
2010
Sustainability Report
UNICA Sustainability Report 2010
SUGARCANE INDUSTRY ASSOCIATION
ETHANOL | SUGAR | ENERGY BRAZIL
unica

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Global Reporting Initiative™

Statement
GRI Application Level Check

GRI hereby states that **UNICA – Sugarcane Industry Association** has presented its report "Sustainability Report UNICA 2010" to GRI's Report Services which have concluded that the report fulfills the requirements of Application Level A+.

GRI Application Levels communicate the extent to which the content of the G3 Guidelines has been used in the submitted sustainability reporting. The Check confirms that the required set and number of disclosures for that Application Level have been addressed in the reporting and that the GRI Content Index demonstrates a valid representation of the required disclosures, as described in the GRI G3 Guidelines.

Application Levels do not provide an opinion on the sustainability performance of the reporter nor the quality of the information in the report.

<Date>, Amsterdam

Nelmara Arbex
Deputy Chief Executive
Global Reporting Initiative

A+ GRI REPORT GRI CHECKED

The "+" has been added to this Application Level because UNICA – Sugarcane Industry Association has submitted (part of) this report for external assurance. GRI accepts the reporter's own judgment for choosing its assurance Provider and for deciding the scope of the assurance.

The Global Reporting Initiative (GRI) is a network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. The GRI Guidelines set out the principles and indicators that organizations can use to measure and report their economic, environmental, and social performance. www.globalreporting.org

Disclaimer: *Where the relevant sustainability reporting includes external links, including to audio visual material, this statement only concerns material submitted to GRI at the time of the Check on 14 April 2011. GRI explicitly excludes the statement being applied to any later changes to such material.*

CONTENTS

PRESIDENT'S MESSAGE

This is the Brazilian Sugarcane Industry Association's (UNICA) second sustainability report, prepared in accordance with the G3 Guidelines of the Global Reporting Initiative (GRI). As such it constitutes a landmark in the development of the Brazilian sugar-energy sector.

This report complies with the GRI A+ Application Level and was organized along the lines adopted globally for sustainability reports. Furthermore, it was assured by PWC under the AA 1000AS standard. This certifies that UNICA complied with the principles of Inclusion, Materiality and Response Capacity with respect to stakeholder demands.

We believe that the preparation of sustainability reports — as a practice for measuring, reporting and giving both internal and external stakeholders an account of our organizational development — helps promote the continuous improvement of our processes.

Development of a sustainability agenda for the sugar-energy sector and the improvement of communication channels with key stakeholders are fundamental for the incorporation and dissemination of sustainable practices throughout our supply chain.

UNICA was a pioneer when it started preparing the 2008 GRI report, and we were the first agribusiness association in the world to publish such a document. Some 90 mills and distilleries provided information for this second report, which refers to the 2009-2010 season. Additionally, more than 70 members are in the process of producing their own reports. This clearly shows the result of efforts undertaken by UNICA, in what is an emerging trend in the sector.

In addition to being a report of activities to members and other stakeholders, this document serves as a source of reliable information on the development of management indicators relating to our processes. We know that we still have some way to go, but we will press ahead as part of an ongoing process to improve our management and that of our members.

In this edition, we present projects and initiatives in which UNICA has participated with a view to promoting the sustainability of the sector. Among these are: the RenovAção Project, the Agora Project, the National Commitment to Improve Sugarcane Working Conditions, Consecana and the Agro-environmental Protocol.

More and more, UNICA is looking to the long term, signaling the promising and diversified future that awaits our industry.

In this sense, UNICA acts as a searchlight in the bow, especially in the areas of competitiveness, sustainability and communication.

This publication records some of the major efforts and results of UNICA and its members in environmental, social and economic questions, and outlines goals for the next period. It also describes important progress made toward the goal of establishing the sugar-energy sector as a benchmark in Brazilian agribusiness and reaffirms our commitment to sustainability.

I wish you good reading!
Marcos Sawaya Jank

A CONVERSATION BETWEEN PRESIDENTS

Sustainability reports such as this are seen as the main communication tool for a company's social, environmental and economic performance. Voluntary reports that meet GRI standards are considered the most comprehensive of their kind in the world. More than 1,800 companies, 134 of them Brazilian, produce these reports.

UNICA President Marcos Jank invited six leaders to take part in a discussion about sustainability: Carlos Eduardo Lessa Brandão, of the Brazilian Corporate Governance Institute (IBGC); Elizabeth Carvalhaes, of the Brazilian Pulp and Paper Association (Bracelpa); Roberto Waack, of the Amata forestry company; José Rezende, of the PwC consultancy; Carlos Dinucci, of the São Manoel sugar mill/distillery; and Fernando Rossetti, of the Group of Institutes,

Foundations and Enterprises (Gife). Also taking part were Eduardo Leão de Sousa, the Executive Director of UNICA; Iza Barbosa, responsible for the area of corporate social responsibility at UNICA; and specialist Renato Raposo.
The main conclusion of the group was that if companies do not believe a sustainability report can boost the bottom line, the initiative will never be more than empty words. "The rest is fine for making speeches," said Dinucci. He used the example of the São Manoel mill to demonstrate how financial return can be a reality. The mill supplies high-quality white sugar to Coca-Cola, which audits its suppliers and classifies them according to sustainability standards. In 2010, Coca-Cola approved 43 Latin American companies, with Usina São Manoel coming first. "This is a result and a byproduct of our work, of the corporate culture," Dinucci said. "We have achieved certain levels naturally. The company that sees this will enter a virtuous circle."

At the São Manoel mill, GRI has moved from being a matter for the directorate to become one of concern for the board. At the same time it has become more strategic than operational.
Dinucci noted that it is important to have a motivation for preparing the report. He cited the example of Copersucar, a cooperative comprising 21 business groups with 46 production units, which prepared its report to make possible a contract to sell ethanol to Japan. When the need arose, Dinucci said, the mills in the cooperative began to realize that the report is not terribly complicated: "The report makes you do better what you're doing already, or were planning to do." The greatest influence, he said, had been the efforts of UNICA. Iza Barbosa, of UNICA, summed up this work: "Three years ago three member companies contributed to UNICA's GRI report. Last year it was eight. Now this year more than 90 companies are involved, and around 70 of them are preparing their own reports."

Bracelpa President Elizabeth Carvalhaes emphasized the importance for associations of preparing the GRI reports as a way to influence the sector they represent. She said the Bracelpa report generated greater dialogue and increased the agility of internal processes related to the report within member companies.
Carlos Eduardo Lessa Brandão of the IBGC observed that companies stay out of this process at their own risk. "The company or the industry could even suffer a boycott," said Lessa. He heads an institution that is generally regarded as the leader for disseminating best governance practices in Latin America. "This is a strategic issue; one where the company has much to gain from transparency." For Lessa, the importance of this process was underlined with the creation in early August, 2010, of the International Integrated Reporting Committee (IIRC), a partnership between GRI and the Prince's Accounting for Sustainability Project (A4S).

The mission of the IIRC is to create a structure that, in an integrated manner, gathers financial, environmental, social and corporate governance information in a clear, concise, consistent and comparable format.
Companies that prepare reports to the GRI standard may also see a return in the shape of credit benefits, said Carvalhaes. "I think we're fast approaching the point where the BNDES and international financial authorities offer credit lines that are linked to social and environmental commitments." Bracelpa, which brings together 40 companies that are responsible for 97% of Brazil's pulp and paper output, produced a pilot following GRI parameters in 2009. Then, in October of 2010, Bracelpa published its first report. It was the first in the industry and addressed the issue of forestry, where Brazil is an international benchmark.
José Rezende of PwC shared the same expectation: "Who knows, maybe in the future

banks will work with a form of credit that allows a differential interest rate?"
With or without favorable credit, however, initiatives in the social and environmental area are extremely important for companies. Fernando Rossetti of Gife cited studies showing that 40% of a brand's value has to do with social and community relations matters: "It's not longer possible to ignore this, because you can't compete in the market on product quality and service alone; but also on these values of relationship with the environment and society."
As for the government, there is still a long way to go. "We spend an excessive amount of time dealing with regulations," said Marcos Jank. "The United States has developed strong institutions that are greater than the individual. Even if you switch Bush for Obama, there is a government machine that works, with clear and transparent rules." The solution, said Jank, is to build strong institutions.
Rossetti agreed: "Our mantra at Gife is that we need to policies of state, not policies of government."
For Carvalhaes, what's needed is a joint initiative between society and government.
"The public sector has to get behind this and make it happen." Roberto Waack said he shared the same opinion. Waack, who sits on the international board of the Forest Stewardship Council (FSC), spoke from the perspective of someone who in 2005 created Amata, one of the world's largest projects for certified tropical forest management. "There is an increasing coexistence of formal, governmental mechanisms and voluntary ones such as the GRI," said Waack. "We have to move more in the direction of convergence and less to competition."
Another consensus emerging from the discussion was about the educational importance of such initiatives. "Mechanisms like the ones we're talking about here go way beyond institutional marketing," said Waack. "They have an educational role; they have the purpose of showing the country moves forward."
Carvalhaes added that "when all is said and done, we are creating a new consumer. The generation of consumers now aged 30 is aware of the importance of certified material."
Rezende said he reached the same conclusion from a business point of view: "Companies can no longer act in the world without taking into account that new generations will charge for the use of natural resources – and the GRI is a way to report this."
Based on the experience of dealing with Gife's 128 members, who together invest about R$2 billion per year in the social area, Rossetti offered a way of classifying social initiatives: those that provide basic assistance; those that include various projects; those with strategic vision; and those that contribute to public policies.
Three years in the presidency of UNICA, Jank summed up the association's progress in areas that are key to the sugar-energy sector, which today includes 430 companies in 200 groups. For Jank, the training of workers, the communication and marketing project for the supply chain, the implementation of agro-environmental zoning, closer ties with trade unions and, without doubt, the preparation of GRI reports are all extremely important. "It's a series of actions that ends up creating what we might call collective goods," he said.
Waack emphasized the importance of addressing the issue of sustainability via mechanisms such as the GRI report, not only to state the sector's position, but also to make known its views on issues of public importance. "An initiative like this has great relevance that goes beyond the sector and its companies."
For Raposo, sustainability has become part of business logic. With a GRI report, a company "moves from risks to opportunities."
For Marcos Jank, the process of preparing and publishing the GRI report, a landmark for all organizations, brings with it change and doubt. Sharing knowledge is therefore the key for this process to succeed, and to this end meetings like the current one are essential.

ABOUT THIS REPORT

This is UNICA's third consecutive biennial sustainability report. It was produced in accordance with GRI G3, the latest version of the Global Reporting Initiative guidelines, with Application Level A+. In various points UNICA has advanced in the process of defining the content and in the collection of indicators.
Moreover, for the first time UNICA's report carries the limited assurance of the application of the AA1000 standard. Provided by independent auditors PwC, this lends greater transparency and credibility to the information herein reported.

Scope

As it implements its strategy in the area of sustainability, UNICA focuses its attention on questions related to certification, the environment, climate change, labor relations, communication and social responsibility.

This report seeks to present the progress made by UNICA and its members in these areas, looking at the major projects and activities developed in each case, together with social and environmental initiatives.

Process

At its fifth meeting on October 6th, 2009, the UNICA Sustainability Committee recommended the following improvements to the organization's sustainability report: a) external verification of environmental and social data; 2) changing the reporting period from the "fiscal year" to the "harvest year", which runs April to March; and 3) conducting formal consultations with external stakeholders as part of the process to define materiality.

The "Materiality Meeting; UNICA Sustainability Report 2010" was held in order to list the issues deemed relevant by stakeholders. This meeting started with a presentation of the 2008 sustainability report, followed by an open discussion on issues to be addressed in the 2010 sustainability report. Participants in this meeting included representatives of PwC, Ernst & Young, BSD Consulting, Consensus, Basf, São Paulo University (USP), the Sugarcane Technology Center (CTC) and the São Paulo State Government's Secretariat of the Environment, plus representatives of UNICA member companies.

The next step was to expand the consultation to all members. To this end, meetings were held between 16th November 2009 and 23rd March 2010 in each of the six regions where member mills and distilleries are concentrated (Ribeirão Preto, Presidente Prudente, Piracicaba, São José do Rio Preto, Bauru and Araçatuba). Representatives from over 100 member companies gave their opinions about the environmental and social indicators to be reported.

The chosen themes were evaluated by the UNICA Directorate and Sustainability Committee, then finally presented to the Board for approval. Questionnaires were prepared using the subjects approved by the Board and sent to UNICA members, who were given until April 10th, 2010 to reply, by when they had data for the 2009/2010 harvest.

UNICA is committed to broadening consultations with stakeholders in its next report to include human rights and environmental NGOs, plus sugarcane suppliers.

Any questions relating to the matters discussed in this document may be clarified via the email: gri@unica.com.br.

STRATEGY AND ANALYSIS

The current administration took office with a mandate to expand UNICA's scope of action, incorporating the development of a sustainability agenda for the São Paulo sugar-energy sector, improving communication channels with stakeholders, expanding the participation of bioelectricity in the Brazilian energy matrix and establishing ethanol as a global commodity.

Since then competitiveness, communication and sustainability have become the three pillars of the strategy that guides and defines the organization's performance.

Lakeside vegetation in Araras

Competitiveness

- Support the management of the sugarcane agri-industry in a competitive, free-market economy.
- Lead discussions to reduce and eliminate barriers that distort trade in sugar and ethanol.
- Promote global expansion of the production, consumption and free trade of fuel ethanol and establish it as a global energy commodity.
- Promote the expansion of bioelectricity generation as a clean and reliable alternative source of electricity.
- Encourage research into new technologies for sugarcane and its derivatives.

Sustainability

- Position UNICA and its members as benchmarks in sustainability.
- Continually improve the sustainability of the sugar-energy sector supply chain.

Communication

- Be transparent and pro-active in our relationship with stakeholders.
- Become a global reference as a source of information and analysis about the sugar-energy sector.
- Disseminate scientific data regarding the positive externalities of sugarcane ethanol.

PRINCIPAL IMPACTS, RISKS AND OPPORTUNITIES

In 2008, the Brazilian sugar-ethanol sector generated US$28.15 billion in revenues — equivalent to almost 2% of national GDP. The stages of agricultural production before and after the farm gate account for 24% of billings in the sugar-energy sector, while industrial processing, transportation and wholesale and retail distribution of products derived from sugarcane are responsible for the remaining 76%.

THE ECONOMIC DIMENSION

THE SOCIAL DIMENSION

Estimated sales of mills and distilleries, based on final products (US$ millions)

Product	Domestic market (DM)	Export markets (EM)	Total (DM + EM)
Hydrous ethanol	11,114.80	23.78	11,138.28
Anhydrous ethanol	2,972.89	2,366.33	5,339.22
Non-fuel ethanol	438.78*	n.d.	438.78
Sugar	5,297.00*	5,482.96	10,780.10
Bioelectricity	389.63*	n.d.	389.63
Yeast and additives	21.41	42.2	63.61
Carbon credits	n.d.	3.48	3.48
Total	**20,234.35**	**7,918.75**	**28,153.10**

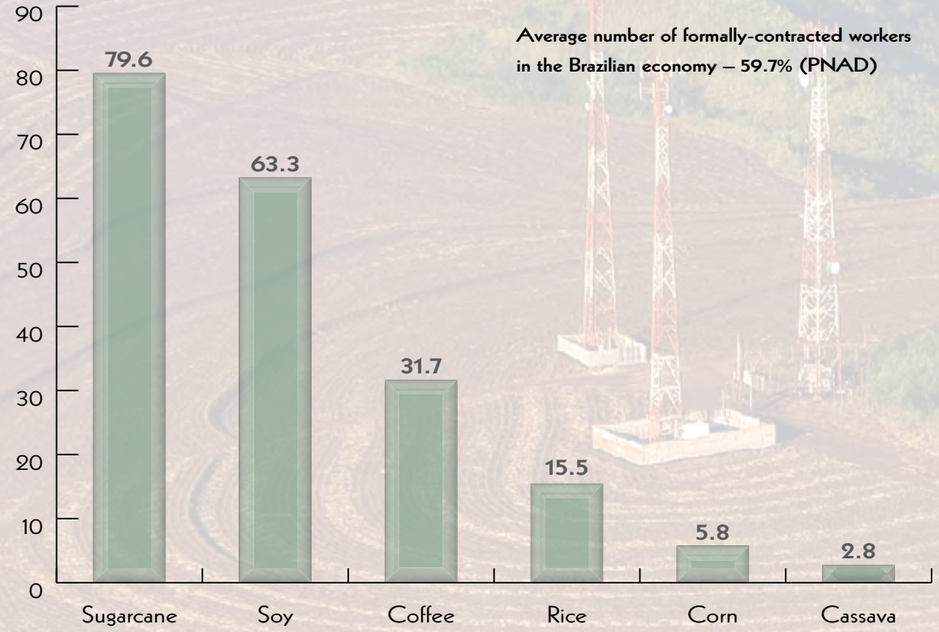
Source: Neves, Trombin and Consoli, with data generated by Markestrat (2009).

*The average 2008 exchange rate of R$1.84 = US$1.00 was used when mapping the sector.

The sugar-energy sector is one of the most important in Brazil, in terms of job creation. According to the Ministry of Labor and Employment's Annual Report of Social Information (RAIS) 1,283,258 people were formally employed in the sector in 2008. Of these, 481,662 were field workers employed in sugarcane cultivation, while 561,292 worked in mills producing raw sugar. A further 13,791 were involved in refining and milling of sugar and 226,513 worked in ethanol production. Given that every direct job in the sector generates two others indirectly, a grand total of 3.85 million people held jobs related to sugarcane.

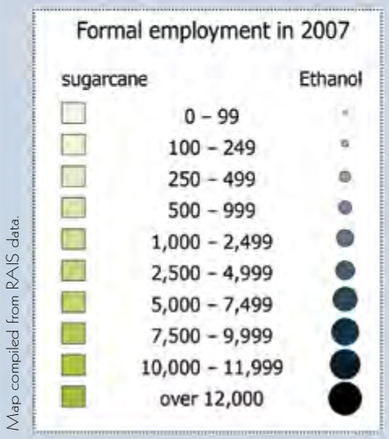
It is worth noting that these direct jobs encompass a wide range of functions, positions and areas of specialization. A standard mill-distillery has on average 403 job descriptions, ranging from manual laborer through highly skilled roles, taking in technical and administrative areas.

PERCENTAGE OF FORMAL JOBS (2009)



Source: Compiled from PNAD 2009 by Fabíola C. Oliveira, a researcher at GEMT (http://www.esalq.usp.br).

THE SPREAD OF EMPLOYMENT



Map compiled from RAIS data.

IBGE data for 2009 show that 79.6% of all manual workers in the Brazilian sugarcane industry were formally registered employees.

However, the social impact of sugar-ethanol activity in Brazil cannot be assessed purely by the number of jobs created. It is equally important that the sector, which spreads almost nationwide, contributes to the decentralization of income and the regional distribution of wealth.

Not only is the sugarcane industry present in 25 of the 26 states, but it is widespread within states, being found in 1,042 municipalities, nearly 20% of the total in Brazil.

It is well known that registered sugarcane field workers in general suffer from poor levels of education, albeit the average has increased in recent years. According to 2009 data, sugarcane workers have an average of 4.5 years of formal schooling.

An analysis of the figures shows that the sector is responsible for incorporating into the labor market a significant contingent of workers that would have difficulty finding employment in other areas of the economy.

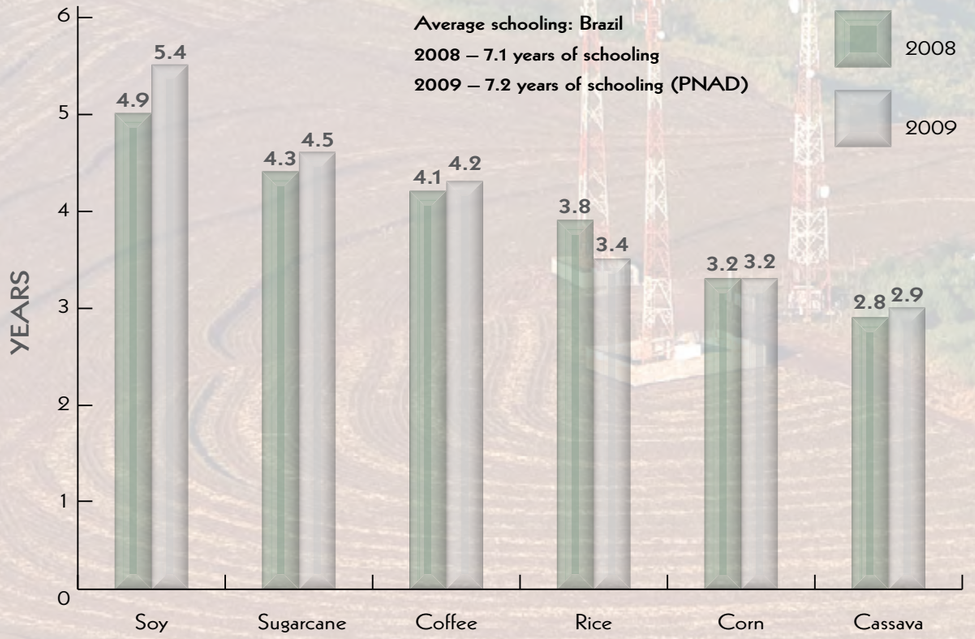
However, increasing mechanization is generating a growing demand for more qualified professionals. One harvester replaces the work of 80 people, usually with low qualifications, while it requires 12 workers trained in automation and mechanization.

Payrolls

Length of schooling is naturally reflected in wage levels. However, to properly assess the level of sugar plantation workers' remuneration, the most telling comparison is in relation to workers in other cultures. In this sense, the sugarcane plantation workers' average monthly wage of R$721.58 is second only to the R$905.33 that workers on soybean farms receive, according to PNAD 2009. However, soybean farms are highly mechanized and therefore require a more qualified workforce. Wages are lower in comparable cultures like coffee, rice, maize and cassava.

The total sector payroll by region was R$786.3 million in the Center-South and R$422.6 million in the North-Northeast, for a total of R$1.21 billion.

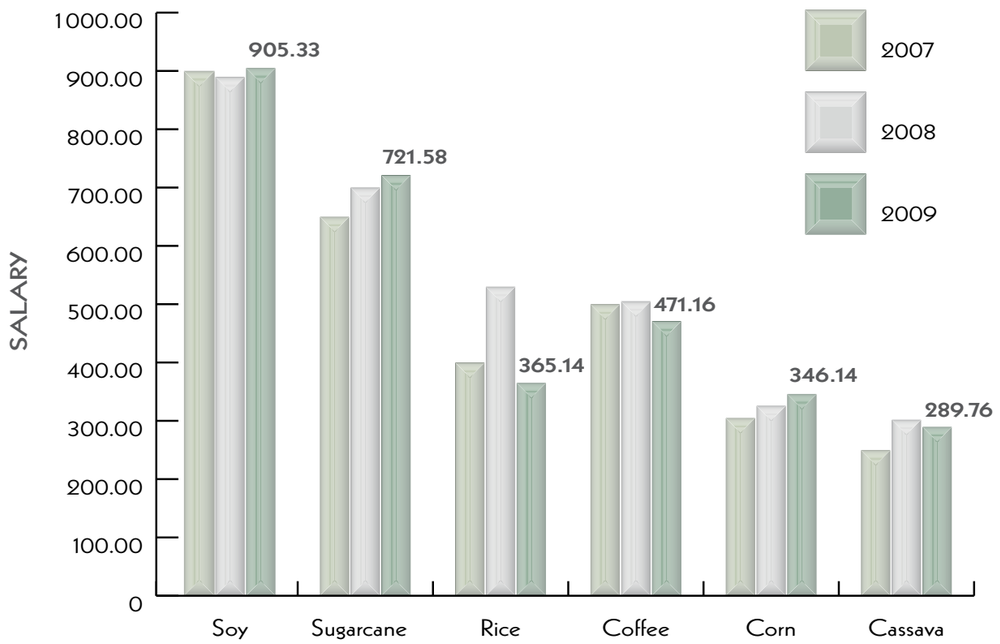
AVERAGE SCHOOLING (2008 AND 2009)



Source: Compiled from PNAD 2009 by Fabio C. Oliveira, a researcher at GEMT (http://www.esalq.usp.br).

