

ANNUAL REPORT 2014



Reference Centers for Innovative Technologies

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CERTI Foundation Annual Report 2014

Approved by Board of Trustees at Ordinary Meeting of 24th March 2015.

PRODUCTION TEAM

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Introduction

We are pleased to welcome you to this Annual Report, in which we present the most interesting and relevant achievements and events of 2014. The report covers all of CERTI's many different fronts of action, focusing on its nine Centers of Excellence, which fulfill the institution's mission, developing and delivering to our customers and partners the innovative solutions that are an important part of promoting firms' competitiveness and furthering regional and industrial development.

This is the work that ensures that CERTI remains both economically sustainable and consistently up-to-date, posting healthy growth figures and responding to the demands of business, government and society.

In 2014 the organization was faced with a complex scenario resulting from the challenging economic situation that resulted in suspension of certain government projects that were highly relevant to development of the region or the business sectors in which the institution operates. CERTI responded by further expanding those of its activities that are directly dedicated to the private sector. This initiative demanded a great deal of well-planned effort aimed at helping businesses to access attractive investments in innovation, such as co-funding operations, grants and/or tax incentives.

The considerable advances in technological competences and the high-impact solutions delivered to our customers will be illustrated in the texts, images, data and facts that make up this document, bearing witness to the results of our efforts throughout 2014.

We would be immensely grateful for your analysis and comments about these achievements and would like to invite you to schedule a visit, so we can receive you here at our headquarters or at one of our other sites.

CERTI Foundation Presidency

CERTI Foundation 30 years Pioneering and Innovating



... Respondendo:

- Quem somos?
- O que nos move?
- O que fizemos?
- Para onde vamos?
- O que almejamos?

CERTI CERTI CERTI certi



Just as the CERTI logo has been updated a number of times, to reflect new times and new ambitions, the institution has leveraged its technical and management competence to the maximum, to face the current economic challenges, or even to meet the demand for innovative solutions for progress in Brazil. Today, CERTI is undoubtedly recognized for its excellence both nationally and internationally.

The Foundation is partway through its most dynamic strategic development plan to date, the 2020 strategic plan, and on October 31 of 2014 CERTI celebrated 30 years of operations supporting the national business sector and regional development in many parts of Brazil, with a particular emphasis on Florianópolis, where its base of operations is located.

CERTI now has a total of nine Centers of Excellence in operation and those who visit it or read this annual report quickly realize how appropriate this structure is as a mechanism for supporting the effective creation of innovative products and processes for industry. An important part of celebrating this milestone at a meeting attended by all employees was a presentation reflecting on the past, present and future of the institution.

The examples set by our teams of employees and their achievements have not gone unnoticed by society and, part of that recognition was the launch that day of a commemorative stamp by the Brazilian postal service (shown on the cover). Our re-modeled head office was also opened on the same day. The work was financed with funds from the FINEP Innovation Prize, which CERTI won in 2009, in the Best Science, Technology and Innovation Institution category that year.

With compliments and a big thank you to all our Employees and Partners.

Carlos Alberto Schneider, Prof. Dr.-Ing.
President of the CERTI Foundation



1984



1997



2004



2009



2010



2014

Institutional and Strategic Management

In 2014, in the midst of an adverse economic scenario, the institution's management overcame a period of complex challenges, thrown up by uncertainty related to the continuity of governmental projects and programs, expanding the foundation's activities in the private sector. The measures for change that the institution's management established in the "Pact30" set out the basis for facing up to these difficulties and for helping business to overcome the economic crisis.

Carlos Alberto Schneider, President

Board of Trustees



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 Moacir Antônio Marafon
Moacyr Rogério Sens (President)

With increasingly complex and extensive agenda, in 2014 the Board of Trustees monitored, advised and deliberated on management of the CERTI Foundation at three ordinary and two extraordinary meetings, in addition to conducting monitoring through a dedicated committee.

Fiscal Board

During 2014, the Fiscal Board continuously monitored the financial operations of the CERTI Foundation, holding one plenary session to discuss the 2013 Balance Sheet and several supervisory sessions.

Members:

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 Günther Pfeiffer (Operations)
 Günther Pfeiffer (Finance and Administration - Interim)
 Laercio Aniceto Silva (Business)
 José Eduardo Azevedo Fiates (Coordination of Science, Technology and Innovation)

The Presidents' Committee held weekly meetings to ensure harmonious integration of the strategies defined in the Pact30, which is a collection of activities designed to strengthen the institution to overcome the Brazilian economic crisis. Activities were oriented towards serving the private sector better and more intensely, whilst reducing operational costs and investments, without negatively impacting on the Foundation's existing competencies. The Presidencies responded to the major challenges of 2014, as will be detailed in this Institutional Report.

The CERTI Foundation is a Science, Technology and Innovation organization monitored by the Public Ministry of Santa Catarina.



ICT and Entrepreneurship Management

This department is responsible for defining the CERTI Foundation's guidelines and strategies for Science, Technology and Innovation and in 2014 it gave priority to two fronts, guiding the process of development and consolidation of the technology, product and market platforms that make it possible to create the innovative technological solutions for CERTI's customers that give them a competitive edge; and organizing and systematizing the system of innovative entrepreneurship, in order to connect the institution's many different initiatives in this area in the most efficient way possible.

José Eduardo Azevedo Fiates, Coordinator of S&T&I

System for Acceleration of Startups - Innovative Entrepreneurship

CERTI Foundation's SA StartUP project, the System for Acceleration of Startups, is the fruit of 9 months' development, carried out by a team that involved CERTI's units and programs that work in this area, specifically, CELTA, CEI, CVentures, and CIENCIA, together with successful initiatives on the local, national and international levels. The result was the creation of a new system, described below, which sets out the steps for providing support for the development of a new technology-based enterprise. In addition to assigning the job of standardizing the mechanisms for fostering entrepreneurship to CERTI, the new model also provides for the creation of a new mechanism - CELTA Startup - which is an acceleration process designed to provide more effective support for companies on the Sinapse project, leading to generation of more innovative and competitive startups for the incubation (CELTA) and venture investment processes (CVentures). Before the end of 2014, this new system had already been presented to customers and partners and work on its 2015 implementation had begun.



Advances at the Model Enterprise Sapiens Parque Innovation Park

During 2014, growth of the Sapiens Parque enterprise reached a point of critical mass and is now irreversible. The year 2014 marks 10 years since Florianópolis city council approved the changes to the park's master plan that permitted CERTI Foundation to effectively take over development of what was then known as the Sapiens project. The following were of particular note among the 2014 projects and initiatives: Renewal of the cooperation agreement with the local Federal University, UFSC, which was unanimously approved by the University's council; Concession of the operational license for Sapiens Parque Phase Zero, through which around 300 professionals are now working in the four buildings that are already operational; Publication of Special Purpose Entity tenders and signature of new contracts for the implementation of

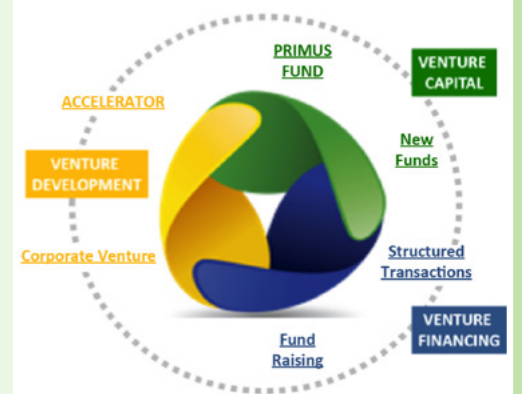


technology business centers (four centers), a service center, a hotel and research centers; Development and publication of a new type of tender designed to attract R\$ 30 million in private capital to fund execution of a new phase of infrastructure, with payment in the form of Real Estate.

CVentures S.A. enabling Innovative Enterprises

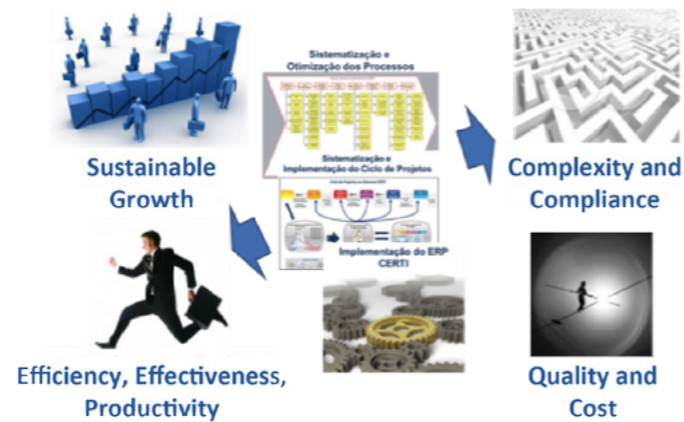
CVentures S.A. is a CERTI System company and in 2014 the three operational units defined in its strategic plan for the 2020 horizon became fully operational.

