



Electricity Museum (Museu da Electricidade) / Central Tejo, Lisboa. Permanent Exhibition <http://www.fundacaoedp.pt/museu-da-eletricidade/>

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1. Exhibition Concept

The **Electricity Museum** is located in Belém (Lisbon), in the former building of *Central Tejo*, industrial architecture exemplary and Property Rated, it is a private museum, owned by the EDP Foundation (Electricity of Portugal). The *Central Tejo*, membership of CRGE, Reunited Gas and Electricity Companies between 1909 and 1975, joins the EDP in 1976, this property is transferred in 2004 to EDP's Foundation, which reopens to the public as a museum definitely, in 2006. To the **Museum of Electricity** competes the preservation of Central Tejo (building - factory) and its memory.

The *Central Tejo* is a characteristic industrial architecture building, located by the river, and with a diverse set of technological equipment, inserting typologically in technical models of coal-fired plants. Starting its operations in 1909, supplying electricity and gas lighting to the city of Lisbon, the *Central* has played a key role in the production of electricity until the emergence of the hydroelectric power stations. Worked continuously until 1954, keeping however in operation until 1975 and the technical equipment was being modified according to the different technical requirements and the need for increased productivity. The existing building was built in 1914 and has been expanded several times. The factory included several divisions, such as the boiler room, engines room, control building, a substation of smaller dimension, channels and siphons, which led the water from the Tejo river to the interior of the Central. This equipment as well as other machinery can be visited at the small museums of the permanent exhibition.

The Electricity Museum, based on the concept of an industrial Museum of Science, shows in their spaces different concepts of Energy, in Past, Present and Future. Beyond the resident exhibition, where it is possible to visualize understand, based on the original machinery of the old Central Tejo, the operation and working environment of different eras are regularly presented several temporary exhibitions (photography, sculpture, painting, design ...) there are even recreational spaces and teaching on the subject of energy, and conferences dealing with the different thematic areas of EDP Foundation's mission.

2. Reception

In 2012 the Museum of Electricity - *Central Tejo* - had 199,755 visitors, mainly composed of Portuguese visitors, with origin in the Lisbon region, also noted was the presence of visitors from all districts of the country, except from the Madeira Archipelago.

Centro Tejo's Museum space and resident exhibition - c. 97 000 visitors.

"Laughter: An exhibition seriously," 20 October until 30 January - 27 000 visitors. World Press Photo - 2012 Edition - with more than 33 000 visitors.

"Illustrate" - 26 000 visitors.

Admission is free, except in the case of some activities that can be paid, being one of the most visited museums in Portugal.

3. Exhibition Design

The exhibition discourse focuses on the added value of architectural building - factory, which corresponds to the *Central Tejo*, as an example of a very specific industrial activity (electricity production). In this building, consisting of multiple cores, architecture and engineering are interconnected and there is no clear distinction between the inside and outside of it. In these internal and external spaces, like the garden, is exposed a vast collection of machinery and equipment, some of which was directly related to the operation of the building *Central Tejo*, such as boilers or generators, technological characteristic of different periods, or equipment and machinery from other plants. In the (visitable) Reserves are still parts, related to the production of electricity, such as pedagogical equipment and devices for electrical measurement.

To the "spontaneous" is offered three free visit circuits: **Central Tejo Circuit (Boilers, Ashtrays, Waters, Condensers, Generators)**, **Energy Circuit (Try)** and **Temporary Exhibitions** (Ashtray8 and Exhibition Hall), and these circuits can be made with a guide on weekends, or by appointment. Once a month, or with pre-booking, visitors have access to "secret circuits", which include parts of the building not directly accessible to the public, such as tunnels, the water castel or the boilers' upper floors (among others), to the Documentation Center and the Museum Reserves.



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4. Visitors Approach - Activation / Participation

Apart from visiting circuits (free and guided) to the general public, guided tours are also planned, depending on the specific interests of the public, language needs, mobility and / or teaching, or hours of operation of organized group visits .

In all the different types of visit is possible to access experimental sessions on electricity. On weekend, the museum develops workshops for children and young people in Energy areas, and within the scope of the temporary exhibitions.

