São Paulo's Environmental Agenda

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www.urban-age.net
Organogram
budget

2004
R$ 77,648,022.96

2005
R$ 92,537,744.26

2006
R$ 98,278,973.63

2007
R$ 208,787,290.00

2008
R$ 330,403,981.00
Water
Air
Green Areas and Biodiversity
Culture of peace
Eco-economy
Ground
DO YOU KNOW WHICH ARE THE BIGGEST SOURCES OF GREENHOUSE GASES IN THE MUNICIPALITY OF SÃO PAULO?

- 15,738,241 tons of carbon gas are emitted per year.
- 76.14% of emissions come from the energy use.
- Which, 68.3% are resulted from the petrol and diesel burning.
Emissions in the city of São Paulo, per source, during 2003 (Gg CO₂ eq)

- Energy Utilization: 11.986 Gg CO₂ eq
- Changes in the soil and forest Utilization: 51
- Agricultural: >1
- Solid Residues: 3.696 Gg CO₂ eq
- Sewage and Effluent Treatment: 7
Emissions of Energy Using produced by the direct consumption of Electric Energy and Fossil Fuels in the Municipality of São Paulo during 2003 (Gg CO$_{2}$eqv.)

Consumo de Energia Elétrica 1.334
Uso Direto de Combustíveis Fósseis 10.562

Fonte: Elaboração Própria
Emissions in the city of São Paulo, per fuel, during 2003
Total of 10,562,000 Gg. CO$_2$ eqv.
Comparison between the total emissions and the emissions per inhabitants, in GWP (CO₂ tons eq)

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<tbody>
<tr>
<td>Population</td>
<td>157,290,000</td>
<td>10,710,997</td>
<td>5,633,407</td>
</tr>
<tr>
<td>Total Emissions</td>
<td>1,289,406,000</td>
<td>15,738,241</td>
<td>12,798,000</td>
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<tr>
<td>Total Emissions Per inhabitants</td>
<td>8.20</td>
<td>1.47</td>
<td>2.27</td>
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<tr>
<td>Emissions Generated by the energy Usign</td>
<td>244,926,000</td>
<td>12,034,061</td>
<td>8,066,000</td>
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<tr>
<td>Emissions per inhabitants regarding the energy using</td>
<td>1.56</td>
<td>1.12</td>
<td>1.43</td>
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Note: This table is merely illustrative
São João Landfill

The operation of the biogas power station has begun in January 2008.
- Conduct of two auctions of carbon credit
- R$ 70 millions invested in the two regions
The selling of 1 ton of Carbon Credits generated from the Biogas Power Station R$ 34 million (about US$ 20 million) were applied in the region of Perus and Pirituba.

- Perus Linear Park
- Squares
- Bike lane on the side of Perus railroad
- Socio-environment educational center (veterinarian hospital, hotbed and cabinet-make school)
- Socio-urbanistic interventions (Bamburral seat urbanization, with the removal of families from around the landfill and parks implementation)

- The Second auction with the credits originated from both landfills took place in September 2008.
The Municipality of Sao Paulo emits about 20% less of the total amount of greenhouse gases:

Less 3,147,648 tons of CO₂ eq
PL CLIMA (project of law for the climate change)

- Establishes as a goal to 2010 the reduction of 30% of Green House Gases Emissions in the city
- Points some strategies for the management of all areas in the government in order to mitigate green house gases emissions.
- Progressive reduction in the use of fossil fuels = the use of renewable fuels, not fossil, by all of the buses from the public fleet in the municipality by 2017
- Compact city
- License for high emissions projects
Surveys of the Laboratory for Atmospherics Research of the Medicine College - USP

They show that in days of thermic inversion, until 10 people die in the capital because of the pollution.

It is spent annually about 24 million dollars in the treatment of respiratory illnesses.

(tabela SUS)

It is esteemed that the vehicles drop in the atmosphere about 70% of the whole pollution, which makes the air of the city harmful to the health. It can reach 90% if we only consider the carbon monoxide emissions.
Inspection of chartered bus

- The city hall of São Paulo has begun, in May 2007, the inspection of the chartered bus which are registered in the Public Transportation Department of the Municipal Transportation Secretary. There are 3 thousand Vehicles. In July 2007, from 364 bus inspectioned, 19 were in very bad conditions and 39 in bad conditions.

