



Graveyard of stations



Immovable transformer central



Water treatment system



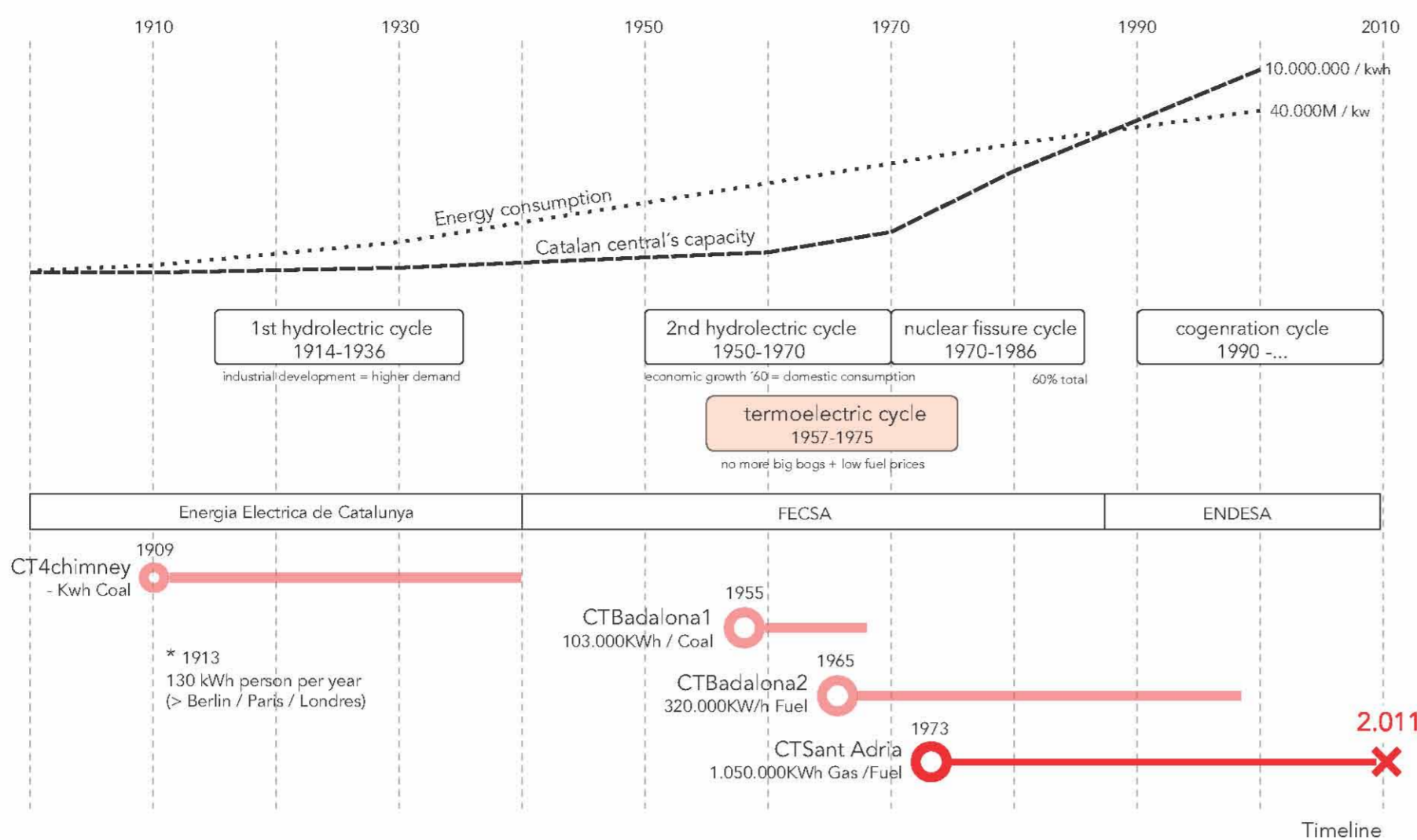
Enormous dominant cranes



Old pumping house



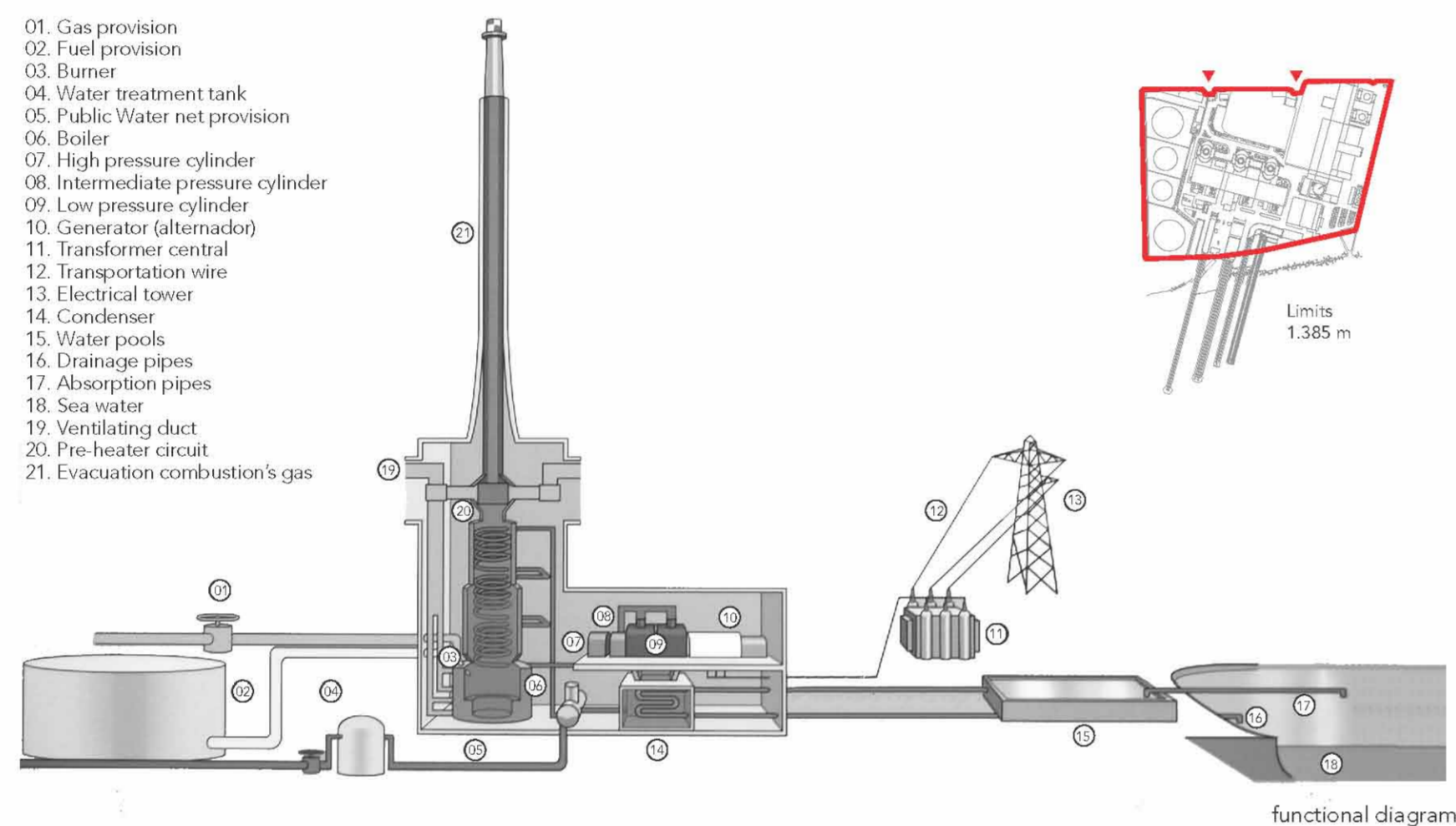
Large fuel tanks



Evolution

The development of electrification has required throughout its different stages, the construction of massive infrastructures: generation and transformation plants, regulation dams and fluid transport and distribution infrastructure. The hydroelectric development, vigorous in Catalonia since the 1920s, requires the implementation of high-cost public works.