Sugarcane planting

AVERAGE SALARY OF FIELD WORKERS (2007, 2008 AND 2009)

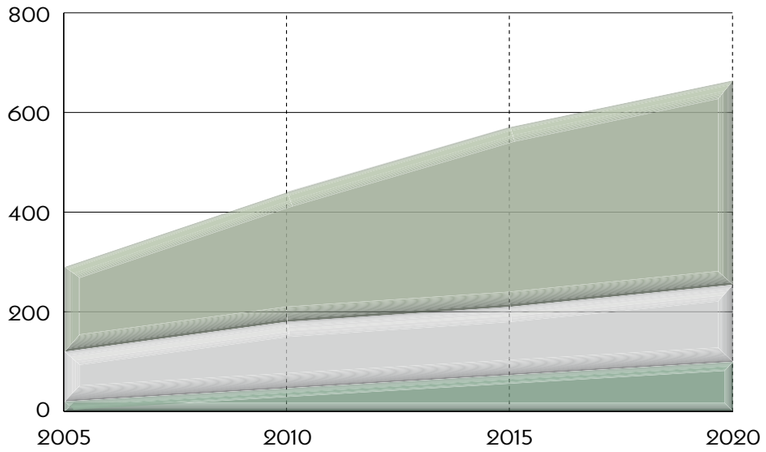


Source: Compiled from PNAD 2009 by Fabio C. Oliveira, a researcher at GEMT (http://www.esalq.usp.br).

THE ENVIRONMENTAL DIMENSION

The use of renewable energy with low carbon content is an important strategy for reducing emissions of greenhouse gases that have caused global warming. The sugar-energy sector has a substantial positive impact. According to studies by researchers at UNICAMP and backed up by the International Energy Agency (IEA) under the auspices of the Organization for Economic Cooperation and Development (OECD), sugarcane ethanol can reduce greenhouse gas emissions by 90 % when compared to gasoline. The contribution of ethanol and bioelectricity is also relevant at a global level. Estimates indicate that from the inception of the UN's Clean Development Mechanism (CDM) in July 2005 through July 2009, Brazilian ethanol has prevented emissions equivalent to about 60% of all the carbon credits generated by the CDM worldwide.

GREENHOUSE EFFECT AND MITIGATION EFFECT IN BRAZIL (MILLION TONS OF CO_2E/YEAR)



Source: Luis Gylvan Meira Filho and Isaías C. Macedo

- Total emissions in Brazil[1]
- Emissions from Electrical Energy + Transportation[2]
- Reduction: sugarcane (electrical energy + ethanol)[3]

Notes: [1] Excluding deforestation. Estimates: Energy Research Company (EPE); National Energy Plan (PNE) 2030.
[2] Emissions from electricity generation and transportation sectors. Estimates: EPE, PNE 2030.
[3] Mitigation, sugarcane: ethanol + electricity (scenario of this study).

PUBLIC HEALTH

Transporting ethanol by rail

Replacing fossil fuels with biofuels significantly reduces the emission of greenhouse gases and helps reduce the effects of global warming. However, this substitution also generates local benefits: the scientific community has long been familiar with the impacts of pollution on health. Studies by the Air Pollution Laboratory at São Paulo University's Faculty of Medicine have shown that substituting gasoline and diesel with ethanol in the vehicle fleet in the metropolitan region of São Paulo would save 875 lives and prevent more than 12,000 hospital admissions per year, saving the government more than US$190 million.

It is also important to emphasize that pre-harvest burning of the sugarcane straw, a centuries-old practice that negatively impacts the health of farming communities, is a process in rapid extinction. Fortunately, the solution for this problem is already being applied. In 2007, UNICA signed an agreement with the Environment Secretariat (SMA) of the State of São Paulo providing for a progressive reduction in the area of fields burned. According to SMA data, in the 2009/2010 harvest 53.9% of the crop in the state was harvested without burning. By 2014, all areas with slopes less than 12%, implying virtually all the areas planted, will be harvested without burning.

Brazilian Sugarcane Map

ETHANOL ▸ SUGAR ▸ BIOELECTRICITY

THE SUGAR-ENERGY SECTOR*

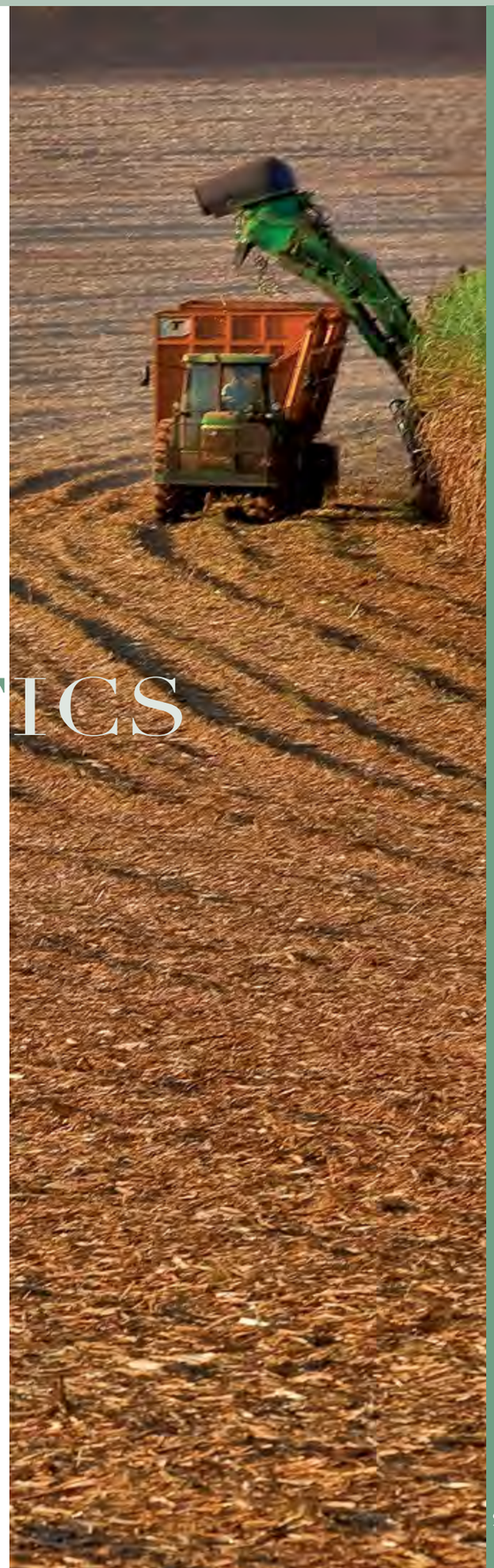
Brazil is the world's largest producer of sugarcane, processing about 605 million tons in the 2009/2010 harvest. In 2009, sugarcane occupied 8.51 million hectares, or 2.5% of total arable land in Brazil. Sugarcane is grown primarily in the Southeast and Northeast region of the country, with two different harvest periods: April-December in the Center-South region and September-March in the Northeast.
The Center-South accounts for more than 85% of Brazil's crushing and the State of São Paulo for more than 60%.

* More information can be found in the book "Ethanol and Bioelectricity: Sugarcane in the Brazilian Energy Matrix," available at http://english.unica.com.br/multimedia/publicacao/.

Night view of a production plant

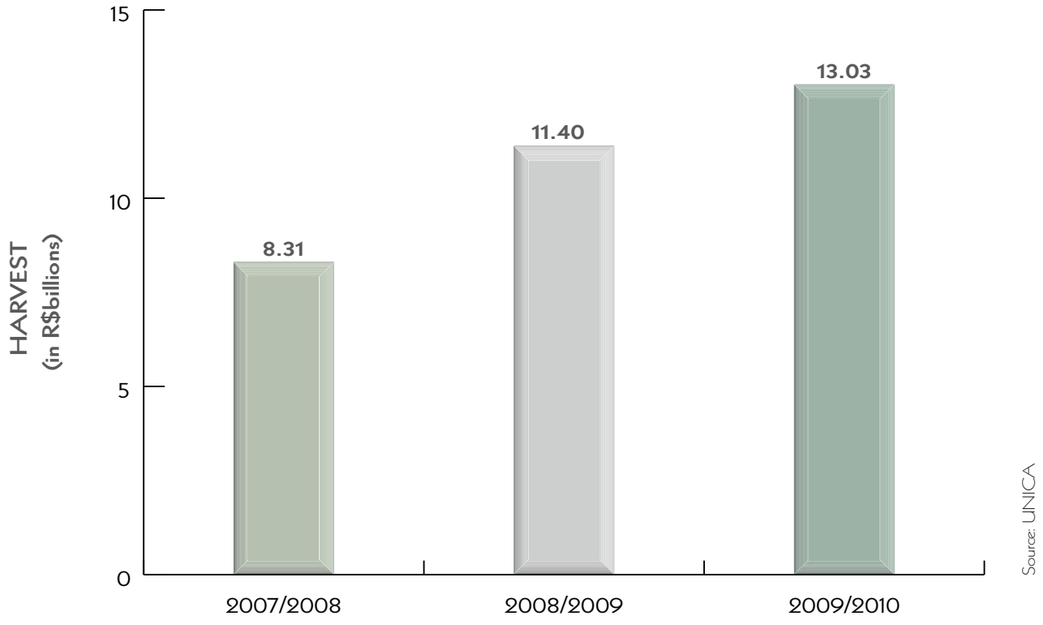
In August of 2010 there were 432 mills operating in Brazil. Of these 251 are mixed units producing both sugar and ethanol, while 162 are distilleries. All are self-sufficient in the production of thermal energy and electricity. The participation of international investors in the Brazilian sugar-energy industry is growing: in the 2009/2010 harvest, 22% of the mills installed in Brazil were controlled by foreign capital, while in 2007/2008 the percentage was 7%.

STATISTICS



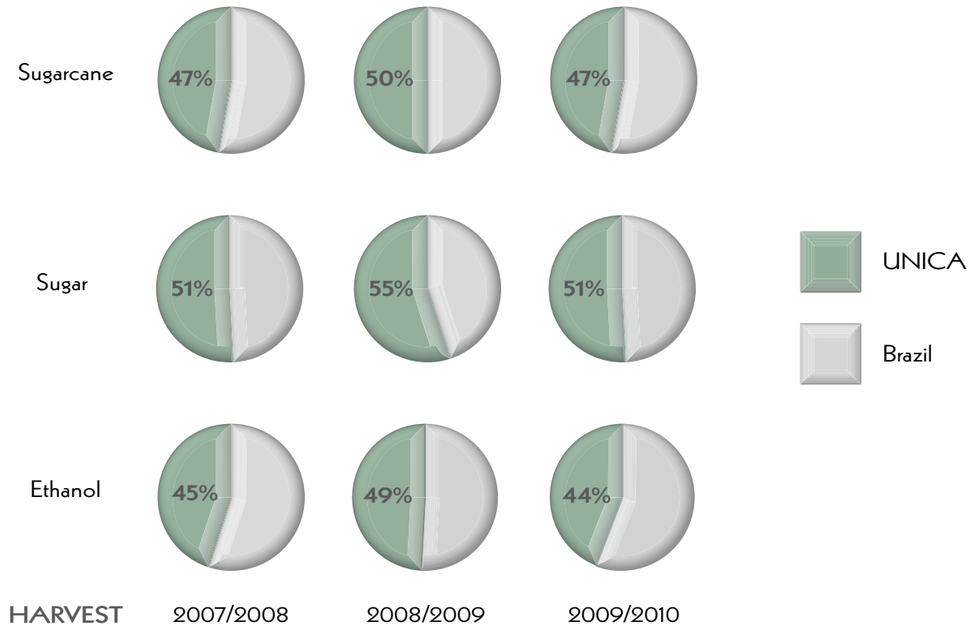
ECONOMIC

ESTIMATED GROSS REVENUE/UNICA MEMBERS



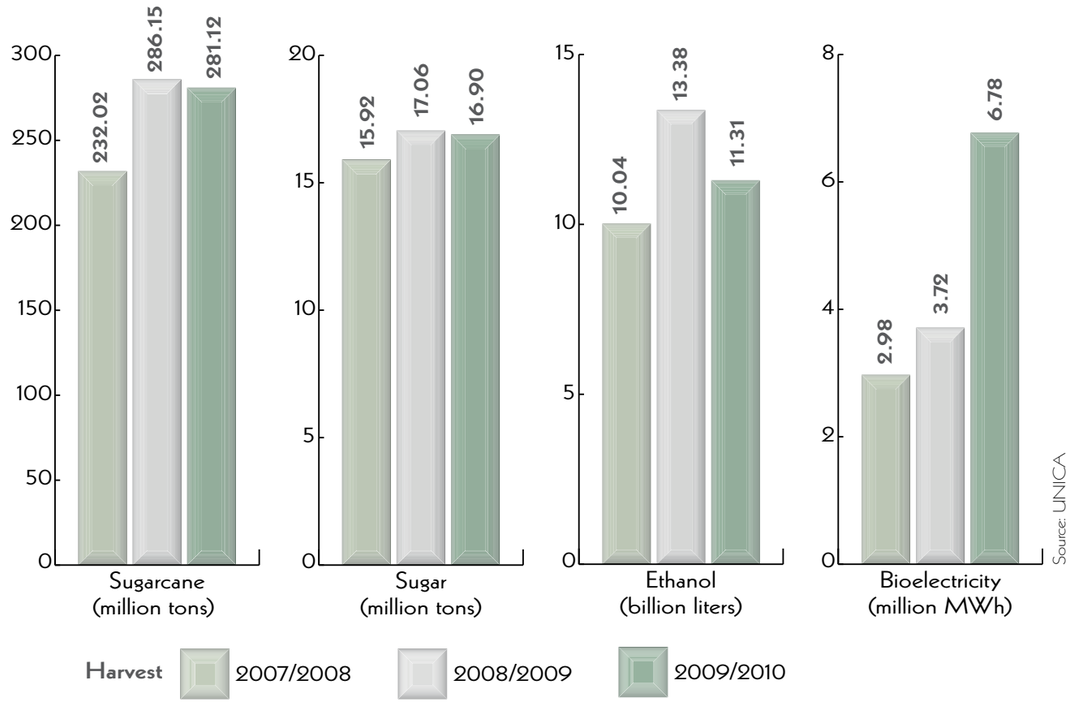
Source: UNICA

SHARE OF SUGAR AND ETHANOL AND PARTICIPATION IN BRAZILIAN SUGARCANE CRUSHING/UNICA MEMBERS



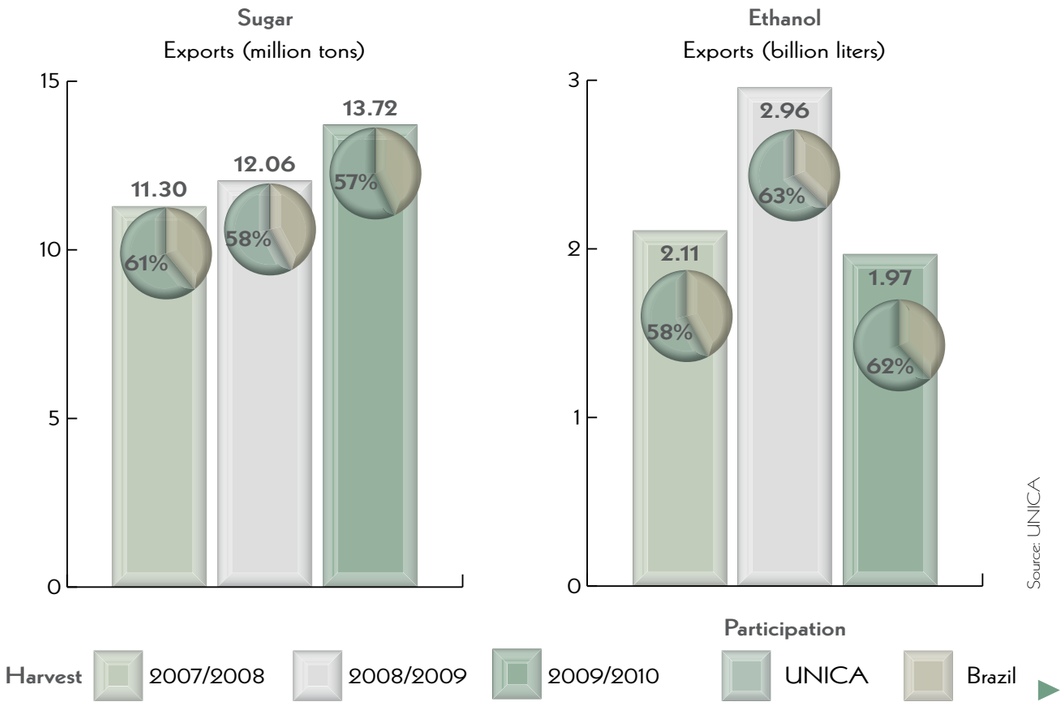
Source: UNICA

SUGARCANE CRUSHING; PRODUCTION OF SUGAR, ETHANOL AND BIOELECTRICITY/UNICA MEMBERS



Source: UNICA

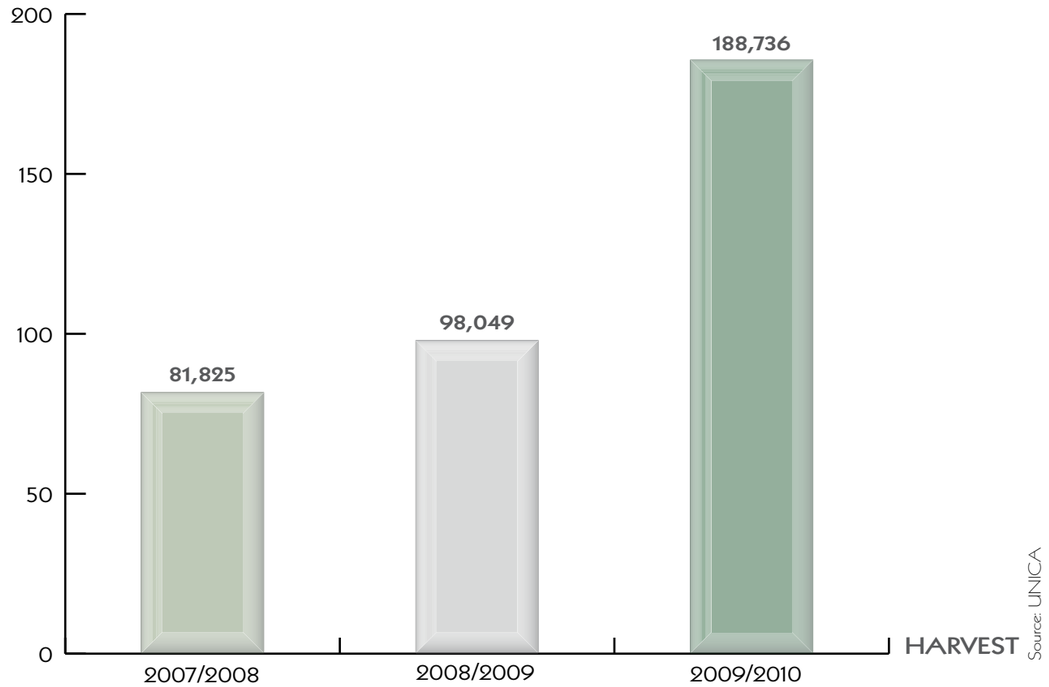
EXPORTS OF SUGAR AND ETHANOL AND PARTICIPATION IN BRAZILIAN EXPORTS/UNICA MEMBERS



Source: UNICA

SOCIAL

NUMBER OF EMPLOYEES*/UNICA MEMBERS



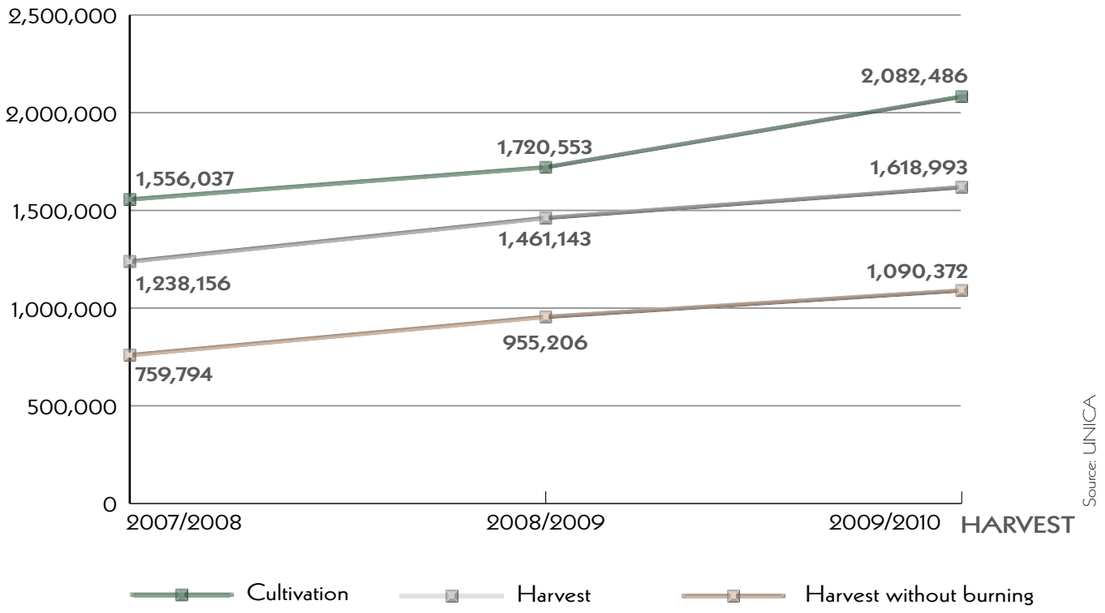
Source: UNICA

*The 2007/2008 and 2008/2009 harvests refer to 60 member mills, while the 2009/2010 harvest relates to 93.

Hand cutting a type of sugarcane for planting

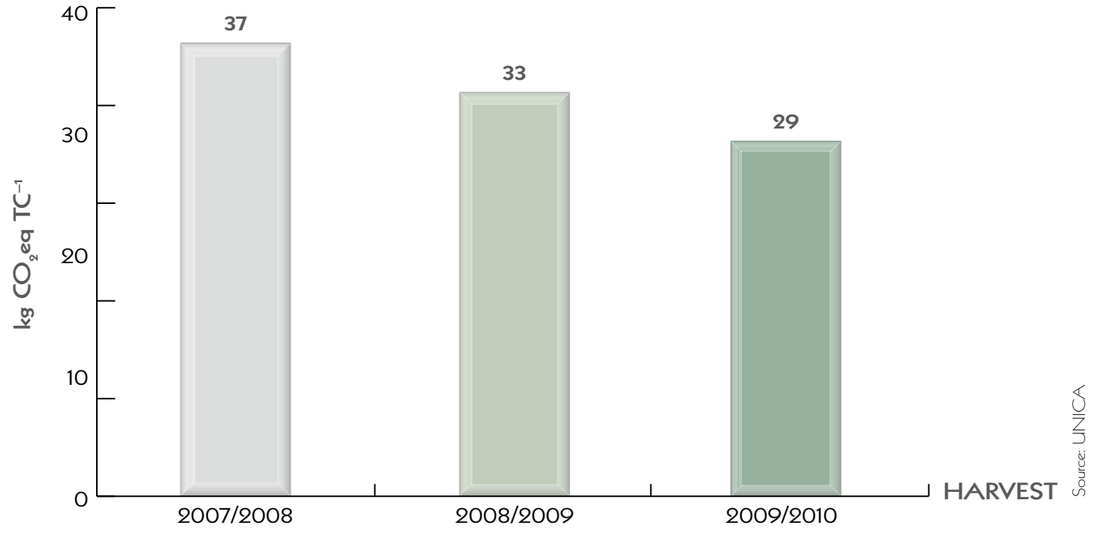
ENVIRONMENTAL

AREA MANAGED (HA) BY UNICA MEMBERS*



*Universe = 97 members

GHG EMISSIONS PER TON OF HARVESTED SUGARCANE*



* Universe: 48 members and the agricultural areas they manage.
Note: Detailed calculation methodology in the box on page 36.

Emissions avoided and GHG inventory/ UNICA members

Ethanol and bioelectricity are forms of renewable energy, and emit less greenhouse gases than their fossil competitors when produced and consumed. For every liter of ethanol consumed in a flex-fuel engine, an average of 1.7 kg of CO_2 is not emitted into the atmosphere (MACEDO and SEABRA, 2008b). This potential is tending to increase with the introduction of new technologies, such as mechanized harvesting and installation of boilers with greater efficiency. The sugar-energy sector is thus an important tool for Brazil in fighting climate change. According to a study by researchers at USP and Unicamp (MEIRA FILHO and MACEDO, 2009), without ethanol and bioelectricity Brazilian emissions related to transportation and power generation would have been 22% higher in 2006 and could be 43% higher in 2020.

This is an option that is both efficient and costs less. The same study indicated that the world saves US$0.20 for every liter of sugarcane ethanol used. This value shows how much is saved, i.e. not spent on other technologies to reduce our CO_2 emissions.

These numbers are the result of complex calculations of life-cycle analysis (LCA) that include all net emissions (effected and avoided) throughout the product life-cycle, from raw material production through to final use.

