certi

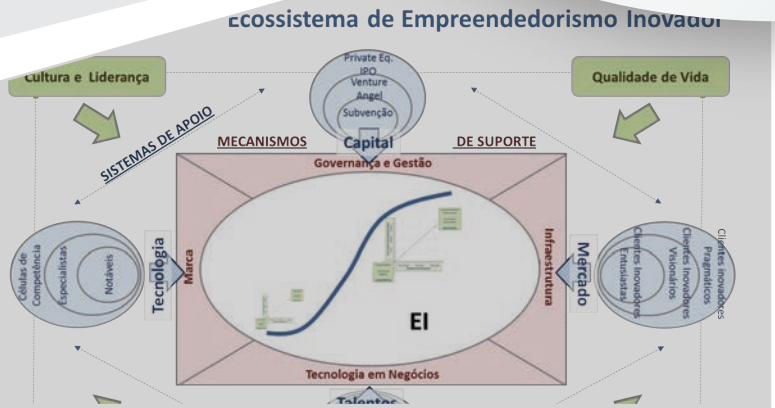
Reference Centers in Innovative Technologies

Development & Integration
Software + Hardware

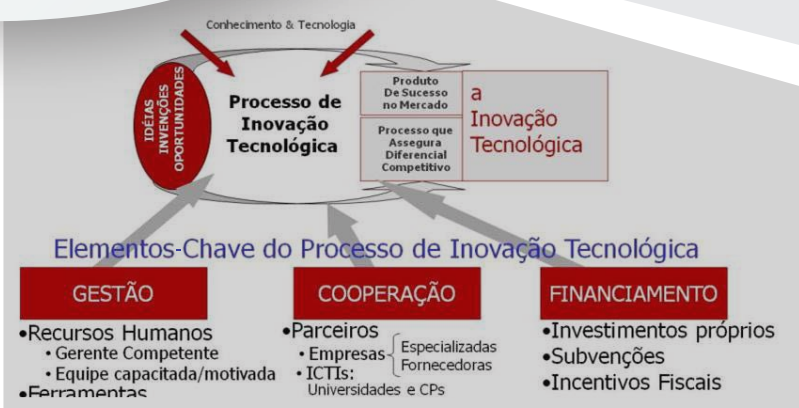
SMART SYSTEMS

Agility

Quality



Innovative Entrepreneurship



Innovation Management

ANNUAL REPORT 2013

CONTENTS

PRESENTATION

The conception and institutional mission of the CERTI foundation, which was established in 1984 in response to encouragement by a group of business and government leaders, guided the establishment of an organization that would have command of technological advances in computing and promote - together with client companies, organizations and partner institutions of science, technology and innovation - the application of these technologies to the generation of successful products and efficient processes and systems. This may take the form of equipment, factories or software for critical human processes, always striving for distinctive performance.

Upon approaching 30 years of operation, CERTI's trajectory displays a complete commitment to its mission, which continues valid and no less strategic. Computing, through all its technological applications, continues to be the key element of global development, and is now better known as information and communication technologies (ICT) or as digital convergence, when more functionalities are integrated. Meanwhile, the development of distinctive and successful products, processes and systems is now known as innovation, and there is consensus that the capacity to innovate is essential to the competitiveness of any society. Today, CERTI's mission is "to cooperate with client and partner organizations in the implementation of intelligent systems, generating innovations that have an impact on economic, environmental and social development."

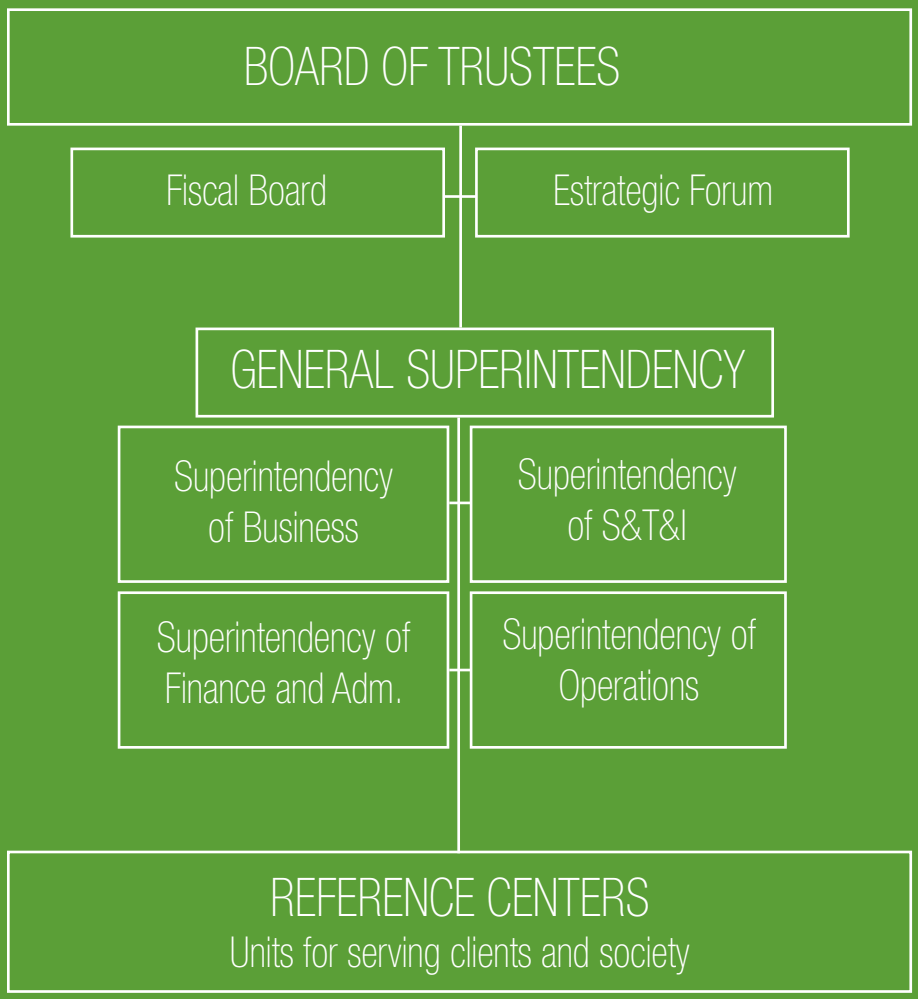
In 2013, important advances were achieved in the form of systemic support to clients, as determined by the guidelines established by CERTI's Strategic Plan 2020. Thus, the capacity exists to assist client companies or organizations in any of the steps of the technology innovation process. This may involve the conception of an innovative solution; the analysis of technological, economic and commercial viability; the generation of integrated hardware and software solutions; the attention with quality and design conditions; or the establishment of productive processes. Even marketing solutions have been developed, given the complementary and aggregated competencies of CERTI's Reference Centers in Technological Innovation.

In 2013, after 26% growth in income from projects and services over the previous year, plans can be established in 2014, calling for the continuity of this expansion in providing companies and financing and government agencies with innovative solutions that result from the valuable work of the CERTI staff, which provides technological services and projects relevant to the highly coveted intensification of innovation in Brazil.

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

INSTITUTIONAL MANAGEMENT AND SUPPORT

The governance of the CERTI Foundation is the responsibility of its Board of Trustees and Fiscal Board and of the Superintendencies, which receive assistance from the Strategic Forum. The following pages report on the routine and special actions of the institutional administration, and on the operating support to the foundation's activcities undertaken in 2013, supported by the Strategic Plan 2020 and by the Action Plan 2013, which led to considerable institutional growth and significant promotion of development, with innovation, in the community served.



CERTI ADMINSTRATORS 2013

Board of Trustees

Members: Amir Antônio Martins de Oliveira Júnior
Antônio Diomário de Queiroz
Armando Albertazzi Gonçalves Júnior (Alternate)
Gilberto Heinzelmann
Giorgio Rodrigo Donini (Alternate)
Juan Carlos Sotuyo
Márcia Ligocki Lins
Moacir Antônio Marafon
Moacyr Rogério Sens (President)

Fiscal Board

Members: Altair Acelon de Melo (Alternate)
Elias Fernandes Eufrásio
Eugênio Busnardo
Nelson Ronnie dos Santos (President)

Superintendents

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

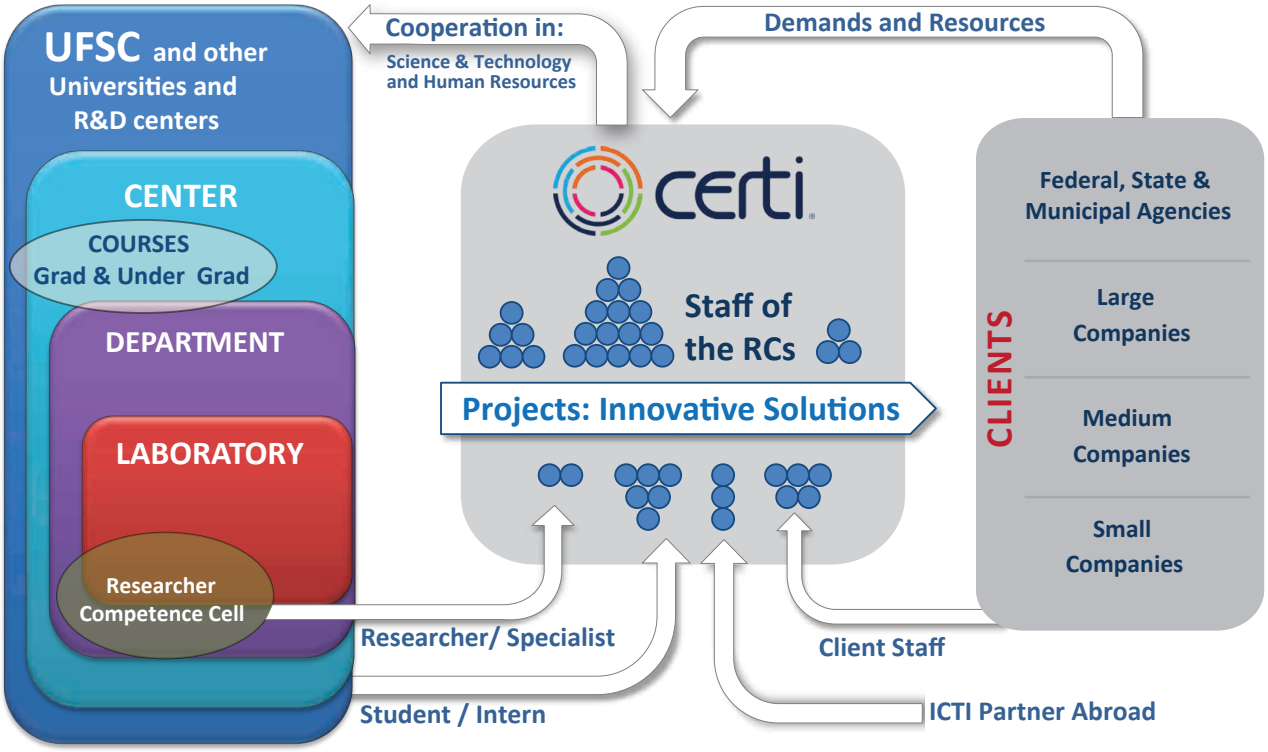
CERTI Foundation Mission

To create and provide clients strategic innovative solutions in technological products and processes, entrepreneurship and sustainability, using universal knowledge and the results of advanced research, its own and that of partners, to support social development and well being.

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

MPSC
MINISTÉRIO PÚBLICO
Santa Catarina

OPERATIONAL MODEL



INNOVATIVE SOLUTIONS FOR CLIENTS

PRODUCT DEVELOPMENT

DEVELOPMENT OF PROCESSES AND SYSTEMS

Technology Services

Consulting and Training

Industrial Plants

Innovation Mechanisms

SUPPORT FOR INNOVATION

FROM PLANNING TO IMPLEMENTATION

INSTITUTIONAL AND STRATEGIC MANAGE-

The guidelines for economic growth and sustainability, including the Foundation's new areas of operation, were given special attention by the Board of Trustees and Fiscal Board, and by the Superintendencies. Significant advances were made in the segments identified in the Strategic Plan 2020, taking advantage of the opportunities created by the federal government's INOVA EMPRESA [Company Innovation] program, through joint project bids from FINEP [the Federal Innovation and Research Foundation] and BNDES [The National Economic Development Bank]. The articulated involvement of the Strategic Forum to strengthen institutional actions was postponed until 2014, because of difficulty in establishing a compatible schedule.

Carlos Alberto Schneider
General Superintendent

CERTI BOARD OF TRUSTEES

At its three ordinary meetings and one extraordinary meeting in 2013, the Board of Trustees, CERTI's highest administrative body, closely accompanied the implementation of the organization's mission and the technical, operational, economic and financial performance necessary for its sustainability.

CERTI FISCAL BOARD

Upon reviewing the accounting statements for the first semester and for the fiscal year ending on December 31, 2013, and by providing permanent counseling, the Fiscal Board recommended the approval of the 2013 budget at its March 14, 2014 meeting.