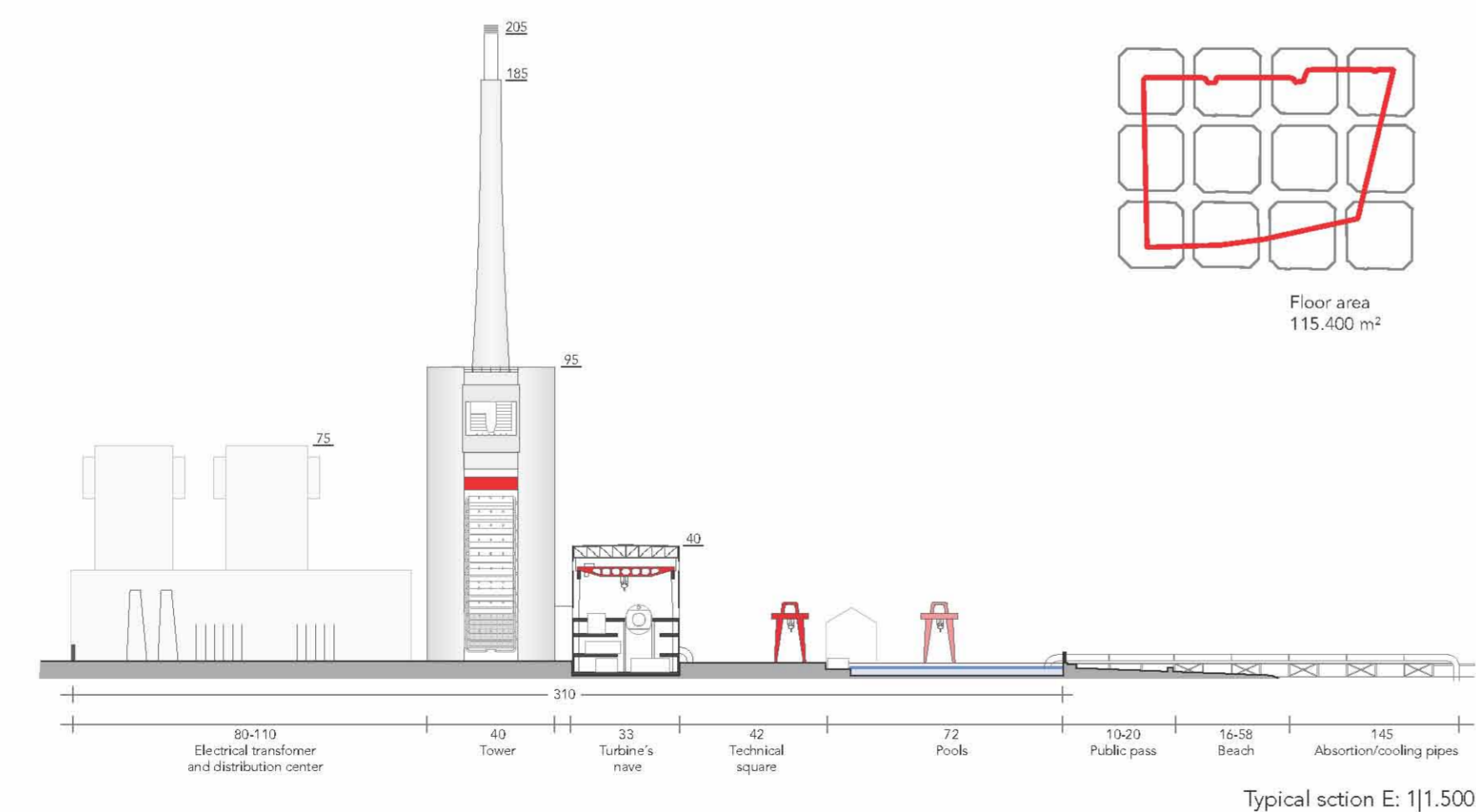
So, when the economic growth of the 60s brought along a huge increase in the consumption of electrical energy, the use of thermo-electrical plants was developed in the area. However, nuclear plants at first, and cogeneration plants nowadays, have become much more interesting investments due to costs and efficiency so they assume the majority of the electricity production.



Machine

The production of electrical power in the thermoelectric plant functions with the vapour obtained from heating water from the city supply in the boilers. Air is taken in for the combustion process where fuel oil or natural gas are used. The gases generated during the combustion are expelled through the chimney. When the high temperature and high pressure vapor is generated,

it is taken into the turbine. With the alternator, this is transformed into electrical energy which is then taken to the transformation station where it is prepared for distribution. Once the pressure from the vapour is used up, it is sent into the condenser where it is condensed by refrigeration with sea water. The water-vapor cycle is thus restarted.



