



Project Statement

The Chilean port city of Valparaíso was established as a World Heritage Site in 2003, largely to protect the environment in which its *ascensores* (hillside inclined elevators) were created and in which they are still needed and used. The city offered the opportunity to design and develop ideas related to a World Heritage Site that are integral to the fabric of everyday life and that contain the most memorable feature of its urban landscape – form, symbol and function all at once.

Valparaíso is one of the most distinctive urban environments in all of South America. An abrupt change of level occurs between the coastal strip and the foothills, which rise in an arc to a height of almost 2,000 feet and separate the city into two levels. The upper and lower areas of the city are tenuously connected by steep stairways, streets winding up the ravines, and a network of fifteen nearly vertical pedestrian elevators, or *ascensores*.

Prosperous in the late nineteenth and early twentieth centuries, Valparaíso began a slow decline when the opening of the Panama Canal eliminated much of the ship traffic around Cape Horn. The consolidation of commerce and industry in the capital city of Santiago to the East and the neighboring city of Viña del Mar to the North also damaged Valparaíso's prosperity. An increase in the number of paved streets to accommodate cars and buses, and construction of new facilities for convenient mass transit in the hills, gradually reduced the need for the *ascensores*, leaving many in a state of disrepair.

We propose to encourage the use of the Valparaíso World Heritage Site by providing the city with wind-generated electricity, a new technology that, like the *ascensores*, will encourage commercial expansion and continue to foster a sense of community. Our designs would create new icons that emphasize the importance of the *ascensores* while also establishing the beginnings of a twenty-first century economic urban revival. The proposal consists of two interrelated concepts:

1) To take advantage of Valparaíso's extremely windy conditions, we propose the creation of wind-powered electric generators on the plateau above the city's steep slopes. The electricity would be generated through lighter-than-air, wind-driven turbines that rotate about a horizontal axis and then transfer electricity down a series of 1000-foot tethers for immediate use. This method is more efficient and economical than that of traditional wind turbines. The turbines would be located directly in line with the *ascensores*, symbolizing a new era while simultaneously highlighting the technological marvels of an earlier industrial age.

2) The creation of "Plug-in pavilions" connected to the upper terminals of the *ascensores* would provide free electricity to impoverished inhabitants of Valparaíso. As gathering places where they could plug in and use their sewing machines, electric tools, computers and cook-tops, the pavilions would reinforce a sense of community, create opportunities for commerce to flourish, and establish the motivation for tourists to visit the city and ride to the top of the *ascensores*. Constructed of permanently inflated material, the pavilions would shift in size according to the wind conditions and glow like lanterns at night.