

Annual Report 2025



Message from the Superintendent's

Operating at the national and international level, from the dynamic innovation ecosystem of the "Capital of Startups", the CERTI Foundation, together with its institutions and affiliated companies, forms its own ecosystem of technological innovation and entrepreneurship that offers its clients a diverse range of competencies and technologies.

The highlight of the year goes to the Amazon Bioeconomy and Innovation Park, which we inaugurated in partnership with the Government of the State of Pará, concurrent with the COP-30 climate conference.

Conceived by our Green Economy Center, sponsored by the Fundo Vale, implemented and operated by our specialists and engineers in two warehouses of the old docks of Belém, the Park offers spaces to promote innovative and impactful entrepreneurship and a factory laboratory capable of processing products from the Amazon forest in the lines of food, essences and cosmetics. The focal point of this report is the presentation of some

of the 73 projects we worked on in 2025, where Petrobras and Lenovo emerge with a diversity of applications in intelligent sensors, production processes and BIM, alongside projects that are no less important for electric power companies.

In the area of entrepreneurship, we ran another edition of the Inovativa and Centelha programs, respectively from MDIC (Ministry of Development, Industry, Trade and Services) and MCTI (Ministry of Science, Technology and Innovation), in addition to continuing the Bioeconomy Synapse of the Jornada Amazônia program. The startups incubated in CELTA, which account for 95% success, have deserved all our attention.

Whenever possible, we seek to involve some of the incubated companies in our projects, as was the case with 4Feedstock, our partner in a project developed with Petrobras. At the international level, we continue to serve our long-standing customer Siemens Healthineers with software projects applied to medical equipment and Kaco New Energy in the area of renewable energy. In addition,

we have the support of GIZ – Gesellschaft für Internationale Zusammenarbeit in our entrepreneurship programs in the Amazon. In keeping with previous years, we have evolved the environment and culture of collaborative work in favor of the best solutions, integrating the multidisciplinary technological domains of the various CERTI centers and units.

Our talent attraction and retention program "I want to work at CERTI" presents excellent results among employees, who have awarded us with eNPS© (Employee Net Promoter Score) 55 to the question "would you recommend CERTI to work?". We appreciate the commitment of our employees, the support of the board members and the trust of our customers, suppliers and partners, and we reaffirm the CERTI Foundation's commitment to contributing to the competitiveness of companies and the sustainable development of the country, through technological innovation and the continuous promotion of innovative entrepreneurship.

Erich Muschellack
General Superintendent



Summary

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INSTITUTIONAL

About CERTI

For more than 40 years, the CERTI Foundation has been active in the development of the bioeconomy and in the technological, social and entrepreneurial advancement of Brazil, providing services to the private sector, the government and the third sector.

CERTI is recognized for its authority on strategic competencies:

- Industry 4.0
- Mechatronics
- Software
- Artificial Intelligence (AI)
- Computer Vision
- BIM (Building Information Modeling)
- Integrity Management
- Energy Systems
- Bioeconomy
- Entrepreneurship

These competencies are structured in six Reference Centers in Innovative Technologies. A private and non-profit institution, CERTI carries out Research and Development (R&D) activities and conducts initiatives that generate impact and contribute to the transformation of the country, integrating academic knowledge with the market.



Ecosystem

Throughout its history, CERTI has been part of an ecosystem formed by a network of institutions that actively collaborate to boost innovation, technology and entrepreneurship in Brazil.

Each partner contributes with their unique expertise and resources, creating synergies that strengthen the system as a whole. As an R&D institute, CERTI connects and integrates academic knowledge, startups and technology providers for the development of innovative products, processes or ventures.

Through its own methodologies and specific tools, it acts comprehensively at all stages, from conception to the solution implemented and launched on the market.



First business incubator in Brazil, created in 1986, leveraging startups and technology-based ventures.



Laboratory-Factory of electronic manufacturing and development of solutions for Industry 4.0



CERTI's Corporate Venture, with the objective of promoting the structuring, acceleration and leverage of technology-based Enterprises.



Contract Manufacturer partner that assembles boards and electronic products, prototypes and pilot batches.



Technological development and innovation focusing on the priority areas of business generation in Digital Transformation and Energy.

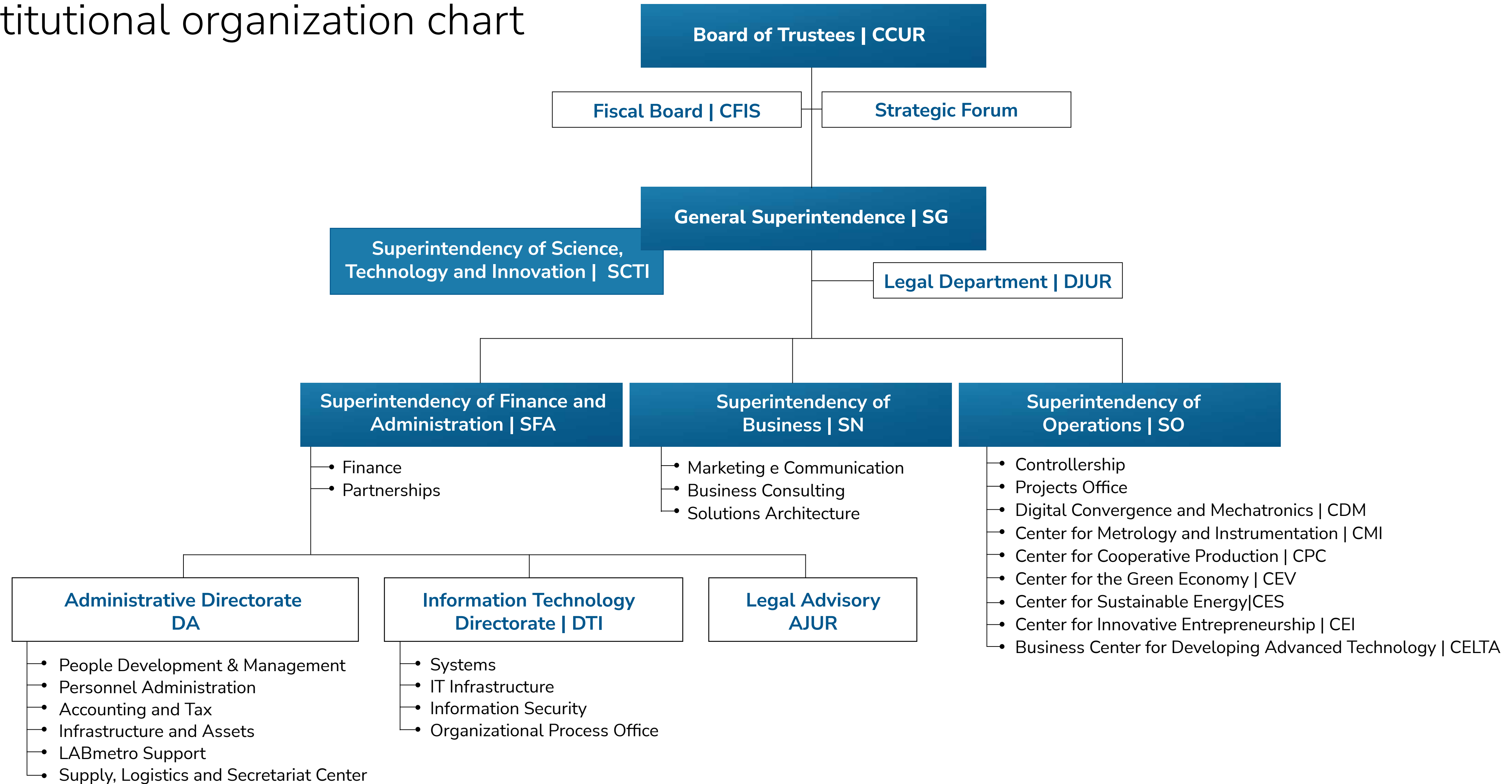


Solutions in Digital Transformation, Intelligent Systems, Industry 4.0, Bioeconomy, Energy, and Entrepreneurship.



Management 2025

Institutional organization chart



Management 2025

Advisory Board Members

Fiscal Board

- 01 - Marco Antônio Harger Lückmann (Presidente)
- 02 - Augusto Luiz de Oliveira
- 03 - Edilson Paulo
- 04 - Israel dos Santos



Board of Trustees

- 01 - Amir Antônio Martins (Presidente)
- 02 - Guilherme Ary Plonski
- 03 - Joel Risso
- 04 - José Eduardo Azevedo Fiates
- 05 - Julia Midori Shimonaga Kodaira
- 06 - Luis Carlos Guedes
- 07 - Luis Gonzaga Coelho
- 08 - Paulo Cesar Rezende de Carvalho Alvim
- 09 - Letícia Mazzarino



Management 2025

CERTI Administration



Superintendents

01 **Günther Pfeiffer**
Superintendent of
Operations, Finance &
Administration

02 **Erich Muschellack**
General Superintendent
& of Science, Technology
and Innovation

03 **Laercio Aniceto Silva**
Superintendent
of Business

Executive Directorate

01 - **Aucinei Angenor Brandão**
Administrative Directorate | DA

02 - **Carlos Alberto Fadul Correa Alves**
Center for Cooperative Production | CPC

03 - **Fernanda Konradt de Campos**
Center for Innovative Entrepreneurship | CEI

04 - **Gustavo Daniel Donatelli**
Center for Metrology and
Instrumentation | CMI

05 - **Marcos Aurélio Da-Ré**
Center for Metrology and
Instrumentation | CMI

06 - **Mauricio Ibarra Dobes**
Digital Convergence and Mechatronics |
CDM & Sustainable Energy | CES

07 - **Gabriel Rodrigo da Silva**
Information Technology | DTI

08 - **Tony Chierighini**
Business Center for Developing Advanced
Technology | CELTA



CERTI RESULTS IN 2025

Indicators

R\$ **114** millions
Net Operating Revenue

R\$ **131** millions
Signed Project Contracts

61%

Projects with funding from incentive and promotion programs

55 eNPS

(Would you recommend CERTI for Work?)

73

Projects executed in the year

671

Customers served

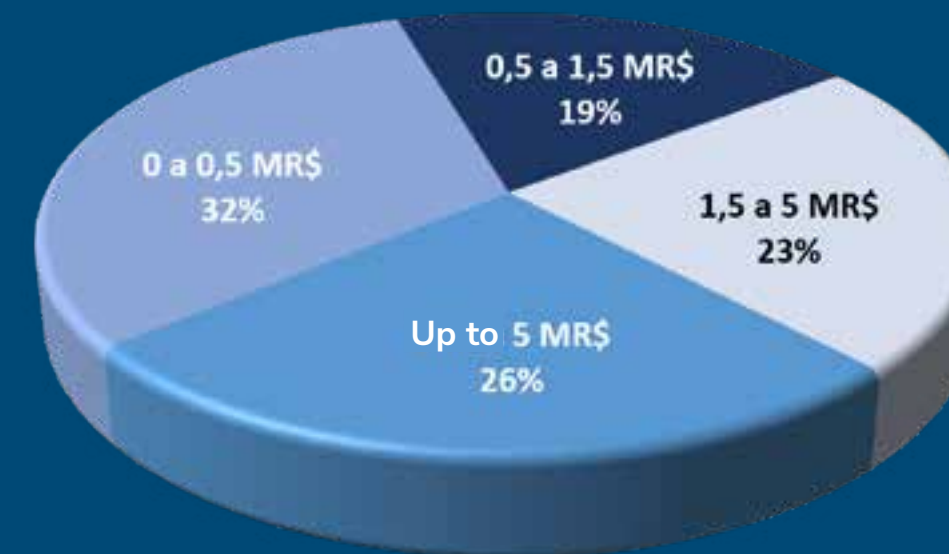
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Staff

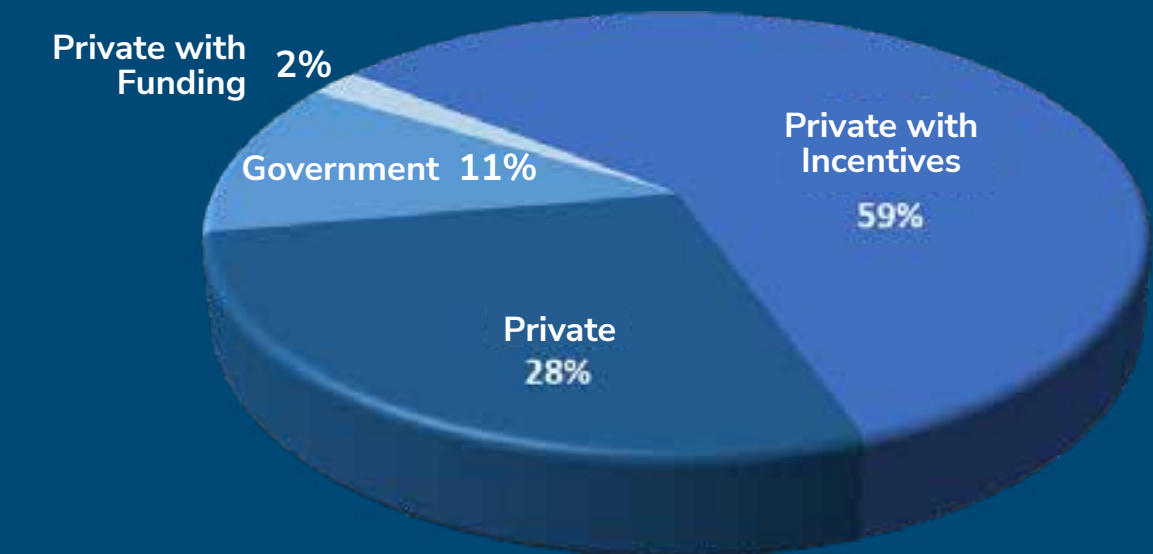
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Market Sectors Served