Inspection of Public Bus fleet.
- The fleet of public transport has been inspected since 2005, by the partnership with Conpet, and of which only 10% was reproved.
Inspection of the whole fleet registered in the city of São Paulo

- It has begun in 2007

- The inspection of diesel vehicles will take place in May 2008.

- The inspection of the most pollutant vehicles, whether they have alcohol, petrol or gas systems, is going to happen in July 2008.

- From May to October 2008, about 18,346 vehicles were inspected and about 14,706 were approved.

- Inspection, in 2009, of the whole registered fleet in the City of São Paulo, including motorcycles.
Trolleybus - Electric bus
Stimulating the bike using

Projects that are under development:
- 6.2 km of bike lanes to be implemented in Radial Leste
- Developing projects to implement 15 km of bike lanes at Butantã.
- 3 km in Itaim Leneal Park
- 11.5 km at Ermelino Matarazzo
- 3.3 km at Perus

Implemented projects
- Radial Leste Bike Lane, with 6 km
- Inajar de Souza Bike Lane, with 7 km
- Parelheiros Bike Lane, with 1.8 km
- More than 1000 bike parkings in municipal parks;

- Implementation of a bike rent system in subway stations;

- Project to implement 1000 km of bike lanes in the next ten years in partnership with IEMA.
Other actions to improve the air quality

- **Fuels**

  - **Biodiesel** = The city hall has established, in July 2007, a partnership with Viação Itaim Paulista and B100. It regards the participation in order to include the biofuel in the Alternative Energetic Evaluation program. The purpose is to study the inclusion of mixed biofuels to the petrol diesel used by the fleet of public transport.

  - **Diesel 50** = In July 2008 will be established the decree 46/SVMA-G/2006 that obliges the distribution of diesel with 50ppm as maximum level of sulphur. By July 2010, this level must be smaller: 15ppm.
The renovation of bus fleet in 2008. The air of the city will receive less 1,500 tons of pollutants per year. Vehicles older than 10 years will not be allowed to circulate.

Bus Corridor
Operação Defesa das Águas

- It has initiated in 2007 and encloses the springs from the south (Billings and Guarapiranga) and north part of the city (Cantareira and Várzea do Tietê)
- There were 1,929 irregular buildings destroyed in the area of environmental protection;
- 12 factories of blocks and material deposits were closed;
- Daily inspections in protected areas by 260 policemen of the Environmental Police and 42 cars, motorcycle and boats, in order to prevent from new construction;
- Limiting with signals the areas where any kind of construction is prohibited;
- It was removed 256 tons of garbage from Guarapiranga dam - partnership with Sabesp;
- Orla Plan for Guarapiranga, with the creation of 09 parks (6.1 million m², 3 beaches and 10 piers), fishing point and nautic sports;
- Project for the creation of new parks:

a) South Zone
- Lineal parks: Caulim, Cocaia e Castelo
- Traditional Parks: Nove de Julho, Shangrilá, Guanhembú e Herculano
- Natural Park: Rodoanel

b) North Zone
- Lineal Parks: Bispo, Perus and Canivete
Implemented
- Parelheiros Lineal Park (Parelheiros – 16,000 m²)
- Ipiranguinha Lineal Park (Vila Prudente – 10,000 m²)
- Parque Linear do Fogo Lineal Park (Pirituba – 30,000 m²)
- Itaim Paulista Lineal Park (Itaim Paulista – 46,000 m²)

Under implementation process
A) North zone
- Do Bispo Lineal Park (Casa Verde)
- Cabuçu de Cima Lineal Park (Jaçanã)
- Ribeirão Perus Lineal Park (Perus)
- Bananal Canivet Lineal Park (Freguesia)

b) South zone
- Caulim Lineal Park (Parelheiros)
- Cocaia Lineal Park (Capela do Socorro)
- Feitiço da Vila Lineal Park (Capela do Socorro)
- Invernada Lineal Park (Santo Amaro)
- Castelo Dutra Lineal Park (Capela do Socorro)
c) Middle West zone
- Sapé Lineal Park (Butantã)
- Caxingui Lineal Park (Butantã)
- Esmeralda Lineal Park (Butantã)
- Itararé Lineal Park (Butantã)
- Pires Lineal Park (Butantã)
- Ivar Beckman Lineal Park (Butantã)

