half the buildings projected for 2050 yet to be constructed, and the majority of existing ones in urgent need of retrofit, the time is ripe to make connected LED lighting a standard. It offers a scalable, impactful strategy for transforming buildings into healthier, smarter and more sustainable environments.

To delve deeper into this topic, explore our full white paper: *“Unlocking negawatts: the role of lighting in energy security and decarbonization,”* created in partnership with Climate Group.

Lighting is omnipresent in buildings, which makes it a powerful data-gathering platform. When paired with connected sensors and analytics, lighting systems can monitor occupancy, usage and behavioral patterns—empowering facilities teams to make data-driven decisions for energy management.

Global momentum toward smarter lighting solutions

A growing number of governments are adopting frameworks to promote energy-efficient lighting as a fundamental requirement rather than an optional upgrade. A few key initiatives include:

- The EU’s RoHS directive banning mercury-based lamps, along with the Eco-design Regulation phasing out low-efficiency lighting.
- The ASHRAE standards and new zero-emissions building definitions in the U.S.
- Germany’s BEG incentive program, which supports upgrades to connected lighting systems
- Japan’s Building Energy Conservation Act, mandating zero-energy new buildings by 2030
- Spain’s PIREP program, which funds retrofits in public infrastructure, including lighting

The time for action is now

“Lighting systems are ubiquitous—in homes, offices, cities and streets. Their cumulative energy demand



FUSION OF CARES:

a port that cares and
the port that takes care



THE PORTS OF PARANÁ ARE SITUATED WITHIN ONE OF BRAZIL'S MOST IMPORTANT AND BEST-PRESERVED BIOMES: THE ATLANTIC RAINFOREST. LOCATED ON THE ATLANTIC OCEAN, THIS RICHLY BIODIVERSE ECOSYSTEM STRETCHES ALONG MUCH OF BRAZIL'S COASTLINE AND IS INTERNATIONALLY RECOGNISED AS PART OF THE ATLANTIC FOREST BIOSPHERE RESERVE BY UNESCO.

The Ports of Paraná are situated within one of Brazil's most important and best-preserved biomes: the Atlantic Rainforest. Located on the Atlantic Ocean, this richly biodiverse ecosystem stretches along much of Brazil's coastline and is internationally recognised as part of the Atlantic Forest Biosphere Reserve by UNESCO.

Nestled within the Paranaguá Estuarine Complex, the ports are surrounded by mangroves and tidal channels that form a vital ecological niche. This unique positioning places the ports in direct interaction with sensitive and valuable environmental systems.

In alignment with the United Nations' 17 Sustainable Development Goals (SDGs), the Ports of Paraná have implemented more than 40 socio-environmental initiatives. These programmes encompass environmental monitoring, education, and conservation efforts, all aimed at harmonising economic activity with ecological stewardship.

A PORT THAT CARES

One of the standout environmental initiatives developed by the Ports of Paraná is the **Degraded Areas Recovery Plan**, also aligned with several SDGs, and especially those related to climate action and emissions reduction. The programme focuses on preserving around 400,000 square metres of land in the watersheds that feed into the Paranaguá Estuarine Complex, with the primary goal of preventing sediment runoff into the bay caused by rainwater erosion—an issue that can lead to the silting of navigation channels.

What makes this initiative unique, as highlighted by the university involved in its monitoring, is that no





similar project led by a port authority exists globally with the same scale and environmental emphasis.

The project began by identifying and registering smallholder farming families with degraded lands who were willing to rehabilitate these areas using agroforestry systems. This model was chosen because it not only restores ecosystems but also employs native species that help retain soil, sequester carbon, and promote biodiversity through the recovery of both flora and fauna.

Beyond its environmental benefits, the programme also ensures food sovereignty and income diversification for participating families. Agroforestry systems simulate natural forest succession while incorporating economically valuable native plants, providing ecological and financial sustainability.

By reducing erosion and channel sedimentation, the project directly contributes to less frequent dredging operations, which in turn leads to a reduction in the Scope 1 of GHG emissions associated to dredging activities. In this way, the Ports of Paraná are combining ecological

restoration with climate mitigation and social development in a truly integrated and innovative manner.

It is important to highlight that Portos do Paraná is the only public port in Brazil to have completed a comprehensive GHG emissions inventory covering Scopes 1, 2, and 3. This positions the port as a national leader in environmental accountability and carbon management. In line with this commitment, the port is currently developing a robust decarbonisation plan.

Proactively, and in an effort to promote the use of cleaner maritime technologies, Portos do Paraná has implemented an innovative berthing priority policy. Under this rule, vessels that adopt proven strategies to reduce GHG emissions—such as the use of wind-assisted propulsion, alternative fuels, or harnessing ocean currents for navigation—are granted preferential berthing in the arrival queue. This approach not only incentivises sustainable practices within the shipping industry but also contributes to the port's broader climate mitigation objectives. »

The Ports of Paraná are a port complex, strategically located on Brazil's South Region. Beside of regular issues, the environmental port team, develops a range of different kinds of activities, specially, those focused in compensation and mitigation of impacts in the territory.

» THE PORT THAT TAKES CARE

In addition to its ecological initiatives, the Ports of Paraná invest heavily in environmental education and community engagement, particularly with traditional communities on nearby islands. These efforts include training sessions and workshops, such as permaculture classes, aimed at enhancing both environmental quality and the well-being of local residents.

One of the most notable outcomes has been the use of bioconstruction techniques, including alternative sewage treatment systems through constructed wetlands. These systems have already led to marked improvements in bathing water quality, demonstrating tangible benefits for public health and the environment.