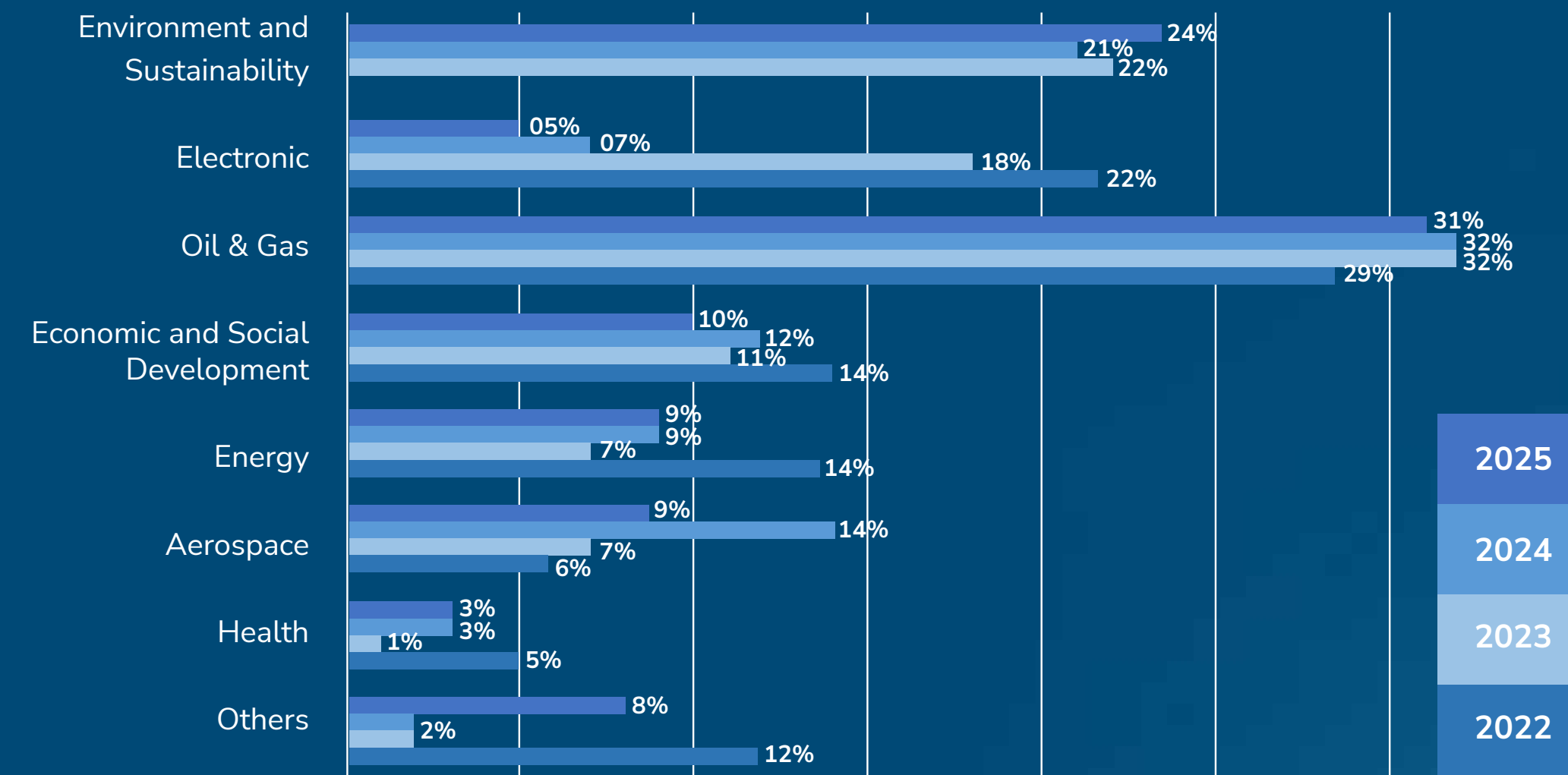
Size of projects executed



Revenue by resource type



Change in sector revenue in annual revenue



Analysis of indicators

Institutional Evolution



CERTI Foundation: a “one stop shop” for technological innovation.

The high competitiveness of the current market demands from companies, our customers, innovations of increasing technological complexity, which translate into the application of multiple technologies to the same objective or project. In this context, an internal policy that encourages our employees to teach and learn promotes a virtuous cycle of knowledge exchange, contributing to the retention of talents and the continuous evolution of projects.

We ended the third year with stable results, recording R\$125 million in sales and R\$115 million in revenue. In addition, operating profit remained positive, at a level compatible with the nature of the Institution.

In a challenging national scenario, the Foundation's operational viability is supported by solid corporate governance, combined with a robust commercial team and a highly qualified technical staff.

Analysis of indicators

Economic Scenario

2025 was consolidated as a period of strategic maturation for the CERTI Foundation, operating in a business environment where the execution of long-term industrial policies found a context of resilience and monetary vigilance.



At the center of this dynamic was the advance of Nova Indústria Brasil (New Industry Brazil), which in 2025 ceased to be just a framework of intentions to become a constant flow of public calls and technological missions. This political context stimulated CERTI to align its competence centers to bring the differential of multidisciplinary capacity to meet national priorities, especially on the fronts of digital transformation of manufacturing, bioeconomy and impact entrepreneurship.

The Foundation acted as a critical node in this system, translating government goals into executable projects for the private sector, which allowed a significant expansion of the portfolio beyond the electronics sector, benefiting from the “Lei de Informática” Law, where CERTI is already a consolidated player. On the macroeconomic front, high inflation and low performance of Brazilian GDP caused industries to face the lack of confidence to invest in innovation throughout the year, due to strict monetary policy.

The maintenance of the Selic rate at restrictive levels throughout 2025 created an expensive credit scenario for corporations. This obstacle ended up reinforcing the business model based on grants and tax incentives.

Favored by the possibility of granting EMBRAPA II funding, where it is accredited to operate in Intelligent Systems, CERTI has frequently used its multidisciplinary capacity to deliver quality final products to outperform the competition. Access to non-reimbursable resources and risk sharing were the main refuges for companies to innovate without compromising cash flow. This inflation dynamic exerted pressures on the Foundation's operating cost, especially in highly qualified services. The phenomenon of “talent inflation” was particularly acute in the artificial intelligence sector. The global competition for experts demanded from CERTI an agile human capital management to retain its talents in the face of proposals in hard currency. In foreign exchange, the volatility of

the dollar had an ambivalent impact on the operation. On the one hand it made the import of electronic components more expensive, on the other hand it made CERTI's services competitive for the foreign market, especially in Europe, favoring the export of research and development services.

The prestige of the entrepreneurial ecosystem of Florianópolis, where CERTI is a pioneer and protagonist, also served as an important reference for securing innovation projects throughout the country. At the same time, the political climate generated fiscal uncertainty, but resources for science were preserved. The energy and sustainability sector has emerged as the major revenue driver. Driven by COP 30 and the interest in sustainability, energy transition and emission reduction, CERTI captured opportunities in the regulation of Green Hydrogen, in the MOVER program and consolidated its position as a specialist in electric mobility. The digitization of health has also advanced with

the support of public policies and device projects and the application of artificial intelligence. To face the complex scenario of 2025, where many project contracts were delayed or postponed, prospecting and marketing actions were intensified. CERTI's governance has also been strengthened to handle complex contracts. International partnerships with Europe have accelerated technology transfer.

The 2025 business environment required CERTI to navigate precisely between the opportunities offered by a robust industrial policy and the challenges posed by a high cost of capital. Assessing risks and transforming challenges into real opportunities to win new customers, CERTI is increasingly establishing itself as a world-class technology institution, resilient and essential for the productivity and competitiveness of companies.

Analysis of indicators

Market



In 2025, CERTI's strategic positioning strengthened its role as a hub for competitive technological innovation and a catalyst for industrial modernization and sustainability with international operations.

Positioned at the forefront of green and digital economies, the institution played a key role as a bridge between scientific research and the generation of economic and social value. Its multidisciplinary work covered strategic sectors, including the digitization of industry in general, electronics, health, aeronautics, energy, oil and gas, environmental preservation and entrepreneurship, reaffirming its commitment to economic and social development through innovation. In the digital transformation, artificial intelligence and the development of intelligent platforms have consolidated themselves as transversal engines of 2025

operations. In healthcare, CERTI's artificial intelligence solutions have driven precision medicine and digital health, operating under strict data protection standards.

For industrial multinationals, in projects with international scope, the focus was on accelerating the digital transition via computer vision solutions, low-cost mechatronics and other Industry 4.0 tools, automating processes and increasing the productivity and competitiveness of global companies in projects in Brazil, Europe, China and the Americas. In the oil and gas sector, CERTI has achieved new levels of excellence through projects based on Open-Bim technology. The integrity management of offshore assets was also a very successful initiative that guaranteed CERTI the prestigious ANP Technological Innovation Award 2025. In the area of energy, in the sphere of energy transition, the Foundation prioritized global decarbonization with a focus on Green Hydrogen, enabling application routes

and monetization plans for this clean matrix. It also optimized asset management systems and intelligent monitoring of microgrids, promoting greater resilience in power distribution for the Brazilian market.

Contributing to COP 30 in Brazil, CERTI's performance was highlighted in the area of bioeconomy and environmental conservation, developing in cooperation with SEMAS-PA (State Secretariat for Environment, Climate and Sustainability) the Amazon Bioeconomy and Innovation Park in Belém-PA, to support business, investments and product development from a factory laboratory operating with inputs from Amazonian biodiversity. In collaboration with the Instituto CERTI Amazônia, it led the convergence between cutting-edge technology and conservation, demonstrating the economic viability of the "standing forest" model. The B.I. (Business Intelligence) of the Forest The B.I. (Business Intelligence) of

the Forest project, integrated with the Bioconex platform, has obtained international recognition for its ability to convert complex environmental data into business intelligence. This award-winning initiative by Microsoft facilitated investments in sustainable production chains and provided essential technical subsidies for the formulation of new environmental public policies.

In support of entrepreneurship, CERTI's role as the EMBRAPA II Intelligent Systems Unit allowed technological democratization through grants for startups and technological chaining with large companies for corporate innovation. In addition to delivering value, the Foundation acted as a bridge between the government and the private sector, replicating the successful model of the Florianópolis entrepreneurial ecosystem to other regions, and fostering a culture of innovation through communication initiatives and strategic debates.

Analysis of indicators

Technologies and Projects



Keeping up with the speed of technological evolution in a fast-paced, digital, intensely connected world, with increasing use of Artificial Intelligence and undergoing deep transformation, is a major challenge for institutions focused on technological development and innovation.

In this context, the CERTI Foundation, as a learning organization, has made intense progress in the study, use and contribution of knowledge and methSDG in digital technologies, especially in computer vision, digital metrology, BIM (Building Information Modeling), intelligent instrumentation, digital twins, collaborative robotics, critical real-time systems, data mining, NLP (natural language processing) and artificial intelligence.

It also advanced in the consolidation of knowledge structures, experience and modeling of innovative business development methodologies, inno-

vative entrepreneurship, impact entrepreneurship, planning and operation of innovation environments and corporate innovation. A significant portion of these technologies are structuring for the strengthening of CERTI's three priority areas of action:

- I) Industry 4.0,
- II) Innovative Entrepreneurship,
- III) Green Economy.

A strategic opportunity for CERTI as a technological competence is the facilitated access of its employees to higher education, especially in specialization, master's and doctoral programs, especially with UFSC (Federal University of Santa Catarina), IFSC (Federal Institute of Education, Science and Technology of Santa Catarina) and UDESC (State University of Santa Catarina). In addition to enabling continuing education, this approach promotes the development and application of new technologies, creating a virtuous cycle of learning and cooperation. Recognizing this potential, in 2025 CERTI intensified its engagement with these and other institutions and expanded

partnerships aimed at technological cooperation. Project execution is the most expressive activity carried out at the CERTI Foundation. Project revenue decreased 5% compared to 2024 and represented 93% of net operating revenue for the year, given the market restriction experienced at that time. The number of 73 projects carried out in the year decreased by 10% compared to 2024, however, large projects (above R\$5 million) grew by 3%. Fewer but larger projects.

The growing demand from customers for solutions in increasingly advanced stages on the TRL 6 to 8 Scale (Technology Readiness Level), closer to the solution for effective operation in the market, has led to an ever-greater competence in solution productization, an area in which the Foundation clearly differentiates itself from the vast majority of ICTs in the country - especially in the electronics, oil and gas, aerospace and health sectors, whose revenues corresponded to approximately 50% of annual

revenue. The development of technological solutions reaching TRL 7 to 9 demands a high level of technical and management expertise, both in market viability, design and architecture and in the delivery of these solutions to the customer, involving aspects such as productization know-how, product lifecycle sustainment and maintenance, requiring a high level of alignment with customers throughout the cycle.