Basing their organization on international criteria defined by ICOM and national legislation, it has a Study Center, a Documentation Center (including the Archive), a Visitors' Service (including educational services), and a Reservations and Museography Service. The Museum of Electricity competes to preserve Central Tejo (building - factory) and it's memory, boost conservation of the historical heritage of electricity and research in this area, as well as encourage the public to science directly related to electrical phenomena and discuss the emerging issues of energy sustainability.

5. Conclusion: Electricity Museum / Central Tejo - permanent exhibition - focus on COP1 and COP2

Toolkit 1 - Making Europe visible. The core exhibition of the **Museum of Electricity** presents to the public a collection of pieces representative of the evolution of electricity production. Many of these devices were manufactured outside the country, such as England or Germany, thus demonstrating the technological developments experienced in Portugal, but also in Europe.

One of the main objectives of this museum undergoes learning and experimentation, in order to stimulate the visitor to science, namely electrical phenomena, and discuss current issues of energy sustainability, as well as awareness of the energetic challenge, present and future.

Toolkit 2 - The Museum as a 'social arena'. The **Electricity Museum**, serves to "identify, classify, protect and value the national electricity heritage". Among various activities the Network of Museums of Energy stands out, composed by entities with electrical and energetic heritage, of historical value. The Museum supports the conservation, enhancement and exploitation of this heritage, in it's scientific, technological and educational potential, with several initiatives such as **the Illuminate the Heritage Program**, through which it conducts an annual meeting and publishes a website.

The Museum of Electricity also has a Studies Center, contributing to research in the energy area, both in the historical aspect, as the history of *Central Tejo* or the history of the distribution and use of electricity, as the aspect of technology and innovation, with the dissemination component, through the magazine *Wikienergia* - <http://www.wikienergia.pt>. The Museum (through the EDP Foundation) also supports and coordinates research projects (academic studies), and



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dissemination/publication of books related to the environment and energy area, such as the **Books with Energy Program**, and various social projects. The book releases, projects or awards ceremonies take place in the museum space.

In the teaching area it also states beyond educational projects and activities and academics mentioned, the support to "Physics Olympics" finals, which are held in museum space.

Toolkit 3 - Bridging-the-gap. The core objectives of the Electricity Museum include, in addition to the appreciation of the narrative of the exhibition space - *Central Tejo* - the appreciation of the public test, through experimentation of elements (machines, experiments) related to the old and new energy/electricity production. The very diverse program of this museum, which takes advantage of its exhibition space for photography shows, art, architecture, as well as to show the EDP new artists Prize Contest, directed to visual arts, among others, which allows the creation of a transversal space, with a very diverse audience.

Toolkit 4 - synaesthetic translation and transformation of contents. The different Museum activities, related to the awareness of use of energy resources as well as the innovation of the same, offer a different approach to the exhibition space, dedicated to various types of audiences. Through the Museum of Electricity's Youth Animators Internship Program (PEJAME), university students are trained (in energy, physics, chemistry and biology areas), in actual real job-related museum studies context, public management, documentation and electricity, scholarships are also awarded. This program covers various objectives, such as the methodologies of interrelationship with groups or science communication for non-scientists, among others, with participants who perform various activities like guiding visitors in the museum circuit, or workshops, creating scientific posters, or conducting experiments in the field of electricity and the construction of a technological device. The trainees, participants in this project disclose their activities on Facebook - Faíscas (Sparks).

Toolkit 5 - Social interaction with web and new media. The Museum's activities are widely publicized in the Web, not just at the homepage, which provides access to several links, but as well as the different links that allow access to various aspects of this project.

<http://www.fundacaoedp.pt/museu-da-eletricidade/> <http://www.fundacaoedp.pt/cultura/> <http://www.fundacaoedp.pt/ciencia-e-energia/>
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[https://pt.wikipedia.org/wiki/Museu da Electricidade](https://pt.wikipedia.org/wiki/Museu_da_Eletricidade) [https://pt.wikipedia.org/wiki/Central Tejo](https://pt.wikipedia.org/wiki/Central_Tejo) <http://www.wikienergia.pt>.



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<http://www.fundacaoedp.pt/museu-da-eletricidade/investigacao-e-patrimonio/valorizacao-do-patrimonio-nacional/111>



<http://www.fundacaoedp.pt/museu-da-eletricidade/missao/centro-de-cultura/91>

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