- **Venture Capital** – this unit's first fund, Primus, controls R\$ 83 million and in 2014 it provided finance to 2 enterprises and undertook prospecting and analyses with a volume that promises well for 2015.
- **Venture Development** – this unit is responsible for the development work of SA StartUP and it has already begun work on development and implementation of the acceleration program.
- **Venture Finance** – this unit initiated activities to conduct structured operations, such as real estate funds, and to support acquisition of resources to be used to fund the growth and innovation strategies of institutions and companies with a technological basis.



Operational, Financial and Administrative Management

The Operations Superintendency and the Finances and Administration Superintendency dedicated themselves intensely to administrative and operational management and their respective optimization processes, to providing methods, systems and services and to making available adequate means and infrastructure for all of CERTI's units to carry out their activities. Significant improvements were achieved in its Projects Office's activities in conjunction with all units and projects, and in the process of implementing best practices in project planning, execution and management processes, in line with development and implementation of the customized ERP system. The refit of our head office was completed in time for the 30-year anniversary of CERTI's foundation, financed with funds from the FINEP Innovation Prize, which CERTI won in 2009.



Günther Pfeiffer, Operations and Finance&Administration Vice President

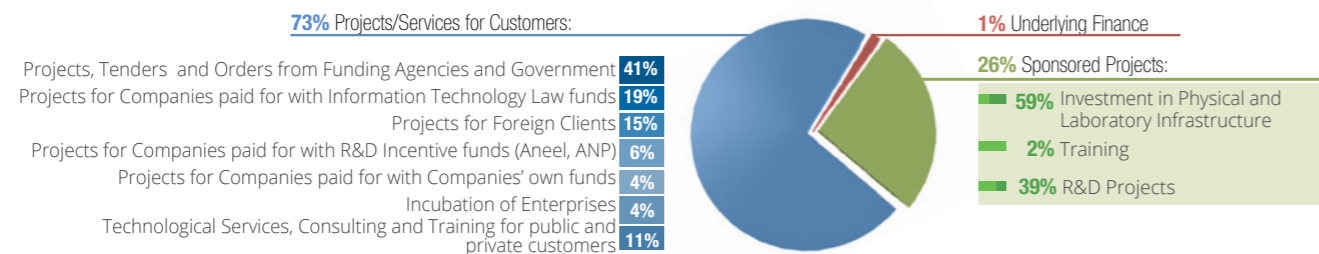


Operations and Economic Sustainability

CERTI reached the end of 2014 with a portfolio of 113 ongoing R&D Projects (project sizes are shown in the figure) and 350 highly specialized technological service and consulting contracts, delivered by a team of 308 staff in technical and administrative support roles. Total revenues were approximately \$19 million, from projects, services, training and consulting contracts, serving the most diverse range of sectors and clients of all sizes.

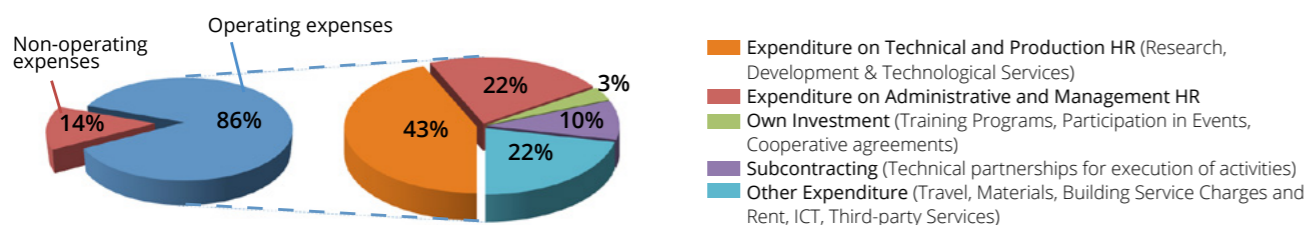
Breakdown of Total Revenues

The listing of "Projects/Services for Customers" includes revenues from activities servicing demand from customers, while items listed under "Sponsored Projects" relate to revenues earned from activities for the improvement of technical and scientific capabilities and physical and laboratory infrastructure, almost all of which relate to government funding programs. The item "Underlying Finance" relates to borrowing for institutional improvement, which is set at 20% in the target model. It will be noted that enterprises have invested very little of their own resources in the projects for technological development and innovation.



Breakdown of Total Spending

"Non-Operating Expenses" comprise investments in fixed assets and infrastructure. "Operating Expenses" comprise spending related to means and ends activities. The institutional adjustments program that was implemented in 2014 reduced operating expenses by 10% in comparison with the preceding year.



Business and Marketing Management

The CERTI foundation is an essentially multidisciplinary organization and in 2014 it played a proactive role in partnership with business in the INOVA EMPRESA and the INOVAR AUTO projects to drive innovation in several strategic industries. Drawing on its impressive network of relationships with both Brazilian and international universities and research centers, technology suppliers and governments, CERTI has expanded its portfolio of customers for projects with a high technological density. Its strategy for marketing and integration of competencies have consolidated its activities in new markets, such as energy and healthcare, and facilitated expansion of its ITC activities.

Laercio Aniceto Silva, Business Vice President

Support to enable and facilitate the viability of Clients' Innovation Projects

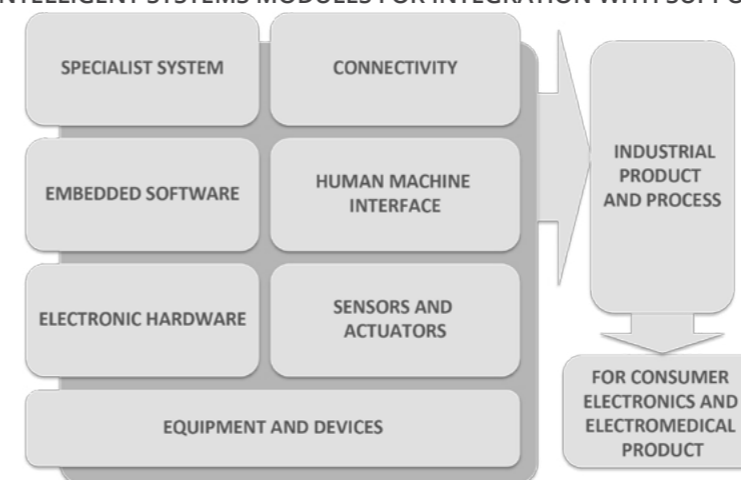
Drawing on its technological expertise, CERTI works to strengthen its customer's competitiveness and support them in obtaining incentive funds and subsidized resources to mitigate the costs of development of innovative solutions. This support is provided during the project planning phase, targeting attractive financing and grants from funding organizations such as FINEP, BNDES, BRDE, SEBRAE and EMBRAPII and incentive resources covered by the INFORMATION TECHNOLOGY LAW, the ASSETS LAW and the CONCESSIONS LAW.



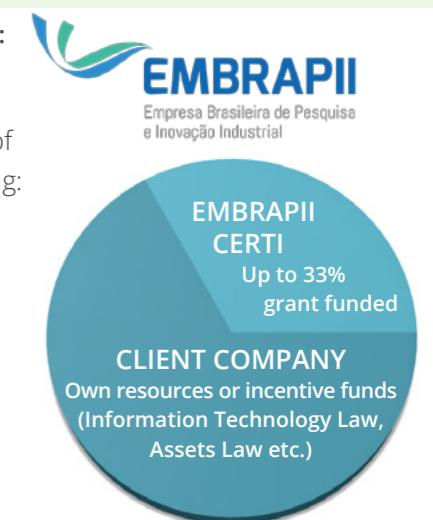
CERTI as an Embrapll Unit

In October of 2014, CERTI was certified as an EMBRAPII Unit for development of INTELLIGENT SYSTEMS for consumer electronics and electromedical products and processes. At the end of a public tender process, in which 96 research and development institutions took part, the Brazilian Association for Industrial Research and Innovation (EMBRAPII) selected CERTI and approved its 6-year action plan that calls for investment of R\$ 36.6 million in grants in innovation projects for industry. Using the modern concepts of the Internet of Things, Big Data and Cloud Computing, the INTELLIGENT SYSTEMS developed by CERTI offer microprocessor-controlled solutions with connectivity and security that provide distinctive functionalities to increase industry competitiveness. With experience participating in multidisciplinary projects, CERTI is able to offer a complete range of services, including feasibility studies, conception, development of prototypes, products (design, mechanics and electronics, hardware, firmware and software) and productive processes, instrumentation and control, tests and experimentation, quality assurance and supply-chain development, always in partnership with clients' own R&D teams, to rapidly arrive at a product that is ready for certification and launching onto the market.