Architecture

We are inheritors of a world that keeps alive the effort of those who built up useful infrastructures. Accepting the received world when it has a certain value means saving efforts for when they are necessary. There is an ethic of rationality on trying to include the received into our world. The tremendous effort implied by building should force us to think of structures that can absorb futures developments, admitting continuity as a moral norm.

The plant is just about the most efficient answer to a functional problem, a huge machine where each part forms a general system. Although on its configuration there was no architectural or public ambition (no exterior-interior distinction, the lack of scale, the non accurate materialization...) it contains enormous potentials. The intentional appreciation of its particular features can transform such a generic machine into an architectural artifact.

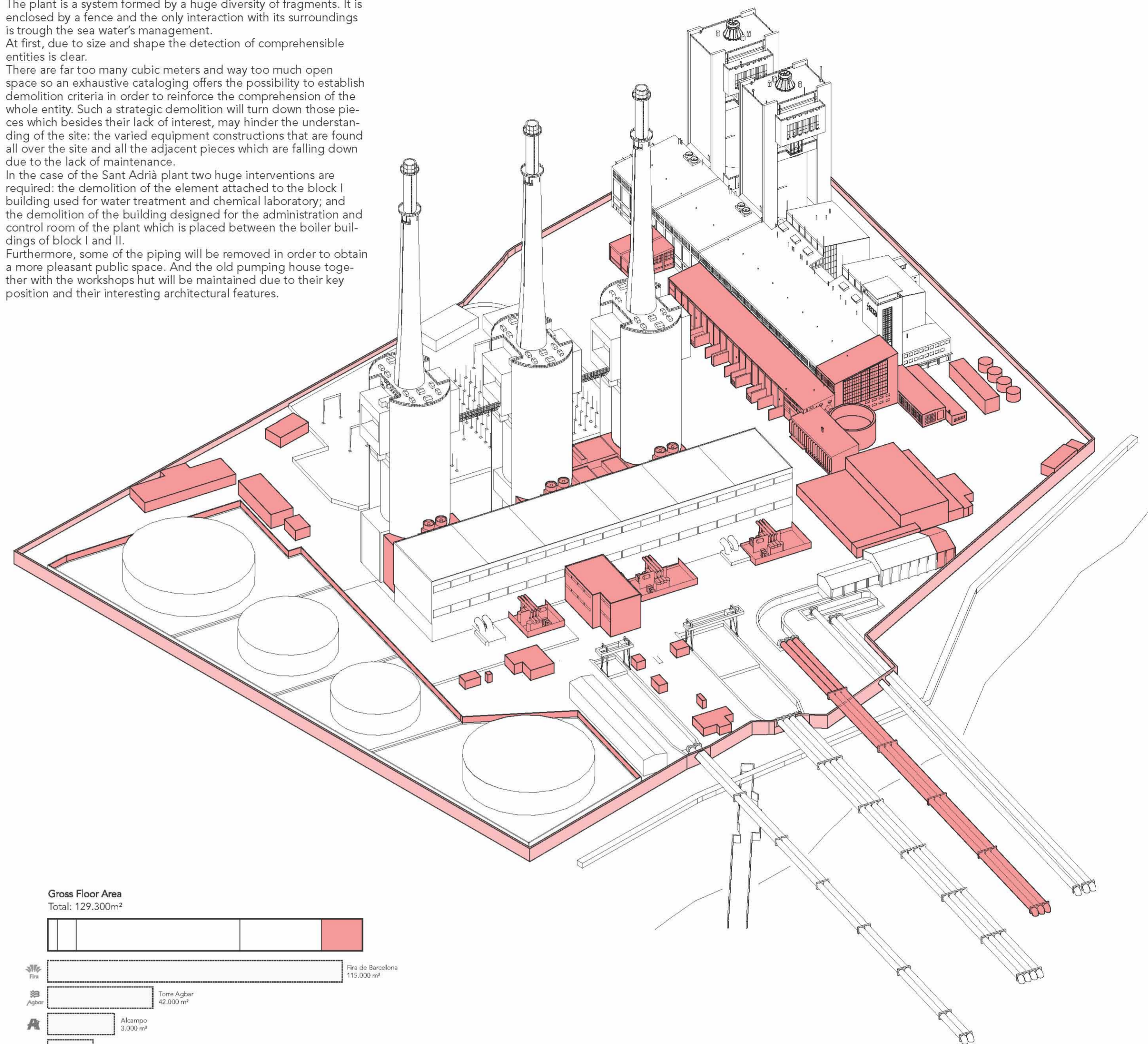
The plant is a system formed by a huge diversity of fragments. It is enclosed by a fence and the only interaction with its surroundings is through the sea water's management.

