The State Legislature and Governor’s office have enacted legislation that addresses greenhouse gas emissions in California. California first addressed climate change and the role greenhouse gas emissions play in that process in 1988 with passage of Assembly Bill 4420, which directed the California Energy Commission to study global warming impacts to the State and to develop an inventory of greenhouse gas emissions sources. In 2002, Assembly Bill 1493 became law and required the State Air Resources Board to reduce greenhouse gas emissions from passenger vehicles, light-duty trucks and non-commercial vehicles sold in California.

In 2005, Governor Schwarzenegger signed Executive Order S-3-05, calling for the State to reduce greenhouse gas emissions to 1990 levels by 2020 and to reduce greenhouse gas emissions to 80 percent below 1990 levels by 2050. The 2020 goal was established to be an aggressive, but achievable, mid-term target, and the 2050 greenhouse gas emissions reduction goal represents the level scientists believe is necessary to reach levels that will stabilize climate.

In 2006, SB 1368 (Perata, Chapter 598, Statutes of 2006) created greenhouse gas performance standards for new long-term financial investments in base-load electricity generation serving California customers. This law is designed to help spur transition toward cleaner energy in California by placing restrictions on the ability of utilities to build new carbon-intensive plants or enter into new contracts with high carbon sources of electricity. Expiration of existing utility long-term contracts with coal plants will reduce greenhouse gas emissions when such generation is replaced by lower greenhouse gas-emitting resources. These reductions will reduce the need for utilities to allowances to comply with the cap-and-trade program.

Other actions followed, including Assembly Bill 32 and Senate Bill 375.

Assembly Bill 32 (AB 32)

AB 32, known as the Global Warming Solutions Act of 2006, intends to reduce carbon emissions in California to 1990 levels by 2020. It requires the California Air Resources Board to develop regulations and market mechanisms in pursuit of that mandate. The Bill further provides the Governor the ability to invoke a safety valve and suspend emissions caps for up to one year in case of an emergency or significant economic harm. Mandatory emissions caps for significant sources will begin in 2012 and ratchet down to meet 2020 goals. In the interim, the California Air Resources Board will begin to measure greenhouse gas emissions of industries it determines to be significant sources of greenhouse gas emissions.

Prior to full implementation of AB32 jurisdictions must examine how projects proposed or allowed for in relevant General Plans will add to greenhouse gas emissions. That is, every project must have a baseline study of its existing
contribution to emissions and a projected level of emissions. The Air Resources Board approved a Scoping Plan in December, 2008, which outlines strategies to cut emissions from 2008 business-as-usual practices. Key recommendations in the Scoping Plan include the following:

- Expanding and strengthening existing energy efficiency programs and building and appliance standards

- Achieving a statewide renewable energy mix of 33 percent

- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system

- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California, and pursuing policies and incentives to achieve those targets

- Adopting and implementing measures pursuant to existing State laws and policies, including California’s clean car standards, goods movement measures, and Low Carbon Fuel Standard

- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund administrative costs of the State’s long term commitment to AB32 implementation

**Senate Bill 375 (SB 375)**

SB 375 (signed by the Governor in September, 2008) is the first law in the United States to attempt to control greenhouse gas emissions by curbing urban sprawl and is the most recent bill to assist in meeting AB 32 targets. This legislation provides emissions-reducing goals for which regions can plan, integrates disparate planning activities, and provides incentives for local governments and developers to follow new conscientiously-planned growth patterns.

SB 375 is intended to reduce greenhouse gas emissions by linking transportation funding to land use planning. It generally is an incentive bill that offers streamlined environmental review for sustainable developments that link land use, transportation, and housing. This emphasizes building vertically rather than horizontally and improving efficiency and connectivity of residences to employment centers via roadways. The California Air Resources Board is the lead agency for implementing SB 375. SB 375 directs the California Air Resources Board to establish greenhouse gas reduction targets for the auto and light truck sectors to be achieved by 2020 and 2035 for regions of the State and to work with California’s 18 metropolitan planning organizations to align their transportation, housing and regional land-use plans with required greenhouse gas reductions. Furthermore, incentives include the following.
• The Air Resources Board would later determine if each region is on track to meet its targets

• Builders would get relief from certain environmental reviews under California Environmental Quality Act if they build projects consistent with new sustainable community strategies

• Cities would get 8 years, rather than 5 years, to update housing plans required by the State

SB 375 requires each metropolitan planning organization to prepare a “Sustainable Communities Strategy” for its region that outlines how its future planning scenarios reduce vehicle miles traveled and overall greenhouse gas emissions. The Sustainable Communities Strategy must contain several specific elements, including identifying areas for meeting regional housing needs, transportation networks and an integrated forecasted development pattern for the region that might feasibly meet greenhouse gas reduction targets.

