

## **UNIVERSITY OF SÃO PAULO ENVIRONMENTAL POLICIES: CHALLENGES AND ACHIEVEMENTS**

(1) Patrícia Faga Iglecias Lemos (corresponding author); (2) Roberta C. Kronka Mülfarth  
(1)(2) Superintendence of Environmental Management of the University of São Paulo, Brazil - SGA USP  
(1) Head of Environmental Affairs SGA USP; patricia.igleacias@usp.br  
(2) Technical Advisor SGA USP; rkronka@usp.br

**ABSTRACT:** The University of São Paulo (USP) is the largest and one of the most prestigious universities in South America with an academic population of nearly 150,000 people (127,000 students, 17,000 staff members and 6,000 teachers). USP has 14 campuses all over the State of São Paulo and an annual budget of US\$ 1.4 billion, totally funded by the State of São Paulo, Brazil. Almost twenty years ago, USP started to take action towards sustainability and reduction of its environmental impacts. As the Superintendence of Environmental Management was created in 2012 to expand these initiatives and to promote environmental education inside the University, it became necessary to define environmental policies for all campuses prior to the establishment of specific indicators and targets, considering the differences between campuses located in rural and urban areas. Such policies aim to facilitate the implementation of some Sustainable Development Goals in the academic environment, specially regarding sustainable management of water, waste and sanitation; reduction of campuses' greenhouse gas emissions; protection and restoration of campuses' ecological reserves and wildlife; and projects for enabling greater integration of academic community and for making campuses more inclusive. Since 2014, USP initiated a comprehensive Environmental Management Plan, coordinated by the Superintendence of Environmental Management (SGA). This plan was divided in four phases:

- 1) Definition of 12 Environmental Policies for the University;
- 2) Definition of Management Plans with indicators and goals;
- 3) Elaboration of Environmental Masterplans with 11 thematic chapters for each campus;
- 4) Elaboration of Specific Environmental Programs for each Faculty or Department.

It is an ambitious goal that involved almost 1,000 people in the process. This paper intends to present the methodologies developed to achieve the sustainability goals of the University of São Paulo and the results already achieved.

**Keywords:** campus sustainability, environmental policies, sustainability plan, sustainability diagnosis

## **Introduction**

In 2010, Brazilian National Policy for Solid Waste (NPSW) was enacted by Law 12.305/2010 and introduced post-consumption responsibility and reverse logistics in Brazilian law, establishing a number of obligations to manufacturers, importers, distributors and dealers. Such actors of the production chain have autonomy to implement and operate systems that are convenient and comply with environmental protection principles<sup>1</sup>.

The NPSW established guidelines for National, State, Regional and Municipal Solid Waste Plans. The specific goals of the Law include: providing incentives for recycling industries to boost the use of recycled raw materials; encouraging the use of clean technology in order to minimize environmental impacts; promoting a management

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<sup>1</sup> Lemos, *Resíduos Sólidos e Responsabilidade Civil Pós-Consumo*.

hierarchy of reduction of waste generation, reuse, and recycling and ensuring that solid waste disposal is completed in an ecologically and environmentally responsible way; prioritizing environmentally friendly products for government procurement; and integrating reusable and recyclable materials in actions that involve lifecycle liability<sup>2</sup>.

Because of this new regulatory policy, in 2012, USP organized a Working Group (WG) to adapt to the demands of NPSW.

Along with the Solid Waste Work Group, the University of São Paulo created, in 2012, the Superintendence of Environmental Management (*Superintendência de Gestão Ambiental* – SGA in Portuguese). SGA's main purpose is to plan, deploy, maintain, and promote environmental sustainability on the 14 campuses and research areas of the University of São Paulo and also to incorporate the environmental dimension of sustainability across the board in university's policies, plans and activities related to teaching, research, extension and management. Although environmental and sustainable actions at USP started in the 90s, only with the creation of SGA environmental sustainability became part of an official program for the entire University. Up to that point, sustainability actions had been compartmentalized, occurring separately in some of USP's campuses<sup>3</sup>.