INTELLIGENT SYSTEMS MODULES FOR INTEGRATION WITH SUPPORT FROM:

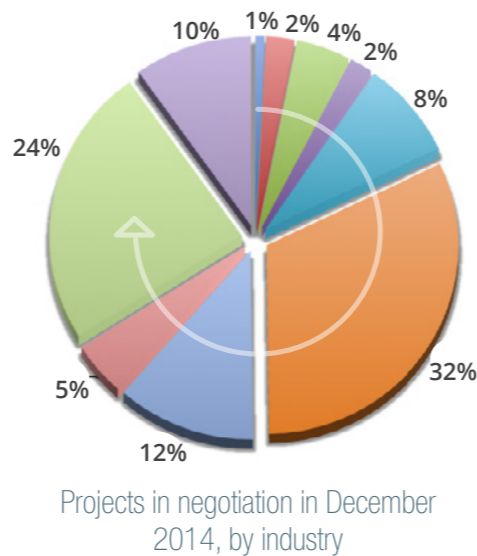


Type of funding:



Services for the Market

In December of 2014, CERTI's portfolio of prospections and proposals included demand for innovative solutions from a variety of industries, as detailed in the graph, classified in the following categories:



AUTOMOTIVE

CERTI studied the demand in this sector in the light of incentives available through the Inovar Auto program and identified opportunities for projects to support development, manufacturing and basic industrial technology environments designed to improve the quality and productivity of automobile manufacturers and their supply chains.

AEROSPACE

In conjunction with partners, CERTI prospected in the defense and aerospace industries and presented proposals for projects that will strengthen the sector's HR, R&D, parts suppliers and technology testing.

THE GREEN ECONOMY

The private sector's growing interest in sustainable development opened a window for CERTI to negotiate technological projects to enable entrepreneurship at the base of the economic pyramid, targeting preservation of biodiversity, environmental protection solutions, etc.

EDUCATION

The Brazilian Ministry of education is supporting a series of projects and, in response to this, CERTI has expanded its product offerings and involvement in educational ICT, with assistive technology projects and multimedia applications for teaching and training.

ENTREPRENEURSHIP AND REGIONAL DEVELOPMENT

Using the success of the CELTA and Sapiens Parque ventures as a springboard, CERTI has been winning over state and municipal governments with projects to plan and model technology parks, innovation centers and incubators, creating processes for the support of Innovative Entrepreneurship, not merely in the conceptualization and design phases, but primarily providing support to ensure their feasibility.

ENERGY

Combining its capabilities in mechaoptoelectronics and intelligent systems with international partnerships for proposed solutions for the electricity industry, CERTI has been winning contracts for projects employing the state-of-the-art in smart grids, flexible photovoltaic generation, OLED lighting and electric vehicles.

OIL AND GAS

The Brazilian energy industry regulator, ANP, granted CERTI definitive certification for execution of R&D projects for concession holders in the industry in the areas of materials and conformity testing, monitoring and control, greatly expanding its ability to offer technological services to the oil and gas industry.

ELECTROMEDICAL

Growing demand and obligatory certification of electromedical products to the IEC 60601 standard combined with government incentives for local development have provided CERTI with opportunities for doing business with domestic and international partners interested in the Brazilian market. The EMBRAPPII grants have further enhanced the feasibility of conducting projects in this market.

ICT - INFORMATION AND COMMUNICATIONS TECHNOLOGY

In addition to the growth in ICT applications in cross-sector projects spanning many different industries, CERTI also consolidated its participation in the ICT market with new contracts with global customers for IP Communications and interfaces and systems and applications for digital TV, also attracted by the possibility of accessing EMBRAPPII grants.

OTHER MARKETS AND EXPORTS

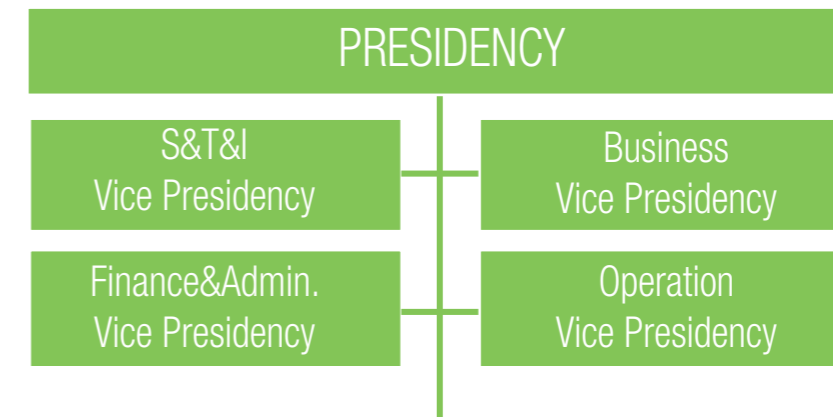
CERTI has successfully consolidated itself as a provider of innovative solutions in products and systems and has now received the seal of approval of Brazilian government recommendation, opening up domestic and international opportunities for new contracts for conceptual and executive projects and for the establishment of manufacturing units in a range of different industries.

Business Vice President
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Daniel Silva da Rosa
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CENTERS OF EXCELLENCE

Each of the CERTI Foundation's Centers of Excellence operates as one of the organization's business units. Their teams of specialists and their operational infrastructure provide services to customers either exclusively or in conjunction with other Centers of Excellence and/or partners from Brazil and/or abroad. In the following sections of this report there are presentations from each of the nine Centers of Excellence highlighting their achievements, their advances in terms of technical and scientific capabilities and their stand-out projects and activities in 2014.



REFERENCE CENTERS IN INNOVATIVE TECHNOLOGIES

CME - Mechatronic Center

CCD - Digital Convergence Center

CES - Sustainable Energy Center

CMI - Metrology and Instrumentation Center

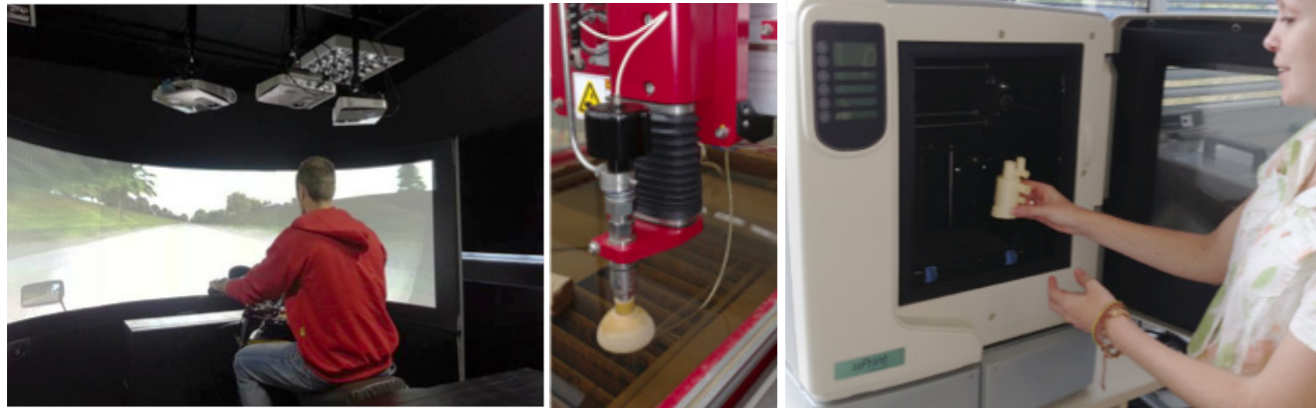
CPC - Cooperative Production Center

CEV - Green Economy Center

CEI - Innovative Entrepreneurship Center

CELTA - Business Center for Advanced Technology Laboratories

CIENCIA - Incubator Center for Companies,
new Knowledge and Advanced Ideas



In 2014, CERTI's Mechatronics Center developed solutions for its customers with a particular focus on products and technology for the healthcare sector, on solid-state lighting and on equipment for education and training. The solutions developed adhered to strict criteria to deliver high quality and met international regulatory and certification requirements. The center focuses on the areas of healthcare, education and sustainability and its multidisciplinary team is dedicated to technological innovation in the electrical and electronic products demanded by business, governments and society, to international standards of excellence. The center's advanced prototyping and test laboratories ensure that the product development process is rapid and high-quality.

Manuel Steidle, Executive Director of the CME.

Competencies and Innovative Solutions:

- Electrical and Electronic Products**
 Product development: from concept to industrial engineering.
 Mechanical, electronic and embedded software design for intelligent systems.
 Human-centered design for physical products.
- Solutions in Mechatronics and Microsystems**
 Mechatronics in products.
 Interconnection and encapsulation of embedded software in microsystems.
- Studies, Consulting and Services**
 Technical and economic viability studies for electrical and electronic products.
 Consulting on adoption of new technologies.
 Design and prototyping services for mechatronic devices.
 Consulting on digital signal processing.