The Southern California Association of Governments (SCAG) is the metropolitan planning organization responsible for Orange County. SCAG has 14 sub-regions and will allow each sub-region to complete its own Sustainable Communities Strategy that gets adopted into the larger Sustainable Communities Strategy. This allows some autonomy of individual sub-regions to create their own plans and not be forced to adopt targets outlined by SCAG. Each sub-region will be assigned a regional reductions target by its own volition or by SCAG. Orange County’s sub-region is governed by the Orange County Council of Governments (OCCOG). On May 27, 2010, a tri-party Memorandum of Understanding (MOU) between SCAG, OCTA & OCCOG was executed establishing OCCOG as the official sub-regional entity responsible for preparation of the Orange County SCS.

The Sustainable Communities Strategy does not supersede local general plans, specific plans and zoning. Future general plans, specific plans and zoning need not be consistent with the Sustainable Communities Strategy. Although there is no penalty for not meeting the regional reduction target, each sub-region must show a good faith effort to meet the target. If the Sustainable Communities Strategy does not achieve the greenhouse gas emission reduction target, an alternative planning strategy must be developed but will not be part of the regional transportation plan. The Alternative Planning Strategy identifies obstacles and how alternative planning methods, transportation measures and infrastructure will be modified to meet the goal. It does not supersede local land use and local land use need not be consistent with the alternative planning strategy. Inconsistency with the alternative planning strategy is not a consideration for CEQA significance purposes.
The reason for developing a Sustainable Communities Strategy or alternative planning strategy is two-fold: first, a project that is consistent with the Sustainable Communities Strategy or alternative planning strategy will be eligible for CEQA streamlining provisions in SB 375; and second, it adds a new focus – reductions in greenhouse gas emissions -- for regional transportation and housing allocations. In short, CEQA streamlining and transportation funding are incentives for local governments to align their planning assumptions with those in the Sustainable Communities Strategy or alternative planning strategy.

**California Environmental Quality Act**

The California Natural Resources Agency has proposed amendments to State CEQA Guidelines. CEQA law already allows analysis of climate change of a project where appropriate. An EIR can be considered inadequate if the EIR does not properly quantify greenhouse gases and disclose Project impacts (project-level and cumulative). Initially, an agency must accurately analyze Project greenhouse gas emissions from all sources. In addition to carbon dioxide, other gases that contribute to the greenhouse effect include methane, nitrous oxide, and hydrofluorocarbons. Also, an EIR must contain a full analysis of new vehicle miles traveled as a result of Project development and occupancy. Furthermore, an EIR must recognize all projects that make significant contributions to the amount of greenhouse gas in the atmosphere through means other than vehicle miles traveled; that is, through energy consumption, manufacturing and lifecycle of building materials, deforestation, and other processes.

**Cal Green**

In 2007, Governor Schwarzenegger directed the California Building Standards Commission to work with specified State agencies on adoption of green building standards for residential, commercial and public building construction for a 2010 code adoption.

The 2010 California Green Buildings Standards Code is the nation’s first mandatory Statewide Standards Code to require Green Construction and to fight Climate Change through reducing greenhouse gas emissions, energy consumption, and water use. On January 1, 2011, mandatory building regulations for all new construction in California became effective.

The 2010 Green Building Standards Code (Cal Green) will require the following:

- a 20 percent mandatory reduction in indoor water use, with voluntary goal standards for 30 percent, 35 percent and 40 percent reductions

- separate water meters for nonresidential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects
• diversion of 50 percent of construction waste from landfills, increasing voluntarily to 65 percent and 75 percent for new homes and to 80 percent for commercial projects

• mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for non-residential buildings over 10,000 square feet in area to ensure all are working at maximum capacity according to each system’s design efficiency

• low pollutant emitting interior finish materials such as paints, carpet, vinyl flooring and particle board

The mandatory regulations are now law, but local communities can take additional action to “green” their buildings. Mandatory Cal Green Code provisions will be inspected and verified by local and State building departments. The City of Aliso Viejo has adopted the mandatory standards as its 2011 Building Code.