SGA began to develop its activities based on three aims: 1) Towards Zero Carbon Emissions: 2) Our campuses as a laboratory for our cities and 3) Sustainable actions.

As a result of these actions, the first task of SGA in its second mandate (2014) was to create "Environmental USP" based on the structure of Solid and Waste Policy of USP. The policies that make part of Environmental USP aim to facilitate the implementation of some Sustainable Development Goals in the academic environment, specially regarding sustainable management of water, waste and sanitation; reduction of campuses' greenhouse gas emissions; protection and restoration of campuses' ecological reserves and wildlife; and projects for enabling greater integration of academic community and for making campuses more inclusive.

## Sustainability Plans

Over the past decade, sustainability issues have come to the fore and environmental protection principles have been incorporated by all actors in society, reinforcing the need to promote deep structural changes aiming greater social equality, enhancement of cultural aspects, greater economic efficiency and less environmental impact on equitable distribution of raw materials, ensuring the competitiveness of man and cities<sup>4</sup>.

According to the US Environmental Protection Agency<sup>5</sup>, sustainability plans are those developed by an organization or government to achieve goals that foster environmental, community, and financial sustainability. The plan will also establish guidelines for achieving and measuring the impact of these objectives.

The creation process of a sustainability plan guides the institution to strengthen its partnerships and to keep projects operating and improving. According to Johnson<sup>6</sup>, sustainability plans can help to identify what resources are necessary to sustain projects, encourage the development of partnerships, and support collaboration.

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<sup>2</sup> BRASIL. *Política Nacional dos Resíduos Sólidos*.

<sup>3</sup> Delitti and Cerri, *Inventário das Emissões de Gases do Efeito Estufa*.

<sup>4</sup> Kronka Mülfarth, "A sustentabilidade e a arquitetura".

<sup>5</sup> EPA, *Strategic Sustainability Performance Plan*.

<sup>6</sup> Johnson, "Building capacity and sustainable prevention innovations".

Whatever the institution's understanding of sustainability, a sustainability plan is an important tool for diagnosis, to identify and organize actions in pursuit of more sustainable benchmarks and to establish goals.

In order to incorporate a new vision for a healthier and resilient future, many universities around the world have adopted principles that guide projects and plans in teaching and research to achieve goals in *sustainability*.

Harvard University adopted principles that will guide projects and plans in teaching and research to achieve goals in "health and wellness, conserving resources and improving the efficiency of campus operations"<sup>7</sup>. The Harvard Sustainability Plan, developed by faculty, students, facilities, and operational experts, along with the Harvard Office for Sustainability management, recognizes that creating a sustainable campus strengthens the research and teaching mission.

The City University of London<sup>8</sup> undertook a range of actions to improve its environmental performance, thereby achieving ISO14001 accreditation for its Environmental Management System, and accreditation within the People and Planet University League.

The Strategic Plan for the University of Maryland (2008) focuses on undergraduate education, graduate education, research, scholarship, the creative performing arts, partnerships, outreach, and engagement. Progress towards the reduction of its environmental footprint and the enhancement of its positive social impacts is evaluated according to a set of indicators.

*Politecnico di Milano* (POLIMI) and *Università degli Studi di Milano* (Unimi), promoted the project "*Citta Studi Campus Sostenibile*" with the purpose to turn the campus neighborhood into a model of life quality and a sustainable environment<sup>9</sup>. The project focuses on users' participation; energy efficiency and renewable energies; environmental quality; sustainable mobility; transferring research from labs into urban life; sustainable lifestyle.

The University of Melbourne committed to addressing environmental issues through its documented Environmental Management System. As the ISO 14001 ceased, the University developed the Resource Smart Tertiary Education, a new framework based on sustainability guidelines and education environments<sup>10</sup>.

There are also networks that create forums for discussion on the implementation of sustainable benchmarks and that aim to assist universities in the adoption of guidelines, goals and actions towards more sustainable campuses.