Markets served:

- Electrical and Electronic Products
- Solid-state Lighting
- Electromedical Equipment
- Simulators for Training
- Machinery and Equipment

Featured partners and customers:



Contacts:

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Medical Equipment



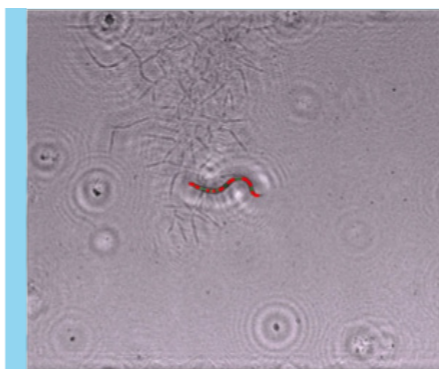
The Center developed a new product platform for providing newborn infants with phototherapy for a client that is a world leader in this market. This was the first CERTI project contracted with the support of the Embrapll framework and it combined evolution of embedded electronics, intelligent controls, optics, thermodynamics and product design, leading to a significant innovation to improve treatment for children with hyperbilirubinemia. Attention to risk management to meet safety and certification requirements to IEC 60.601/Anvisa standards will ensure that this product is rapidly and effectively brought to market. The equipment features embedded intelligence and communications solutions that are aligned with the needs of the hospitals of the future.

Mother and Baby Health Diagnosis

This project, in partnership with IMBMP Fiocruz, involves design of a portable machine for diagnosis of infectious diseases during prenatal examinations. This easy-to-use and robust equipment utilizes embedded electronics, image capture and digital signal processing solutions and will be provided to the Brazilian health service as a solution for mother and baby health diagnosis at health centers, for the identification of infections and prompt referral for appropriate treatment.



Advanced Microscopy Technologies

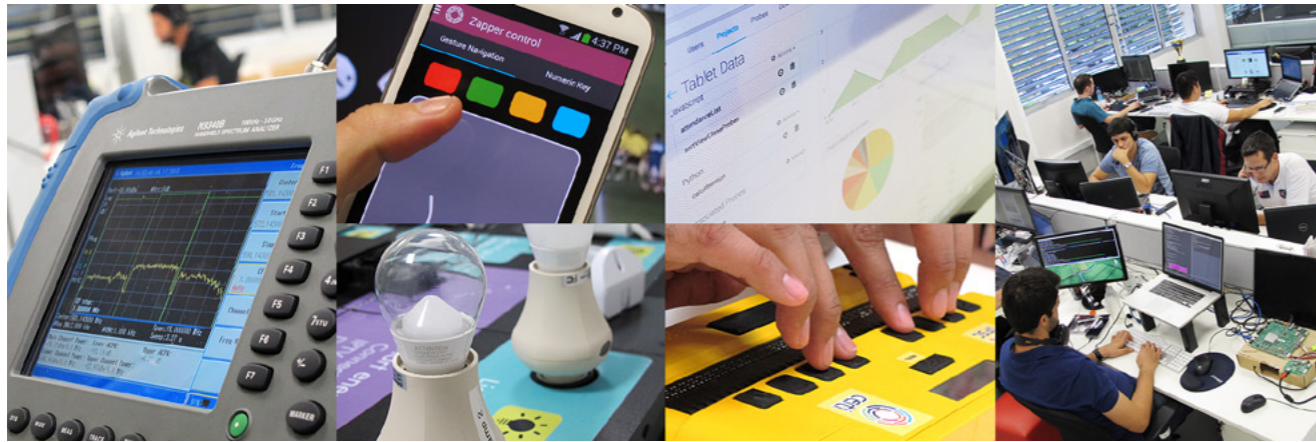


This is a joint MIT and CERTI cooperative project with the support of CNPq and Lapix/UFSC participation to develop solutions for lensless microscopy and image processing. These technologies are aligned with the global tendency for ubiquitous availability of embedded image capture systems and are the key to simplification and miniaturization of systems employing image capture and pattern recognition in biological samples for diagnosis of infectious diseases and analysis of cellular morphology in drug and cancer studies, and also have many other applications.

OLED Illumination with CE Certification

In partnership with Philips Brazil and Philips Germany, and with support from BNDES/FUNTEC, CERTI's CME, CPC and CMI worked together to develop a compact OLED lighting system, its production line and product supply chain, with international certification and world-class quality. The successful handover of both product and process to Produza demonstrates the CERTI ecosystem's capability to develop and supply industrial products for the demanding and competitive world of solid-state lighting market and other segments of the global electrical and electronics industry.





In 2014, the Digital Convergence Center consolidated its upward growth curve with research and development projects for the telecommunications, electricity, education and consumer electronics industries. The center won new and important customers, including multinational mobile communications and consumer electronics giants. Capitalizing on the potential for crossover between digital convergence technologies, projects were initiated for customers from hitherto unexplored markets such as healthcare and precision agriculture. This diversity has conferred economic sustainability on the CCD, mitigating dependence on specific markets and represents an expansion of its opportunities to generate innovations, opening new horizons for the center's competencies and technologies.

Marcelo Otte, Executive Director of the CCD

Competencies and Innovative solutions:

- Software development**
 Web and portal solutions.
 Collaborative environments.
 Applications for mobile devices.
 Cloud Computing and Big Data
- Digital convergence products**
 Embedded/intelligent systems.
 Internet of Things.
 Electronic hardware projects.
 Interactive applications for TV.
 Smart Platform solutions .
- Business analysis and strategy**
 Support for adoption of new technologies and entry to markets.
 Modeling of business strategies for digital convergence-based products and services.
 Introduction of intelligent competition practices.
- Educational technologies**
 Solutions with new teaching concepts.
 Design Thinking in products for education.
 Integration of ITC in the classroom.

Markets served:

- Telecommunications
- Electrical and Electronics
- Information Technology
- Digital Television
- Mobility
- Education
- Energy
- Smart cities

Featured partners and customers:



www.certi.org.br/ccd ccd@certi.org.br +55 48 3239 2020

The Digital Convergence Center achieved good financial, technical and operational results in 2014. On the financial side, the CCD made a significant contribution to the organization's overall results and, operationally, management practices were improved and aligned with the institution's guidelines. On the technical front, new competencies were mastered in important technologies that are key to digital convergence, as described below:

HD-One for New Platforms



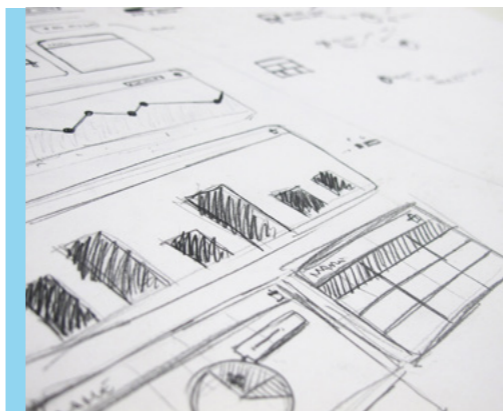
With the new generation of Android Smart TVs, CCD led the way with its pioneering port of Ginga™ Middleware to the Android operating system. This solution will be used both for Smart TVs and for mobile devices such as smartphones and tablets. This is another significant step for the HD-One digital TV platform and consolidates CCD's position in the vanguard of digital TV and convergent solution development. The solution also offers an important competitive advantage because the CCD is one of the only providers of Middleware Ginga solutions for Android in the world.

Cyber Security

Digital security is a promising market and the CCD developed an advanced digital security system for embedding in mobile devices, smartphones and tablets running the Android operating system. The system is designed to identify security vulnerabilities and breaches in these devices and to prepare them to defend against future attacks. To achieve this it was necessary to develop and apply innovative, next-generation algorithms to identify sophisticated attacks and failures and notify the user in the event of anomalies. Also in the realm of digital security, the CCD developed a tool for legal monitoring of social network users' activities, designed to identify and monitor suspect profiles.



The Internet of Things & Big Data



In the area of the Internet of Things, the CCD developed a project to construct a cloud computing platform capable of connecting thousands of different sensors spread across the web. Utilizing protocols such as MQTT and REST APIs in conjunction with big data techniques, data are stored in NON-SQL databases in a non-structured manner, allowing the application of analytics to this information. The platform offers pattern identification and inference from sensor data. For example, monitoring vital signs, anticipating requirements from context data or using data from a smartphone accelerometer to detect whether a driver has entered or left a parking space are possible applications.

Virtual Learning Environments - Knowledge Modeling Processes

In the context of applying technology to education, CCD has initiated a project and continues to improve a directed process approach to conduct acquisition of tactical and explicit knowledge, modeling it and making it available in virtual learning environments and distance education programs. This development benefits from the center's accumulated experience in a range of projects using ICT in education and integrates the concepts and methodologies of user-centered design, usability and instructional design. The current stage of development involves employing the process to define guidelines and best practices with a view to adapting existing content from public education management training programs for virtual learning environments.





In 2014, CES celebrated its second full year as a CERTI Foundation Reference Center, once more exceeding its financial growth targets for the year. During this period, and working with a team of 14 people, the CES set up its own research laboratory infrastructure, developing and demonstrating technologies for distributed generation and intelligent grids. Other highlights of 2014 were contracts for new development projects in renewable energies, microgrids and market surveys and studies of technological tendencies in the energy sector.