This initiative originated from the local community's aspiration to promote tourism by enhancing water quality for safe bathing, while simultaneously supporting the expansion of oyster

farming. Oysters, as filter-feeding organisms, depend on high water quality to attain optimal nutritional value. By improving environmental conditions, the community aims not only to ensure public health and ecological balance but also to position itself within the emerging field of gastronomic ecotourism, leveraging sustainable aquaculture as a central attraction.

The Port Authority's commitment to people is reflected in a wide range of socio-environmental actions that support the sustainable development of island communities, encouraging the preservation of traditional knowledge, the promotion of artisanal fishing, and the growth of sustainable tourism.





**PORTOS
DO PARANÁ**
PORT AUTHORITY



SCHOOL AND SUSTAINABILITY:

in search of a fairer world for everyone

Carolina Paschoal, CEO

UNDERSTANDING SUSTAINABILITY AS AN ESSENTIAL ISSUE FOR MAINTAINING LIFE ON PLANET EARTH REQUIRES MORE THAN WHAT HAS BEEN DONE SO FAR. THE WAY NEW GENERATIONS BECOME AWARE OF THE IMPACT OF THEIR LIFESTYLE DEPENDS DIRECTLY ON THE EDUCATION THEY RECEIVE AT HOME AND AT SCHOOL. THE CHALLENGE BEGINS WITH ANSWERING THE QUESTION, "WHAT CAN BE DONE TODAY TO TRANSFORM THE COMMUNITY?"

School is a place of change, and adults inhabit its grounds. Above all, they must recognize that this is not just a topic, but the only way to transform the environment.

Teachers have the power to impact people and transform them. For this reason, schools are a possible space for sustainable literacy. The first question is how management can incorporate the Sustainable Development Goals (SDGs) into their students' curriculum. It is necessary to rethink and promote continuing education for educators, both through research and by placing them in contexts that encourage learning.

To transform school culture, students need to see tangible strategies in their space. For example, disposable plastic cups can be cited as an example based on this statement. It's pointless to talk about the problem of single-use plastics in class when the school continues to use them daily.

That is why carrying out projects that put ideas into practice is a priority. These projects minimize unnecessary consumption and enable students to understand how their daily choices can transform their relationship with the environment. The pursuit of fair citizenship fosters the development of

Escola Pedro Apóstolo's history with SDG research and practice began in 2020 when it was ranked among the top ten schools in Brazil in the UN's Clean Seas Project. Since then, initiatives have been created to ensure that responsible choices are part of students' daily lives.



individuals who can think critically about their own reality and the realities of others.

The institution started composting organic waste with the help of a specialized company that collects the waste and turns it into fertilizer. Since then, 23,688 tons have been composted, preventing the emission of 37,722 tons of CO₂e. In addition, the institution has banned the purchase of polypropylene-based products and removed single-use plastic.

The school has a workshop that is used by all students. Dozens of projects are developed, and materials are needed to do so. Everything except paints and glues comes from industry surpluses or donations from students' families. Creating from what we already have is a priority for the school.



As it is a private institution, course fees vary by age group and shift. However, a 3% discount is applied to families who take actions that reduce consumption, promote recycling and minimize food waste. Additionally, used cooking oil is collected and donated to biodiesel producers. Plastic caps and dish sponges are also collected. The proceeds are donated to institutions in need.

Students use textbooks every year and return them to the school to be recycled at the end of the school year. It is estimated that around forty tons of paper have been recycled in four years, with the value of the weight donated to an NGO that helps stray dogs.

Transforming the school environment into an agent of sustainability is not just a choice, but an ethical responsibility. When schools teach by example, they create a solid foundation for a more just, empathetic and sustainable society.



DECARBONIZATION JOURNEY IN DENIM PRODUCTION: towards a sustainable future

FOCUSING ON ECO-EFFICIENCY, SOCIAL INCLUSION AND ETHICAL GOVERNANCE, THE COMPANY ACHIEVES INTERNATIONAL RECOGNITION AND LEADS SUSTAINABLE TRANSFORMATIONS IN THE TEXTILE MARKET.

With almost 80 years of history, Capricórnio Têxtil proves that tradition and innovation go together when it comes to socio-environmental responsibility. Founded in 1946, the family business is now the second largest denim producer in Brazil, with an annual production of about 60 million meters of fabric, a team of approximately 850 employees and a presence with more than 3,000 customers in Brazil and other South American countries.

We have a base of transparency and ethics and are committed to creating solutions that combine innovation, performance and sustainability. We deliver all this with a team passionate about what we do, committed to transforming the textile industry and contributing to a better world through our values:

- **People at the Center of Everything**
- **Being and Doing Right**
- **Flexibility to innovate**
- **Communication without Barriers**
- **Doing More with Less**
- **Weaving Change**

Our Movement for a more sustainable fashion

At the heart of our strategy and in line with the value of Weaving Change, we have designed our **Movement for Sustainability** – in line with the Sustainable Development Goals (SDGs) and the UN Global Compact, to which we are signatories – in which we have defined concrete actions to minimize the environmental impacts of textile production.

We continuously invest in technologies to reduce water, energy and chemical consumption, in addition to rigorously managing solid waste and greenhouse gas emissions. Our priorities include the efficient use of natural resources, the

“We believe that sustainability is a movement, a desire that moves action. We want to be a reference in everything we do, developing the most qualified, engaged, safe and happy team, which builds true relationships with customers and partners, in a creative, agile and dynamic way. The practice of this culture on a daily basis greatly facilitates the construction of the path that is moving our industry towards a cleaner, more conscious and diverse future.”