CERTI Foundation Superintendencies

By unanimous decision of the CERTI Foundation Trustees and with the approval of the Public Ministry of Santa Catarina State, the mandate of the General Superintendent and, thus of the other Superintendents, was extended until December 2015. This provides continuity to the implementation of a plan for strengthening institutional sustainability, according to the Strategic Plan 2020, seeking a solution that assures a financial base that is in keeping with that of the world's best ICT institutions.

In 2013, the Superintendency of Science, Technology and Innovation focused its attention on strengthening the CERTI Foundation units that work in the field of innovative entrepreneurship, seeking to promote a progressive process of systemic integration in strategic, business, technical and operational aspects. This alignment is designed to promote greater operational efficiency and mainly more effective support for innovative projects, to generate business of global relevance and scope. This system, known as "EcoVentures", includes the units or programs: CELTA, Synapse of Innovation, Sapiens Parque, CERTI Empreende [CERTI Entrepreneur], CVentures and in a complementary manner, the Green Economy and Innovative Entrepreneurship Reference Centers. The strategy is based on globally recognized practices and initiatives. It works with a model developed in the context of the doctoral thesis of CERTI's S&T&I coordinator, which focuses on the CERTI Foundation and the Technology Pole of Florianópolis. The results already obtained in the realm of each unit, as well as the first highly successful integrated actions, demonstrate that CERTI can take better advantage of opportunities for its units related to innovative entrepreneurship.

José Eduardo Azevedo Fiates
Coordinator of S&T&I

Organizational Actions with direct support from the Superintendencies:

PROMOTION OF INNOVATIVE ENTREPRENEURSHIP

In 2013, FAPESC's SYNAPSE OF INNOVATION program successfully concluded Operation – SC-III and implemented one more state operation, which was extremely successful in its initial steps, in which more than 1,226 proposals for new companies were submitted. In the period, the SYNAPSE OF INNOVATION methodology perfected its methods and models of support for entrepreneurs, generating a new, much more complete, customized and simple online training portfolio. As requested by FAPESC [The Research and Innovation Support Foundation of Santa Catarina], the program conducted its first review to analyze the results of the first five years of the program. During this time it has identified 189 companies that are now operating in the market, which in 2012 had total income of R$ 60 million, some of which received venture capital investments.

ADVANCES IN THE REFERENCE DEVELOPMENT SAPIENS PARQUE

The year 2013 was symbolic in the process of consolidation of Sapiens Parque, because of the implementation of the first phase of the development's infrastructure, with paid-in capital from the state government, via CODESC and SC-Par. The road system, sewage treatment and electrical and lighting system were implanted. This infrastructure allowed the installation of 15 new units at Sapiens Parque, many of which are already under construction. In addition, the buildings and internal facilities of various science and technology and corporate projects have advanced, some of which began operations at the park. Finally, in 2013 Sapiens Parque won one more investment from the public bid of the Ministry of Science Technology and Innovation (MCTI/FINEP) for support for technology parks, through a project led by the CERTI Foundation, in partnership with the Santa Catarina Association of Technology Companies (ACATE) and the Federal University at Santa Catarina (UFSC).

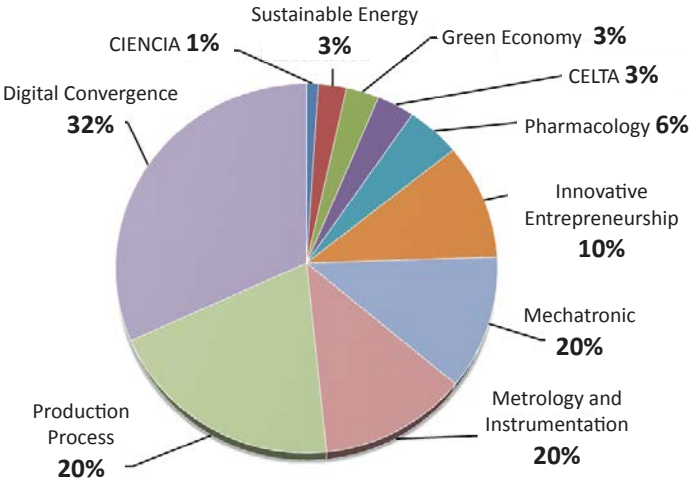
EXPANSION OF SUPPORT FOR INNOVATIVE COMPANIES

After three years of negotiation and articulation with investor partners, organization of the fund and complying with norms in the sector, in March 2013 the Fundo CVentures Primus began operations with investments from FINEP, CAF, the Inter-American Development Bank (IDB) and a number of private investors from Santa Catarina and other states. During 2013, more than 400 projects were prospected, of which about 100 were analyzed in greater detail, generating a more promising group that allowed the initial choice of two businesses that have already been approved by the fund's administrative committee. The development of the CV Primus Fund is essential for the consolidation of the CERTI strategy, which is aimed at strengthening high-impact innovative entrepreneurship and is focused on the generation of high-growth companies.

The development of the units and programs described above, combined with other CERTI initiatives, such as the CELTA incubator, the program to stimulate internal entrepreneurship and the startup acceleration program, are allowing the organization of a complete and innovative system for support to new technology- based companies.

INSTITUTIONAL INDICATORS

In 2013, the CERTI Foundation operated a portfolio of more than 80 projects that were undertaken by its ten Reference Centers and supported by an administrative structure organized into five Superintendencies, as presented in the organizational chart on page 7. The Reference Centers (RC) work in a complementary and synergistic manner to develop solutions for clients. Each one of the RCs is established as a strategic business unit, and has the permanent challenge of economic self-sustainability, which guides the administration of its sales and market articulations, its technical staff, laboratory base and its portfolio of key technologies for its respective field of operation. Below is a set of indicators that portray the operation of the CERTI Foundation and its Reference Centers in 2013.

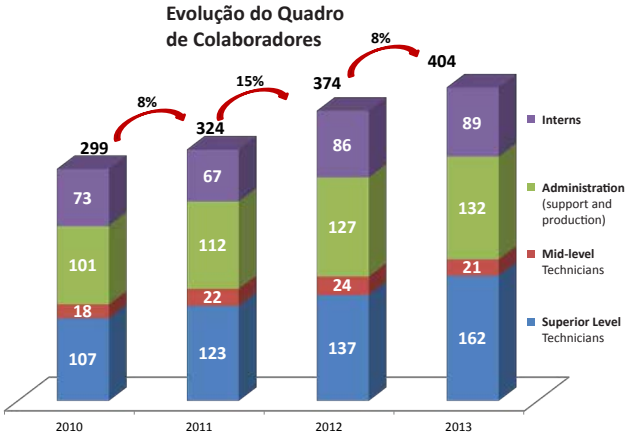


Portrait of the Reference Centers

Operations at all of the RCs grew in 2013, compared to 2012, in terms of the intensity of business and activities undertaken, although in different degrees. The table presents the percentage of operating income from each Center in relation to the Total Operating Income of the CERTI Foundation in 2013.

CERTI Staff

The general staff structure that makes possible the technical, administrative and support activities grew 8% over the previous year. The significant number of employees in the administrative area is due to the institutional policy of having a low degree of outsourcing, and to the need to provide complete support to the operation of the units geographically located at seven different sites in Greater Florianópolis.



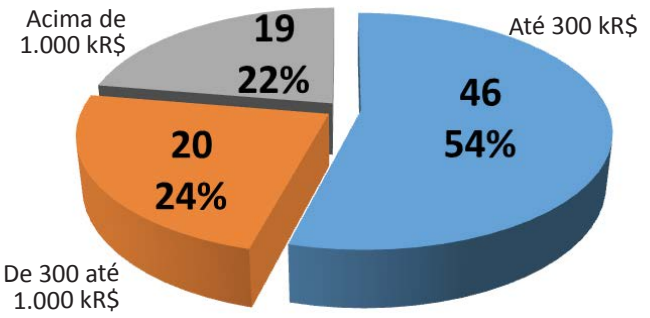
Nature of Activities Conducted

In total, 710 clients of different sectors, sizes and regions of the country and abroad were served in 2013, by means of six different types of activities, as indicated in the chart:

Technological Research	2%
Studies/Planning	15%
Development of Products, Processes and Innovative Systems	67%
Technological Services	10%
Training and Consultancy	3%
Company Incubation	3%

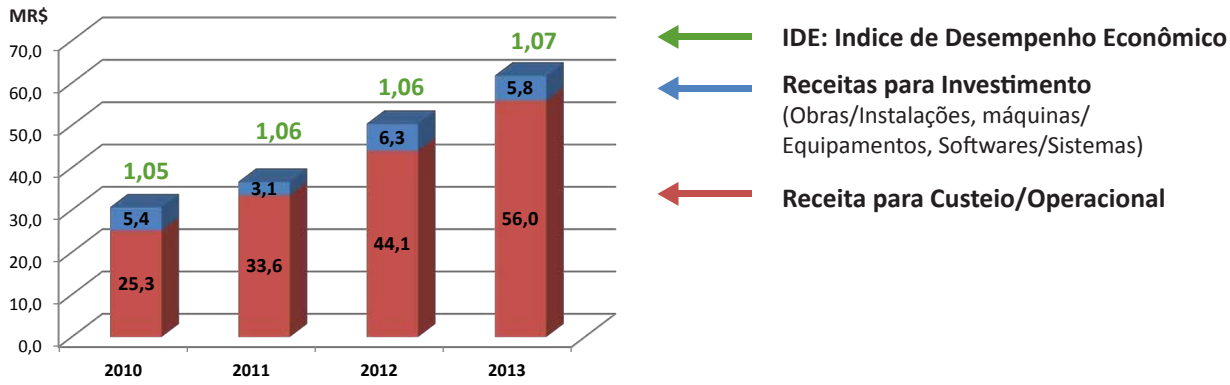
Porte dos Projetos

As atividades de Pesquisa, Estudos, Planejamentos e Desenvolvimentos são atividades realizadas na forma de Projetos, que representam 87% das Receitas Operacionais de 2013. O número de projetos, segundo seu porte financeiro, em dezembro 2013, é apresentado ao lado.

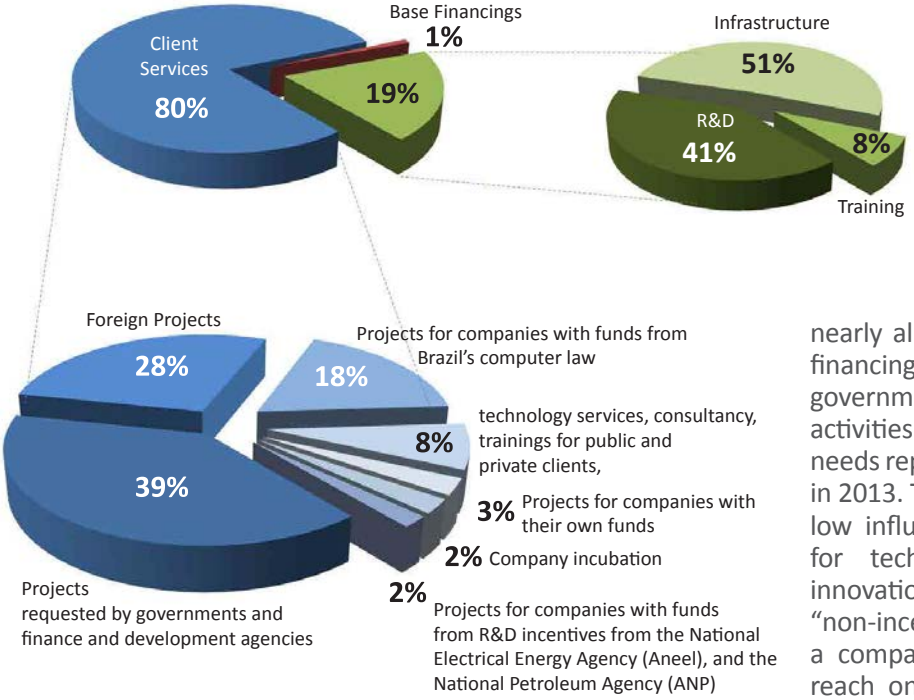


Economic Sustainability

Institutional Economic Sustainability continued to be a great challenge in 2013, a year marked by bold goals, by the strong rhythm of growth experienced since 2010 and by the increasing complexity of administration. This complexity is due particularly to the difficulty of forecasting income from contracted funds from government sources and the constant growth of new rules and bureaucratic procedures established by government funding agencies. Thus, in 2013, total revenue was 61,8 MR$ (23% higher than in 2012) and total expenses were 58,1 MR$, thus attaining essential economic sustainability in operations, revealed by the indicator "Economic Performance Index," represented by the ratio between total revenue and expenses in the year.