Cesare Quinteiro Pica, Executive Director of the CES

Competencies and Innovative solutions:

- Distributed renewable energy generation:**
 Specification, modeling, design and implementation of distributed generation systems and micro electricity grids.
 Development of intelligent systems with applications in the renewable energy and energy efficiency industries.
- Smart cities and electricity grids:**
 Energy management directed at optimization of the technical and economic benefits of operating systems involving electricity generation and demand, including systems that respond to demand.
 Management of energy in systems including electric vehicles and intelligent buildings and smart microgrids.
 Development of hardware and software for energy management in industrial, commercial, corporate and residential applications.
- Energy efficiency, energy business and energy market:**
 Analysis and recommendation of innovative solutions for improvement of energy efficiency and quality in corporate, commercial and industrial installations.
 Development of commercial models and technical and economic modeling of new ventures in a range of segments in the energy industry.

Markets served:

- Electricity concession holders
- Industrial, commercial and residential sectors, with distributed generation and energy efficiency projects
- Electrical equipment and instrument companies
- Governmental organizations, with projects for smart grids and smart cities

Featured partners and customers:



The majority of projects in development by CES are part of the ANEEL Brazilian Electricity Regulatory Agency's R&D program and through them CERTI is consolidating its position in the sustainable energy industry. These projects are executed in a transversal manner in all the CERTI Centers of Excellence in Innovation Technology and also establish relationships with partner science and technology companies and institutions, as described below:

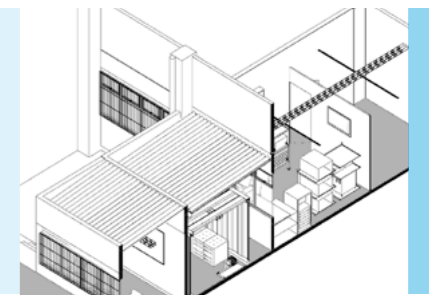


District Renewable Energy Power Station

This project involves development and implementation of engineering and control solutions for integration of micro-generators in a hybrid system, in a power station format, for application within urban areas. The project was developed for the Santa Catarina electricity distributor CELESC and the results should provide a foundation for the company to face the challenges created by, and take advantage of the opportunities afforded by, the distributed generation market. In 2014, installation of the pilot system planned in the project was completed. The pilot will be used as a demonstration unit and laboratory and as a platform for future projects.

Smart Microgrids

The scope of this project is to develop control strategies for integration and energy management of a smart microgrid. This project is being executed in the context of an R&D assignment for Tractebel and includes installation of a 100 kW pilot microgrid integrating solar, wind and gas micro-turbine generation with batteries and dispatchable loads. In 2014, the control system and energy management systems were developed and the first operational tests of the functioning microgrid were conducted.

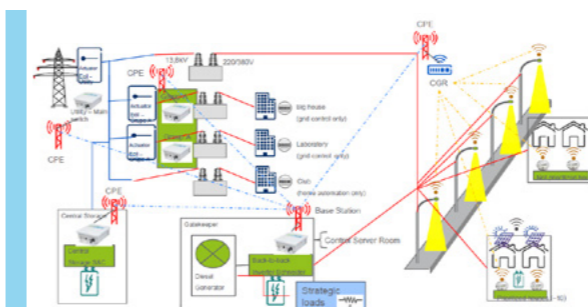
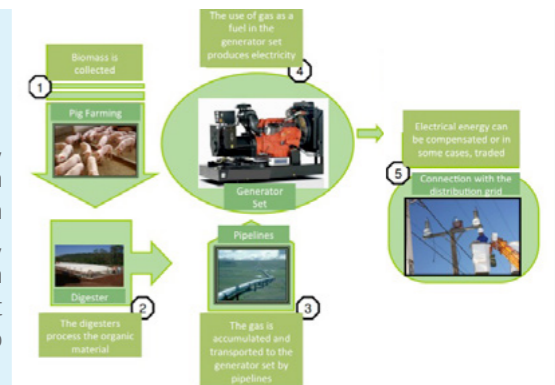


Connection of a Photovoltaic Complex to the Distribution Grid

The objective of this project is to study and develop technical and commercial solutions for a photovoltaic electricity generation complex to be installed at the Eletrosul main site. The complex comprises a Megawatt Solar power station and an experimental plant made up of six different photovoltaic generation technologies with a combined total of more than 1 MWp. In 2014, stages of the operational analysis for the Megawatt Solar plant were conducted and construction was initiated on the experimental station, with completion expected during the first 6 months of 2015.

Technical and Commercial Configuration of a Biogas Power Plant

Eletrosul is installing a 400 kW mini thermoelectric plant in Itapiranga, in the West of Santa Catarina, which, from 2015 onwards, will run on biogas produced by 12 pig farms. The project is being conducted in cooperation with six Brazilian science and technology institutions, including CERTI. The part played by CES within the project is focused on mapping and analysis of the costs of the technologies used throughout the plant and on support for technical and commercial modeling to ensure the economic feasibility of the project's business model.



Electricity Generation and Distribution Micro-Grid

The objective of this project, contracted by Coelce, is to develop a project targeted at condominiums, based on self-generation of electricity, autonomous distribution through a microgrid and residential automation. It includes software and applications for managing the grid and to provide user interfaces and local generation using photovoltaic solar and wind power and will be capable of operating in autonomous mode or connected to the electricity grid. Ten homes and a communal area in a condominium in Fortaleza, CE, will be selected for installation of a pilot system.



In 2014, the CMI continued to fulfill its mission to “develop innovative solutions in metrology, instrumentation and testing, focused on the competitiveness of products and processes, and structural activities in strategic areas”. In adherence with the guidelines laid out in the CERTI PE 2020, demand from companies in the Automotive, Oil and Gas and Medical Equipment industries and also from government was prospected, contracted and met. Our technological services branch continued to grow in 2014, consolidating its activities in metrology services for niche markets, such as analysis of parts using computed tomography, three-dimensional high-precision measurement and calibration of API thread standards for the oil and gas industry. Buildings energy efficiency labeling services also enjoyed considerable growth in demand, contributing to the sustainability of this initiative and building the national position of its OI3E buildings energy efficiency labeling organization.

Gustavo Daniel Donatelli, Executive Director of the CMI

Competencies and Innovative solutions:

- Metrology and Quality Control**
 High complexity and low uncertainty dimensional measurement and calibration services, with Brazilian calibration network RBC accreditation.
 Non-destructive computed tomography testing services.
 Lighting technology testing services.
 Product and process quality improvement projects.
 Metrology quality control and structural planning projects.
- Instrumentation and Testing**
 Development of measurement systems and testing for special applications, with automation and guaranteed metrological traceability.
 Planning and execution of special testing to meet specific standards or client requirements; support for product certification.
 Development of systems for asset integrity monitoring.
 Development of solutions for monitoring natural and artificial environments.
- Quality and Innovation Systems**
 Projects for installation of metrology management systems in large enterprises and institutions (ISO 17025, ISO 10012).
 Market research and business plans for basic industrial technology laboratories and centers.
 Design and management of technological services or R&D networks.
 Projects for building energy efficiency–Zero-energy Buildings; national energy conservation label issuance (ENCE).

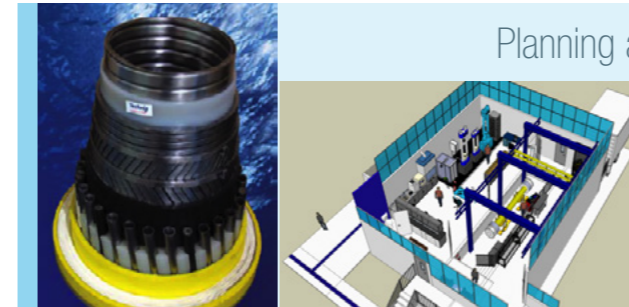
Markets served:

- Automotive
- Aerospace
- Metal working and mechanics
- Capital goods
- Electricity industry
- Civil Engineering
- Oil, gas and biofuels
- Metrology Laboratories

Featured partners and customers:



Planning and Installation of Metrology and Test Laboratories



Within the department responsible for laboratory design and technical and economic feasibility studies, one of the most important projects initiated in 2014 was the LabRIM project, contracted by Technip. The objective is to plan and install a test laboratory for fiber optic sensors used to monitor deformation and stresses in flexible risers.

Automated Quality Inspection Systems

The Instrumentation and Testing department has been developing test benches designed for automatic product quality control on production lines. Of greatest interest are two benches developed for Kavo, a company doing business in the dental equipment industry. The first test bench validates the technical performance of dental photopolymer light curing devices, measuring wavelengths and power output, in addition to the instruments' tip temperatures. The second is much more complicated and is designed to conduct functional testing of the six electronic circuit boards used in their Aqia dentist's chair, measuring voltage at 84 different test points, activating 64 actions and communicating with three serial ports.