**João Bordignon,
Director of Marketing,
Communication and Sustainability**

promotion of the circular economy, innovation in more sustainable materials and processes, the development of people and transparency in our practices. This vision moves us to continuously reduce environmental impacts, increase social inclusion and strengthen relationships with employees, partners and the community. »

capricórnio



Read more about our progress by accessing our Sustainability Report [HERE](#)

www.capricornio.com.br

[@capricorniotextil](#)



» Our Decarbonization Journey

We understand that tackling climate change is one of today's greatest global challenges, and a great opportunity to innovate and lead by example while being and doing the right thing. Therefore, 3 years ago we started our journey on the Climate Agenda, taking the first steps to make our Decarbonization Journey possible, in accordance with our reality, and aligned with the global goals to contain the warming of the planet.

In recent years, we have invested heavily in cleaner technologies, such as the acquisition of a biomass boiler powered by recycled wood chips, which marked the beginning of our Decarbonization Journey. In addition, our initiatives include the use of 100% energy from renewable sources, with the acquisition of the Renewable Energy Certificate

(iREC) for both industry and offices, modernization of industrial equipment, and expansion of the use of recycled inputs with a lower carbon footprint.

We are in the process of measuring, reporting and managing our emissions across the value chain, with the aim of setting even more ambitious targets in the coming years. This journey involves not only our direct operations, but also engaging with suppliers, customers and partners to find collaborative solutions that accelerate the decarbonization of the textile industry as a whole.

2023: Official opening of the sustainability area

- 1st Inventory of Greenhouse Gases according to the GHG Protocol – Bronze Seal
- Acquisition and installation of the biomass boiler at the São Carlos unit



- Signing of Capricórnio's commitment letter to the Science Based Targets initiative
- Adherence to the NetZero Movement of the UN Global Compact
- 100% of the packages are biodegradable and compostable, and are internationally certified by the Swedish laboratory RISE – Research Institute of Sweden according to ASTM D 6954-4.

2024: Year of evolution and recognition

- 2nd Inventory of Greenhouse Gases according to the GHG Protocol – Gold Seal
- 76% reduction of our total Scope 2 emissions
- Construction of science-based goals (SBTi) in conjunction with the Climoo consultancy: Scopes 1 and 2: 42% / Scope 3: 51.6% / FLAG: 30.3%
- Renewable energy certification for 100% of our industrial plants and offices

- Capricórnio was selected by FGV and the GHG Protocol program to present the article on the project "Evolution in mapped emission sources and accuracy in data collection" in the best GHG Protocol cases.

2025: A year where commitments drive results

- 3rd Inventory of Greenhouse Gases according to the GHG Protocol – Gold Seal
- Deployment of a digital platform to manage and monitor our emissions
- 100% of industrial waste is recycled or reused as by-products, with no disposal in landfills
- We are proud to be the first weaving company in Brazil to have the goals approved and validated in SBTi, reinforcing our commitment to a low carbon future.

CHANGE FOR A MORE SUSTAINABLE FUTURE



CLIMATE CHANGE STANDS AS ONE OF THE MOST PRESSING CHALLENGES HUMANITY FACES TODAY. THE YEAR 2023 AND THE FIRST HALF OF 2024 SAW NUMEROUS RECORD-BREAKING TEMPERATURES AND EXTREME WEATHER EVENTS WORLDWIDE. JANUARY 2024 MARKED THE HOTTEST JANUARY ON RECORD, WITH AN AVERAGE SEA SURFACE TEMPERATURE OF 20.97°C, SURPASSING THE PREVIOUS RECORD SET IN 2016.

These disruptions to nature directly impact our environment, ecosystems, human lives, and production processes, etc., ultimately affecting global development and security. Addressing climate change has thus become an urgent imperative for every nation and its people. and dedication, AkzoNobel team has relentlessly pushed boundaries to create new, high-quality,

aesthetically pleasing, safe, and more sustainable surface solutions.

In 2023, AkzoNobel embarked on comprehensive improvements and innovations driven by a shared ambition: to paint the future and collaboratively build a vibrant, colorful, and more sustainable world for future generations.

Dual goals on surfaces

As a reputable global provider of surface products and solutions, AkzoNobel's product range spans various economic sectors, including industry, production, services, and residential use. AkzoNobel's innovations significantly influence industry transformations and the lives of customers, as demonstrated by the following achievements:

In the Beverage Industry: AkzoNobel introduced Aqualure G1 50 and Accelstyle, the new generation of coatings technology compliant with FDA and EU regulations, enabling beverage can manufacturers

to offer products with surfaces free from bisphenols, styrene, and PFAS. The new products allow manufacturers to switch to coatings that do not contain harmful substances, while maintaining commercial viability.

Additionally, AkzoNobel's bisphenol-free products reduce carbon emissions by up to 26% compared to previous epoxy-based products. It means, with Accelstyle, AkzoNobel achieves the dual goals of protecting users and minimizing environmental impact.

In the Transportation Sector: In aviation, AkzoNobel developed new paint for Brazilian manufacturer Embraer's Profit Hunter E195-E2 aircraft, called Tech Eagle, unveiled at the 2023 Dubai Airshow. AkzoNobel's color experts provided the ideal paint palette aligned with Embraer's vision. The skilled team at MAAS then completed the aircraft painting in 15 days, turning the idea into reality.

On the ground, AkzoNobel became the first supplier of bio-based interior coatings for KIA Motors. The interior paint for EV9 the new electric SUV, using bio-rosin (rosin is a solid form of resin) one extracted from rapeseed and the other from pine rosin, meets all color and functional requirements, including UV protection, air cooling, temperature regulation, and scratch resistance.