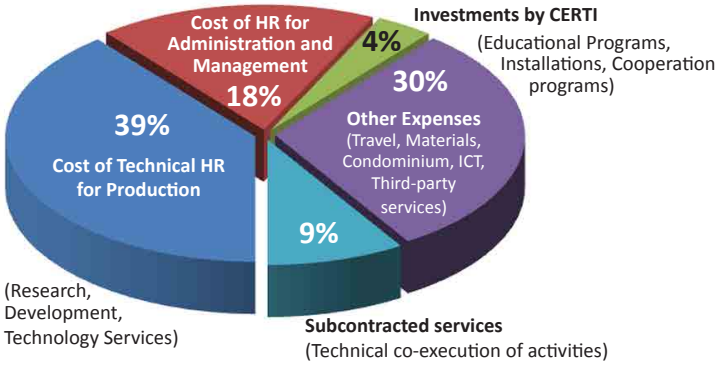
Composition of Revenue



Of the total revenue for 2013, 90% is operating revenue, resulting from the execution of activities for various clients/agents, while 10% involves income from investments aimed at expansion and improvement of institutional infrastructure. Revenues to be invested are nearly all captured from government financing agencies and or other government bodies. The revenue from activities that directly serve client needs represents 80% of total revenue in 2013. The data is highlighted by the low influx of funds from companies for technology development and innovation projects that come from "non-incentivated funds" (that is from a company's own resources), which reach only 3% of total investments. The Base Financing, called for to strengthen the institution (through training, marketing, communication, and corporate innovation), which is essential to the competitiveness of the institution, remained at a level absolutely distant from the 20% established in the institutional model.

Composition of Operating Expenses

Operating expenses grew 25% in 2013 over 2012, and were particularly affected by the expansion of staff benefit programs and the intensification of efforts to improve institutional competitiveness by means of investments in work methods, tools, systems and staff growth.



OPERATIONAL, FINANCIAL AND ADMINISTRATIVE MANAGEMENT

The pace of development/growth of the CERTI Foundation in 2013, as expressed by the growth in staff, by increased activities, the increased size of the projects being executed, of the volume of income and expenses, as well as the substantial increase in administrative positions for managing funds from government agencies, will require concerted effort from the Superintendencies of Operations and Finance and Administration in their organization and management. An emphasis was made to improve productivity, economic sustainability, cooperation between units, provision of methods and tools and on the administration of talents, through joint efforts by all the support and production units. The organizational structure and the staff of the two superintendencies that account for 85% of the administrative and support staff is presented below. They are responsible for 93 key administrative and operational processes necessary to the complete operation of CERTI Foundation's activities.

Günther Pfeiffer
Superintendent of Operations, Finance and Administration

Organizational Structure and Staff Involved

<table>
<tr><th>(n) Number of employees</th><th></th><th>Departments/Managements</th><th>Consultancies and Offices</th></tr>
<tr><td rowspan="3">Superintendency of Finance and Administration (SFA)</td><td rowspan="6">Secretariat (01)</td><td>Finance (05)</td><td rowspan="3">Legal Department (04)</td></tr>
<tr><td>Accounting (05)</td></tr>
<tr><td>Human Resources (06)</td></tr>
<tr><td rowspan="3">Superintendency of Operation (SO)</td><td>Logistics and Infrastructure (33)</td><td>Project Office (03)</td></tr>
<tr><td>Information and Communication Technology (22)</td><td rowspan="2">Quality Office/ Q_CERTI (01)</td></tr>
<tr><td>Controllership (02)</td></tr>
</table>

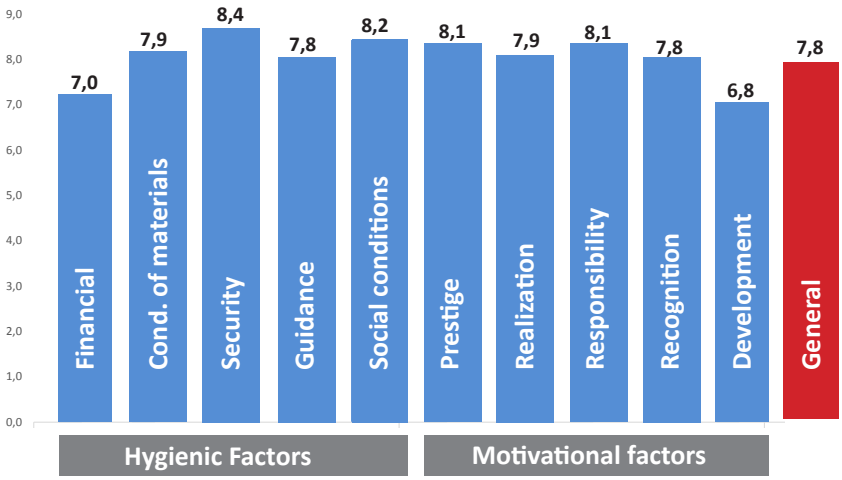
Operational Support

These two Superintendencies provide the units of the institution all of the necessary operational support tools and activities, in close interaction with the Reference Centers and administer the interlocution with outside agents, such as suppliers, partners, banks, finance agencies, government agencies, independent auditors and internal councils. The services executed, according to the table below, indicate the volume of operations conducted in 2013.

SERVICES EXECUTED	Quantity
Operationalization of Travel	1.419
Contracting Specialized Services	833
Importation Processes	117
Domestic Purchases	2.509
Contract Signing	295

SERVICES EXECUTED	Quantity
Construction and Renovation	46
Registration of Assets	1.431
Building Infrastructure Services	490
Physical Logistics Operations	2.725
ICT services	6.386
Hiring and Dismissal Processes	295

Monitoring of Organizational Climate



Each year a systematic structured research method based on Herzberg's concept is applied to evaluate Organizational Climate. In 2013, 316 employees participated, or 85% of the total staff. The staff's evaluations are made based on a scale from 0 to 10. The financial component deserves special emphasis in the 2013 results, with an increase of more than 20% over the previous year. In general, the organizational climate had an average score of 7.8, exceeding the proposed goal of 7.5.

Organizational Projects of the Support Units

To expand the administrative capacity and improve productivity in the institution's operations, various efforts and investments were taken by the SO and SFA units, in the form of projects and programs, among which stand out:

Expansion of the Employee Benefit Program:
In 2013 the existing benefits were complemented by a dental plan, food vouchers and a System for Variable Pay for Exceeding Goals (SISMETA). This establishes a variable pay scale above base salary for exceeding the goals established in the annual budget and planning for each production and support unit.

Improvement of Travel Procedures through Implementation of the Online Booking Tool:
Given the intensity of travel and the respective direct and indirect costs, in 2013 advanced corporate travel management tools were implemented, to support the planning and operationalization of travel, with plans to link it to the ERP System.

Implementation of the CERTI Management Information System (ERP):

Intense efforts were made in 2013 to provide the institution a computerized support system for corporate planning and management with a high degree of integration, capable of increasing the efficiency of processes with high reliability and security of information and adaptability. They involve the mapping, registration and improvement of the institution's procedures, aimed at implementing them through the TOTVS-Protheus system, with substantial efforts made for their parametrization and customization to the institutional reality.

Complete Operationalization of the CERTI Project Office (PO):
With new coordination in 2013, the PO was intensely dedicated to the systematization and improvement of the methods, processes and tools of the project cycle and their harmonization to training actions at the production units (the ten Reference Centers) and support units.

Restoration/complementation of Physical Infrastructure at the Main Offices:
With funds from the FINEP Innovation Award, won by the CERTI Foundation in 2009, work began in 2013 on improving and adapting security and accessibility procedures and equipment at the main offices on the UFSC campus, which also allowed expansion of 25% in work posts, and the creation of a modern, efficient and stimulating work environment.

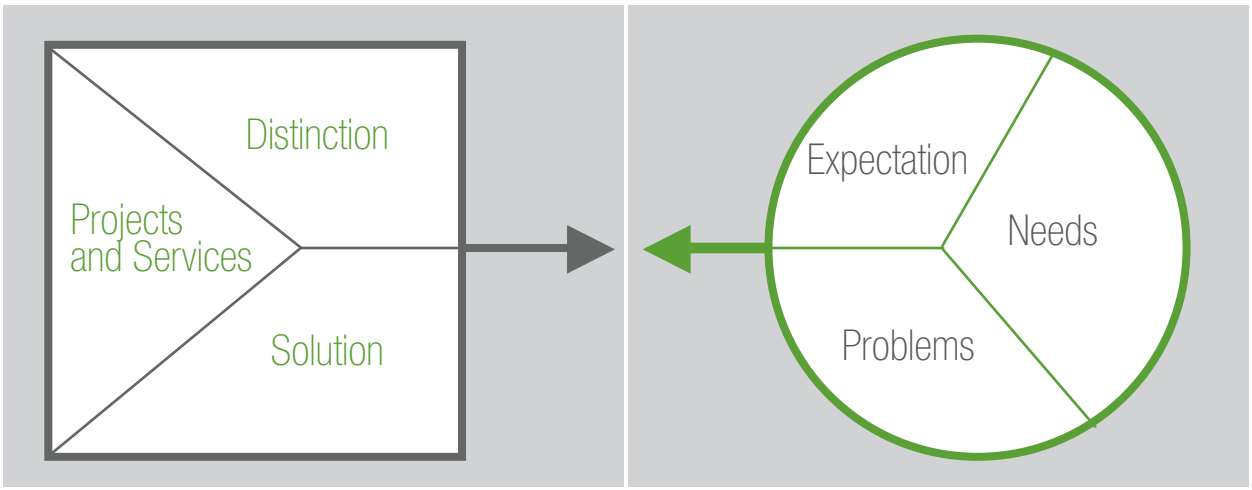


BUSINESS AND MARKETING ADMINISTRATION

CERTI is well positioned to increase the competitive distinction of its client companies, given its capacity for multidisciplinary technological action dedicated to generating innovations. Oriented toward the market and focused on results for clients, CERTI has also expanded its expertise by engaging in high technology projects in future-oriented sectors. The marketing strategy and efforts to integrate competencies were aimed at conquering participation in new markets, in particular energy and healthcare, while taking advantage of the already consolidated actions in ICT and industrial development. Recommendations from important clients and cooperation with distinctive partners strengthen the CERTI brand and give rise to new opportunities that contribute to Brazil's technological development.

Laercio Aniceto Silva
Superintendent of Business

Value Proposition



CERTI's business and brand strategy, to be seen as a reference technology institution in Brazil and abroad, necessarily involves creating proposals of significant value in development and innovation projects.

CERTI's innovations in products, processes and systems are conceived to create competitive distinctions, which allow the repositioning of the supply of solutions in the current operating segments or the opening of new markets.

In addition to taking on technological challenges, CERTI strives to understand each client's business model, to identify which needs must be satisfied, which problems must be solved and how to meet or exceed client expectations.

NIT – The Technology Innovation Nucleus

(NIT) at CERTI has deepened its knowledge in the main mechanisms for incentives and support to innovation, focusing its attention on fiscal incentives to innovation; capturing reimbursable and non-reimbursable resources; intellectual property and technology transfer. Its action's are highlighted by its articulation and provision of assistance to the RCs when they present business plans and the documentation required for a wide variety of publics, particularly for proposals to the Inova Brasil program. The NIT created a unified data information base to facilitate client service and make it more agile.

The “Intelligent Systems” solutions are applicable to practically all the markets where companies and entities strive to innovate. In 2013, CERTI made strong efforts to provide incentives and support to private companies seeking opportunities for financing and assistance offered by the federal government Inovar Empresa [Company Innovation] program.

Serving the Market

In December 2013, the portfolio of prospections and proposals involved the demands of sectors as indicated in the graph and exhibited in the items below:

AUTOMOTIVE:
Studying the demands of the sector from the perspective of the incentives of the Inovar Auto program, CERTI identified opportunities for projects to support environments of development, manufacturing and basic industrial technology, seeking the improvement of quality and productivity of the manufacturers and their supply chains.

AERONAUTICS:
Through articulation with partners, CERTI conducted prospections in the defense and aeronautics sectors and presented proposals that will strengthen the sector with HR, R&D, suppliers of parts and technological trials.

GREEN ECONOMY:
The increasing concern among companies for sustainable development allowed CERTI to negotiate technological projects that make entrepreneurship viable at the base of the pyramid, with preservation of biodiversity, environmental protection solutions and similar endeavors.

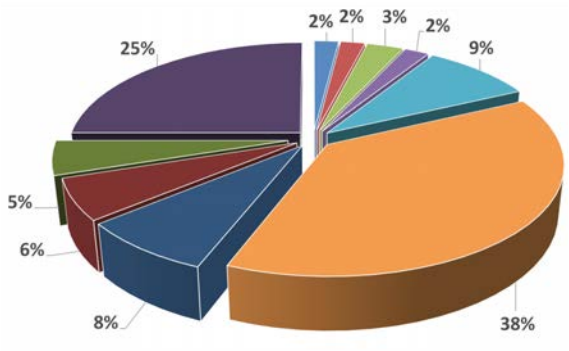


Chart of active prospections and proposals in December 2013

EDUCATION:
In partnership with UFSC, CERTI expanded the proposals it made and its operations in the application of ICTs in education, with assistive technology projects and multimedia applications for teaching and training.

ENTREPRENEURSHIP AND REGIONAL DEVELOPMENT:
Taking advantage of the reputations of CELTA and Sapiens Parque, state and municipal governments have sought CERTI to develop projects for modeling and organization of technology parks, innovation centers and incubators, not only through conceptualization and design, but mainly with support for their implementation.

ENERGY:
Combining competencies in mechaoptoelectronics and intelligent systems with international partnerships when proposing solutions for the electrical sector, CERTI has been conquering projects using the state of the art in smart-grids, flexible photovoltaic generation, OLED illumination and electrical vehicles.

OIL & GAS:
CERTI expanded its capacity to provide technology services to the oil and gas sector by obtaining definitive credentials from the National Petroleum Agency (ANP) to execute R&D projects with concessionaires in the sector related to materials, evaluations of conformity, monitoring and control.

