

(FOTO que ocupa toda a página)

## Hitting a Home Run (Gol de placa)

More than 600 soccer fields are benefited from Fields of Light Program.

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## Environment (Meio Ambiente)

New technologies at the fish monitoring. **Page 5**

## Energetic Efficiency (Eficiência Energética)

Cemig installs solar heating at housing groups. **Page 12**

## COMPANY (EMPRESA)

### New vice-president (Novo vice presidente)

Cemig's Administrative Council elected, on a meeting held on January 20<sup>th</sup>, Arlindo Porto Neto for the vice-president position of the Executive Board of Directors of the Company. President Djalma Bastos de Moraes was holding the vice-presidency accumulatively.

Born in Patos de Minas (MG), Arlindo Porto is a business administrator, majored by Federal University of Uberlândia, where he also majored in accounting. He used to be the mayor of his hometown, vice-governor of Minas Gerais (1991 to 1995) and senator of Brazil (1995 to 2003). He held also the Ministry of Agriculture and Food Supplies, from 1996 to 1998, during the first presidential term of President Fernando Henrique Cardoso.

### Director receives *The Equilibrist Trophy* (Diretor recebe...)

Luiz Fernando Rolla, director of Investor Relations and Control of Cemig's Participations, was awarded with *The Equilibrist Trophy*, by Brazilian Institute of Finance Executives (IBEF). The award took place at the ceremony held last November.

The award has been granted every year since 1986 to the Finances Executive of the Year, chosen by IBEF's members, and it is considered by the business community and media as the most important homage paid to the field's professionals of Brazil.

Luiz Fernando Rolla has been a member of IBEF for 20 years and he revealed that: "all finances executives look forward to the award as it grants the recognition to the work developed on the companies by this professional once who elects him are people with deep view and knowledge and that have all the necessary qualifications to be awarded on the same way".

(FOTO: Diretor Luiz Renato...)

Director Luiz Fernando Rolla spoke about the importance of the trophy

(FICHA TÉCNICA)

(LOGO CEMIG)

Director-President: Djalma Bastos de Moraes

Director Vice-President: Arlindo Porto Neto

Distribution and Commercialization Director: Fernando Henrique Schuffner Neto

Finance, Investor Relations and Participations Control: Luiz Fernando Rolla

Generation and Transmission Director: Luiz Henrique de Castro Carvalho

Entrepreneurial Management Director: Marco Antonio Rodrigues da Cunha

New Projects Director: José Carlos de Mattos

Commercial Director: Bernardo Afonso de Alvarenga

Gas Director: José Carlos de Mattos (accumulatively)

## CEMIG NEWS

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Cemig's Mission: To act on the energy's sector with profitability, quality and social responsibility.

## Recognition of the competences (Reconhecimento...)

DDC's Innovation Program, of Distribution and Commercialization Board of Directors, coordinated by Distribution Engineering Superintendence (EG) is part of the efforts towards the recognition of the competences available at Cemig.

The creation of the Program will supply a channel of innovating ideas of DDC's employees, including those possible of development inside of Cemig/Aneel's P&D Program. The first things carried out were the study of the literature about the concepts of innovation, mapping of the current models of innovating programs in Brazil, elaboration of the program's proposal, including its name and logo. The accumulated experience on the first phase that began last September resulted on the launching of the Program in December. At the moment, DDC's Innovation has just begun the second phase with the planning and the implementation of the initiative, creating necessary actions to its feasibility.

### Mega jumper cart

The mega jumper consists of a group of equipment (insulated cable, bornes, connectors) assembled on a tow, especially projected for maintenance on a de-energized circuit of faulty medium tension empty spaces. The biggest advantage is the reduction of the average time of re-establishment of the electric energy of the consuming units, mainly on feeders that have only one feeding alternative.

Nowadays, the Annual Program of Research and Development (P&D), ruled by Brazilian Electricity Regulatory Agency – Aneel, from the Law 9.991/2000, is the only formal program for changing the ideas into innovating products at Cemig.