This approach converges with CERTI Foundation's view that innovation is effective when the solution developed reaches the market and generates value for the customer and society.

Analysis of indicators

Technological Services and Infrastructure



In addition to its strong performance in projects, CERTI maintains a prominent performance at the national level in technical advisory services, short-term training, specialized technological services and support services for startups in the process of incubation and acceleration.

Although this aspect of its performance represents in terms of revenue only 7% of the net revenue for the year, it contributed significantly to more than 650 customers in technological services in the area of metrology, instrumentation and laboratory quality systems, primarily in the industrial sector and in the provision of conformity assessment and certification services.

The number of technological services performed was 3,711 in the year, slightly lower than the previous two years. A wide range of training, guidance and mentoring services, associated with the entrepreneurship movement and incubation of technology-based companies, were carried out in the context of projects such as Gênese, in the Jornada Amazônia Program, Inovativa Brasil, Centelha and in the Incubation of companies in CELTA, reported respectively in the chapter "Reference Centers" in this report.

These services reach almost all states of the Federation, thus contributing to the economic development of the regions, and the strengthening of innovation ecosystems.

To ensure the provision of technological services at a high level of metrological reliability and modernization of laboratories, equipment and standards, CERTI seeks to maintain state-of-the-art standards as a national reference. As a private non-profit ICT, however, CERTI is unable to fund the necessary investments with its own resources, which is why it has historically sought to access non-reimbursable resources from agencies such as FINEP, BNDES or incentivized structuring government programs. The availability of these resources, however, has not been sufficient in the face of institutional demand, which has only partially been compensated through projects proposed with companies such as Petrobras, CEMIG, among others, in the context of R&D projects with regulated resources such as ANP (National Petroleum Agency) and ANEEL (National Electric Energy Agency).

Analysis of indicators

Management and Governance

Brand, market, knowledge, human capital and R&D infrastructure represent the institution's main asset and are the object of special focus on institutional management and governance.

It is in their combination that CERTI's ability to propose, generate and deliver differentiated solutions to its customers lies. In addition to the very dynamics of the market that deserves extreme attention, the challenge



with human capital and organizational culture are the object of full attention in the institution. What distinguishes CERTI is its ability to bring together various technological competencies through the cooperation of its CRIT's in favor of a differentiated solution that generates differentiated value for customers. For its competitive performance,

CERTI invests significant effort in institutional management, especially in the continuous improvement of the planning and execution of challenging projects in a matrix arrangement of competencies. In 2025, new interaction dynamics and management support tools were developed, including the monitoring of indicators and goals, performance measurement, collegiate meetings between the Business and Operations areas, periodic communication of institutional strategies, goals and results achieved, in an open and transparent manner to all employees

through weekly livestreams and informational bulletins. In the year, information automation and process integration in management, new BI platforms and dashboards, integration and centralization of information systems between production/projects and administration were implemented, simplifying and streamlining processes and moving people to higher value-added activities. An important management goal achieved in 2024 and maintained in 2025, establishes that by the tenth business day of the following month all economic, financial, accounting, production and sales results of the previous month are updated.

The monthly "Revenue Map Meeting" of each CRIT was also consolidated in 2025, with the Operations and Business Superintendence analyzing the revenue outlook for the next 12 months on a project-by-project basis and defining the respective business actions and adjusted headcount for the production

teams. The positive results of the management trajectory are reflected in the 2025 financial statements, with a result before financial effects of R\$7.1 million and an EBITDA margin of 10.5%, audited by independent auditor PwC – PricewaterhouseCoopers, approved without qualifications by the auditors and by the Fiscal Council and the Board of Trustees, evidencing the adequacy and compliance of the institutional management.

The CERTI Foundation, throughout its growth and expansion in the more than 40 years of its operations, gave rise to the informal "CERTI System", which brings together a set of entities with complementary competencies and objectives, in favor of a common purpose: "To contribute in a relevant way to the competitiveness of companies and to the sustainable development of Brazil" (CERTI's purpose). Based on strategic planning and in line with the guidelines of the Board of Trustees, the Superintendences

of the CERTI Foundation conduct the activities of the Foundation itself as well as those of the CERTI Amazônia Institute and the CERTI Sapia Institute, both non-profit ICTIs (Science, Technology and Innovation Institutions) in the OSCIP modality, in addition to the companies C Ventures (in the restructuring phase) and Produza SA (www.produza.ind.br), the industrial operator of CERTI's LABFABER, each with its own legal identity.

This systemic action follows unified standards of administrative, operational and contractual processes, always in accordance with good compliance and corporate governance practices.

Each of the ICTI's and companies are legally constituted with their respective statutes, governance bodies and audited by independent auditors, distinct from the CERTI Foundation.

Analysis of indicators

People



In 2025, the staff of the CERTI Foundation grew 3% compared to the previous year, totaling, in December, 404 professionals in the CLT, internship and Young Apprentice modalities.

For 2026, the implementation of the scholarship modality is planned. The hybrid work model, adopted since 2023, was maintained, with 15% of the team on a face-to-face basis, 45% on a hybrid basis and 40% on full teleworking. Although this model presents good results in view of the multiple factors involved, it still brings challenges for the strengthening of team spirit, the sharing of knowledge and the consolidation of a collaborative work culture — fundamental aspects for the constant reconfiguration of the teams, due to the dynamics of the projects. Respecting pre-established labor agreements, CERTI intends to gradually

increase in-person presence, a shift initiated in 2025. The overall turnover among CLT employees was 14%, below the average for technology companies, accompanied by a slight growth in headcount compared to 2024. Regarding employee satisfaction, the Organizational Climate Survey (PISC), especially in terms of recommendation, demonstrated that the institution is perceived as a good place to work. The eNPS© (Employee Net Promoter Score) reached 55 points, a result considered excellent, as it is above 50 points, within a scale ranging from -100 to +100.

The team composition process requires continuous effort: throughout the year, 136 selection processes were conducted, with an average hiring time of 62 days (SLA). The internship front remained an important mechanism for training and developing talent, ending the period with 59 active interns. In total, 49 hires and 43 departures were recorded, among which 14

Analysis of indicators

Pessoas

were conversions to permanent employment, with an average tenure of approximately one year and six months. The "I Want to Work at CERTI" (EQTC) program for attracting, retaining and valuing people, launched in 2021, maintained its performance by structuring processes and preparing the organization to achieve its goals until 2027.

Organized in multidisciplinary working groups, with engagement strategies for leaders and employees, the program worked on the development of topics such as Compensation, Benefits and Recognition; Institutional HR Policies, Work Arrangements and Work Environment; Skills, Performance and Feedback Assessment; Development and Career Pathways; Partnerships and Interaction Networks; and Internal Communications. Within the scope of internal communications, 33 livestreams

were held, with an average duration of one hour and weekly frequency, including 11 focusing on technological content.

The commitment to academic training and the professional development of students has gone hand in hand with strategic partnerships with educational institutions. Two technical visits of great relevance were carried out with the Federal University of Santa Catarina (UFSC) and one with the Center for Professional Education (CEDUP). These interactions provided students with a valuable opportunity to experience the professional environment, especially in areas such as Metrology, in addition to getting to know the institution's facilities and laboratories closely. Such experiences are crucial to broaden students' practical vision and stimulate their interest in the trajectory they are starting. Social Management is another front that develops important actions

aimed at employee well-being and community support. In 2025, the traditional participation in the Winter Clothing Drive stood out, with donations directed to the São Judas Tadeu Church in Barreiros, which serves people in situations of social vulnerability.

The partnership with SESC was also strengthened, through the provision of SESC membership access to employees and participation in the SESC Mesa Brasil program in 2025, with donations of food and hygiene products, reinforcing the institution's commitment to promoting social inclusion and sustainability. In addition to the community garden, developed and maintained by the CERTI Foundation, which provides fresh vegetables to employees, encouraging healthy habits, Social Management monitored employees on leave for health reasons, such as surgeries and other diseases, providing support during the

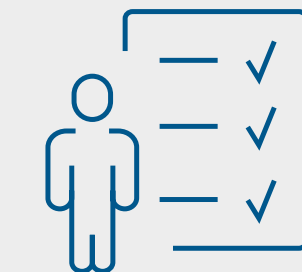
recovery period. Finally, the appreciation of achievements and the recognition of employees remained priorities.

After the celebration of CERTI's 40th anniversary, held in 2024, an annual structured commemoration of the institution's anniversary was instituted in 2025, including the length-of-service recognition ceremony.

Employees with more than 10 years of experience — organized in milestones every five years, up to 30+ — received diplomas and started to use (still in the process of implementation) badges and lanyards alluding to their time of contribution and permanence in the organization.



14%
Turnover



136
Recruitment Process



55
eNPS



33
Lives

REFERENCE CENTERS AND SYSTEM UNITS

Center for Innovative Entrepreneurship | CEI

The Center for Innovative Entrepreneurship aims to offer solutions aimed at strengthening the culture of entrepreneurship, developing opportunities for new businesses and increasing the competitiveness of companies, as well as structuring mechanisms to support innovation, promoting innovative entrepreneurship in Brazil.



The Center operates on three fronts:

Innovative Entrepreneurship, dedicated to the support and acceleration of startups and entrepreneurs at different stages of maturity, through programs, methodologies and development initiatives;

Innovation Ecosystems and Environments, which focuses on promoting innovation in a regionalized way, from the planning, implementation and operation of innovation mechanisms based on methodologies developed over more than 40 years of operation, generating consistent results and real impact;

Corporate Innovation, offering solutions that increase the competitiveness and results of companies of different sizes, forming teams and promoting the culture of innovation in our customers, while connecting challenges of consolidated companies to startups and their innovative solutions.

In 2025, the CEI had a team of 42 employees to execute 15 projects on its fronts, contributing to the strengthening of 9 innovation environments and ecosystems and directly supporting the development of 424 startups.



Digital Convergence and Mechatronics Center | CDM



Digital Convergence and Mechatronics Center consolidated itself as a reference in the national and international markets as a solution provider for digital transformation.

In 2025, its performance covered the development of software (information systems and applications), embedded systems and conventional and highly complex electronics, integrating system engineering skills and interface design and user experience (UX).

The Center has also directed its efforts to projects aimed at the development of digital systems for remote management and actuation, solutions based on intelligent systems, artificial intelligence (AI) combined with computer vision and natural language processing (NLP), and data science.



It also worked in the development of web systems, cloud computing, mobile applications, internet of things (IoT) and systems and electronics for critical systems, in addition to relevant work in oil and gas projects (Petrobras) on two fronts of high degree of innovation: Digital Twins and Digital Commissioning. The main segments served throughout the year were health, aerospace and defense, energy, telecommunications and oil and gas.

Cooperative Production Center | CPC



The BIM and Lean area had as its main highlight the consolidation of modeling activities through new tools, which began to apply the concepts of interoperability in work routines within the oil and gas chain. In the same period, the expansion of the use of the IFC standard for Petrobras' supply chain began.



In the industrial context, the diversity of projects carried out in the year was evident: diagnosis of industrial roadmaps, evaluation of layouts, advanced simulation of flows and internal and external logistics of materials, projects for process automation in different scenarios of the factory floor, implementation of laboratory-factory, as well as advanced electronic manufacturing projects.

Green Economy Center | CEV



In the year in which Belém-PA hosted the United Nations Conference on Climate Change (COP 30), the innovative Amazonian bioeconomy gained worldwide projection. In this context, the Green Economy Center was present at the event, presenting the results of its performance in the Impact Innovation Ecosystem in the Amazon.

2025 was marked by the completion of the Amazon Journey Initiative programs, which, over the three years of operation, supported more than 300 Amazon bioeconomy businesses at different stages of maturity.

The initiative consolidated a model of strengthening enterprises aligned with the valorization of the standing forest, highlighting its role as a strategic Brazilian solution for the transition to a low-carbon economy. Another relevant milestone in the period was the performance of the Green Economy team in the implementation of the

Amazon Bioeconomy and Innovation Park, in Belém-PA, in partnership with the Vale Fund, supporting the Government of the State of Pará in the implementation of this important Public Policy instrument.



12K
Visitors

Sustainable Energy Center | CES



In 2025, the Digital Convergence Center temporarily took over the management of the CES. From this movement, a restructuring of the teams was promoted, guided by a new strategic planning based on competencies. The areas of Electrical Power Systems, Power Electronics, Energy Control and Automation and Regulation and Economic Modeling were created, in addition to the implementation of a new organization focused on research and, mainly, on project management. Operationally, positive effects have already been observed in the conduct of the projects, in line with the practices consolidated in the CDM.

In the second half of the year, CES registered a reduction in the volume of projects, impacting the Center's overall indicator. During this period, the team focused its efforts on supporting the business area in devising projects to be presented to the market, bringing positive results for building a solid pipeline for 2026.

During the Seminar on Power Electronics and Control (SEPOC), held in Balneário Camboriú-SC, the CERTI Foundation was recognized in the Typhoon HIL Best Paper Award – Latin America 2025, being among the five best works in Latin America in the Outstanding Paper category.

