



### SUSTAINABILITY REPORT 2012



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#### INTRODUCTION

Through the pages of this report, the reader is invited to know us better, understand what we do and, above all, how we do it. This publication is a very important communication tool, which shows our vision of the world and describes how we act to become a leading player on relevant issues, such as reducing the use of natural resources and social issues.

Therefore, the report was written for everyone, be they laymen or technicians. For all our managers, all our employees, all our partners, all our shareholders, all communities where we operate and for anyone interested in sustainability issues.

Here, you'll understand how innovation is able to build and create products with respect for the environment. Our compressors are designed to consume less energy and use the minimum amount of raw materials.

The Embraco Sustainability Report 2011 also shows our internal policies for valuing people. We present several initiatives to provide greater safety for employees and to recognize the good work they perform, in addition to actions outside the company, such as support for environmental education. Our management and governance structure is part of the report, as well as the commitments made globally by the signing of protocols.

We have prepared the report based on the Global Reporting Initiative (GRI), a nongovernmental organization that develops global reporting guidelines. On adopting GRI, we are committed to international concepts, along with other prominent companies, who share the same concerns as we do. GRI indicators are highlighted in this report and can be easily consulted by the reader.

With this report, we are disclosing our actions and improving our transparent relationship with our public.

Embraco seeks innovation to create products that respect the environment



# BRILLIANT FUTURE

We are walking with strong steps along a very promising path. Embraco has a brilliant future ahead. Our plans are very clear, and we know where we are headed to. We want to be a company increasingly global, more innovative and more relevant to a sustainable planet. We will continue focusing our attention on developing people and teams that provide technological development as intense as it has always been in our company.

We offer training, workshops, exchange opportunities and vacancies for people to work outside their countries of origin. It is an environment that values differences among people, among cultures and among professional backgounds. Here, the differences are complementary. Only committed teams, aware of their importance can prepare the company to face the market's challenges, balanced with social and environmental demands. I would also like to

emphasize the importance of having people who develop employees and challenge our partners. They are leaders who make all the difference in the day to day and in our strategic plans. Rounding off the scenario of our commitment to social-environmental issues is our adhesion to the Global Compact, since 2005.

In 2011, Embraco celebrated its 40<sup>th</sup> year anniversary. A trajectory that will continue to be recognized by the intense dedication to innovation. I am particularly passionate for technology, for research and development. Innovation is the reason for Embraco's existence. It is our strength. Innovation moves us, and it is its fruit that sets us apart from competitors around the world: for example, we applied for 69 patents in 2011, 62 of those on inventions. We will continue researching hard to get to products that are more efficient, with lower energy consumption and that use fewer raw materials.

In 2011, Embraco celebrated 40 years of a trajectory recognized by its intense dedication to research and development.



I am pleased to have participated in this history. I say this not only because I have been the company's president since April 2012, but with the experience of someone who entered Embraco as an intern 25 years ago. Since then, I have held various positions, participated in several projects and worked in different areas. I have met many people and I can confirm that our



culture of seeking excellence in what we do, the established values and pillars that guide us are ingrained in every corner. Our company has very strong governance, concerned with creating value for the entire chain involved. Our work has a clear objective: to impact all our publics positively.

Embraco is a unique company, solid and visionary. We are market leaders but above this, we want to be leaders of people. We want to inspire them and motivate them to build a brilliant future, an innovative future, a sustainable future.

Roberto H. Campos President of Embraco

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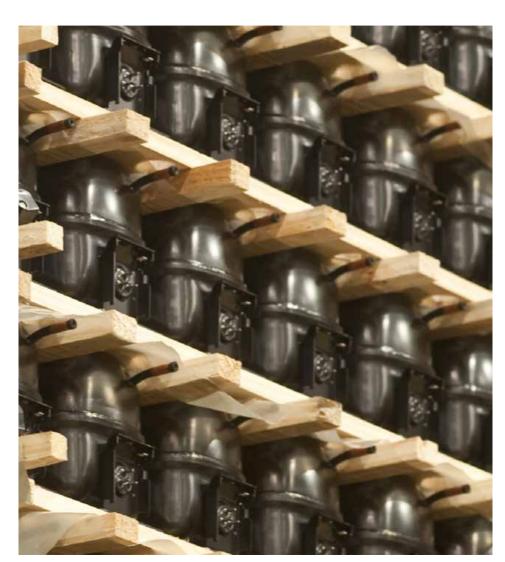
VALUE

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Technology is Embraco's differential to ensure leadership in its sector

#### **PROFILE**

# WHO WE ARE

We, from Embraco, lead the world market in manufacturing hermetic refrigeration compressors. The products are used in household appliances such as refrigerators, freezers and air-conditioners along with industrial machines such as refrigerated counters. Our biggest differential is technology. Technological development is what enables us to launch competitive, modern and high energy efficiency models - a trend of a market in which we are a alobal benchmark.

In 2011, we highlight the launch of the world's first Bivolt compressor, an immense challenge for the sector. produce Bivolt refrigeration equipment, it was necessary to couple voltage transformers. But these transformers are very large, which reduces the free space inside the final product and also increases manufacturing costs. Our solution to circumvent the problem was to develop a special electronic board. It recognizes the network's

voltage and automatically adjusts the voltage feeding the equipment. In a pioneering manner, the company developed a compact, complete and commercially viable solution.

The new model pleased manufacturers, retailers and consumers. Consumers no longer need to worry about buying household appliances that only work with one voltage type. And manufacturers and retailers can measure better inventories and more accurately plan distribution logistics (read more on page 20).

Embraco was founded in 1971, in Joinville, Santa Catarina (Brazil), where it maintains its headquarters. The company underwent a corporate reorganization in 2006 and joined the household appliance manufacturer Multibrás, forming, in Brazil, Whirlpool SA, controlled by the North American Whirlpool Corporation, which until this time had been a shareholder of both organizations. Embraco focuses on the production of compressors, while Multibrás manufactures household appliances. Since Embraco provides refrigeration solutions to the entire market, it maintains its management independently, with a strong shielding policy which ensures the confidentiality of information, protecting its business and its customers.





# EMBRACO STRONGER IN MEXICO

One of the most noteworthy events for Embraco in 2011 was the start of operations of our new plant, in August, in the city of Apodaca, in Greater Monterrey (Mexico). The factory employs about 700 people and has production capacity of 2.5 million compressors per year. But these numbers should increase even more with new investments. The expectation is that, as of 2013, capacity will reach 5 million units per year, with a total of 1,000 employees, in addition to 500 indirect jobs generated in the local supply chain.

The factory in Mexico was established within the concept of sustainability and "green building". The elevators, ramps and accesses were built larger than usual, to facilitate access for people with disabilities. Embraco Mexico also has temperature control systems for water and energy consumption. Moreover, it uses energy-efficient equipment and has natural gas as its main energy source.

The entire construction was designed to value natural light and ventilation and adopted the use of thermal-insulated walls. This set helps the factory reduce energy consumption for lighting and cooling internal facilities.

With the new unit, Embraco will increase EM compressor production, a compressor that caters to the high energy efficiency niche. Production will attend consumer demand from Mexico and the United States.

Factory in Mexico was designed as a "green building" to meet various sustainability criteria.



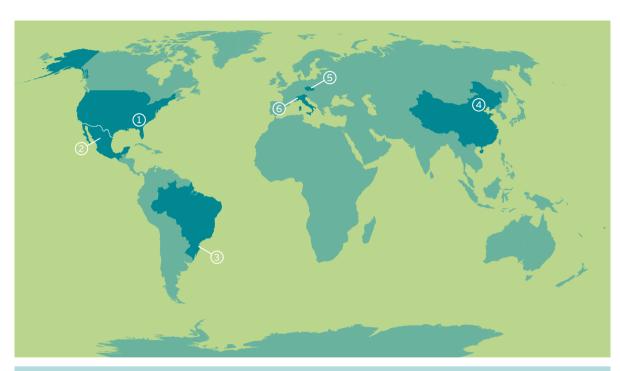




# GLOBAL REACH

Embraco has interconnected and complementary units in six countries across three continents. In addition to Brazil, where we began our work, we have staked flags in China, Slovakia, Italy, United States and Mexico. The Mexican factory, together with the expansion of Slovakia's facilities, will increase our production capacity of 32 million compressors / year to nearly 35 million compressors / year. In total, we have five compressor factories, three component factories for compressors and one foundry. Our products are sold in over 80 countries.

Employees by country (data from December 2011)		
Brazil	6,901	
Italy	624	
Slovakia	2,351	
China	2,176	
United States	59	
Total	12,108	



#### **01 EMBRACO UNITED STATES**

Suwanne, Georgia

Warehouse and commercial office

#### **02 EMBRACO MEXICO**

Apodaca, Monterrey, Nuevo Léon Compressor factory and office

#### **03 EMBRACO BRAZIL**

Joinville, Santa Catarina

Headquarters, office, compressor factory, electronic component factory and foundry

Itaiópolis, Santa Catarina

Component and cooling system factory

#### **04 EMBRACO CHINA**

Beijing

Office and compressor factory

Electronic component factory

#### **05 EMBRACO SLOVAKIA**

Spisská Nová Ves

Office and compressor factory

#### **06 EMBRACO ITALY**

Riva Presso Chieri

Office and compressor factory

#### Mission

Offer innovative solutions for a better quality of life

#### Values

Diversity with inclusion Spirit of Winning Integrity Respect Teamwork

#### **Pillars**





# NEW EMBRACO BRAND

In 2011, we renewed our brand positioning, accompanying our business' evolution. The cornerstone of this new positioning was the change in the logo, which brings the concepts of movement and renewal through its design while at the same time being simple and modern.

The new positioning reflects our understanding of how Embraco's leadership should be in the market and in relationships with all our publics. It is expressed in four values, which are the base of our attitude.

In each of them, there is a double meaning, which converses between potential and challenge, between present and future. In this report, the four values permeate all topics, and the reader is invited to better understand how the new brand is intrinsic to each step taken by Embraco, from the daily routine in the factories to the strategic decisions.

#### **DELIVERING INTELLIGENT** PERFORMANCE

Delivering Intelligent Performance involves understanding what users of our products consider as intelligence and meeting this expectation. Every day we must be more and more connected to the market, offering unique and useful solutions.

#### **CULTIVATING PASSION**

To form talented teams is to unite people passionate about what they do and with the desire to seek more challenges. It's to develop innovative professionals who know how to work through the diversity of people and cultures. Cultivating Passion is to encourage employees to recognize their leadership role within the company and society.

#### SHAPING THE GLOBAL SCENARIO

We are in constant contact with different regions, countries and cultures, which gives us a good competitive advantage. At the same time, it reminds us of our responsibility as leaders, brings us the possibility of helping other people, other companies and our customers, showing them what is happening around the world.

#### TRANSCENDING THE FUTURE

After 40 years, we continue being a very modern company, thanks to actions and efforts in pursuit of innovation and technology. Transcending the future is to look to the future, act in the future and be the future, investing in research and development, anticipating trends and expanding knowledge.



New brand's design emphasizes movement and renewal

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# NFW LEADERSHIP

Throughout 2011, we prepared for important changes in our management. Changes that started being implemented in the first semester of 2012 and that value the exchange of best practices, enhance the company's global nature and accelerate the progress of cultural diversity.

The main highlight of Embraco's new phase is the change of Presidency. João Carlos Brega, who took over as president about three years ago, received another mission. Brega is now president of Whirlpool Latin America. In his place is Roberto Campos, Vice President of Business and Marketing as well as EECON. Campos joined Embraco in 1987, having had management positions in various areas and also served as vice president of R&D and Procurement. It's a move that strengthens our technology leadership expansion strategy allied with market demands, leveraging our expertise in innovation and further valuing the relationship with customers.

Vice President of R&D Marcio Todescat Planning

Vice President of Finance. IT and

Vice President of Operations. Management and Sustainability Lainor Driessen

Vice President of Business. Marketing and **EECON** 

Presidente

Vice President of HR

> Corporate Legal Director Bernardo Gallina

**Corporate Materials** Director

Assuming the Vice Presidency of Business and Marketing is Reinaldo Maykot. Since 2009, he had been responsible for the Directorship of the Domestic Refrigeration Business, through which he participated in conducting global business for this sector. For this position, Embraco promoted the Italian Pierluigi Zampese.

Henrique Haddad (who served as Embraco's CFO and Human Resources VP) went to Whirlpool Latin America. In Haddad's place, Embraco appointed Arthur Azevedo, in the role of Vice President of Finance, IT and Strategic Planning.

The structure also counts on something new that strengthens Embraco's cultural diversity. Ursula Angeli is the first woman to assume a vice president position. She took over the Human Resources area. which was also previously run by Henrique Haddad (now the board is composed of five vice-presidencies). Ursula has worked in the area for over 16 years and seven of these years with Whirlpool. In the company, she occupied the position of Organizational Development Director.

In relation to cultural diversity, it is worth mentioning that, once again, Embraco's unit in Italy will be led by an Italian, Giuseppe Daresta. He takes over from Brazilian Emerson Zappone, appointed to be the new director of Embraco Brazil. Luis Felipe Dau, previously director of the Brazilian factory, now serves as director of Embraco China as of May 2012.

Another change in management was the dismemberment of Procurement from the R&D Vice Presidency. The Procurement area now reports directly to Embraco's president, under the leadership of André Vincent.

The year 2011 marked the beginning of management changes that were consolidated in 2012, intensifying the company's global nature and strengthening its cultural diversity.







### INTERNAL ASSESSMENTS

The Executive Committee, known in Embraco as the President's Staff, takes care of Embraco's economic, environmental and social planning and oversees that the company properly follows adopted international standards, in addition to internal conduct codes and principles. Another committee function is to assess the performance of the organization and the executives through quarterly reviews. Annually, the company maps and monitors the key business risks using the Enterprise Risk Management process, as well as perform mitigation actions.

4
9
13
11
2 (Brazil)

#### **INTENSE RELATIONSHIP**

One of the tools that help us maintain a good relationship with employees is the communication channel network that Embraco makes available in its units. Each country has a specific policy. In Brazil, the company has the tool Open Channel, a network of computers that allow people to send questions and suggestions directly to the board of directors. In Italy, the employee can make suggestions and inquiries directly, with the factory's communication team. In Slovakia, the strategy was to put suggestion boxes and a hotline to receive reports on any environmental issue that may have occurred due to the company's operations.