### Second phase

The planning and implementation of DDC's Innovation Program begun January this year, through the definition of the resources and the creation of the necessary actions for its feasibility. On the second phase, the following actions will be implemented:

- set up of DDC's Innovation Prospecting Group;
- definition of the criteria for the selection of the innovating products and ideas;
- creation of the program's website on the Intranet, the Implementation Plan for the selected products and ideas, DDC's Innovation Award, the Innovation Forum and DDC's Innovation Virtual Network.

### Third phase

For the third phase of DDC's Innovation Program it will be proposed for 2010 the Knowledge Management Program in partnership with Human Resources (HR) and Energetic Technology and Alternatives Superintendence (ET), for the enhancement and management of the current knowledge at the Company.

(LOGO: Programa Inovação DDC)

DDC's Innovation Program

(FOTO: Carretas mega jumper ...)

Mega jumper carts, invention of Hélio Domingo Carvalho and Raimundo Anastácio Filho, of Distribution Assets Engineering Management (EG/EA)

### ***Química Amparo* signs contract with Cemig (Química Amparo...)**

For the next 11 years Cemig will provide electric energy for *Química Amparo*, a manufacturer of Ypê cleaning products line, to supply the industrial plant located in Amparo County, São Paulo. The contract, that assures also the supply of electric energy of alternative sources, was signed last year.

A manufacturer also of hygiene products, the company – that has been growing, in average, 20% per year, for the last five years -, is a national market leader with Ypê soap and the liquid detergent of same name, with 28% to 45% of participation on the market, respectively. *Química Amparo* has other two plants in the Country: one in Salto, São Paulo and another in Simões Filho, Bahia.

From this contract out of Minas Gerais, the Company consolidates itself among the biggest suppliers of electric energy of the Country, with a customers portfolio that includes companies, such as *Química Amparo*, that are concerned about environmental and social responsibility issues, a practice that is in favor of the sustainability policy of Cemig.

(FOTO: Contrato assegura o fornecimento de energia de fontes alternativas)

Contract assures the alternatives sources electric energy supply

### **National Council of Electric Energy Consumers (Fórum Nacional de ...)**

The President of Cemig's Consumers Council, Emílio Ludovico Neumann, is also the new president of the National Forum of Electric Energy Consumers. The election for the biennium of 2009-2010, in which the new directors of the institution were also chosen, was held in Campinas in the end of November. "We'll be pro-active, working also towards the reciprocity", stated, on the occasion, Emílio Neumann, that hopes to intensify the relationship with Brazilian Electricity Regulatory Agency (Aneel). "We have the possibility of giving our opinion and we'll be spokesmen of the 62 thousands of consumers that we represent", he said, regarding the fact of influencing the Tax Reform project, in respect of the taxes that incur on electric energy, the main goal of his administration.

(FOTO: Equipe utiliza a radiotelemetria ...)

Team uses radio-telemetry that allows locating species up to two kilometers

### **New shoal of fish monitoring technology in Três Marias** (Nova tecnologia de ...)

Cemig tested, from January 19<sup>th</sup> to 23<sup>rd</sup>, in the section of São Francisco River, after Três Marias Hydroelectric Power Station, a new technology to monitor the behavior of important fishes for the recreational and commercial fishing that have migration habits. The aim of the work, that has also analyzed available technologies in the market, is to determine the most appropriate methodologies to measure the concentration of fishes in sections of the rivers of Minas where the Company operates.

The tests were held through an agreement signed with Federal University of Lavras (UFLA), in the scope of *Peixe Vivo Program* that is directed to preserve the ichthyofauna and hydrological basins where the power stations of Cemig are. For the next years, the research that studies the fishes' behavior downstream from dams will monitor also sections of the rivers in Itutinga and on Paraná River Basin.

These first evaluations were carried out into tanks of Hydrobiology and Pisciculture Station of Três Marias in São Francisco River. Besides of biologists of Cemig and UFLA, there was the participation of consultants Mark Bowen and Steve Hieber both of Bureau of Reclamation, a State American company that works on the production of electric energy and handling of hydric resources.

#### **Tested technologies** (Tecnologias testadas)

The use of the acoustic sonar helps to determine the size, the quantity and distribution of fishes, besides of monitoring and mapping habitat parameters in aquatic environments, while the telemetry consists of the installation, via surgery, of transmitters to track the marked species. The radio-telemetry uses antennas that enable the localization up to two kilometers of distance.