The article “Cost and Cybersecurity Challenges in the Commissioning of Microgrids in Critical Infrastructure: COGE Case Study” stood out for its applied approach, using Hardware-in-the-Loop (HIL), showing a concrete impact on power systems and energy electronics. The institution's participation was expanded with the presentation of the work “Large-Signal Modeling of a Solid-State Transformer for Power Flow Validation in RTDS”, reinforcing CERTI's contribution to technological advancement in energy



solutions. Opened in October 2025, the Park played a prominent role during COP 30, receiving more than 12,000 visitors. The deliveries made for COP 30, combined with the high institutional visibility achieved during the event, consolidate CERTI's strategic role in strengthening the bioeconomy and the Brazilian climate agenda.

Metrology and Instrumentation Center | CMI



The CMI Measurement, Inspection and Test System area continued to focus its efforts on the development of visual inspection systems for the industrial sector, creating advanced solutions based on Artificial Intelligence. This work ranges from the implementation of market-ready smart cameras to the development of customized systems built on conventional cameras.

The Metrology and Instrumentation Center delivers projects that use both visible light and other frequency spectra to clients such as Lenovo, Multi, Petrobras, Sabó and COPEL. This technology allows solutions to identify details and characteristics that exceed the perception capacity of the human eye, ensuring a higher level of accuracy in production processes. At CMI, through the Intelligent System for Integrity Management area, we understand that asset integrity management is an essential process for several industry sectors. CERTI develops digital twins applied to subsea asset integrity management, focusing

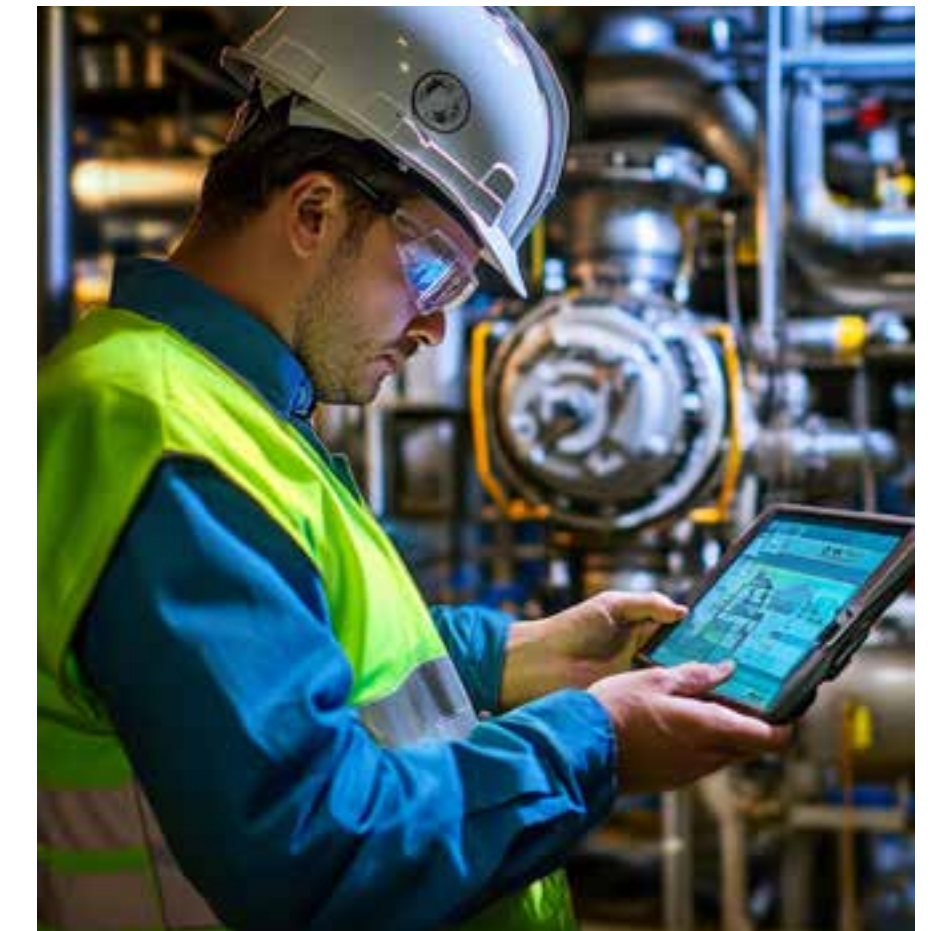
on prediction, risk-based decision making, and operational efficiency. In the oil and gas sector, its relevance is even greater, due to the consequences of possible failures, which can impact operational safety, generate environmental damage and cause significant financial losses, in addition to the costs involved in inspections in unhealthy, dangerous and difficult to access places, such as four thousand meters below sea level. Safe and reliable oil production in ultra-deep waters depends on managing the integrity of the assets involved, which is currently based on sending subsea robots, which have a high daily cost, or on sensor vehicles (pigs), which require production shutdown.

In this sense, digital twins of subsea assets, based on data and models of degradation of phenomena such as corrosion and fatigue, are able to estimate the state of degradation of subsea assets, such as equipment and pipelines. In addition, they allow predictions of the future state of degradation of the assets, which supports analysis of remaining life

and risk-based inspection. As a result, inspections are no longer the only source of truth, and are oriented when and where really necessary, thus optimizing inspection plans and ensuring operational safety and resource-saving production capacity. In this sense, CERTI has been developing solutions aimed at the reality of Petrobras, which invests in the development of digital twins of its assets.

In 2025, CMI employees received an Honorable Mention at the XIII SINGEP & 13th CIK Online Conference, for a study on TRL and Agile Methodologies in R&D&I Management.

The study entitled “Integrating Levels of Technological Readiness (TRL) and Agile Methodologies or the Management of Uncertainties in R&D&I Projects”



consolidates practical experiences of the CERTI Foundation in the application of the Technology Readiness Level (TRL) approach, integrated with agile methodologies, for the management of research, development and innovation projects.

This methodology has been structured and improved by CERTI's technical team, and is currently undergoing an update process, with the objective of strengthening and evolving the internal analysis and technological maturity tool.

Incubator CELTA



Throughout the year, CELTA celebrated the graduation of nine companies that reached sufficient maturity to follow their growth cycles outside the incubation environment.

The companies that graduated in the period were: Bortoni, WWtech, Photonita, Caexpress, Conetec, Making, Global Drones, O AIS and Incentiv, reflecting the diversity of sectors served and the maturation of the startup portfolio. In the same period, new companies began to integrate the CELTA ecosystem, expanding the incubator's performance in strategic areas of innovation. Startups Multiplicai, Vertesis, Limbx, Warux and Walklab joined as incubated companies in 2025, strengthening CELTA's collaborative environment.

A relevant milestone in 2025 was the approval of CELTA in FAPESC (Santa Catarina State Research and Innovation Support Foundation) Public Call Notice No. 59/2025 – Support Program for Incubators of Santa Catarina Companies. This achievement

represents the institutional recognition of the excellence of the CELTA management model and its contribution to the economic and technological development of the State of Santa Catarina. FAPESC's support strengthens the incubator's operational capacity, expands support to startups and boosts the generation of innovation, employment and income in the regional ecosystem.

CELTA reaffirmed its role as a national reference in the incubation of technology-based companies, promoting an environment favorable to innovation, entrepreneurship and the consolidation of high-impact businesses.

Aggregate revenues of incubated companies grew throughout the year, totaling R\$96 million, reinforcing the economic impact generated by startups linked to CELTA.

Amazon CERTI Institution | ICA



The year 2025 represented a period of important learning and consolidation for the ICA, marked by the execution of strategic projects in the Energy, Electronic Assembly Industry and Bioeconomy sectors. Although the first quarter presented a more restrictive scenario, due to the lower volume of projects contracted at the turn of the year - which directly impacted the institutional IMC (Contribution Margin Index) of the year - from April onwards, there was a consistent resumption, driven by the beginning of new contracts. It is noteworthy that the projects started throughout the year achieved, on average, CMI results above 40%, evidencing the technical quality, commercial assertiveness and competitiveness of ICA deliveries.

At the end of December 2025, the accumulated CMI was 22%, reflecting the impact of the more moderate beginning of the year, but also the capacity to react and strengthen performance throughout the year.

The ICA team maintained a strategic focus on the development and application of Industry 4.0 enabling technologies, especially in Intelligent Systems for Manufacturing, with the development of end-to-end industrial software solutions, ranging from the machine data acquisition and integration layer to the design and implementation of industrial applications in front-end and back-end architecture.

A team dedicated to low-code solutions was structured, expanding the capacity for agile and scalable development, which contributed to the renewal of projects with active customers and to the generation of new opportunities for 2026, including winning contracts with companies such as Compal, Denso and Digiboard. The initiative strengthens support for startups and socio-bioeconomics businesses, with emphasis on the implementation of an unprecedented laboratory-factory in the Amazon.



In the area of Bioeconomy, ICA advanced strategically with the consolidation of the Amazon Bioeconomy and Innovation Park, expanding its operations with the productive chains of the region and also starting to operate from its new base in Belém-PA.

CERTI EMBRAPII Unit



Throughout the year, 15 R&D projects were contracted with the support of EMBRAPII, in partnership with medium and large companies, covering multiple strategic sectors of the economy, such as transportation, energy, automotive industry, metalworking, electronics, ICT, health and electromedical equipment.



In the industrial and automotive segment,

initiatives aimed at automating assembly lines, computer vision systems, increasing factory efficiency and digital transformation of the factory floor stand out.



In the energy sector

the projects involve solutions for electrical networks, application of artificial intelligence for data analysis and development of electrical monitoring devices.



In the health area,

they include the development of hardware for blood pressure measurement and digital platforms, such as virtual patient solutions.

The technological fronts include software and artificial intelligence — including generative AI, RAG architectures and multi-agent systems—, advanced data analysis and Data Lake, Internet of Things, embedded systems, dedicated hardware, industrial automation, communication between devices and intelligent data extraction, supported by scalable digital architectures. The set positions projects at the frontier of digital transformation and Industry 4.0, focusing on competitiveness, operational efficiency and applied innovation.



R\$200M
Invested



15
R&D
Projects

Metrology and Instrumentation technological services



The year 2025 consolidated the trajectory of technological expansion and operational excellence of the Dimensional Metrology Laboratory, marked by the expansion into new markets and the strengthening of loyalty among its base of 487 customers served during this period. The technical performance was guided by highly complex measurements and urgent demands, with emphasis on special service requests in industrial tomography and the issuance of 3,664 calibration certificates within the laboratory's accredited scope.



CERTI reaffirmed its global relevance by holding the “Metrology Day” event with institutional support from the Bureau International des Poids et Mesures (BIPM), as well as strategic workshops with partners. These initiatives, added to the execution of 37 courses, resulted in the training of 512 professionals and the provision of 10 technical advisories focused on results and problem solving.

The period was also decisive for the future of laboratory infrastructure, with the achievement of the Thematic Center for Qualification of Critical Parts of Additive Manufacturing (CTMA) project, which directed resources to strengthen the area of technological services and allowed the commissioning of new equipment under strict technical coordination. Finally, the commitment to quality was ratified by the positive evaluation of Inmetro's General Accreditation Coordination (CGCRE), a seal of trust that endorses CERTI's technical competence in providing advanced metrology solutions and supporting the technological evolution of the industrial sector.