Reliability of Measurements for the Oil and Gas Industry

The center conducted an important study of measurement reliability, financed by Petrobras, investigating the volume measurement chain used in tanker vehicle loading operations. Results include compilation and analysis of the components of uncertainty involved in calibration of capacity measurements, verification of volume measurement devices and the loading compartments of tanker vehicles and analysis of the loading operations at terminals. The study also identified potential for improvement in the practices employed at the IPEM weights and measures institute's verification stations and at Petrobras' loading terminals, focused on improving the reliability of the measurement processes involved.



Product Certification

Another of CMI's competencies that is in a process of rapid evolution is that dedicated to products certification. In 2014, based on a Concession Agreement contracted by the FAPESC research and innovation funding agency, the OCP-SC project was launched to analyze the market in Santa Catarina state and to create the model for a sustainable product certification organization (OCP) for the state of Santa Catarina that should improve the competitiveness of the state's automotive and aerospace industries. Several publications have resulted, including Reference Guides for certification of products for these two industries.





During 2014, the Center concentrated on execution of major projects initiated in 2013, and also began activities to diversify the Center's portfolio of projects. Of particular note were completion of projects for the installation of manufacturing units in cooperation with other Latin American countries, initiation of new projects in the areas of nanomaterials and textiles and the planning and specification phase of a program to support Enterprises in implementation of Industry 4.0 manufacturing systems.

Carlos Alberto Fadul Corrêa Alves, Executive Director of the CPC

Competencies and Innovative solutions:

- Development of New Manufacturing Units
- Planning and Industrial Quality Assurance for Products and Processes
- Reliability of Products and Processes
- Optimization of Existing Industrial Processes for Industry 4.0 Scenarios
- Development of Processes for Introduction of New Products
- Shop Floor Information Management Systems
- Small Series Production Technologies
- Studies of Post-consumption Industrial Waste Chains

Markets served:

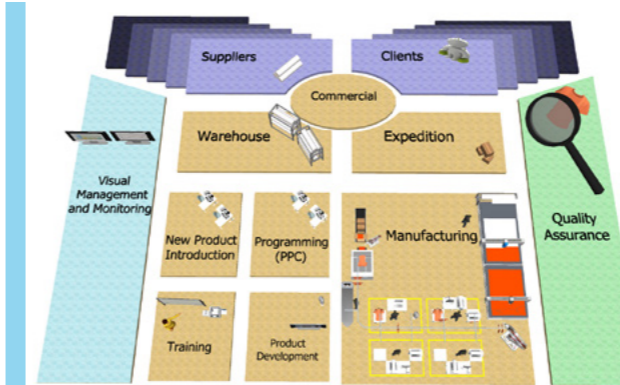
- Telecommunications
- Electrical and electronic
- Automotive
- Aerospace
- Mining
- Foodstuffs
- Machinery and Equipment
- Health
- Education
- Energy
- Oil & Gas
- Manufacturing Industries
- Governmental

Featured partners and customers:



Contacts: www.certi.org.br/cpc cpc@certi.org.br +55 48 3954 3000

In 2014, the Center's teams maintained its wide diversity of operational fronts. In the area of Quality Assurance they worked on planning and implementation of quality in new products and processes. In the area of Intelligent Manufacturing Systems, they worked on the development of systems for shop floor information management. The Advanced Manufacturing team conducted strategic studies for new Industry 4.0 technologies. The Product Engineering department worked on design of high complexity electronic circuit board layouts and the Industrial Processes Engineering team worked on projects for the new materials sector and production processes for ITC products. The following projects were of particular note:



The Clothing Factory of the Future

The project to design a Clothing Factory of the Future is part of an initiative to promote industrial and technological development of the Brazilian textiles industry by implementing a strategy to transform traditional clothes-making factories into environments for next-generation clothes making, becoming more productive and more competitive by employing Industry 4.0 concepts such as professionalized management and adding value by leveraging technology and industrial processes with lower environmental impacts to reduce costs and increase competitiveness for the industry.

Polymer-clay nanocomposites extracted from Brazilian nanoclays

The objective of this project is to develop a new class of composite materials formed by reinforcing polymers with organophilic clay, using exclusively Brazilian technology. These new materials have the potential to attract great interest from the plastics and polymer industries, in view of the improvement to mechanical, thermal and gas barrier properties that these new materials confer on products, such as, for example, PET bottles and plastic films for food packaging. In this case, the major challenge is development of an innovative production process to create the new material, which has not yet been mastered and consolidated. The project is being conducted in partnership with T-Cota and represents a major technological advance for the mining industry and a new business opportunity for the company.



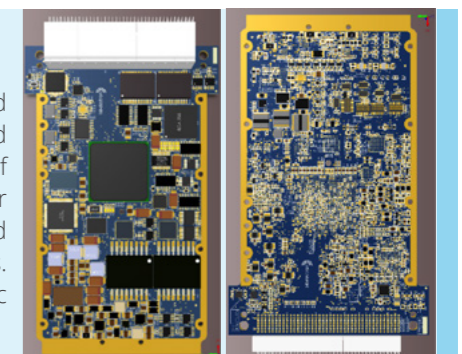
Production processes for OLED lamps

The CPC team's role in the OLED project involved working on the production process and on certification of an OLED Undershef Light. In order to achieve the desired results, it was necessary to work on several different fronts, from designing procedures and control plans, through improving the quality of suppliers and production lines, to creating a traceability system. The CPC also worked on certification of the products, planning and conducting testing and interacting with international accredited laboratories.



Electronic circuit boards for aircraft sensors

The objective of this project was to develop the layout of an electronic circuit board for aircraft sensors in compliance with the client's existing electronic circuit board development system. Development included activities to analyze the integrity of signals and two rounds of critical analyses, of design for manufacture and design for assembly (DfM and DfA), which were needed to optimize the electronic circuit board design for the production processes used by the client's preferred manufacturers. The client, LABelectron, was responsible for the entire conception of the electronic design project for a circuit board with 16 layers and more than 1500 components.





In every way, 2014 was a challenging year that stimulated the Green Economy Center's team to seek out and consolidate new perspectives! As such, the Center's stand-out achievement was to reinforce its position as a developer of solutions for Creating Shared Value and for High-impact Innovation, applying these approaches to the sustainable development of physical areas and to organization of production chains for the creation of environmental and social value, in addition to economic value.

Marcos Da-Ré, Executive Director of the CEV

Competencies and Innovative solutions:

- Solutions for Transition to the Green Economy**
 Design of Sustainable Developments.
 Green Transition Incubators.
 Sustainable Business Platform.
- Biodiversity Valuation and Management Model**
 Innovative Management Models and Tools & Green Businesses.
 Transfer of specific and integrated skills for geographical area sustainability initiatives.
- Auditing, Management and Communication of Impacts**
 SISMO-BIO –Intelligent Biodiversity Monitoring System.
 Ecological Footprint Inventories.
 3+1=2 Strategy (Plan for the reduction of the ecological footprints of developments).
 Sustainable Geographic Intelligence.
 Environmental & Social Due Diligence.

Markets served:

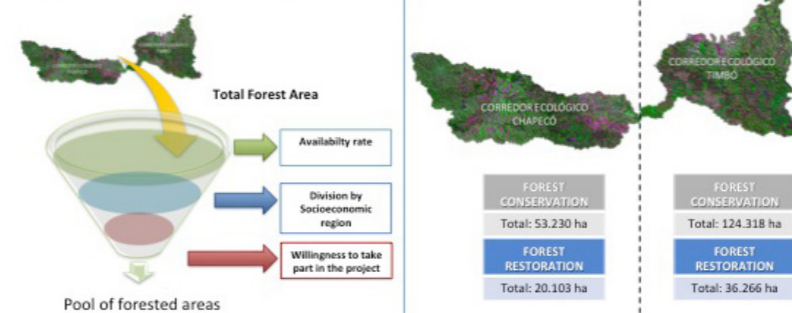
- Green Economy and Sustainability (cross-sector)
- Private sector (management of supply-chain sustainability)
- Public sector (Public policies and mechanisms for inducement or control)

Featured partners and customers:



Constantly striving for the effectiveness of solutions in terms of their integrated environmental, social and economic sustainability, the Green Economy Center has been exploring the approach to Innovation Ecosystem planning in the context of high-impact businesses. In this manner, environmental competitiveness is achieved for geographic areas and/or developments, creating value that is shared between the developer, the environment and society. The most outstanding features of the projects conducted during 2014 are described below:

Ecological Corridors Management Plans



Implementation of the Conservation Credits System - SICC

Roll-out of the SICC was initiated in 2014, in line with the business plan established in 2013 by CERTI. The system was developed for the Santa Catarina state environmental protection foundation, FATMA, with resources from the World Bank, as part of the SC Rural program. The SICC converts the environmental obligations of developments into investments in conservation of private (large scale) areas of natural preservation that lie within the state's ecological corridors.

Plan for Sustainability of the Bocaina Mosaic

Contracted by the FAO in favor of Rio de Janeiro's INEA state environment institute, the objective of this project is to develop a plan for the sustainability of the Bocaina Mosaic, which stretches into 14 municipal districts in the states of Rio de Janeiro and São Paulo, including 18 Conservation Units and their buffer zones, five Indigenous territories and four Maroon territories.