HEALTHCARE:
The growing demand, the requirement for certification of electro-medical products according to the IEC 60601 norm and government incentives for local development, allow CERTI to develop business opportunities with domestic and international partners interested in the Brazilian market.

ICT:
In addition to the growth in the application of ICTs in transversal projects in various economic sectors, CERTI consolidated its participation in the sector with new contracts for IP communication and interfaces, and digital TV systems and applications for global clients.

OTHER SEGMENTS AND EXPORTS:
The consolidation of CERTI as a supplier of innovative systems in products and systems, with recommendations form the Brazilian government, has brought domestic and international opportunities for new contracts for conceptualization and execution projects, and for the implementation of factory units in a variety of sectors.

CONTACT

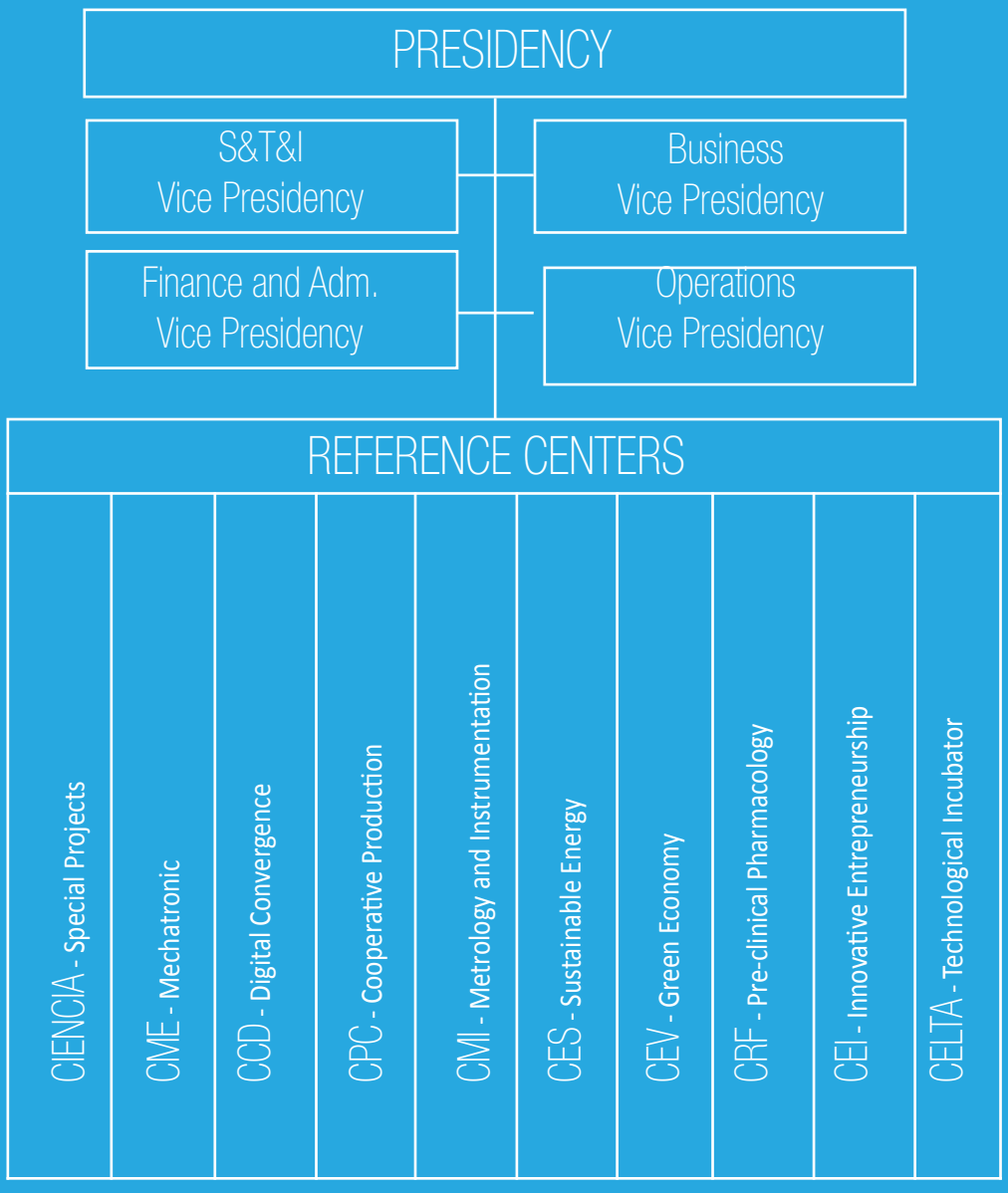
Superintendency of Business
Laercio Aniceto Silva
las@certi.org.br
48 3239 2014

NIT – Nucleus for Technological Innovation
Daniel Silva da Rosa
dnr@certi.org.br
48 3239 2190

REFERENCE CENTERS

Each CERTI Foundation Reference Center (RC) operates as a business unit of the organization, which, with its staff of specialists and operational infrastructure, serves its clients either on its own or in conjunction with other RCs or partners from Brazil or abroad.

Below is presented each one of the ten reference centers, highlighting their realizations, advances in technical-scientific competence and three to five important projects or actions conducted in 2013.



CME - Mechatronics Center



In 2013, the Mechatronics Center had a substantial increase in its volume of projects and other activities, evolving towards new fields for the application of Mechatronics, highlighted by the medical products sector, as well as organic electronic modules for lighting and energy. The internationalization of the activities strengthened the competencies aimed at product quality, with emphasis on obtaining certifications for a wide variety of target publics. In this sense, the evolution of the CME's competencies serve the development of world class products with strategic value for industry, in both the domestic market and for export.

Manuel Steidle
CME Executive Director

Competencies and Innovative Solutions:

- **Mechatronic Products:**
  Product development, from conception to industrial engineering
  Mechanical design, electronics and embedded SW intelligent systems
  Design focused on the human being for physical products.

- **Microsystemic Solutions:**
  Integration of microsystems in products
  Interconnections and encapsulation
  SW Embedded in the Microsystem

- **Studies, Consulting and Services:**
  Technical-economic viability studies of electronic products
  Consulting in the adoption of new technologies
  Design and prototyping services for mechatronic devices

Sectors served:

- Electronic equipment
- Solid-state lighting
- Electromedical equipment
- Simulators for training
- Machinery and equipment

Featured partners:

UNIVERSIDADE FEDERAL DE SANTA CATARINA · INEP · Centro de Tecnologia da Informação Renato Archer · UNICAMP · FIOCRUZ · GRANTE Grupo de Análise e Projeto Mecânico · Fraunhofer ENAS · PHILIPS · labMAT · FEPESE · Tractebel Energia GDF SUEZ · certi amazônia

Contacts: www.certi.org.br/cme mecatronica@certi.org.br +55 48 3239 2160

The 2013 projects were dedicated to the theme of product development for the sectors of solid-state lighting based on OLED, medical equipment and environmental monitoring systems. CME's four fields of competency – electronics, mechanics, design and embedded systems – work in synergy in a direct and competitive manner, with involvement of the clients and partners, in the product innovation process. Below are some of the examples of the projects conducted in 2013:

Electromedical devices

In the field of electromedical devices, two platforms for in-vitro testing at the point of care are being developed. One of them, the result of the PodiTrodi Project, part of the Brazil-European Union Technical-Scientific Cooperation Program, combine molecular and immunological tests for diagnosing Chagas disease. This advanced project has an Executive Consortium with European and Brazilian entities and companies. Another project, in cooperation with MIT, uses an imaging platform without lenses, seen in the photo, to diagnose soil transmitted-helminthiasis.

Organic Light Emitting Diodes (OLED)

In the field of lighting, the development of modules and lighting based on organic light-emitting diodes continued, with a project financed by BNDES-Funtec, in partnership with Philips do Brasil. The photo shows the Ufficio lighting, designed by the CERTI design team in 2013 and awarded at the IDEA Brazil competition in 2014.

Special Machine Design and Robotics

The development and replication of innovative mechatronic and microsystemic products for CERTI's clients is being made viable with non-conventional machinery and equipment designed and implemented by CME. The manufacturing of OLED light sources, RFID tests and wireless communication boards were made viable and led to aggregated value, increased quality and decreased cost of the manufactured products.

Motorcycle Simulation Project

Ordered by the Ministry of Cities and the National Department of Transportation Infrastructure (DENIT), CERTI/CME, in partnership with UFSC/EMC, has been undertaking the Motorcycle Simulator Project, which is conducting research on the use of simulators for licensing motorcycle drivers. Different configurations of simulators are being tested with the target public, to generate a proposal for optimized architecture and specification of the minimal requests for equipment for regulating the adoption of motorcycle simulators in driving schools in the country.

CCD - Digital Convergence Center

In 2013, CCD's work was marked by the diversity and relevance of the projects undertaken in the sectors of telecommunications, energy, education, accessibility and consumer electronics. Some of the highlights were projects of R&D&I that are at the frontier of knowledge in intelligent solutions and interaction with televisions through voice and gestures. The expansion of competencies in the field of embedded and intelligent systems is also highlighted, which are consolidated on the Smart Platform and allow applications in fields such as automation, intelligent networks and electronics.

Marcelo Otte
CCD Executive Director

Competencies and Innovative Solutions:

- **Software Development**
  Web solutions for portals
  Collaborative environments
  Applications for mobile devices
- **Digital convergence products**
  Embedded/intelligent systems
  Electronic hardware project
  Interactive applications for TV
  Solutions with the Smart Platform
- **Educational Technologies**
  Solutions with new pedagogical concepts
  Design thinking in products for education
  Using ICTs in classrooms
- **Business analysis and strategy**
  Support for the adoption of new technologies and markets
  ICT strategies for products and companies
  Analysis of technical, economic and commercial viability of new ICT products and platforms.

Sectors served:

- Telecommunications
- Electronics
- Computing
- Digital television
- Mobility
- Education
- Energy
- Smart-Cities

Featured partners:

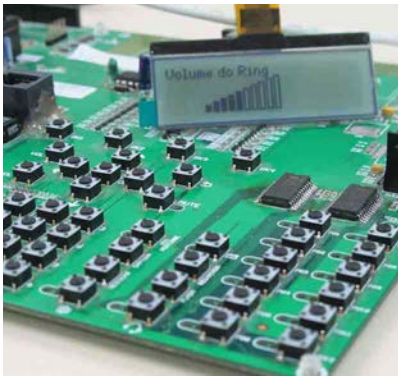
UFSC, FEPESE, Fórum SBTVD, e3c, certi amazônia, wyplay, Schneider Electric, ST, IS, Stanford University, MIT ILP Industrial Liaison Program, 1 laptop per child

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

2013 began early for the CCD with the presentation of innovative solutions and generation of business at the Consumer Electronics Show, in Las Vegas, and continued at an intense pace throughout the year, which led to exceeding all the goals for economic and operational performance established for the center. Below are some of the projects undertaken during the year.

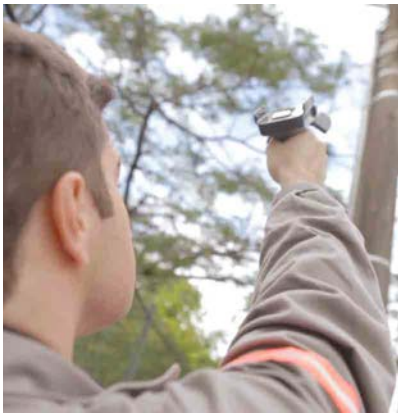
Intelligent TV Platform

The CCD developed a set of projects focused on the insertion of intelligent solutions and connectivity for televisions. These projects are highlighted by the complete software framework for TV, which allows controlling its operation and developing applications; the integration of Android devices with solutions for digital TV reception, control, second-screen and YouTube™; the Middleware Ginga™ port for the most advanced versions of the TV chipsets; as well as the integration of voice and gesture command technologies for interaction with televisions.



IP Wireless Solution for Telephones and Audio conferencing

the communication solution developed by incorporating wireless modules with aerial digital interface, gained, in addition to the functionalities of conventional telephone systems, the characteristics of a mini PABX and a wireless audio conference tool. The CCD conducted the complete development of the project, from the review of the requirements, to the hardware and software development, prototyping and validation. This led to the substitution of imports and development of domestic command of technology, with a reduction in cost and increase in the solutions available for IP telephony for small and medium companies.



Asset Management in the Electrical Sector

In the field of energy, the CCD made a pioneer development in a project for the application of radiofrequency identification (RFID) in the maintenance operations of substations and the distribution grid. Through User Centered Design methodologies and Agile Software Development, an Android application was created for mobile devices and a web management system, which allowed the maintenance, management and planning teams to access and insert data used during the maintenance activities. The project allows achieving greater agility and efficiency in the management of the maintenance orders, decreasing the effort and time spent by the teams in the field.

Innovation in the Learning Process

The CCD developed a pedagogical strategy and two innovative educational spaces for classes about sustainable development for the state Secretariat of Sustainable Economic Development of Santa Catarina. Permeated with new technologies and with a design based on innovative methodologies for using ICTs in education, the two spaces were used in an interdisciplinary manner by students and teachers from a public school. This use, conducted during the pilot phase, received extremely positive evaluations from the educational community, and generated improvements both in the disciplinary aspects of the classes and in relation to the learning of the content and development of sustainability values.