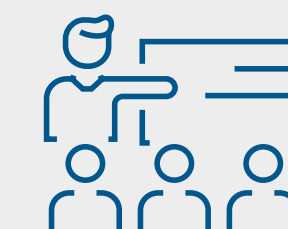
487
Clients



3664
Certificates



515
Trained
Professionals



37
Courses

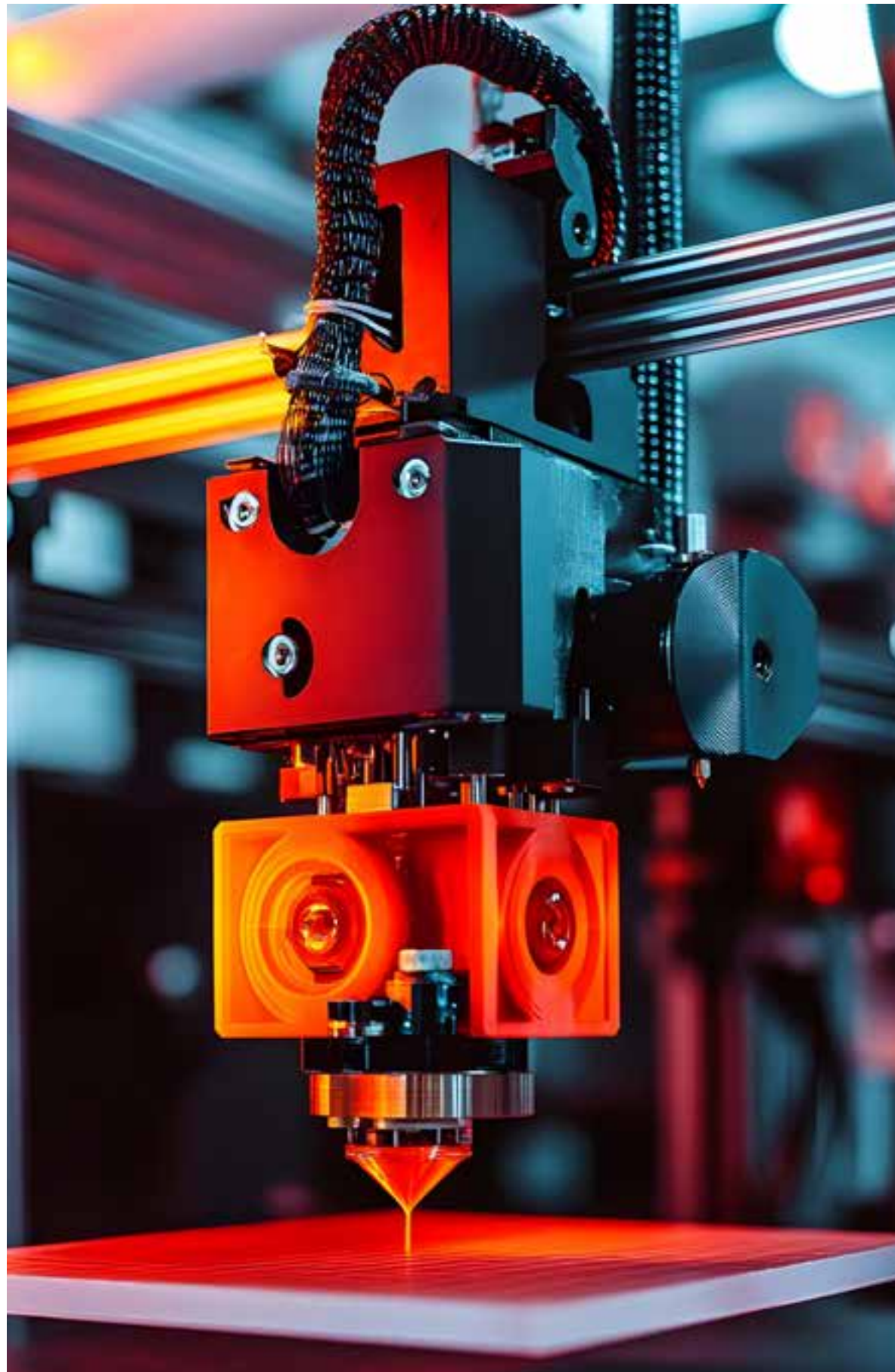
HIGHLIGHTS OF THE YEAR



Clients & Partners 2025



Projects Executed



Qualification center for additive manufacturing

CTMA – Thematic Center for Qualification of Critical Parts Manufactured by Additive Manufacturing is a project supported by FINEP, developed in partnership with CTI Renato Archer, aimed at structuring and consolidating, in Brazil, a robust technical and institutional path for the qualification of critical components produced by Additive Manufacturing.

The initiative integrates skills in engineering, metrology, non-destructive testing, reliability and technological risk management, articulating international standards and good practices, focusing on reducing technical uncertainties and increasing reliability throughout the product life cycle. Through the creation of laboratory infrastructure, the development of methodologies and technical guidelines and collaborative action with industry and research institutions, CTMA seeks to support the safe and competitive adoption of Additive Manufacturing in high-value and critical industrial applications.



Asset mapping by point cloud

The project integrates Petrobras' "Asset 360" platform and focuses on the research and development of methodologies for the acquisition of point clouds, aiming at capturing reality through the experimentation of equipment, the establishment of procedures and the proposition of a workflow that covers the capture, storage, processing, reuse and consumption of data. The specific objectives of the system resulting from this initiative include: researching and generating experiments of point cloud acquisition, conditioning, analysis and visualization technologies; researching and generating experiments with resources for compression, transmission and storage of point cloud data; establishing connections between the identified technologies and associating them with the identified use cases; mapping and experimenting with open source technological resources; transferring asset digitization technology and offshore data flow (from Technical Specification and publications). With more than 40 years of experience, CERTI won, through its partnership with Petrobras, the ANP Technological

Innovation Award 2025. The "Asset 360" solution, a digital platform for visual management of the integrity of production assets, was the winning initiative in the category dedicated to industry 4.0, digital transformation and artificial intelligence. Recognized as one of the innovations with the greatest impact on the future of the national energy sector, the project also had the participation of Vidya, Evcom, PUC-Rio and Universidade Federal Fluminense (UFF).

Projects Executed

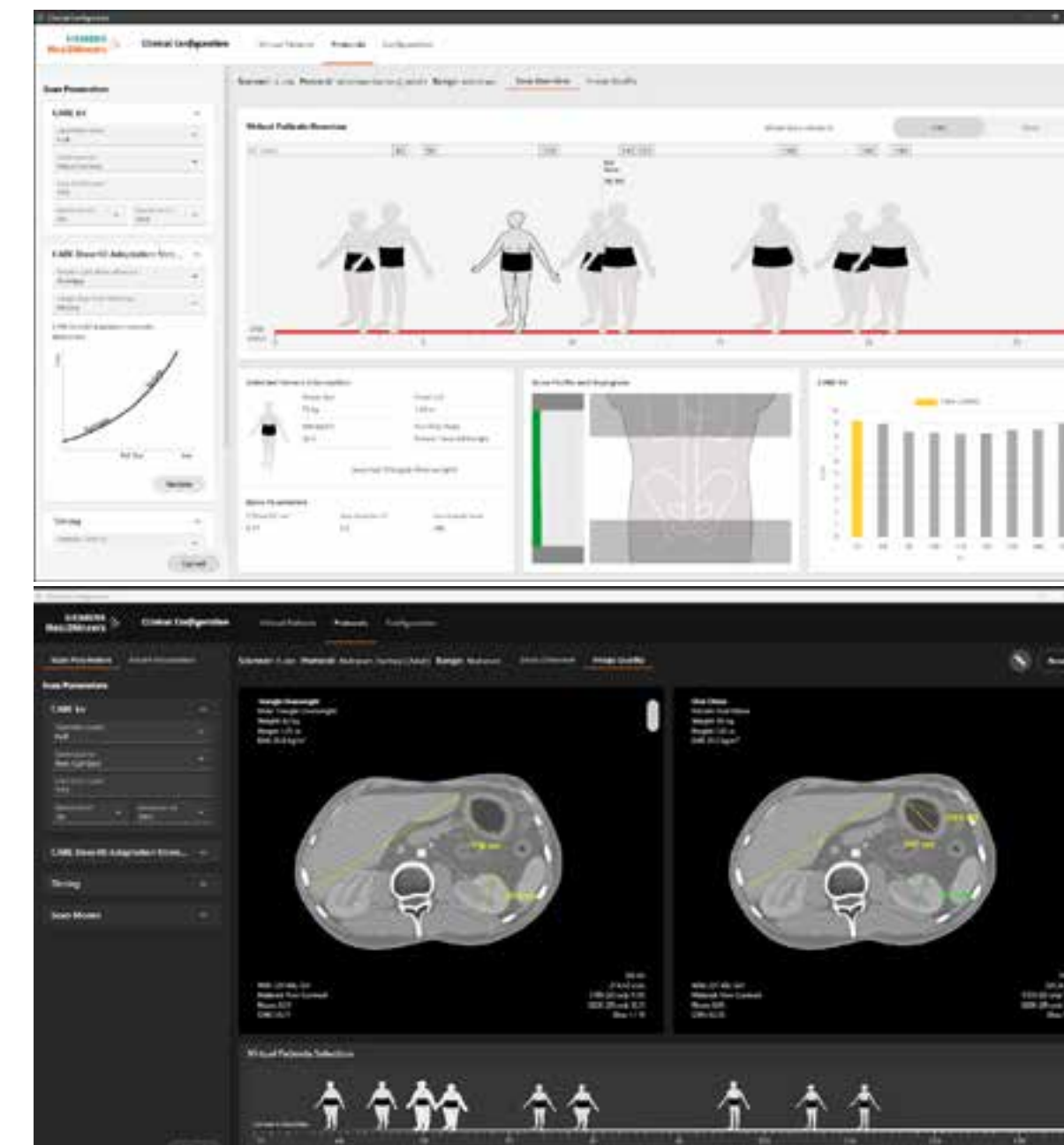


Capacitive profiler prototype TRL5

This project aimed to raise the TRL and CRL maturity level of the capacitive profiler, considering operational aspects (such as ease of removal, for example) and safety (with a view to Ex certification). For this, it was structured in stages that dealt, in parallel, with the sensing, fixation and removal, activation and control subsystems, in addition to the human-machine interface. The subsequent integration between the subsystems, combined with the evaluation against the Ex requirements, made it possible to carry out tests in a laboratory environment, but under conditions close to the final application, allowing the validation in TRL5 maturity.

Among the main results of the project, the following stand out: the development of a functional prototype of capacitive profiler, with an operating capacity of up to 6 bar and 60 °C, suitable for operation in classified areas; the design of the capacitive profiler in accordance with standards for equipment in explosive atmospheres (IEC 66079), CERTI's first prototype with Ex certification; the implementation of an automated test bench, with variation

of fluid level, vessel pressure, temperature and redundant sensing through an ultrasonic level meter; and the training of the project team in the development of equipment for classified areas (Ex).



Virtual patients for diagnostic imaging

Under development by the CERTI Foundation in partnership with Siemens Healthineers, the project seeks to improve a concept already applied in previous projects and create a class of virtual patients for application in diagnostic imaging. The proposal aims to optimize the time of exposure of patients to radiation, without compromising the quality of the images generated.

The initiative integrates advanced computational modeling, physical simulation of biological systems and algorithms to generate highly realistic digital models, capable of reproducing different anatomical profiles and clinical conditions. In addition, it seeks to increase reliability and efficiency in the testing of medical equipment and software, reducing costs, development time and dependence on preliminary clinical trials. As a result, it strengthens innovation in digital health, boosts industrial competitiveness and consolidates national skills in simulation applied to biomedical engineering.

Projects Executed

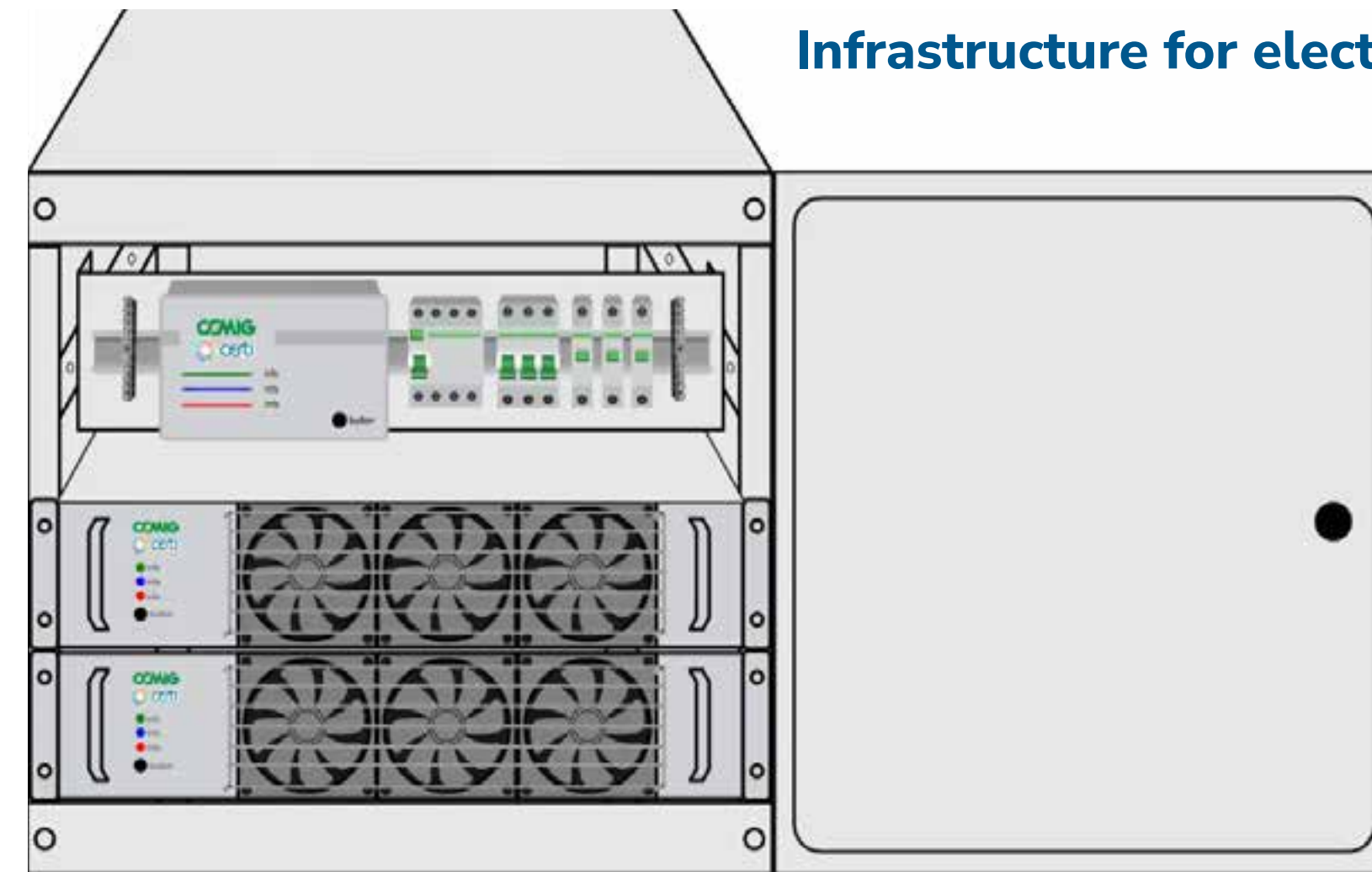


Ponta Porã International Technology Park

The CERTI Foundation's work at the Ponta Porã International Technology Park (PTIn) focused on strategic structuring, legal modeling and operational implementation of the innovation environment, ensuring that the project was born with defined governance, a structured service portfolio and a trained local team. Through the application of the Octagram methodology, CERTI conducted the definition of the Park's DNA, institutional planning, the elaboration of legal instruments, the construction of the communication

plan and the assisted operation in the first months, promoting the transfer of knowledge to local management. At the same time, it implemented entrepreneurship days, structured the incubation program and fostered the culture of innovation in the region, ensuring qualified occupation and integration with universities, the productive sector and public authorities. Within the scope of the related projects, CERTI also carried out the strategic and connection modeling of the Center for Culture, Entrepreneurship, Innovation and Memory of Tereré (CEIMPP), aligning its portfolio of services, its governance and its insertion in the local innovation ecosystem, while Casarão - Training, Bioeconomy and Innovation Complex for Family Agriculture remains in the planning and conceptual deepening phase.