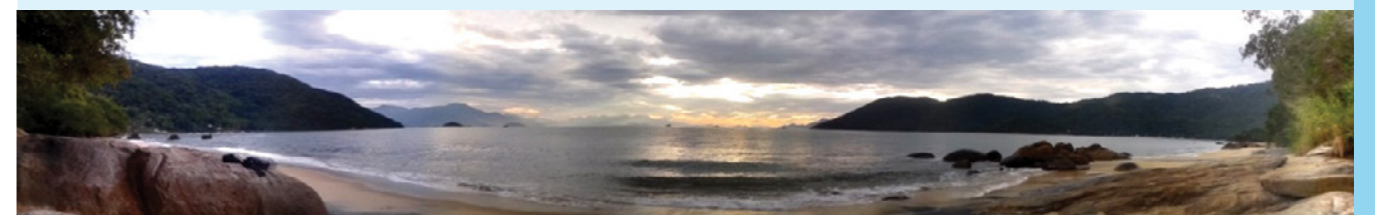


Araucaria+ is Operational

2014 saw the Araucaria+ project begin its activities. The negotiation of an export contract for 20 tons of yerba mate increased the operator's revenue by 130% over the traditional market and enabled conservation of 65 hectares of Araucaria Forest. More than 50 different actors including producers, companies and research teams interacted in the Araucaria+ Ecosystem during 2014. The Araucaria+ project began in 2013 through a strategic partnership with the Boticário group's foundation, and with the support of CODESC, and its objective is conservation of biodiversity hand-in-hand with reinforcement of the base of the production chain, by socioeconomic inclusion of communities in the benefits created by technological innovation and business, using species native to the Araucaria Forest.

Ilha Grande is Formalizing its Sustainability Plan

The Sustainable Ilha Grande Project was developed by the CEV and in 2014 an important step was taken towards formalizing it, in the form of an executive proposal to implement a system for control and management of the island's environmental capacity to support tourism. The proposals for a law to create the System for Orderly Tourism (SOT) and the Environmental Fund for the Maintenance of the Ilha Grande Conservation Units is scheduled for analysis by the Rio de Janeiro state legislature in 2015.





The Innovative Entrepreneurship Center has chosen to seek growth by widening its customer base for projects for which it already has consolidated competence, with special focus on areas of importance to the economic development of Brazil, such as, for example, creation and acceleration of innovative Startups.

The CEI team employs efficient methods to develop innovative projects with significant capacity to create value for the client and deliver sustainable growth for CERTI.

Leandro Carioni, Executive Director of the CEI

Competencies and Innovative solutions:

- Innovation Environments and Mechanisms:**
 Planning, installation and operation of technology parks and entrepreneurial incubators.
 Planning, installation and operation of technology innovation centers, innovation management support centers and regional offices for the promotion of innovation.
 Development of technology and innovation centers.
- Innovation Ecosystem:**
 Design and execution of high added value projects providing the structure for Innovation Ecosystems.
 Regional Technological Development.
- Corporate Innovation:**
 Strategic Innovation Planning.
 Solutions for promotion and support of innovation in firms (technology mapping, open innovation, incubation of new businesses and management of innovation).
- Innovative Entrepreneurship**
 Development and operation of programs for the creation of innovative startups.
 Acceleration of innovative startups.
 Support and management of Angel investments in innovative startups.

Markets served:

- Technology-based Companies
- Municipal, State and Federal Governments
- Industrial Associations and Federations
- Innovative companies
- Funding agencies
- International Organizations

Featured partners and customers:



During 2014, the Innovative Entrepreneurship Center was involved in 19 projects, around 30% more than in the previous year. A major highlight was growth in its involvement in projects for Promotion of Innovative Entrepreneurship, such as Sinapse da Inovação and InovAtiva Brasil, transforming the CEI into a major driver of innovative company creation in Brazil. The center also expanded its activities in projects within its distinctive areas of competence, with emphasis on the following:

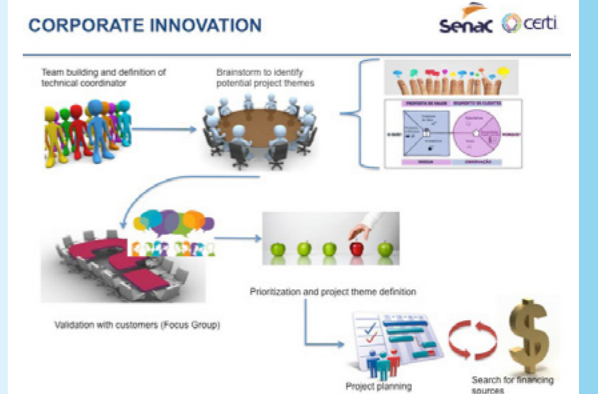
Sinapse da Inovação



In 2014, the Sinapse da Inovação program is a FAPESC research and innovation funding agency project that has become consolidated as the largest innovative Startup generator in Santa Catarina state. The program has run four rounds of its selection process, resulting in the creation of 294 enterprises, 83% of which are still doing business, with an estimated turnover exceeding R\$ 120 million in 2014, resulting in R\$ 27 million in tax revenues and the creation of 1,200 jobs. These and other results are contained in a book produced by the CERTI Foundation, describing the program's history, its most important results and impacts, and 24 stand-out cases. Furthermore, December 2014 saw the first steps towards "exporting" the program to other parts of Brazil, with signature of a partnership agreement between CERTI and FAPESC's sister research and innovation funding agency in the state of Amazonas, FAPEAM, to execute the first edition of a Sinapse da Inovação program in Amazonas.

Corporate Innovation

In the area of Corporate Innovation, the CEI developed the Inova SENAC project, with the objective of conducting strategic planning of innovation, aiming to position the Santa Catarina SENAC as a national center of excellence in innovation, performing in an innovative manner and expanding its services. The Organizational Profile and Innovation Radar methodologies were used to define the future positioning of SENAC/SC, and techniques of design thinking, value proposition and creativity were applied to selecting priority areas and to developing a structured project for innovation in the retail sector.



Technology Parks and Business Incubators

The CEI also initiated new projects in 2014, strengthening its position as a national leader in conception, planning and support for installation and operation of technology parks, with stand-out projects including the Imbituba Innovation Park, the Capivari de Baixo Technology Park, the Uberlândia Technology Park and the Uberaba Technology Park. In the case of the last of these, the CEI widened its experience, taking a hands-on role in the park's operations, working to drive consolidation and expansion.

Promotion of Innovative Entrepreneurship

In 2014, the CEI continued to play a starring role on the national stage, working to set up and accelerate innovative startups, signing a partnership agreement with the Brazilian ministry for trade, industry and development to run the Programa InovAtiva Brasil initiative in partnership with Senai and Endeavor. InovAtiva Brasil is a program for training, mentoring and connection-forming for innovative enterprises, which is offered free of charge and on a large scale all over Brazil. The Center also embarked upon a strategy to connect with startups on a national level, offering support for accelerated development and access to Angel investors.





Over its 29 years of existence, CELTA has become known for outstanding results with innovations, entrepreneurs and daring enterprises that, through application of innovation, have showcased the best that Brazil has to offer to the whole of society. Companies born at CELTA have produced products with exceptional penetration and have set examples of excellence for the whole country. As such, the CERTI Foundation, through its incubator, has contributed to expansion of global enterprises. During 2014, in addition to its constant and ongoing efforts to improve its processes, CELTA has been engaged in preparations for the roll-out of a pre-incubator to support the FAPESC Sinapse da Inovação program and an incubation acceleration unit, as part of a partnership between CERTI, CVentures and other partners.

Tony Chierighini, Executive Director of CELTA

Competencies and Innovative solutions:

- **New Firms set up by private individuals**
Opportunities for researchers/professionals who have an idea/project/prototype/product and wish to start their own technology-based firm at CELTA.
- **New Firms set up by existing companies**
Companies or business groups that wish to start new technology-based firms and seek extra technical and/or management support and/or integration with other companies.
- **Firms Transferring to Florianópolis**
Technology-based firms that already exist in the market and wish to transfer to Florianópolis in search of greater technical and/or management support and/or integration with other companies.
- **Unit Dedicated to Development of Products/Processes for Businesses**
Already-existing firms that wish to assemble a technical team at CELTA to develop new technology-based products/process.

Markets served:

- Instrumentation
- Telecommunications
- Automation
- Mechatronics
- Microelectronics
- Energy
- Information Technology
- Biomedical
- Biotechnology
- The Creative Economy
- Life Sciences
- Nanotechnology

Featured partners and customers:



Firms Graduated



Welle Laser - in their own words: "We specialize in laser marking and laser engraving solutions: marking metals and polymers and engraving metals. We work closely with the top global centers of laser technology, such as the Fraunhofer Institute in Germany, with the purpose of bringing to the industry innovative and efficient solutions that have significant advantages in cost savings and increased production. We therefore stand at the forefront of developing laser machine technologies in Brazil. For example, we have pioneered the development of laser coding and solutions for industrial traceability".