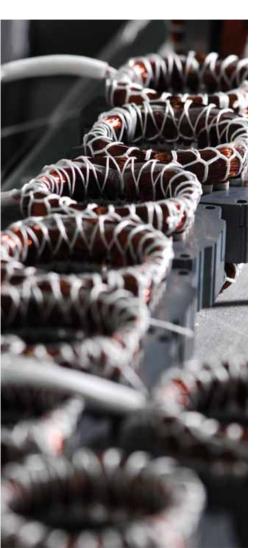
The Chinese have opted, along with the suggestion box, for an e-mail that goes directly to the general manager. In North America, the intranet also allows employees to express their opinions.

Another relationship channel is the Ethics Committee. Employees can contact the committee, with anonymity guaranteed, through a hotline or e-mail, if they perceive that concepts of ethics and conduct are not being followed in some way in the company. In 2011, Embraco concluded 11 contacts, with seven in Brazil, three in Slovakia and one in Italy.

Dialogue with employees helps maintain the good relationship







Technology and innovation have marked our operation

since 1971

# TIME LINE

### 1970

Empresa Brasileira de Compressores S.A. (Embraco) is founded in 1971 in Joinville, Santa Catarina, Brazil. Operations begin in 1974, with the production of the first compressors. Exports begin shortly thereafter. The compressors begin to be sold to Peru in 1977 and then to the United States and Canada. It is the first step in the company's journey to becoming global.

### 1980

The decade is marked by the development of a technology and innovation culture within Embraco. The company signs, in 1982, the first technical cooperation agreement with the Federal University of Santa Catarina. The following year, establishes the Research & Development area. The practical result was evident in 1987 with the arrival of the first compressor to the market with 100% Embraco technology. In the same year, the company demonstrates its concern for the environment by participating in the UN's Montreal Protocol and commits itself to creating alternatives to eliminate the use of CFC gas.

### 1990

At the end of the decade, Embraco begins producing 21.7 million compressors per year, a figure achieved thanks to international expansion. In 1994, we acquire a factory in Italy. We then create an industrial joint venture in China (the first Brazilian company in the country). In 1998, it is time for Slovakia to receive Embraco's operations. The decade is also rich in sustainability issues. We receive ISO 9.001 certification, begin producing compressors for alternative gases to CFC, launch the Embraco VCC, today a high energy efficiency model, and also create the Embraco Ecology Award in Brazil.

In 2006, we begin operating in Brazil under the corporate name Whirlpool SA and developed ourselves within the concept of sustainability and continuous improvement. We sign the UN's Global Compact in 2005 and in the following year, the plants from Brazil, Italy and Slovakia receive OC 80.000 certification which aims

to eliminate harmful substances from the environment. In 2007. Embraco Snowflake is certified by ISO 14.001. Another notable event was the inauguration, in 2003, of our electronics unit, Embraco Electronic Controls (EECON), focused on manufacturing the compressor's electronic components. Today, EECON also has a factory in China.

### 2010

In 2010, we launch another revolutionary product, the microcompressor, which will allow the development of portable cold. In 2011, we begin the operation of our plant in Mexico within the most demanding standards of sustainability and eco-efficiency, as well as the expansion of Slovakia's plant. We also define Embraco's new brand with four values. The new identity makes our desire and challenge to be an increasingly more global company even more evident.



### **AWARDS**

#### 2011

- → China Home Appliances Exposition
- →- EMT (R290) Series: Low Carbon Emission Pioneer Award
- →Embraco VCC:
- Technology Innovation Award
- $\hookrightarrow$  EMD Series: Golden Heart Award
- → Embraco was among the 10 most innovative companies of Brazil
  - → Época Negócios magazine, in partnership with ATKearney consulting
- → International Exhibition and Conference for Power Electronics, Intelligent Motion and Power Quality (PCIM) – Invitation to participate in the board
- → Guia Exame de Sustentabilidade (Sustainability Guide):one of 20 sustainability model-companies of Brazil
- → Via Bona National Award, from Pontis Foundation, in Slovakia:
  - → Main prize for long term partnership with local hospital.
- → Honorable recognition for responsability towards employees.



We were voted one of 20 model-companies by Exame Sustainability Guide

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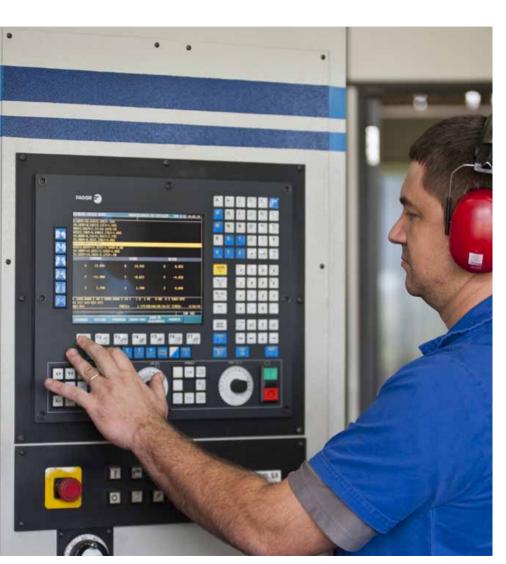
**PEOPLE** 

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EWM increases the synergy necessary to offer intelligent solutions **MANAGEMENT** 

### OUR WAY OF WORKING

How can we remain leaders in such a competitive market? How can we become increasingly connected with the demands of our customers, consumers and society as a whole? These questions need to be asked daily by all our employees. The importance of this reflection is such that it was inserted into the new brand, under the phrase Delivering Intelligent Performance. It is a value that expresses our desire to discover and offer intelligent and innovative solutions for all our publics. But how to do this?

The path we have adopted to put this thought into practice is applying the Embraco Way of Management (EWM), the Embraco Management Model. EWM demonstrates our way to manage the company. It is a concept that directs the company to become each day more integrated with different areas that interact with each other. The goal is to act in a united and cohesive manner through

process improvement and use of methods and management tools. In practice, EWM increases the internal synergy and defines how the areas should act together, seeking to enhance efficiency and improve customer service.

In 2011, we went through an important experience to consolidate management by process. An example is the Demand Management process, implemented in 2011, which is part of the Supply Chain Management macroprocess (see list of macroprocesses below). Demand Management allows long-term demand (which varies from four to 18 months) to be planned with more precision, thanks to integrated collaboration between different areas. Sales, market and statistical analysis sectors provide information which, analyzed interconnectedly and in a contextualized manner, create a more appropriate and efficient planning.







EWM is assessed frequently to keep itself alive and dynamic

Throughout the year, we also conduct training as part of the integration portfolio in all our units. They are trainings to further consolidate the EWM concept among our employees and managers. Another highlight is the development of Routine Management in Manufacturing (read more on page 34).

To maintain EWM always alive and dynamic, it is necessary to assess, from time to time, how we are evolving in relation to our management practices. This reflection occurs annually and is a great learning opportunity. In 2011, the assessment was conducted in two stages and was based on the criteria of the National Ouality Award (NOA) and on internal reguirements, established by Embraco itself. The first step assessed our "Processes", to understand the evolution of management practices. Together with an external consultant, we conducted several workshops and interviews with various employees from different areas of the company.

In conversations, we asked their opinion on the practical application of seven criteria (leadership, strategies and plans, customers, society, information and knowledge, people, processes). The answers, jointly with the analysis of other external sources, such as awards and recognitions received by the company, help

Identifying improvement opportunities through the units' assessments helps Embraco make decisions to develop the team of directors and work focused on its process management.

us to understand how management can help improve our day to day, what are the strengths and where are the opportunities for improvement.

One of the highlights pointed out by the units' assessment in 2011 is Social Development, which evolved 25% over the previous year. On the other hand, cooperation between the areas appeared as one item to improve. Identification of this improvement opportunity helped Embraco make the decision to develop the team of directors and work more focused on management by process. Thereby, we disseminate the culture that the professionals work for the whole company, not just one department, and encourage areas to act and speak more intensely.

In the 2011 assessment, the corporate sector stood out for the following items:

- → awareness of risk management;
- → succession plan;
- → management by processes and standardization;
- → refinement and standardization of indicator management;
- → Embraco brand repositioning and application of values;
- → cause and effect relationship between actions and

The assessment's second stage is called "Results". At this time, we analyze the behavior of indicators that encompass the entire company. One example is the financial information, such as revenue, costs and cash flow. With the survey in hand, we compare the results achieved with the stipulated targets and the results obtained by other companies in the world market.

In 2011, the assessment's results in the two steps (Processes and Results) placed Embraco at maturity level 6. This is the score range of companies considered leaders in their field of operation. For 2012, our goal is to climb one more step and reach level 7, being at the same level of companies honored by national awards such as NOA

In EECON Oingdao,

the team gathers in kaizen to address

work safety

#### INTEGRATED COMPANY

To further enhance our management and prepare ourselves for global challenges, we are developing management by process through the Evolution Project. The idea is to identify and redesign internal processes, to bring us more agility and speed. We now see the company as something more integrated, removing the barriers which divide its areas.

In this way, information and knowledge circulate more quickly, greatly increasing our efficiency. A marketing process, for example, counts on the participation and work of employees from various sectors, units and countries, such as Innovation, Human Resources and Supply Chain. Everyone contributes in some way to help the process.

### Until 2011, the following processes have been worked:

- → Supply Chain Management;
- → Innovation Management;
- → Marketing & Customer Management:
- → People Management;
- → Finance Management.

Until 2011, 249 process models were designed and validated. Another 498 are in the design or assessment stage. The mappings are developed according to Embraco's strategic priorities. In 2012, we have approximately 18 projects in progress for process review and creation.

### LFAN THINKING

Lean Thinking is the philosophy that guides our efforts to be an increasingly more efficient company. Lean means light, streamlined. Our idea is to make Embraco exactly like this: no fat, no waste. In practice, this means an obsession for details, which together result in great achievements. We seek to avoid unnecessary transport, always maintain production adjusted to consumption and take care of equipment so it operates in the best way possible.

But how can we detect these small details. that make the difference? Our answer to this question lies in the Value Stream Map, a semi-annual planning that describes improvement opportunities in units, prioritizing the execution of each one of them. With map in hand, managers convene meetings to take care of each opportunity.

They are improvements in several areas: safety, standardized work and supply system. These meetings or groups that fight against waste are called gemba kaizen (continuous improvement, in Japanese). The kaizens also need to be light and lean. They receive a single mission and take, on average, one week to find a solution to the



### KAIZEN IN NUMBERS

**China:** 69 *kaizens* (34% related to standardized

work to increase productivity)

**Slovakia:** 79 kaizens

**Italy:** 63 *kaizens* (39% related to TPM to increase

equipment efficiency) **Brazil:** 227 kaizens





Kaizens are a fundamental part of our global

# STANDARDIZATION OF OPERATIONS

Koizens had an important year in our strategy of consolidating our position as a global company. In 2011, an extensive project was carried out, aiming to standardize the operating procedures in all production lines. An example is the inspection checklist of basic conditions (operator's procedure to ensure

By following a list of pre-established actions, employees confirm if the correct material is available and if the equipment is functioning properly. The result is greater safety and accuracy. In addition, standardization perfected other mechanisms, such as workstation documents, supervisors' management tools and formalization of critical analysis process forums.

Thanks to the standardization strategy, we can optimize the preventive inspection control, detect problems early and act quickly to correct the deviations in the process. Simplification of standards also increases synergy and alignment among the factories, making our manufacturing even more efficient. The project is in the phase of certifying the pilot areas - which serve as models for expansion into other areas - but we've already noticed great benefits in the day to day, such as waste reduction, increased reliability and better risk control.

Productivity increase (compressors produced per hour)		
Factory	(comparison of % evolution - 2010 and 2011)	
Brazil	3.8%	
China*	7.1%	
Italy	10.7%	
Slovakia**	7.2%	

- \* We did not consider the EM 3.4 line module.
- \*\* We did not consider the EM line, implemented in 2011.

The results of the various measures we have taken throughout the year can also be expressed in improved efficiency. We recorded an increase of more than 3.5% of our productivity rate, when compared to 2010.

### IMPROVEMENT CIRCLES

## EFFICIENT ROUTINE

Throughout 2011, we began the manufacturing routine management process. It is a process that seeks to standardize the manufacturing management activities in all plants to reduce the number of failures during production. Consequently, we have improved our efficiency and have gained more predictability in the results. Through routine management, we have reduced the number of failures by 30% in the production processes.

The project was put into practice with the creation of committees in each of the plants. The committees are interdisciplinary, composed of professionals from various areas, who map, identify improvement opportunities, guide and assist the operation team in the implementation and correct use of standards.

In 2011, we were able to integrate the routine management standardization to other existing initiatives in Embraco, such as autonomous maintenance, help chain, labor certification and BBS (read more on page 34). Another important example is the integration of routine management to our quality control program. We developed an inspection checklist of 5S, safety, quality, production and maintenance aspects which indicate correct conditions for operation. Ensuring these conditions bring greater efficiency and better results.

Continuous improvement within Embraco also has the support of volunteers who make up the Ouality Control Circles (OCC). The groups concentrate on finding opportunities to improve the routine of factories and cut waste. These can be simple details, such as reducing water consumption when washing hands, or even develop equipment that make the work more efficient.

To encourage employee participation, Embraco offers gifts, awards, recognitions and even trips to events to exchange information and experiences with OCCs from other cities, states and companies. Until publication of this report 427 OCC teams have been created in Brazil, involving 2,612 people. With great dedication, the volunteers were able to develop 3,862 projects throughout the year.

One of the highlights among the projects developed by the QCC in Brazil, in 2011, was the reduction of water consumption

in the process used in the Midis compressors' paint booths. In this process, every 15 minutes the used water is changed, which leads to a very high consumption of the liquid.

3,862 improvement projects were created

through Ouality Control Circles, involving 2,612 volunteers.