Infrastructure for electromobility



This project, carried out in partnership with CEMIG, is consolidated as a technological response to the modernization of the low voltage electricity network in Minas Gerais. The initiative arises from the need to adapt the distribution infrastructure to the new reality of electromobility, ensuring the adequacy and stability of voltage

levels and energy quality in the face of the sector's expansion. In general, the project aims to develop equipment that allows the integration of renewable sources, energy storage systems and recharging stations for electric vehicles, in addition to carrying out the intelligent management of connected assets and communication with electric vehicle recharging management platforms. The result will be the development of a national technology, encompassing areas of knowledge such as power electronics, hardware, control, automation and embedded software. The system will enable active and intelligent demand and generation management, ensuring technical compliance and operational efficiency. In addition to the engineering advancement, the project delivers a structured business model for CEMIG to implement the production and commercialization of this innovation, allowing the exploration of the product in the national market.

Projects Executed



Inovativa

In 2025, the Ministry of Development, Industry, Trade and Service (MDIC) signed an amendment with the CERTI Foundation for the execution of the InovAtiva Hub for another year, through the InovAtiva Brasil and InovAtiva de Impacto programs, with co-execution by Impact Hub. The program received 471 applications and supported 120 startups and impact businesses from all Brazilian regions. With this performance, InovAtiva was recognized with the title of Best Accelerator/Incubator Program in Latin America in the regional competition of the Global Startup Awards.



Centelha

2025 was marked by the launch of the third edition of the Centelha Program. Throughout the first semester, CERTI, together with the Ministry of Science, Technology and Innovation (MCTI), the Studies and Projects Funding Agency (FINEP) and the National Council for Scientific and Technological Development (CNPq), had the mission of preparing the program for its launch. The preparation consisted of the elaboration of the National Work Plan, with the unfolding of the methodological review, the structuring of the public notice, the training of state execution teams, the customization of the web system and the inclusion of the theme of socio-environmental impact in the objectives of the initiative, among other key activities for

the national implementation of public policy. In this edition, Centelha has the participation of the 26 states and the Federal District, with the potential to become one of the largest operations in the program's history. The first call was launched in September and, still in 2025, 16 states opened their applications for support in transforming innovative ideas into business. The estimate is for an investment of R\$155 million, including economic subsidies and technical support grants, to support more than 1,100 startups throughout the country.

Projects Executed



Synoptic panel for electrical system

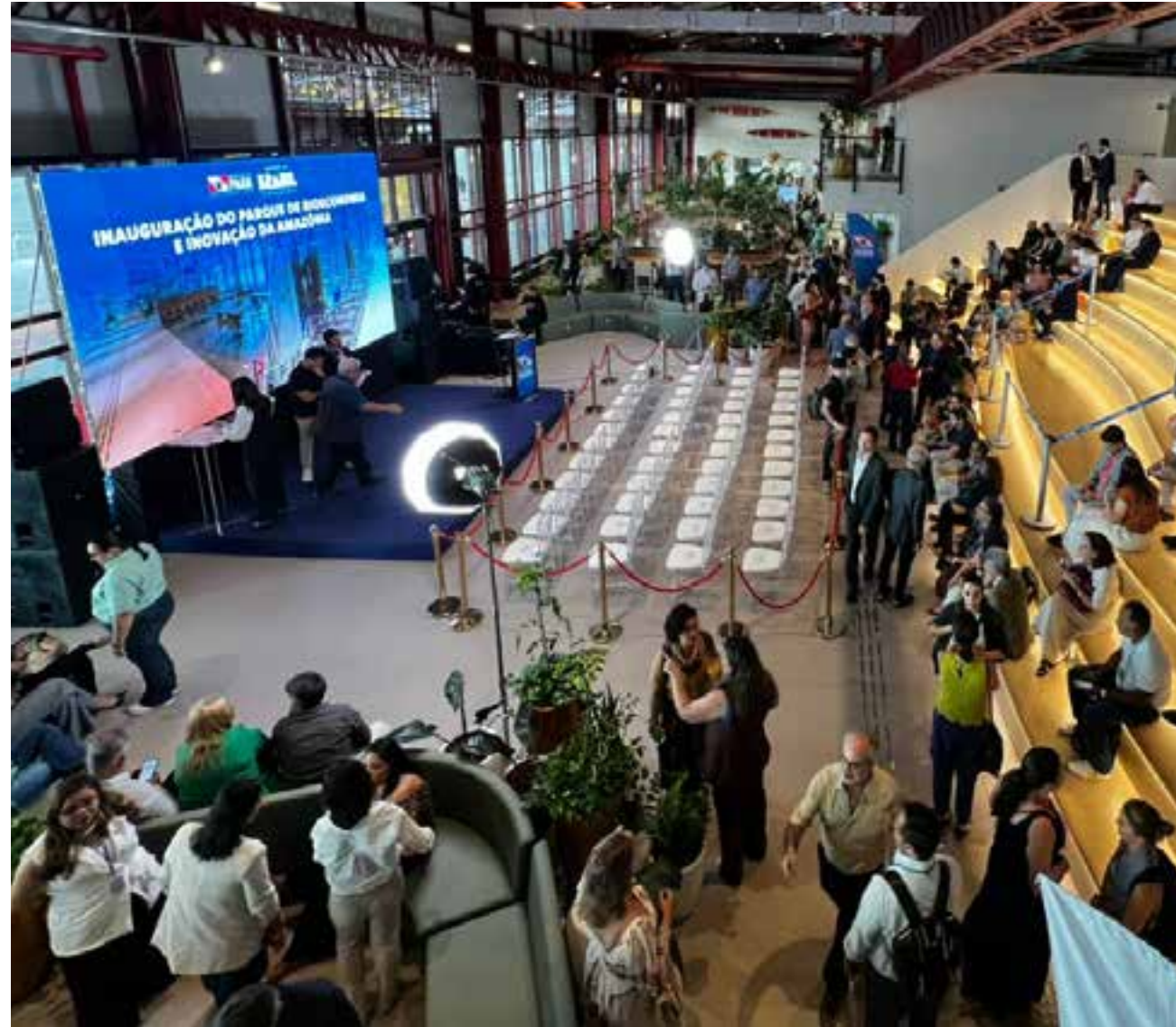
This project, carried out in partnership with Petrobras over 2 years, had as its central objective the development of an intelligent synoptic panel for the management of electrical system assets on offshore platforms.

Through the modeling of health and availability indicators, the initiative sought to centralize the historical record and enable predictive analysis on a unified platform. In the initial phase, a scalable architecture was consolidated, which integrated data from Plant Information with Microsoft Power BI, culminating in the delivery of an MVP that monitored thermal and electrical parameters, in addition to classifying the condition of assets into criticality levels by failure zones. The technical execution involved the formulation of algorithms for the indicators of the final scope, allowing the treatment of data and the validation of services that supported the customized dashboards. The initial focus was on monitoring deviations from reference values in

IEDs, ensuring that the database was ready to support accurate diagnoses. In addition to technological development, the project included a specific investigative study on failures in generator exciters, addressing the problem from the perspective of integrity management and operational continuity of the units served.

In the completion phase, efforts were directed to the calculation of advanced estimators, such as the aging of the insulation, the useful life consumed and the remaining average reliability of each asset. The end of the 24-month cycle included the delivery of complete technical documentation, implementation manuals for direct operation in Petrobras units and the formal transfer of knowledge to the support team. Thus, the project consolidated strategic recommendations for the evolution of the system, guaranteeing the company a robust tool for data-based decision making.

Projects Executed



Amazon bioeconomy and innovation park - Bioeconomy center and factory laboratory

The project aimed to implement the Amazon Bioeconomy and Innovation Park, making it suitable for inauguration and operation until COP 30, in November 2025. To enable this project, competencies in innovation, impact entrepreneurship, bioeconomy and development of biodiversity production chains were applied, combined with the strategic assessment for the factory floor and the integrated development of processes. A key component of this initiative is the Factory-Laboratory for Food and Beverages, an innovative,

flexible and shared technological infrastructure, inaugurated in Belém-PA during COP 30. Developed in partnership with the Government of the State of Pará and Vale, the laboratory had its installation, commissioning and operation accompanied by CERTI, bringing together more than 80 equipment aimed at drying technologies, liquid filtration, processing of oilseeds, tubers and fruits, in addition to the filling of solids and liquids. This structure was designed for startups to develop products, community businesses to appropriate new production processes and industries to test the use of forest inputs in their portfolios. As a result, the Park was inaugurated in October 2025 and acted as a showcase for the Amazon bioeconomy during COP 30, receiving more than 12,000 visitors. Currently, the laboratory-factory is already considered the anchor element of the so-called "Amazon Silicon Valley", consolidating itself as a milestone for the business and technological development of the region.



Environmental restoration in Santa Catarina

This project aimed to enable the production and planting of 160,000 seedlings of 25 native species, with genetic viability, of the Mixed Ombrophilous Forest and Seasonal Deciduous Forest phytophysiognomies, involving family farmers settled under agrarian reform and an indigenous community throughout the process of the forest restoration production chain. Over 26 months of execution, the project carried out a comprehensive diagnosis of the physical, socioeconomic and environmental environments of eight territories located in the mid-west of Santa Catarina. It began

the expansion and implementation of two forest nurseries in research institutions and established partnerships with two universities and a state institute of education, providing six research grants for undergraduate, master's and doctoral students. It also carried out the genetic characterization of two populations of five priority species for the conservation of biodiversity in the state of Santa Catarina. In addition, it promoted the engagement of eight communities in the project's actions and the direct hiring of eight family farmers. It also started the formation of a network of seed collectors, involving farmers settled in the agrarian reform, generating income for their families.

Projects Executed



SINAPSE BIO

The Bioeconomy Sinapse is a pre-incubation program that drives the creation of innovative businesses aimed at valuing the standing forest. The initiative arises to face the challenge of the low density of structured enterprises in the Amazon bioeconomy, evidenced by studies that point to the reduced number of businesses based on the region's biodiversity. For this, competencies in business development, pre-incubation methodologies, entrepreneurial training and articulation of strategic connections were applied, through mentoring, training, connections with the market and financial

support between R\$50,000 and R\$70,000, to transform ideas into testable solutions, strengthening sustainable production chains in the Amazon. In three editions, the program mobilized 1,991 ideas in 18 states and supported 185 businesses in the Legal Amazon, with an investment of R\$11.26 million in non-reimbursable resources and six months of support for entrepreneurs. To contextualize the relevance of these results, a study carried out by CERTI (2018–2020) identified about 46 businesses based on biodiversity in the Amazon. In response to this scenario, the Bioeconomy Synapse contributed significantly by supporting the creation and development of new ventures, more than doubling this base in the region. As a result, 115 new CNPJs were created and another 70 early-stage companies were strengthened, validating business models, expanding access to markets and structuring a consistent bioeconomy pipeline, generating a lasting positive impact and boosting the Amazonian innovation ecosystem.