According to Raquel Coelho Fontes, an environmental analyst of Generation and Transmission Environmental Management Superintendence (GA), Três Marias Power Station will be a pilot test for the other facilities of the Company, and the choice of the kind of technology will depend on the efficiency of each proposed objective. "Intense studies such as these are pioneering in the Country and they'll bring even more safety to the power stations' operation, at the creation of a database that will be able to delimitate the procedures for the fauna preservation of the fishes of these basins", she highlights.

#### **Acoustic Telemetry** (Telemetria acústica)

A new technology towards the fishes monitoring in Brazil was tested by Cemig this month, when specialists evaluated the acoustic telemetry. This modality works with hydrophones, a kind of microphone that capture sounds below water, in the region of the dam, to detect the position of the transmitters installed on the fishes. This way, it is possible to locate the marked species and also to obtain images, of two or three dimensions, of the displacement of these fishes.

## **Ball on the net: (Bola na rede:)** **Cemig floodlights more than 600 (Cemig ilumina...)**

Cemig, in partnership with the govern of Minas Gerais, through the Government State Secretariat, concluded last December, Fields of Light Program, that consists of proper floodlight works at amateurs' soccer fields and also at soccer fields of communities in need.

Fields of Light Program was concluded with a total of 602 floodlighted, benefiting the sports practice in 374 counties located in all regions of the State. As a whole, R\$ 24 million were invested, R\$ 13 million were Cemig's resources and the rest of the State govern.

Since the first phase of the program that began in 2004 the number of floodlighted soccer fields were always above of the foreseen. On the first phase, installed until November 2005, the schedule was to serve 100 soccer fields and 156 were floodlighted in the end. On the second phase, from December 2005 to December 2008, the result was even better. For this period it had been foreseen 300 soccer fields and 446 were assisted. According to Mauri Perpétuo de Paiva, a distribution electric system expansion technician, of Distribution Network Expansion Management (EX/RD), it was possible due to the use of top technology equipment. "We optimize our work and, thus, with the same financial resource we could floodlight a greater number of soccer fields", he affirms.

(Continuação do artigo da página anterior)

## meadow fields (...campos de várzea)

Besides of not having any expenses with the installation of the floodlights, through Fields of Light the tariff charged of the reflectors will be the same tariff of the public lighting of the city where the soccer field is located: another benefit for the local community.

According to Mauri de Paiva, the initiative of Fields of Light Program contributed, on its essence, to improve the sports practice and the cultural activities, but it also brought as a result greater peace to the residents as they began to feel safer at night due to the illumination and the greater use of the spaces.

### The program (O programa)

Created in 2004, Fields of Light based on a social program carried out in New York, USA, in which was observed the decrease of criminal and vandalism indexes from the illumination of basketball courts by the city hall.

It was then perceived that this initiative could be applied at the amateur soccer fields in Minas, aiming at improving the life quality of the communities through sports and culture.

All the soccer fields served by the program have compatible dimensions with the soccer practice, they belong to the city hall or are located at public areas, and they are linked to an amateur soccer club and have changing room and wire fence or fence, among other requirements for their inclusion on Fields of Light.

## Sub-20 of *Atlético* is the special attraction of *1<sup>st</sup> Peixe Vivo Cup* (Sub-20 do Atlético...)

The main attraction of *1<sup>st</sup> Peixe Vivo Soccer Cup* was the match between the juniors' team of *Clube Atlético Mineiro* and Três Marias Team, held on December 14<sup>th</sup>. The match, competed at *Enseada Stadium*, Três Marias, was part of the preparations of sub-20 of *Atlético* for São Paulo Cup of Juniors and for the trip to Europe to take part on a continental competition.

The tournament is a partnership among the Municipal City Hall of Três Marias, Cemig and *Estrela Gol ONG*. According to Elias de Assis, Municipal secretary of Development, Sports and Tourism of Três Marias, *Peixe Vivo Soccer Cup* that is on its first edition, integrates from then on the official calendar of the county's events. "The initiative excited the representatives of the Municipal League and of the associated clubs", he comments.

The competition, which champion was *Tradição Futebol Clube* that received *Peixe Vivo Cup*, gathered the first three classified teams of Três Marias Municipal Championship and last year's champion at three matches that were also held at *Enseada Stadium*.