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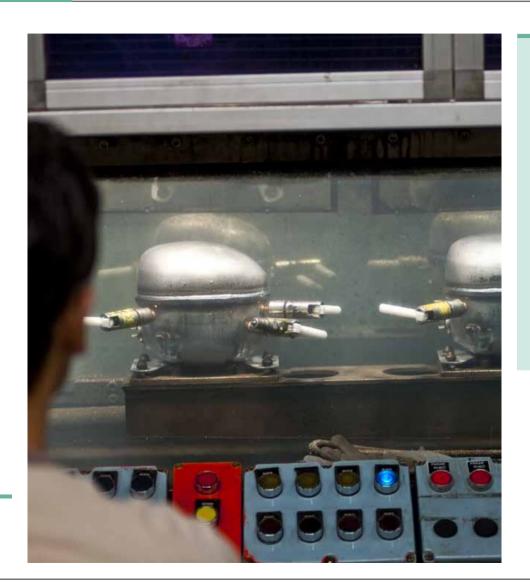


Quality Control Circles (QCC) encourage professionals to find solutions, from the simplest to the most complex, with the goal to improve factory routines, increase efficiency and cut wastes.

The team realized that one reason for using so much water was the rinse pressure nozzles, the last step before the product goes to the drying oven. Therefore, the goal was to reduce the number of nozzles. After many tests, they realized that the painting process continues to work well if only two nozzles were used, and not six, as originally.

Furthermore, the team installed a float in one of the painting process' tanks and changed the drain system. The initiative reduced water consumption from 326.69 cubic meters to 141.3 cubic meters per month, a 57% savings. The amount of water saved in one year is sufficient to supply 185 houses in Joinville for one month.

Employees' contribution ensures quality in our processes



### SOLUTION IS IN THE DETAIL

In our factory in China, we faced a problem of refrigerant leakage in one of our machines. Each leak represented more than 14 liters of the fluid, causing environmental and financial cost. The QCC team discovered that the problem was in the fragility of one of the parts: a small pin that broke easily. So, the circle redesigned the pin so that its replacement is faster and more agile. The idea is simple, but with excellent results. Now, the maintenance time was reduced, and the leaks have been eliminated, increasing production efficiency.

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Efficiency reducing energy **SUSTAINABILITY** 

# VISION

When we talk about sustainability in Embraco, we immediately think about our high energy-efficiency compressors. With technology and innovation, we develop products that help reduce energy consumption. Besides the reduction in the electric bill's value, which can be seen every month, our products have significant impact in environmental terms.

Today, one of the planet's biggest challenges is to find new energy sources to meet the demand of a population of 7 billion people. In June 2012, for example, the UN launched the Sustainable Energy for All pact, signed by Embraco, which through the efforts of various organizations, businesses and governments seek to ensure access to reduced impact energy for all. The world will only succeed in this endeavor if we can use energy rationally and intelligently. This is where Embraco's work is even more valued. The refrigeration sector

is responsible for 15% of total energy consumption in the world. More efficient compressors, refrigerators, freezers and refrigerated counters collaborate to the planet's health and avoid unnecessary energy use. This efficiency can be expressed in numbers: if all the refrigerators in Brazil were equipped with Fullmotion technology, the energy savings would be enough to supply every household in the city of São Paulo for almost six months.

Reducing energy consumption is one of the greatest challenges facing humanity. Embraco operates in this area, offering compressors with high energy efficiency, resulting in less CO2 emissions and savings on the electricity bill.

#### **GREEN FACTORIES**

Sustainability is one of the five pillars that shape the way we work, since it is inherent to our internal manufacturing processes. Day by day, we seek to reshape the procedures in our units to save water, energy and other raw materials. To combat any wasted droplet, we qualify and train people to identify these small opportunities for improvement and quickly forward a solution.

In 2011, however, we were not able to achieve our goal of reducing water and energy, which was set at 10%. In contrast, the rate increased by 3%. There are some reasons that explain this performance. The first cause is connected to the measurement criterion. In Embraco, water and energy consumption are measured by manufactured compressor. With the 2011 crisis, there was a slowdown in production. The problem is that, to keep the plant operating, there is a minimum energy consumption. In practice, this means that the more we produce, the lower our energy consumption per compressor. However, when production falls, consumption per manufactured unit rises.

Another reason for not having reached the goal is that in the first years of implementing processes to reduce water and energy consumption we achieved great success with simple actions such as solving small leaks in hoses or orientating employees to use some equipment appropriately. After this initial phase of minor adjustments, great results are only achieved with large structural modifications, like changing equipment in factories. These major investments will be made only in the next years.

On the other hand, we can mention an interesting initiative. Our unit in Italy implemented a system for heating water using solar energy. The installation allows the use of hot water in the new dining hall and administration area's bathrooms. This way, we reinforce our goal of developing renewable energy sources.

Energy consumption per compressor		
Brazil	9.4 kwh/compressor	
China	7.4 kwh/compressor	
Italy	12.4 kwh/compressor	
Slovakia	18.4 kwh/compressor	

### VALUE CHAIN AND COMMUNITIES

We also advanced greatly in the mission to bring sustainability practices to our entire value chain. We conducted workshops, lectures and actions with pedagogical features for our employees, customers and suppliers. In 2011, 2,028 people participated in educational activities, with 1,103 in China alone.

Another of Embraco's area of activity is social investments - initiatives together with communities to promote education, health and environment. An example is the Embraco Global Volunteer Day (read more on page 33). In 2011, our social investment reached more than 28,000 people around the world.





# GAS EMISSION TRANSPARENCY

The fight against global warming has been gaining significance in Embraco's work. In 2011, we conducted an inventory of our gas emissions relative to 2010. The units in Brazil and Italy participated in the pilot survey. In Brazil, the studies covered the so-called scope 1 (direct emissions such as fuel and gas consumption used in the factories' air-conditioning, for example) and scope 2 (indirect emissions, which are the energy and heat purchased from a utility or another company).

In Italy, the inventory went beyond these two items and also addressed scope 3. This field refers to gas emissions that occur during the work on logistics, such as raw material transport, travel and product distribution.

In 2012, the inventory will be performed again. The big news is that Embraco has

Inventory total amount (t CO <sub>2</sub> eq)		
	Brazil	Italy
Scope 1	13,305	3,784
Scope 2	9,444	6,217
Total	22,749	10,001

# **IMPROVEMENTS** IN PROCESSES

At the end of 2011, we studied the inclusion of sustainability criteria in the Lean Manufacturing actions, a program based on the kaizen concept (actions that search for continuous improvement in the company's internal processes). In this way, we awaken the concern of teams to important elements in the environmental and social spheres. The teams get together to improve the productivity of any process,

Kaizens are actions developed with the goal of continually improving Embraco's internal processes. Aspects such as the reduction of water and energy consumption, rational use of raw materials and CO<sub>2</sub> emissions began to be observed by these teams in 2011.

more carefully consider and report issues such as water reuse, reduction of energy consumption, rational use of raw materials or even CO<sub>2</sub> emission.

The benefit to people also integrates Lean thinking. There are kaizens, for example, that seek to develop improvements in workplace safety procedures and analyze the possibilities of disabled people to occupy work posts in the factories. Planning to include sustainability items on the Lean worksheet occurred in 2011. The implementation began shortly thereafter, in February 2012.





### LESS WASTE, LESS DISCARD

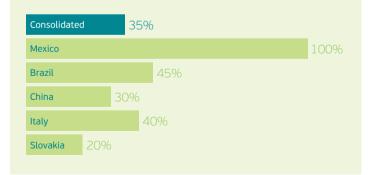


identify leaks

Within the sustainability actions, we can also cite the identification of oil leaks in our factories. It is common that the machines, over time, have little problems that result in oil leakage. Until 2010, this liquid was collected and discarded in a proper and environmentally responsible manner. Now we are taking a step further. Our objective is to avoid, to the maximum, these leaks and, consequently, the discard.

In 2011, we began to train our operators, transforming them into leak identifiers, so they can report them quickly. After identification, the operators themselves are able to make simpler repairs. If the problem persists or is technically complicated, the employee is instructed to communicate the improvement opportunity to the specialized maintenance team, through the tag system (see more on page 19).

### **NEW RAW MATERIAL**







# PACKAGING REUSES

A very important initiative and integrated into our work in 2011 is the reuse of packaging (wooden pallet) that protects the compressors manufactured in Brazil. We developed a project so that the material is not wasted or discarded improperly. For this, we work together with three Brazilian customers. They return the packaging to us, and we become responsible for reusing them in the best possible manner. For the idea to be put into practice, we created different ways so that each customer can participate, as in the following methods.

1 Customer purchases Embraco compressors - removes product from packaging - forwards wooden pallets back to Embraco - Embraco selects the material for reuse.

- 2 Customer purchases Embraco compressors removes product from packaging contacts Embraco, who goes to the customer and picks up the pallets Embraco selects the material for reuse.
- **3** Customer purchases Embraco compressors removes product from packaging forwards wooden pallets to one of our suppliers the supplier selects material and forwards for reuse.

With this initiative, we have achieved excellent environmental gains. In three months, we have reduced by 19% the need for new pallets.

# PRIORITY THEMES IN EECON

In 2011, we formulated the Relevance Matrix in the electronics unit, EECON. It is a study that identifies what are the most important themes for the business unit and what are the essential themes for society. By crossing this information, we managed to list the major priorities for EECON, in other words, the issues relevant to both our business as well as to society. The themes chosen are eco-efficiency in manufacturing, sustainability education (internal), new business with sustainability and communication for sustainability.

The Relevance Matrix was developed during a training in EECON, which was attended by all managers. As a result of the training, we were able to appoint some people to take special care of each issue. In another step, the priority themes were broken down into several specific actions, having more specific

objectives in mind. The expectation is that, among other benefits, Relevance Matrix development will provide reduction in electrical energy consumption and increase scrap reuse (plastic, screw and cable).

Relevant issues study identified items related to the operations' sustainability as priorities for EECON's operation.

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We promote every year the Embraco Ecology Award. In 2011, the event celebrated its 19th edition in Brazil, and has already held three editions in Slovakia. In Europe, last year alone, over 2000 school children who received the award were benefited.

The most outstanding award winner was the ZŠ Povýšenia sv. kríža school, for the project "Our natural garden." With lots of creativity, the children created a garden with paths, trees and nursery of plants. Not to mention the stable and the ecosystem, enriched by the lake, little river, field, and shrubbery.

In Brazil, the award celebrates 20 years in 2012, and in these decades, has sowed and reaped excellent results. Check out the following testimonials from some participants.

### Sonho de Criança (Child's Dream) **Early Childhood Education Center**

### Plácido Olímpio de Oliveira Basic Education School



### NATURAL REFRIGERANTS

Embraco sees the use of natural refrigerants as an important way to reduce greenhouse gas emissions that impact global warming. To disseminate the use of these refrigerants, the company discloses the benefits in major events such as business trade shows and scientific conferences. and in customer visits, answering guestions and responding to inquiries on the subject. The great advantage of natural Potential (GWP), measurement to exof gases such as R600a (isobutane), in

These gases are already greatly adopted in Europe and China, and since the end of last year, had their use regulated in

the United States also. However, the new North American legislation poses some challenges. Isobutane refrigerators, for example, can only have up to 57 grams of the gas, slightly more than one third of the maximum amount approved in Europe. With regard to propane, the United States also limited the amount in vending machines - one of the most important applications in the country's commercial refrigeration market.

offers solutions to meet the North Amerilaw was passed, the company had signed

A practical example was propane adoption in the 26-cubic-foot so-called Glass Door Merchandiser, equivalent to about 736 liters. The devices are those refrigerators with a transparent glass door, widely used in markets and convenience stores. We used propane in place of R134a and obtained good results. We reduced energy use by almost a quarter, decreasing CO<sub>2</sub> emissions. Over 10 years, each device will avoind emitting 1,709 tons of gas into the atmosphere. The same concept was applied to other equipment, such as the 10-cubic-foot Glass Door Merchandiser, about 283 liters, and Ice Cream Chest Freezers. In both cases, we emitted less CO<sub>2</sub> and improved energy efficiency.

Embraco, for being one of the pioneers in the use of natural refrigerants, and also one of the forerunners in the elimination of CFC use, is a world reference in the sector and aligns this strategy with the development policy for high energy efficiency products.

### How Embraco seeks to contribute to slowing alobal warming

- → Using less gas in the compressors' operation also
- → We develop the highest energy efficiency products.

#### **INNOVATION AND ENERGY EFFICIENCY**

# OUR VOCATION IS TO INNOVATE



Embraco invests, annually, 3% of its revenues in research When we stamp on our new brand the value Shaping the Global Scenario, we are expressing that we understand what our mission is as leaders in the hermetic compressor segment for refrigeration and we know that we influence the market's development worldwide. The great differential for having achieved this position is the dedication to technology and innovation, which together form one of Embraco's pillars. Each year, we launch models with high efficiency and with lower energy consumption.

The importance of innovation for Embraco has direct impact on economic results. In 2011, close to 50% of the company's revenues came from the commercialization of products launched since 2007. The innovation cycle has already shown that it has vigor for the next years. Last year alone, we registered 69 patent applications, including 62 invention applications. These are ideas

that will soon be converted into even more efficient and sustainable products than those offered today.

To achieve our goals in innovation, we have invested, every year, about 3% of the company's net revenue in funding research and development. In addition, we have a team of 500 professionals in different countries, integrating the Research & Development area. Another way to stimulate innovation in the company is called the Y career. In this career model, the company offers differentiated salary opportunities for researchers - remuneration compared to management positions. The goal in these cases is to encourage the good researcher to continue working within his expertise, rather than opt for an administrative career in search of better compensation.

Our R&D team s distributed in five countries		
290		
95		
77		
10		
28		
500		

# **PRESIDENT**

# REVOLUTION IN THE COMPRESSOR MARKET

In 2011, we launched a revolutionary product, capable of solving a problem that seemed unsolvable until then. It's the Bivolt compressor, the world's first hermetic compressor for household refrigeration with single-phase induction motor for use in 127V or 220V without need of applying a voltage transformer. Although the market is full of products that work in more than one voltage, like televisions and stereo equipment, there was nothing like it in the refrigeration industry. The difficulty occurred because it was necessary to couple large transformers in refrigerators, freezers or refrigerated counters. Except that attempts were thwarted by the increase in manufacturing costs and space that the transformer occupied in the final product, making the concept unfeasible. But

Embraco researched, innovated and found a very practical solution.

We developed a compressor containing an electronic board that recognizes the voltage which feeds the product and automatically adjusts the voltage, without risks for the system. The first Bivolt compressors reached the Brazilian market in December 2011. In Brazil, the power grid has two voltages: 127v and 220v.