CPC - Cooperative Production Center

CPC expanded its international operations in 2013, through the development of new projects and business in different areas. The year was highlighted by the completion of the conceptual design for the Laboratory Factory for Prototyping and Manufacturing of Intelligent Systems (LABFABER), which will become the new facilities for LABelectron. The laboratory will expand to a new dimension, and focus not only on circuit boards, but on the technological product as a whole, by means of rapid prototyping and integration of various manufacturing processes and production techniques.

Carlos Alberto Fadul Corrêa Alves
CPC Executive Director

Innovative Competencies and Solutions.

- Design, prototyping and manufacturing of Circuit Boards for Intelligent Systems
- Small Series Production Technologies
- Organization of Factory Units
- Planning and Industrial Quality Assurance
- Development of Processes for Manufacturing and Integration of Products
- Development of Systems for the Management of Information on the factory floor
- Studies of the post-consumer chain for industrial residues

Sectors served:

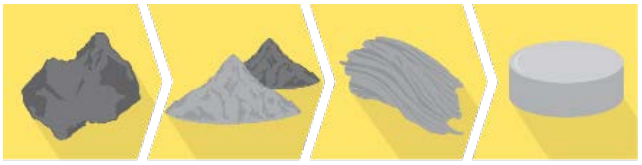
- Information and Communication Technology
- Machinery and Equipment
- Healthcare
- Education
- Energy
- Oil &Gas
- Industrial Manufacturing
- Government Agencies

Featured partners:

Binghamton University, State University of New York
Centro de Tecnologia da Informação Renato Archer
ERSA
Fraunhofer
Gobierno Bolivariano de Venezuela
certi amazônia
instituto sapientia
Ministério da Ciência, Tecnologia e Inovação – Brasil
SCPar
Mentor Graphics
Universal
MIT – Industrial Liaison Program – LP
PRODUZA
ipt – Instituto de Pesquisas Tecnológicas
facti
UFSC
Technische Universität Dresden
Instituto Federal – Santa Catarina
corpivensa
CETEM – Centro de Tecnologia Mineral

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

In 2013, the CPC staff maintained its diversified action on various work fronts and in different projects, which allowed maintaining the excellent level of business of 2012. More than 20 projects were executed for different clients, from small and medium companies that sought innovation in the electronic components of their products, to large companies for which were developed new and innovative products as well as processes and for state and federal government agencies, for which were developed important structural projects. Here are some of the highlights:



projeto ETR-BR

Implementation of the ETR-BR Project

Considered strategic by the Brazilian federal government, rare earth elements are minerals that are the essential raw materials for the manufacturing of various high technology components and products, especially magnets for motors of electrical vehicles and wind generators. Based on this positioning, and because Brazil has the world's second largest reserve of these elements, CERTI, in conjunction with CGEE, UFSC, the federal Mineral Technology Center (CETEM) and Institute of Technological Research (IPT), initiated the ETR-BR in 2013, to conduct a broad range of strategic actions for the organization of a competitive production chain of products with rare earth elements in Brazil.

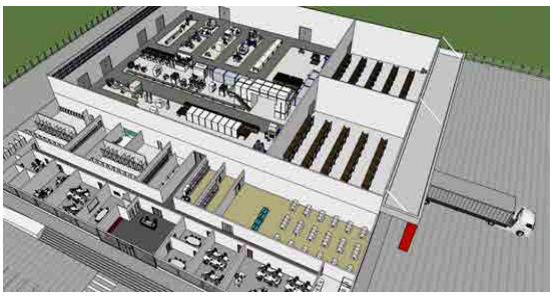
Promotion of 13 Innovation Projects in the Context of SIBRATEC's EPP Network

During 2013, the project for the implementation and operation of SIBRATEC's Electronics Network for Products (EPP Network), coordinated by CERTI, conducted three rounds of promotion and selection, which led to the recommendation that FINEP establish contracts with 13 companies that received funding from the FNDCT of US$5 million for innovation in the electronics of their products. The first year of operation of the EPP Network was quite successful. As a whole, the EPP Network received 44 project proposals, predominantly from micro and small companies, which requested resources of US$20 million. This indicated the interest of Brazilian companies in innovating through the insertion of electronics in their products, so they can remain competitive in the market.

Conception of the Composite Materials Technology Center (CTC)

The project is dedicated to the conceptual development of a Composite Materials Technology Center, which will focus on the realization of R&D activities in carbon fiber products for aeronautical applications. The conception of the operating model of the CTC considered the needs of companies in southern Brazil, particularly Novaer Craft, which will manufacture small airplanes in Lages. The model establishes an environment of high-level technology, based on a laboratory-factory concept, with the capacity to develop parts, molds and productive processes, and that has the competence for production of pieces in small series. In addition to serving the aeronautics market, the CTC should also act in other markets of state and national importance: such as automobiles, sports, energy and shipbuilding.

Design of Electric Motor Factory



To continue the projects being developed for the Venezuelan government, in 2013 CPC conducted, in partnership with Santa Catarina companies, the detailed engineering project for a mono-phase and three-phase electric motor factory, dedicated to developing domestic technology in this type of product. The project resulted in a factory with the capacity to produce 167 thousand motors of six different models per year, after investments of US$18 million. The factory will be built in the region of Tinaquillo, Venezuela and will generate more than 250 direct jobs. When it is completely operating, annual sales of US$20 million are forecast. The next phase of the project involves construction, equipment purchase and accompaniment of implantation, with inauguration planned for December 2014.

CMI - Metrology and Instrumentation Center

In 2013, CMI consolidated its management model based on thematic areas and focused efforts on the conquest of business in the automotive and oil&gas sectors. The area of Metrology and Quality Assurance expanded its scope, incorporating non-destructive trials with tomography, and provided consultancy in planning of inspection and quality improvement with important clients. The area of Instrumentation and Tests increased its volume of business, operating mainly in the oil&gas, energy and medical equipment sectors. In the Quality and Innovation Systems division, there was a consolidation in the competency of organization and management of networks and continuation of the outstanding activity in laboratory management systems.

Gustavo Daniel Donatelli
CMI Executive Director

Competencies and Innovative Solutions

- **Laboratory and Industrial Metrology**
  Services of calibration and high complexity dimensional measurement, with low uncertainty and RBC certification
  Services of non-destructive trials with computerized tomography
  Projects for improving product and process quality
  Projects for quality assurance planning and organization of metrology

- **Instrumentation and Tests**
  Development of measurement system and tests for special applications, with automation and guarantee of metrological traceability
  Planning and execution of tests according to norms or client requirements; support for product certification
  Development of property monitoring system
  Development of solutions for monitoring of natural and artificial environments

- **Systems for Quality and Innovation**
  Projects for implementation of metrology management systems at large companies and complex institutions (ISO 17025, ISO 10012)
  Market research and business plans for laboratories and Basic Industrial Technology centers
  Organization and management of technology networks or R&D services
  Projects of energy efficiency in buildings – Zero-Energy Buildings; Issue of National Energy Conservation Tag (ENCE)

Sectors served:

- Automotive
- Aeronautical
- Machinery
- Capital Goods
- Electrical Energy
- Civil Construction
- Oil&gas and biofuels
- Laboratories for trials and calibration

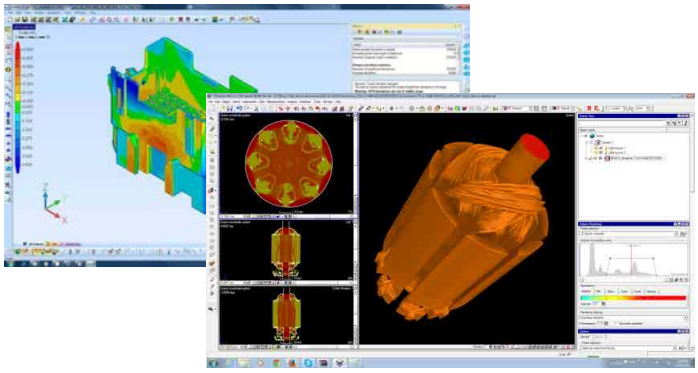
Featured partners:

UFSC · BR PETROBRAS · INMETRO · Fraunhofer · WZL RWTH AACHEN · LabEEE · ZEISS · LAB METRO UFSC FLORIANÓPOLIS · Eletrobras Eletrosul

Contacts: www.certi.org.br/metrologia metrologia@certi.org.br +55 48 3239 2070

In 2013, the CMI staff met demands for metrological services, training and assistance at 561 companies throughout Brazil, issuing 5,377 certificates of calibration and training 698 people. In the realm of implementation of quality management systems, 20 laboratories were assisted, of which nine pertain to the METRORADI Network of the SIBRATEC System (Metrology of Ionizing Radiation). The projects conducted are highlighted by:

Computerized Industrial Tomography



In 2013, CMI consolidated its services in dimensional inspection and evaluation of the integrity of components and systems by tomography, with a positive impact on Brazilian industry. In the R&D line, the BRAGECRIM project was successfully concluded, entitled “Methods for fast setup and robust dimensional measurements with industrial X-ray computed tomography – CTmetro”.

Network of Products for Mechanical Manufacturing

CMI is responsible for organization and executive management of the SIBRATEC Network of Technological Services for Mechanical Manufacturing Products – RP2M. In 2013 the project staff conducted an important part of the acquisitions of equipment and imported standards, strengthening the capacity of various RP2M institutions to meet new market demands. The CMI was benefitted with a state of the art system for measuring deviations in shape.

Yara Buoy for remote water monitoring

In the context of an R&D project financed by Tractebel Energia and regulated by ANEEL, CMI participated, in partnership with the Mechatronics Center (CME), in the development of an environmental monitoring buoy with a sonde with atmospheric and water quality parameter sensors for water reservoirs. In 2013, the prototype was tested in the lake at Sapiens Park. It was then transported to the reservoir at the Itá Hydroelectric Plant, where it is currently in service.

Energy Efficiency Tags for Buildings

In 2012, the Project “Implantation and Accreditation of the Model Inspection Agency for Energy Efficiency in Buildings in Santa Catarina – OI3E”, was concluded. It was financed by Eletrobras. Today, the OI3E of the CERTI Foundation is the only inspection agency accredited by CGCRE/ INMETRO to issue the National Energy Conservation Tag (ENCE) for residential, commercial, service or government buildings.

CES – Sustainable Energy Center

In 2013, the CES completed its first year as a CERTI Reference Center, and exceeded its goals for economic growth in the year. The portfolio of products and services initially established for CES found acceptance in the market, which allowed the realization of strategic projects for companies in the electrical energy sector and the strengthening of technical and scientific partnerships. During the year, the CES doubled its staff and began installing its own laboratory facilities for research, development and demonstration of technologies for distributed generation and intelligent grids. Another highlight of the year was the modeling of CES's cooperation projects with CERTI's other reference centers, to strengthen CERTI actions in the energy market.

Cesare Quinteiro Pica
CES Executive Director

Competencies and Innovative Solutions:

- **Distributed Generation of renewable energies:**
  Dimensioning, modeling, design and implementation of systems for distributed generation and microgrids;
  Development of Intelligent systems applied to the renewable energy segment and energy efficiency.

- **Electrical grids and intelligent cities:**
  Energy management aimed at enhancing technical and economic benefits in the operation of systems, involving electrical generation and demand, including demand response solutions;
  Energy Management in systems with electrical vehicles, buildings and intelligent microgrids;
  Development of hardware and software for energy management in industrial, commercial, corporate and residential applications.

- **Energy efficiency, business and markets:**
  Analysis and recommendation of innovative solutions for improving energy efficiency and quality of energy in corporate, commercial and industrial installations;
  Development of commercial models and technical-economic modeling of new business in various segments of the energy field.

Sectors attended:

- Electrical energy utilities
- Electrical equipment and instrument companies
- Government agencies with smart grid and smart cities projects

Featured partners:

UFSC · LabPlan · Tractebel Energia GDF SUEZ · MIT Massachusetts Institute of Technology · INEP · ANEEL · Celesc Distribuição S.A. · Eletrobras Eletrosul · certi amazônia

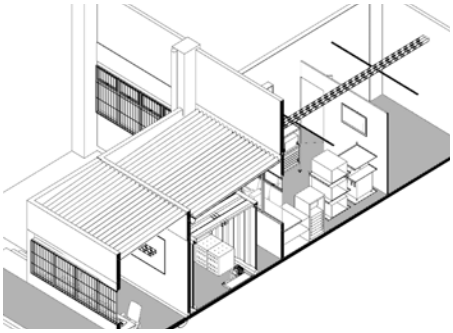
Contacts: www.certi.org.br/ces energiasustentavel@certi.org.br +55 48 3261 2863

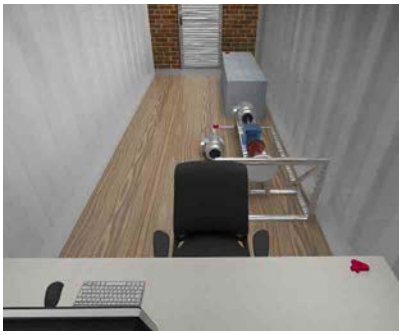
The projects being developed by the CES, mostly in the context of ANEEL's R&D program, generate an excellent opportunity to consolidate CERTI in the sustainable energy sector. The execution of the projects has strong participation by other CERTI CRs, at the same time as it establishes a relationship with partner S&T companies and institutions, as presented in the examples of projects below.