*ISCN – International Sustainable Campuses Network* is a global forum that aims to support leading colleges and universities in the exchange of information and best practices for achieving sustainable campus operations and integrating sustainability in research and teaching<sup>11</sup>.

*WC2 – World Cities World Class / University Network* brings together top universities located in the major world cities in order to promote closer interaction between universities, local government and business communities and to address cultural,

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<sup>7</sup> Harvard, *Sustainability Plan*.

<sup>8</sup> City University London, "Annual Report 2013 /2014".

<sup>9</sup> POLIMI, *Citta Studi Campus Sostenibile*.

<sup>10</sup> University of Melbourne, *University of Melbourne Environmental Sustainability Strategy 2011-2015*.

<sup>11</sup> ISCN International Sustainable Campuses Network, "Best Practice in Campus Sustainability, Latest Examples from ISCN and GULF Schools."

environmental and political issues of common interest. Thereby, WC2 helps universities to be more responsive to the needs of their stakeholders<sup>12</sup>.

Global Universities Partnership on Environment for Sustainability (GUPES) is one of UNEP's Environmental Education and Training Unit program. GUPES aims to promote the integration of environmental and sustainability concerns into teaching, research, community engagement, the management of universities (including greening of university infrastructure/facilities/operations), as well as to enhance student engagement and participation in sustainability activities both within and beyond universities<sup>13</sup>.

There are also several universities in Latin America that are organized to enable actions in pursuit of more sustainable benchmarks.

ARIUSA is a network of environmental universities created in Bogota to promote and support the coordination of actions in higher environmental education as well as academic and scientific cooperation between University Networks for Environment and Sustainability<sup>14</sup>.

The network RISU - *Red de Indicadores de Sostenibilidad en las Universidades* developed the Project "Defining indicators to assess the implementation of sustainability in Latin American Universities", which consisted on reviewing, monitoring and evaluating experiences that were being developed and carried out in the region. An assessment tool was developed with a set of 114 indicators clustered in 11 thematic areas or dimensions for implementing sustainability in universities<sup>15</sup>.

The RISU Project found that only 35% of universities have a communication plan associated with their sustainability policies or strategies and 30% of universities have a sustainability committee or council with students, academics and support staff who can oversee and monitor the implementation of sustainability policies<sup>16</sup>.

The natural teaching vocation, research and extension give universities the potential to become a "laboratory" for looking not only for solutions to the demands, but also to effectively contribute to the construction of knowledge in a fairer society. Universities, as an intermediary between local government and society, have an important role to promote discussion and to act towards changes.

In the case of public universities, especially in Brazil, this commitment to the incorporation of more "sustainable" variables should be seen as a duty, and this search for a better dialogue between society and governments must be seen as a daily exercise in all instances they are requested.

## **USP's Environmental Policy**

Based on the background described previously, USP, being aware of the established importance of its Environmental Policy, decided to set up "Environmental USP", based on the structure and principles proposed by the National Policy for Solid Waste (NPSW). Consequently, the construction of Environmental USP was defined in four

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<sup>12</sup> Stiasny and Gore, *Going Global*.

<sup>13</sup> UNEP, *Greening Universities Toolkit*.

<sup>14</sup> Sáenz, *Universidades y Sostenibilidad en América Latina y el Caribe*.

<sup>15</sup> Álamo, *RisuProject*.