Unis Sistemas - is a company that develops ERP Information Systems using the concepts of Business Management with Executives' Information Systems functions, Budget Management Systems and Costs Management Systems. In addition to software development, Unis Sistemas also provides process consulting services, helping their clients to find the best solutions to develop their businesses.



MormaiiTec - is a Brazilian company that has spent 35 years striving to help people achieve quality of life, health and wellbeing. The brand started producing neoprene clothing for surfers, going on to achieve huge success in Brazil and worldwide with a mix of more than five thousand items. In 2013 it created the spin-off MORMAITEC to build on the Mormaii values and offer even more benefits to the public.

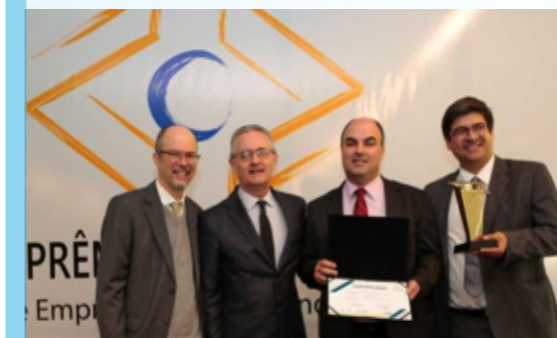
The firm that grew most: Welle Laser

Welle Laser graduated in 2014 and, as further proof of the success of its work, was chosen as the firm that most grew in Brazil. This prize is awarded by Deloitte consultants in conjunction with the magazine Exame. Welle has imposed strong tendencies based on laser technology in Brazil, such as Industry 4.0, and Industrial Traceability - a solution in which it is a specialist and absolute market leader in sales - supporting clients through definition of complete solutions.



Best Innovation and Best Incubated Firm: Nano VETORES

Nanovetores won the II Brazil-Germany Innovation Prize, promoted by ANPROTEC in partnership with SEBRAE and designed to encourage innovative activities by Brazilian companies or by German companies operating in Brazil. The prize also has the objective of creating opportunities for partnerships between Brazil and Germany in which, through application of innovation, competitiveness is increased and industry development is advanced. Nanovetores was also awarded the trophy for first place in the Anprotec Prize - Best Incubated Company. The primary role of this award is based on showing society the potential contribution that the innovation movement has to make to the sustainable development of Brazil.





In general, CIENCIA's activities are the resultant of investments made by the CERTI Foundation. During 2014, ongoing efforts directed at a future move into nanotechnology were continued, maintaining the API.nano operation and undertaking a small-scale planning and specification project. Work on fostering partnerships with Science, technology and Innovation Institutions (STIIs) through the Competence Cells and the search for new talents and advanced training of employees were scaled down. Efforts to define and specify an Industry 4.0 platform are directed at restarting, within a near-term horizon, business based on promotion of the competitiveness of industrial production, which is a strategy that is indispensable to Brazil.

Carlos Alberto Schneider - Interim Executive Director of CIENCIA

Competencies and Innovative solutions:

- Partnerships with Scientific and Technological Institutions (domestic and international)**
 Negotiation of international agreements for the advancement of ICT.
 Partnerships with STIIs to supply ICT demand of mutual interest.
 Collaboration on Committees and Boards of Funding Agencies and STIIs.
- Incubation of New Businesses**
 Incubation of new Centers of Excellence.
 New platforms for technology, products and/or markets of interest to the CERTI System.
 Prospecting of opportunities for new projects, programs or enterprises of strategic interest.
- Attracting New Talent and Training Employees**
 Programs for training and qualifying CERTI System employees.
 Programs for development of new talent.

Markets served:

- ICT Institutions
- Large Corporations
- Funding Organizations
- Development Agencies
- Governmental Entities
- CERTI System Centers of Excellence

Featured partners and customers:



During 2014, CIENCIA's highly specialized team continued to fulfill its mission and conduct the Center's activities, with valuable contributions from the NEO Empresarial program (see below for details), the CERTI Superintendency and colleagues from the Centers of Excellence. The following are of especial note:



Running API.nano – the Arrangement for Promotion of Innovation in Nanotechnology

Com a evolução do API.nano atingindo 86 Membros, este vem sendo referenciado em todo o País e internacionalmente. O API.nano foi considerado pelo MDIC um exemplo de desenvolvimento industrial de Nanotecnologia para o Brasil. Das 90 empresas de Nanotecnologia brasileiras, 23 estão associados ao API.nano, as quais tiveram destaque em premiações nacionais e estaduais de peso. Pelo lado acadêmico, tem-se hoje 48 Lideranças de Grupos de P&D catarinenses, sendo 30 ligados à UFSC, os quais se organizam em rede interna ligados ao LINDEN. A atividade base do API.nano, que é o Simpósio Técnico-Empresarial, foi postergada para 2015, com uma concepção de forte parceria com o PDIC da FIESC, voltado a todo o setor empresarial catarinense.

NANOTOX Project - A CI.nano module

This project is funded by FAPESC and it has already produced two important results: the book "Nano Segurança: Guia de Boas Práticas em Nanotecnologia para Fabricação e Laboratórios" (Nano Safety: Best Practices in Nanotechnology Guidelines for Manufacture and Laboratories), to provide a foundation and guidelines for understanding and development of Nanotechnology, putting into practice the Safety by Design paradigm, in order to improve communication and integration between industry and academia; and creation of a preliminary model for Conformity Assessment, based on metrology and standardization, leading the way to Certification of Nanotechnology Products. These technological activities will be the focus of the planned Center for Innovation in Nanotechnology.



Fostering and Strengthening International Cooperation

While the CERTI Centers of Excellence deal directly with international cooperation linked with and funded by specific projects, CIENCIA is responsible for negotiating "umbrella" Cooperation Agreements that initiate relationships. Specific highlights of this process include the efforts to restart activities in conjunction with the COLUMBUS program and with the State of Bavaria and Ireland and with the Berlin and Brandenburg photonics cluster, which was officially signed at CELTA in the presence of members of the state governments of Santa Catarina and of Berlin and Brandenburg and was attended by the Tourism Secretary Vinícius Lummertz and Senator Luiz Henrique da Silveira.



"Towards Industry 4.0" Program

Revisiting the aims of the "CIM Project" from the early 1990s, which was intended to provide Brazilian industry with advanced solutions in digital automation to improve competitiveness, but with the addition of the many new information and communication technologies that have been fully mastered by the CERTI Centers of Excellence, 2014 saw the first steps to specify the program content, and survey interest in the business sector, for a "Towards Industry 4.0" program. On the basis of these interactions on the national level, and also of enquiries with partners that supply solutions, it is understood that the initiative is highly opportune.



Talent Promotion: The ToP and NEO Empresarial Programs

Although the ToP, Training of Professionals, program had to be suspended, the NEO Empresarial program, which is co-sponsored by business, is still going strong. NEO Empresarial is a Supplementary Training Program for Future Engineers, located at the CERTI Foundation. Students from a range of specialties are trained according to a three-pillar philosophy of technical, management and personal development. The technical side involves carrying out small technological projects with their three sponsors, CERTI, WEG S.A. and Whirlpool/Embraco S.A. Over the last ten years, more than 150 projects have been completed and 50 NEO members have graduated from UFSC.

Communications

In 2014, CERTI Foundation projects, activities and events were the subject of more than 300 spontaneous news items in the national press. Its press office oversaw 43 interviews with managers and technical team leaders and produced 94 press releases, resulting in four publications in national newspapers, 41 in state newspapers and 26 in local newspapers, in addition to seven articles in magazines with a national distribution and 222 internet mentions. The launch of CERTI's new website and technical publications produced by its Centers of Excellence were of particular utility for publicizing the institution.



New CERTI Site



CERTIfique-se, special 30-year anniversary edition



New Institutional and Commercial Folders for Centers of Excellence

Presentations at Events in Brazil and Overseas



Business Consultant Daniel Rosa presents the PODITRODI Project to the European Community Commission for Planning and Evaluation of Cooperation. Brussels-Belgium



Director Marcos Da-Ré exhibits Environmental Externalities Mechanisms at a Workshop organized by Araucaria+, an initiative in partnership between CERTI and the Fundação Grupo Boticário. Florianópolis-Brazil



Director Gustavo Donatelli at a conference, by invitation of SAE-Brasil, focusing on metrology techniques applied to the automotive industry. Rio de Janeiro-Brazil



Director Manuel Steidle presents the Brazilian proposal for using simulators for training motorcyclists, on a panel at the 10th International Motorcycle Conference. Cologne-Germany

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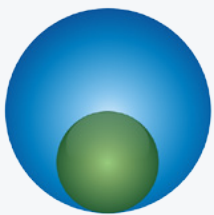
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Santa Catarina Island



A unit:



TECNÓPOLIS



FLORIANÓPOLIS
Capital da Inovação

ROTA DA
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