Implementation of a District Renewable Energy Generating Plant

The purpose of this project is the development and implementation of engineering and control solutions for the integration of micro electrical generators in a hybrid system, in the form of an electrical generating plant in urban areas. The project is being developed for CELESC, and its results should help this company meet the challenges and opportunities in the distributed generation market. In 2013, the implementation of a pilot-system foreseen in the project was initiated, which would serve as a demonstration unit, laboratory and platform for new projects.

Development and Implementation of Intelligent Microgrids





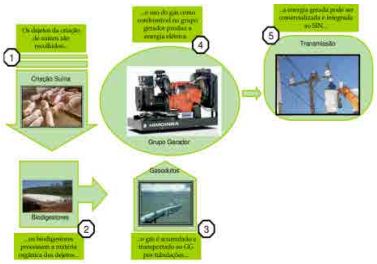
The scope of the project is the development of control strategies for integration and management of an intelligent microgrid. The project is being conducted with the support of Tractebel and includes the implementation of a pilot microgrid of 100 kW, integrating solar, wind, gas microturbine, batteries and dispatchable load. In 2013, the executive project was concluded, the hardware and software solutions proposed were developed and the installation and the first operating test of the microgrid were begun.

Connection of a Photovoltaic Complex in the distribution grid

The purpose of the project is to study and develop technical and commercial solutions for a photovoltaic energy generation complex to be installed at the central offices of Eletrosul. The complex will include the Solar Megawatt plant and an experimental plant composed of six different photovoltaic generating technologies, totaling more than 1 MWp. In 2013, all of the designs and technical specifications were realized and the installation of the system was begun. The plant should be commissioned and connected in mid 2014.

Development of Technical-Commercial Arrangement for a Biogas Plant

Eletrosul is installing a 400kW electrical generator in Itapiranga, in western Santa Catarina state, which will be fueled with biogas produced at 12 local hog farms. This plant is being developed in cooperation with six Brazilian S&T institutions, including CERTI. The role of CES in the project is mainly in the mapping and analysis of the technology costs used throughout the plant and in the support for technical-commercial modeling to establish the economic viability of the project.



CEV - Green Economy Center

Upon completing its first year of existence, the CEV commemorated 2013 as the year when its first team of talents was consolidated. Not only did it organize a diversified technical staff (with 14 professionals from 8 fields of knowledge), but also implemented a model for the formation of a staff culture based on the integrated diversity of expertizes, which is necessary considering the challenges of the emerging GREEN ECONOMY. Complementing its own competencies, in 2013 the CEV consolidated its strategic partnerships with important organizations including the Fundação Grupo Boticário, the SPVS - Wildlife Research Society and Fundação AVINA, and became part of business networks concerned with the future of the planet (such as the Business Movement for Biodiversity – Brazil – MEBB). Diversity integrated in a common vision and acting in a network, as in nature itself, expresses the way that this new CR at CERTI plans to overcome its future challenges, in the same way that it achieved its goals in 2013.

Marcos Aurélio Da-Ré
CEV Executive Director

Competencies and Innovative Solutions:

- **Solutions in Transition to the Green Economy**
  Sustainable Design for Developments
  Green Transition Incubators
  Sustainable Business Platform
  Platform for Integrated Sanitation Management

- **Model of Valorization and Management of Biodiversity**
  Innovative Models and Tools of Management and Green Business
  Transfer of specific and integrated competencies for initiatives of sustainability for a territory

- **Balance, Management and Communication of Impacts**
  SISMO-BIO – Intelligent Biodiversity Monitoring System
  Ecological Footprint Inventory
  Strategy 3+1=2 (Plan for reduction of ecological footprint of construction projects)
  Sustainable Geographic Intelligence

Sectors served:

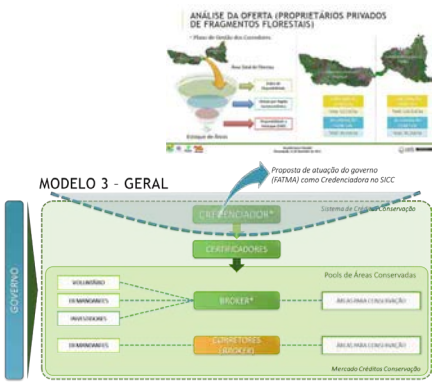
- Green Economy and Sustainability (transectorial)
- Private (environmental protection solutions)
- Public (Public Policies and induction or control mechanisms)

Featured partners:

FATMA – Fundação do Meio Ambiente
AVINA
socioambiental – Consultores Associados
SEMEAR ambiental
SPVS
Governo do Estado Santa Catarina
Fundação Grupo Boticário

Contacts: www.certi.org.br/cev economiaverde@certi.org.br +55 48 3261 2863

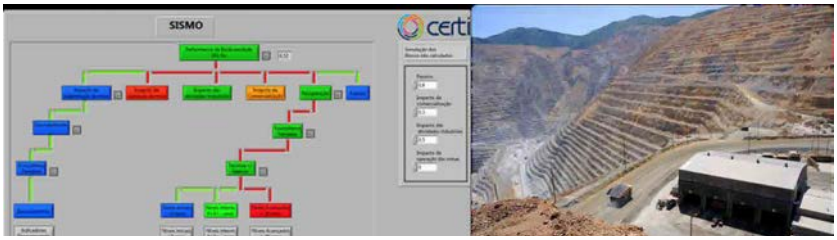
The solutions made concrete by CEV in 2013 directly explore the potential and the needs and challenges of new markets, aligned with trends in the perception of value of NATURAL CAPITAL. These solutions are highlighted by:



SICC –Conservation Credits System

Developed for FATMA with World Bank funding, in the realm of the SC Rural program, the SICC converts environmental obligations of companies into investments in the conservation of private natural areas (in scale) in the state's ecological corridors. The SICC operating model considers techniques for administering investment funds, accreditation and certification processes of market actors, exonerating the government structure and promoting agility in the environmental licensing of projects, while enhancing the conservation of biodiversity at the scale of the territory.

SISMO-BIO –Intelligent Biodiversity Monitoring System



Based on real data about biodiversity, CEV developed the SISMO-BIO prototype, which is a system (or tool) for integrated analysis of data and performance indicators about impacts on biodiversity, designed for assistance in making strategic decisions in the operation of projects. Tracking environmental results and causal relation in a manner that is integrated to operating processes, the system allows planning contingency measures and generating risks. SISMO-BIO is applicable to various sectors, particularly to projects whose operation involves large areas, (such as mining for example) or whose potential environmental impacts can propagate spatially.

ARAUCÁRIA+ with Economic, Environmental and Social Sustainability

Conceived and realized in strategic partnership with the Fundação Grupo Boticário [Boticário Group Foundation for Nature Preservation], Araucária+ is the first application of the Green Innovation Ecosystem Platform. Initiated in 2013, with support from the Santa Catarina State Development Company (CODESC), it is aimed at the conservation of biodiversity associated to the strengthening of the base of the production chain, by including communities in the socio-economic benefits generated by technological innovation and by businesses based on native species of forests with Araucária pine. It can be replicated in any biome involving other chains of Brazilian sociobiodiversity and is configured as a model for repartition of benefits through access to genetic resources.

GREEN CHALLENGE – Attracting and Training Talents

The Green Challenge was a selective process of sequential training in the Green Economy. Through a work process with qualifying challenges, the 319 registered participants gained experience, at different levels, in the competencies that compose a Green Economy professional. At the conclusion, four participants accepted the unexpected outcome of placing in practice the knowledge acquired. Today, as staff at CEV, they perform a high impact role in the Araucária forest, as articulating agents of the Araucária+ initiative. In addition to the impact as a training model, the Green Challenge has been established as a high-performance tool for attracting and training talent.

CRF - Pre-clinical Pharmacology Center

The CRF was born in 2009 as a Reference Center of the CERTI Foundation, based on the challenge presented by the Ministry of Health, the Ministry of Science, Technology and Innovation, by pharmacology researcher Prof. João Batista Calixto and from understandings initially established with the Federal University at Santa Catarina and financial support agencies. The concept of the development grew from a proposal for a Laboratory for Preclinical Trials, to one for an Innovation Center, an environment where the academic universe would encounter the business sector, which simultaneously contemplates providing services in competitive preclinical trials with international accreditation, through the strong interaction with R&D at UFSC and ICTIs in the GECIS Network and promoting innovation in nascent companies and established pharmaceutical manufacturers in Brazil. The activities, the scope and the environment in which it is inserted, at Sapiens Park, are inducive to its economic sustainability as a CERTI Foundation Reference Center under private operation. In addition, the potential cooperation with the other CERTI RCs creates opportunities for advanced solutions in systems, instrumentation and innovative business. At the end of 2013, the phase of building and laboratory infrastructure installation of the CRF was completed and the project was redirected, leading to the discontinuation of the CRF as a CERTI Foundation Reference Center.

CERTI Foundation Presidency Board

Competencies and Innovative Solutions Planned:

- **Realization of Pre-clinical Trials:**
  Safety Evaluation (Toxicology)
  Evaluation of effectiveness (tests of concept and studies of mechanism of action)
  Pharmacokinetic Studies
  Pharmacology of Safety

- **R&D and Specialized Consultancy**
  Development of non-clinical studies necessary for registering medicines

- **Support for Innovative Projects**
  Promotion of innovative companies aimed at the pharmaceutical sector
  Innovative Entrepreneurship in Pharmacology/Medicine
  Development of it own projects for medicines to transfer to the productive sector

Sectors to be served:

- Pharmaceuticals
- Cosmetics
- Functional foods
- Healthcare
- Veterinary

Highlighted Sponsors and Partners:

UFSC · LAFEX · FIOCRUZ · PUCRS INCT-TB · LNBio Laboratório Nacional de Biociências · CPDM · Ministério da Ciência, Tecnologia e Inovação · Ministério da Saúde · Governo Federal Brasil País rico é país sem pobreza · Finep Inovação e Pesquisa · FAPESC

Contacts: www.certi.org.br/crf certi@certi.org.br +55 48 3239 2010

In 2012/2013, CRF was awarded US$15 million under the project MS/MCTI/FINEP so that in three years the CRF project can achieve complete operationalization and sustainability, according to the strategic planning and business plan presented by CERTI to the finance agencies. Santa Catarina state, through FAPESC, made viable complementary investment support, which assures the funding needed to attain the objectives proposed for the CRF. In terms of production, of pre-clinical trials, consultancies and other associated activities necessary to the sustainability of the project, income declined, because the cooperation between UFSC and Prof. Calixto was discontinued. Here is how CERTI planned to operate the CRF in its four lines of action:

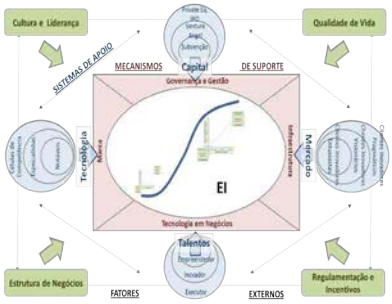
Studies and Pre-clinical trials of Pharmacochemicals

With capacity planned to principally serve demand from Brazilian companies and ICTIs, by involving a highly competent staff and operating according to international quality and safety standards, the business plan identifies an existing and latent market, which if served with the efficiency of international CROs, will assure the sustainability of the operation, based on an initial range of services, as indicated on the previous page.

Research and Development in the Segment

It is understood that permanent R&D activity - in the form of methodological and instrumental improvement of preclinical trials, and in the continued efforts to reduce or substitute the use of living creatures for experimentation – to be essential to the maintenance of leadership and competitiveness. In this line of action, since the conception of the CRF, the intensive presence and participation of researchers from the Pharmacology department at UFSC has been planned, and from other ICTIs, particularly institutions from the GECIS network.

Innovative Business Incubator



The forecast that the laboratory, technological and scientific infrastructure of the CRF will be extremely attractive and favorable to the generation and development of companies in the segment has already proved to be true, with the installation of two companies at Sapiens Park. The incubator would have a concept, operation and management similar to that of CELTA, giving space to companies created by individuals, by corporations, companies that want to relocate and for the installation of R&D units of large companies. All of these innovative establishments would provide special opportunities for business to the CRF, contributing to its sustainability.

Interaction with the Business Cluster

Beyond the typical public of a CRO, which provides pre-clinical trials, and the presence of researchers who are resident at the incubator, there were plans to bring to the environment - through the association of a Santa Catarina business cluster, which may be organized as an Arrangement to Promote Innovation with Pharmacology (API-Pharma) - a constructive interaction, which could provide intense results of mutual interests of companies and ICTIs in the field of production of medications.

Considering the conclusion of the project's organizational phase, the CERTI Foundation initiated discussions with its sponsors and the Management Committee of GECIS/CRF, with the goal of passing on to another organization all of the accumulated assets and operating resources, to continue the endeavor, thus assuring the solution of this national challenge to consolidate its capacity for complete development of medications at international standards.