(FOTO: Tradição Futebol Clube comemora o título da 1ª Copa Peixe Vivo)

*Tradição Futebol Clube* celebrates the title of *1<sup>st</sup> Peixe Vivo Cup*

## ENVIRONMENT (MEIO AMBIENTE)

### Cemig receives homage at 3<sup>rd</sup> Environment Brazil Award (Cemig é homenageada...)

Cemig received special homage on January 22<sup>nd</sup>, as the Brazilian company that had the best performance throughout last year, on the managements of its enterprises and processes related to the environmental sector.

The distinction of Best Company was granted by the 3<sup>rd</sup> Environment Brazil Award during solemnity at the Modern Art Museum in Rio de Janeiro.

The initiative, carried out by Brazilian Company of Multimedia (CBM), through *Jornal do Brasil*, *JB Ecológico*, *JB Online* and *Gazeta Mercantil* is directed to encourage the sustainable development and the continuity of the expansion of the environment awareness raising in the Country. Besides of the awards, CBM elected last year's distinctions of the environmental sector, among them Cemig, that received special homage.

For Cemig, the homage means the recognition of the work developed, which actions in favor of the environment preceded the validity of the sector's legislation. According to Luiz Augusto Barcellos Almeida, superintendent of Entrepreneurial Sustainability (SE), programs of environmental awareness raising and preservation are part of the Company's culture.

"We've for a long time carried out our businesses focusing on the socio-environmental responsibility, looking for new solutions and technologies that integrate the generation, transmission and distribution of electric energy to the environment preservation", highlights the superintendent.

#### Environmental Police (Política ambiental)

Luiz Augusto highlights that Cemig interacts with the society through the participation at councils and committees of environment and hydric resources, and also through activities and seminars of the sector, environmental programs and meetings with environmental bodies and organizations, besides of the dissemination of information about the environment.

Its environmental policy has seven principles that guide the activities and direct the efforts related to the environment protection and to the sustainable development. "Such principles are brought into action that aim at rousing on the employees and partners the awareness towards the environmental issue", he affirms.

(FOTO: Superintendente de Comunicação Empresarial, ...)

Entrepreneurial Communication Superintendent, Luiz Henrique Michalick (on the right), receives the award

### Nova Ponte UHE wins environment management award (UHE de Nova Ponte ...)

Nova Ponte Hydroelectric Power Station received in November the Environmental Management Award of Minas (PMGA), thanks to the work developed on the environment field and together to the communities involved on its operation. PMGA 2008 trophy was delivered by governor Aécio Neves to Cemig's President Djalma Bastos de Moraes.

It was the third year on end that the Company competed with the management of Nova Ponte Power Station. In 2007, Cemig had already been among the final companies and, this time was again at the finals and received PMGA distinction tablet, delivered by State Secretariat of Sustainable Environment and Development (Semad), José Carlos Carvalho, to Luiz Henrique de Castro Carvalho and Fernando Henrique Schuffner Neto, directors of Generation and Transmission and of Distribution and Commercialization of Cemig, respectively.

The hydroelectric power station, located on Araguari River, started its operations in 1994. With a total of 510MW of power, it has a reservoir capable of storing about 10 billion of cubic meters of water and that includes eight counties of Minas Triangle.

(FOTO: Moradores reconstruíram...)

Residents rebuilt their lives at Riacho da Porta Farm

## **Monitoring is one of the most wide-ranging of the Country** (Monitoramento é um...)

This year the Telemetry and Hydrometeorologic Monitoring System (STH) of Cemig completes ten years. Nowadays, there are already more than a hundred of hydrometeorologic stations scattered by Minas Gerais, besides of Goiás. The Telemetry System is composed by a network of hydro-climatic sensors and a group of telecommunication equipment supported by an information system. Cemig counts on one of the most complete and wide-ranging systems of all generation concessionaires of the Country, fulfilling the requirements demanded by Brazilian Electricity Regulatory Agency (Aneel).

According to André Cavallari, a hydroenergetic generation planning engineer of Energetic Planning Management (PO/PE), the data that come from the field are sent to the central system installed at the headquarters of the Company, where they receive a treatment and are made available at CemigNet for the users previously registered and with specific functions according to their field of performance.