For more information on emissions avoided through the production and consumption of sugarcane products, please see the book "Ethanol and Bioelectricity: Sugarcane in the Brazilian Energy Matrix," available on the UNICA site (http://english.unica.com.br/multimedia/publicacao/).

Another important analytical tool is the corporative emissions inventory. In this case, only the company's absolute emissions are considered, without taking into account emissions avoided. The following indexes present inventory data for direct emissions at 48 mills of UNICA members and the agricultural areas they manage. It is important to note that this is an inventory of emissions, not an analysis of the product life-cycle.

Absolute GHG emissions (tCO_2eq).

2007/2008	2008/2009	2009/2010
2,243,330.23	2,443,671.33	2,413,106.82

Source: UNICA

Universe: 48 members and the agricultural areas they manage.
Note: Detailed calculation methodology in the box below.

Despite the increase in both planted area and the volume of sugarcane processed in the last three years, absolute emissions rose only slightly (see table above). Moreover, in analyzing the emissions per ton of sugarcane produced (chart above), a downward trend can be seen. Among the potential factors that contributed to these results are increased mechanization (from 46% to 54% in the period) and greater productivity (6.6% between 2007/2008 and 2009/2010), among other factors.

It is worth noting that a significant part of the absolute emissions relates to the use of nitrogen fertilizers, lime and diesel.

Sugarcane farming is subject to significant seasonality (rainfall, resting areas, etc.). It is thus to be expected that there may be significant variations of emissions from one harvest to the next. A trend analysis of these indicators over time is more important than an annual result.

Calculation methodology used for emissions inventory in this report

The inventory of greenhouse gases (GHG) takes into account all direct emissions in the production of sugarcane, from planting to industrial processing. The data are for 48 mills, and consider only the area that they themselves manage.
Only the items of greatest relevance for GHG emissions were considered in the inventory. These are: consumption of diesel, burned and unburned straw, nitrogen fertilizer, lime, vinasse and filter cake.
The direct emission of CO_2 uses factors based on IPCC (2006), with the Global Warming Potential (GWP) updated according to IPCC (Fourth Assessment Report, 2007) for emissions of methane and nitrous oxide.
Emissions caused by burning straw were calculated according to rates from HASSUANI (2005), who considers 14% of sugarcane to be straw (dry matter). It is assumed that 5% of the sugarcane straw harvested mechanically ends up being brought to the processing plant and burned in the boilers. There is thus no emission of N_2O in those 5%.

It is also assumed that 10% of straw in the area harvested with burning remains in the field and therefore emits N_2O.
We considered only the emission of NO_2 through the use of urea. Emissions in its production process were disregarded.
Issues relating to the use of industrial waste from the production of cane sugar, as filter cake and vinasse, were estimated according to MACEDO (2008).

Following is the list of emission factors used.

Source	Emission factor* (kg CO_2 eq/kg source)
Straw burning	0.088
Nitrogen application	6.2
Limestone	0.44
Vinasse	0.002
Filter cake	0.071
Mulch	0.003

*IPCC, 2007

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Guarantã seeds collected in the forest for the seedlings nursery

Protection of riparian areas (hectares)/ UNICA members*

HARVEST	PROTECTED AREAS
2007/2008	122,449
2008/2009	130,437
2009/2010	143,462

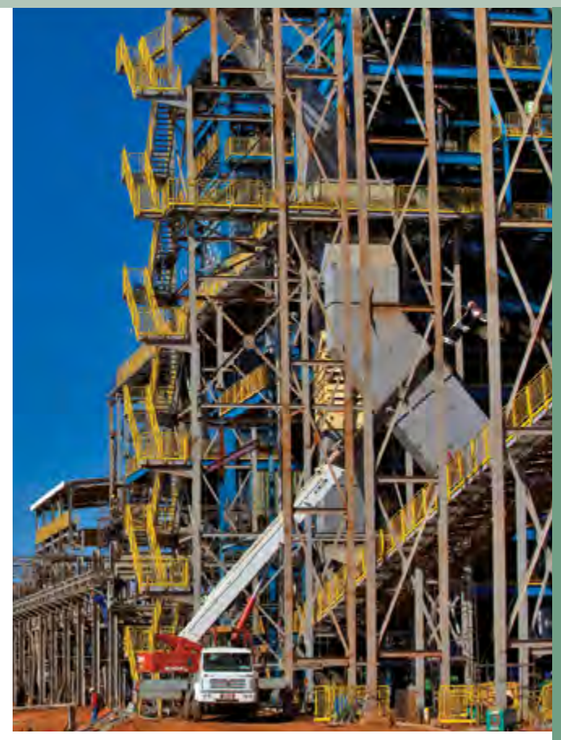
Source: UNICA
*Universe = 97 members.

UNICA-member mills and others that signed the morally binding voluntary commitment entitled the "Agro-Environmental Protocol" are pledged to protecting areas of riparian forest. Together these mills declared they would protect more than 143,000 hectares in the 2009-2010 harvest, considering areas that they own or manage.

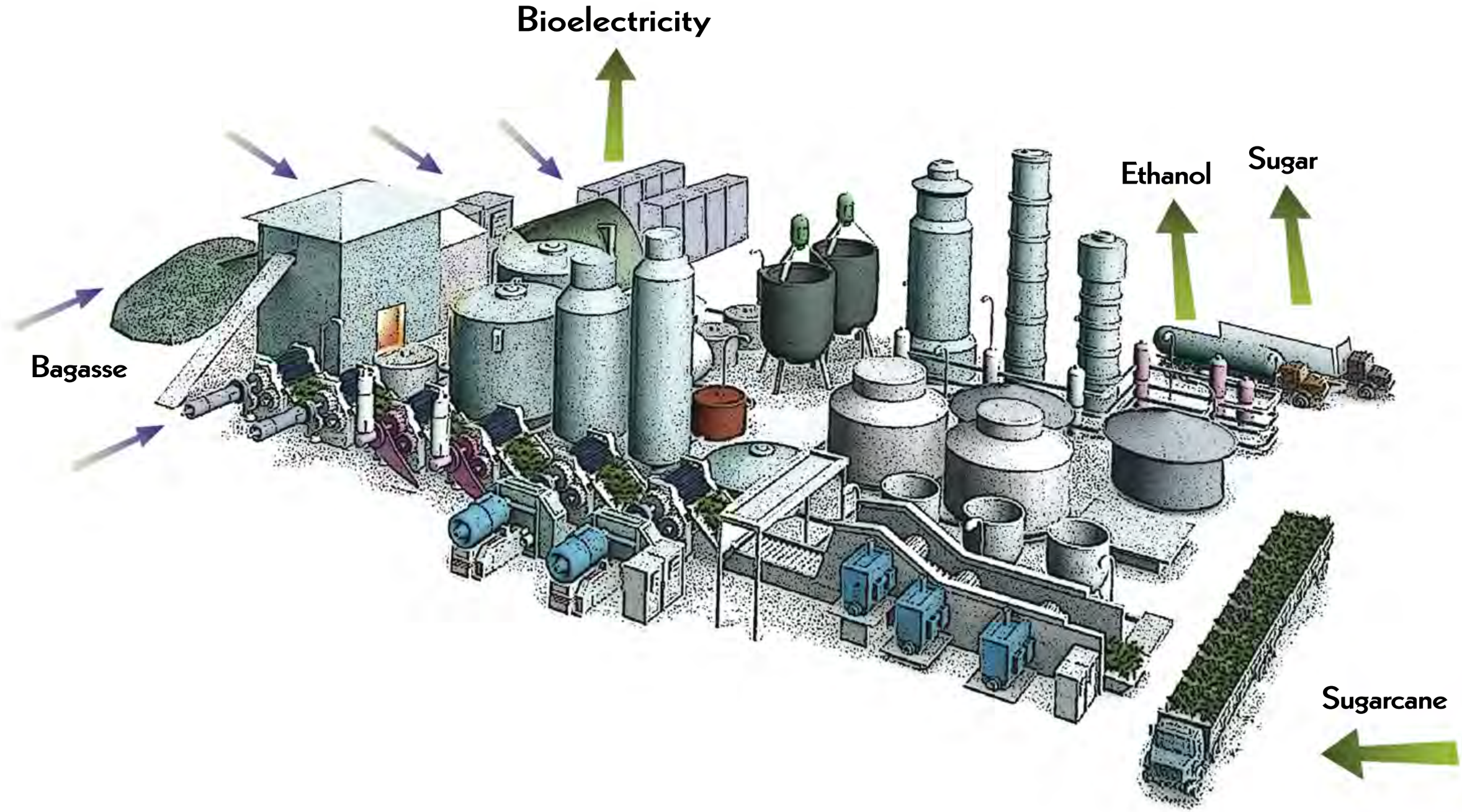
Use of water resources (billion liters)/ UNICA members*

HARVEST	WATER CONSUMPTION
2007/2008	438
2008/2009	503
2009/2010	418

Source: UNICA
*Universe = 97 members.



BUSINESS OPPORTUNITY


Bioelectricity
Ethanol
Sugar
Bagasse
Sugarcane

SUGAR-ENERGY SUPPLY CHAIN – IN US$ MILLIONS, 2010

PRODUCTION OF SUGARCANE
Mill Plantations: **6,387.91**
Independent Suppliers: **5,121.84**

DISTRIBUTORS AND COOPERATIVES
477.54 with pesticides and herbicides

Fertilizers - **2,259.09**
Pesticides and herbicides - **768.44**
Soil complements - **50.56**

Autoparts and Maintenance Services - **2,851.19**
Harvesters - **426.52**
Tractors - **320.87**
Implements - **425.66**
Trucks - **331.36**
Tractor trucks, trailers and semis - **233.36**

Diesel oil and lubricants - **1,054.01**
Protection equipment - **53.80**

EQUIPMENT - **3,400.99**
Steam generators - **667.13**
Reception/extraction - **568.13**
Distillery - **469.13**
Sugar processing - **354.38**
Electricity generation - **274.50**
Other assembly - **411.75**
Maintenance - **655.98**

Automation/Instrumentation - **269.76**
Electrical installations - **366.00**
Civil construction - **594.75**
Assembly and maintenance services - **1,110.35**

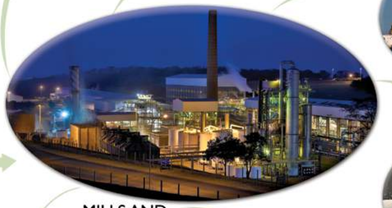
Chemical products - **463.82**
Laboratory materials - **15.45**

Sacks - **45.42**
Big Bags - **14.67**

Protection Equipment - **38.96**
Fuel Oil and Lubricants - **94.19**

CARBON CREDIT
3.48

BIOELECTRICITY
389.63



MILLS AND DISTILLERIES
Total: **22,639.17**

BIOPLASTIC
(non-commercial scale)

YEASTS AND ADDITIVES
Domestic Market
Animal Feed Industry: **21.41**
Export Market
Animal Feed Industry: **42.20**

ANIMAL FEED INDUSTRY

ETHANOL
Domestic Market
Hydrous: **6,615.58**
Anhydrous: **2,972.89**
Non-fuel: **438.78**
Export Market
Hydrous: **1,179.91**
Anhydrous: **1,210.20**

DISTRIBUTOR
8,624.05

FILLING STATIONS
11,114.50

DRINKS AND COSMETICS INDUSTRIES

SUGAR
Domestic Market
Industry: **2,037.88**
Wholesale: **580.57**
Retail: **1,663.66**
Export Market
Raw Sugar: **3,699.55**
White Sugar: **1,833.41**

WHOLESALERS
743.89

RETAIL
3,259.26

FOOD INDUSTRY AND OTHERS

FINAL CONSUMER

DISTRIBUTORS

FREE CONSUMER

SPECIAL CONSUMER

Source: Neves, Trombin and Consoli, with data from Markestrat (2009)

PROFESSIONS IN THE SUGAR-ENERGY SECTOR – 403 DIFFERENT JOBS

AUTOMOTIVE*
- Vehicle and Machinery Maintenance
- Welding
- Electrical
- Tire Repair
- Fuel Supply
- Washing
- Mechanical
- Bodywork
- Paintshop
- Alignment
- Automotive Controls
- Carpentry

AGRICULTURE*
- Earthmoving
- Soil Preparation
- Planting
- Irrigation
- Fertilization/Pest and Weed Control
- Labor
- Mechanized Harvesting
- Transportation
- Maintenance
- Purchasing
- Agricultural Control
- Farm Administration

ADMINISTRATIVE*
- Human Resources
- Social Responsibility
- Supplies
- IT
- Financial
- Accounting/Tax/Costs
- Billing
- Legal
- General Services
- Commercial – Domestic and Export
- Logistics
- Quality Management

INDUSTRIAL*
- Sugar
- Ethanol
- Bioenergy
- Bioplastics
- Yeast
- Maintenance/Utilities
- Quality Control
- Projects

DIRECTORATE*
- Presidency
- Unit
- Agricultural
- Industrial
- Commercial
- Administrative/Financial
- Human Resources
- IT
- Market/Investor Relations
- Corporate Environmental Affairs

MANAGEMENT*
- Unit
- Agricultural Production
- Industrial
- Production
- Maintenance
- Engineering and Projects
- PCP
- Processes
- Industrial Laboratory
- Supply
- Purchasing
- Quality
- Sales
- Marketing
- Foreign Trade
- Sales Distribution
- Logistics
- Administrative/Financial
- Financial
- Control
- Tax Planning
- Accounting
- Costing and Budgeting
- Legal
- Human Resources
- Personnel Administration
- Remuneration
- Benefits
- Training and Development
- Workplace Safety
- IT Systems Development
- Technical Support/Network
- Market/Investor Relations
- Corporate Environmental Affairs
- Contract Administration
- Media and Communication
- New Products

* See overleaf for a complete list of all professions in the sugar-energy sector.

Source: Neves, Trombin and Consoli, with data generated by Markestrat (2009)

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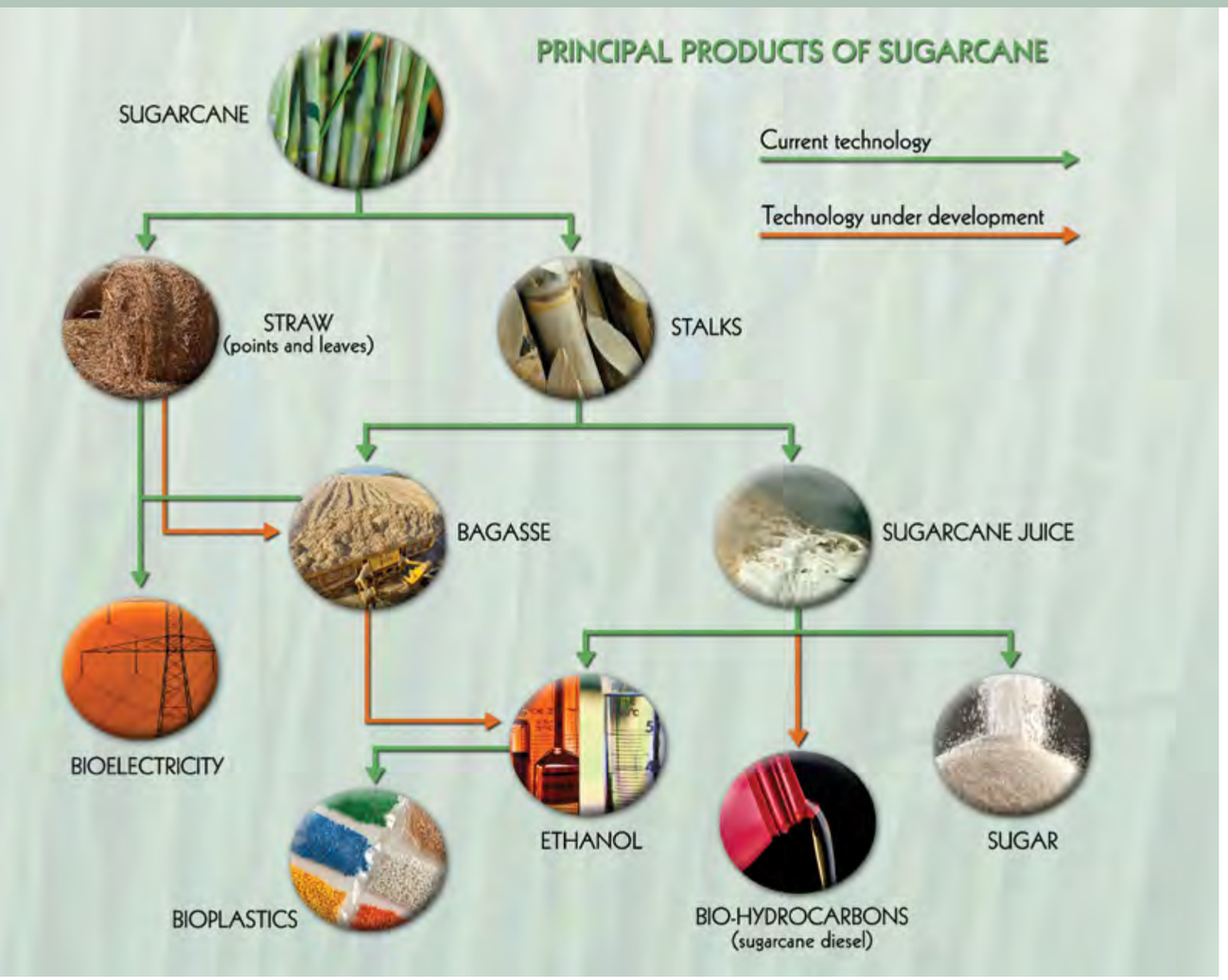


Sugar

Brazil is the world's largest producer and exporter of sugar, accounting for approximately 25% of global production and 48% of global exports to more than 100 countries in the 2009/2010 harvest. Domestic production in that period was approximately 36 million tons. About two-thirds of the sugar produced in Brazil (24.1 million tons) was destined for export, with raw sugar accounting for more than 70% of international sales.

Ethanol

Brazil is a pioneer in the use of ethanol as a vehicle fuel. The country used ethanol in cars for the first time in the 1920s, but it was only in 1975 that the industry got a big boost with the introduction of the National Ethanol Program (Proálcool), a project for the large-scale replacement of vehicle fuels, financed by the government in response to the global oil crisis.
Today, the program's success is driven by two major factors: the mandatory blend into gasoline of 20% to 25% anhydrous ethanol (ethanol that is virtually waterless) and the expansion of the fleet of flex-fuel cars running on hydrous ethanol (5% water content by volume).
First commercialized in 2003, flex-fuel cars currently account for about 90% of new cars sold in Brazil. And in 2009, Honda launched the world's first production flex-fuel motorcicle in Brazil. Thus it was that ethanol consumption overtook that of gasoline in 2008, and by the end of 2009 ethanol represented more than 50% of total light vehicle fuel in the country.

Bioelectricity

Bioelectricity generated from sugarcane bagasse is gaining increasing importance as a product for mills and distilleries. Each ton of sugarcane yields on average of 250 kg of bagasse. This has been used mainly to produce steam and electricity in sufficient quantity to make the production plants energy self-sufficient, but since the early 1980s plants have increasingly generated surplus power to sell to the grid.
Bioelectricity sold to the electricity sector exceeded 1,000 MWa in 2010, equivalent to more than 2% of the country's annual power consumption. This was an improvement over 2009 when 670 MWa were sold to the power sector. More than 100 mills and distilleries currently sell bioelectricity to the grid, but this still pales in comparison to the total number of mills in the sugar-energy sector — about 440 mills.
UNICA took part in studies aimed at improving regulations for the regulated and free markets, as a move to promote sectoral policies that support a renewable component within the Brazilian energy matrix, in particular bioelectricity. It was also the focus of efforts to organize auctions in 2010, for contracting both back-up and alternative-source energy.
A course entitled "Bioelectricity and the Electricity Sector" was organized for more than 70 members and taught by the Fundação Coge, a body specializing in issues relating to the power sector. We also speeded up the program entitled "Visiting Bioelectricity" which has organized more than 30 visits to member companies; this activity involves government officials and power sector technicians.

Bioplastics

Biopolymers, commonly called bioplastics, are produced from various renewable sources including ethanol, sugarcane, corn glucose and starches, among others. Some bioplastics are also biodegradable and compostable, in addition to being renewable.
Production of bioplastics has grown steadily in recent years, above all to meet demand from supermarkets and food companies.

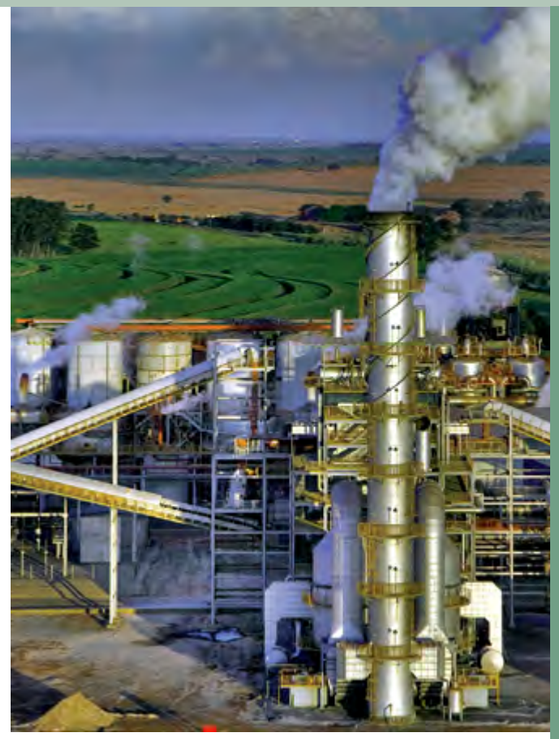
PET packaging containing 30% of "green plastic" made from sugarcane
Michael Pugh/Coca-Cola handout

Biopolymers are the raw material for the production of packaging, bags and bottles, among other items. Coca-Cola and Braskem are examples of companies that are investing in this new technology: the former launched an ecological bottle made partly from sugarcane ethanol; while the latter is producing green polyethylene. This so-called "green plastic" can be used to make various products including plastic packaging, and in the autoparts, hygiene, cleaning, and other sectors.
Another bioplastic is PHB (Biocycle), produced by PHB Industrial S/A using 100% Brazilian technology. This bioplastic is produced from sugarcane bagasse, and is material from a 100% renewable source. It is also completely biodegradable and compostable. In other words, following its use and disposal, and once in contact with a biologically active environment (presence of bacteria and fungi) together with temperature and humidity, it is transformed into carbon dioxide and water, so completing the life cycle without affecting the environment.
Biocycle can be used in autoparts, cosmetics packaging, toys, credit cards, cutlery, agricultural parts and so on.
Given all the various uses for polymers, this growth in bioplastics consumption should generate an increase in the search for renewable sources for their production. The sugar-energy sector can contribute with ethanol and sugar.

Photo: UNICA file

Board meeting ▼

The UNICA Team ▲

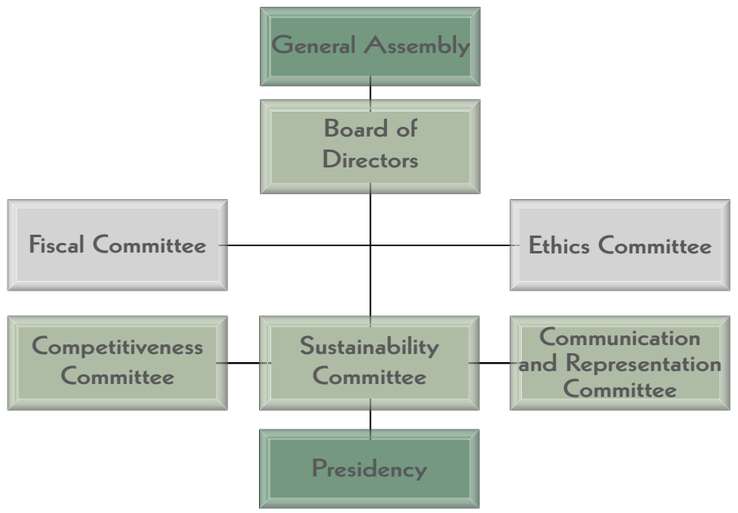


UNICA

UNICA is the largest representative organization for the Brazilian sugar, ethanol and bioelectricity industry. A not-for-profit body, UNICA operates internationally on behalf of its members, who are the companies controlling 124 sugar and ethanol mills in the South-Central region of Brazil, specifically the states of São Paulo, Minas Gerais, Goiás and Mato Grosso do Sul. UNICA members processed a total of 281 million tons of sugarcane in the 2009/2010 harvest year, transforming this into 16.9 million tons of sugar and 11.3 billion liters of ethanol, representing about 44% of the ethanol and 51% of the sugar produced in Brazil. They also produced 6.8 million MWh of electricity.