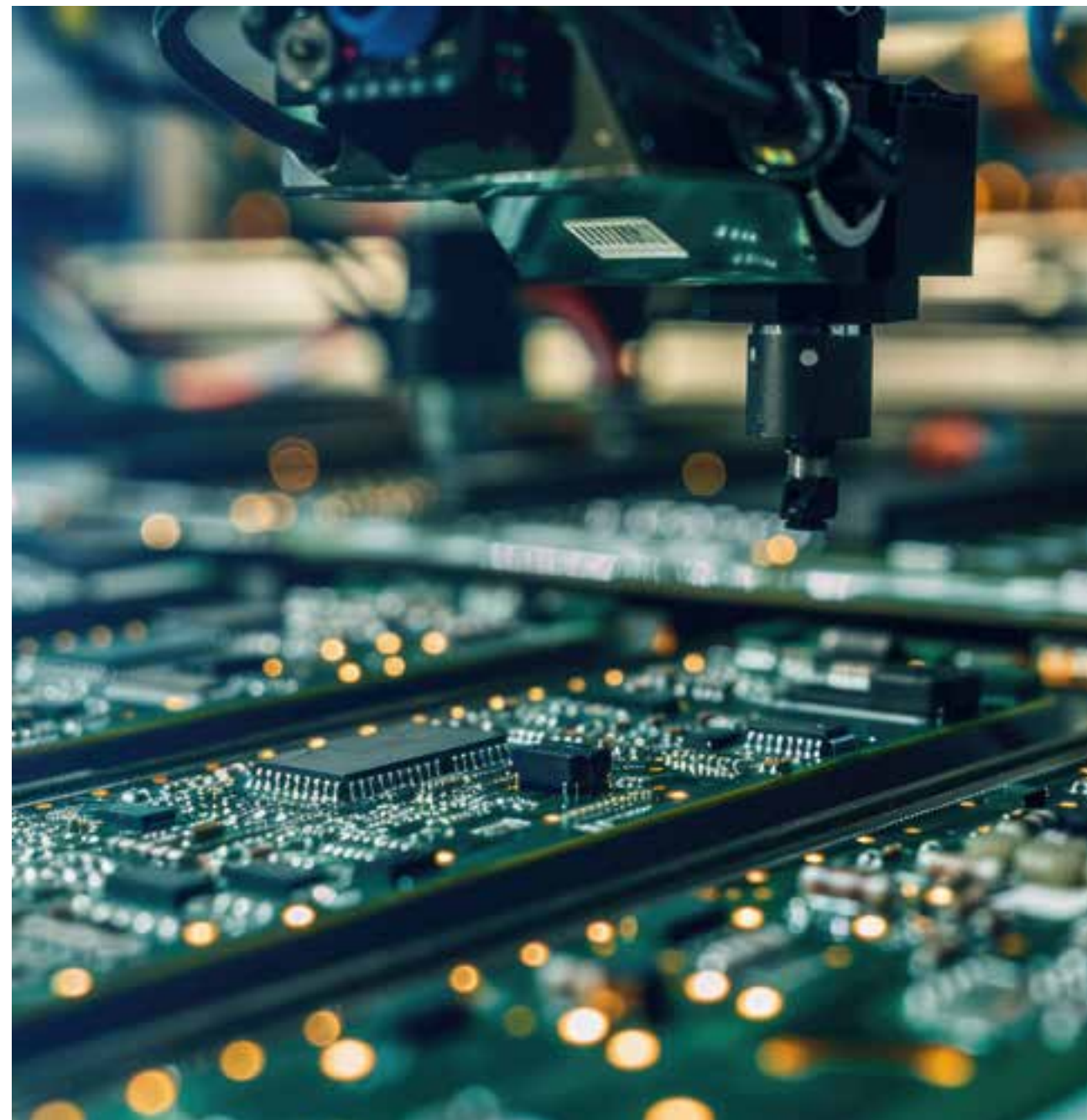


Circular economy of polymers

The project aims to generate circular economy scenarios for polymers obtained through the decommissioning of offshore equipment, focusing on flexible pipelines, mooring cables and hoses of offshore platforms.

The construction of these circular economy scenarios and routes starts from the identification of the technological state of the art for polymer recycling routes, and the application of innovative technologies, such as additive manufacturing, traceability, big data and AI. Opportunities were identified for the use of AI and Databases in the digitization and classification of materials present in decommissioned equipment, allowing greater speed and assertiveness in the analysis of equipment data to be decommissioned in the future.

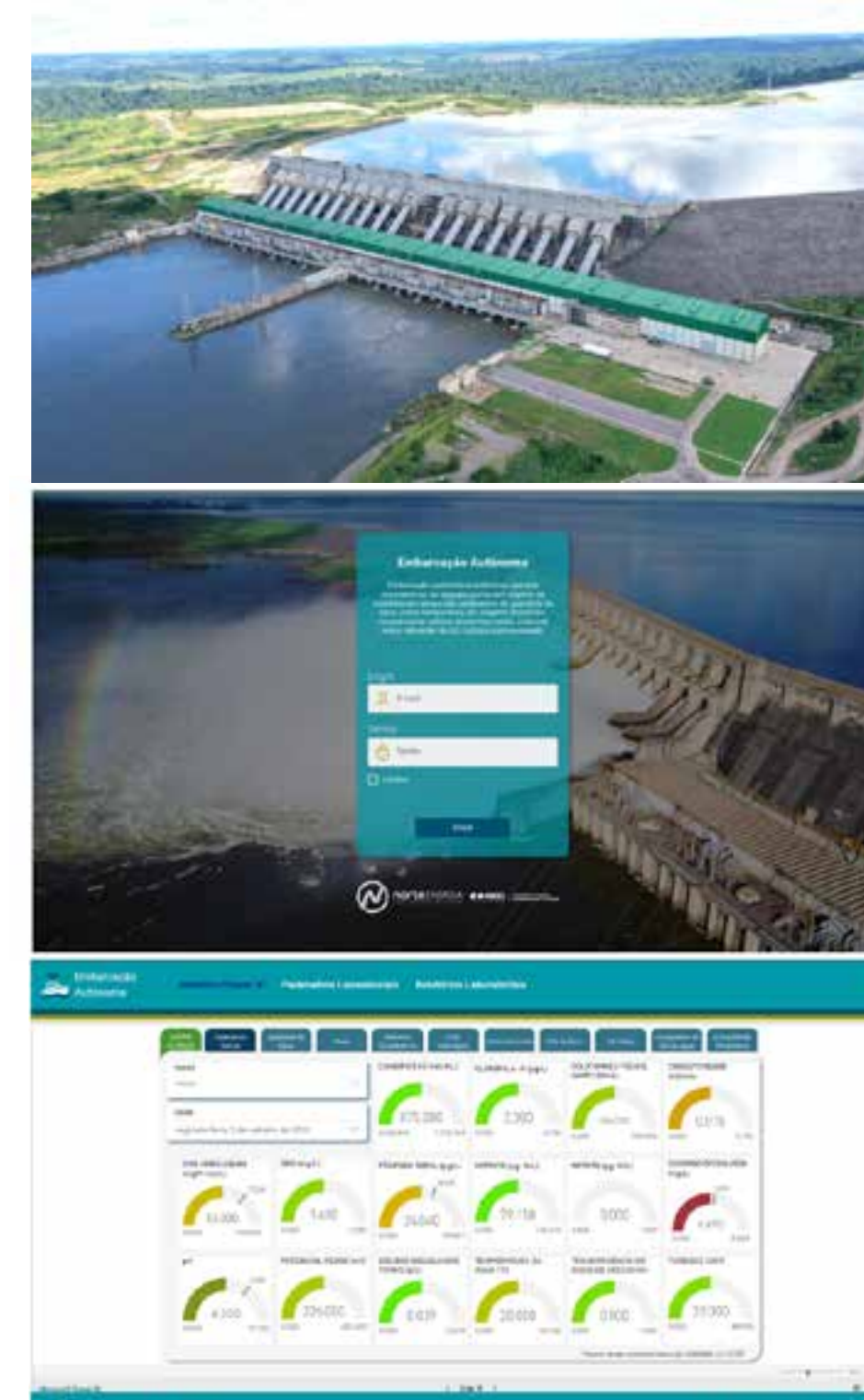
Projects Executed



Automation of critical operations and digitization on the assembly line

This project was developed to meet Lenovo's challenge of increasing the flexibility, efficiency and quality of notebook assembly lines in the face of a scenario of high product variability and heavy dependence on manual operations. The need to reduce setup times, increase traceability and expand operational control has driven the adoption of an Industry 4.0-based approach. As a differential, the initiative integrated multiple technical competencies in a synergistic way, combining process simulation, industrial automation, mechanical engineering, computer vision, Industrial IoT, system integration, software development and AI. Automated stations and a data lake-based architecture were developed for data integration and analysis. As a result, we highlight the automation of critical operations — such as screwing and inspection with computer vision — and the partial implementation of the digitization platform, with traceability and data integration. The structuring of the data lake made data available in a scalable way, while the first applications

with AI and LLM (Large Language Model) demonstrated the potential to increase analytical capacity and operational efficiency. These advances establish a consistent basis for the evolution of manufacturing, with expected gains in productivity, quality and decision making.



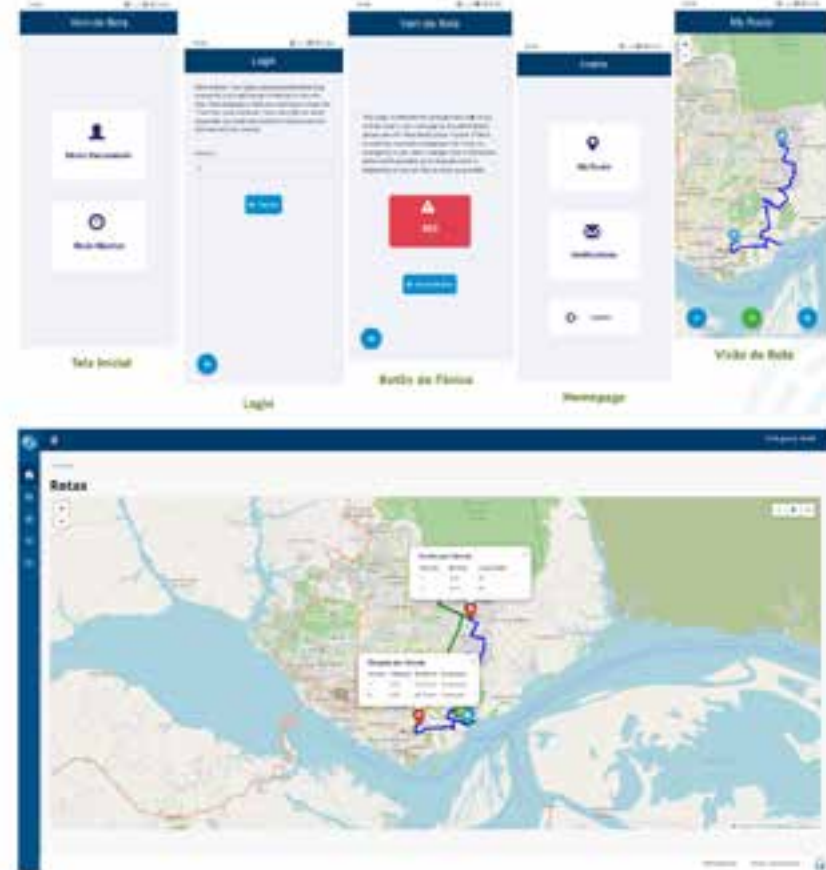
Data system for water quality

The project aimed to develop a Specialist System for visualization of parameters of multiparametric probes and automatic calculation of the Water Quality Index (WQI) in reservoirs of hydroelectric plants. The solution will be operated at the Belo Monte Plant, managed by the concessionaire Norte Energia.

To enable the project, Amazon CERTI Institution worked in the stages of data collection and processing, definition and training of artificial intelligence algorithms, in addition to the processing and integration of data in a cloud environment.

Projects Executed

Digitization of sales process and AI for data acquisition



In the industrial context, several applications were developed for partners such as Jabil, with emphasis on the Routes by AI and Digitization

of Sales Process projects, and for Compal, with the Autolog project. In these initiatives, we used software competencies for data acquisition, AI components such as RAG and chatbot for the implementation of virtual assistants that explore data and generate actionable insights for customer teams.



Crop Forecasting BI

In the project developed for NATURA, a customized BI for crop prediction was implemented, based on the Forest BI (by-product of the Digital Forest Platform, from CERTI) and information from Natura GIS, as a historical database of the Brazil Nut chain, aiming at its use in the training of crop prediction algorithms. In

a second stage of the project, through the processing of satellite images, the solution enabled the identification of Brazil nut producing regions still little explored by Natura and its partner communities. This set of new data was integrated into Natura GIS, expanding business generation opportunities for the client.



Bioconex BI of the forest

Based on the milestones achieved in the area of Bioeconomy, the Forest Digital Platform has achieved a robust evolution. Forest BI consolidated its operation by expanding support to three distinct production chains. Complementing data intelligence, the Platform reached a new level of accuracy with the implementation of specific crop forecasts for Brazil nut, açai and cocoa crops, essential tools for risk mitigation and strategic planning.

In the commercial sphere, the BIOCONEX platform reached operational maturity, starting to process real demands from suppliers and producer offers, with registration of financial transactions and support of an integrated logistics infrastructure, which connects transport suppliers directly to the solution. Throughout the development of the Forest Digital Platform, Amazon CERTI Institution has won important recognition: World Forum Award Amazon Economic Development Category and Microsoft New Commons Award

Projects Executed



Waste management and valuation for circular economy

The CERTI Foundation's work with 4FeedStock, a startup focused on the valorization of industrial waste, involved the mapping and validation of technological routes capable of transforming them into circular raw materials. The work consisted of mapping the company's processes and consolidating them into a web tool called SIMILIS, which concentrates the entire customer base and processes that the company runs, and technological intelligence to

pair circular and conventional raw materials with market data, quickly connecting valued waste to supply chains as sustainable inputs. SIMILIS crosses physicochemical data, location, demand and purchase price, promoting the most strategic and viable choice for the insertion of new raw materials in the market. In this way, it accelerates the implementation of valorization routes, optimizes decisions and supports decarbonization, ESG and industrial competitiveness strategies.