The innovation brings great benefits to users, manufacturers and salespeople. Users can choose the equipment without bothering to check the voltage. And, the new model allows manufacturers and retailers to more easily manage inventories and distribution logistics for regions with different voltages.



Bivolt compressor launched by Embraco is the first in the world to operate with two different voltages, eliminating the need for the transformer.

# BEYOND OUR MARKET

Leadership in the hermetic compressor market for refrigeration brings us an enormous challenge: how can we further expand our business, if we already have a significant market share in the world? The question stimulated us to strengthen the team and processes of the New Profit Pools (NPP) area in 2011. This area's mission is to discover which paths Embraco could use their expertise (making cold) and further expand the market segment, with differentiated business opportunities. In general, it means breaking new niches that go beyond the traditional. For this, NPP works with the dimensions called extend the core, beyond the core and expand beyond the core.

They are concepts that lead us to expand knowledge and develop business segments still nonexistent - an initiative vigorously expressed in our new brand: it is the

value Transcending the Future. Although represented by the NPP area, this initiative includes the participation and involvement of all Embraco employees, in the conception and/or implementation of new value creation sources for the business.

sor. A small portable model, which has the firefighters' clothes. The product takes our NPP's objective is to identify other op-

The new area is under the umbrella of the Vice Presidency of Business and Marketing. Thus, it is in contact with the market demands while at the same time acting in strong partnership with the R&D staff. After all, technology and innovation are great allies for the success of this process.



### OIL FREE

One of Embraco's most innovative projects enters its final stages and is about to reach the consumer market. In 2011, we began in Brazil pilot-manufacturing the Linear Oil Free, the first compressor in the world that eliminates the use of lubricant oil. This new feature brings direct benefits to customers. The absence of oil, combined with the model's compact size, means the compressor takes up less space in refrigerators and freezers and can also be placed in any position, either horizontally or vertically. Today, to prevent oil leakage, the compressor must always be placed vertically. The novelty will enable our customers to make better use of

Developed in partnership with Fisher & Paykel, from New Zealand, and North American Whirlpool Corporation, the project totals five years of research, with 82 registered patents and investments of R\$ 20 million.

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#### **FULLMOTION**

To bring Embraco closer to our final consumers, we launched our new brand for the variable speed technology. From now on, the Embraco VCC will now be called Embraco Fullmotion, with its own name and identity, further highlighting our technology. The Embraco Fullmotion technology was launched in 1998 and remains the company's main energy efficiency product. On average, the cooling system's energy consumption can drop by up to 40%, compared to equipment which adopts traditional compressors. The differential of Fullmotion technology is that the compressor stays on all the time. But how can it use less energy, if it's never turned off? The dilemma is easy to explain. The moment that the compressor consumes the most energy is when it is turned on. The concept behind the Embraco Fullmotion technology is to create an intelligent system, in which the compressor automatically increases and decreases the work intensity, according to the refrigeration need. Thus, it never turns off and avoids the energy use on restarting, which occurs several times a day in conventional models. The Embraco Fullmotion technology also allows better food preservation due to minimum temperature variation in the cabinet. Additionally, its use reduces the compressor's overall noise and vibration by approximately 30%.





40%

is the reduction in energy consumption by using the Embraco Fullmotion Compressor compared to traditional products.

### **EM PLATFORM**

Models developed in the Embraco Mini (EM) platform are quiet, compact and efficient. It is the company's best-selling line worldwide and the only one present in all production units (Brazil, Italy, Slovakia, China and Mexico). Its newest version, the EM3 family, launched in 2011, allows the development of models up to 5% more efficient than their predecessors. The EM platform arrived in the market in 1987, being a milestone in our history. It was the first compressor with 100% Embraco technology, representing the company's achievement of technology autonomy.

### **MICROCOMPRESSOR**

production of the microcompressor. There are two models, 2.7 cm and 5.0 cm in diameter. The compact size and absence of oil created a new market, still to be exploited and developed. The microcompressor can be used, for example in cooling portable equipment, such as special firefighter uniforms, when subjected to high temperatures, small refrigerators, refrigerated compartments for the medical area (such as organ transport) and in automobiles.

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Embraco consolidates itself, each time more, as a global company

**PEOPLE** 

## **GLOBAL VALUES**

We are consolidating ourselves as a global company. Not only for being present in six countries or for our products being marketed in over 80 countries. We also want to be a company with global culture. A place where people from various nationalities work side by side, where cultural differences are respected and valued. In our brand, we designed the value Cultivating Passion to make it clear how much people are important to us and to illustrate our emphasis on building talented teams that are passionate about what they do.

We are building a broad concept about diversity. We have set strategies and actions so that this idea takes root in our offices, corridors and laboratories. In practice, this means being a company that is inclusive, that welcomes people with some type of disability, whether physical or intellectual, to participate in our routine. It means encouraging Brazilians to work in China, bringing Italians to Brazil or taking Slova-

kians to Mexico. It means seeing people from different backgrounds enrich our day to day with particular behaviors and knowledge.

One of the tools to deepen our global DNA is the Trainee Program. In 2011, we had in Brazil almost 13,000 applications for the 2012 program, double the forecasted target. Eight trainees were selected. Those chosen receive the mission to lead strategic projects and are closely monitored by managers. An interview with one of our trainees can be found on page 35.

### **IMPROVEMENTS IN SOCIAL INITIATIVES**

In 2011, we completed the Assessment of Embraco's Social Initiatives in the Community. The study was conducted in five countries and six cities where we promote social action. The goal was to discover the opinions of communities and employees about our initiatives. The comments were very positive and helped us further improve our social investment policy. In China, for example, the donation of more efficient refrigerators to hospitals was not so valued by the community. The priority is to welcome and qualify people that arrive from the field to work in the industry, and therefore we prioritized the Dandelion



In the survey, the growing demand for environmental issues also became clear, which motivated us to make some adjustments in our programs. The idea is to launch new projects and strengthen existing ones. This is the case of the Ecology Network, an initiative, in Brazil, through which adolescents are encouraged to create blogs to debate and exchange information about the environment. After the survey, we are intensifying the implementation of workshops and courses to teach participants to use blog publishing tools and also how to write and approach topics relating to the environment, as well as expand the number of participating youths.

## TALENTS OF DIVERSITY



The inclusion of people with disabilities is an important work (and very gratifying) in Embraco. We created, in Brazil, the Talents of Diversity Program. It is an excellent employment opportunity for people with disabilities who do not have suitable professional qualifications. Every year we make 30 vacancies available. In 2011, 25 people were benefited from the program.

Each participant is hired by the company for a period of 12 months, in an eight-hour workday. However, they only work four hours. During the remaining hours, they attend a career improvement course. Since the program was implemented, 108 people have been selected. About 68% of them have been hired permanently.

#### WOMEN VALUED

In 2011, we conducted, in Embraco Brazil, two Roundtables about Genders. These events are encounters with male and female leadership which aims to debate the role of men and women in society, reflecting on how the differences between them could be better addressed in the workplace. Roundtable participants had the opportunity to better understand the genders' peculiarities and leave old prejudices aside. We were able to understand the specificities of men and women and also perceive that there is much in common between the two.

### **OUR CITY PROJECT**

In Slovakia, we participated in a volunteer project called Our City Project. There were 60 people from Embraco dedicated to working in communities for two days, along with other local businesses and organizations. During those days, we cleaned the local zoo, planted trees, promoted activities for children, offered workshops for people with disabilities and hosted a blood donation booth at Embraco.

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## EXTRA CARE WITH MOTHERS

To take better care of our employees, in 2011, we entered into a partnership with the Itaiópolis Municipal Health Secretariat, in Santa Catarina. The objective was to conduct a campaign to disseminate good practices to contribute to women's health. During some days, the company promoted lectures with professionals in the area to clarify doubts among participants.

Another way to collaborate with women's health is by offering a number of maternity benefits. Before the baby's birth, expectant mothers have access to our group of pregnant women, with whom they can talk and express their feelings about motherhood.

When the child is born, the mother continues to have special attention. She can stay home without working for up to six months. This is because Embraco adhered to the Brazilian federal government program Citizen Company. The program offers tax incentives to companies that extend the maternity leave from 120 to

180 days. After this period, there are additional advantages available. In Joinville, there is a nursery at their disposal within the factory, and in Itaiópolis, they are given day-care assistance. In addition, the mothers receive special attention from the company's bus driver. The line follows a special route, passing in front of the nursery. This provides greater comfort to the families' routine.

Embraco offers special care for mothers, through partnerships with local government agencies, adherence to the federal program Citizen Company and the provision of benefits like daycare assistance.

In Joinville. professionals have a nursery available in the factory



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# TURNING DREAMS INTO REALITY



Embraco's Global Volunteer Day was held for the 1st time in 2011

For the first time in 2011, we held Embraco Global Volunteer Day. It's a date on which employees from the units in Brazil, USA. Slovakia and China work, with their families, community leaders, NGOs and school teachers, to improve some aspect of the community in which they live. In total, we recorded more than 4,200 hours of volunteer work.

In the United States there were donations of more than 500 food and hygiene items. In Slovakia, the employees participated in the cleanup of Podlesok Slovak Paradise (a national park), collecting the region's trash.

In Joinville, 120 volunteers rolled up their sleeves for almost 2,000 hours of intense community work. The location chosen was Jardim Paraíso. They delivered to residents of the subdivision Los Angeles two new leisure options: a sand court for soccer and another for volleyball. The Early Childhood Center Paraíso da Crianca also underwent improvements: it received a beautiful painting on the walls and changes in the bicycle rack area. The volunteers furthermore revitalized the walls and the flower beds of the square and the police station and gave a new face to the cemetery's walls, located at the neighborhood's entrance.

In the Itaiópolis unit, 70 people worked together with five schools. There, they built a solar heating system and a doll house, prepared a garden to plant strawberries and set up a drainage system to reduce humidity in the garden. The volunteers also created covers for sandboxes and painted walls, sidewalks and squares.

performed by company employees.



### METHODOLOGY IN VOLUNTEERING

Embraco Global Volunteer Day adopted the Oasis methodology to develop the project. In 2010, Oasis entered with a pilot proposal in Joinville, and in 2011 the idea was brought to the other units. The methodology is consolidated in several countries and stipulates all conditions for the community to make the intervention according to their needs. According to the Oasis methodology, participants pass through seven steps, which encompass all the work's phases, from creation to the beginning of a new cycle. See below the seven steps.

- **1** Gaze: observe the community, people and site's characteristics. Know the situation well and what can be improved.
- 2 Affection: live with people, listen, discuss and establish a relationship of trust and affection with the community.

- **3** Dream: build the image of what you want to have or do. Go beyond simply identifying problems, but connect the people's individual dreams.
- 4 Care: organize, plan and seek resources to transform the dream into reality. It is the beginning of the mobilization and of the changes in practice.
- **5** Miracle: is time to work, join forces, to act collectively and explore what is best in the community towards a common dream.
- **6** Celebration: time when participants gather to observe the results and celebrate the good work.
- **7** Re-evolution: is the time to think about the future, to reap the learnings and encourage the community to participate in new projects.

People benefited by our social investments		
Country		
Brazil	18,345	
China	1,360	
Italy	2,300	
Slovakia	6,568	
North America	300	
Total	28,873	

#### **MIGRANTS IN CHINA**

In China, 130 million people, close to 10% of the country's population, are migrants or children of migrants. It is a them 20% are school age. These children have difficul-Many of our employees in Embraco migrated from other regions. Therefore, 50 volunteers were mobilized to work located in the community around our factory. Thus, we The hands of our employees painted stairs, gates and even

#### **SAFETY UMBRELLA**

How to get to Joinville? Follow the road and take the first rain on the right. The humorous and entertaining directions reflect Joinville's reputation in Brazil. The city is known for wet weather and rain that doesn't let up. The weather, cautions are neglected. To escape the rain, many people usually run for cover. A practice that breaks our Safety Golden Rule number 4. This rule raises the danger of a "sprint" inside Embraco's premises. Haste increases the risk of concussions and fractures, besides exposing the person to accidents with forklifts and other cargo vehicles that

# SAFETY FIRST

To ensure employees' safety and health in the workplace, in 2011, Embraco focused on the continued implementation of the Safety Golden Rules and behavior change.

Our factories have OHSAS 18.001 certification - international standard of occupational health and safety management - and implementation of the Golden Rules is part of the continuous improvement process of our internal procedures.

These rules are a set of basic procedures and standards designed to guide behavior in the day to day and in all activities performed by employees, contractors and visitors.

Within the eight rules, number 7 deals with Lockout/Tagout of Hazardous Energy and focuses on prevention in all intervention activities (preparation, maintenance

and cleaning). In 2011, the Brazil, Mexico and Slovakia factories implemented this rule in 100% of the activities. The other units will complete the project in 2012.

### LET'S TAKE CARE OF EACH OTHER

In 2011, we implemented the global project Behavior-Based Safety, which aims to help people choose a safe behavior, rather than a risk, while performing their daily activities. The idea here is not reprimand. It is only guidance. BBS foresees stimulating conversations, highlighting positive aspects of work, praise what is being done correctly and explanations about the benefits of safety measures for everyone.

The program has three basic elements: making observations and feedback about safety, action plans to remove barriers

and recognition of good results. In 2011, 1,600 people were trained as observers, who gave 140,000 positive feedbacks on safety, totaling 19,180 hours of conversations, and another 5,870 hours invested in training observer teams.

The program begins by identifying behaviors which are the most present in people's routines in each area. Through continuous observations of his fellow employees, the next step is to recognize and congratulate people for behaviors that are being carried out safely and talk to them about those that can be improved in order to avoid an accident. The idea is that employees take care of colleagues, a relationship that combines friendship, respect and professionalism.

From May to December 2011, there were 76,728 observations in all Embraco units.

### **BBS SEEN BY OUR EMPLOYEES**

people who work in Embraco."

"We allow people to speak freely, speak of their fears and all the things they have in mind. We listen and change any obstruction to safety or problems that occur during work. I







Anne: "I intend to improve myself, becoming a reference"

### **RICH EXPERIENCE**

Anne Gomes Jacobson, 24 years old, was one of eight participants in Embraco's Trainee Program 2010 and was chosen as leader of a global project, which led her to know our units, as well as Whirlpool Corporation. Anne traveled, knew several factories and lived with people of diverse cultures as part of a training and alignment project of HR tools. In the following interview, Anne details her experience.