At first, due to size and shape the detection of comprehensible entities is clear.

There are far too many cubic meters and way too much open space so an exhaustive cataloging offers the possibility to establish demolition criteria in order to reinforce the comprehension of the whole entity. Such a strategic demolition will turn down those pieces which besides their lack of interest, may hinder the understanding of the site: the varied equipment constructions that are found all over the site and all the adjacent pieces which are falling down due to the lack of maintenance.

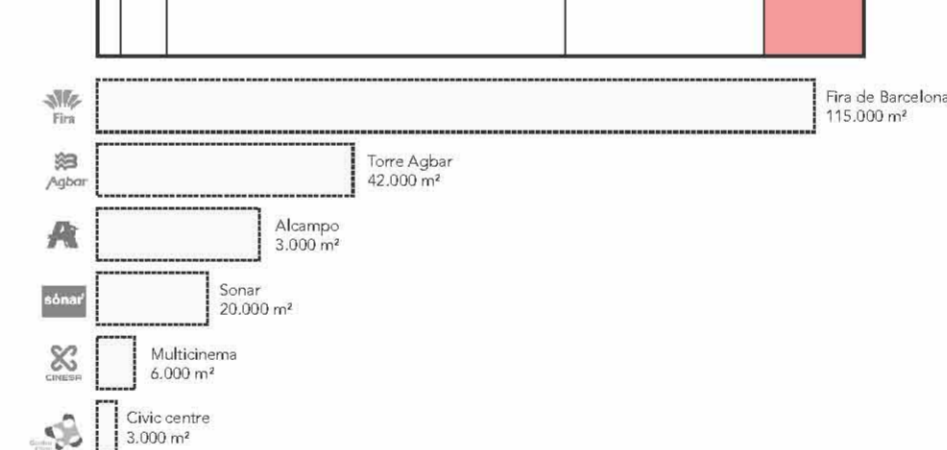
In the case of the Sant Adria plant two huge interventions are required: the demolition of the element attached to the block I building used for water treatment and chemical laboratory; and the demolition of the building designed for the administration and control room of the plant which is placed between the boiler buildings of block I and II.

Furthermore, some of the piping will be removed in order to obtain a more pleasant public space. And the old pumping house together with the workshops hut will be maintained due to their key position and their interesting architectural features.



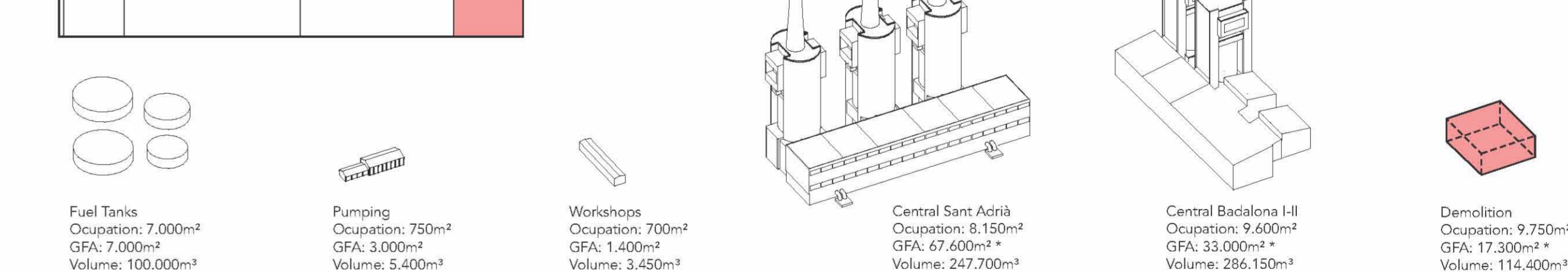
Gross Floor Area

Total: 129.300m²



Volume

Total: 759.140m³



Occupation

Total: 35.950m²

Total: 115.400 m²