Pursuing a philosophy of perfect surfaces that are not only beautiful but also meet quality, impact, efficiency, and sustainability criteria, AkzoNobel sets high expectations for its R&D team. This team is tasked with delivering digital solutions that streamline processes and increase profitability, helping auto repair shops work smarter and more sustainably. Refinish+ is one of the outcomes of this effort. This is a comprehensive set of solutions from Sikkens Vehicle Refinishes for repairing the entire paint layer on vehicles, from restoring the original color, reducing drying time and volatile organic compounds (VOC) emissions, to lowering carbon emissions on the vehicle body, etc.

In the Powder Coatings Industry: AkzoNobel's approach to sustainable development is guided by the principle of reducing consumption and increasing durability. AkzoNobel pioneered the introduction of Interpon D1036 Low-E, a product that can cure at temperatures as low as 150°C, 25% faster than conventional powder coatings, thereby reducing energy consumption by 20% during production. Especially, products using Interpon D

approved coating techniques can be warranted for up to 30 years for exterior architectural applications, supporting sustainable construction trends, cost savings, and resource conservation.

Similarly, in the Decorative Paint Sector, real-world tests have shown that AkzoNobel's Dulux Professional Weathershield Express improves application productivity by 30% compared to traditional three-coat systems, saves 20% of time, and reduces material consumption by 15%. In this sector closely linked to daily life, AkzoNobel has successfully applied bio-based PureAir technology to improve indoor air quality and KeepCool Technology™ to reduce building surface temperatures by up to 5°C.

Hearts turned to the community

Beyond my passion for creating surface solutions and adding color to life, thousands of AkzoNobel employees worldwide share a big dream: to join hands in building a better world.

For nearly a decade, AkzoNobel has partnered with SOS Children's Villages in numerous social programs. The "Let's Colour" initiative aims to reduce youth unemployment through soft skills education, vocational training, and innovation, and has been successfully implemented in countries like Argentina, Belgium, China, Brazil, Nigeria, South Africa, Pakistan, and Indonesia, so on. Besides job and entrepreneurship training, the program focuses on character and capability development. For example, in Banda Aceh and Meulaboh, Aceh Province, Indonesia, young people are trained to make furniture from wood and iron or learn about constructing nursery structures.

YouthCan! Initiative, another SOS Children's Village activity in which AkzoNobel participates, reaches out to orphans, providing them with the best language skills to communicate with the world, opening up new job opportunities.





ON THE GROUND, AKZONOBEL BECAME THE FIRST SUPPLIER OF BIO-BASED INTERIOR COATINGS FOR KIA MOTORS. THE INTERIOR PAINT FOR EV9 THE NEW ELECTRIC SUV, USING BIO-ROSIN (ROSIN IS A SOLID FORM OF RESIN) ONE EXTRACTED FROM RAPESEED AND THE OTHER FROM PINE ROSIN, MEETS ALL COLOR AND FUNCTIONAL REQUIREMENTS, INCLUDING UV PROTECTION, AIR COOLING, TEMPERATURE REGULATION, AND SCRATCH RESISTANCE.

In India alone, over 3,500 underprivileged youth have been trained at AkzoNobel India's Paint Academy, and this number continues to grow as training activities expand worldwide. Notably, these community contributions, regardless of time or place, always receive enthusiastic support from passionate hearts. I am deeply moved by the images of Indian AkzoNobel employees painting community halls and family homes at SOS Children's Village Greenfield in Faridabad. Similarly, in Indonesia, AkzoNobel employees joined hands to renovate foster homes and kindergartens at SOS Children's Village in Jakarta. These foster homes received vibrant, inspiring murals, creating a friendly space for children to grow and create. Dulux EasyClean Anti-Virus was used to ensure the projects were more sustainable and provided a safe, healthy environment for the children. Once again, a dual goal achieved by AkzoNobel!

Renovating community projects has become a hallmark of AkzoNobel's social efforts. In Vietnam, repainting historically significant local lighthouses like Dai Lanh, Vung Tau, and Cu Lao Xanh, has been well-received by local residents and the young Vietnamese community. The short film 'Eyes of the Sea,' integrating the refurbishment of Dai Lanh Lighthouse into a heartwarming family story, garnered over 13 million views, linking Dulux Weathershield with the image of lighthouse guardians in this tropical country. The message of joining hands to protect lighthouses was also spread to young Vietnamese.

For a better world

As mentioned, responding to global climate change is an urgent priority, compelling AkzoNobel and other businesses to take resolute action. In alignment with the Paris Agreement, AkzoNobel is actively striving toward sustainable value

indicators, which include: reducing carbon emissions by 50% in its operations, cutting carbon emissions by 50% across the entire value chain, and achieving 100% circular material usage in operations through reduction, reuse, and recycling. AkzoNobel also aims for 50% of its revenue to come from more sustainable solutions.

AkzoNobel continues to develop radical solutions to combat climate change. One such innovation is KeepCool Technology, which uses special pigments to reflect infrared heat, keeping exterior walls up to 5°C cooler in the Dulux Weathershield product line. To reduce solvent emissions, AkzoNobel is converting specialty wood coatings and decorative paints to water-based technology, targeting over half of its production. Additionally, in the furniture sector, AkzoNobel is implementing circular solutions by increasing the use of renewable materials in finishing products.

It's important to note that climate change and sustainable development must be collective efforts, not the responsibility of a single business or country. This common goal requires strong collaboration among businesses, organizations, and governments. Focusing on green transformation, carbon reduction, innovation, and cooperation, AkzoNobel gathers resources from partners across the value chain to address main challenges. AkzoNobel continues to work with ecosystem partners on research and transformation activities.