d) East zone
- Água Vermelha Lineal Park (Itaim Paulista)
- Taboão Lineal Park (Aricanduva)
- Aricanduva Lineal Park (Cidade Tiradentes)
- Mongaguá Lineal Park (Ermelino Matarazzo)
- Guaratiba Lineal Park (Gualanazes)
- Rapadura Lineal Park (Aricanduva)
- Rio Verde Lineal Park (Itaquera)
- Cipoaba Lineal Park (São Mateus)
- Nsa. do Aricanduva Lineal Park (Cid. Tiradentes)
- Oratório Lineal Park (Vila Prudente)
Água Vermelha Park
Feitiço da Vila Lineal Park
Esmeralda Linear Park
Caulim Lineal Park
Itaim Linear Park
Green Areas and Biodiversity
Program 100 Parks for São Paulo
Nowadays the city has **48 municipal parks**

- **15 implemented** and/or finished between 2005 and 2008
- **17 to be implemented** until the end of 2008
- **34 under development** of project, with

The possibility to be finished in the next few years.
Trote Park
Parque do Povo - Park
Rodoanel (zona sul)

Unidade de conservação com 1.200 hectares na região de mananciais, composta por quatro núcleos: Bororé, Jaceguava, Varginha e Itaím.

A criação desta unidade de conservação é parte da compensação ambiental pela construção do trecho sul do Rodoanel.
The Inventory of the registered wild in the green areas of Sao Paulo City, has been updated by the Wild Fauna Division.
More than 400 registered species, between birds, mammals, amphibians and reptiles.
### Arborization - São Paulo City Hall
#### 2005 to 2007

<table>
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<tr>
<th>Kind</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
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<tbody>
<tr>
<td>Arborization Program - SVMA</td>
<td>5,288</td>
<td>81,186</td>
<td>70,760</td>
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<tr>
<td>City boroughs</td>
<td>18,220</td>
<td>56,850</td>
<td>41,654</td>
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<tr>
<td>TCAs</td>
<td>13,316</td>
<td>29,567</td>
<td>36,583</td>
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<tr>
<td>Other kinds of supplies</td>
<td>1,031</td>
<td>973</td>
<td>23,991</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>37,855 trees</strong></td>
<td><strong>168,576 trees</strong></td>
<td><strong>172,988 trees</strong></td>
</tr>
</tbody>
</table>

Total planted from 2005 to 2007 = 379,419 new trees
Eco-economy
- According to the law, every new residence that has 4 bathrooms (or more), must install the solar energy equipment to warm the water. Residences that have until 3 bathrooms do not have to follow this standard.

- Establishments that demand great volumes of warm water must have in its hydraulic system one thermic reservoir and plates which are able to collect solar energy: industries, stores, public and private services that require a huge volume of warmed water in their process, such as hotels, clubs, hospitals, gyms, schools, kindergartens, barracks, laundries, etc.
WOOD AND RECYCLED MATERIALS

The use of native wood

- Decree 46.380/05 – It establishes procedures of environmental control regarding the application of products made of native wood in construction and by hired engineering services.

The use of recycled materials

- Decree 48.075/06 – It is required the use of recycled materials, originated from construction, in public pavement.

“Cidade Amiga da Amazônia” Program

The public administration compromises to eliminate the use of wood with illegal origin which has been acquired in biddings.
International articulations

✓ Iniciativa do Ar Limpo
✓ ICLEI
✓ C-40
✓ Clinton Foundation
✓ PNUMA
Culture of Peace
In January 2005, the Municipal Secretariat for Environment created the Project UMAPAZ – Free University for the Environment and the Culture of Peace.

- Center for diffusion of information about environmental issues in São Paulo City.
▪ Cooperation with GCM disarmament

▪ Alternative punishments

▪ Partnership with governmental institutions

▪ UN
Web: Action for Peace

The web Action for Peace was created by an old article of the Comitê Desarma São Paulo (Disarm São Paulo Committee) and nowadays is composed by more than 40 organizations that look forward to promote the culture of peace in the Metropolitan region of São Paulo. It prevents the violence and contributes for the population’s disarm
The course for Mediation of Social - Environmental Conflicts has **1,719** enrolled participants (The initial forecast was to enable no **1,200** participants).

The course has eight levels (sustainability, mediation of conflicts, water, green areas and biodiversity ground, air, new economy and culture of peace).
Green and Healthy Environment
Activities with health agents of the Family Health Program
Carta da Terra (Land Letter)
Capacitation course for the Land Letter
http://portal.prefeitura.sp.gov.br
Municipal Secretariat for Environment

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