Energy, Environment and Sustainability of Green Buildings

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8.1 INTRODUCTION

As a certain reflect of hazard energy emission and arising awareness towards environment, sustainable energy and green architecture have become the new concern over the wide global issues. Green Architecture or in other words ecological design seeks to harness natural sources of energy and to increase their ability to generate their own energy in terms of enhancing efficiency and moderation in the use of materials, energy, and development space by using different techniques (Elliott, 2007).

8.2 CASE STUDY

The green architecture California Academy of Sciences which resided in Golden Gate Park for San Francisco in California in United States.

8.2.1 Country background in terms of location

California Academy of Sciences in San Francisco is one of the ten largest natural history museums worldwide that houses 18 million natural history specimens, over 10,000 living specimens, and includes aquaria, a planetarium, rain forests, research laboratories, public exhibit space (Kociolek, 2005).

California is the most populous and third largest state located on the west coast of the United States, bordering the Pacific Ocean as figure 1 clarifies. It is both physically and demographically diverse. California includes some of the largest cities in the USA including Los Angeles, San Diego, San Jose and San Francisco as shown in figure 2. Its state capital is Sacramento (California, 2011).

San Francisco is located on the West Coast of the United States at the tip of the San Francisco Peninsula. It includes significant stretches of the Pacific Ocean and San Francisco Bay within its boundaries as Figure 45 illustrates. It encompasses a land area of about 121 km2. (US Census, 2011).