Thanks to these combined efforts, AkzoNobel has achieved impressive results. By 2023, compared to 2018, AkzoNobel's absolute energy consumption in operations decreased by 4%, and relative energy consumption decreased by 7%. Furthermore, all production sites in North America, Europe, and

AKZONOBEL CONTINUES TO DEVELOP RADICAL SOLUTIONS TO COMBAT CLIMATE CHANGE. ONE SUCH INNOVATION IS KEEPCOOL TECHNOLOGY, WHICH USES SPECIAL PIGMENTS TO REFLECT INFRARED HEAT, KEEPING EXTERIOR WALLS UP TO 5°C COOLER IN THE DULUX WEATHERSHIELD PRODUCT LINE.



Latin America now operate with 100% renewable electricity, marking a significant milestone following a 48% reduction in waste to landfill versus the 2018 baseline. These achievements are not the final destination. Responding to climate change is only part of the overall sustainable development goal. The circular economy presents more opportunities, despite significant challenges. By adopting this economic model early, AkzoNobel has achieved notable circular solutions, such as a unique two-layer coating method that reduces material usage and improves labor productivity

while maintaining superior performance similar to the conventional three-layer coating method. This material reduction goal is further supported by Sprayvision, a data technology that adjusts materials according to surface needs. This data-driven coating technology helps customers save time, ensure perfect coverage, and reduce waste.

AkzoNobel is also using renewable materials as bio-based binders in decorative paints and producing recycled paints from waste materials. These circular paint lines have been launched in



**Global Product Management
Director AkzoNobel**

**President & Technical
Chairperson, Singapore Paint
Industry Association**

**Chairperson, National
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Pamela Phua is the Global Product Management Director for AkzoNobel, covering both Paints and Coating businesses. Prior to the current appointment, Pamela was the Commercial Managing Director for Vietnam and cluster of key emerging markets including Singapore Cambodia, Laos & Myanmar.

In her stint of career with AkzoNobel, Pamela was also the R&D Director for Asia Pacific & Global Director of Exterior Wall Paint research group who has led and pioneered breakthrough paint innovations & product inventions across well-known household & trade brands including Dulux Weathershield / Powerflexx, Dulux Pentalite, Dulux Wash & Wear / EasyClean, Dulux Inspire / Catylac by Dulux, Aquatech and many others.

Pamela is currently the President and Technical Chairperson for the Singapore Paint Industry Association and Vice President for Asia Coating & Ink Federation.

Pamela also heads National Technical Committee for Surface Coating, under the Chemical Standards Council of Singapore which contributed to the development of various well-known and trusted Singapore Standards for the paint & coating industry:

- SS678 (Specification for Solar Reflective Waterbased Coating)
- SS685 (Specification for Waterbased Primer for Wood & Metal)
- SS686 (Specification for Waterbased Enamel Paint)
- SS345 (Specification for emulsion paints for decorative paints)
- SS500 (Specification for elastomeric wall coatings)
- SS150 (Specification for Emulsion Paints for Decorative purposes)
- SS 579 (Specification for water-based sealer for interior and exterior uses)
- and many others

Pamela is also an author for the G7&G20 summit publication advocating green developments and a keynote speaker in United Nation Climate Change Conference. Latest being the COP29 in Baku Azerbaijan during November 2024.

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some European countries under the Sikkens and Dulux brands. Despite certain cost challenges, AkzoNobel's circular, more sustainable solutions genuinely enhance user health and happiness. The bio-based paint line protects walls from harmful pollutants, providing cleaner indoor air and fresher homes. AkzoNobel's wood coating line ensures that high moisture MDF wood interiors and exteriors eliminate harmful volatile compounds.

Since its foundation in 1792, AkzoNobel has positioned itself as a brand that brings color to spaces, protecting vital values in life: family bonds, creativity, social development, and community cohesion, so on. AkzoNobel's mark can be found in projects deep underground, in homes, cities, transportation means, and even spacecraft. Each layer of paint tells a story, just as each person is a marvel of creation. AkzoNobel believes that opening up a world full of potential is built on the most basic foundation everyone has access to: the colors of life. As Zen masters often advise us living mindfully, recognizing, capturing, and cherishing the most beautiful moments around us in the present is the key to opening up a bright future. AkzoNobel's future path will be guided by the purpose "Paint the Future".

"Paint the Future" is not only the purpose for AkzoNobel but also a call to action. The world is striving to accelerate the transition to a better economy. In a constantly moving world, sustainable development requires building an innovation ecosystem. Collaboration, connection, and positive inspiration to explore new limits are the springboards that elevate human imagination and skill to new heights. I believe this connection, not just between businesses but also at local, national, and regional levels, is essential. Only then can we collectively achieve climate goals and meet basic human needs—all for the benefit of tomorrow's world.

"Paint the Future" will be the foundation and motivation for AkzoNobel to surpass all limits. AkzoNobel's innovative activities will be built on three main pillars, also the identity it has established over time: Innovation, Sustainability, and People. Imagine a day where you greet the morning not with plans to complete routine tasks, but with dreams of a better world where each of us is a colorful piece in the mosaic of that bright future. Your day would be much more wonderful, wouldn't it?



About Akzonobel

We supply the sustainable and innovative paints and coatings that our customers, communities – and the environment – are increasingly relying on. That's why everything we do starts with People. Planet. Paint. Our world class portfolio of brands – including Dulux, International, Sikkens and Interpon – is trusted by customers around the globe. We are active in more than 150 countries and have set our sights on becoming the global industry leader. It's what you'd expect from a pioneering paints company that's committed to science-based targets and is taking genuine action to address globally relevant challenges and protect future generations.