“The objective is to provide Cemig’s technicians information about the hydro-climatic variable in the several regions of the State. Therewith, it is possible to subside the elaboration of the tributary outflow forecast to the reservoirs or spots of interest, to subside the meteorological forecast or to enable studies of the scientific community and P&D projects and, in some cases, to fulfill legal requirements”, affirms Cavallari. With this information it is possible to plan better the operation of the reservoirs, subside sooner the flood warning announcement and warn the operation areas of Cemig.

### **Benefits (Benefícios)**

Cavallari explains that, with the use of the system, everybody profits. The reason for that is that it allows putting in readiness the maintenance team that will re-establish the system fast in case of shut-down. Besides of that, the local community suffers less from the floods or the droughts, and smaller time of shortage of electric energy, in case it happens.

An example is the work that is being developed by Cemig together with the State Coordination of Civil Defense (Cedec). The levels of outflows of the main hydric basins of the State are monitored and, from these data, PO/PE, together with the Operation Centers System (COS) and of Distribution Operation Center (CODs), gives warnings of flood risks to the riverside counties, helping to avoid deaths and damages caused by the rains.

(ILUSTRAÇÃO: Sistema está disponível ...)

System is available at Cemig-Net for registered users

## **EFFICIENTIA BRIEFING (INFORME EFFICIENTIA)**

### **Consulting about energetic matrix** (Consultoria sobre...)

Efficientia closed a contract of rendering service of specialized consultancy for the design and optimization of the energetic matrix of *Vallourec & Mannesmann Tubes (V&M do Brasil)*, located in Belo Horizonte. To support the works, Efficientia installed an advanced office for monitoring and data and information survey, aiming at analyzing and evaluating the efficiency of the use of energies in the industrial processes of that company.

The consultants of Efficientia’s Engineering Management will work at this industrial plant until March this year, performing field services inserted in between with office work, focused on the identification of efficiency opportunities of the industrial processes in respect of the energetic point of view. The necessary infrastructure was made available by *V&M do Brasil* that will connect the office to the local network to facilitate the handling and the transmission of information.

“At the development of the works, we’ll sound out the opportunities of production cost reduction with energies such as: installation of frequency inverters (dust removal systems), improvement of the efficiency at the drying of ore, analysis of the energetic balances of the blast furnaces focusing on the oxygen injection and of charcoal fines, improvement of the use of air gases (oxygen, nitrogen and argon) on the steelworks processes, improvement of the steel ladles heaters’ efficiency, among others”, affirms Cláudio Latorre, engineering manager of Efficientia.

Once the alternatives, improvements and recovering systems or energetic losses minimization at equipment and processes have been determined, Efficientia will present economic-financial and cost-benefit analysis of the identified alternatives, of which will be implemented according to definition of the customer, with the option of resources use of Cemig’s Energetic Efficiency Program, via Performance Contract.

## COUNTRYSIDE (INTERIOR)

### Simplified community customer center available in Três Marias (Comunidade visita...)

Since December, residents of Três Marias county, in the Central Region of the State, count on a Simplified Community Customer Center (PAS) of Cemig, to explain doubts and solve problems related to the electricity bill. PAS was installed at the City Hall at *Praça Castelo Branco, nº 3, Centro*.

The opening of the Community Customer Center is part of the representative participation in Minas Gerais forecast by Cemig and it also answers the demand of the residents of Três Marias that up to now have had an easy access to services such as copy of a document issuing, change of title-holder, complaint of consumption and invoiced amounts, negotiation and payment in installments of debits, among others. "PAS offers to the consumers almost all services of a customer center", affirms Vinícius Provenciani, commercial agent of Coordination of Relations with Customers and Marketing Management (RC/RM). "This avoids people going to the nearby counties where there are customer centers to solve their problems", he emphasizes.

According to Geraldo Antônio Avelino, supervisor of Commercial Relations and Services Management of Curvelo (DO/CV), a worker of the City Hall of Três Marias has been trained to assist the customers. He also says that there is an exclusive line (hotline) that guarantees the direct contact with the Company's Central Customer Service.