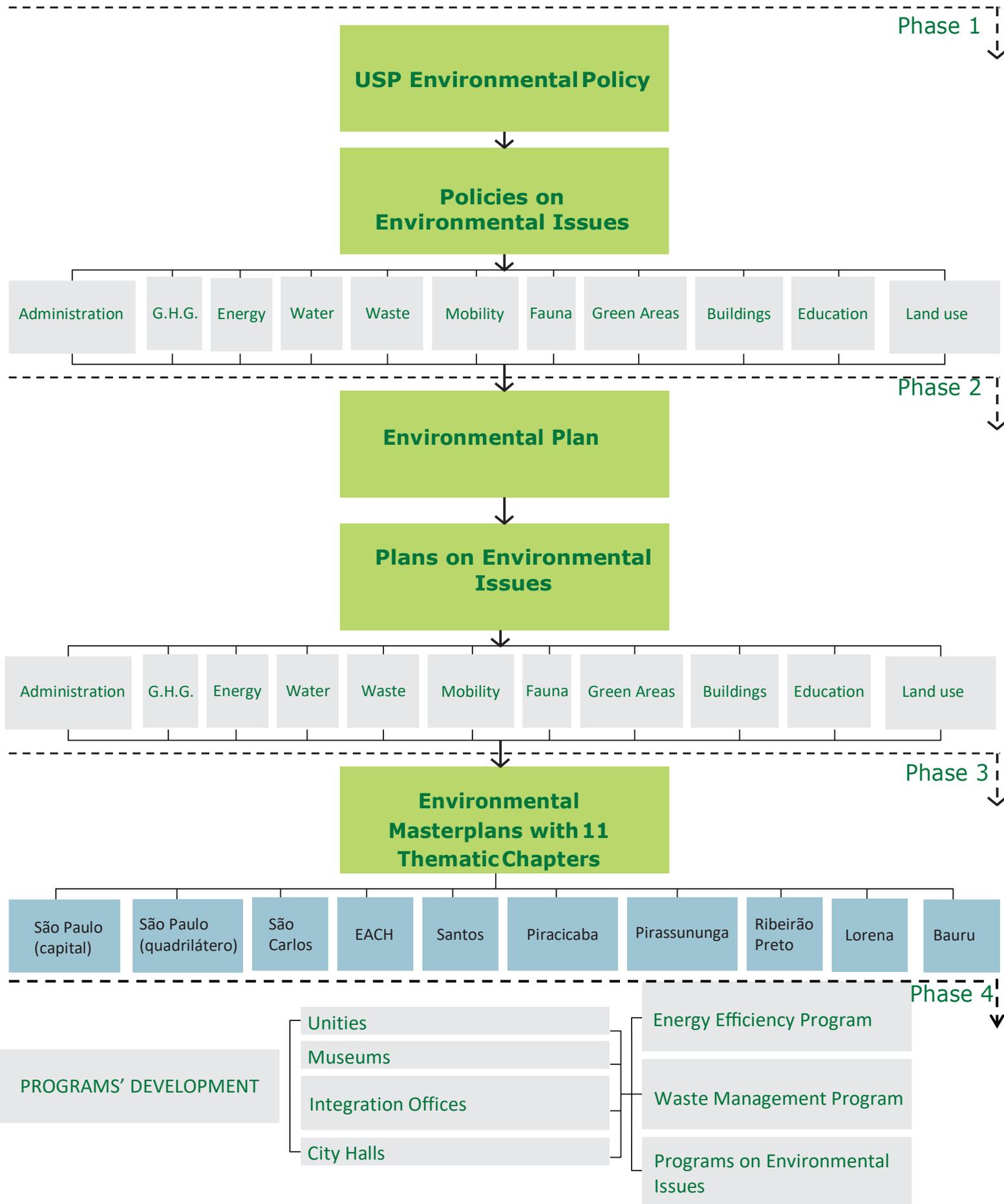
<sup>16</sup> Álamo, *RisuProject*.

phases:

- Phase 01 – Definition of 12 Environmental Policies for the University;
- Phase 02 – Definition of Management Plans with indicators and goals;
- Phase 03 – Elaboration of Environmental Masterplans with 11 Thematic Chapters;
- Phase 04 – Elaboration of Environmental Programs for each school or department.

Figure 01: USP Environmental Policy Chart

# ENVIRONMENTAL USP



## **Phase 01 – Definition of Environmental Policies**

Thus, Environmental USP was divided in 11 + 01 sections, 11 thematic policies and 01 management policy of thematic policies, as following:

1. Administration;
2. Greenhouse Gas Emissions;
3. Energy;
4. Water;
5. Solid Waste;
6. Mobility;
7. Fauna;
8. Green Areas;
9. Sustainable Buildings;
10. Environmental Education;
11. Land use;
12. Environmental Policy;

The last one, “Environmental Policy”, provides the framework for decision making regarding all environmental areas and policies.