Cloud Asset Monitoring Center

Carried out over 12 months, the project focused on addressing the challenge of the aging of ISA ENERGIABRASIL's assets through the creation of the Asset Monitoring Center (CMA). The initiative sought to optimize Operation and Maintenance (O&M) processes by centralizing previously dispersed data on an integrated cloud-based platform. By consolidating cadastral, historical and real-time information, the CMA provided an accurate view of the operational state of the equipment, mitigating risks of failures and reducing costs associated with the maintenance of critical assets in the transmission sector. During execution, the project established a scalable and

secure infrastructure, integrated with legacy systems such as SAP and SAGE, respecting strict cybersecurity guidelines. MVP algorithms were developed and validated that used offline data to predict asset health and analyze specific processes, such as the impact of mowing on transmission lines. In addition to the technical part, the delivery included configurable dashboards for trend identification and direct support to predictive decision making, transforming reactive management into an intelligent prioritization approach. In the closing phase, the project ensured the transfer of knowledge to the internal team, ensuring autonomy in the operation of the new platform. A Transition Plan for Implementation was also delivered, containing the guidelines for contracting the definitive infrastructure and expanding monitoring to new substations. With these results, ISA ENERGIABRASIL consolidated a robust technological base to extend the useful life of its equipment, aligning operational excellence with the company's innovation and sustainability goals.



CERTI SDG Profile

UN Sustainable Development Goals (SDGs)

To understand how CERTI's activities align with the SDGs, we cross-referenced the 169 goals associated with the 17 SDGs with the 89 projects executed throughout 2025.

From this analysis, which resulted in the construction of the SDG 2025 Profile, it was found that 72% of the projects positively impacted at least one SDG, with initiatives that contributed to up to nine distinct objectives. This result highlights the transversal and integrated nature of the solutions developed by the Foundation, which are simultaneously connected to different dimensions of sustainable development. The analysis revealed a high concentration of projects in strategic SDGs for CERTI's mission.

SDGs 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production) and 17 (Partnerships and Means of

Implementation) appear with high frequency, each being impacted by more than 20 projects. SDG 9, in particular, stands out by being present in 46 projects, reaffirming the Foundation's commitment to building resilient infrastructures, promoting inclusive and sustainable industrialization and fostering innovation.

The presence of all 17 SDGs, impacted to some degree by the solutions developed, demonstrates CERTI's continued commitment to the 2030 Agenda. This scope reinforces our vocation to drive innovation, foster partnerships and support economic growth responsibly, acting consistently and dynamically in different innovation ecosystems.

The results confirm the coherence between the technological trajectories adopted by the institution and the contemporary challenges of sustainable development.

The diversity of CERTI's portfolio in 2025 proves that sustainable development is built at the intersection of different areas of knowledge. It is in the convergence between cutting-edge engineering that modernizes the national industry, intelligent software that optimizes resources and makes cities more efficient, and innovative initiatives that value the bioeconomy and protect biodiversity, that the Foundation materializes its mission.

By integrating technology, entrepreneurship and socio-environmental responsibility, CERTI not only contributes to the 2030 Agenda, but helps write a new chapter for sustainable development in Brazil, where innovation is the tool to build a more resilient and prosperous future for all.



Awards & Recognitions



ANP Technological Innovation Award

Category: Industry 4.0 /Digital Transformation/Artificial Intelligence
 Offered by: ANP
 Received by: CERTI and Petrobras



Ranking 100 Open Startups special 10 years - 10th position

Category: Private Entities
 Offered by: Top 100 Open Startups
 Received by: CERTI



Jaraqui Graúdo

Category: Startup Program
 Offered by: Jaraqui Valley
 Received by: Jornada Amazônia



ExcelênciaSC Trophy

Category: Tribute
 Offered by: ExcelênciaSC Movement
 Received by: CERTI Foundation



New Commons Challenge

Category: Data Commons Enhancement
 Offered by: Open Data Policy Lab, in partnership with Microsoft, The GovLab, UNESCO, Harvard and Direct Relief
 Received by: Instituto CERTI Amazônia



Transforming Tomorrow Trophy

Category: Legal Entity of Private Law
 Offered by: FloripAmanhã
 Received by: CERTI



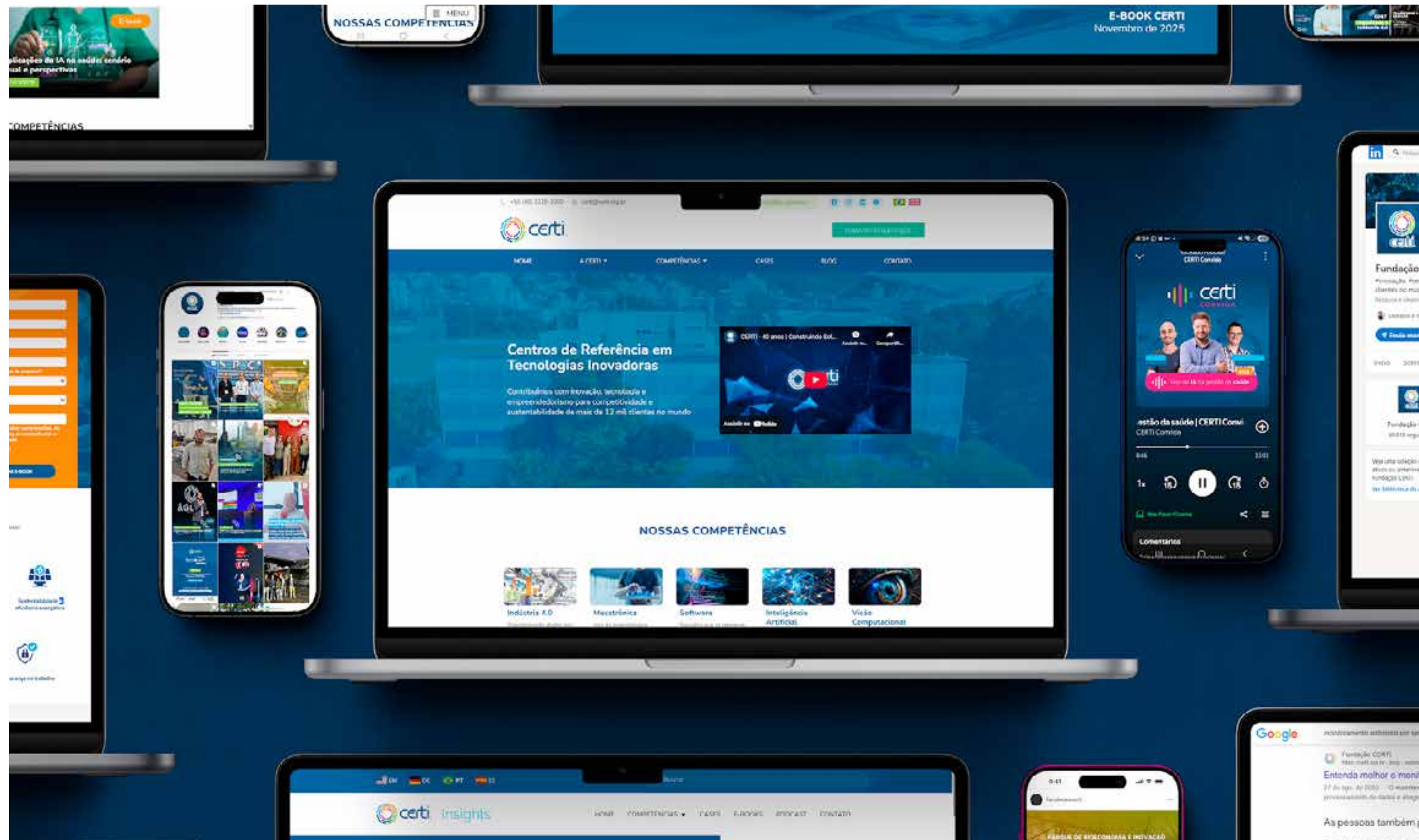
Solemn Session of the 352nd anniversary of Florianópolis

Category: Virgílio Várzea Medal of Merit
 Offered by: Florianópolis City Council
 Received by: CERTI

COMMUNICATION & BRAND



Digital outreach



In 2025, the CERTI brand was present at events and fairs of different themes. This communication channel remained integrated with the online presence, strengthening the brand throughout the year.

The main position was based on CERTI's competencies, emphasizing industry 4.0 and its aspects, entrepreneurship and bioeconomy. Through content marketing strategies, 32 new articles were published on the CERTI Insights blog, an important channel for attracting new customers. Traffic metrics confirm the relevance and quality of the articles, which are always reviewed and validated by specialist contributors.

A new communication format was launched in 2025. With 6 episodes, the CERTI Convida podcast brought market experts

to talk about Neoindustrialization, Impact Entrepreneurship, AI in Health, Innovation Ecosystem, Open BIM and Bioeconomy.

Building on all of this, CERTI consolidated its digital presence with significant organic growth across its main social media channels. Instagram recorded an almost 15% expansion in its follower base, driven by the excellent performance of video posts and an average engagement of 5.53% per post.

On LinkedIn, the follower base grew by approximately 10%, distinguished by a consistent editorial output of 385 posts throughout the year and by attracting a highly qualified audience of leaders and professionals in technology, engineering, business and innovation.

Visibility in the press

Working with the press office in 2025 was essential to maintain the brand's reputation and relevance in the various media outlets. Projects with a high level of innovation or with a great impact on society were highlighted in the press. In different media formats (radio, TV, digital and print), CERTI was able to publicize initiatives ranging from programs for startups, to forest restoration and electromobility, to innovation parks.

Other publications that had good visibility in the press were opinion articles and technical articles, written by CERTI experts. The institution's participation in events, either as a sponsor or with staff speakers, also generated coverage in niche and regional media outlets. In total, there were 2,330 media placements.



Forest Digital Platform

Digital commerce platform promotes Amazon bioeconomy

Vehicle: **Globo Rural**
Date: 04 March 2025
Link: [Click here](#)



CERTI ECOSYSTEM

The Success Equation

Vehicle: **Forbes Bilionários SC**
Date: 08 August 2025
Link: [Click here](#)



More Forest with Araucaria

Project restores 562 hectares in the heart of the Santa Catarina Atlantic Forest

Vehicle: **Um só planeta**
Date: 28 April 2025
Link: [Click here](#)



Startup Driven by Centelha II

Will you have an 'açai coffee'? New use of the stone of the fruit advances in Brazil and abroad

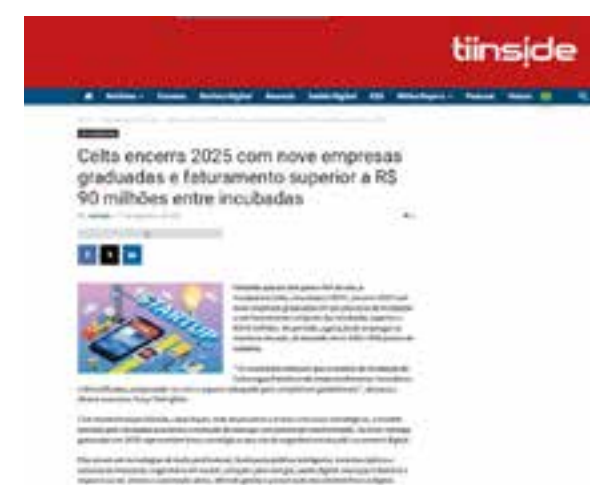
Vehicle: **O Globo**
Date: 16 September 2025
Link: [Click here](#)



Article -Energy Transition

Brazil at the forefront of the global energy transition

Vehicle: **Canal Energia**
Date: 04 December 2025
Link: [Click here](#)



Celta Balance 2025

Celta closes 2025 with nine graduated companies and revenues of more than R\$90 million among incubated companies

Vehicle: **TI Inside**
Date: 17 December 2025
Link: [Click here](#)



Autonomous Boat

Autonomous boat with AI will monitor water quality in the Xingu, in the area of the Belo Monte Plant

Vehicle: **Galileu**
Date: 29 May 2025
Link: [Click here](#)



Article - Smart Cities

The role of social impact startups in building smarter, more sustainable cities

Vehicle: **Startupi.com.br**
Date: 04 March 2025
Link: [Click here](#)



IoT Congress Solutions

CERTI leads debate on the role of IoT in the modernization of the electricity grid at a national meeting in São Paulo

Vehicle: **Crypto ID**
Date: 02 September 2025
Link: [Click here](#)



COP 30

Bioeconomy park led by SC institution is the highlight of Pará at COP30

Vehicle: **NSC Total (Stela Benetti)**
Date: 14 November 2025
Link: [Click here](#)

Participation in events

CERTI was present at more than 20 events this year, with different formats of participation.

The themes ranged from entrepreneurship, BIM, bioeconomy, manufacturing, mobility and technologies in general. Of these, two were their own events:



World Metrology Day

Organized by CERTI and with the institutional support of the Bureau International des Poids et Mesures (BIPM), the event brought together experts, students and professionals to discuss the strategic role of metrology in digital transformation, industrial innovation and people's lives.



Entrepreneurship Journey

In partnership with Sebrae and Embrapii, the event presented in a practical way the alternatives to transform innovative projects into reality through non-reimbursable resources.

CERTI experts were invited to take the stage and present the institution's expertise in the various areas of competence,



at events such as GovTech Summit, BIM CREA-SC, C-Move Sul, Manufacturing Forum and Mobility Forum. The active participation in the implementation and operation of the Amazon Bioeconomy and Innovation Park was the theme requested in many of the lectures of the year, leveraged mainly by COP 30. CERTI shared the challenges and repercussions of the Park's management in important events such as Green Rio Tech, Peruvian Innovation Week and PNDBio Regional Dialogue.