The installation process of the Simplified Community Customer Centers by Cemig began in 2004. Nowadays the Company has more than 90 of these centers and the forecast is that other units will be opened this year.

#### Cemig at the Square (Cemig na Praça)

On January 7<sup>th</sup>, about 400 residents of Joaquim de Lima neighborhood in Três Marias, took part on Cemig at the Square Program. The event had the participation of the Company's technicians that disseminated the Simplified Community Customer Center, gave tips about electric energy saving and safety, and guidance related to the electricity bill, service and complaints of high consumption and requirement of services.

They also distributed 150 incandescent lightbulbs to 75 consumers that fit on the reduced tariff and were at risk of losing their benefit due to the increment of their electric energy consumption.

(FOTO: Clientes de Três Marias...)

Três Marias' customers are assisted by Cemig at the Square

## INFOVIAS COLUMN (COLUNA INFOVIAS)

### Infovias consolidates itself along of ten years in the market (Infovias se consolida ...)

In January, Infovias S/A Company completes ten years of its creation, showing an annual invoicing of about R\$100 million, supported by the effort of the 78 employees. Through its infrastructure, the company offers what it is considered the best optical network for transport of telecommunications services of Minas Gerais, consolidating itself as one of the most well successful companies of Cemig Group.

Allied to the strictest technical requirements of quality and a corps of highly qualified collaborators, Infovias guarantees the delivery, operation and maintenance of the services at appropriated periods and with high level of customer satisfaction.

#### Trajectory (Trajetória)

On January 13<sup>th</sup> of 1999, the General Meeting of Infovias' formation decided to the approval of its Corporate By-Laws, which objective up to now is to render telecommunications services.

Set up originally as a corporation, by the partnership with Cemig, *AES Força Empreendimentos Ltda* and Cemig's Employees Investment Club (Clic), Infovias became a full subsidiary of Cemig with the further acquisition of AES participation and of CLIC at the company.

### More agility and reliability on the reading of medium tension (Mais agilidade e ...)

Distribution and Commercialization Board of Directors (DDC) tested, approved and is using an original methodology for the reading of medium tension customers. The novelty was included on the processes of Invoicing and Tax Collection Coordination (RC/FA) and of the field team of Commercial Relations and Services Management of Uberlândia (DO/UL), and the work was carried out in a partnership.

With the new methodology, the PDA is used with Bluetooth technology for the invoicing data collection, directly from the gauges on a safe and fast way through a simple connection between them. In few minutes the entire customer's invoicing information are available, while the previous method demanded the typing of the data on the PDA and the manual filling out of a form.

"We're taking advantaged of the current technology of our customers' medium tension gauges, the peripheral output and the accessories of the PDA, the converters modules, responsible for the connection between the gauge and the PDA, through the Bluetooth system. Besides of recovering the entire customer's invoicing information, we can establish parameters, with the PDA, for the gauges, what was done before using a laptop", explains engineer Luciano Magno da Silva, coordinator of DO/UL's field service.

According to Sérgio Humberto de Oliveira, supervisor technician of DO/UL's inspection team, the profits of productivity is about 35%, while the quality and the reliability increase a lot, considering that the use of the new technology almost abolishes the occurrence of re-invoicing of the bills, due to reading mistakes.

#### Big Results (Grandes resultados)

The inspection teams at consuming units of DO/UL adopted a simple action that was the redefinition of the reading routes of the medium tension customers, but of great impact on its productivity. With four specific days to carry out the reading of the medium tension customers, the objective was to increase the operational efficiency, assuring the quality level, which indicator is the global cost of the field service. Thus, the customers are mapped according to the reading day and physical location, and the reading routes are redefined in order to concentrate them. The result was a reduction of 15% on the quantity of driven kilometers and of 13% of labor-work.

With this measure, there is release of labor-work to carry out the inspection at consuming units, aiming at identifying frauds and to favor another indicator: the one that measures the recovered electric energy and incremented at West Collegiate.

## GASMIG COLUMN (COLUNA GASMIG)

### Gas pipe line arrives at Confins Airport in April (Gasoduto chega ao...)

In December started the works of installation of the distribution network of natural gas to serve Tancredo Neves International Airport in Confins. "We're using the technique of directional drilling that is more appropriate for the rainy season, besides of causing less impact for the community of the surroundings", affirms Sílvio José Machado Filho, coordinator of the works of Engineering Management. Thus, the state period forecast to conclude the works should be kept for April.