Based on such organization, subdivisions were established consisting of 12 working groups (WG) involving about 300 people, including faculty and technical staff, who produced 12 documents with the following structure:

- Subject and Applications;
- Preliminary Provisions;
- Principles;
- Guidelines;
- Goals;
- Preliminary Provisions;
- Management tools;
- Administrative and financial tools;
- Liabilities;
- Prohibitions.

This phase was concluded in November 2015, and established the following policies to be approved by the Head of USP:

### **Administration Policy**

The administration working group was created in order to reduce the environmental impacts of the administrative activities of the University, establishing definitions, criteria and goals that guide the work of the Coordination of General Administration (CODAGE) and all administrative bodies in order to match the commitments of the University of São Paulo with the environmental agenda.

The working group works for rationalization of goods and services consumption, expanding the use of clean technologies and reuse in order to save natural and economic resources.

Some of the means to achieve these objectives are:

- Application of the 3Rs, in other words, prioritization of environmental education in the management of solid waste so that people can reduce consumption, reuse and recycle materials;
- Reduction of bureaucracy of administrative procedures;
- Prioritizing the purchase of goods with longer life and lower maintenance costs;

- Adoption of electronic systems for insertion of environmental data from USP in the internal Corporate Computerized System and for more sustainable purchases, through the Electronic Exchange System (BEC) and studies such as the Environmental Catalogue and technical studies of outsourced services (CADTERC) made by the Government of the State of São Paulo;

The governing principles of this policy are rationality and responsibility in the use of natural and economic resources, transparency, participation of the whole community, the development of an intersectional and interdisciplinary approach, considering the various dimensions affected by the administration of the University.

### **Greenhouse Emissions Policy**

The WG reduction of GHG emissions was created in view of the need for the University to adapt legislation, such as the National Policy on Climate Change, and develop policies for the prevention and mitigation of greenhouse gas emissions.

The WG works in order to harmonize the activities of the University with the protection of the climate and environmental systems and public health. To this end, it encourages the use of renewable energy, the identification of the sources of greenhouse gas emissions, the adoption of clean technology standards and rational consumption.

Some of the means to achieve these objectives are:

- computerized corporate system;
- promotion of scientific and technological research;
- environmental impact assessment;
- environmental licensing;
- social and environmental formation of USP community;
- diagnosis and monitoring of emissions from the University using indicators;
- adopt measures to prevent, mitigate and adapt to climate change; and
- prioritization of products and services with less environmental impact.

The governing principles of this policy are, in order of importance, systemic and interdisciplinary vision, prevention and precaution, cooperation, access to information, awareness, and use of best available technologies and the principles of non-generation, reduction and treatment.

### **Energy Policy**

The Energy WG was established to promote the study of energy use at USP, given that its management must prioritize conservation and rational use, in addition to meeting the legal requirements, as provided in National Policy for Energy Efficiency and the relevant rules issued by the competent bodies.

The WG aimed to promote the welfare of the population, through the adoption of sustainable standards, increasing public awareness, or by the development of programs that improve production processes and energy use. In addition, it is necessary to prioritize the purchase of durable goods that have a low environmental impact, preferably recycled or recyclable, and that are efficient. Moreover, it is important that hired services should be committed to the same principles that guide the University of São Paulo.

Some of the means to achieve these objectives are:

- to carry out a full assessment of the energy situation at the University, including indicators and inventories;
- the Corporate System Computerized environmental information, enabling better control and monitoring;

- the promotion of scientific and technological research and educational processes;

The governing principles of this policy are systemic, social and environmental commitment, prevention and precaution, the rationalization of consumption to a sustainable level, interdisciplinary collaboration and cooperation, reuse and increase of efficiency.

### **Water Policy**

The Water WG was created in recognition of water scarcity issues and the consequent need for rationalization of its use, as well as preservation of water bodies.