CEI – Innovative Entrepreneurship Center

Due to efforts for the organization and improvement of the methodologies used in the products of the Innovative Entrepreneurship Center (CEI), greater compatibility can be found between the results of the projects with the main needs of the clients. The focus was expanded in the phases of implementation and operation of the innovation environments and mechanisms, which allowed for a greater exchange of experiences between the CERTI staff and clients. The result was expressive growth in the CEI and an increase in the productivity and effectiveness of the projects, which sought to make dynamic the economic, social, environmental and technological impact by creating and or strengthening the ecosystems of innovation to assist the country become more competitive and innovative.

Leandro Carioni
CEI Executive Director

Innovative Competencies and Solutions:.

- **Environments and Mechanisms of Innovation:**
  Conception, implementation and operation of Technology Parks and Incubators of Entrepreneurship
  Conception, implementation and operation of NITs, NAGIs [Innovation Support Nuclei] and regional offices for promoting innovation, technology development and Innovation Centers

- **Ecosystem of Innovation:**
  Development of high added value projects to organize the Ecosystem of Innovation
  Regional Technological Development

- **Corporate Innovation:**
  Strategic Planning of Innovation
  Solutions for promotion and support to innovation at a company (technological mapping, open-innovation, incubation of new business and management of innovation)

Sectors served:

- Technology-based companies
- Municipal, state and federal governments
- Associations and Federations of Industry
- Innovative Companies
- Finance Agencies

Featured partners:

FEPESE, ANPROTEC, Member of IASP, IEL Instituto Euvaldo Lodi de Santa Catarina Iniciativa da FIESC, SEBRAE Serviço de Apoio às Micro e Pequenas Empresas Santa Catarina, IS, UFSC, Governo de Santa Catarina Secretaria do Desenvolvimento Econômico Sustentável, MIT Massachusetts Institute of Technology, FAPESC, Ministério da Ciência, Tecnologia e Inovação, Governo Federal Brasil País rico é país sem pobreza, sapiens parque, British Embassy Brasília

Contacts www.certi.org.br/cei empreendedorismoinovador@certi.org.br +55 48 3239 2180

The specialized staff of the CEI worked on 14 projects, achieving 21% growth over the previous year. The efforts to develop technology parks in all regions of Brazil stand out, generating expressive value for government clients. In addition, it is expanding the work in conjunction with the productive sector, whether for the creation of dozens of new projects, or for the support for planning and execution of actions for corporate innovation for already consolidated companies. The highlights are:

Synapse of Innovation Program - Operation-SC-IV

Due to the excellent results presented, the Santa Catarina government, through the Secretariat for Sustainable Development and FAPESC, hired CERTI to execute Operation-SC-IV of the Synapse of Innovation program. With an already consolidated methodology, this operation beat a new record for participation and quality, with 1,226 innovative ideas registered, from more than 90 municipalities. After undergoing the three phases of training, proposal and selection, 93 innovative projects from 31 municipalities in the state received economic support to continue in a pre-incubation process. The Synapse of Innovation, in all its operations, has created a total of 280 innovative companies that help to diversify and strengthen the economy of the cities of Santa Catarina.

Technology Parks and Company Incubators

The projects for development of technology parks are highlighted by those in Chapecó, Jaraguá do Sul, Tocantins and Cuiabá. Using established methodology, the projects are expanding in number and size, operating from the conception and planning of the technology park to the provision of support for its implantation and operation. Work in the incubator segment is highlighted by the project for planning, implementation and assisted operation of Áity, the Company Incubator of the Tecnocentro in Salvador, Bahia, where work in 2013 focused on the assisted operation phase. The various results are highlighted by the implementation of the managerial and operational processes that have already been systematized, in consonance with the CERNE Model, the constitution and training of the local staff and the expressive rise in the quantity and quality of the projects supported. The year ended with 18 companies incubated and eight new companies already selected.

Corporate Innovation – NAGI Project of the Federal University at Uberlândia

In the field of Corporate Innovation, the center developed the I9NAGI project, to support the organization of the Nucleus for Support for Innovation Management at the Federal University at Uberlândia. The CEI staff mapped the Ecosystem of Innovation of the software sector in the Uberlândia region, and developed the strategic plan and operating model for the NAGI, conducted training in global culture and innovation and prepared the individual innovation plan for 47 companies participating in the project.

Improvement of the National Support Program for Parks and Incubators

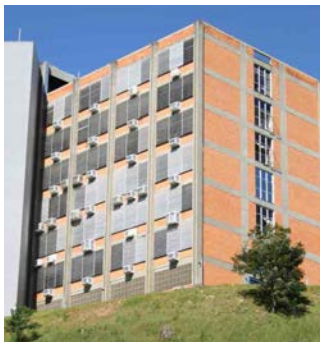
The CEI initiated the development of the “Parks and Incubators for the Development of Brazil” project to analyze the impact of the National Program to Support Parks and Incubators and identify the best domestic and international practices, presenting, at the end, recommendations for policies to strengthen technology parks, incubators and startups. The project is financed by the British Embassy in Brazil and by the Ministry of Science, Technology and Innovation (MCTI), and conducted with support from ANPROTEC and in partnership with the Department of Administration of UFSC.

Strategic Routes for the ICT Sector in Santa Catarina

CEI, in partnership with CERTI’s Digital Convergence Center (CCD), developed for FIESC the Strategic Path for Information and Communication Technology, to construct visions for the future for the sector, prepare a convergent agenda of actions to allow all interested parties to concentrate efforts and investments, identify key-technologies for the industry and prepare a roadmap with the possible and desirable trajectories for the development of the sector through 2022. Socioeconomic studies and trends were conducted, as well as interviews with business leaders and workshops with specialists.

CELTA - Business Center for Advanced Technology





In 2013, the CELTA Events Center received new communication and training infrastructure. The year was also marked by new partnerships and new graduated and incubated companies, which have significant levels of technological command and market value. CELTA's GO! office, which is responsible for promoting the expansion of business of the incubated companies, conducted interactions with more than 50 innovation environments in Brazil and abroad. In this way, the CELTA Innovation Network, which includes entrepreneurs and specialists from various countries, expanded the diversity and quality of business opportunities.

Tony Chierighini
CELTA Executive Director

Competencies and Innovative Solutions:

- **New company created by Individuals**
  Opportunity for the researcher or professional who has an idea, project, prototype or product and who wants to create at CELTA their own technology based company.
- **New Company created by a Corporation**
  Company or business group that wants to create a new technology-based company, and looking for greater technical and or managerial support and or integration with other companies.
- **Company transferred to Florianópolis**
  Technology-based company that is already established in the market and that wants to transfer to CELTA in search of greater technical and or managerial support and or integration with other companies.
- **Development Unit of Products and Processes at Companies**
  Already established company that wants to install a technical staff at CELTA for the development of new technology-based products or process.

Sectors served:

- Instrumentation
- Telecommunications
- Automation
- Mechatronics
- Microelectronics
- Energy
- Computing
- Biomedical
- Biotechnology
- Creative Economy
- Life Sciences
- Nanotechnology

Featured partners:

FAPESC, BADESC, BRDE, ACATE, SEBRAE, ACE, SUCESU-SC, CNPq, FINEP, Prefeitura Municipal de Florianópolis, FIESC SESI SENAI IEL, ANPROTEC, Inatel, LOGO, UFSC, AITEC

Contacts: www.certi.org.br/celta celta@certi.org.br +55 48 3239 2222

In 2013, seven new companies began the incubation process. They are: BRABO, CREATIVE, CROWD, GEONUMERICS, NANOATIVA, RESULTADOS DIGITAIS and PNX. Five companies graduated in the year: (AGRINESS, CERTIMARCA, CHAORDIC, COMPLEX and ESSS), totaling 77 companies graduated by CELTA/ CERTI.

Graduated Companies

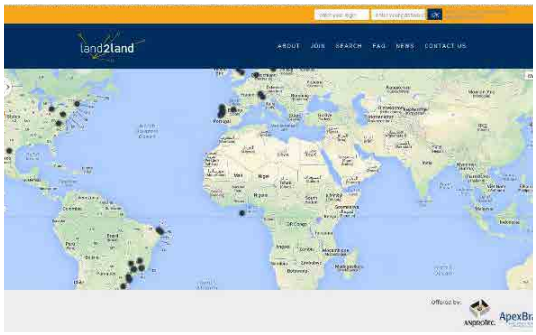
AGRINESS is a reference in information management models and solutions for agribusiness, with strong operations in the Brazilian pork industry and a market leader in the sector. Its serves more than 1,700 companies in Brazil, generating more than 1,220,000 hog matrixes and is found in more than 8 countries, exporting technology to all of Latin America and some European countries.

CERTIMARCA was born as a spin-off of another CELTA graduate, SUNTECH, and is the only company with Brazilian technology for generating and reading visible and invisible markings. The company offers tools for protection of brands and products in physical documents and digital content.

CHAORDIC develops solutions for the personalization and recommendation of e-commerce, and is found in the latest e-commerce operations in Brazil. In 2013, it received the award from the Great Place to Work institute and from the journal Revista Amanhã, as the best company to work for in Santa Catarina state.

COMPLEX offers personalized solutions in training, distance education, portals, on-line evaluations and content-generation systems for distance education. Placing the most modern technologies and methodologies at the service of education, it was awarded in Brazil by ASSESPRO and internationally with the Max Award.

ESSS gained international recognition for offering the market complete solutions in mathematical modeling and computer simulation and expanded its installations to Argentina, Chile, Colombia, the United States and Peru.



Land2Land Project

Developed by the staff of CELTA-GO!, through a partnership between Anprotec and Apex–Brasil, the Land2Land project is a platform for support to internationalization that allows approximating innovation environments, such as technology parks and company incubators in Brazil and abroad with innovative businesses that are interested in obtaining support for locating at these environments. Its goal is to both attract promising businesses to the local innovation environments and to facilitate the insertion of the different companies in qualified spaces outside of Florianópolis. The service provided ranges from proposing a website to the identification and selection of environments to integrate the platform. In all, there were more than 100 innovation environments analyzed in Brazil and abroad.

Consolidation of the CELTA Pedra Branca

Implemented in January 2011, with a project prepared by the CERTI Foundation, the CELTA Pedra Branca Incubator, dedicated to the development of the municipality of Palhoça, inaugurated its new offices in October 2013 with more than 7,000 square meters, encompassing 14 new incubated companies and a new business condominium. With this development, the CERTI foundation staff realized one more successful regional development project.

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

The effective installation of the Arrangement to Promote Innovation in Nanotechnology (API.nano) was realized, as well as activities for its promotion and efforts for its development and expansion. To do so, the 2nd Technical-Business Symposium on Nanotechnology and the II Nanotechnologies Workshop were conducted – on issues from science to the world of business. In addition, network organization was improved and a search made for new partners. Finally, emphasis was given to constant improvement in the quality of the programs for education and training of new talent, the NEO Business and the TOP Program.

Arno Bollmann
CIENCIA Executive Director

Innovative Competencies and Solutions:

- **Education of Staff and Training New Talent**
  Coordination of training programs for CERTI System employees
  Capturing and training new talents

- **Partnerships with Science, Technology and Innovation Institutions (STIIs)**
  Support for the establishment and maintenance of the "Competence Cells" at the partner STIIs
  Establishment of partnerships with STIIs to meet demands for S&T&I of mutual interest
  Prospecting of opportunities for new projects, programs or business of strategic interest
  Collaboration in Committees and Councils of Support Agents and STIIs

- **Incubation of Special Projects**
  Incubation of new Reference Centers
  New platforms for technology, products and or markets of interest to the CERTI System

Sectors served:

- S&T&I institutions
- Large corporations
- Financing agencies
- Government agencies
- CERTI System RCs

Featured partners:

UFSC, FAPESC, AHK Câmara Brasil Alemanha, MIT ILP, DHWI Digital Humanities Winter Institute, Fraunhofer, Prefeitura Municipal de Florianópolis, UDESC, FIESC, WEG, CAD, embraco, SEBRAE, Columbus

Contacts: www.certi.org.br/ciencia ciencia@certi.org.br +55 48 3239 2022

The staff of CIENCIA made constant efforts to contribute to the maintenance, expansion and establishment of cooperation projects with STIIs in Brazil and abroad. Special attention was dedicated to the constant improvement in the quality of the programs for education and training of new talent. In this way, CIENCIA can provide technological and scientific support to the CERTI System.

API.nano – Arrangement for Promoting Innovation in Nanotechnology

The mission of API.nano is to create an environment of communication and cooperation between companies and universities, respecting particularities, competencies and interests in an ethical and organized manner, in the promotion of the development of a competitive and innovative nanotechnology economic sector in Santa Catarina state and in Brazil. Since its installation in June 2013, the network has grown continuously. Initially composed of 30 member companies that supply or use nanotechnologies, research groups, science, technology and innovation institutes, development agents and government institutions, there are now 72 members that work with nanotechnology for textiles, metallurgy, resins, dyes, ceramics, foods, animal nutrition, biomedicine, medicine, dentistry, cosmetics, civil construction and legal affairs.