### Why did you choose Embraco to get a job as a trainee?

From the moment I knew about Embraco's program structure and the projects to be undertaken by the trainees, which were presented by the organization's managers themselves, I decided that Embraco was a company in which I would definitely like to work.

### In which units have you worked during the Trainee Program?

During the program, I went to China, Slovakia, Italy, ENA (Embraco unit in the United States) and also to Whirlpool in Benton Harbor, United States. I conducted training courses related to the deployment of goals and implementation of development plans, I worked on the corporate tools' alignment process. I also worked with Aiesec's Trainee Program and Exchange Program, making a diagnosis and seeking improvement opportunities.

### How have you experienced the global business concept?

It was a unique experience. We realized that, indeed, a certain group of individuals tend to exhibit characteristics and behaviors very similar to each other, depending on the culture and the environment in which they live. I found it interesting and challenging to adapt verbal and nonverbal language to all publics. Another curious point is to observe the different forms of relationship.

Embraco's Trainee program values the professional and stimulates them to improve themselves in their position and seek leadership within the company.

### What are your goals in the company? Were you surprised to receive Embraco's recognition?

I intend to improve myself each time more in my position, becoming a reference in human resources. In this way, I'm preparing myself to occupy a leadership position in Embraco. I saw the recognition that I received as an opportunity to know realities very different from ours, putting into practice much of the knowledge acquired during the Trainee Program.

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#### **CULTURAL DIVERSITY**

Johari Gregorio's story expresses well Embraco's way to improve global culture. At 28, he is one of the participants in the exchange program promoted through a partnership between the company and the Aiesec organization, but his international bloodline is even older. Johari is an Italian who was born in Malaysia. He graduated in mechanical engineering and has already worked professionally in Ethiopia and Italy. Now, he's in Brazil, doing an internship in sales at Embraco's headquarters in Joinville. He arrived in the country in June 2011 and stayed here for twelve months. In this interview, he tells a little about his routine and how the international experience helps in his professional qualification.



How was your routine during the program?

I am part of the Asia Pacific, Africa and Middle East (Apame) sales team for the domestic market. In the first six months of the program, in the morning, I helped the sales team and learned about the tools used in the company and how to relate with customers and colleagues. In the afternoon, I went to trainings in different areas with which the sales sector relates, such as logistics and research laboratories. In the following months, I took care of tests in the laboratories - tests to measure the compressors' performance - and, in parallel, focused on negotiations with customers.

Do you think that cultural diversity in Embraco is a positive aspect of the company?

Diversity means understanding other realities, it means improving communica-

tion, finding varied solutions for similar problems. This proximity is very useful and helps improve our performance at work. For example: I work with a Chinese colleague in the office. With her, I learned interesting things about the Chinese corporate culture, such as answering e-mails in less than three minutes and to communicate in a simple, clear and effective manner, focusing on results.

### What are your main professional goals from now on?

My idea is to continue developing competences in sales and negotiation and also in research and development for the next three years. I intend to also know more about the market and reality of China, which will always be relevant to the company's future. Then, I will dedicate myself to deepen my knowledge in finance. I want to do an MBA and prepare myself to assume new responsibilities.

Exchange programs among employees is one way to improve the company's global culture

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#### **VALUE CHAIN**

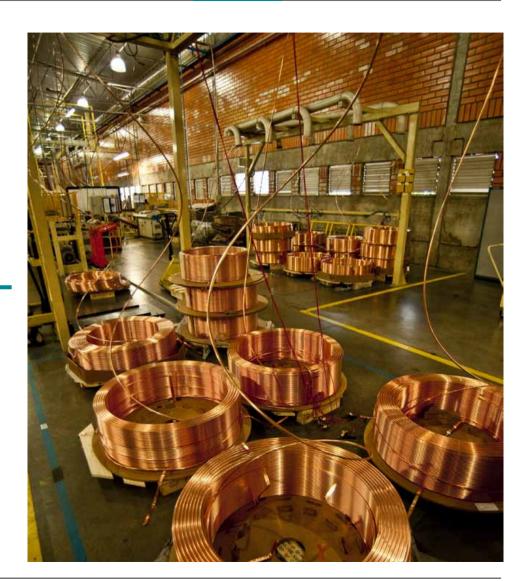
# COMMITTED SUPPLIERS

In the process of consolidating ourselves as a company that looks to include sustainability in its business and alignment to environmental concerns, we must use our market leadership so that our entire supplier chain also develops these global values. Embraco has worked several years to spread awareness about sustainability to its partners through various actions. These are initiatives that improve labor relations, recycling policies, reuse of materials and environmental management. All this, executed in a coordinated manner. will build a better future for our planet.

We are evolving a great deal in our strategy, and most of our partners are already committed to deepen sustainability guidelines. Over 90% of direct suppliers, distributed in the Americas, Europe and Asia, have signed the Code of Conduct, a document with guidelines on the correct posture of companies regarding socialenvironmental issues.

One of the mechanisms to encourage sustainable vocation in the chain is self-assessment. Periodically we send a questionnaire to partners. Ouestions cover a very broad range of topics. When answered, we have an X-ray of the company's situation. Thus, our suppliers can clearly measure if they are acting in accordance with our Code of Conduct. At the same time, Embraco can also analyze case by case. With the data in hand, we guide each supplier in a distinct and individualized manner, so that each one enhances the sustainability concept in accordance with their own reality.

More than 90% of suppliers have signed our Code of Conduct



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Self-assessment is also an important recognition tool. In China, we developed an annual award for suppliers who have excelled in the year. It is an important way for us to get closer to the partners, interact and stimulate best practices. Among the awards, is the sustainability item. In 2011, to decide who were those highlighted in this item, we used the selfassessment results, analyzing companies that are more advanced in this process. And the following suppliers were awarded: Roshow Technology, Zhejiang Sunho Science & Technology and Hangzhou Qianjiang Spring.



FOUNDRY PARTNERS' ASSESSMENT

In 2011, we further improved our supplier assessment policy. For the first time, we applied the questionnaire to the Foundry's partners. The questions were sent to direct materials suppliers, such as oil and iron, and to intermediate materials suppliers, those who do not make up the final product, only participate in the manufacturing process, such as sand. The result was very good. Over 95% of the

partners responded to the questionnaire (representing close to 70% of the Foundry's purchases in the direct, intermediate materials and direct services categories).

The index shows our chain's great concern with the sustainability theme. Based on information gathered from the questionnaire, we drew up an orientation plan together with those who most need support, which are considered most critical.

Assessment allows Embraco to orientate its foundry partners





In China, we conducted a pilot project to take an important step in the process of social-environmental risk management. The quality team went beyond the selfassessment analysis and visited five of our suppliers on sight. The audit's perception is that there is good supplier adhesion in relation to social-environmental issues and there is no resistance to access information. Based on this pilot, Embraco is studying to extend the work, which could reach more suppliers and more countries. It is worth mentioning that the initiative is a pioneer in Embraco and originated from China's own quality team, which sought to qualify itself to develop and carry out the project.

# GREEN ON SIGHT PRODUCTS

Our concern for sustainability accompanies the products' entire useful life, even when they are no longer being used by our customers - about 95% of compressor waste is recycled. The big challenge is to collect used products in order to recycle the raw materials and discard them properly. For this reason, we created Top Green. The program counts on a very large participation of different Embraco publics. Customers, suppliers and employees collaborate. In 2011 alone, 601,600 discarded compressors returned to the company through the program, about 45% more than in the previous year.

When a used compressor reaches the hands of the Top Green team, besides avoiding the inappropriate disposal, we help the environment by recycling the non-renewable raw materials, such as steel, copper and aluminum. Steel and

casted iron are used directly by the Embraco Foundry. Copper and aluminum are sold for reprocessing. Not even oil escapes our eyes.

Close to 95% of the compressors' residuals are recycled. Embraco's great challenge is to collect used products, reason for which the Top Green program was created, that counts on the participation of various publics.

## **EVOLUTION**

#### 2010

housings collected (received): 415.574

#### 2011

housings collected (received): 601.600

45%

increase in the volume of housings removed from the market.







# BUSINESS LEADER FORUM

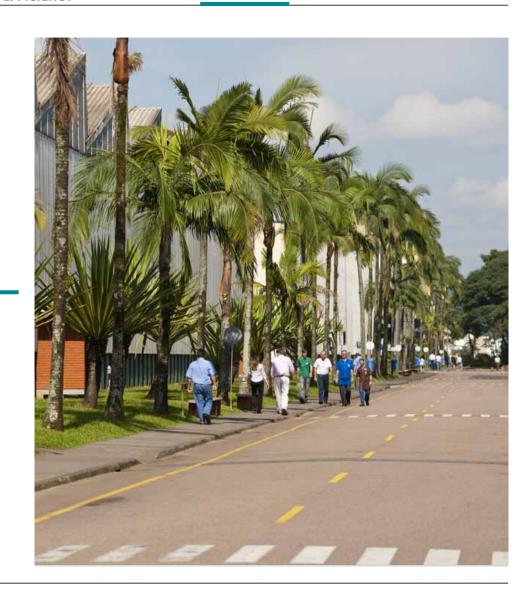
In Slovakia, we have a good example of action together with suppliers. Embraco participates in the Business Leader Forum (an initiative that brings together 25 companies, in order to disseminate best management practices). The forum has different work groups, and Embraco participates in several of them, including the one that works with suppliers in terms of sustainability. We indicated one of our partners to participate in the program.

The Business Leader Forum, then, conducted an audit to check the status of our supplier following the EFQM methodology, which evaluates the criteria: employees,

market, customers, community and environment. After the audit, the Business Leader Forum delivered a report to the supplier, with some recommendations and a strategy to conduct business in a sustainable manner.

Another objective of the forum is to encourage companies and their suppliers to jointly develop a project to meet a community need. We decided to create a hotline to give support on psychological issues, such as depression, for example. A very relevant service, since unemployment is growing in the region.

Embraco seeks. together with suppliers, management solutions



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# **GRI CONTENT**

#### **REPORT PROFILE**

#### Reporting period

We seek to focus the report on the period January 1 to December 31, 2011, in the Global Reporting Initiative (GRI) performance indicators as well as other actions relevant to the company. However, the report also addressed some information or events of 2012, to provide the reader a more contextualized approach.

<u>Date of the most recent previous report</u> 2010

Reporting cycle
Annual

# Contact data for questions regarding the report's content

If you have doubts, suggestions or comments, send them to:
accs@embraco.com.br
Corporate Communication and Sustainability Office
Rua Rui Barbosa, 1020
Caixa Postal 91
CEP 89219-901 – Joinville-SC – Brazil

#### Report's scope and boundary

This report's content cover the activities of Embraco's units in the six countries where it has operations. Changes in the data's presentation were presented together with the text, when necessary and appropriate.

#### Application Level

This report is based on GRI guidelines, methodology in which the publication is inserted in the application level B, self-declared. This application level determines the reporting of all profile items, information on the form of management and no less than 20 performance indicators, including, at least, one indicator of the following areas: economic, environmental, human rights, labor practices, society and product responsibility. The company reports, here, 26 indicators.

#### Materiality

Embraco uses a materiality matrix to give focus to its sustainability strategy. The matrix also defined this report's content.

In 2012, we carried out a consultation process with some of our stakeholders in order to verify if the issues raised in the previous materiality matrix were still current for these publics. As a result, there were no major changes in the main themes, but, with the new query, a few items stood out (see below).

For this process, we analyzed documents and internal surveys, we performed an online consultation with our internal public (participation of 70 employees) and a customer survey (answered by 26 companies), plus conducted interviews with our former president João Carlos Brega, with specialists and with community representatives.

Material theme	Page
Eco-efficiency	
Sustainable energy solutions	
People development and training	
Ethics in business	
Minimizing environmental impact	
Respect and valuing diversity	
Product quality and customer satisfaction indexes	

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# **GRI APPLICATION LEVELS**

			С	C+	В	B+	A	A+			
		G3 Profile	Respond to items: 1.1, 2.1 to 2.10, 3.1 to 3.8, 3.10 to 3.12; 4.1 to 4.4, 4.14 to 4.15.	tion	Respond to all criteria listed for Level C plus: 1.2, 3.9, 3.13, 4.5 to 4.13, 4.16 and 4.17.	tion	Same as requirement for Level B	tion			
	Report Content	G3 management approach	Not required.  Respond to a minimum	External Verification	Information on the Management Approach for each indicator category.  Respond to a minimum of	External Verification	Management Approach disclosed for each indicator category.  Respond to each core G3 and	External Verification			
	Indicators & Sector Supplement Performance Indicators	of 10 Performance Indicators, including at least one of each of the following performance areas: social, economic and environmental.	With E				20 performance Indicators, including at least one of each of the following areas: economic, environmental, human rights, labor practices, society and product responsibility.	With E	Sectorial Supplement Indicator (whenever there is a final approved version) with due regard to the materiality principle of one of the following forms: (a) responding to the indicator or (b) explaining the reason for the omission.	With E	

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## **GRI ITEMS**

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0111	TI CM3	
Strate	gy and analysis	
1.1	Message from the President  → Consult page 3	
1.2	Description of key impacts, risks and opportunities  → Consult pages 18 and 19.	
Organ	izational Profile	
2.1	Name of the organization  → Consult pages 18 and 19.	
2.2	Primary brands, products, and/or services  → Consult page 4.	
2.3	Operational structure of the organization  → Consult page 6.	
2.4	Location of the organization's headquarters Joinville, in Santa Catarina (Brazil).	
2.5	Countries where the organization operates and where its main operations are located  → Consult page 6.	
2.6	Nature of ownership and legal form  → Consult page 4.	
2.7	Markets served → Consult page 4.	
2.8	Company's size  → Data on the total number of employees are on page xx. In Brazil, as we are a business unit of Whirlpool SA, our financial information is not disclosed separately. To know the consolidated data of Whirlpool SA, see the electronic address http://www.whirlpool.com.br/investidor.aspx.	
2.9	Main changes during the period covered by the report  → Consult page 5.	
2.10	Awards received during the period covered by the report  → Consult page 11.	