The WG works in order to ensure water quality and adequate quantity standards, to improve the quality of effluent produced and to make use of the best available technologies in order to reduce the environmental impact of the University. Moreover, the WG is looking to build a shared management structure for water to protect the health of the University and the environment.

Some of the means to achieve these objectives are:

- general diagnosis, including the following quality indicators: discharge of effluents, consumption and water losses;
- control of water use permits;
- technical training;
- prohibition of underground water use, surface water, reuse of water and the discharge of effluents into water bodies without proper approval from the competent bodies;
- environmental training programs; and
- segmented metering and the apportionment of costs of water and sewage.

The governing principles of this policy are transparency, the right to participation, rationality and efficiency of water use, the compartmentalization of consumption measurement, care at the final destination of waste and prioritization of the use of water for human consumption aimed at protection of health and the environmental balance. It should consider the need to adapt water management and wastewater to local diversities.

### **Solid Waste Policy**

The Solid Waste WG was created due to the requirement for a solid waste management group in accordance with the National Policy on Solid Waste (NPSW), in order to reduce the environmental impacts of human activities.

The WG works in order to ensure that solid waste management prioritizes non-generation, reduction, reuse, recycling and environmentally sound disposal of solid waste. The aim is to protect health and the environment by adopting sustainable patterns of consumption and through environmental education.

Some of the means to achieve these objectives are:

- computerized corporate system;
- waste inventories;
- selective collection;
- promotion of scientific research;
- continuity of educational processes; and
- disposal that is environmentally appropriate (presenting the certificates required by law).

The governing principles of this policy are multidisciplinary, a systemic vision, prevention and precaution, transparency, access to information, cooperation, shared responsibility and reduction of the social impact of the University regular activities.

### **Mobility Policy**

The Mobility WG was created by the perceived need to improve mobility inside campuses and among the campuses so that they can carry out the mission of the university and its regular activities. The WG works in order to develop mobility policies that improve the lives of campus users, are a model for society, and comply with policies and legislation.

Some of the means to achieve these objectives are:

- establishing better integration between transport facilities and the surrounding areas;
- prioritizing non-motorized means of transport and collective public transport, discouraging the use of motorized individual transport;
- encouraging active mobility by ensuring there is adequate infrastructure to promote the use of transport considered most suitable by the University in terms of the health benefits, well-being and social interaction; and
- encouraging the development of studies on the mobility theme and encouraging the use of cleaner renewable energy sources that have less impact on the environment and public health;

Thus, it enables a reduction in the environmental and socioeconomic impact of displacement, providing improved comfort, safety and health of users and the public.

The governing principles of this policy are universal access, equity, security and efficiency.

### **Fauna Policy**

The Fauna WG was based on the assumption that, as the campuses are home to wildlife species, which interact with humans, there is a need for a policy that guides the administration's actions. There must be a behavioral change in the management of the University and wildlife management in order to minimize human-wildlife interaction risks.

The WG works in order to conserve wild and native wildlife, controlling the risks of human-wildlife interaction and combating invasive species. The goal is to guarantee a healthy and balanced environment, the management of wildlife where necessary, the prevention and control of risks and the formation of conscious citizens.

Some of the means to achieve these objectives are:

- computerized corporate system;
- social and environmental training programs for the USP community;
- diagnosis and survey of fauna and human-wildlife interactions;
- the environmental impact assessment;
- use zoning and land occupation of campuses;
- training and technical training; and
- ban on feeding wildlife, as well as its abandonment or capture.

The governing principles of this policy are the conservation of biodiversity, a systemic and interdisciplinary approach, social participation, access to information, cooperation, respect for diversity, responsible action, and fairness and proportionality.

### **Green Areas Policy**

The Green Areas WG was created in view of the responsibility of the University for the protection of its ecological heritage. In addition, USP is committed to institutional leadership and proactivity, as well as compliance with environment laws. The preservation of green areas promotes conservation of water resources and biodiversity, improves air quality and climate control, among many other benefits.

