



GGHH Agenda Goals

- Waste

Hospital Goals

- Ensure the environmentally correct disposal of electronic waste generated in the Albert Einstein Hospital.

Progress Achieved

- Environmentally correct disposal of almost 24 tons of electronic waste from the project implementation in January 2012 until August 2015;
- Dissemination of sustainability culture through increasing awareness of the employees.

The Issue

According to the United Nations, more than 40 million tons of electronic waste (e-waste) are generated worldwide each year. Brazil leads the ranking of countries in emerging economies with the index of 0.5 kg/per capita. When the e-waste is disposed incorrectly, it may cause serious harm to human health and the environment, as it is made up of hazardous chemicals such as heavy metals. Health facilities have contributed to the problem, due to increased technology intensity and obsolescence of equipment, especially for diagnostics.

Adopted Solution

The Albert Einstein Hospital established a partnership with a cooperative registered in the Municipality of Sao Paulo to receive electronic waste for processing and disposal. The formal hiring process occurred after checking all environmental licensing and auditing the working conditions (and occupational structure) *in loco*.

Implementation Process

The search for alternatives for the e-waste disposal arose as a demand of the Decommissioning Committee, which is a corporate multidisciplinary group composed of representatives of the Legal Department, Information Technology, Clinical Engineering, Maintenance, Sustainability and the Social Responsibility Institute. The committee attends all units of the Albert Einstein Society.

In the Committee, all disabled equipment are analyzed within a classification flow to set a target, which can be sale, donation or disposal. The technical evaluation is made solely by the Clinical Engineering or IT departments and whenever the equipment is classified as "junk" they check the possibility of removing its parts to use in other similar equipment prior to disposal.



For the environmentally correct disposal of e-waste, the Sustainability department assessed partnership possibilities. Among the potential partners, Coopermiti was chosen due to better working conditions, environmental licenses, ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System) and keeping much of its processes documented through operational procedures.

The partnership was formalized by contract. The disabled equipment are forwarded to the cooperative's Screening and Processing Center where they are dismantled and, according to the characteristics of the components, sent for recycling, reconditioning of the parts or treatment. Another important aspect is that, through reverse engineering, the cooperative members are trained for the maintenance of the electronic equipment.

The e-waste collection is performed upon request of the Sustainability department, depending on the demand, usually every two months. A list of the materials is sent to the cooperative so they can size the reclamation team and the transport vehicle. With the confirmation of the date and time for the collection, an invoice is issued for the transport. At the end of the process the cooperative issues a Statement of Responsibility for the disposal of the waste.



Figure 1: E-waste stored for collection



Figure 2: E-waste prepared for transportation



Tracking Progress

The project began in 2012 with an institutional campaign entitled **Desapega** (to detach), whose aim was to identify electronic equipment out of service in the departments. The action lasted three weeks and the last week was only to collect e-waste, resulting in the collection of 4.5 tons. Since then, the withdrawals of e-waste have become a routine.

The Figure 3 shows the annual evolution of e-waste disposal and Figure 4 the agenda of disposal of the Desapega campaign in 2014.

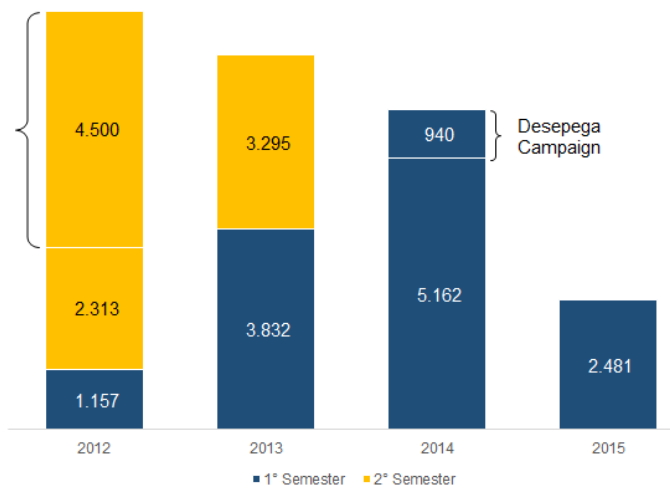


Figure 3: Amount of e-waste (kg)



Figure 4: Agenda of disposal "Desapega" Campaign

Challenges and Lessons Learned

Since there is no structured network for environmentally correct disposal of e-waste in Sao Paulo, each organization has to plan and implement the most appropriate solution. Thus, the key action for the project success was the selection of a partner that met all legal requirements and had the entire disposal process mapped.

The quality of the equipment should also be taken into account when choosing a partner. It is essential the partner is capable of providing assurances that the equipment will not be used in their original functions. In this sense, photographic reports proving the dismantling or destruction of the equipment provide greater security to the process.

Next Steps

The current model does not include the electronic waste disposal of our employees, thus the Hospital is evaluating options to meet this demand.



General Information

Member of the Jewish-Brazilian Benevolent Society Albert Einstein, the Albert Einstein Hospital in Sao Paulo, has 647 beds, 36 operating rooms and almost 12,000 employees. The Hospital is a national reference of quality in healthcare services.

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