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Report	Parameters	
3.1	Period covered by report for information provided  → Page 41.	
3.2	Date of most recent previous report  → Page 41.	
3.3	Reporting cycle  → Page 41.	
3.4	Contact data for questions regarding the report or its contents  → Page 41.	
3.5	Process for defining report content  → Page 41.	
3.6	Boundary of the report  → Page 41.	
3.7	Statement of any specific limitations on the scope or boundary of the report  → Page 41.	
3.8	Base for report elaboration  → Page 41.	
3.9	Data measurement techniques and the bases of calculations  → Described in the footnotes of tables and graphs.	
3.10	Reformulations of information provided in earlier reports  → None.	
3.11	Significant changes in scope, boundary or measurement methods applied in the report  → None.	
3.12	Table identifying the location of information in the report  → Page 43 onwards.	
3.13	Current policy and practice with regards to seeking external verification for the report  → The disclosed information was not audited.	
Goverr	nance, Commitments, and Engagement	
4.1	Governance structure of the organization, including committees of the highest governance body  → Consult page 8.	
4.2	Presidency of the highest governance body  → Consult page 88.	

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MESSAGE FROM THE PRESIDENT

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4.3	Independent or non-executive members of the highest governance body  → There are no independent or non-executive members.	
4.4	Mechanisms for shareholders and employees to provide recommendations  → Whirlpool S.A., which includes the business of Embraco compressors, holds an annual meeting with shareholders and provides a telephone channel and an e-mail address to receive recommendations. For more information, visit the site http://www.whirlpool.com.br/investidor.aspx.  Employees can also send suggestions via the ombudsman, the Open Channel.  We also hold a large annual meeting (Leadership Meeting), which brings together all corporate leadership and managers of operating units worldwide. In addition, each area of the company conducts alignment meetings, with varied frequencies.	
4.5	Link between compensation and organizational performance (including social and environmental)  → We have the Profit Sharing Program (PPR), which rewards performance against the targets. The idea is to value who acts according to the company's values, culture and pillars.  To further clarify the individual responsibilities in the company's results, leadership regularly converses with teams and discusses the application of goals in the day to day work.	
4.6	Processes to ensure that conflicts of interest are avoided  → The Letter of Organizational Values, the Code of Conduct and Code of Ethics are known and have the commitment of all Embraco professionals. To ensure the company's entire alignment, we receive under the scope of the Ethics Committees, complaints, doubts and denouncements from any employee regarding irregularities in Embraco. Directors of factories, legal sector, Human Resources area and vice-presidencies may also be triggered directly in these cases.  Denouncements may be made by electronic mail or even through calls to a specific line, ensuring the employee's anonymity.	
4.7	Qualifications of members of the highest governance body  → The assessed competences of the members that compose the highest governance body are associated to the knowledge that the executive has of Embraco's business and their particular area of operation.	
4.8	Statements of mission and values, codes of conduct and internal relevant principles  → Consult page 6.	
4.9	Responsibilities for implementation of economic, environmental and social policies  → Monitoring: the execution of Embraco's economic, environmental and social planning, as well as the executives' performance, is supervised by the president's staff. Formal assessments are conducted quarterly, guided by our five strategic pillars: revenue growth, technology leadership, operational excellence, sustainability and people.  Risks and opportunities: to manage and minimize potential risks to Embraco's interests, we review the risk spreadsheet semiannually, according to Enterprise Risk Management methodology. This spreadsheet contains not only the possible impacts resulting from occurrence of that risk, but also ways to combat it.	
4.10	Processes for performance self-assessment of the highest governance body  → We do not fully adopt the precautionary principle, but we seek to act with environmental responsibility by eliminating from products and processes substances proven harmful to the environment.	
4.11	Explanation of if and how the organization applies the precautionary principle  → We do not fully adopt the precautionary principle, but we seek to act with environmental responsibility, eliminating from products and processes substances proven harmful to the environment.	

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4.12	Charters, principles or other initiatives developed externally  → Since 2005, Embraco Brazil has been a signatory to the Global Compact of the Unite	ed Nations Organization. In 2008, Embraco Slovakia also adhered to the initiative.	
4.13	Participation in associations and / or national / international organisms  → Among the main entities in which we participate or with which we interact, are:  American Chamber of Commerce in Slovakia;  Brazilian Electrical and Electronic Industry Association (Abinee);  Brazilian Association of Advertisers (ABA);  Brazilian Business Communication Association (Aberje)  Brazilian Foundry Association (Abina);  Brazilian Human Resources Association (ABRH);  Brazilian Refrigeration, Air Conditioning, Ventilation and Heating Association (Abrava);  Itaiópolis Commercial and Industrial Association (ACII);  Slovakia Electrical Equipment Industry Association;  Brazilian Foreign Trade Association (AEB);  Occupational Health and Safety Professionals Association of Joinville and Region (APSSOJ);  Joinville Business Association (ACIJ);  Latin American Electrical and Electronic Industrial Association (Alainee);  National Association of Manufacturers of Electro-electronic Products (Eletros);  National Research, Development and Engineering Association of Innovative Companies (Anpei)  Human Resource Development Association - Slovakia;  Business Leaders Forum - Slovakia;  American Chamber of Commerce - Slovakia;  Electricity Utility Company of Santa Catarina (Celesc);  Center of Industries of the State of Santa Catarina (Ciesc);	Joinville Architect and Engineer Center (Ceaj); Joinville – Spisská Nová Vês Sister City Committee; National Confederation of Industry / Brazilian Business Coalition (CNI/CEB) São Francisco do Sul Port Authority (CAP); State Council for Foreign Trade Advancement (Ceacex); Honorary Consulate of the Slovak Republic in Southern Brazil; Itaiópolis Volunteer Fire Brigade; Federation of Industries of the State of Santa Catarina (Fiesc); Forum of Business Leaders; Forum of Social Leaders; Certi Foundation - Reference Centers in Innovative Technologies; Global Compact – Slovakia Chapter; Ethos Institute; Santa Catarina Movement for Excellence (MCE); Global Compact; Inter-municipal Union of Workers in Metallurgical, Mechanical, and Electrical Material Industries of Santa Catarina (Sintimesc); Sinditherme Employers' Federation; Slovak Business and Industrial Chamber (SOPK); Joinville Volunteer Fire Brigade; Information Technology and Telecommunications Users Society (Sucesu/SC); Santa Catarina Educational Society (Sociesc);	
4.14	List of stakeholder groups engaged by the organization  → Our main stakeholders are customers, suppliers, employees and communities surrou	unding our operations.	
4.15	Basis for identification and selection of stakeholders to be engaged  → The strategic importance to our business is the main selection criterion of stakehold	lers.	
4.16	Approaches for stakeholder engagement  → Consult page 41.		
4.17	Main themes and concerns raised through stakeholder engagement  → Consult page 41.		



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# **PERFORMANCE INDICATORS**

Management Approach: consult pages 3, 37 and 28.

#### Economic performance

#### EC3

Coverage of pension plan obligations

→ Taking into account the different locations where Embraco has operations, there are different structures of retirement plans offered. In China, as well as in Slovakia, there is no private pension plan.

In Brazil there is a plan with voluntary participation and open to all positions. Embraco contributes with values ranging from 1% to 5.5% of the employee's salary according to the salary range. Contributions also follow a table linked to the employee's age. In the case of the smaller proportion, Embraco contributes with half, increasing its participation until it is doubled. Participation rises progressively with age.

The plan foresees normal type retirement (age 60), early (age 55) and by disability, as well as death benefits, paid to the spouse and children.

In Italy, there is a retirement plan provided for in the collective bargaining agreement, but participation is voluntary. For employees, the minimum participation is 1.2%, the same percentage by which the employer participates. As for executives, the minimum contribution is 4%.

In the United States, a structured plan is offered by the government, in which participation is voluntary and the employee participates with the amount he desires, and optional participation by Embraco. The company's share is 50% of the amount invested by the employee, up to a maximum of US\$ 17,000.

#### Market Presence

EC7

Procedures for local hiring and proportion of senior management hired from the local community in important operational units

→ There are no specific policies aimed at hiring locally. However, whenever possible, this practice is adopted.









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### **Indirect Economic Impacts**

EC8 Development and impact of infrastructure investments and services offered for public benefit

→ Embraco develops and invests in activities for the public benefit in all countries, especially through volunteerism of its employees. In all locations surveys are performed to identify the main demands of the communities. The total amount invested in the community reached US \$ 170,500, with volunteer programs and others targeted to health, environment, sport and education, in addition to socialization in communities.

Unit	Value Invested (US\$)
United States	8,495
Brazil	120,192
Slovakia	36,200
China	5,642
TOTAL	170,529

#### Social Investment Carried Out by Embraco in 2011

EECON Volunteer Program - Brazil	829 people benefited. Investment of US\$ 266
Embraco Ecology Award - Brazil	2,130 teachers and students benefited. Investment of US\$ 52,658
Volunteer Program - Brazil	9,492 people benefited, 7,400 hours of community service, 302 volunteers in 2011. Investment of US\$ 7,763
Digital Knowledge Space - Brazil	Digital inclusion program aimed at employees, their families and communities. 671 beneficiaries. Investment of US\$ 6,183
Sports School - Brazil	Inclusion of children and adolescents through sports. 486 beneficiaries. Investment of US\$ 13,974
Support to Rescue Project - Brazil	240 beneficiaries. Investment of US\$ 25,636
Embraco Theatre Group - Brazil	1,030 beneficiaries. 160 hours of community service. 8 volunteers. Investment of US\$ 5,306
Itaiópolis Environmental Games - Brazil	3290 beneficiaries. Investment of US\$ 5,995
Embraco Choir- Brazil	750 beneficiaries. 76 hours of community service. 16 volunteers. Investments of US\$ 2,410
Volunteer Program - Slovakia	Investments of US\$ 3,206
Embraco Ecology Award - Slovakia	Investments of US\$ 9,100
People with disabilities - Slovakia	Investments of US\$ 7,020

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EC8 continuation

Social Investment Carried Out by Embraco in 2011

Support for nurseries - Slovakia	Investments of US\$ 8,333
Supplier development - Slovakia	Investments of US\$ 3,900
Investment in health - Slovakia	Investments of US\$ 4,641
Volunteer Program - EECON China	Investments of US\$ 1,194
International Volunteer Day - China	Investments of US\$ 746
Donations to NGOs - China	Investments of US\$ 1,493
Volunteer actions and projects - China	Investments of US\$ 2,209
March of Dimes – United States	Allocates resources to programs aimed at health of pregnant women and babies. Investments of US\$ 6,424
International Volunteer Day – United States	Investments of US\$ 1,420
Donations and sponsorship for the community - United States	Investments of US\$ 650

→ In total, actions in the USA benefited 300 people, with 239 hours of volunteering. In Slovakia, there were 6,568 people benefited and 1,262 hours and, in China, 1,360 people and 726 hours. In Brazil, there were 18,345 people benefited with 5,833 hours. EECON Brazil and China do not have this information.

# **ENVIRONMENTAL PERFORMANCE**

Management Approach: consult pages 19, 23 and 24.

#### Energy

EN3

Direct energy consumption

→ Consult the response from EN4 indicator



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#### EN4 Indirect energy consumption

→ In 2011, there was an average energy consumption reduction of about 5% in each plant. In global consumption, the reduction was 3% (even considering EECON, as of 2011). Despite the reduction in the absolute values, in relation to compressor production there was an increase of approximately 7% in consumption - with the exception of the Italy unit, which recorded a reduction of 8%. In global consumption, there was an increase of 4% in the amount of energy consumed per compressor produced (also considering EECON only in 2011).

	Brazil				China			Slovakia		
	DIOZIL									
	2009	2010	2011	2009	2010	2011	2009	2010	2011	
Direct Energy (MJ)	189,878,442	242,392,744	245,107,876	65,072,470	71,215,002	66,609,331	86,505,392	111,551,302	105,029,836	
Natural gas	175,133,910	224,060,655	227,436,650	64,949,635	69,893,635	65,047,745	83,917,486	108,406,072	101,694,683	
Methanol	372,842	411,840	386,496	7,603	0	0	0	0	0	
Propane	3,716,471	3,032,424	2,554,042	0	0	0	0	0	0	
Kerosene	0	0	0	115,232	0	0	0	0	0	
LPG	9,099,830	12,978,919	12,927,071	0	0	0	0	0	0	
Diesel oil	1,477,594	1,786,200	1,702,397	0	205,442	237,666	1,210,519	1,974,861	2,005,964	
Gasoline	77,795	122,706	101,220	0	1,115,925	1,323,920	1,377,387	1,170,369	1,329,189	
Indirect energy (MJ)	568,752,462	666,968,951	644,202,396	91,260,000	107,927,640	107,682,840	98,256,294	119,348,590	110,256,444	
Electric energy	568,752,462	666,968,951	644,202,396	91,260,000	107,927,640	107,682,840	98,256,294	119,348,590	110,256,444	
TOTAL ENERGY	758,630,904	909,361,695	889,310,272	156,332,470	179,142,642	174,292,171	184,761,686	230,899,892	215,286,280	

		Italy				
	2009	2010	2011	2009	2010	2011
Direct energy (MJ)	64,595,895	67,008,830	60,161,220	406,052,169	492,167,878	476,908,263
Natural gas	64,595,895	67,008,830	60,161,220	388,596,896	469,369,192	454,340,298
Methanol	0	0	0	380,445	411,840	386,496
Propane	0	0	0	3,716,471	3,032,424	2,554,042
Kerosene	0	0	0	115,232		0
LPG	0	0	0	9,099,830	12,978,919	12,927,071
Diesel oil	0	0	0	2,688,113	3,966,503	3,946,027
Gasoline	0	0	0	1,455,182	2,409,000	2,754,329
Indirect energy (MJ)	51,674,386	51,679,717	50,902,729	809,943,142	945,924,898	913,044,409
Electric energy	51,674,386	51,679,717	50,902,729	809,943,142	945,924,898	913,044,409
TOTAL ENERGY	116,270,281	118,688,547	111,063,949	1,215,995,311	1,438,092,776	1,389,952,672

 $<sup>^{\</sup>scriptsize 1}$  2011 data include the manufacture of electronic components (EECON).