GOVERNANCE

The governance of UNICA establishes the relationship between members, the Board of Directors and the committees related to it, including the Fiscal Committee, and the directors who are responsible for managing the organization. Good governance practices promote transparency and the generation of lasting value for UNICA, contributing to its legitimacy for members and credibility for society and public opinion, both national and international.



GENERAL ASSEMBLY

The General Assembly is UNICA's highest organ of governance and is composed exclusively of members with full voting rights. The Assembly's decisions are final. Votes are weighted in proportion to the amount of sugarcane crushed in the previous harvest by each member, counting all his production units. Each member's number of votes, and each member's percentage of the total votes, is published by the chief executive based on the membership existing at the date on which the Assembly is convened.

The General Assembly holds two annual meetings: the Ordinary Meeting is held not later than June 30 to approve the accounts for the previous financial year; while the Extraordinary Meeting is held not later than March 31 to discuss and vote on the budget proposed by the Board of Directors for the coming financial year. Every three years the General Assembly is convened to elect the Board of Directors and the Fiscal Committee; the meeting taking place not later than March 31 of the year in which the Board and Committee members' mandates expire.

The prerogatives of the General Assembly are: to elect and dismiss the Board of Directors, the Fiscal Committee, directors or any member of these bodies; to hear and rule on appeals against actions of the Board of Directors, including those brought by members excluded from UNICA; to approve amendments to the Bylaws; and to decide on winding up the organization and disposal of its assets.

BOARD OF DIRECTORS

The Board of Directors is composed of the President and CEO – who is responsible for coordinating Board meetings – and 25 representatives of members elected by the General Assembly for renewable terms of three years. In this election, each member or group of members who together hold 1/25 of the qualified votes shall have the right to occupy a seat on the Board, and upon its eventual vacancy this seat shall be filled by another board member elected by the same votes.

Ordinary meetings of the Board of Directors are held once a week. The President and CEO shall convene plenary meetings on the last Tuesday of each month that are open to all members. At these meetings the results of programs under implementation are presented, and members are informed about matters of general interest and issues that are being studied or negotiated by UNICA.

Responsibilities of the Board of Directors include: preparing and approving the annual budget and fixing the annual contribution of members, based on budget parameters to be presented to the General Assembly by March 31 each year; preparing the accounts for the past year and delivering these for consideration by the General Assembly, together with an opinion from the Fiscal Committee; deciding on the admission of new members; and considering and ruling on appeals respecting actions taken by directors.

The responsibilities of the Board of Directors also include indicating to the General Assembly a professional person of recognized capability, not an employee of any member, to fill the executive position of President and CEO. The Board shall also indicate up to three specialized professionals to compose the professional directorate.

Board of Directors

Marcos Jank
President and Chief Executive Officer

Antonio Carlos Previte
Ferrari

Antonio Eduardo Tonielo
Viralcool / Santa Inês

Antonio José Zillo
Zilor

Bruno Melcher
Louis Dreyfus Commodities Bioenergia

Carlos Dinucci
São Manoel

Carlos Ubiratan Garms
Cocal

Celso Torquato Junqueira Franco
Pioneiros Bioenergia

Eduardo Pereira de Carvalho
Former President of UNICA

Fredy Assis Colombo
Colombo

Hermelindo Ruete de Oliveira
Grupo Virgolino Oliveira

Hermínio Ometto Neto
São João

Homero Corrêa Arruda Filho
São Martinho

Eduardo Leão de Sousa
Secretary

Jacyr S. da Costa Filho
Guarani S.A.

José Carlos Escobar
Clealco

José Carlos Grubisich
ETH Bioenergia

Humberto Junqueira Farias
Renuka do Brasil

Luciano Sanches Fernandes
Cerradinho

Luiz Roberto Pogetti
Copersucar

Marcos Marinho Lutz
Cosan

Maurílio Biagi Filho
Maubisa

Pedro Isamu Mizutani
Cosan

Ricardo Brito Santos Pereira
Bunge

Roberto de Rezende Barbosa
Nova América Agroenergia

Rubens Ometto S. Mello
Cosan

Werther Annicchino
Copersucar

FISCAL COMMITTEE

The Fiscal Committee is composed of three members and three alternates, elected by the General Assembly for a term of three years, coinciding with the mandate of the Board of Directors. When electing members of the Fiscal Committee, each member or group of members that jointly holds one third of the number of votes in the General Assembly shall be entitled to elect one committee member and one alternate.
The Fiscal Committee meets regularly once every month and, extraordinarily, whenever necessary, with the presence of at least two of its members. Responsibilities of the Fiscal Committee include: conducting a quarterly examination of financial statements and balances, and emitting an opinion thereon; presenting the Board of Directors with a quarterly opinion on the financial situation of the organization and the proper conduct of the accounting; reporting to the Board of Directors any breach of the law or bylaws and suggesting corrective measures. The Fiscal Committee shall also monitor the work of the directors and submit a monthly report to the Board of Directors advising on budget compliance.

Fiscal Committee

Carmem Aparecida Ruete
Virgolino de Oliveira

José Vitório Tararam
Cosan

José Pilon
J.Pilon

Marcelo Vieira
Adecoagro

José Roberto Della Colleta
Della Colleta

Wilson Helio de Albuquerque Pinheiro Jr.
Paraiso Bioenergia

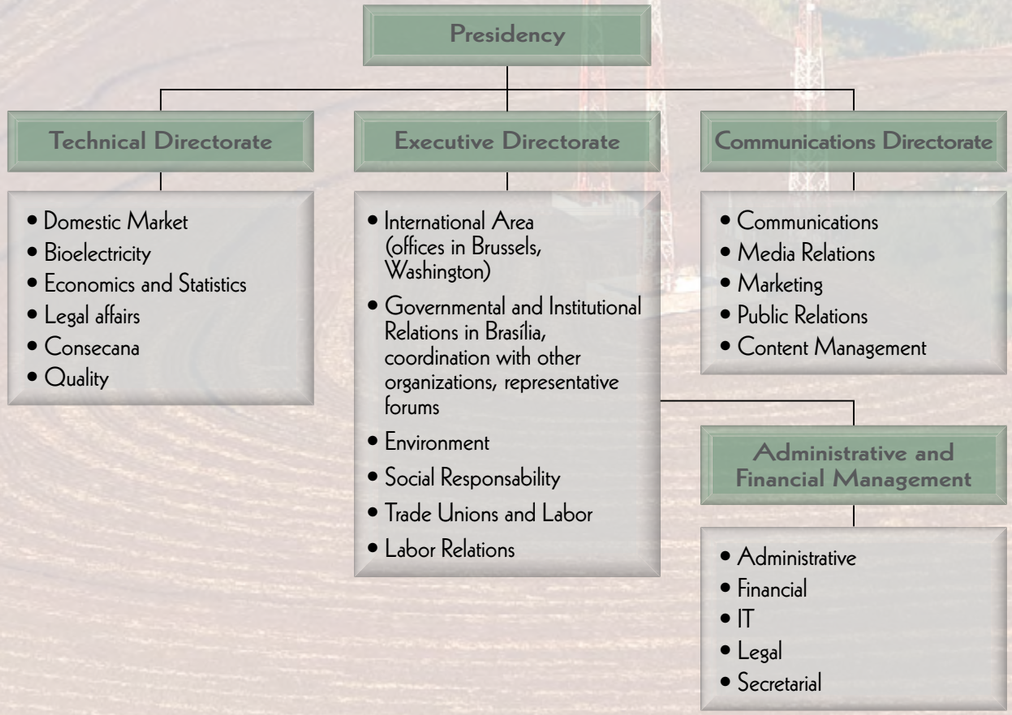
MANAGEMENT

COMMITTEES

Committees are standing bodies for in-depth discussion of long-term proposals for the strategic agenda set by the Board of Directors, focusing on competitiveness, sustainability and representation. Each committee is composed of eight members of the Board.
The president, executive directors and consultants of the respective areas (sustainability, competitiveness and communications) meet monthly and are responsible for developing action plans that form part of the budget and annual strategic planning.

UNICA management was professionalized in 2000 when the first executive president was hired from outside the group of members.
The organizational structure was revamped under the current presidency with the creation of the Communications Directorate, in addition to the existing Executive and Technical directorates. Directors are chosen by a committee consisting of the president and members of the Board and are ratified by all Board members.

ORGANIZATIONAL STRUCTURE



Directors

Marcos Sawaya Jank
President and CEO

Eduardo Leão de Sousa
Executive Director

Antonio de Pádua Rodrigues
Technical Director

Adhemar Altieri
Communications Director

The professional staff also includes 55 people working at UNICA headquarters in the city of São Paulo, its regional offices in the federal capital of Brasília and in Ribeirão Preto in upstate São Paulo, and its international offices in Brussels (Belgium) and Washington, DC (USA).
The UNICA Board of Directors is responsible for the selection, monitoring, assessment and variable remuneration of senior executives.

Relative basic salary for men and women, by employee category

Board level	Quant. in %	% Relation of Salaries
Men	100%	100%
Women	0%	-
Total		

Management level	%	% Relation of Salaries
Men	67%	100%
Women	33%	108%
Total		

Coordination level	%	% Relation of Salaries
Men	67%	100%
Women	33%	80%
Total		

Secretarial level	%	% Relation of Salaries
Men	0%	-
Women	100%	100%
Total		

Technical level	%	% Relation of Salaries
Men	33%	100%
Women	67%	110%
Total		

Administrative and financial level	%	% Relation of Salaries
Men	100%	100%
Women	0%	-
Total		

Support level	%	% Relation of Salaries
Men	40%	100%
Women	60%	67%
Total		

MISSION

To lead institutional actions that promote the competitiveness and sustainability of the sugar-energy industry, while disseminating the positive impacts of its products in Brazil and abroad.

VALUES

Integrity and transparency
UNICA acts in the defense and preservation of the general and common interests of its members, in an open and transparent manner, treating its employees and the community in the same way. UNICA is an apolitical association of an essentially institutional nature, with no direct or indirect involvement with the commercial activities of its members.

Respect
UNICA makes respect the cornerstone of its relations with its employees, society and the environment.

Value creation

UNICA seeks to create value in its relations with its members, players within the sugar-energy supply chain, and civil society and the media.

Operational excellence

UNICA seeks operational excellence with technical and scientific rigor in its daily activities, in order to ensure accuracy in its work and precision in the information and statistics that it generates.

Sustainability

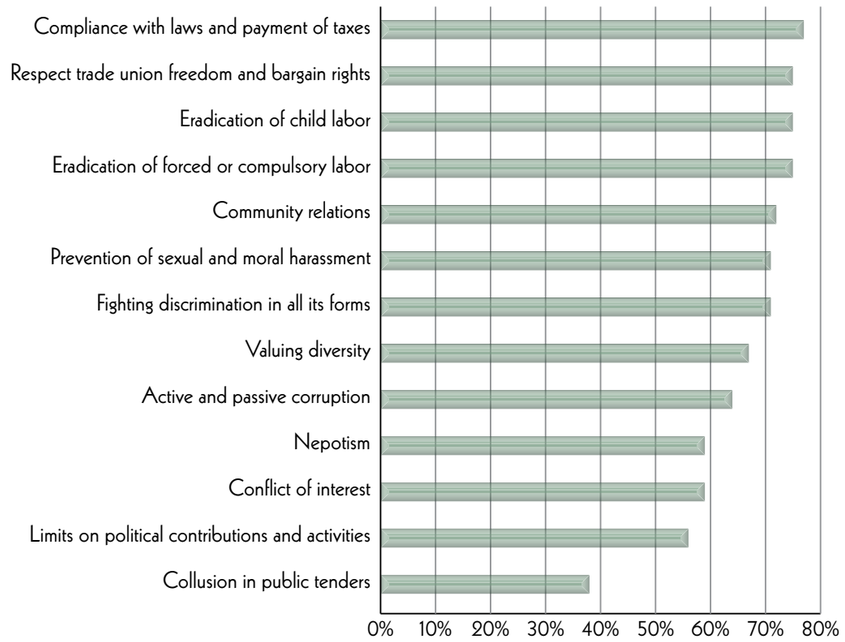
UNICA provides guidance, training and diagnostics at all levels of activity for member companies, furthering the permanent search for sustainability in the sugar-energy sector.

Code of Conduct

UNICA published its first Code of Conduct in 2010, containing a set of standards for directors, executives and employees. It lays out propositions that enrich the decision-making processes of the organization and better guide its behavior. The association established an Ethics Committee to meet the needs of the code, comprising of one member of the Board of Directors plus representatives from administrative, legal, human resources and social responsibility areas.

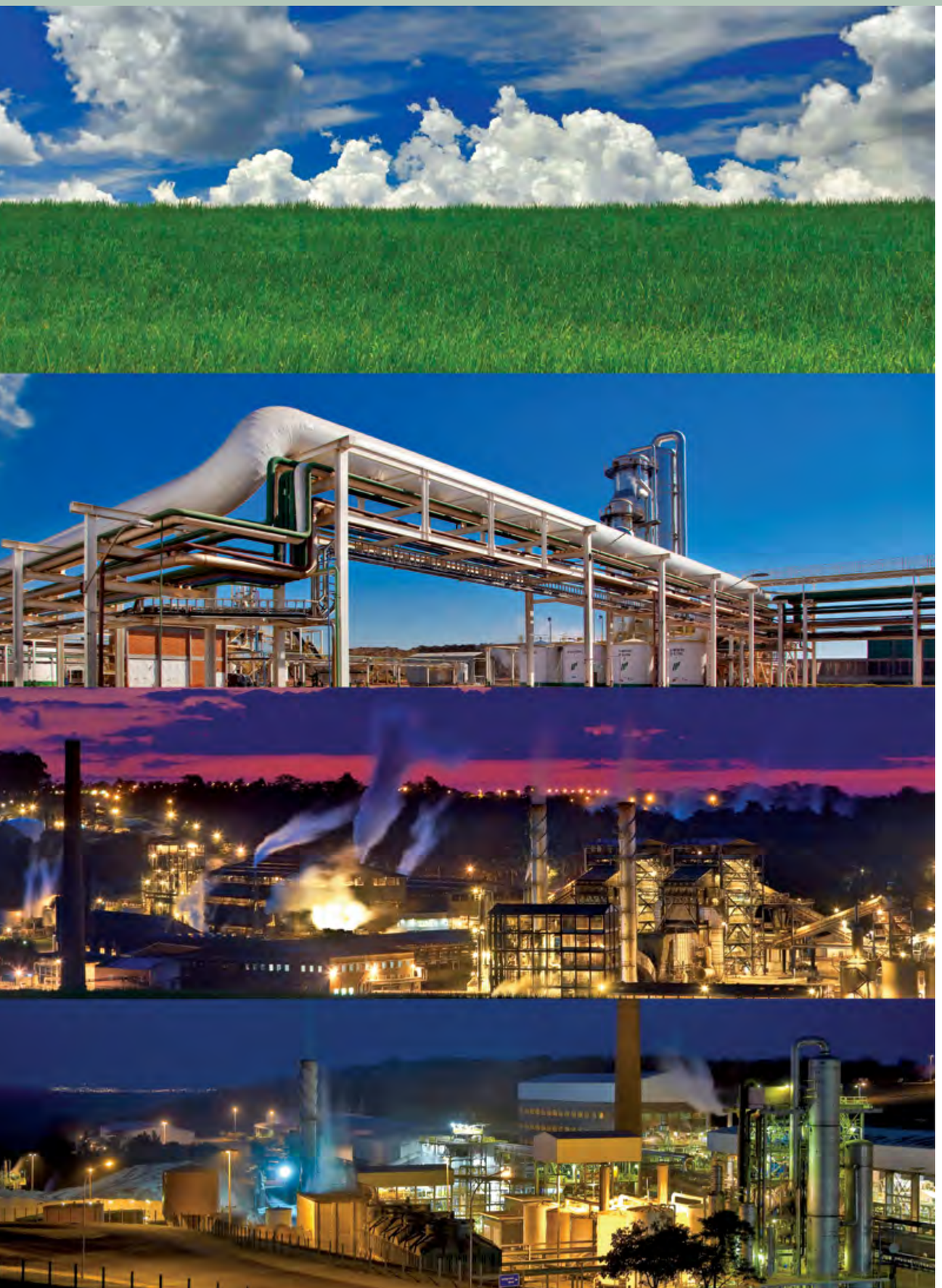
This work to raise awareness about the importance of codes of conduct has been effective: about half of member companies now have their own codes. Publishing these codes strengthens the commitment to ethical and sustainable management practices and contributes to transparency and credibility (For the full document in Portuguese, please access: www.unica.com.br/multimedia/publicacao).

Issues addressed in the Code of Conduct/UNICA members*



Source: UNICA

* Universe = 93 members



AWARDS AND RECOGNITION

GOVERNOR MÁRIO COVAS AWARD

São Paulo State Government

The "Green Ethanol" Strategic Environmental Project led to the signature of the Agro-Environmental Protocol, under which the sugar-energy sector in São Paulo has brought forward deadlines to eradicate the burning of sugarcane straw prior to harvesting. The project is a partnership between the São Paulo State Secretariat of the Environment and the São Paulo sugarcane industry, represented by UNICA.

MASTERCANA BRAZIL 2009 PRIZE

ProCana Marketing

The award of Brazil's top national prize in the sugar-energy sector, MasterCana Brazil 2009, confirmed the commitment of businessmen, officials, researchers, managers and other professionals who are helping Brazilian sugarcane gain global prominence. Honorees in 2009 were the most influential professionals in several areas, and award-winners at UNICA were: Alfred Szwarc, in the "Institutional/Political Action" category; Elimara Aparecida Assad Sallum and Maria Luiza Barbosa in the "Management" category; Antonio de Padua Rodrigues in the "Market" category, and Marcos Jank in the "Class Representation" category.
UNICA President Marcos Sawaya Jank was named "Leader of the Year" in the MasterCana 2009 survey. As the representative of the majority of sugar-energy producers in the South-Central region of Brazil, Jank has taken on the challenge of leading a campaign to publicize sugarcane ethanol around the world, working together with the government.

BULLDOG AWARDS FOR EXCELLENCE IN MEDIA RELATIONS & PUBLICITY

Category: "Best Reaction to News"

The campaign entitled "Are We There Yet" ran in the United States in May 2008, and was honored with the Bronze Prize. The Bulldog Awards constitute the only prize of its kind in which winners are chosen by a jury of editors and columnists at some of the leading media in the United States, including The New York Times, The Washington Post and The San Jose Mercury News.

RECOGNITION FROM DA PC & BALDAN CONSULTORIA E MARKETING

Cana Invest 2010 Prize
Spreading awareness of sustainability

The Cana Invest Prize is awarded to mills and distilleries that have outstanding technical criteria of efficiency, assessed by expert consultants and professionals connected with management groups in the sugar-energy sector. The award also honors individuals who have contributed to the construction of the history of the Brazilian sugarcane industry. Maria Luiza Barbosa, of the Corporate Social Responsibility area at UNICA, was honored for spreading awareness of sustainability.

HIGHLIGHTS OF THE YEAR

Renewable Fuel Standard
In February of 2010, the U.S. Environmental Protection Agency (EPA) promulgated its final regulations for the Renewable Fuel Standard (RFS), the law that defines the use of biofuels in that country. The EPA designated sugarcane ethanol as an advanced biofuel.
UNICA contracted the preparation of scientific papers to supply US authorities with credible information, and the UNICA representative office in Washington participated in several technical meetings with the EPA.
The agency acknowledged that sugarcane ethanol can reduce greenhouse gas emissions by 61%, when compared to gasoline.

COMPETITIVENESS

Low Carbon Fuel Standard

A regulation in California, adopted in March 2009, to promote a reduction in the carbon intensity of fuels used in the state. The goal is to achieve a reduction of at least 10% by 2020. Ethanol from sugarcane has been recognized as one of the biofuels that best helps achieves this goal.

European Directive on Biofuels

Adopted by the European Parliament in December of 2008, this directive requires the replacement by 2020 of 10% of fossil fuels by renewable energy by the transportation sector. The new law also determines sustainability indicators for biofuels sold in EU countries.

Ethanol trading companies

Instruction No. 52 of the Brazilian Ministry of Agriculture, Livestock and Supply, and Resolution No. 43 of the National Agency of Petroleum, Natural Gas and Biofuels govern the creation of trading companies controlled by ethanol producers. The measure should lead to greater liquidity and efficiency in spot and futures markets.

Biomass auctions

The federal government determined the holding of two auctions specifically for the purchase of energy from alternative sources. These occurred on the 25th and 26th of August, 2010. Almost 200 MWa of energy was sold to be produced by burning bagasse, to be delivered annually under contracts ranging from 15 to 20 years.

Formula Indy 2010 car race in São Paulo

SUSTAINABILITY

COMMUNICATION

Crotalária (commonly called rattle pods, or sunn hemp) are grown before each sugarcane planting as "green manure"

Photo: Paulo Carvalho
Launching the RenovAção Program

National Commitment to Improve Labor Conditions in Sugarcane

This is a voluntary agreement launched in June 25, 2009 and designed to evolve over time. In its first year, more than 300 of the 410 mills and distilleries operating in Brazil committed to complying with a set of about 30 extra-statutory labor practices.
The private sector was represented in a tripartite committee by UNICA, together with the National Sugar-Energy Forum. Labor unions and the federal government also participated.

RenovAção

This program, whose name means "Renewal" in English, has the goal of retraining 7,000 manual sugarcane workers and members of the local communities every year for jobs in the mills and distilleries, and in other sectors of the economy. Launched in February of 2010, the program is coordinated by UNICA and the Federation of Salaried Rural Workers in the State of São Paulo (Feraesp), with sponsorship from Syngenta, John Deere, and Case IH and support from the Inter-American Development Bank (IDB). As of October 2010, RenovAção has enjoyed the support of the Solidaridad Foundation, a Dutch NGO.

Agro-ecological zoning of sugarcane

UNICA took a public stance in favor of establishing Agro-Ecological zoning of Sugarcane (ZAE) and zero deforestation for all types of native vegetation, together with a prohibition on the expansion of sugarcane cultivation in agricultural areas that lie within sensitive biomes such as the Amazon and the Pantanal wetlands.

The Agora Project

Agora — the name means "Now" in English — is an integrated marketing and communications project that enjoys the support of several companies and entities representing all of the sugar-energy sector supply chain. Launched in 2009, Agora aims to educate and teach the public about the benefits of producing and using clean renewable energy from agricultural sources.

Ethanol Summit

The second edition of this event in 2009 attracted more than 3,000 people. They heard high-level presentations on biofuels, renewable energy, sustainability and the various aspects of new products derived from sugarcane and their contribution to the so-called low carbon economy. More than 120 experts from around the world participated in panels and debates, including Bill Clinton, the 42nd President of the United States. The 2009 Summit featured innovations such as a special plenary session sponsored by The Economist magazine, and the Brazil Ethanol Trade Show, a technology fair held at the same time.

TOP Ethanol Prize

This new initiative distributed more than R$60,000 in prizes for 13 works selected from among 220 entrants in four categories: Photography; Journalism; Monographs and Academic Papers on the theme "Agri-Energy and the Environment". TOP Ethanol also honored personalities linked to the sugar-energy sector.

Formula Indy

Ethanol was present in one of the main categories of motorsport, powered exclusively by ethanol as the official fuel supplier. In 2009, the project involved 14 races in the United States, two in Canada and one in Japan, together with a number of communications activities developed and coordinated by UNICA to promote the Sugarcane Ethanol brand.

Ethanol in fuelling stations

Acting on the suggestion of UNICA, the National Agency of Petroleum, Natural Gas and Biofuels (ANP) in December of 2009 adopted Resolution 39 that replaced the designation "alcohol" with "ethanol" on pumps and price panels at gas stations across the country.
UNICA had been arguing for the change since 2007, and it became mandatory in the second half of 2010.

Owner's manual

As the result of a partnership with the four largest automakers in Brazil (Fiat, Ford, GM and Volkswagen), new cars with flex-fuel engine now leave the factory with an Ethanol Guide inserted into the owner's manual. In 2009, more than two million vehicle owners received the booklets.

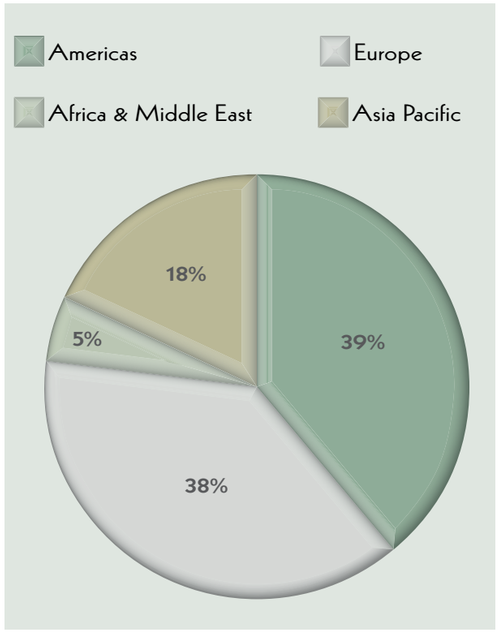
Participation in events

Participation as speakers in more than 370 seminars in Brazil and abroad, and as exhibitors at more than 26 events.