For more information, please visit www.akzonobel.com

COP30 IN BELÉM:

highlighting the Amazon's role in the global climate agenda

Hosting COP30 in the Brazilian Amazon brings renewed attention to the region's environmental importance and the opportunity to connect climate action with development and resilience efforts in a complex and dynamic territory

Jéssica Teijido de Melo and Helena Marinho Ketzer Yacoub, lawyers at Rolim, Goulart, Cardoso

THE CHOICE OF BELÉM, CAPITAL OF THE STATE OF PARÁ, AS HOST CITY FOR COP30 IS SYMBOLICALLY POWERFUL. IT WILL BE THE FIRST TIME THE WORLD'S LARGEST CLIMATE CONFERENCE TAKES PLACE IN THE BRAZILIAN AMAZON – A REGION ESSENTIAL TO GLOBAL CLIMATE STABILITY, YET HISTORICALLY MARKED BY CHALLENGES IN INFRASTRUCTURE, BASIC SERVICES AND INCLUSIVE DEVELOPMENT. BY BRINGING COP30 TO THE HEART OF THE RAINFOREST, BRAZIL PLACES THE AMAZON AT THE CENTER OF THE GLOBAL CLIMATE DEBATE AND HIGHLIGHTS INTERNAL REGIONAL CONTRASTS.

Brazil is a country of deep inequalities. While the Southeast and South concentrate most of the population, industry and economic activity, the North – home to the Amazon – is vast, sparsely populated and faces persistent development challenges. Access to healthcare, education, transportation and sanitation remains limited, and these disparities were clearly reflected in Brazil's 2022 national census disparities.^{1,2,3}

Environmental pressures add complexity to this picture. The North accounts for the largest share of Brazil's greenhouse gas emissions,⁴ largely due

to land-use change and illegal deforestation. In 2024, the Amazon suffered significantly from climate-related events. Severe drought, intensified by El Niño, contributed to widespread fires: 2.4 million hectares destroyed, releasing over 31 million metric tons of CO₂e⁵ – nearly equivalent to Norway's annual emissions.⁶ Once a major carbon sink, the Amazon emitted more carbon than it absorbed in 2024.⁷

This ecological degradation directly affects local populations who depend on the forest for food, water and income. Limited access

Rolim Goulart Cardoso is a leading Brazilian law firm specializing in energy, infrastructure, environmental, and regulatory matters. With offices across the country, the firm combines legal accuracy with technical depth, offering multidisciplinary solutions to complex challenges while maintaining a strong commitment to ethics, sustainability, and client-focused service.

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to infrastructure and services leaves many communities ill-prepared to cope with intensifying climate risks such as extreme heat, floods and droughts. In this context, climate change acts as a stress multiplier, underscoring the need for regionally tailored and inclusive adaptation strategies.

Hosting COP30 in Belém draws international attention to the unique realities of the Amazon – a region where environmental dynamics and development challenges are deeply intertwined. The Amazon plays an irreplaceable role in maintaining planetary balance. It absorbs vast amounts of carbon each year and hosts over 10% of global biodiversity.⁸ There is no viable path to climate stability without a healthy Amazon. Holding the COP during the region's dry season – a period marked by heatwaves and forest fires – adds urgency and visibility to these challenges. It is also a rare opportunity to center the Amazon in global climate discussions.

This context calls for a more integrated approach to the climate agenda – one that links environmental protection with inclusive development, infrastructure investment and economic resilience. Climate justice, in this sense, means ensuring that the regions most affected by

climate change have the tools and opportunities to adapt and thrive.

In the Amazon, this includes expanding access to basic services, strengthening climate-resilient infrastructure and supporting sustainable livelihoods that align conservation with income generation. Empowering local actors – including Indigenous peoples, traditional communities and low-income populations – is key to designing policies that are both effective and rooted in local realities.

For COP30 to leave a meaningful legacy, the Amazon must be recognized not only as a global ecological asset, but as a strategic region for building inclusive and low-carbon development models. Advancing a climate agenda that connects environmental priorities with health, education, connectivity and economic opportunity is essential. In the Amazon, resilience depends on solutions that safeguard the forest while promoting inclusive development for local communities – a core principle of climate justice, which seeks to ensure that those most affected by climate change are also empowered to shape and benefit from the solutions.

1 When it comes to access to sewage systems, the North has the lowest rate in the country, with only 24.41% of households connected. In contrast, the Northeast stands at 43.06%, the Center-West at 54.27%, the South at 63.73%, and the Southeast at 86.68%. Data available at: https://censo2022.ibge.gov.br/panorama/mapas.html?tema=conexao_rede_esgoto&recorte=N2

2 The same trend appears in access to the general water supply: only 56.45% of the North's population is regularly served, while the Northeast reaches 77%, the Center-West 85.65%, the South 86.89%, and the Southeast 91.17%. Data available at: https://censo2022.ibge.gov.br/panorama/mapas.html?tema=abastecimento_agua_rede_geral&recorte=N2

3 Additionally, the North has the highest percentage of its population living in favelas, at 18.91%, compared to 8.49% in the Northeast, 2.41% in the Center-West, 3.23% in the South, and 8.38% in the Southeast. Data available at: https://censo2022.ibge.gov.br/panorama/mapas.html?tema=pop_em_favelas&recorte=N2

4 According to 2023 data from the Greenhouse Gas Emissions and Removals Estimation System (SEEG), the North accounted

for approximately 657.780.973 million metric tons of CO₂e, followed by the Center-West with 477.885.260 million, the Northeast with 455.671.607 million, and the Southeast with 422.305.578 million metric tons of the country's total gross emissions. Data available at: <https://seeg.eco.br/english/home/>