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### EN4

continuation Energy consumption per unit

2011 (MJ)	Itaiópolis – BR	Joinville – BR	Foundry – BR	EECON – BR	Beijing – CH	EECON – CH	Spisska Nova Ves – SK	Riva di Chieri – IT	Total	2010
Direct energy	6,818,076	224,751,073	13,538,726	0	66,609,331	0	105,029,836	60,161,220	476,908,262	600,013
Natural gas	-	217,655,620	9,781,030	-	65,047,745	-	101,694,683	60,161,220	454,340,298	1,612,128
Environmental recycling <sup>1</sup>	80,236	128,891	0	0	1,381,570	1,840,796	55,986	381,022	1,517,792	2,350,709
Methanol	386,496	-	-	-	-	-	-	-	386,496	235,549
Propane	2,554,042	-	-	-	-	-	-	-	2,554,042	0
Kerosene	-	-	-	-	-	-	-	-	0	4,798,399
LPG	3,877,539	5,291,836	3,757,696	-	-	-	-	-	12,927,071	35,330
Diesel oil	-	1,702,397	-	-	237,666	-	2,005,964	-	3,946,027	19,094,598
Gasoline	-	101,220	-	-	1,323,920	-	1,329,189	-	2,754,329	35,330
Indirect energy	12,931,837	392,608,944	232,456,392	6,205,223	103,326,120	4,356,720	110,256,444	50,902,729	913,044,409	101,658,877
Electric energy	12,931,837	392,608,944	232,456,392	6,205,223	103,326,120	4,356,720	110,256,444	50,902,729	913,044,409	140,110
TOTAL ENERGY	19,749,914	617,360,017	245,995,118	6,205,223	169,935,451	4,356,720	215,286,280	111,063,949	1,389,952,672	125,727,314

#### EN5

Energia economizada por meio de melhorias em conservação e eficiência

→ Embraco implemented a series of initiatives aimed at energy conservation and increased efficiency, such as redesign of processes, lighting control, installation of compensation capacitors, reducing cycle times and elimination of process steps. There were also initiatives related to employees' behavioral habits, such as adjusting the air conditioning and ambience lighting. From 2011, electronic components manufacturing unit (EECON) became part of this indicator. In total, these initiatives led to a reduction of 14,763,910 MJ.



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EN8 Total water withdrawal by source (m³)

		Brazil			China			Slovakia			Italy		To	tal Embra	ico
	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
Wells	205,210	264,925	255,140	0	0	0	0	0	0	125,786	78,062	37,443	330,996	342,987	292,583
Water supply networks	98,820	89,586	70,854	127,855	136,482	133,571	75,209	90,796	88,027	15,519	18,675	16,784	317,403	335,539	309,236
TOTAL	304,030	354,511	325,993	127,855	136,482	133,571	75,209	90,796	88,027	141,305	96,737	54,227	648,399	678,526	601,818

<sup>&</sup>lt;sup>1</sup> 2011 data include the manufacturing of electronic components (EECON).

#### Water consumption per unit

2011 (m³)	Itaiópolis – BR	Joinville – BR	Foundry – BR	EECON – BR	Beijing – CH	EECON – CH	Spisska Nova Ves – SK	Riva di Chieri – IT	Total
Wells	12,015	147,692	93,003	2,430				37,443	292,583
Water supply networks	2,662	67,061	1,131		131,465	2,106	88,027	16,784	309,236
TOTAL	14,677	214,753	94,133	2,430	131,465	2,106	88,027	54,227	601,818

<sup>&</sup>lt;sup>1</sup> 2011 data include the manufacturing of electronic components (EECON).

**↓** continues

<sup>→</sup> Despite the change in scope and consideration of the electronic components manufacturing units, the water consumption's absolute value decreased by 11%. However, if we consider the year's compressor production, the reduction was 5% in liters per compressor produced.

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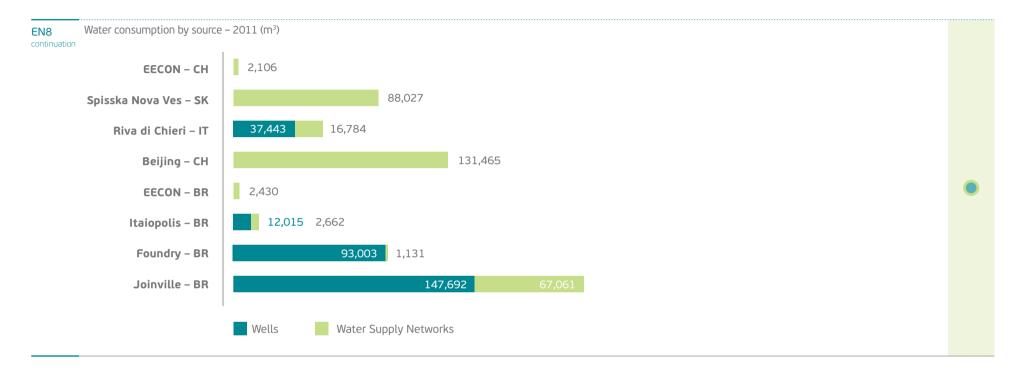
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EN10 Percentage and total volume of water recycled

Recycled water (m³)	2009	2010	2011
China	35,698	30,026	22,546
Compressors (Brazil)	137,323	128,443	118,007
Foundry (Brazil)	60,312	34,103	35,771
TOTAL	233,333	192,572	176,323

<sup>→</sup> Similar to results presented in 2010, only compressor plants from China and Brazil, in addition to the Foundry have water recycling systems. Results for the year 2011 indicate that there was a reduction in the absolute consumption of recycled water in Compressor plants (approximately 17%) and an increase in the order of 5% at the Foundry. For efficiency results, i.e. liters of recycled water per compressor produced, the same results were observed (a reduction of approximately 10% for compressor plants and 14% increase for the Foundry). Consumption target for the year 2012 is to maintain the best results achieved in 2011, respecting the seasonal variations, considering the relative water consumption (liters/compressor) - each plant will develop specific actions so that the quantity of recycled water be maintained.

#### Use of recycled water (%)



<sup>&</sup>lt;sup>1</sup>Percentage of water recycled compared to the total water consumed in the unit.



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#### Emissions, Effluents, and Waste

**EN21** Total water discharge by quality and destination.

→ In 2011, there was an average reduction of 14% in the absolute amount of water discharged by plants in relation to 2010. This decrease was due to efficiency improvement or internal reuse projects, such as greater utilization of reused water in the toilets and in the cooling towers and optimization of production processes. Embraco's production can also be seen by comparing the years 2010 to 2011, which was, on average, 6% lower. Another important point is that the electronics unit (EECON) now incorporate this indicator as of 2011.

Discord of water (m3)		Brazil			China		Slovakia				
Discard of water (m³)	2009	2010	2011	2009	2010	2011	2009	2010	2011		
Return to collection point	115,550	136,114	125,734	89,243	103,726	69,854	0	69,325	82,964		
Public Sewage System	0	0	0	0	0	2,430	75,209	0	0		
Evaporation	66,725	45,086	40,218	1,279	0	0	0	0	0		
Irrigation	0	0	0	1,662	3,139	0	0	0	0		
TOTAL	182,275	181,200	165,952	92,184	106,865	72,284	75,209	69,325	82,964		

<sup>&</sup>lt;sup>1</sup>2011 data include the manufacturing of electronic components (EECON).

#### Waste disposal by unit (m<sup>3</sup>)

2011	Itaiópolis – BR	Joinville – BR	Foundry – BR	EECON – BR	Beijing – CH	EECON – CH
Return to collection point	7,164	66,573	49,891	2,106	69,854	-
Public Sewage System	-	-	-	-	-	2,430
Evaporation	1,680	30,065	8,472	-	-	-
TOTAL	8,844	96,639	58,363	2,106	69,854	2,430

<sup>2&</sup>quot;Recycling" data were excluded, as the water returns to the process and is then discarded, being counted twice.

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EN22 Total weight of waste by type and disposal method

- → Between the last two years, there was a 7% decrease in waste generation in Embraco, a drop linked to the reduction in the year's compressor production.
- → Embraco's main goal for 2012 is the development of projects focused on improving waste management, considering technical and legal aspects of each country. This initiative seeks to improve the segregation, packaging, disposal and transportation, with focus on increasing the destination of materials for recycling, thus reducing the waste sent to landfills.

Total waste		Brazil			China			Slovakia			Italy	
generation (t)	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
Hazardous wastes	1,005,539	2,261,853	1,536,454	98,370	74,178	71,736	1,522,590	2,081,346	1,959,293	55,986	69,325	82,964
Landfill	200,464	400,863	433,644	0	0	0	141,020	199,150	147,400	0	0	0
Incineration	464,500	1,537,950	829,460	98,210	74,178	50,856	0	0	0	0	0	0
Internal recycling	80,236	128,891	70,904	0	0	0	1,381,570	1,840,796	1,780,233	55,986	0	0
External recycling	260,339	194,149	202,446	0	0	20,880	0	41,400	31,660	0	69,325	82,964
Others	0	0	0	160	0	0	0	0	0	0	0	0
Non-hazardous waste	57,218,189	81,508,718	79,649,370	11,324,598	13,264,077	10,900,778	13,197,440	19,891,550	17,240,670	5,608,828	0	0
Landfill	12,838,368	17,146,051	15,211,973	795,070	771,157	928,350	681,700	821,980	671,780	0	69,325	82,964
Internal recycling	26,550	24,910	16,140	1,080	0	0	0	0	0	5,608,828	0	0
External recycling	44,236,671	64,197,647	64,254,647	10,528,448	12,492,920	9,972,428	12,515,740	19,069,570	16,568,890	0	0	0
Remediation of building waste	116,600	140,110	166,610	0	0	0	0	0	0	0	0	0
TOTAL	58,223,728	83,770,571	81,185,823	11,422,968	13,338,255	10,972,514	14,720,030	21,972,896	19,199,963	5,664,814	69,325	82,964

<sup>&</sup>lt;sup>1</sup>2011 data include the manufacture of electronic components (EECON).

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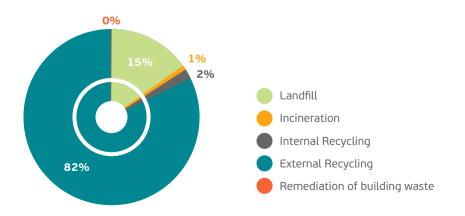


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EN22 continuation

Waste generation (t)	Itaiópolis – BR	Joinville – BR	Foundry – BR	EECON – BR	Beijing – CH	EECON – CH	Spisska Nova Ves – SK	Riva di Chieri – IT	Total
Hazardous wastes	16,293	1,464,771	53,348	2,042	71,016	720	1,959,293	133,465	3,700,947
Landfill	5,064	400,983	27,597	-	-	-	147,400	-	581,044
Incineration	-	808,390	21,070	-	50,136	720	-	-	880,316
Internal recycling	5,902	62,095	865	2,042	-	-	1,780,233	133,465	1,984,601
External recycling	5,327	193,303	3,816	-	20,880	-	31,660		254,986
Non-hazardous waste	569,380	64,719,488	14,282,594	77,908	10,871,478	29,300	17,240,670	6,057,828	113,848,646
Landfill	35,330	1,092,480	14,084,163	-	926,310	2,040	671,780	140,360	16,952,463
Internal recycling	-	-	15,854	286	-	-	-	60,660	76,800
External recycling	534,050	63,460,398	182,577	77,622	9,945,168	27,260	16,568,890	5,856,808	96,652,773
Remediation of building waste	-	166,610	-	-	-	-	-	-	166,610
TOTAL	585,673	66,184,259	14,335,942	79,949	10,942,494	30,020	19,199,963	6,191,293	117,549,592





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# **SOCIAL PERFORMANCE - LABOR PRACTICES**

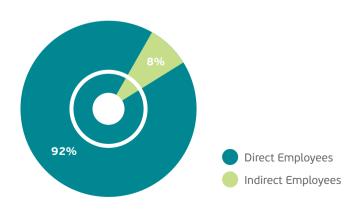
Management approach: consult pages 29, 30, 31 and 34.

#### **Employment**

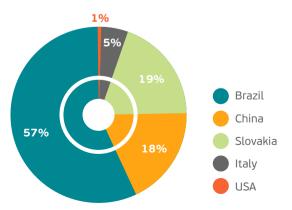
LA1 Total number of employees by employment type, employment contract and region

		Brazil			China		5	Slovakia	3		USA			Italy		Tota	Total Embraco		
	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	
Employed for an indefinite period	4,820	5,735	5,427	1,303	1,588	1,915	1,685	1,617	1,933	59	59	58	621	617	599	8,494	9,622	9,932	
Temporaries	854	582	831	589	23	94	152	176	289	10	4	1	-	4	1	1,606	789	1,216	
TOTAL	5,674	6,317	6,258	1,892	1,611	2,009	1,837	1,793	2,222	69	63	59	621	621	600	10,100	10,411	11,148	
Outsourced	300	570	643	-	621	167	-	309	129	-	-	-	-	28	24	300	1,528	960	
TOTAL EMPLOYEES	5,974	6,887	6,901	1,892	2,232	2,176	1,837	2,102	2,351	69	63	59	621	649	624	10,400	11,939	12,108	

#### Employees by work relation



#### **Employees by Location**





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LA2 Total number and rate of employee turnover by age group, gender, and region

Diamiasad		Brazil			China		9	lovakia	)		USA			Italy		Tota	al Embr	асо
Dismissed	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
Men	818	1,883	1,078	696	1,281	399	123	161	58	9	4	6	50	15	21	1,696	3,344	1,562
Women	206	551	253	81	140	91	72	83	26	6	7	2	24	7	3	389	788	375
Age group																		
< 30	544	1,576	697	688	1,317	425	83	127	28	n/d	2	1	0	2	0	1,315	3,024	1,151
From 30 to 50	425	776	560	61	104	65	87	96	40	n/d	8	6	52	15	24	625	999	695
> 50	55	82	74	28	0	0	25	21	16	n/d	1	1	22	5	0	130	109	91
TOTAL	1,024	2,434	1,331	777	1,421	490	195	244	84	-	11	8	74	22	24	2,070	4,132	1,937

Hired in 2011	Brazil	China	Slovakia	USA
Men	939	334	150	2
Women	334	113	71	-
Age group				
< 30	863	354	85	-
From 30 to 50	394	93	136	2
> 50	16	-	-	-
TOTAL	1,273	447	221	2



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#### I A4 Relationship between workers and governance

→ Slovakia: there was a change in existing law, which will be changed again in 2013, with the new government. China: in the past 14 years there have been no collective bargaining agreements with employees. Currently, most employees are union members. U.S.: doesn't have this type of agreement.