Delegations received

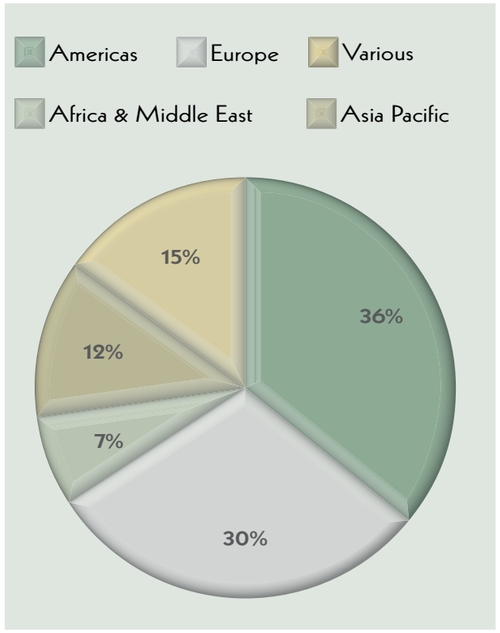
A total of 325 foreign delegations were received, of which 258 visited UNICA headquarters and 67 visited other plants. Delegations came from four regions: the Americas, Europe, Asia-Pacific and Africa-Middle East.

VISITS TO UNICA HEADQUARTERS (APRIL 2008 TO APRIL 2010)



Source: UNICA

VISITS TO UNICA MEMBER MILLS AND DISTILLERIES (APRIL 2008 TO APRIL 2010)



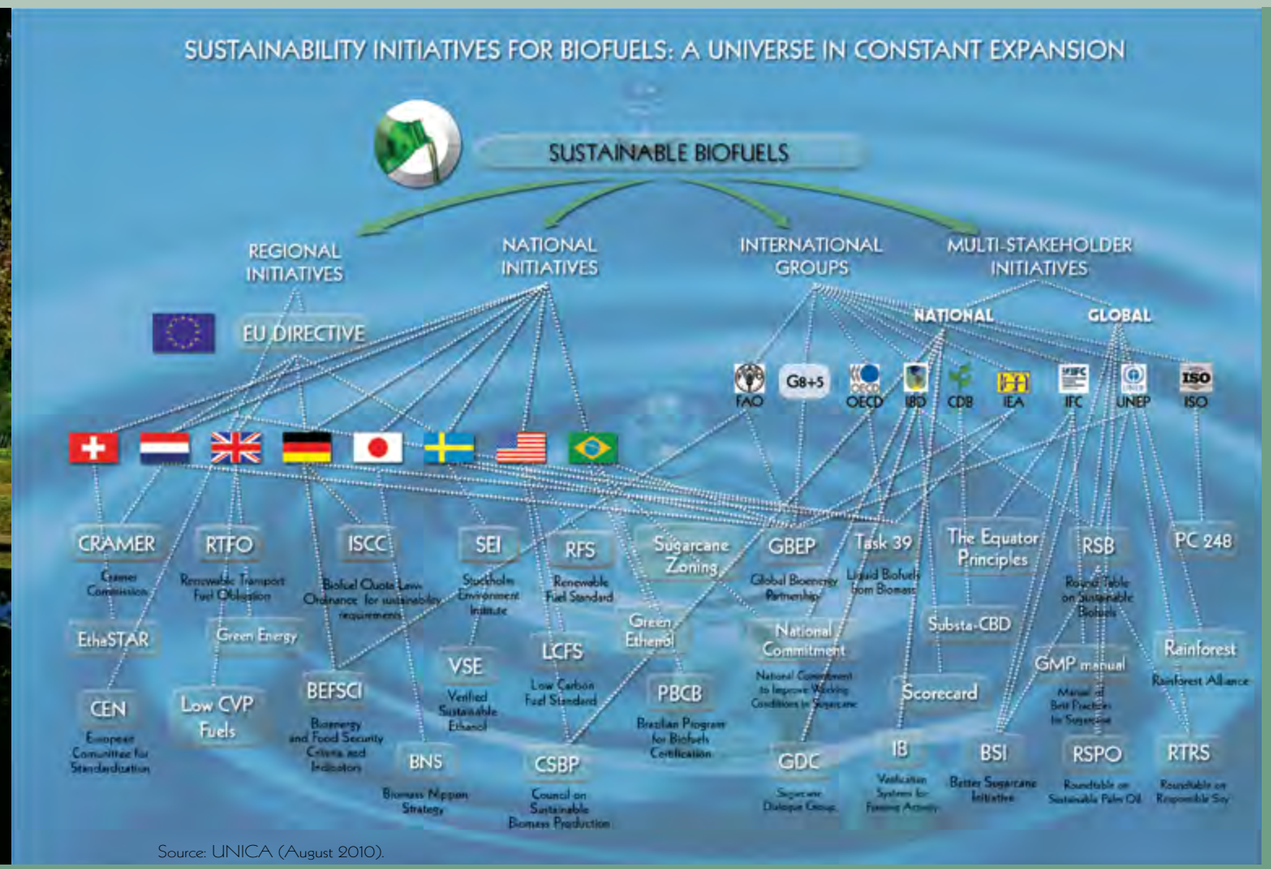
Source: UNICA

White Ipê blossom

SUSTAINABILITY INITIATIVES

UNICA implements its sustainability strategy focusing on the following issues: certification, environment, climate change, labor relations and social responsibility. The main actions and projects for these topics are described below.

CERTIFICATION



Source: UNICA (August 2010).

The "Luiz de Queiroz" Higher Institute of Agriculture in Piracicaba (SP), where sugar and ethanol prices are tracked

BONSUCRO

UNICA continued to participate actively in this initiative throughout 2009, remaining a member of the board and executive committee. BONSUCRO is a voluntary international roundtable that aims to establish a standard for certification of responsible practices in the area of sugarcane. Participating in the initiative are:

- Producers in Brazil, Central America, Sudan, India, and Australia.
- Large consumer and intermediaries of sugarcane products such as Coca-Cola, Shell, ED&F, British Sugar and Cargill.
- Representatives of civil society, such as Ethical Sugar, Solidaridad and WWF.
- International institutions like the World Bank's International Finance Corporation (IFC).

BONSUCRO develops environmental, social and economic criteria and indicators that are applicable to the entire production process of sugar and ethanol, organized around five principles:

1. Obeying the law;
2. Respect for human and labor rights;
3. Managing the efficiency of inputs, production and processing to increase sustainability;
4. Active management of biodiversity and ecosystem services; and
5. Commitment to continuous improvement in key areas of the business.

During 2008 and 2009 BONSUCRO organized three technical working groups focused on agricultural, industrial and social and labor areas. Various stakeholders from around the world participated. The Center for Sugarcane Technology (CTC) was nominated by UNICA to represent the Brazilian productive sector in the agriculture and industry groups while UNICA itself was the representative in the social and labor group. Internally, UNICA established three technical mirror groups, with the participation of more than 60 mills and distilleries. These held seven meetings in the cities of São Paulo, Piracicaba and Ribeirão Preto, for internal discussion and updates about the process. The subject was also discussed repeatedly in meetings of the UNICA Sustainability Committee.

The BONSUCRO Production Standard

UNICA has participated in and supported the preparation and publication of the "BONSUCRO Production Standard". The first draft was published for public consultation in early 2008, followed by several meetings with stakeholders on four continents. The meeting held in Brazil was supported by UNICA and brought together more than 30 institutions, including mills and distilleries, the sugar consuming industry, banks and NGOs.
In June of that year, BONSUCRO carried out pilot studies in two UNICA member companies to evaluate the first version of the "Production Standard". In November of 2009, a second version was published, followed by a new phase of public consultation. In March of 2010, BONSUCRO created a subcommittee to harmonize the "Production Standard" with the European Renewable Energy Directive (which states that all biofuels and their raw materials consumed in the bloc must be certified). UNICA was chosen as coordinator of this process.
Also in the first half of 2010, BONSUCRO started developing the "Chain of Custody Standard". This sets out rules for traceability of the certified products in the distribution chain. The final versions of these two documents are being completed. Once this phase is concluded, the process of accreditation and training of auditors is due to begin.

Acting with support from the UNICA office in Brussels, BONSUCRO will request official recognition of this initiative by the European Commission.

More information: www.bonsucro.com.

Goals for 2012

For the preparation of the next sustainability report in 2012, UNICA is committed to:

- Expand consultation with stakeholders, including non-governmental human rights and environmental organizations, and sugarcane suppliers.
- Encourage and increase to 100% the participation of members in the report.
- Reinforce the consistency of sectoral social and environmental indicators provided by members, through seminars and lectures aimed at standardizing the information submitted and ensuring accuracy of the data collected and compiled.
- Achieve the largest possible number of workers trained through the RenovAção Program, and encourage members to invest in projects for retraining sugarcane cutters.
- Encourage the implementation of sustainability programs throughout the entire supply chain.
- Seek to achieve 100% compliance of members in the National Commitment to Improve Working Conditions in Sugarcane.
- Contribute to increased adherence of members to the State of São Paulo Environmental Protocol.
- Increase participation in discussions about climate change and act actively to raise awareness of all members.
- Achieve a consolidated regulatory framework capable of stimulating the participation of bioelectricity in the Regulated Energy Supply Environment.
- Maintain the Bioelectricity Technical Group (GTBio) structured and organized, via meetings and discussion forums, aiming to assist them in activities related to bioelectricity.
- Remain honest and impartial in publishing data of interest of civil society and the national and international press, and increase as much as possible the attention given to the demands of the media in matters of interest to the Brazilian sugar-ethanol industry.
- Maintain an active presence at leading trade shows and industry events, aiming to promote positive actions in favor of ethanol in Brazil and abroad.
- Increase the number of international delegations received to disseminate knowledge about the Brazilian sugar-ethanol industry, and promote its good image.
- Highlight the environmental benefits of products derived from sugarcane through marketing activities such as sponsorships, participation in key national and international events, our own events and media campaigns.
- Continue developing the activities of the Agora project in Brazilian states and expand the work of the project across the country.
- Seek new partners among companies and associations involved in the sugarcane supply chain for the projects supported by UNICA.
- Contribute to the eradication of child labor and forced or compulsory labor in all member plants.

CONSECANA-SP (COUNCIL OF SUGARCANE, SUGAR AND ETHANOL PRODUCERS IN THE STATE OF SÃO PAULO)

Consecana-SP is a nonprofit association formed by representatives of sugar and ethanol processors and sugarcane growers, with the primary function of ensuring a good relationship between both parties. It completed 13 years of existence in 2010.

The council created a system for payment of sugarcane based on sucrose content, with technical criteria for assessing the quality of sugarcane delivered by growers to processors and for determining the price to be paid to the farmers. Use of the system is voluntary.

Under the system, the value of sugarcane is based on the so-called Total Recoverable Sugar (ATR in Portuguese), which corresponds to the amount of sugar available in the raw material minus the losses in the manufacturing process, and the prices for sugar and ethanol sold by processors in domestic and foreign markets.

The basic principle governing the model is that revenue should be shared between industry and agriculture in a balanced way based on production costs. From this criterion, revenue from the sale of sugar and ethanol is split in proportion to costs.

Any changes to the model are evaluated by a Technical Board and approved by the Board of Consecana, thus preventing unilateral decisions.

The Consecana Board is composed of five representatives of the Organization of Sugarcane Planters in the Center-South Region of Brazil (Orplana) and five representatives of UNICA, with the same number of alternates.

Consecana also has a Technical Board (CANATEC) which advises the Board on technical and economic issues. It consists of six representatives each from Orplana and UNICA.

Transparency is crucial in this model, which is why surveys of prices in domestic and foreign markets are conducted by a neutral body – the Center for Advanced Studies in Applied Economics (Cepea) which is linked to the "Luiz de Queiroz" Higher Institute of Agriculture (ESALQ), within the University of São Paulo.

Moreover, production and marketing volumes of the producing units within Consecana are subject to supervision by federal and state governments, which allows for proper taxation of products sold.

Joining the system is voluntary, and the results confirm the success of the partnership between production plants and suppliers. In the 1998/99 season, the first year the system was implemented, São Paulo had 11,570 sugarcane suppliers who produced 51.5 million tons of sugarcane within a total of 199.5 million tons in the state. In the 2009/2010 harvest there were 18,078 sugarcane suppliers producing 124 million tons of sugarcane in a total 361.3 million tons crushed in the state.

Given the obvious mutual gains from the São Paulo system, other states copied the model by creating their own systems or by relying on information from neighboring states.

No other Brazilian agribusiness sector has a forum for discussion between producers and processors that generates shared results with such transparency as Consecana in the formalization of supplier contracts.

National Commitment to Improve Labor Conditions in Sugarcane

The proactive pursuit of engagement with key stakeholders in the sugarcane supply chain is a hallmark of the operational strategy adopted by the current management of UNICA. In this sense, the National Commitment to Improve Labor Conditions in Sugarcane is of great importance.

It can be said that this commitment is the result of a pioneering experiment in Brazil of a national tripartite dialogue and negotiation between employers, employees and the federal government.

The Brazilian sugar-energy industry has more than 400 processing plants, over a thousand support companies and 70,000 sugarcane suppliers, resulting in 2009 in almost a million jobs in 20 states. It was in this context of inclusion and diversity that this historic commitment was negotiated to recognize best labor practices adopted in manual sugarcane operations.

Negotiations began in July of 2008 and it took 17 meetings and nearly a year of dialogue and cooperation to build a consensus.

Businessmen were represented by UNICA and the National Sugar-Energy Forum; workers by the São Paulo Federation of Salaried Rural Workers (Feraesp) and the National Confederation of Agricultural Workers (Contag); and the federal government by the General Secretariat and Staff of the Presidency of the Republic and the ministries of Labor, Agriculture, Livestock and Supply, Agrarian Development, Education, and Social Development and Elimination of Hunger.

The National Commitment was launched June 25, 2009 in the presence of the president of Brazil. On that occasion the great majority of UNICA members decided to join voluntarily and committed to complying with a set of 30 labor practices that go beyond what is required in law. The initial validity of the commitment is two years. Companies undertaking to comply with the practices laid down in the Commitment are subjected to monitoring of results by the National Commission for Dialogue and Assessment, which comprises representatives from government, Contag, Feraesp, the National Sugar-Energy Forum and UNICA.

The centerpiece of the National Commitment is the stimulus to adopt best labor practices by creation of market instruments that recognize these practices as examples to be adopted by a growing number of companies. In relation to the employment contract, for example, the Commitment provides for direct hiring of workers for manual tasks of planting and cutting sugarcane, totally eliminating the use of intermediary sub-contractors.

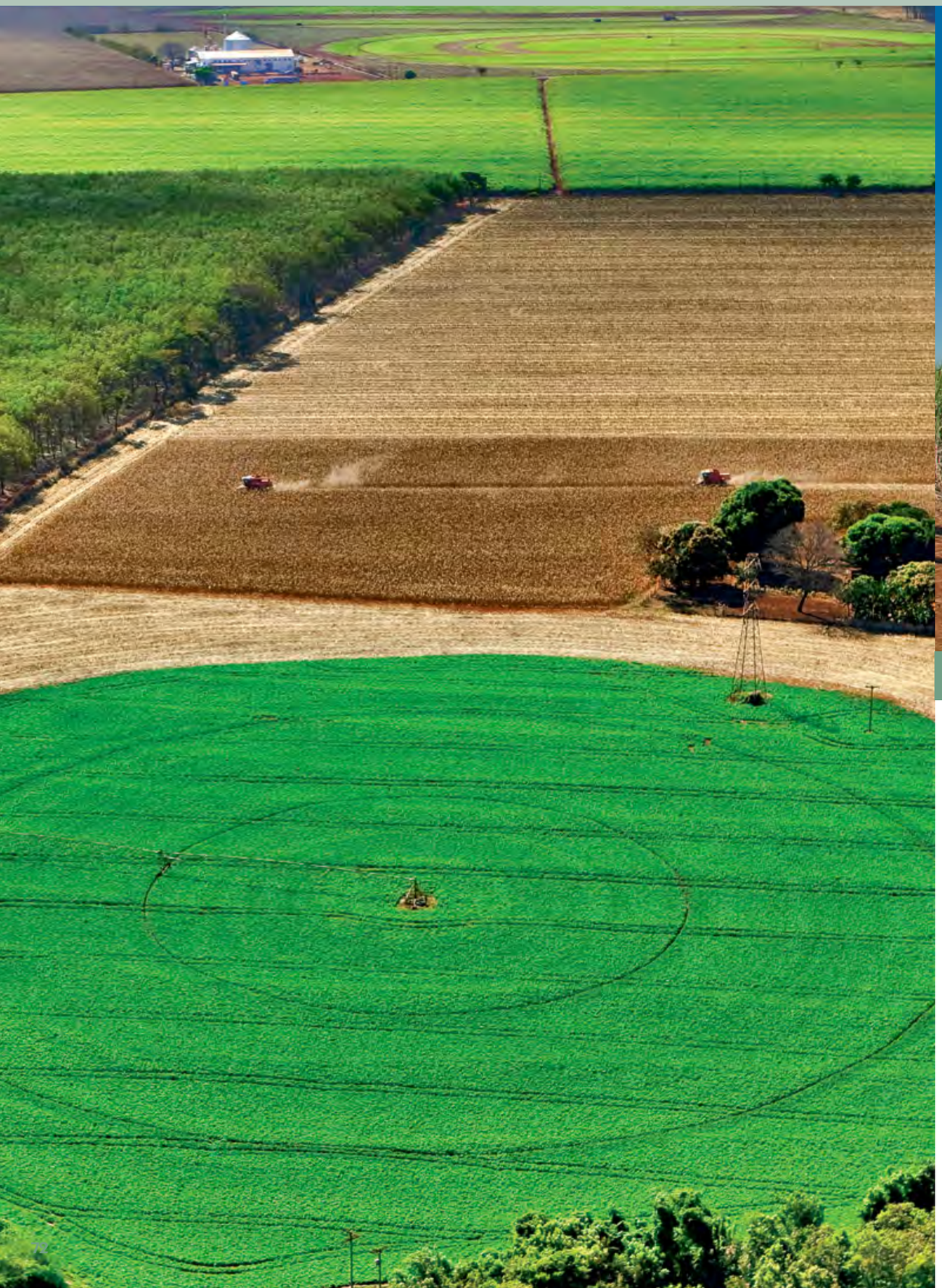
The Commitment also promotes other points: the elimination of pay linked to workers' earnings for services of transport, administration and supervision; increased transparency in the assessment and payment of piecework; a broad set of best health and safety management practices, such as workplace gymnastics, breaks, rehydration and emergency care; workers' transportation; publishing and guidance about best practices for sugarcane suppliers; care for migrant workers hired in other localities; strengthening of trade unions and collective negotiations; and promoting company activities for corporate responsibility in communities in the sugar-growing regions.

For its part the federal government contributed with public policies that support and encourage actions aimed at improving Personal Protective Equipment (PPE); strengthening the Public Employment System, improving literacy, education and worker training; as well as sustainable organization of production, health, sanitation, access to water, infrastructure and land management in less developed areas, where there is seasonal hiring of workers.

It should be noted that during the period covered by this report, UNICA has conducted more than 10 state meetings on the National Commitment in its six regional offices. Representatives of all members and suppliers of sugarcane participated in these meetings, for a total number of about a thousand people.

Workplace gymnastics

UNICA also publicized the National Commitment at universities and governmental and nongovernmental organizations inside and outside Brazil. In addition to providing clarification about the negotiating process, the National Assessment Commission and the importance of taking part in and publicizing the National Commitment, UNICA and the participants evaluated each item in the agreement, the standardization of procedures and deployment deadlines, and cleared up any questions.



SOCIAL RESPONSIBILITY

UNICA file photo

RETRAINING PROGRAM FOR SUGARCANE WORKERS

RenovAção

The industry is committed to taking action ahead of the legal deadline and has brought forward the date for ending the practice of controlled sugarcane burning, with the introduction of mechanized harvesting.

One inevitable consequence of this is the reduction in the number of workers employed in manual sugarcane cutting, because each harvesting machine replaces the work of 80 men. According to assessments by UNICA, 70,000 workers in the state of São Paulo will have to migrate to other activities.

This process also impacts the communities around the plantations, which often have their main source of employment and income in sugarcane. The retraining of these workers is seen as the only way they can be reintegrated into other jobs.

The Program for Retraining Sugarcane Workers (called RenovAção in Portuguese, meaning "Renewal" in English) is the largest program of its kind in Brazilian agribusiness. Discussions started when UNICA signed the São Paulo State Agro-Environmental Protocol in 2007. Launched in 2010, RenovAção has ambitious goals: to train and retrain 7,000 sugarcane cutters every year, so that they can begin to operate the machines that will replace them in the fields. Alternatively, they will be able to work in other operations within their own plants or even be absorbed into other sectors of the economy.

Work began with the formation of a committee comprising representatives of UNICA member companies, to calculate demands for manpower in various sectors and also in their own plants, because there was a significant increase in the number of jobs related to mechanization. Each new harvester requires two tractors, four sugarcane tipper trailers and a team of 18 people ▶

to operate them, but there is not enough skilled labor. The next step was to involve the Federation of Rural Workers in São Paulo State (Feraesp). Two major areas of retraining were defined:

1) For the sector itself: training for the positions of sugarcane driver, harvester operator, harvester electrician, truck electrician, harvester mechanic, tractor mechanic, tractor electrician and welder.
2) For other sectors: retraining workers to work in groups of activities defined as agricultural services, industrial services and urban services. The supply of these retraining vacancies took into account regional economic vocations, and Feraesp had the task of working with local governments so that courses were created where there was a demand for labor.

Once the program was designed, UNICA started a new round of contacts with some players in the supply chain that stood to benefit most from mechanization: the sectors of agricultural and industrial inputs. RenovAção won important allies, with the support of Case IH, John Deere and Syngenta, which have become sponsors of the program. Then the Inter-American Development Bank (IDB) came in as the supporting financial institution.

Investment

SOURCE	INVESTMENT (R$)
Inter-American Development Bank (IDB)	888,159
UNICA + partner companies	1,515,335
TOTAL	**2,403,494**

Source: UNICA

Representatives of UNICA, Feraesp and the sponsoring companies make up the RenovAção executive committee, which is responsible for the following actions: to define and approve, in a decentralized manner, the proposals for courses; to select participating companies; to accredit public and private institutions that carry out training and retraining; and to continuously monitor and evaluate the program.

In day-to-day program activities, UNICA is responsible for coordinating and publicizing the project and assembling groups of students. The mills and distilleries nominate students, provide course classrooms, locations and equipment for practical training (areas to be cut or planted, laboratories, workshops, and so on) and provide transportation and food, while continuing to pay salaries to ensure that workers go to the lessons. For their part the sponsoring companies participate in internal meetings and collaborate with funding. The National Industrial Training Service (Senai) and FAT/Centro Paula Souza were the successful bidders to provide instructors and teaching resources, conduct training, evaluate students and certify course participants.

The first phase

RenovAção started in 2010, offering eight courses tailored to fill 2,000 vacancies in 120 member companies participating in the program. Students were selected by the mills and distilleries themselves, from among their cane cutters, and were divided into 62 classes of 32 students.

Courses offered in Phase One

COURSE	WORKLOAD
Welder	160h
Tractor electrician	160h
Harvester electrician	160h
Truck electrician	192h
Tractor mechanic	192h
Harvester mechanic	192h
Sugarcane driver	242h
Harvester operator	322h

Source: UNICA

To cast the net as wide as possible, courses were taught in six major geographical regions that represent the main sugarcane producing areas in São Paulo state.

Major sugarcane producing areas in São Paulo state

Courses were taught from February to December 2010. More than 1,700 people graduated, of whom 56% have already been hired for new jobs at the plants or are undergoing a probationary period.

The second phase

While the first phase of the program focused on regions with a high concentration of processing plants, the second phase selected regions according to the concentration of jobs lost due to the increase in mechanization. Manpower demands were researched in 13 sugarcane communities, in partnership with Feraesp. Based on this result, the program created 1,500 vacancies divided among various courses designed to serve other sectors of the economy. Courses began in August 2010 and are being administered by the Technological Support Foundation (FAT) and the National Industrial Training Service (Senai), which won the bidding to select suppliers of courses.