NANOTOX – Module of CI.nano

The purpose of this project is to create a base of knowledge of norms, procedures and processes that will support companies and researchers who work or want to work with nanotechnology in Santa Catarina, focused on the competitiveness of the products, solutions and companies. Financed by FAPESC, the idea is to model the process of analysis and evaluation of toxicity of nanotechnology products and processes according to international norms and standards and establish competitive advantages for their adoption by Santa Catarina nanotechnology companies. In this way, the project seeks to contribute to the process of modeling of a service of the Innovation Center in Nanotechnology planned for Sapiens Park, promoting the generation of specialized information and content about nanotoxicology, safety, management of risk of nanomaterials and others.

Monitoring of Competence Cells

The competence cells are advanced R&D units, led by a professor-researcher at the head of a team of undergraduate and graduate students and researchers in modern experimental laboratory environments, which have interests in common with CERTI units, which are seeking to establish long-term technical-scientific cooperation. CIENCIA began a study to identify and characterize the indicators that point to opportunities and possibilities for success and sustainability of a competence cell and define its main actions, resources and the good practices that can facilitate its creation, maintenance and growth, in partnership with a CERTI Reference Center.

Promotion of Talent

Operation of the NEO EMPRESARIAL [New Company] Program
NEO Empresarial is a program for training future engineers located at the CERTI Foundation. Composed of an average of 12 talented engineering students, it offers the realization of technical-scientific projects, internships during school vacations, personal development activities and management actions, and is co-sponsored by CERTI, Embraco and WEG.

Operation of the TOP Program – Training of Professionals
The ToP Group is an internship program for engineering, computing, administration and economic students that seeks to educate distinctive professionals by providing training in three foundational areas: technical and administrative knowledge and personal competencies. It usually has 12 members and is supported by the CERTI Investment Fund.

COOPERATION, COMMUNICATION AND SOCIAL CONTRIBUTIONS

COOPERATION

As expressed in the institutional mission itself, CERTI advocates promote support to customers in cooperation with other STIIs and technology-based companies and thus streamline and expand its capacity to generate solutions. Among the communities of interest, the highlights are in those organizations/units who participated in many of the achievements presented in this report.

COMMUNICATION

In order to nurture the dissemination of advanced knowledge of CERTI and its partners, or even for the purpose of marketing their products and services, the Foundation is committed to the achievement and participation in events, exposure in the press and in their own newsletters.

SOCIAL CONTRIBUTIONS

Alongside the activities of institutional management and operation to customers, there is a commitment from leaders and employees to promote actions that have significant impact on the social development of CERTI community and communities around.

SCIENTIFIC, TECHNOLOGICAL AND BUSINESS COOPERATION

Broader and more complex innovative solutions can be generated with greater agility, following the internal technological cooperation guidelines between the CERTI System Reference Centers, as well as the external guidelines for universities, technology centers and specialized companies in Brazil and abroad. The management of cooperation has been recognized as one of CERTI's special abilities. Aspects of the work conducted in 2013 in the four communities of partnerships identified are highlighted below:

Cooperation with the Federal University at Santa Catarina

The interaction with R&D laboratories and groups, departments and support foundations at UFSC has evolved significantly, to the degree that joint projects have been enacted and projects for clients are of increasing complexity, seeking to interact with competence cells of this outstanding federal university. The collection of logos presented does not represent all of the partnerships undertaken in 2013:

UFSC · LabEEE · INEP · LOGO Laboratório de Orientação da Gênese Organizacional · UFSC Departamento de Engenharia Mecânica · FEESC · labMAT · GRANTE Grupo de Análise e Projeto Mecânico · LabPlan Laboratório de Planejamento de Sistemas de Energia Elétrica · EGC · FAPEU · LAB UFSC METRO FLORIANÓPOLIS · LAFEX · DAS · FEPESE

Cooperation with STIIs, Financing Agents and Companies from the TECNÓPOLIS

It is known that large international corporations increasingly conduct their technological innovation processes by using the competencies of other companies and technology institutions. The CERTI Reference Centers, in their own projects or those for clients, have utilized the great potential of the organizations at the Technology Pole of Greater Florianópolis - TECNÓPOLIS. Below are some partnerships from 2013:

ACATE · Celesc Distribuição S.A. · CODESC · cventures · Eletrobras Eletrosul · E3C Tecnologia · FAPESC · FATMA Fundação do Meio Ambiente · INAITEC Instituto de Apoio à Inovação e Tecnologia de Palhoça · Instituto Federal Santa Catarina · Prefeitura Municipal de Florianópolis · PRODUZA · sabia · sapiens parque · SCPar · SEBRAE SC · FIESC CIESC SESI SENAI IEL Sistema Federação das Indústrias do Estado de Santa Catarina · socioambiental Consultores Associados · UDESC Universidade do Estado de Santa Catarina · Tractebel Energia GDF SUEZ

Cooperation with Brazilian STIIs, companies and associations

CERTI participates in important projects conducted in networks and consortiums, such as international projects, the SIBRATEC networks, and particularly, the large projects for implementation of industrial factories for Venezuela. There are countless existing partnerships highlighted by:

Cooperation with foreign STIIs and companies

Substantial advances were made in the interaction with foreign STIIs and companies, allowing access to advanced and complex infrastructures and technologies. In 2013, a cooperation agreement was enacted with the Fraunhofer Society, which represents 60 specialized institutes. In addition, the partnership with MIT opened new channels for the realization of the programmed "Challenge of Innovation." Technological partnerships with large companies in the IT sector make viable strategic developments for Brazilian industry.

COMMUNICATION

In 2013, CERTI gained significant visibility for its projects, actions and events because of the work of the Communications Office. CERTI received 381 spontaneous mentions in the Brazilian media. The production of 92 press releases and notes, and the accompaniment of 60 interviews with directors and chief technicians, led to the publication of 18 articles in national newspapers, 41 in statewide newspapers and 41 in local papers, in addition to 12 articles in nationally distributed magazines and 269 insertions in Internet bulletins. Yet, more aggressive activity began on social media, creating institutional profiles and becoming increasingly present on Facebook, Twitter, Instagram, YouTube and Linkedin.

Promotional Instruments

Website CERTI

Social Media

Bulletins and Journals

CERTIfique-se
(weekly)

for CERTI System Employees

CELTA Newsletter
(bi-weekly)

for the companies associated to CELTA

Event Promotion

CHALLENGE OF INNOVATION 2013
THINKING OUT OF THE BOX WITH MIT

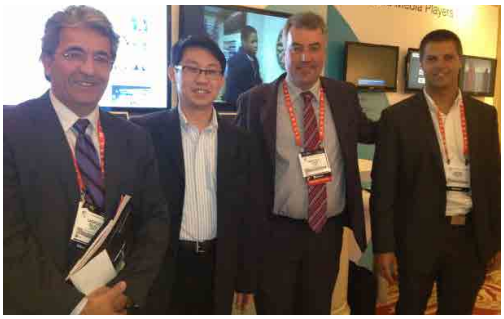
In May 2013, some 500 people, including businessmen and women and representatives of business associations and S&T&I entities, benefited from the second edition of COI 2013, in São Paulo. The event was promoted by CERTI, SENAI and the MIT Industrial Liaison Program (ILP-MIT), in a partnership with CNPq - the National Council of Scientific and Technological Development. A group of 11 internationally renowned researchers from the Massachusetts Institute of Technology (MIT) presented the leading developments in four strategic areas: energy, life science, material sciences and digital business.

2nd NANOTECHNOLOGY TECHNICAL-BUSINESS SYMPOSIUM

In March 2013, CERTI promoted, at spaces of the Tecnópolis, a set of activities for interaction between companies and universities, attracting 160 participants, including Brazilian and international researchers and businessmen and women. The event was organized by the Arrangement for Promoting Innovation in Nanotechnology (API. nano) of the Tecnópolis, under the coordination of CERTI and UFSC, with support from the Ministry of Science, Technology and Innovation.

Presence in Missions, Fairs and Exhibitions

With the proposal to learn about the state of the art of products, services and innovative solutions in which it act and also exhibit his competencies, CERTI participated systematically at fairs and events with advanced levels of S&T&I, such as:



CERTI AT THE CES
(Consumer Electronics Show 2013 in the United States)
As it happens each year, in January 2013, CERTI participated at the Consumer Electronics Show 2013 in Las Vegas, the world's largest presentation of technological innovations in consumer electronics. At the fair, CERTI presented the CERTI Smart Hub Platform, with Digital TV functions and applications for well-being, remote learning, Skype communication, voice commands and gestures, as well as educational solutions, such as the Student Portal and the Braille Device developed for MEC.

PARTICIPATION IN TPV WORKSHOPS IN ASIA
Also in January, CERTI was represented at workshops held in Taipei, Taiwan and Xiamen, China, when directors and managers of TPV presented the status of the Digital TV projects developed by CERTI together with the TPV team, involving GINGA and SmartTV solutions. The global CTO of TPV praised CERTI's work, for the quality of management and the technical results in the realization of projects, consolidating itself as the main partner in R&D in the global TPV.

CERTI AND PHILIPS PRESENT OLED IN MILAN
In April 2013, CERTI presented the Living Sculpture at the Euroluce International Lighting Exhibition, during Design Week in Milan, Italy. The Living Sculpture was developed by CERTI under the FUNTEC/BNDES project, using OLED technology developed by Philips. The product, which was a highlight at the fair, executes computer-programmed movements through the "dimerization" of the OLED components, and embodies other sophisticated technologies.

SENATE HEARING ABOUT RARE EARTHS
In May 2013, Prof. Schneider participated in a hearing of the Commission of Science, Technology, Innovation, Communication and Computing (CCT) and of the Temporary Commission for the Development of the law to regulate the mining and exploration of rare earth elements in the Brazilian Senate. According to the senator responsible for drafting the report on the proposed law, Luiz Henrique da Silveira, the objective is for Brazil to dominate all phases of the processes of utilization of these strategic minerals.

DIGITAL TV AT BRAZIL'S LEADING FAIRS
CERTI exhibited Digital TV solutions at ABTA 2013, a fair of the Brazilian Digital TV Association, in August 2013. At the end of that month, the institution participated, together with a team from CENDIT, at the Brazilian Congress of Television Engineering (SET 2013), in São Paulo. On both occasions, the CERTI collaborators participated in meetings with partners and suppliers, and in talks about the definition of the direction of Digital TV in Brazil and Latin America.

SOCIAL CONTRIBUTIONS

The CERTI Foundation develops an internal awareness program about environmental sustainability practices and the engagement of employees in social and health related actions, known as SustentAção.

In 2013, the program realized activities to encourage the adoption of habits that can lead to a better quality of life of the staff, such as work gymnastics, trail walking and healthy eating, and conducted a flu vaccination campaign.

Voluntary actions include donations for the celebration of Children's Day and Christmas for the elderly at social support institutions. CERTI also participated in a warm clothing donation drive and raised donations for flood victims in Rio do Sul.

certi interação

In July, the program promoted an integration and communication activity, CERTInteração, in which employees could learn more about CERTI's various fields of operation, installations and laboratories, at the main offices on the UFSC Campus, at LABelectron, at CELTA and at Sapiens Park (CV-FI, CES, CEV, INOVAlab and CRF), with a demonstration of solutions developed at these units of the Foundation. Sustainability actions designed to avoid wasted materials were also emphasized. A "feijoada" lunch was offered at CELTA.

In September, the CERTI soccer championship was held, a competition in the form of an electronic game on a giant screen, followed by leisure and educational activities, conducted at CV-FI, involving employees and their families.

Continuing the implementation of the Solid Waste Management Plan (PGRS) of the CERTI-offices, which established the best practices for handling and management of the residues generated, SustentAção used an outside space for differentiated storage of residues, before their final destination.

PGRS
SustentAção
Programa de Sustentabilidade do Sistema CERTI
PLANO DE GERENCIAMENTO DE RESÍDUOS SÓLIDOS
ESTAMOS IMPLANTANDO!

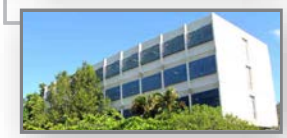
ENVIRONMENTS AND CONTACTS


CERTI - CRF


CERTI - CV-FI

InovaLAB/CES/CEV


CELTA - ParqTec ALFA


CERTI - Sede


CERTI - LABelectron


CELTA - Pedra Branca

Santa Catarina Island

CERTI - SEDE
Campus da UFSC, Setor C
Bairro Trindade
88040-970 Florianópolis - SC
Fone: +55 48 3239 2000

CERTI - CELTA
Parque Tecnológico ALFA
Rodovia SC 401, km 1
88030-000 Florianópolis - SC
Fone: +55 48 3239 2222

CELTA - Pedra Branca
Cidade Universitária Pedra Branca
Rua das Águias, 231
88137-280 Palhoça - SC
Fone: +55 48 3286 3192

CERTI - LABelectron
Rua José de Anchieta, 95
Bairro Balneário
88075-547 Florianópolis - SC
Fone: +55 48 3954 3000

INOVALAB / CES / CEV / CRF / CV-FI
Sapiens Parque
Av. Luiz Boiteux Piazza, 1302
88056-000 Florianópolis - SC
Fone: +55 48 3261 2800

FLORIANÓPOLIS

THE INNOVATION CAPITAL

WWW.CERTI.ORG.BR

certi

Reference Centers for Innovative Technologies