Collective bargaining agreements	Brazil	China	Italy	Slovakia	EECON China
Percentage of employees affiliated with unions	100%	89%	33%	8%	100%
Percentage of employees covered by collective bargaining agreement	98%	NA	100%	100%	NA

#### Rates of injuries, occupational diseases, lost days, absenteeism, and work-related fatalities by region LA7

→ Embraco has shown improvements in its rates, although in 2011, didn't reach the internal goal set for the frequency rate of time away accidents, Global project initiatives related to safe behavior, Loto (blocking dangerous energies) and routine management in manufacturing contributed to this improvement.

Maintaining the global audit program of health, safety and environment, in Brazil, Component units, Foundry and Electronic Component units (EECON) have been audited in addition to the Compressor plant in Italy. Identified non-compliances are addressed through an action plan and monitored every quarter. In order to share information, any accident with time away from work that occurs in the organization is shared across all units, as a way to call attention and to take preventive actions to prevent new recurrences. To prevent such accidents remains a challenge for the organization.

Establishment of the Health, Safety and Environment Forum in 2010, with the monthly participation of Health, Safety and Environment leaders from all plants, coordinated by the Corporate EHS Management, provided, in 2011, improved communication, increased exchange of best practices and information, alignment of approaches and critical analysis of the results and projects.

Forecasted for 2012, is the global implementation of a comprehensive project on the evaluation and adaptation of machinery and equipment, as well as the stabilization phase of the Safe Behavior and Routine Management project, in order to maintain and further improve the results. The OHSAS 18001 and ISO 14.001 certification project, in EECON China, and Global EHS Audit, in the Slovakia plant, are also part of the plan for 2012.

Health and safety rates	Brazil	China	EECON China	Italy	Slovakia	USA	Global
TL: injury rate	1.07	0.79	0.50	2.99	0.40	0.00	0.94
DO: Occupational disease rate	0.03	0.00	0.00	0.00	0.00	0.00	0.03
TDP: total days lost	5.77	4.68	0.00	35.09	13.77	0.00	7.53

<sup>\*</sup>The rates are calculated for every 100 employees. Contractors' employees are not included in the calculated rates. First aid nor minor injuries that do not generate temporary restriction to work are not included. For lost days, running calendar days beginning on the day following the accident are considered. They meet ILO standards, as well as local legal requirements in each country.



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### Training and education

LA10 Average hours of training per year, per employee, broken down by employee category





 $<sup>^{\</sup>rm 1}\,\text{Brazil}$  data include the manufacturer of components, compressors, foundry and EECON.

<sup>&</sup>lt;sup>2</sup> In the China data EECON's training hours are not included, which had in 2011 an average of 24 hours per employee.



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### Diversity and equal opportunity

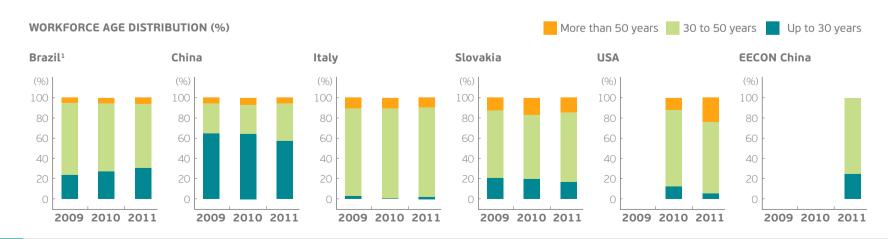
LA13 Total workforce, by employment type, employment contract and region

Participation of women in the		Brazil		China*			EECON China	Italy			Slovakia				USA		
workforce (%)	2009	2010	2011	2009	2010	2011	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	
Vice-presidency, board and management	9.2	6	7	30	41	29	0	0	0	0	12	12	13	ND	1	0	
Supervision and leadership	9.2	9	9	41	26	32	33	15	14	17	12	12	28	ND	9	0	
Teams	19.7	23	24	14	10	19	87	30	32	32	24	35	34	ND	36	43	

<sup>\*</sup> EECON data are not included.

Participation of people with		Brazil			China			Italy		9	Slovakia	)		USA	
disabilities in the workforce (%)	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011	2009	2010	2011
Vice-presidency, board and management	0	2	2.3	10	10	0	0	0	0	0	0	0	0	0	0
Supervision and leadership	0	2	1.1	0	0	0	0	0	0	0	0	0	0	0	0
Teams	5	5	5.2	1	1	0.3*	0	2	2	1	1	1	0	0	0

<sup>\*</sup>This percentage refers only to people who have an exam proving disability. There are more people with disabilities working in Embraco China.





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#### LA14 Proportion of base-salary between men and women by employee category

→ In Embraco Brazil, the total difference between men and women's salaries is 51%. In Slovakia, the difference is 1%, but the unit does not have data broken down by categories. In Embraco China, salary information is confidential.

Salary men / women (%)	Brazil	Italy	USA
Vice-presidency, board and management	8%	25%	NA*
Supervision and leadership	6%	17%	14%
Teams	25%	8%	5%
Teams			

<sup>\*</sup>In Embraco U.S. there are no women among executives.

# **SOCIAL PERFORMANCE - SOCIETY**

Management approach: consult pages 9, 64 and 65.

#### Corruption

Percentage and total number of business units submitted to risks assessments related to corruption S02

→ Embraco, as a subsidiary of Whirlpool Corporation, meets the requirements of the Sarbanes-Oxley (SOX) law, maintaining documentation of all significant internal controls regarding financial reporting. The company has established an Internal Audit, responsible for testing the SOX internal controls on performance and effectiveness, which are validated by an External Audit. A total of 189 controls were tested in 36% (4 units of 11) of Embraco plants. In addition, 100% of Embraco units are subject to periodic review of processes, through the work of Operational Auditing.

	Braz	il	Slova	kia	United S	tates	Italy	/
Units	2010	2011	2010	2011	2010	2011	2010	2011
Process evaluated (absolute number)	10	12	8	9	5	6	8	9
Processes evaluated (% of total current processes in the unit)	32	33	26	25	16	25	26	17









SO3 Percentage of employees trained on anti-corruption policies and procedures of the organization

Percentage of employees trained in procedures against corruption in 2011

Brazil*	China**	Italy	Slovakia	USA	TOTAL
20.96%	9.43%	26.05%	13.03%	80%	17%

<sup>\*</sup>Considering all Embraco Brazil units, including EECON.

→ Embraco's positioning about corruption, money laundering and antitrust actions can be found in the company's Code of Ethics, distributed to all employees and covered in the new employee integration training, and specific global internal policies on the theme.

Administrative and managerial positions undergo training in relation to these issues. In 2011, training involved 2,092 employees from all units, including 1,305 from Brazil, reaching almost 100% of employees in this group.

#### SO4 Measures taken in response to incidents of corruption

→ There were no recorded cases of corruption in 2010 and 2011 in the organization. To avoid this type of conduct, we have made available to the internal public the company's Code of Ethics, as well as the guideline that all can report any violation of the principles contained in the document.

For this to happen, employees can make a complaint directly to their supervisor or through the Hotline, a completely free phone line, with attendants in Portuguese, English and Spanish. The complainant is kept confidential, and verification of the complaint occurs confidentially.

#### Public policies

#### SO5 Positions relative to public policy and participation in public policy development and lobbying.

→ For considering public policies a vector driver instrumental in the company's strategy, Embraco actively participates in the movements that affect the company directly or indirectly. Typically represented by senior management, expression of the company's strategic objectives is achieved through trade associations and formal representation, primarily of entities that are mainly focused on innovation, such as the National Association of Research and Development of Innovative Companies (Anpei) and the Brazilian Association of Electrical and Electronic Industry (Abinee), among others.

In order to express themselves publicly and participate in building a national public policy that aims for sustainability and energy efficiency through innovation, Embraco is also present in associations such as ABNT, IEC, Fiesc, Fiesp and CNPQ, among others.

Standing out internationally, in 2011, was Embraco's Innovation Award, in China, which had as one of its aims, interest in sensitizing public figures and opinion makers on the relevance and impact of the refrigeration segment.

The organization has positioned itself formally regarding a number of public policies with emphasis on the following topics: innovation, taxation of goods and raw materials, among others.

**↓** continues

<sup>\*\*</sup> Considering Beijing Embraco Snowflake Compressor Company Ltd. and EECON Oingdao.

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S05 continuation

Main company requests	
Themes	Actions
Innovation environment	Through Anpei, Embraco has led a large group of innovative companies to discuss and request a favorable environment for innovation, addressing issues such as an incentive law to encourage innovation and interaction between universities and companies, among others.
Revision of the Good Law	Through Anpei, Embraco expressed its interest in reducing the legal uncertainty caused by inconsistencies in the law. This goal was partially achieved with the launch of the revision of the Good Law, which regulates several obscure questions.
Patent system	Embraco's participation in discussions on the topic of innovation. The rounds of discussions concerning the patent system, which was attended by Whirlpool SA's vice president of Institutional Relations and Sustainability, Armando Ennes Valle, resulted in an article that addresses some difficulties encountered by the company regarding filing and maintaining patents in Brazil and in the world and will be published in a book.

→ Beyond these fronts, the company has established contacts with electric utility companies, in order to develop research and development projects focused on energy efficiency. Besides these projects, initiatives that strive for end-user energy efficiency are being developed in partnership with these companies so as to insert high efficiency products in the market. Both actions are supported by the Law No. 9991 of Aneel, and its changes are accompanied by the institutional relations team. In 2012, Embraco intends to continue participating in discussions about matters of interest through the actions of the entities that it is already a part of. Also, it intends to start or

increase its participation in matters related to research and development, solid waste policy formulation, compressor technical requirements, environmental education, etc.

## **SOCIAL PERFORMANCE - PRODUCT RESPONSIBILITY**

Management approach: consult pages 66 and 67.

#### Customer's health and safetye

Products and services life cycle phases whereby health and safety impacts are assessed for improvement, and the percentage of products and services subject to PR1 these procedures

→ In developing new products we take into account the health and safety of employees and customers. In the phases ranging from idealization to customer delivery, for example, we seek to identify and reduce the risk of toxicity based on a list of 546 hazardous substances that must be avoided in our processes and products. Some have already been banned and others are being progressively eliminated. The process is certified by the QC 80.000 standard and involves testing carried out internally and by external partners, providing greater transparency and quality.

Throughout product design and manufacture, we apply simulation tools to test performance under extreme conditions, with safety factors that reproduce the time of use for more than 10 years. The goal is to eliminate safety fault risks even after the end of the life cycle planned for the product.

These procedures are complemented by a fault detection process, which follows the customers' perspective and evaluates field products (those that were on the market and were returned to the company for evaluation). The goal is to identify faults and to act preventively; reducing impacts on customers. This assessment is performed in 100% of the compressor families produced by Embraco, following statistical sampling representative of each compressor model and family, and contributes with information that enhance the product development cycle.

We have also created a series of manuals and catalogs that guide customers on how to properly and safely use the compressors and refrigerant gases. With a focus on responsible disposal, the manuals and packaging contain information on the optimal disposal procedure and the chemical compatibility of waste.



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#### Products and Services Labeling

PR3 Type of information about products and services required by labeling procedures, and the percentage of products and services subject to such requirements

→ All products sold by Embraco follow international laws governing the presence of substances harmful to health and the environment in electro-electronic products. In order to ensure compliance with legislations and the fulfillment of customer requirements for products free of substances that can cause social or environmental impact, production units are annually audited and evaluated according to criteria of the QC 80.000 standard.

Thinking about the impact that its products may cause at the end of the life cycle, Embraco provides its customers with information on proper disposal and the materials used in its products. Furthermore, since 2000, the company has developed the Top Green Program, which consists of collecting compressors, which are disassembled in special equipment and their components are sent for recycling.

The program has already withdrawn from the market more than 1.35 million used compressors.

In order to ensure continuous improvement, Embraco has a work group focused on increasing the reliability of electrical components. There are also several ongoing projects in the company to improve the identification of components regarding recyclability and disposal. The care with harmful substances, especially the work carried out to identify them throughout the supply chain, is also present in the actions.

Embraco also includes in its manuals, references to safety in the use of its products and also on the products' disposal.

## **SOCIAL PERFORMANCE - HUMAN RIGHTS**

Management Approach: refer to pages 37 and 38.

#### Investment and Procurement Practices

HR1 Percentage and total number of significant investment agreements that include human rights clauses or that were subjected to human rights screening

→ The best way to evaluate the investment contracts that consider assessments of human rights is by departments. For the Corporate Procurement Department, in 2011, there were 19 existing significant investment agreements - considering the agreements above R\$ 10 million -, with 68% of these containing human rights clauses. In the Research and Development Department, none of the 19 significant investment agreements - made between the organization and universities - contain human rights clauses. EECON Brazil has 17 strategic suppliers (80% of total purchases), with two having human rights clause.

The Environment, Health and Safety Department has a significant investment contract - of relevant value and global coverage - which includes human rights clauses.

HR2 Percentage and total number of significant suppliers and contractors that have undergone screening on human rights and the measures taken

→ Between October and November 2011, 51 suppliers of Embraco Foundry were assessed on issues regarding the Code of Conduct, which contains aspects of human rights, among others. These suppliers are representatives of more than 70% of the volume of purchases. Actions for the most critical group will be implemented in 2012. Embraco's other units had already undergone such an assessment in 2010, as previously reported.

There was no case of refusal in contracting by Embraco.

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**MESSAGE FROM THE PRESIDENT** 

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#### Child Labor

HR6 Operations identified as having significant risk for incidents of child labor and measures taken to contribute to the abolition of child labor

→ No operation has been identified with significant risk for incidents of child labor. However, Embraco understands that there may be risk of occurrence in the suppliers of their

In order to avoid the occurrence of child labor, Embraco is attentive in complying with local legislations, corporate requirements, and all internal procedures and, furthermore, takes several measures, such as: signing contracts with human rights clauses, using a checklist that includes social and environmental issues to certify new suppliers, in addition to requesting that they all sign its Code of Conduct which contains provisions relating to child labor. To ensure compliance with the code, Embraco performs periodic self-assessments and regular visits to their suppliers.

#### Forced and Compulsory Labor

Operations identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of forced or compulsory labor HR7

→ No operation has been identified with significant risk for incidents of forced or compulsory labor in Embraco's operations. However, Embraco understands that there may be risk of occurrence in the operations of the suppliers of their suppliers.







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# **CREDITS**

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