Courses coordinated by Feraesp

GROUPS	TRAINING
Rural Services	Hydroponics
	Worm farm
	Seedlings
	Horticulture
Agricultural Services	Harvester mechanic
	Tractor driver
Industrial Services	Industrial operator
	Boilerman
	Industrial electrician
	Welder
	Electrical fitter
	Lathe operator
Urban Services	Cutting and sewing
	Leather and footwear
	Breads and pastries
	Meat and sausages
Digital Inclusion	

By selecting priorities, RenovAção helped UNICA members focus their efforts on training and redirect their investments to various professional training initiatives. While a few companies still do not invest many hours per year in training, most UNICA members have structured their professional development programs with course loads that in the 2008/2009 harvest year reached as much as 53 hours/year of training per agricultural employee, and 90 hours in industrial and administrative areas. In the 2009/2010 harvest year the training workload in industrial and administrative areas fell to 62 hours, due to the global crisis.

Investments in retraining initiatives/ UNICA members*

	2008/09	2009/10
Agricultural	R$5,480,532.79	R$5,469,872.84
Industrial	R$6.419.696,53	R$7,178,551.03

Source: UNICA

*Universe = 79 members (harvest 2008/09); 81 members (2009/10 harvest)

Improving the skills profile of workers contemplated by the RenovAção Program has a direct impact on their earning profile. It is estimated that the new activities related to mechanization generate salaries around 50% higher.

Estimated salary increase

RenovAção Program	São Paulo state		Salary increment of cane cutters in other jobs			
Retraining for new jobs	Nominal*	Total**	Nominal*		Total**	
Cane cutter	R$550.00	R$1,060.00	Value	%	Value	%
Sugarcane driver	R$873.00	R$1,354.00	R$323.00	59	R$294.00	28
Harvester operator	R$1,096.00	R$1,864.00	R$546.00	99	R$804.00	76
Harvester electrician	R$954.00	R$1,621.00	R$404.00	73	R$561.00	53
Truck electrician	R$954.00	R$1,621.00	R$404.00	73	R$561.00	53
Tractor electrician	R$954.00	R$1,621.00	R$404.00	73	R$561.00	53
Harvester mechanic	R$1,006.00	R$1,851.00	R$456.00	83	R$791.00	75
Tractor mechanic	R$1,064.00	R$1,767.00	R$514.00	93	R$707.00	67
Welder	R$1,018.00	R$1,971.00	R$468.00	85	R$911.00	86

Source: Wiabiliza, September 2010.

* Nominal: minimum wage for a formally contract employee.

** Total: nominal value + bonus + benefits + profit sharing

INDICATORS

Social

Total workforce by employment type, employment contract and region

UNICA members are located in the South-Central region of the country in the states of São Paulo, Minas Gerais, Goiás and Mato Grosso do Sul. The agricultural area of the sugarcane sector is seasonal, because of the harvest. It is estimated that harvest workers represent about 25% of jobs in the agricultural area that are created from April through November.

Number of jobs/UNICA members*

AREA	WORKERS	
	Harvest	Intercrop
Agricultural	112,015	82,817
Industry/Administrative	38,698	35,431
Total	**150,713**	**118,248**

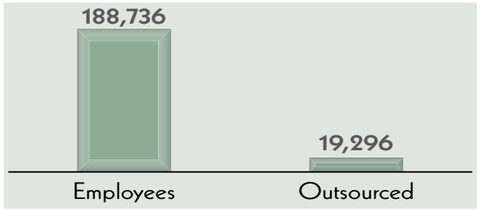
Source: UNICA

*Universe = 90 members.

UNICA members employ over 180,000 people, directly and via contractors.** Companies use employment contracts that are in accordance with Brazilian labor legislation and for the most part relate to permanent, full-time jobs on open-ended contract. The exception is cane cutters who have fixed-term contracts.

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

Formal jobs in the agricultural, industrial and administrative areas/UNICA members***



Source: UNICA

**Employees are those with a direct employment relationship with the mills and distilleries; outsourced workers are those who provide services to the plant (contract workers).

***Universe = 91 units

Workers aged over 45 years/ UNICA members*

AREA	WORKERS	
Agricultural	25,907	17.9%
Industry/Administrative	8,521	19.4%
Total	**34,428**	

Source: UNICA

*Universe = 90 members.

This is the result of various actions to include workers more than 45 years old, who represent 10% of all workers for UNICA members.

The difference between the share of male and female workers is due to the fact that most jobs require physical strength, which favors the recruitment of men. Female participation has, however, been growing with the opening of new job opportunities related to mechanization. Women work as drivers, harvester operators and electricians, among other activities.

Female workers/UNICA members*

AREA	WORKERS	
Agricultural	12,270	8.5%
Industry/Administrative	5,021	11.5%
Total	**17,291**	

Source: UNICA

*Universe = 90 members.

Percentage of employees covered by collective bargaining agreements

Workers covered by collective agreements with the union of the main labor category/ UNICA members*

AREA	WORKERS
Agricultural	99%
Industry/Administrative	96%

Source: UNICA

*Universe = 93 members.

Description of notifications (Deadlines, procedures)

Companies that provide information impacting employees in a timely manner, so that the union and employees have a chance to position themselves/UNICA members*

AREA	COMPANIES
Agricultural	91%
Industry/Administrative	90%

Source: UNICA

*Universe = 93 members.

Rates of injury, occupational diseases, and lost days

Total accidents by area/UNICA members

	2008/ 2009*	2009/ 2010**
Agricultural	6,836	6,075
Industry/ Administrative	2,611	2,552

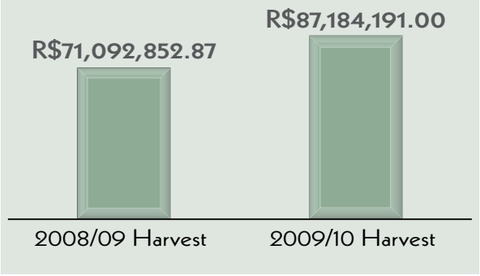
Source: UNICA

*Universe = 87 units in the 2008/2009 harvest;

**Universe = 88 units in the 2009/2010 harvest.

Programs for education, prevention and risk control

Investments in health and safety/ UNICA members*



Source: UNICA

*Universe = 82 units in the 2008/2009 harvest;
86 units in the 2009/2010 harvest.

Human rights

Description of policies and guidelines to manage all aspects of human rights/ UNICA members

In the universe of 93 members answering, 65% reported having significant investment agreements that include clauses referring to human rights or that have been evaluated in terms of human rights.

Company contracting that includes for human rights evaluation/UNICA members

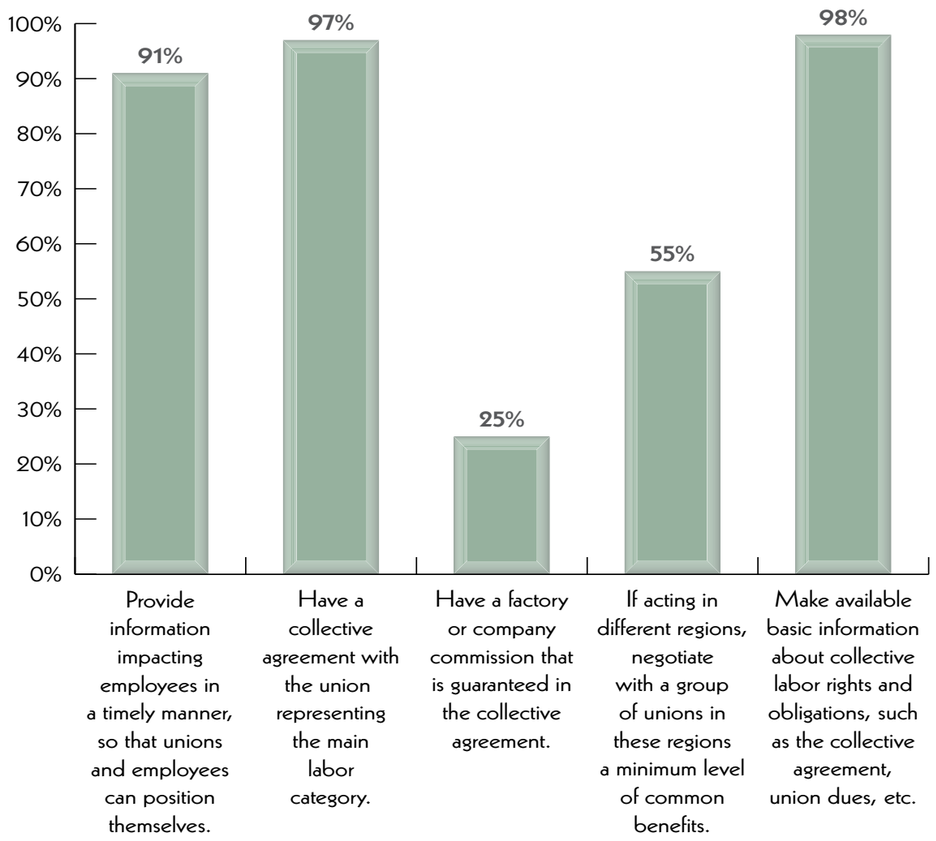
In the universe of 93 members answering, 96% of companies said that their research and evaluation of suppliers includes criteria relating to child and/or slave labor and other principles concerning human rights.

Total number of incidents of discrimination and actions taken

UNICA adopts a policy of non-discrimination and valuing diversity.
The organization does not condone and is committed to prohibiting any employee from performing any act of discrimination based on race, sex, age, disability, nationality or any other legally protected status.
It disseminates this practice based on international requirements, legislation and social norms among its members.

Policy of freedom of association and the extent of its application

Relationship with unions/UNICA members*



Source: UNICA

*Universe = 93 members

Economic

UNICA offers all its employees benefits including life insurance and a health plan with medical and hospital care for all clinical and surgical procedures, and emergency and urgent care. The pension plan is not yet part of the benefits package.
In the universe of 93 members reporting, 79% said they applied policies for purchasing and investment aimed at enhancing socioeconomic development in the community where they operate.

In the universe of 93 members reporting, 89% said they have programs to hire as many local people as possible where they operate, giving them — in cooperation with unions, NGOs, community associations or public authorities — training with the aim of increasing skill levels in the community.
Within this same universe, 79% of members apply purchasing and investment practices to enhance the socioeconomic development of the community where they operate.

Society

Programs and practices to assess and manage the impacts of operations on communities

The Nucleus for Environmental Responsibility and Sustainability at UNICA has, since its creation in 2001, conducted seminars and workshops to educate members about the importance of promoting actions that are increasingly more sustainable and less welfare-oriented. This work counts with the support of organizations like the World Bank, the Ethos Institute and GRI, among others. It is clear that the one-off actions and donations of a welfare nature, which have prevailed in the sector, are being replaced by projects that focus on more robust and comprehensive action, taking into account the needs of surrounding communities and employees who are the main beneficiaries.
The table shows the total number of projects submitted by 93 UNICA members.

Social and environmental programs/UNICA members

AREA	PROJECTS	PEOPLE CONTEMPLATED	INVESTMENT
Culture	22	91,333	R$1,564,432.66
Environment	43	69,243	R$8,596,047.34
Sport and Leisure	12	23,645	R$1,743,830.28
Quality of life	53	80,982	R$7,005,617.57
Health	36	28,698	R$2,975,886.53
Education	46	26,988	R$6,618,190.76
Training	61	88,718	R$3,851,518.39
Total	**273**	**409,607**	**R$32,355,523.53**

Source: UNICA

Note: The projects will be presented in full on the site www.unica.com.br/gri

Interaction with communities/UNICA members*

INITIATIVES	COMPANIES
Participate in local forums.	61 companies
Internalize this relationship within the company.	51 companies
Work in partnership with the community to build networks to solve local problems, offering technical support and/or physical space, or other types of support.	48 companies
Participate in the formulation of public policies, engaging in solving problems where the company is located.	41 companies
Recognize the community where it is present as an important stakeholder in the company's decision-making processes.	67 companies
Contribute to improvements in infrastructure or in the local environment that can be enjoyed by the community (housing, roads, bridges, schools, hospitals, etc.).	83 companies
Have a program to hire as many local people as possible in the community where it operates, giving them training, aiming to increase skill levels in that community in cooperation with unions, NGOs, community representatives or public authorities.	89 companies
Have procurement and investment practices to improve socioeconomic development of the community where it operates.	71 companies

Source: UNICA

*Universe = 93 UNICA members

Percentage of employees trained in anti-corruption policies and procedures

Given the characteristics of UNICA's current business and structure, no process is seen as offering a significant risk to its reputation or image. The corruption issue is addressed in the Code of Conduct with the aim of making employees capable of identifying and assessing situations and preventing corruption.

Actions taken in response to cases of corruption/UNICA members*

Does the company have a formal commitment in relation to combating all forms of corruption?*

COMMITMENT	NUMBER OF COMPANIES (%)
In the Code of Conduct	62%
As a specific corporate policy on the subject	24%
Via formal adhesion or public declaration relating to the commitments and voluntary initiatives	25%

Source: UNICA

*Universe = 93 members

Description of significant fines and total number of non-monetary sanctions

UNICA has no fines imposed against it. UNICA has no control over and does not monitor cases of fines imposed on its members; this is not part of its objectives.

Product liability

Policy for protecting consumer health and safety during use of the product

To safeguard the production of sugar as a human foodstuff, mills have in recent years adopted criteria existing in the legislation of Brazil's National Agency for Sanitary Vigilance – Anvisa (Decree 326 of July 30, 1997, and Resolution RDC 275 of October 21, 2002); in Good Manufacturing Practices (GMP); in systems such as Hazard Analysis and Critical Control Points (HACCP); and, more recently, the requirements of the Brazilian Association of Technical Standards (ABNT) in NBR ISO 22000:2006. This international standard includes requirements for managing the production of safe food, and can be associated with ISO 9001.

On the other hand, mills sell their products to large food and beverage companies only after third-party audits contracted by the buyers. These audits check the system used by the mill to ensure that the sugar is being produced under conditions suitable for human consumption.

Non-compliance related to the impacts caused by products and services

Mills are subject to control by Anvisa and the Ministry of Agriculture, Livestock and Supply (MAPA). There is no record of events that have led to imposition of fines for safety problems in products or services.

Type of information about products and services required by labeling procedures

The product is packaged in the mills in 50 kg sacks or in Big Bags of up to 1,200 kg, the only exception being those mills that pack products for the consumer market in packages of 1 kg or 5 kg. In the first case labeling is very simple: it contains the information necessary to allow product traceability, but no nutritional information because it is directed to industrial customers. Mills that package in 1 kg/5 kg bags adopt Anvisa legislation with respect to nutritional information, shelf life and other requirements.

Programs for adherence to laws, standards and voluntary codes

Marketing activities are carried out only by companies that sell sugar to the domestic consumer. Those that sell only to industry do not engage in direct marketing or advertising of their products. Sales activities are conducted by specialized professionals who deal directly with the buyer. Food producing companies can also specify to the mills how they want the products. Marketing has been carried out on sites of each producer or producer group, which give information about specifications of products available to the market.

Proven complaints regarding breaches of customer privacy

Total number of consumer complaints and criticisms/UNICA members*

INSTANCE	QUANTITY
In the company	3,778
In Procon	1
Legal action	2

Source: UNICA * Universe = 93 members.

Percentage of complaints and criticisms resolved/UNICA members*

INSTANCE	QUANTITY
In the company	100%
In Procon	100%
Legal action	–

Source: UNICA * Universe = 93 members.

The complaints and criticisms have been investigated by the mills and distilleries that are UNICA members; they relate to requests from consumers about their products: sugar and ethanol.

Fines for non-compliance related to the provision and use of products and services

Compliance with laws – Production plants are subject to control by Anvisa and the Ministry of Agriculture, Livestock and Supply; there is no record of events that have incurred fines for safety problems in products or services.

THE ENVIRONMENT

Enlargement of riparian forest by planting new seedlings

THE SÃO PAULO STATE AGRO-ENVIRONMENTAL PROTOCOL

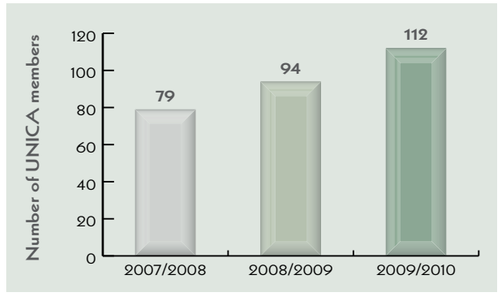
In mid 2006, given the projected expansion of sugarcane planting in São Paulo state and the consequent effects of legally-permitted crop burning prior to manual harvesting, the São Paulo sugar-energy sector faced the challenge of making its agricultural and industrial activities more environmentally correct. It was then that UNICA joined with the São Paulo state government, represented by the Environment and Agriculture secretariats, to start talking about a new development model for the sector.

Following several months of discussion, the São Paulo State Agro-Environmental Protocol was published on June 4, 2007, setting targets more stringent than those required in law to minimize some of the major impacts of sugarcane cultivation on society and the environment.

Principal among these targets are bringing forward the deadline for eliminating straw burning, the protection of remaining forest around water sources and riparian vegetation, and the reduction of water consumption in mills and distilleries.

The voluntary protocol already enjoyed broad support when it was launched, and the number of signatory mills and distilleries has grown every year. There has also been important institutional support from financial institutions, traders and cooperatives that joined in to further strengthen the initiative.

Mills and distilleries within UNICA that have signed the Agro-Environmental Protocol



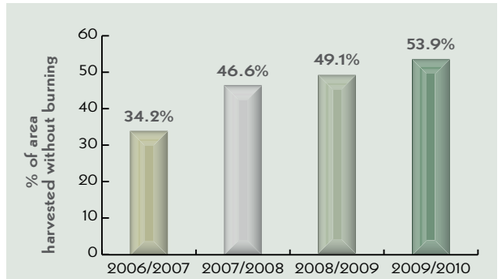
Source: UNICA

To join the protocol, mills and distilleries must prepare an action plan containing detailed measures, targets and timeframes for compliance with the technical directives specified in the agreement. These plans are reviewed by a tripartite committee comprising experts from UNICA and the Environment and Agriculture secretariats. Once this is approved, the production plants receive a certificate of compliance, renewable annually. In 2009, over 95% of ethanol produced in São Paulo came from plants certified by the project, and became known as "Green Ethanol".

Burning

The deadline to end burning sugarcane straw was brought forward from 2021 to 2014, for areas where mechanized harvesting is possible — defined as those with slopes less than 12% — and from 2031 to 2017 in areas considered inappropriate for mechanization with existing technology (slopes exceeding 12%). It should be noted that mechanizable areas accounted for 79% of the administered area in 2007, rising to 84% in 2010.

Sugarcane harvesting/UNICA members*

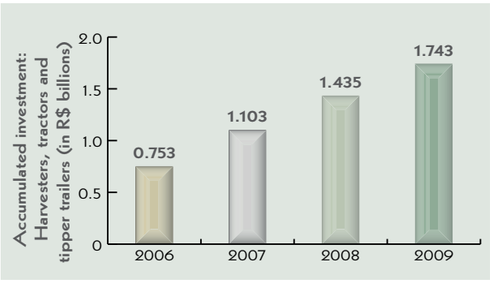


Source: UNICA

*Universe = 97 members.

Companies have invested significantly to acquire machinery in order to raise the mechanization rate from 34% before the protocol to the current level of 60%. Since signing the protocol in 2007, UNICA members have invested more than R$1.7 billion in harvesters, tractors and sugarcane tipper trailers.

Number of machines/UNICA members*



Source: UNICA

*Universe = 97 members.

Emissions avoided

Thanks to the Agro-Environmental Protocol, between 2008 and 2010 UNICA members avoided burning 785,000 hectares of sugarcane, so avoiding the emission of 427,000 tons of CO_2. In addition, the straw remaining in the field after mechanical harvesting represents substantial energy potential. Its use as a fuel increases the capacity of mills to export electricity and to mitigate carbon emissions from power generation. This substitutes electricity that would have been generated by regular power stations, in many cases from fossil sources.

Emissions mitigated by straw cogeneration/ UNICA members*

	2007/2008	2008/2009	2009/2010
Tons of CO_2 equivalent	227.467	284.762	330.567

Source: UNICA

*Universe = 97 members.

Riparian vegetation

Another requirement of the Agro-Environmental Protocol relates to the protection of riparian areas in land administered by mills and distilleries.

This means that topographical surveys and georeferencing have become a priority for UNICA members.

Survey of riparian areas/UNICA members*

	2007/2008	2008/2009	2009/2010
Area protected (ha)	122,449	130,437	143,462

Source: UNICA

*Universe = 97 members.

The first direct effect of this protection is carbon absorption and carbon storage by restored forests. UNICA projections indicate that after 20 years, with the complete restoration of this vegetation, carbon storage will be more than 21 million tons of carbon, equivalent to one year of industrial emissions of São Paulo.

Carbon stock/UNICA members*

	2007/2008	2008/2009	2009/2010
Tons of CO_2 equivalent	306,123	762,652	1,243,302

Source: UNICA

*Universe = 97 members.

Adding together emissions stored by riparian forests, emissions mitigated by the use of straw in cogeneration and emissions avoided by bringing forward the elimination of burning, UNICA members will by 2017 have avoided emissions of more than nine million tons of carbon, which is equivalent to the average annual reduction of Mexico City.

The second effect is to increase the diversity of fauna and flora. So far, more than 10 million seedlings of native trees have been planted in the restoration of more than 6,000 hectares of forest, with investments exceeding R$46 million. About 8,000 workers are directly involved in activities including seed collection, nurseries, planting, and the care and maintenance of reforested areas.

Additionally, the sector has invested continuously to expand bio-indicator monitoring in protected areas.

In 2007, almost 20,000 hectares were monitored, an area that grew to 35,000 hectares in 2009. Thanks to this monitoring, it is possible to identify whether the protected forests will provide shelter to birds and mammals.

To date, biodiversity projects are monitoring 12 species of mammals, of which five are endangered and seven considered vulnerable. There were 31 individual sightings of species identified as vulnerable.

The Canasat Project

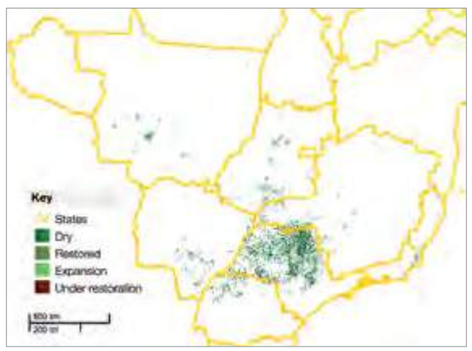
Canasat is a project developed by Brazil's National Institute for Space Research (INPE), with support from UNICA.

It aims to provide information about the spatial distribution of the area dedicated to sugarcane plantations in the South-Central region of Brazil, using satellites imaging.

The maps so generated are available online for use by various stakeholders.

Canasat data is used to track the reduction of burning, which is a commitment by mills and distilleries that are signatories to the Agro-Environmental Protocol.

Change in sugarcane area in South-Central Brazil



More information: http://150.163.3.3/canasat.

Flock in the sky, at Pereira Barreto

A total of 29 bird species were monitored, of which three in the near endangered category and 26 in the vulnerable category. During the period of monitoring, there was one sighting of a species in the near endangered category, and also at least one sighting of a species in the vulnerable category.

Water

The responsible use of water resources constitutes the third pillar of the Agro-Environmental Protocol. Since its signing, UNICA members have reduced their specific water consumption from 1.89 m^3 to 1.49 m^3 per ton of sugarcane crushed. During this period, more than R$42 million was invested for reuse of water in closed industrial cycles, resulting in savings of more than 106 billion liters of water since 2007. This is enough to supply a town of about one million inhabitants for two years.

Specific water consumption/UNICA members*

	2007/2008	2008/2009	2009/2010
Consumption (m^3/TCC)*	1.89	1.76	1.49

Source: UNICA

*Universe = 97 members. TCC = ton of crushed cane

Manual for water conservation and reuse in sugar-energy agribusiness

This manual was developed by experts at the Sugarcane Technology Center (CTC), under the coordination of researcher Andrew Elia Neto, and provides detailed information on the management of water resources for the sugar-energy sector. It is the result of a Technical Cooperation Agreement between the National Water Agency (ANA), the São Paulo Federation of Industries (FIESP), the CTC and UNICA.

Published in December 2009, the Manual is consistent with the commitment of mills and distilleries under the São Paulo Agro-Environmental Protocol to adopt programs to control water quality and reuse in their industrial processing.

More information in Portuguese: www.unica.com.br/multimedia/publicacao.

Materials used by weight or volume/ UNICA members*

HARVEST	CANE	BAGASSE
	(million tons)	(million tons)
2007/2008	232,020,000	77,340,000
2008/2009	286,150,000	95,383,333
2009/2010	281,120,000	93,706,667

Source: UNICA

*Universe = 97 members.

Percentage of renewable materials used.

Sugarcane from plantations represents 98.9% of all products used by the sugar-energy sector.