The WG monitors Green Areas and Ecological Reserves to promote change in the form of human interaction with the vegetation cover of the University. In order to achieve this, it is necessary not only to identify and separate both, but also to establish environmental sustainability goals. In addition to the conservation of existing areas, the WG seeks to encourage recovery, restoration and renaturation.

Some of the means to achieve these objectives are:

- social and environmental training of USP's community;
- urban plans;
- afforestation plans;
- inventories and maps, including indicators;
- computerized corporate system.

The governing principles of this policy are inclusion and community participation in management, shared responsibilities, access to information, cooperation, encouraging new forms of management of green areas, the appreciation of the environmental heritage of the University and sustainable landscaping.

### **Sustainable Buildings Policy**

The Sustainable Buildings WG was created in view of the urgent need to adopt actions for the sustainability of the buildings of the University, by saving natural resources, such as water and energy, and financial resources. This rationalization should be adopted in the maintenance, renovation, restoration or expansion of existing buildings, as well as in new buildings.

The WG aims to promote architectural designs that use natural local conditions in order to reduce energy demand and water. Moreover, the WG promotes the use of recycled or recyclable materials (as long as it does not compromise the durability of the building), minimizes soil sealing, and ensures universal accessibility as well as functionality and safety. The objective is to consider the health, productivity, environmental comfort and air quality for occupants.

Some of the means to achieve these objectives are:

- formulation of indicators to assess thermal performance, natural lighting, noise and energy, as well as the durability of the physical structure; and
- use of technical standards that are nationally or internationally recognized;

The governing principles of this policy are respect for contextual diversity of campuses; promotion of environmentally friendly buildings that are economically viable, culturally accepted, socially just, democratic, practical, proportional, and that take into account health protection, comfort and safety of users. This policy gives preference for refurbishment of existing buildings over the construction of new ones.

### **Environmental Education Policy**

The Environmental Education WG was created based on National Environmental Education Policy, which prescribes that environmental education should be present at all levels of formal education, and on other legal documents, including the Federal Constitution. As the University of São Paulo is committed to social and environmental

issues, it should aim to be a model for society, and to form critical citizens, capable of facing global environmental crisis.

The WG works to institutionalize the concepts of environmental sustainability and environmental education in all areas of the University. USP should promote the production of knowledge, planning and management in view of the environmental problems, and the issue should be rooted in teaching, research, culture, extension and academic management.

Some of the means to achieve these objectives are:

- training of USP community as a whole in environmental educational communication;
- fostering research and projects on environmental education, promoting monitoring and evaluation of progress, as well as disclosure of results;
- creation of specific courses that consider the methodological aspect of environmental education; and
- continuity of participatory strategies that promote the capillarity and rooting to improve environmental education of USP's employees.

The governing principles of this policy are cooperation and interdisciplinary collaboration. Additionally, this policy is guided by the values of transforming education and forming citizens capable of responsible action.

### **Land Use Policy**

The Land Use WG was created in view of the need to comply with legislation and to promote proper land management on campus in order to safeguard natural areas.

The WG works to standardize the land situation of the University and guide management of the USP territory in an efficient, socially and environmentally responsible, and financially sustainable way. Moreover, it is essential to prevent, mitigate and restore environmental damage caused by land use changes on campus.

Some of the means to achieve these objectives are:

- monitoring of data in the computerized corporate system, resulting in a diagnosis of land use and occupation;
- environmental licensing;
- performance certifications and environmental quality;
- technical training of employees through environmental education; and
- promotion of research and technological innovation;

The governing principles of this policy are: promoting interdisciplinary collaboration; considering several variables, such as environmental, cultural, social, public health and economic management of the university territory; democratization and participation; and respect for diversity in the context of different campuses.

### **Environmental Policy**

The Environmental Policy WG at the University was created by the need for a document that would legitimize and guide the environmental initiatives at the University of São Paulo, in order to promote more efficient environmental management and in accordance with the principles of the University. The topics covered are: management, water and wastewater, green areas and ecological reserves, sustainable buildings, environmental education, greenhouse gas emissions, energy, fauna, mobility, waste, and land use.

