

11.0 ENERGY

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I. STATUTORY REQUIREMENTS

The conservation of energy resources is sub-component of the State mandated Conservation Element. Statutory requirements for this element are described in the preceding section.

II. OPPORTUNITIES AND CONSTRAINTS (ISSUES)

1. There may be the potential of new or underutilized resources.
2. A reduction in the reliance on automobiles and total vehicle miles traveled as well as structure designs minimizing heat gain and loss are important conservation techniques.
3. San Clemente's location and climate make it suitable for utilization of passive and active solar energy technologies.

III. OVERVIEW OF ENERGY POLICIES

This section of the Energy Element establishes goals, objectives, policies and implementation programs to guide the efficient manner in which energy is consumed within the community. The General Plan process requires a total commitment from the local legislative body in adopting the policies of the Energy Element if the goals are to be realized. The policies contained herein address the following:

1. Minimizing transportation-related energy consumption.
2. Reducing energy consumption in buildings.
3. Increasing public awareness and encouraging feasible energy conservation methods.
4. Increasing the energy efficiency of City operations.

IV. GOALS, OBJECTIVES, AND POLICIES

The following presents the goals, objectives, and policies for energy conservation in the City of San Clemente. Implementing programs are contained in the following sub-section. Listed at the end of each policy a capital "I" and number(s) in parentheses which refers to the pertinent implementing program(s).

A. Energy

Goal

Reduce consumption of non-renewable energy sources and support the development and utilization of new energy sources.

Objective

11.1 Minimize transportation-related energy consumption.

Policies

- 11.1.1 Encourage the development of employment centers and other land uses to provide a balance and minimize vehicle trips in San Clemente and provide incentives to developers to provide employment-generating and other desired land uses (*I 11.1, and I 11.6*).
- 11.1.2 Require that Specific plans provide for High-Occupancy Vehicles (HOV) where feasible and public transportation through provision of appropriate transit areas and park-and-ride locations along public transportation routes (*I 11.6*).
- 11.1.3 Require Specific plans to provide for bicycle and pedestrian circulation systems to transit and employment centers (*I 11.1, and I 11.6*).
- 11.1.4 Maintain a system of traffic signals and controls to minimize waiting time and speed changes on through routes (*I 11.4*).
- 11.1.5 Provide incentives for the private sector to set up and operate alternative transportation systems (*I 11.6*).
- 11.1.6 Encourage clustering of residential structures as well as mixed uses where appropriate (*I 11.1, and I 11.6*).

Objective

11.2 Reduce energy consumption in buildings.

Policies

- 11.2.1 Require energy-efficient subdivision and site planning and building design. Measures to be considered will include building orientation and shading, landscaping, reflectance of building, use of active and passive solar heating and hot water system, etc. In establishing these energy related design

requirements, the City will balance energy efficient design with good planning principles (*I 11.1, I 11.5, and I 11.6*).

- 11.2.2 Require that new City buildings be energy efficient (*I 11.1, and I 11.3*).

Objective

- 11.3 Increase public awareness of energy conservation needs and means in order to encourage informed choices about energy conservation by the general public.

Policies

- 11.3.1 Cooperate with local utilities to provide energy conservation information to the public (*I 11.3, and I 11.4*)
- 11.3.2 Develop public and/or public-private energy conservation educational programs for City employees and the public (*I 11.4*).

Objective

- 11.4 Increase the energy efficiency of City operations to save energy, reduce municipal costs, and provide an example to the private sector.

Policies

- 11.4.1 Introduce concepts of energy efficiency and life-cycle costing to City planning and operating decisions and design of all major City facilities (*I 11.1, I 11.2, I 11.3 and I 11.5*).
- 11.4.2 Work with other agencies and utility companies to develop safe, economical and renewable energy resources (*I 11.3*).
- 11.4.3 Consider participating in demonstration projects for energy conservation and savings (*I 11.4*).

V. IMPLEMENTATION PROGRAMS

The following lists the programs to implement the energy conservation policies contained in the preceding subsection of the plan. The capital "I" and numbers preceding each program are referenced by the policies, which they implement.

A. *Energy Efficient Design*

- I 11.1 Require energy efficient site and building design in all new development consistent with the requirements of Title 24 of the California Administrative Code.

Responsibility: City of San Clemente Department of Community Development.

Funding Source: Developer.

Schedule: Ongoing as development projects are submitted or as funding permits.

- I 11.2 Allow for the use of alternative energy systems provided that they meet all public safety, health, welfare and design requirements and are proven to be reliable. If necessary, backup systems should be required.

Responsibility: City of San Clemente Department of Community Development.

Funding Source: Developer.

Schedule: Ongoing as development projects are submitted or as funding permits.

B. *Energy Audits*

- I 11.3 Initiate and facilitate programs for energy audits of existing structures and public education programs in the promotion of energy conservation. The programs should define the current levels of use, compare these to current standards for similar types of structures, and prescribe corrective methods to improve conservation. The City should initiate programs, which facilitate the retrofitting of existing buildings and their required improvements.

Responsibility: City of San Clemente Department of Community Development in cooperation with energy providers.

Funding Source: City of San Clemente General Fund and/or any available funds approved by the City.

Schedule: Develop citywide energy conservation program within two (2) years of General Plan adoption, or as funding permits.

C. Energy Conservation Funding

- I 11.4 Solicit state and federal funds to implement the City's energy conservation programs as such revenue becomes available.

Responsibility: City of San Clemente Department of Community Development.

Funding Source: City of San Clemente General Fund and/or any available funds approved by the City.

Schedule: Ongoing as funding opportunities become available.

D. Energy Performance Requirements and Standards

- I 11.5 Enforce existing provisions and establish additional energy performance requirements in the building code as information becomes available. Measures to be considered as life-cycle cost feasibility is demonstrated include building orientation and shading, active and passive solar heating and hot water systems, insulation of water heater and pipes, roof, wall and floor insulation, solar swimming pool heater, setback thermostats, double-pane windows, etc.

Responsibility: City of San Clemente Department of Community Development.

Funding Source: City of San Clemente General Fund and/or development application fees.

Schedule: Ongoing as development projects are submitted or as funding permits.

- I 11.6 Revise the Zoning Ordinance to reflect development standards contained in policies. Amend zoning ordinance and special standards to allow for mixed-use development where appropriate as funds are available.

Responsibility: City of San Clemente Department of Community Development.

Funding Source: City of San Clemente General Fund and/or any available funds approved by the City.

Schedule: Within 18 months of General Plan adoption, or as funding permits.

VI. GLOSSARY

- A. *Non-Renewable Energy Resource*** - inanimate resources that do not increase significantly with time and whose use diminishes the total stock (e.g. minerals, fossil fuels and fossil water)
- B. *Life-Cycle Costing*** - the total cost from start to finish of producing, using, maintaining and dispensing of an item or structure.