Initiatives to provide products and services with low energy consumption

The evolution from low to high-pressure boilers has contributed to the energy efficiency of the sector.

There are also reasons to celebrate with respect to the insertion of bioelectricity into the Brazilian energy matrix. In 2009, thanks to intensified efforts by UNICA to promote changes in the regulatory and institutional environment, the federal government decided to hold two auctions specifically for electricity from alternative sources in the second half of 2010.

Also on this subject, we should note the launch of the 2011-2020 Bioelectricity Program. This is a sustained program of auctions to make possible the supply of 1,000 MW per year in the period 2011-2020 (10,000 MW). This provision gives entrepreneurs and technology producers conditions to plan supply and security for marketing the bioelectricity generated by mills and distilleries.

The program was created by UNICA with support from the Electricity Sector Research Group of the Rio de Janeiro Federal University (Gesel) and the Power Cogeneration Industry Association (Cogen). Its activities have two main areas of focus:

1) Mapping potential supply and conditions of connection required to inject 10,000 MW into the grid; and
2) Studies about energetic and environmental externalities, aimed at pricing criteria (R$/MWh) and methodology for auctions that can stimulate supply with adequate remuneration for bioelectricity.

Much of the growth in bioelectricity generation and the export of surplus power is due to regulatory improvements that have occurred over the past 10 years. UNICA has played a key role for the consolidation and recognition by players in the electricity sector of the specific characteristics of bioelectricity.

The following table shows the drive for energy efficiency by the sugar-energy sector, made possible by the creation an institutional environment that is conducive to exporting bioelectricity to the grid. It can be seen that between the 2008/09 and 2009/10 harvests there was an increase in the purchase by existing power plants of boilers working at pressures greater than 60 bar, so promoting efficiency in the process of producing bioelectricity and the generation of surplus electric power. This was facilitated by the construction of an institutional environment that is favorable for marketing bioelectricity.

Characteristic of boilers/UNICA members*

Pressure	2007/ 2008	2008/ 2009	2009/ 2010
Up to 21 bar	80	88	86
Between 28 and 45 bar	20	22	22
Between 63 and 67 bar	15	17	24
Between 90 and 100 bar	–	–	2
General total	**115**	**127**	**134**

Source: UNICA

*Universe = 39 plants.

Total water drawn, by source/UNICA members*

Water drawn from water sources (billions of liters)

HARVEST	CONSUMPTION
2007/2008	438
2008/2009	503
2009/2010	418

Source: UNICA *Universe = 97 members.

Water sources significantly affected by drawing off water

This information is not available.

Percentage and total volume of recycled and reused water/UNICA members*

Recycled water* (billions of liters)

HARVEST	CONSUMPTION
2007/2008	3,946
2008/2009	5,036
2009/2010	5,026

Source: UNICA *Universe = 97 members.

Total water discharge, by quality and destination/UNICA members*

Waste water (millions of liters)

HARVEST	AREA
2007/2008	118.000
2008/2009	151.000
2009/2010	151.000

Source: UNICA *Universe = 97 members.

Aspect: Biodiversity

Location and size of land owned

Areas with potential to increase biodiversity (ha)/UNICA members*

HARVEST	PROTECTED AREA
2007/2008	122,449
2008/2009	130,437
2009/2010	143,462

Source: UNICA *Universe = 97 members.

Significant impacts on biodiversity of activities, products and services

According to the study "The Impact of Sugarcane Production on Biodiversity in the State of São Paulo, Brazil", Dr. Luciano M. Verdade identified 27 species of mid-sized mammals between 2002 and 2005 in areas of sugarcane and pasture. This corresponded to two-thirds of the species native to the Atlantic Rainforest in its original state.

The number of small mammal species found was eight, about a third of the total original native species. Also according to the study, the number of species was less diversified in pasture-land and more abundant in sugarcane.

With regard to birds, 202 species were identified, equivalent to 60% of species originating in the Atlantic Rainforest.

Greatest avian diversity was found in native forests, followed by pasture areas.

Habitats protected or restored/UNICA members*

Summing habitats protected and restored (ha)

HARVEST	AREA
2007/2008	93,647
2008/2009	100,335
2009/2010	110,180

Source: UNICA *Universe = 97 members.

Sugarcane plantations and protected forests in harmonious coexistence

Strategies for managing impacts on biodiversity

Strategies for managing sugar-energy sector impacts on biodiversity currently focus on the following actions:

1. Identification of priority areas to increase the diversity of fauna and flora;
2. Protection and/or restoration of the priority area for this increase;
3. Implementation of this increase: protection and/or restoration;
4. Continuous or spot monitoring of the biodiversity index (bio-monitoring).

Aspect: Emissions, effluents and waste

Total direct and indirect emissions of greenhouse gases/UNICA members*

Emissions of greenhouse gases (tCO_2eq)

SOURCE	VOLUME
Diesel	923,504.97
Nitrogen-based fertilizers	3,164,235.90
Sugarcane burning	6,355,780.20
Herbicides	236,500.00
Potassium	421,314.00
Phosphorus	412,800.00
Insecticides	19,952.00
TOTAL	**11,534,087.07**

Source: UNICA *Universe = 97 members.

Other relevant indirect emissions of greenhouse gases

The main source of indirect emissions relates to those coming from the production processes of sugarcane suppliers. UNICA is the body that represents the sugarcane industry, and while UNICA maintains institutional relations with suppliers' representatives, it has no information regarding this topic.

Emissions of substances that destroy the ozone layer

It does not fall within UNICA's remit to supervise its members with respect to matters that are governed by Brazilian law.

NOx, SOx and other significant emissions/ UNICA members*

Other emissions (tons)

SUBSTANCE	VOLUME
SOx	28.21
NOx	7,328.40
Soot	101,868.60
Particulate matter	128.56
TOTAL	**101,997.16**

Source: UNICA *Universe = 97 members.

CLIMATE CHANGE

Handling sugarcane bagasse for bioelectricity generation

Total weight of waste, by type and disposal method

It does not fall within UNICA's remit to supervise its members with respect to matters that are governed by Brazilian law.

Total number and volume of significant spills

It does not fall within UNICA's remit to supervise its members with respect to matters that are governed by Brazilian law.

Percentage of products and packaging materials recycled, by product category

UNICA is the body that represents the sugarcane industry, and while UNICA maintains institutional relations with representatives of sales and marketing cooperatives, it has no information regarding this topic.

Amount of fines and total number of penalties for noncompliance with laws

It does not fall within UNICA's remit to supervise its members with respect to matters that are governed by Brazilian law.

Total investments and expenditures on environmental protection/UNICA members*

Investments in environmental protection (R$ millions)

AREA	2007/ 2008	2008/ 2009	2009/ 2010
Mechanization	378	484.5	1,219.5
Survey, protection and reforestation	15	15	16
Closing water cycles	7	15	20.5

Source: UNICA *Universe = 97 members.

National and international public policies and proposals on climate change.

- Participation in the 15th Conference of the Parties (COP 15) of the United Nations Framework Convention on Climate Change, held in Copenhagen in December 2009: monitoring of negotiations and participation in seminars and side events.
- Participation in the Open Letter to Brazil about Climate Change, as an institution supporting the initiative coordinated by the Ethos Institute and the Vale mining company. The Open Letter was supported by 22 companies and six organizations. The purpose of the Open Letter was to stimulate a discussion with the Brazilian government about commitments and proposals for discussion at COP 15.
- Launch in September 2009 of the Brazilian Alliance for Climate, an initiative that brings together 15 Brazilian institutions in the agricultural, planted forest and bioenergy sectors. This produced a position paper with recommendations about international negotiations under the auspices of the Climate Convention, and the Brazilian government's actions with respect to climate change.
- Participation in the Industry Mobilization Group for Climate Change, created in 2010 by the National Confederation of Industry (CNI) for the purpose of coordinating private sector actions to implement the National Policy on Climate Change (PNMC).

Ethanol-powered bus on Av. Paulista

Photo: Scania handout

Climate Change Challenge

The Climate Change Challenge is an educational project aimed at 8th and 9th grade students in state public schools in Bahia, Goiás, Mato Grosso do Sul, Minas Gerais, Paraná, Rio de Janeiro, São Paulo and the Federal District, with the goal of helping them understand the consequences of global warming.

Launched in August 2009 as part of the Agora Project, in which UNICA participates, the Challenge reached some 12,000 schools, 47,000 teachers and 2.3 million students. More than 3,500 entries were received and 24 winners received prizes.

More information in Portuguese:
www.desafiomudancasclimaticas.com.br.

Ethanol beyond light vehicles

UNICA actively supports the Bioethanol for Sustainable Transport (Best) project. In 2009, UNICA promoted the introduction of the second ethanol-powered bus which has now been incorporated into the São Paulo city urban transportation fleet.

In November of 2010, UNICA, São Paulo city hall and several partner companies and organizations signed a letter of intent that will lead to the introduction by June 2011 of the first 50 ethanol-powered buses in the mass transportation system in the state capital.

COMMUNICATION AND SUSTAINABILITY

The Agora Project – the name means "Now" in Portuguese – is an integrated marketing and communications project that is supported by several companies and organizations representing various stages in the sugar-energy sector supply chain. The project aims to clear up misconceptions, strengthen ties with various stakeholders of the sugar-energy sector and inform public opinion about the benefits of the production and use of clean, renewable energies from agricultural sources.

Society

In 2009, Agora held the Climate Change Challenge, a project designed for teachers and students in state fundamental education. The aim was to spark environmental awareness among children by supplying information about the causes of global warming and ways to mitigate climate change.
A second educational project was conducted in 2010. Called the Sugarcane Municipalities Study, this focused on the importance of the sugarcane industry from the standpoint of sustainability for the communities where it is located. The project reached state and municipal schools in São Paulo, Paraná, Minas Gerais, Mato Grosso, Mato Grosso do Sul and Goiás states where 90% of Brazil's sugarcane is produced.

Government

Studies on the positive externalities of ethanol and bioelectricity in the Brazilian energy matrix, from the social, environmental and public health perspective, were presented at seminars held in the National Congress and the Legislative Assemblies of Paraná, Minas Gerais, São Paulo, Mato Grosso do Sul, Mato Grosso and Goiás states. Such studies have prompted discussion about the importance of establishing regulatory policies for the sector.

Press and academia

Launched in 2010, a programa to enhance and expand journalists' knowledge with respect to the sugar-energy sector was launched. It is aimed at reporters and editors in the economics, politics and international areas, and deals with issues relating to the sugarcane agribusiness system such as new technologies, the supply chain, growth trends and efforts to make ethanol a global commodity.

The TOP Ethanol Award is another highlight. In its first edition, TOP Ethanol distributed more than R$60,000 in prizes for 13 works selected from among 220 entries on the "Agri-Energy and Environment" theme. Categories were photography, journalism, monographs and academic papers. The prize also honored individuals involved in the sugar-energy sector.

Consumers

With the aim of increasing knowledge about the sustainable production of biofuels, the sugar-energy sector is present at events such as the Bibendum Challenge, ExpoPostos & Conveniência, the Bioenergy Sector Business Fair (Feicana Feibio), the International Sugar-Ethanol Trade Fair (Fenasucro), the Auto Show and the International Symposium and Exhibition of Sugarcane Technology and Energy (Simtec).

THE AGORA PROJECT

UNICA
Monsanto
Itaú
Itaú BBA
Basf
Dedini
SEW Eurodrive
Syngenta
Amyris
BP
FMC
Bioenergy Producers Association of the State of Paraná (Alcopar)
Bioenergy Producers Association of Mato Grosso do Sul (Biosul)
Minas Gerais State Ethanol Manufacturing Industry Union (Siamig)
Goiás State Ethanol Manufacturing Industry Union (Sifaeg)
Sugarcane Industry Union of Mato Grosso (Sindalcool/MT)
Paraíba State Union of the Ethanol Manufacturing Industry (Sindalcool/PB)
Union of the Sugar and Ethanol Industry in Pernambuco State (Sindaçúcar)
Alagoas State Sugar and Ethanol Industry Union (Sindaçúcar)
Organization of Sugarcane Planters in the Center-South Region (Orplana)
National Center for Sugar-Ethanol Industries (Ceise BR)

THE BRAZILIAN TRADE AND INVESTMENT PROMOTION AGENCY (APEX-BRASIL)

In December 2007, UNICA signed an agreement with Apex-Brasil to promote the image of ethanol as a clean and renewable energy around the world. The aim is to consolidate ethanol as a global commodity, by publicizing the Sugarcane Ethanol brand. Member distilleries within UNICA benefit directly from activities of this project, as does the Brazilian sugar-ethanol industry as a whole. The agreement provides for the shared injection of resources totaling R$18.75 million through the end of 2009. Activities range from ethanol supply enablement and the production of marketing intelligence studies to participation in high-impact events and image promotion. Such activities are developed through public relations work with leading shapers of world opinion.

Following are some of the activities undertaken, and their results:

Enablement

- Development of the certification system approved by the BONSUCRO management committee.
- Proposal of criteria for reducing greenhouse gas emissions agreed in the Roundtable on Sustainable Biofuels.

Market intelligence

- Contracting three regulatory and target market studies, one for the United States (North American Ethanol Data & Market Outlook Materials) and two for the European Community (EU Ethanol Prices and Production Costs and EU Ethanol Policies and Market).

Image and trade promotion

United States

- Recognition by the U.S. Environmental Protection Agency (EPA) of sugarcane ethanol as a renewable low carbon fuel.
- Meeting with more than 40 U.S. congressmen.
- A public opinion survey was conducted to identify the central themes of the 2010 marketing campaign against the U.S. tariff.
- A promotional campaign was carried out at fuelling stations during Formula Indy races around the United States, and activities during the 2010 World Cup, targeting US congressmen and journalists.
- A media campaign was aired in 2008, placing sugarcane ethanol within the U.S. renewable fuels debate.
- A total of 78 lectures were presented at international conferences, workshops and meetings.
- Participation as an exhibitor at 10 events.

Europe

- Work to ensure that the European Directive on Biofuels did not produce any new barriers that hindered access for sugarcane ethanol into the European market. The project involved meetings in the European Parliament and Commission, participation in seminars and organizing road show in five countries, with specialists in the subject.
- Presentation of a proposal to identify better ways of producing the standard calculation of emission reduction compared to fossil fuels.
- Public relations work conducted in 2008 and 2010 to build relationships with journalists from major media in Europe, and a media campaign with messages about the contributions of sugarcane ethanol and about the participation of UNICA in international events of the sector.
- Research of public opinion and an image audit, which confirmed the effectiveness of the strategy adopted by the sector in Europe and the status achieved by UNICA as an important source of information for the media, opinion leaders, decision makers and academics in Europe.
- Presentation of 47 lectures at international conferences, workshops and meetings.
- Participation as an exhibitor at eight of the leading energy and biofuels events in Europe.

Visits by opinion makers

UNICA brought to Brazil 24 journalists from specialist and major general media, as well as nine international correspondents of newspapers in Brazil and a Canadian TV station. As a result, more than 30 positive news stories about Brazilian ethanol were generated on the Internet and in print.
Also as part of this program, Brazil saw the visit of renowned experts in environmental policies such as Michael O'Hare, assistant to the governor of California in the formulation of the Low Carbon Fuels and Land Use Changes policies, and Clayton McMartin, the leading specialist in the United States in the area of Renewable Identification Numbers (RINs), a system created by the U.S. government to monitor the use of biofuels in the country according to the volumes defined by law.

Quantitative results

This project has been of fundamental importance for the inclusion of Brazil in international debates about biofuels.
In 2010 a new partnership was signed with Apex-Brazil to continue the activities undertaken to promote increased exports and the Brazilian trade balance.

Fueling up during training at Formula Indy 2010

Activities in the United States and the European Union
(Period January 2008 to July 2010)

GOALS	MARKET	ACHIEVED
Articles published in the press	USA	295
	EU	312
Contacts with journalists	USA	320
	EU	237
Visits of opinion makers and/or delegations	USA	56
	EU	75
Contacts made by UNICA representatives	USA	2,757
	EU	1,170
Lectures by UNICA representatives	USA	76
	EU	47

Contributions via the agreement with Apex

- Advanced Biofuels Association
- BONSUCRO
- Brazilian Chamber of Commerce
- Woodrow Wilson International Center for Scholars

INSTITUTIONAL PARTNERSHIPS

- Brazilian Agribusiness Association (Abag)
- Brazilian Automotive Engineering Association (AEA)
- Power Cogeneration Industry Association (Cogen-SP)
- Brazilian Association of Food Industries (Abia)
- Brazilian Technical Standards Organization (ABNT)
- Association of Municipalities in the Center of São Paulo State (Amcesp)
- Center for School-Business Integration (Ciee)
- Federation of Workers in Chemical and Pharmaceutical Industries in São Paulo State (Fequimfar)
- Business Leaders Forum
- Institute for Responsible Agribusiness (Ares)
- Institute for Studies of International Trade and Negotiations (Icone)
- Brazilian Internal Revenue Service
- Brazilian Rural Society
- Brazilian Society of Sugar and Ethanol Technicians (Stab)

International organizations

- Brazil Industries Coalition (BIC)
- Friends of Europe
- Global Reporting Initiative (GRI)
- International Dairy Foods Association
- International Ethanol Trade Association (Ietha)
- Queensland Sugar Limited
- World Sugar Research Organization

MILLENNIUM DEVELOPMENT GOALS

The United Nations Millennium Declaration is an historic document. Approved at the Millennium Summit, held from the 6th to the 8th of September, 2000, in New York, the Declaration reflects the concerns of the 147 heads of state and government and the 191 countries that took part in the largest-ever meeting of world leaders. The Declaration defines eight concrete goals to be achieved by 2015. These are the Millennium Goals, or putting it another way, the Eight Ways to Change the World.

In the following pages, we show the actions being undertaken by UNICA members related to achievement of the Millennium Goals. It's the way the sugar-energy sector is helping change the world.

More than 700,000 people are employed in the São Paulo sugar-energy sector. This, together with factors such as the increasing percentage of formally hired farm workers, sector wage levels that rank as the second best average in Brazilian agribusiness and investment for professional upgrading of employees all point to a willingness to contribute to creating the new economic order advocated by the United Nations.

1 Eradicate extreme poverty and hunger

Cocal
Reusing of Food

The Cocal Group, in partnership with the Gran Sapore Restaurants Association and Luiza de Marillac in Paraguaçu Paulista, hosted a lecture on the reuse of food. At the event people were taught techniques to produce homemade soda and paté with vegetable stalks. Participants receive books with recipes for reuse. Other highlighted initiatives were courses in making chocolates for 20 girls of the Luiza de Marillac Paraguaçu Paulista Association, and preparing party snacks for families in the Iepê community. Besides improving nutrition standards in the community, the courses promoted income generation.

Cerradinho
The Healthy Eating Program

This aims to team students about the importance of full exploitation of food to improve nutritional status, and present alternatives for using these foods.

Pitangueiras
Infant Nutrition

Provide kids aged 0-2 years of age with three tins of milk per month, under medical prescription.

2 Achieve universal primary education

Cerradinho
Literacy Program

The program offers uneducated rural workers the opportunity to learn to read and write. In 2009, 24 workers in Novais achieved literacy. In 2010, the course was to be offered to workers in Catiguá.

Cerradinho
Keeping an Eye on the Community

This aims to monitor the needs of the surrounding community, diagnosing and planning actions with proposals for educational development and the preservation of quality of life and health.
Actions include: Lectures, workshops, grants, company visits, support and visits to the Evangelistic Maanaim Charity (Ibem), and presentations of the "Sweet Child Energy" project for the community.

Cosan
Waldemar Alves Nursery

Developed by the city of Valparaiso in partnership with Cosan, this program provides education for children from four months to six years.

Fundação Cosan Jaú

Provides formal and complementary early childhood education, information technology, folk art, toy library, school support, citizenship, environmental education, arts, and psychological support. The foundation is aimed at children of employees and from the community, aged four months to 10 years.

ETH - Alcídia
Social Energy for Local Sustainability

Centralizes all projects and environmental responsibility of ETH Bioenergy. The goals are sustainable development and quality of life in communities directly affected by the activities of ETH. The differential of the program is the participatory governance of implemented projects, involving communities and local government.
There are four priority areas of investment: education and culture, productive activities, health and safety, and environmental preservation.

Iracema
Teleclassroom

Working in partnership with the Bradesco Foundation and the municipalities of Iracemápolis and Limeira, six teleclassrooms were set up for the education of the plant employees and community members. In Iracemápolis, the four teleclassrooms (two primary and two high schools) offer 160 student places per year; in Limeira another 80 student places per year are offered via two teleclassrooms.
Usina Iracema gives Iracemápolis the use of the building for the teleclassrooms and funds the equipment and monthly payment of monitors.

Monte Alegre
Literacy for Rural Workers

Paraíso
Early Childhood Learning Center

Promotes full-time education for children from 0 to 6 years, as well as offering four daily meals and different pedagogical projects.

Pedra
Creche Support Program

Partnership with local governments and educational institutions for the care of children under six years of age. In this partnership, resources are transferred to the institution to carry out infrastructure improvements and purchase of teaching materials, among other things.

Santa Fé
Itaquerê Community Integration Center

Free online courses open to children and adolescents in the community, aimed at social integration, education, health and environmental preservation.

São Domingos
Educational Material

Provision of basic school materials for children of employees and collaborators to study in public schools, from kindergarten to high school.

São José da Estiva
Never Too Late to Learn

Promoting social inclusion and improving self-esteem are the goals of this program that serves employees, dependents and community members who were not able to attend school when young. The classroom, maintained by the company, is fully equipped and the learning material is tailored to the student's reality to facilitate learning.

Time to Learn More

In this project, employees, their dependents and community members who did not had the opportunity to complete elementary and high school have the chance to learn more. The company has equipped teleclassrooms in partnership with public schools of Novo Horizonte.

On the Ball, Good at School!

This program aims to develop the growth of the child, take him/her away from drugs and other social problems, improving personal character and sparking a taste and enthusiasm for sport. To participate, children must be enrolled at school, attend classes and get good grades. Recreational and social projects are also offered.

Zilor
Always Learning

Program geared to children of employees who receive aid and scholarship costs to fully fund Higher Education.

Zillo Lorenzetti Band

Founded in 1991, the band is composed of 50 children, whose participation depends on regular attendance at school.

Tennis lessons for children at Novo Horizonte

3 Promote gender equality and empower women

Pedra
Project for Women

Bringing together all the women in the company, aiming to promote integration and dissemination of women's health topics.

São José da Estiva
International Women's Day

The date is celebrated with various activities such as lectures, social events, delivering flowers and souvenirs. Besides promoting integration between employees, families and people in the community, the activities mark the celebration of a very important date in world history.

São Domingos
Viva Women

Guidance for contributors, employees and spouses and women from the community about certain diseases, preventive health measures and general explanations, aimed at the health and quality of life for women.

Della Coletta
Women's Health

The main focus is the prevention of cervical cancer through Pap tests.

Campaign for Men

Prevention for men over 40 years old, collecting samples and conducting PSA tests, blood count, triglycerides, cholesterol and glucose levels.

4 Reduce child mortality

Guarani
Dietary Supplement

Donation of supplementary nutrition to children recovering from illness.

São Domingos
Early Childhood Nutrition

Under medical supervision, the company supplies powdered milk, essential to the growth of children, to all children of employees up to six months old.

Partnership with Kindergartens and Charities

Assistance to 180 children of the Lar da Criança Dona Lula Zancaner, Catanduva; 100 children from the Prevenir project, in Pindorama; 80 children from the Espaço Amigo project in Peti; and 80 children in the Zellinda Cacciari Tereza Fernandes and Prof. Maria Lucia Vivaldini Vallejo daycare centers, both in Catiguá.

São José da Estiva
Growing Up Healthy

Besides encouraging breastfeeding, the company guarantees children from 0-2 years a daily supply of one liter of milk. To receive the benefit, children must be up to date with vaccinations and receive regular monitoring with a pediatrician.

São Manoel
Criança Feliz Daycare and Nursery, and the Grow Project

In Botucatu, Usina São Manoel has partnered with Criança Feliz Daycare and Nursery and the Grow Project, which provide education, safety, security, quality of life, healthy leisure and even job training for about 520 children of different ages. During the period covered in this report, in addition to financial resources, the company provided continuous monitoring and contributed to the maintenance of activities and the operational structure of the institution.

Institution for Protecting Children and Young People

The Institution for the Protection of Children and Youth, located in São Manuel, offers special protection for 27 children and adolescents, from birth through to 14 years who are in a situation of social and family risk or in the process of adoption. Together, the actions promote a recovery of self-esteem, health care, social and family inclusion, while promoting welfare and educational leisure. Expanding its operations, the institution also directs activities to the family, with a view to rehabilitation, recovery of citizenship, personal enhancement and professional training to enable earning and income and self-sustainability, the aim being a better quality of life, with social and economic inclusion. Usina São Manoel continually supports the development and maintenance of projects and actions of this institution, contributing to a healthy diet, maintenance and expansion of facilities and improving service.