5 Considering only forested areas, 700,000 hectares were affected, releasing 12.7 million metric tons of CO₂e.

6 Available at: <https://ipam.org.br/emissao-de-co2-por-queimadas-na-amazonia-cresce-60/>

7 Available at: <https://oglobo.globo.com/um-so-planeta/amazonia-ja-emite-mais-gas-carbonico-do-que-absorve-indica-estudo-25109172#:~:text=As%20emiss%C3%B5es%20das%20queimadas%20s%C3%A3o,que%20tem%20em%20m%C3%A9dia%201%25.&text=Dados%20do%20Inpe%20mostraram%20que,bilh%C3%A3o%20de%20toneladas%20por%20ano>

8 Available at: <https://infoamazonia.org/2022/12/15/cop15-amazonia-biodiversidade/>

UNLOCKING THE TRANSITION:

how Brazil's financial sector is turning ambition into action

Fabiana Costa – Head of Sustainability at Bradesco

As the world prepares for COP30 in Belém, Brazil's role in the global transition is once again under the spotlight. The country combines one of the world's richest reserves of natural capital with a mature financial system — a combination that gives it unique leverage to design pathways reconciling economic growth, inclusion and conservation.

For Brazilian banks, the challenge is clear: to translate climate ambition into concrete financial solutions that reach all regions and sectors. Over the past decade, financial institutions in Brazil have developed methodologies, governance structures and instruments to embed sustainability at the core of their operations. This evolution has been both technical and cultural — from measuring risks to identifying opportunities that deliver social and environmental value.

The Rise of Sustainable Finance

In recent years, the financial sector has advanced in integrating climate-related metrics into credit and investment decisions. Tools such as the estimation of financed emissions, climate stress testing and portfolio alignment models are increasingly used to steer business strategies.

Bradesco was the first financial institution in Brazil to measure its financed emissions under the Partnership for Carbon Accounting Financials (PCAF) methodology, incorporating these results into risk management and portfolio steering processes — a key step towards aligning finance with climate science.

Banks have also expanded access to sustainable finance instruments — including green, social and sustainability-linked loans and bonds — to support clients in decarbonisation and adaptation projects.



Community of Tumbira, on the banks of the Rio Negro, where financial inclusion and local entrepreneurship have helped strengthen sustainable livelihoods. Photo: © Ednei Fialho Lopes.

In Brazil, this market has grown rapidly, with major institutions such as Bradesco allocating more than R\$350 billion since 2021 to activities with social and environmental benefits – a target established to guide and monitor the expansion of sustainable finance within the bank's portfolio. The process often involves close advisory work to help companies establish credible frameworks, define targets and report outcomes in line with international standards.

These advances are not limited to large corporations. Sustainable finance in Brazil has also reached local entrepreneurs, cooperatives and rural producers through credit lines and inclusion programs. This multilevel approach – from major issuances to community-based finance – is what gives the Brazilian case its distinctiveness.

Local Presence, Global Lessons

The intersection between finance and conservation becomes visible in the Amazon, where banking presence and partnerships can reshape local economies. In communities such as Tumbira, access to microcredit, financial education and digital services has enabled new income sources linked to sustainable resource management.

Bradesco's long-term partnership with the Fundação Amazônia Sustentável (FAS) exemplifies how collaboration and local engagement can generate lasting impact: the bank has invested over R\$129 million across 17 years in initiatives that promote financial inclusion, entrepreneurship and forest conservation. These experiences demonstrate how inclusive finance can act as a lever for development and climate resilience simultaneously.

For banks like Bradesco, which combine sustainable finance strategies with on-the-ground partnerships, such experiences provide tangible insights into how finance can unlock transformation when aligned with local needs and measurable outcomes.

Towards COP30 and Beyond

The lessons emerging from Brazil's financial sector are particularly relevant ahead of COP30. They show that the transition to a low-carbon economy is not an abstract goal – it requires technical capacity, regulatory stability and collaboration across the entire value chain.

The financial sector has a critical role to play turning commitments into scalable models that connect investors, regulators and communities. The Brazilian experience demonstrates that when inclusion, innovation and measurement converge, finance becomes one of the most powerful tools for real climate action.

Bradesco is one of Brazil's largest financial institutions, integrating sustainability into its business strategy. It supports clients in the transition to a low-carbon economy through financial inclusion, advisory and sustainable finance solutions, combining technical innovation, transparency and long-term partnerships to create positive economic, social and environmental outcomes.



Fabiana Costa, Sustainability Superintendent at Bradesco, leads the institution's ESG strategy and performance, promoting its integration into the business. With over 20 years in the financial sector, she works on structuring sustainable businesses, climate finance and solutions for the low-carbon transition. She is an economist from PUC-SP, with an MBA from Fipe-USP, a master's in Sustainability from FGV and executive training in ESG from Saint Paul. Co-author of the book *Sustainable Business*, she is recognized for her strategic leadership and active presence in forums that drive corporate sustainability in Brazil.

BUILDING CLIMATE RESILIENCE THROUGH COMMUNITY-LED SUSTAINABILITY INITIATIVES

AS ACCELERATING CLIMATE CHALLENGES AND SYSTEMIC SHIFTS REDEFINE GLOBAL PRIORITIES, RESILIENCE HAS EMERGED AS A CENTRAL IMPERATIVE, ONE THAT MUST GO BEYOND STRATEGY TO BECOME A LIVED, LOCALIZED PRACTICE.