Thus, USP's Environmental Policy will be the basis to guide the formulation of Policies on Environmental Issues, Plans on Environmental Issues, Environmental Masterplans

with 11 Thematic Chapters and the Environmental Program of each school or department. Thus, by establishing objectives and targets stemming from the diagnosis, these documents establish a better-defined framework for environmental management within the University.

The general purpose of these documents is to encourage environmental education at the University, to protect health and the environment and to adopt sustainable patterns. In short, these documents aim to promote integrated environmental management at the University in order to improve the quality of life of its members and society in general.

Some of the means to achieve these objectives are:

- the computerized corporate system for data and environmental monitoring;
- monitoring and control of environmental performance;
- cooperation between university units and with society as a whole;
- continuous education processes; and
- reallocating human and financial resources for environmental management.

The governing principles of this policy are the prevention and precaution, fairness and proportionality, the mainstreaming of education, interdisciplinary, transparency, participation, access to information, shared responsibility, respect for local conditions, the appreciation of the knowledge produced at the University and responsible action. Moreover, it applies the principle of proximity, by which all environmental problems should be resolved as close to the source as possible in order to stimulate local development.

## **Phase 02 – Definition of Plans on Environmental Issues**

After completion of the first phase and the 12 documents, the development of *Plans on Environmental Issues* was initiated for each Policy, with details of actions, targets, goals and their objectives.

## **Phase 03 – Environmental Masterplans with 11 Thematic Chapters**

These masterplans consider the ecological and urban diversity of each locality and will be related to urban master plans for each campus.

## **Phase 04 – Environmental Program of each faculty or department**

From the definition of Environmental Policies, Plans on Environmental Issues, Environmental Masterplans and Environmental Programs, it will be possible to set coherent actions for each school or department.

## **Conclusions**

The incorporation of the principles of sustainability by all actors in society has gained momentum over the past decade, reinforcing the need to promote deep structural changes in search of greater social equality, enhancement of cultural aspects, greater economic efficiency, environmental sustainability, and equitable distribution of raw materials.

In this context, universities have the duty to strengthen their role as an intermediary between local government and society in order to promote such changes.

Sustainability plans can contribute to such endeavor, as they provide a roadmap to

guide the organization to work on sustainability efforts. A sustainability plan can strengthen partnerships and efforts required to operate and improve a project. At universities, sustainability plans are useful not only for organizing collective actions and identifying issues, but also for establishing short-, medium-, and long-term sustainability goals.

In Latin America, despite the importance of sustainability, the vast majority of universities have not developed sustainability policies yet.

Almost twenty years ago, USP started its actions in the area of sustainability in order to reduce its environmental impacts. Due to its immense size, and its presence in rural and urban areas across a wide diversity of ecosystems, it was necessary to define environmental policies for all campuses prior to decision-making and to establish indicators and targets. Such measures are capable not only to improve environmental quality inside university's campuses, but also to generate positive outcomes and examples that can go beyond the university's walls in order to contribute to the fulfillment of Sustainable Development Goals, specially regarding sustainable management of water, waste and sanitation; reduction of greenhouse gas emissions; and protection and restoration of ecological reserves and wildlife.

Although environmental and sustainable actions at USP started up in the 90s, only with the creation of the Superintendence of Environmental Management (SGA) actions related to sustainability became part of an official program for the entire University. Up until this point, sustainability actions had been compartmentalized, occurring separately at some of the USP's campuses. USP Environmental Policy organized existing actions, future actions and congregated a huge contingent of faculties and employees around the environmental cause.

With the completion of the first phase, it was possible to observe that:

- greater cohesion is taking place among faculty and staff regarding sustainability issues;
- faculty and staff now have greater responsibility in their actions related to sustainability;
- after the creation of USP's environmental policies, a clearer definition occurred, not only of the university's environmental issues, but also in defining clear goals, targets and deadlines.

With the completion of the Environmental USP, the University of São Paulo hopes to achieve all goals by its centenary, in 2034.

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