Remodeling Creches

The Remodeling Creches program focuses on the work of renovation and modernization of buildings of various institutions. In this period of the report help went to the Ângela Martin Basseto creche and nursery in Pratânia, which cares for 160 children aged 0-6 years and 11 months. A construction project led by the company renovated facilities and recreational space so allowing for better development of activities for children. This allowed service at the creche to be expanded, with improvements in the educational process.

Viralcool
Taking Care of the "Big Beehive"

The Casa da Criança Desembargador Dr. Euclides Custódio da Silveira has since 1967 supported families in Viradouro, caring for children from six months to four years. The project aims at the holistic development of children in their physical, psychological, intellectual and social development, complementing the actions of families and community. Since 2006, Viralcool municipality has collaborated with the restructuring of the institution.

5 Improve maternal health

Cerradinho
Healthy Pregnancy

The program provides information to expectant mothers for a greater understanding of pregnancy, childbirth, postpartum and baby care.

Cerradinho
Health & Cia

The program has monthly campaigns to promote health and wellbeing of employees. Since 2007, when it was started, the program has conducted campaigns on topics such as women's health, vaccinations, drugs and sexually transmitted diseases, healthy hearing, blood and bone marrow donation, ergonomics, dengue, traffic safety, hypertension, diabetes, obesity, stress and H1N1.

Santa Fé
Prenatal Course

Guidance and care for mother and baby, breastfeeding, hygiene, disease prevention, relaxation techniques, exchange of experience and birth.

São José da Estiva
New Life

Aimed at women, this program encourages love, security, hygiene procedures and breastfeeding. Mothers, whether they are employees, community members or dependents, receive follow-up from specialized professionals, through lectures and courses, as well as a layette for the baby.

6 Fighting HIV/AIDS, malaria and other diseases

Cerradinho
Keeping an Eye on the Community

This aims to monitor the needs of the surrounding community, diagnosing and planning actions with proposals for educational development and the preservation of quality of life and health.
Actions include: lectures, workshops, grants, company visits, support and visits to the Evangelistic Maanaim Charity (Ibem), and presentations of the "Sweet Child Energy" project for the community.

Cocal

Partnership with the Municipality of Narandiba in the Fique Sabendo campaign, promoting HIV tests and guidance to those interested.

São Domingos
Preventative educational activities for workers' health

Offers guidelines through educational pamphlets and direct contact with employees, on the following topics: smoking, licit and illicit drugs, hypertension and diabetes, obesity, STDs/AIDS, prostate, breast and uterus cancer, ergonomic guidelines and dengue.

São José da Estiva
Prevention

Periodically, the company develops preventive campaigns to alert and advise people on health problems. Topics are hypertension, diabetes, anti-smoking, prostate cancer, cervical and breast cancer, and influenza vaccination.

7 Ensure environmental sustainability

Angélica
Environmental Education in Schools

Held in the week when Tree Day is celebrated, the project addresses topics such as education, environmental awareness and preservation. The study was conducted in the Napoleão, Harry Amorim, Benedicta Figueiró, Sideney Carlos Costa and José do Patrocinio public schools in Angélica and Ivinhema.

Abengoa
Environment Day

Planting 200 tree seedlings performed by volunteer mill employees, in partnership with CEPTA/IBAMA in Pirassununga.
The ceremony was attended by children of the Parque Ecológico Décio Pires Barbosa School, to discuss environmental issues like preservation of biodiversity, environmental quality, management and the rational use of renewable resources.

Rebirth

Manufacture of bricks from PET bottles and the subsequent construction of houses.

Boa Vista
Let's Learn About the Environment

Usina Boa Vista now sponsors the booklet "Let's Learn About the Environment", prepared by the Secretariat of Environment in Quirinópolis (GO). The booklet aims to inform, educate and motivate students from local schools to have a sense of preservation and conservation of nature.

Environmental Education Program in Rural Schools in Quirinópolis Municipality (GO)

This educational program uses workshops aimed at developing a process of intervention that includes concrete actions to give the students tools to have a meaningful learning experience, giving them another way to look at the environment in which they live.

Water Project at the 5th Quirinópolis Rodeo Show

Given with the global climate scenario, and always renewing its commitment to environmental education, the Usina Boa Vista booth received more than 5,000 people at the 5th Quirinópolis Rodeo Show, using various illustrative models to demonstrate how water is distributed on the planet. The Water Project is one more tool that the Boa Vista mill uses to support its environmental education program focused on the city of Quirinópolis.

Cerradinho
Wood Chip Project

This project consists of collecting wood waste. Every month the Cerradinho Group collects, weighs, treats and chops up an average of 800 to 1,000 tons of waste, which is collected in about 10 municipalities. After the treatment, the chips are sent to environmentally friendly boilers, where they are burned to produce clean energy. Part of the money earned from the sale of energy provides funds for charities in the region.

Waste Recycling Project

The aim is to contribute to actions directed at waste minimization, environmental conservation, improvement of the quality of life and training people committed to this mission.

Reforestation Project

Working in partnership with the Luiz de Queiroz Higher College of Agriculture (ESALQ), the Cerradinho sugar mill identified more than 230 species of trees native to the region where it is located. It then collected seeds from these to form its first nursery. These plants provided for a whole process of reforestation, which is committed to planting 700,000 trees in seven years, to preserve water sources, flora and fauna. The project thus contributes to maintaining and improving rivers, streams and air quality.

Visit Cerradinho

Introduced in 2008, this project receives academic and business groups of up to 30 people, who are shown the company's environmental projects. Visitors go to the nursery of the Reforestation Project and learn about the process of producing ethanol, sugar and bioenergy in a visit to the mill's industrial area.

Clealco

Release of Fingerlings

Restocking aquatic fauna in the region.

Ceretas

Construction of a recovery and screening center for wild animals.

Pró-Verde

Reforestation of riparian areas.

Seedlings Nursery

Production of native tree seedlings.

Cocal

Cultural Event

The Grupo Cocal promoted the Responsible Energy event - Consumer Awareness, aimed at 8th grade students from seven municipal schools from Paraguaçu Paulista and Narandiba.

Paper Cut

A printer monitoring system to promote the responsible use of paper and toner.

Colombo

7th Cycle of Environmental Activities

The project aims to promote ecological awareness of professionals engaged in direct service to children and youth. The audience consists of educators and the 15,000 students from public schools in eight districts of the regions where the Ariranha, Palestina and Santa Albertina mills and distilleries of the Grupo Colombo are located.

Tiapita and Rio Feliz

A total of 15,000 copies of the book were distributed through the Cultural Action Program of the São Paulo state Secretariat of Culture. The aim is to arouse interest in helping with the process of conserving the environment, by encouraging children's reading.

World Environment Day

In celebration of World Environment Day, the Palestina mill developed several activities related to the theme.

Colombo

Cultural Exhibition of Brazilian Natural Landscape

The project subsidized the work of three renowned photographers who depict Brazilian ecosystem landscapes.

Planting Lives

The project develops environmental and social education and technical training for students and teachers in public schools.

1st Municipal Environmental Seminar in Riolândia

The project promotes community participation in the municipality of Riolândia with discussions and environmental activities carried out by the Planting Lives project.

Della Coletta

Selective Collection of Garbage and Waste – 1st and 2nd Phases

Collection bins for paper, glass, metal, plastic and non-recyclable items were installed in all areas of the mill. These materials are collected three times a week and sent to the separation area. Only non-recyclable and organic materials are discarded at the city landfill. Materials that decay over a long time no longer pollute or clog up the city landfill.
Others are left in discard area for future sale. More specific cases such as fluorescent lamps, which use mercury, are sent to a company specializing in the recovery of that material. Proceeds from the sale of these materials are reinvested in the maintenance of the structure of the project. The 3rd and 4th stages will see improvements in storage and the composting of organic waste.

Equipav

Environmental Education

Companies participate in the Formare Project, which offers introductory work training courses for low-income youth. The teachers, called "voluntary educators", are company employees. Besides vocational training, students receive information on environmental practices and issues.
On anniversary dates related to the environment, the project conducts activities with students from local schools in areas directly impacted by the mills. First, students hear a lecture on environmental education and are instructed on how to conduct environmental practices such as tree planting and preservation of the environment.
The Formare project invites cane sugar producers and other suppliers to attend meetings which encourage the development of environmental awareness, by addressing issues such as environmental responsibility and preservation, including techniques for restoration of protection areas and discussions about the Brazilian Forest Code.

Spontaneous Reforestation Projects

The Equipav and Biopav mills signed partnerships with municipalities, NGOs, schools and landowners for the annual planting of 100,000 seedlings of native species in areas that lie within the direct influence of their factories.

Restocking fish in rivers and lakes

Equipav annually releases 5,000 fingerlings in rivers and streams of the region where it is located. Since the project was initiated in 2003, more than 18,500 fish have been released, of which 5,000 in the company's water catchment reservoir; 3,000 in the Córrego Azul stream and 7,500 in the Córrego dos Patos stream.

ETH - Alcídia
Social Energy Program for Local Sustainability

The program focuses on ETH Bioenergia's environmental responsibility projects, with the aim of seeking sustainable development and quality of life in communities directly affected by the company's activities. There are four priority areas of investment: education, culture, productive activities and health, safety and environmental preservation. The differential lies in the implementation of participatory governance for these projects, with local government, the community and ETH.

Guariroba
Monitoring Fauna

This program aims to determine the richness and distribution pattern of species of wildlife groups in the region, especially those that are under threat. Furthermore, it seeks to identify areas with the greatest richness and diversity of fauna and indicate priority areas for conservation in the region.

Iracema
Viva Nature

Planting trees in areas of riparian vegetation.

LDC-SEV Santa Elisa Unit
Environmental Adjustment

Production and donation of seedlings, aimed at raising awareness of preservation and restoration of water resources in deforested areas.

Moema
Seedling Nursery

Collection of 182 species of native trees and production of 240,000 seedlings. The project included the participation of 25 employees.

Environmental Adjustment Program

250 hectares were reforested by planting native trees.

Monte Alegre
Seedling Nurseries

Ouroeste
Tracking the Ecology

This program seeks to verify the presence of endemic, rare and endangered species, and bioindicators, as well as suggesting guidelines for environmental restoration programs.

Pedra
Environmental Program for Teens

Partnership with the Regional Environmental Defense Association (Econg) in conducting the program, which trains young people from 13 to 16 years, from the Nova Independência community, in crafts, farming techniques, music and citizenship.

Pioneiros
Planting a Seed

Environmental education project conducted with elementary school students in communities surrounding the mill.

Santa Cruz
Environmental Education

Provides educators, students and organizations with material for discussion and awareness of environmental issues, highlighting the need for change in attitudes towards the environment.

Distribution of Seedlings

Contributing together with other bodies to preserve and improve the environment.

São Manoel
Environmental Adjustment Program

370 hectares of forest in need restoration have been identified within areas of Permanent Preservation Areas, in a total of 853.53 hectares already protected from any kind of intervention. Restoration will take place gradually — 35 hectares per year over 11 years. This amount implies protecting more than 60 km of water courses and is equivalent to planting more than 600,000 seedlings.
From December 2009 to March 2010, 66,760 seedlings were planted in Permanent Preservation Areas located on farms either owned or leased by the company. Some 50,000 of these were for voluntary recuperation and the rest for environmental compensation agreed with the appropriate organ.

São Martinho
Design & Nature

An annual event with an exhibition and seminar. The goal is to promote and disseminate practical projects that contribute to the planet's sustainable development and awareness of humanity. The most important Brazilian designers are invited to develop ecodesign projects for the exhibition. In addition, a seminar provides topical discussion relating to the environment and sustainability. Design & Nature is supported by the Cultural Action Program of the São Paulo Culture Secretariat.

Viva Nature

Planting trees in riparian forests — 112,370 trees were planted in the period covered by this report.

Environmental Education Center

The Environmental Education Center serves employees and visitors from the surrounding region. It has themed rooms and projects addressing issues related to water, soil and riparian forests.

Santa Fé
Restoration of Protection Areas and Legal Reserves

Protect the vegetation cover, allowing an increase in diversity.

Environmental Awareness Campaign

Internal and external lectures, training, stickers and posters to raise awareness.

Solid Waste Control

All waste generated at the plant receive adequate treatment in accordance with the rules for temporary storage, selection, identification and destination.

Itaquerê Community Integration Center

Free online courses for children and teens, open to the community, aimed at social integration, education, health and environmental preservation.

Santa Adélia
Environment Week

The week is focused on orienting staff and children on the environment.

8 Develop a global partnership for development

Boa Vista
Setting Up a Branch of Senai in Quirinópolis (GO)

Aims to contribute in various ways to the development of activities in professional education, enabling training for people who work in Usina Boa Vista and also other companies in Quirinópolis municipality and the community at large. It includes a wide range of occupations in the productive sector, through the access to high quality training conducted by SENAI.
This project is a partnership with the BNDES, Senai/Goiania, Quirinópolis City Hall and the Usina Boa Vista.

Cerradinho
Child Sweet Energy Project

The project has been running for 13 years and caters for children 8-16 years, children of employees and people from surrounding communities such as Catanduva, Catiguá and Tabapuã. It aims at developing skills for personal and professional life, offering workshops in the following areas: drama, choir, dance, crafts, personal and professional development, tutoring, computer science, physical education, communication and business management. Students receive free transportation plus a snack, teaching materials and a uniform.

Vegetable Crops Program

Aims to professionally train small farmers and rural workers in the production of organic gardens, seeking to produce healthier products.

Corporate Volunteers

The goal is to encourage employees to donate their time, talent and work in a spontaneous and unpaid manner for social causes and community building activities such as organizing campaigns, fundraising events, community visits, lectures and group studies such as the Sugar-energy Sector Study Group and Group Cerradinho (a knowledge multiplier).

Clealco
Building Talent

Training manpower for the automotive sector.

Cocal
Solidarity Project

Aims of this project are: provide favorable conditions for professional training and retraining; contribute to raising the rate of employability in the West of São Paulo state; contribute to the social development of communities covered by the project; and provide training and technical retraining in industrial, agriculture and services areas.

Training and Development

Completion of 309 training events aimed at in-job training, acquisition of knowledge and technology, and professional and personal development.

Presentation by mill employees' choir

Della Coletta
Creating Opportunities for Rural Workers

Developed in partnership with the Bariri Rural Union, this project aims to improve the cane cutters qualifications by enrolling them in training courses. In 2009, 88 employees received qualification in the following courses: hydraulics (10 participants); clay handicrafts (5 participants); tractor operation (10 participants); electricians (10 participants); manual herbicide application (25 participants); fiber handicrafts (15 participants); and inspection and control of ants (13 participants).

Digital Inclusion

The project aims to educate, train and give certificates to employees interested in basic computer knowledge. It is a company partnership with two local schools to develop the Family School Program, which provides a computer room with capacity for 12 students.

Generating Opportunities

The project seeks to create a school for training drivers and operators, not only to meet demand within the mill for labor, but to also create an opportunity for other people who want to improve themselves and work in the area. In 2009, 192 people were qualified both from the mill and externally, some of whom were employed in their new roles in the 2010 harvest. The project is a partnership with the Family School Program at the Idalina Vianna Ferro School, which provides lectures.

Guarani
Education for Work

In partnership with Senac, this program prepares young people for the job market.

GVO
New Dimension

Technical courses.

Professional improvement.

LDC-SEV Santa Elisa Unit
Young Apprentices Project

Partnership with Senai to train employees' children and youth from the community, ranging in age from 14 to 15 years.

Moema, Itapagipe, Ouroeste e Guariroba
Scholarships
Companies have a program to grant scholarships for undergraduate, graduate and language courses, which currently include 106 employees committed to raising their educational and skill level.

Santa Cruz
Reviver Foundation

Provides vocational training for poor children.

São José da Estiva
Scholarships

Employees have the opportunity to complete their studies and go to college, thanks to personal encouragement and financial help from the company. Scores of Estiva employees have gone back to school or continued studying to complete their dream of professional graduation.

Digital Inclusion

Estiva employees have access to the digital world, with the support of well-equipped classrooms and trained teachers.

Income Generation Workshop

Estiva develops several workshops that teach handicrafts, how to make truffles, Easter eggs, etc., which enables people to improve their income.

Connected

Children attend computer classes and become familiar with the language of the computer. This is a way to open doors for future careers and to promote social inclusion

São Domingos
Scholarships

Offers undergraduate and postgraduate scholarships to employees, besides helping to pay for vocational courses such as technical analyst, production of sugar and ethanol, computers, mechanics, instrumentation, personnel department, accounting, financial mathematics, secretarial, serving the public and others.

Santa Fé
Scholarships

This program aims at providing employees with the means for improvement through technical and cultural training.

Professions

This project is a partnership with the Lucia de Abreu State School in Nova Europa, together with professional staff from the Usina Santa Fé. The aim is to support young people completing high school to make a more conscientious choice about college and technical courses. It provides lectures on jobs and the labor market.

EXTERNAL AUDITOR'S OPINION

An independent auditors' limited assurance report on the application of the AA1000 Assurance Standard in the process of stakeholder engagement as published in the UNICA Sustainability Report 2010

To the Directors and President of the Brazilian Sugarcane Industry Association (UNICA)

We were hired to provide a service of limited assurance with respect to the statement by the administration of the Brazilian Sugarcane Industry Association (UNICA) concerning compliance with the principles of Inclusion, Materiality and Responsiveness ("Objective"), defined by standard AA1000 (2008) ("Criteria") as published in the UNICA Sustainability Report 2010, in the section entitled "About this report" on page 11.

Foto: Fernando Batistelle

Representatives of members contributing to the GRI report

Management responsibility

UNICA administration is responsible for preparing and presenting the Sustainability Report, as well as complying with the principles of Inclusion, Materiality and Responsiveness as defined in standard AA1000 2008 ("Criteria"). This responsibility includes the design, implementation and maintenance of internal controls to meet these criteria.

The criteria for compliance with the principles of Inclusion, Materiality and Responsiveness are established by the AccountAbility 1000 Assurance Standard 2008 (AA1000AS) Type 1, which evaluates the level of adherence to the AccountAbility Principles Standard 2008 (AA1000APS). The criteria of this standard have the following main objectives:

- Inclusion: The process of Inclusion should consider the key stakeholders with respect to the sustainability aspects of the company;
- Materiality: There should be a transparent procedure to determine the Materiality and importance for stakeholders of the significant sustainability issues;
- Responsiveness: The process of Capacity to Respond must relate to matters involving the stakeholders and that affect the performance and sustainability of UNICA.

Auditor's responsibility

Our responsibility is to issue a limited assurance report on the object, based on work performed.

We conducted our work in accordance with the Brazilian standard NBC TO 3000 relating to Assurance Engagement Other than Audit and Review, issued by Brazil's Federal Accounting Council (CFC). This requires compliance with ethical standards and the planning and implementation of an assurance service to obtain limited assurance that no matter has come to our attention that causes us to believe that the objectives have not been prepared or carried out in accordance with the criteria in all relevant respects.

In a service of limited assurance, the procedures for obtaining evidence are more limited than in a service of reasonable assurance; the degree of assurance achieved is thus lower than would be obtained in a service of reasonable assurance. The procedures selected depend on the auditor's judgment, including the assessment of risk that the objects fail significantly to meet the criteria.

Within the scope of our work, we performed the following procedures, among others:

a) acquiring an understanding of the controls and procedures for Stakeholder Inclusion by means of interviews with the managers responsible for such information;
b) examination, on a test basis, of evidence supporting the quantitative and qualitative data relating to the process of Inclusion, Materiality and Responsiveness; and
c) review of information presented in the sustainability report about the process of stakeholder engagement.

The information that constitutes the object of this assurance report, relating to compliance with the principles of Inclusion, Materiality and Responsiveness, is published in the UNICA Sustainability Report 2010, in the section entitled "About this report" on page 11. All other data and actions of sustainability activities do not fall within the scope of this report, and are therefore are not assured by this report.

Conclusion

Based on our limited assurance service, we are not aware of any material modification that should be made to the information contained

in the section entitled "About this report" on page 11 of the UNICA Sustainability Report 2010, in order for such information to fairly present, in all material respects, the conclusion of the UNICA administration with respect to adherence to the principles of Inclusion, Materiality and Responsiveness established in standard AA1000.

Emphasis

Without implying any caveat to our conclusion, we draw attention to the fact that non-financial information is more subject than financial data to inherent limitations, given the characteristics of the object and the methods used for defining and obtaining evidence. Qualitative interpretations of Materiality and the appropriateness of such types of non-financial information are subject to individual judgments and assumptions. In this regard, we highlight the following aspects in relation to the present object:

INCLUSION:

- Compliance was noted in the procedures used to identify key people for mapping themes relevant to the company. To this end the following criteria were used: pre-existing relationship; and influence in the implementation of social and environmental commitments made by UNICA. Stakeholders were given priority according to their degree of influence on the fulfillment of UNICA's sustainability commitments; and
- For its next report UNICA pledged to extend the consultation with key people to including the following stakeholders: representatives of nongovernmental organizations that deal with issues like human rights and the environment; and sugarcane suppliers. This is described in the section entitled "About this report" on page 12 of the UNICA Sustainability Report 2010.

MATERIALITY:

- material themes were selected via the "Materiality Meeting, Sustainability Report 2010" held in October of 2009. This was attended by stakeholders from various entities; and
- the process of managing material themes is defined as follows: after the selection of themes by stakeholders, an analysis was conducted by the board and presidency. The Sustainability Committee was then consulted about the subjects, and finally they were submitted to the UNICA Board for approval.

RESPONSE CAPACITY:

- the UNICA Sustainability Report 2010 describes the institution's commitments by presenting the critical issues identified by key individuals, together with specific targets; and
- the UNICA Sustainability Report 2010 presented the material themes, and these were illustrated by the outcomes of the programs and commitments made during the previous cycle.

São Paulo, April 8, 2011.

PricewaterhouseCoopers
Independent Auditors
CRC 2SP000160/O-5
Manuel Luiz da Silva Araújo
Accountant CRC 1RJ039600/O-7 "S" SP

AA1000
Licensed Assurance Provider
000-65

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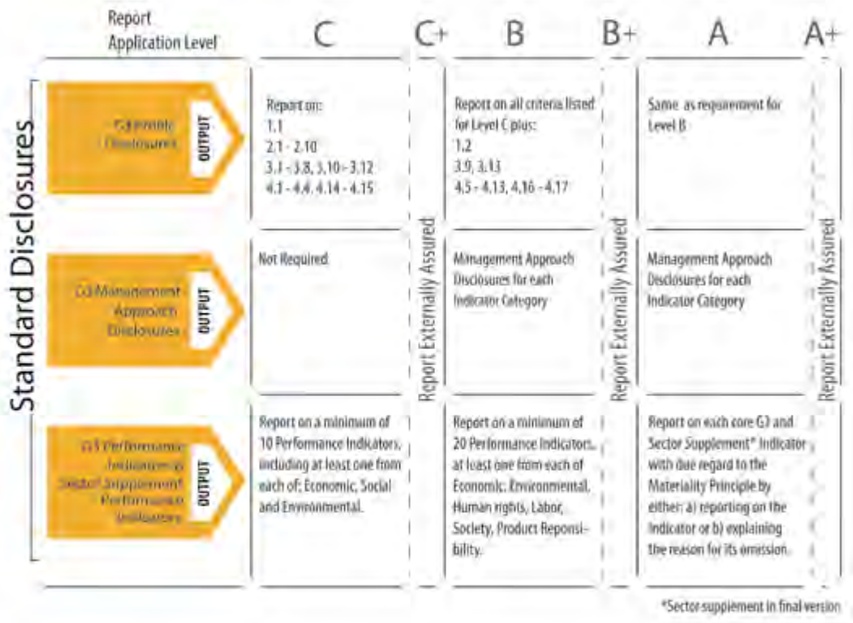

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Our thanks
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- Colombo - Palestina Unit
- Colombo - Albertina Unit

Bazan
- Bazan
- Bela Vista - Pontal

US.J - São João Araras
- São João - Araras
- São Francisco/GO

ETH
- Alcidia
- Eldorado/MS
- Usina Conquista/SP

Bunge
- Moema
- Guariroba
- Ouroeste

Tonon
- Tonon Bioenergia - Main Unit (Unid. Bocaina/SP)
- Tonon Bioenergia - Maracaju/MS Unit

RENUKA
- Renuka - ex-Equipav
- Revati - ex-Biopav

Vista Alegre
- Vista Alegre
- Usina Rio Pardo

Abengoa
- ABENGOA São Luiz - Pirassununga
- ABENGOA São João - São João da Boa Vista Unit