Communities, often on the front lines of environmental and social disruption, play a central role in this transition. Building resilience on a scale therefore requires the combined engagement of all actors, from institutions and civil society to businesses and local ecosystems.

In this evolving landscape, the private sector is increasingly seen as a catalyst with the capacity to support resilient and inclusive communities capable of adapting to and thriving amid climate disruption.

For Les Eaux Minérales d'Oulmès (LEMO), resilience lies at the core of its sustainable strategy, grounded in a long-term vision that aligns purpose with performance. It begins where it matters most,

in the heart of the communities it serves, where the connection between people, purpose, and nature guides collective progress.

OUR APPROACH SPANS FIVE STRATEGIC PILLARS:

- ◆ **Consumers**, by promoting healthy hydration and well-being
- ◆ **Clients**, by creating lasting shared value
- ◆ **Employees**, by fostering an empowering and inspiring workplace
- ◆ **Communities**, through education, employability, and solidarity
- ◆ **Environment**, by reducing our footprint and investing in sustainable growth.

These pillars inform every level of our action, from strategic planning to local execution.





LES EAUX
MINÉRALES
D'OULMÈS

These pillars are not abstract commitments, they take shape on the ground, in territories where LEMO has forged long-standing partnerships with communities and ecosystems.

Built on decades of close collaboration with the communities and ecosystems on which we rely, LEMO embraced sustainability through practical, community-based action. This commitment is reflected in our support for local green employment, in empowering youth and women with skills in sustainable trades via focused capacity-building programs, in assisting small businesses in adopting climate-smart practices, and in fostering of locally driven innovation to develop tailored solutions for climate challenges.

Scaling resilience from the ground up

At LEMO, sustainability has grown from the ground up, deeply rooted in its long-standing ties to the Oulmès region where **its journey began**. This local anchoring has shaped the company's evolution – not only as a producer of natural mineral water, but as a catalyst for shared value creation.

Over the years, LEMO has built strong, lasting relationships with communities, local authorities and partners, enabling the co-creation of solutions that are both impactful and inclusive. This deep local embeddedness is not symbolic, it represents a strategic pillar of its resilience model, influencing how initiatives are designed, scaled, and measured.

Embedding inclusion at the core

Les Eaux Minérales d'Oulmès considers social inclusion to be a cornerstone of climate resilience. It is not only about widening access, but also about rethinking how value is created and shared.

Programs are designed with and for women, youth, and rural communities, recognizing these groups not as passive beneficiaries, but as active co-drivers of transformation.

By embedding inclusion into the design and governance of its actions, LEMO strengthens the relevance, effectiveness and long-term impact of its sustainability commitments. »



- » Resilience, in this view, can only endure when it is locally rooted and collectively owned.

Strategic programs driving measurable impact

Guided by a strong commitment to sustainability, LEMO implements a portfolio of strategic programs designed to generate long-term, systemic impact, while ensuring alignment with local priorities and challenges.

This commitment is brought to life through a set of targeted programs, each contributing tangible, long-term impact in alignment with local realities:

- **African Youth Climate Hub:** In collaboration with the Mohammed VI Foundation for Environmental Protection, this initiative nurtures the potential of young African entrepreneurs committed to green innovation through an intensive six-month incubation program. Beyond providing technical assistance, the program offers mentorship and access to a broad network, enabling participants to develop and scale climate-led business solutions. The third edition of the program, held this year, underscores the growing pan-African momentum propelling the transition toward a greener economy.
- **Morocco Water Race:** Co-created with Enactus Morocco, this nationwide competition promotes water-focused innovation and catalyzes student ingenuity to develop creative solutions for sustainable water use and management. Engaging more than 2,000 students across Morocco's 12 regions, the program not only generates 400 innovative projects but also shepherds 26 promising ventures through pre-incubation, nurturing a generation of climate-smart entrepreneurs, equipped to shape resilient water futures.
- **Sustainable Rural Cooperatives:** LEMO's partnership with the International Labour Organization champions sustainable development through the empowerment of local cooperatives specializing in medicinal and aromatic plants. This initiative synergizes ecological conservation with economic diversification by providing cooperatives with governance training, sanitary best practices, digital marketing expertise, and market access, thereby creating resilient livelihoods rooted in biodiversity preservation and valorization.
- **Annual Medical Caravans:** Understanding that health is a cornerstone of resilience, LEMO organizes multidisciplinary medical caravans in collaboration with local health professionals, delivering over 4,500 vital healthcare services to underserved populations in Tarmilite and surrounding regions. This program exemplifies LEMO's holistic approach to community well-being.





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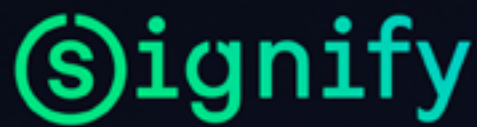
Together, these initiatives form a cohesive ecosystem aligned with national priorities and driven by one ambition: to contribute to strengthening the territorial anchoring of sustainability for the benefit of the communities and regions served by LEMO.

Purpose-Driven Corporate Initiatives Strengthening Community Resilience

As climate dynamics continue to evolve, companies are called to redefine their roles as genuine agents of positive change and proactive contributors to resilience by deeply integrating social and environmental priorities and fostering systemic, long-term impact.

Through inclusive programming, purposeful partnerships, and sustainable operational practices, businesses contribute to building adaptive, thriving communities equipped to face the uncertainties of a changing climate, a vision that Les Eaux Minérales d'Oulmès (LEMO) continues to bring to life across the territories it serves.





The role of lighting in smarter, more efficient buildings



Explore our white paper, created in
partnership with Climate Group:

Unlocking negawatts: the role of lighting
in energy security and decarbonization.