It will be 6.2 kilometers of steel piping of 10.16 centimeters installed alongside LMG-80 highway. The ramification will derive from the lateral-line *Lapa Vermelha* that, on its turn, derives from the North trunk line to Sete Lagoas. The works' costs, carried out through a Contract of Service Unit in force and under the responsibility of *Cetro Engenharia*, are about R\$2 million.

Besides of servicing the Airport, the Management For Gaining New Customers has searched for other potential consumers in the region. Some have already showed interest in using the fuel as it is the case of Gol airlines. Besides of that, this project is strategic for the Govern of Minas that plans to offer special conditions of competitiveness for the installation of export, import and distribution companies, characterizing the concept of industrial airport.

Nowadays, only Maceió Airport uses natural gas, using it on the electric energy generation for self-supply and cold generation at air conditioners of "absorption" type, involving the classic co-generation process. The intention of Infraero is to count on the use of raw materials for the same purposes at several airports of the Country.

The service at Confins Airport is associated to the Structuring Project of Natural Gas Offer, inserted on the Integrated Development Plan of Minas (PMDI – 2003/2023) of the Govern of Minas Gerais. At Gasmig this project finds backing on the strategic objective of "assuring discipline of capital and management of great projects".

## EFFICIENCY (EFICIÊNCIA)

(FOTO: Equipamentos similares aos instalados nas residências da Cidade Ozanan)

Similar equipment to the ones installed at *Cidade Ozanan*

### **Water heating with solar energy at *Cidade Ozanan*** (Aquecimento de água ...)

Cemig, in partnership with *Rotary Club Barro Preto*, finished the installation of solar heating systems at 59 houses of housing groups of *Cidade Ozanan* neighborhood, in Belo Horizonte.

The initiative is part of the Water Heating with Solar Energy project at Housing Groups, promoted by Cemig since 2002. The installed systems have a capacity of 200 liters of heated water that is enough for five daily showers. The alternative for the colder days is that the systems can work out of the rush hour, between 6pm and 10pm, with the aid of electric showers of low potency.

The installation of this kind of system is directed to specific popular housing groups such as the ones built by Housing Company of Minas Gerais (Cohab), that are located in regions of low Human Development Index (IDH), which average consumption is of 150 kWh/month, and where there are also problems related to the regional load factor.

#### **Costless (Sem custos)**

The equipment was acquired and installed by Cemig without any expenses for *Cidade Ozanan* or the houses' owners. "Each system, that has an average cost of R\$1.4 thousand should reduce the consumption on 52 kWh monthly, what represents a saving of about 40% on the total electric energy consumption of the customer", affirms Davidson Andreoni Rocha, a technician of electric energy processing and final use of the Coordination of Income Protection and Use of Energy Management (RC/PR). Besides of that, according to Andreoni, there is a decrease of the potency at rush hour, enabling a relief on the load of the electric systems of high loadings.

Cemig began the researches about the solar heating technology in 1986. Since then, the Company has been encouraging the improvement of the equipment, giving support to the research and it has already made feasible more than 7.000 m<sup>2</sup> of solar collectors.

### **Energetic efficiency in favor of health** (Eficiência energética em...)

In November Cemig donated two autoclaves to São Domingos Hospital and Maternity, of Uberaba. Autoclaves are essential equipment on the sterilization of hospital materials.

The autoclaves are vital at a hospital plant. All kind of material that go through them that is sterilized, since liquids to clothes and glasses, and allow a significant reduction of hospital infection, contributing a lot on the number of hospital stays and related costs reduction.

Cemig invested R\$280 thousand on the acquisition and installation of the new two autoclaves with individual capacity of 520 liters. The resources came from the Intelligent Energy Program, responsible for Cemig's actions against the energy waste.

The use of the new equipment at São Domingos Hospital will save R\$85 thousand per year on the electricity bills, with consumption reduction of 257 MWh/year, electric energy equivalent to the annual average consumption of 150 beds of the Intensive Care Unit (ICU) or of 200 residences.

## CEMIG<sub>NEWS</sub>

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