**AB 1881**

California Assembly Bill 1881 ("AB 1881"), known as the *Updated Model Water Efficient Landscape Ordinance*, was enacted into law on September 28, 2008 to modify and strengthen the Act. One key provision of AB 1881 requires the DWR (Department of Water Resources) to update the existing model water efficient landscape ordinance, which serves as a model ordinance for cities and counties to adopt mandatory local landscape planting and irrigation ordinances. All cities and counties were required to (1) adopt the DWR updated model water efficient landscape ordinance (the "Model Ordinance"), or (2) adopt a customized local water efficient landscape ordinance at least as effective in conserving water as the updated Model Ordinance. AB 1881 also made the updated Model Ordinance automatically applicable within the jurisdiction of each city and county that did not adopt its own water efficient landscape ordinance or the updated Model Ordinance by January 1, 2010. Furthermore, the DWR was required, to the extent funds were appropriated, to prepare and submit by January 31, 2011, a report to the State Legislature relating to the status of water efficient landscape ordinances adopted by cities and counties.

The completed Department of Water Resources updated Model Ordinance contained significant differences from current regulations, including the following:

• Reduces the irrigated area compliance threshold from one acre to 2,500 square feet for developer installed projects, public agency projects, and private development projects requiring a building or landscape permit, plan check, or design review.
• Requires homeowner provided or homeowner hired projects exceeding 5,000 square feet or irrigated area to acquire a building or landscape permit, plan check, or design review.

• Collaboration between cities, counties, and water purveyors is now strongly encouraged in development and implementation of water efficient landscape ordinances.

• Local ordinances must now be “at least as effective as” the State Model and documented “on the record.”

• Jurisdictions must now utilize evapo-transpiration based “Maximum Applied Water Allowance” (MAWA) rates of 0.7 instead of 1.0. Use of the new MAWA rate represents a 33% reduction in water allocations for new landscapes.

• Water purveyors are now required to offer landscape surveys and/or incentive programs targeting landscape irrigation efficiency for new and existing landscapes.

• Local ordinances must now address smaller landscaping projects including single-family residential projects.

• Local jurisdictions must now regulate existing landscapes for water waste.

• A local agency may designate another agency, such as a water purveyor, to implement some or all requirements contained in the updated Model Ordinance.

The Orange County Division of the League of California Cities and the Municipal Water District of Orange County developed a separate Orange County Model Ordinance for cities in Orange County to use for compliance with AB 1881 in response to requirements of the Model Ordinance.

The City of Aliso Viejo previously had enacted many provisions of the Model Ordinance. Therefore, to retain local control and flexibility in implementing AB 1881 requirements and to avoid complexity and additional costs in the local permitting process, the City of Aliso adopted Ordinance No. 2009-119 (reference Appendix C). This Ordinance used the Model Ordinance and the County Model Ordinance as beginning points to establish simple and clear regulations and separate Guidelines for implementation of the City of Aliso Viejo Water Efficient Landscape Regulations (the “Guidelines”) that can be updated easily, edited, or augmented as deemed necessary and appropriate. The Guidelines also incorporate the City’s existing land use and planning documents and regulations that are applicable to installation of water efficient landscaping. The Guidelines allow for self-certification, eliminating the need for additional layers of government and review, and are intended to minimize cost of implementation. The Ordinance established regulations that achieve water use reductions “at
least as effective” as Model Ordinance requirements, but also allow a project applicant the option of complying with the Model Ordinance in determining the MAWA rate for landscaping within a project.

• Encourage application of Low Impact Development; encourage projects to capture and manage a specific amount of rainwater per storm through on site infiltration, retention and bio filtration

• Expand water recycling and develop local water supplies that will not be affected by climate change; storm water harvesting can assist in controlling flash flooding events and can serve as a water supply

• Determine resiliency of existing storm water and waste water collection systems to extreme flooding and storm surges

• Implement all best management practices for water use efficiency to reduce water demand, wastewater discharges and energy demand; efficient water use can help Aliso Viejo cope with water shortages and thereby reduce associated economic and environmental impacts.

**AB 1358 (California Complete Streets Act)**

The Complete Streets Act of 2007 (now effective) will ensure transportation plans of California communities meet needs of all users of the roadway, including pedestrians, bicyclists, users of public transit, motorists, children, the elderly, and the disabled. AB 1358 requires the legislative body of a city or county, upon revision of the applicable General Plan Circulation Element to identify how the jurisdiction will provide for routine accommodation of all users of the roadway, as identified above. The legislation also directs the California State Office of Planning and Research to amend guidelines for development of general plan circulation elements so building and operation of local transportation facilities safely and conveniently accommodate everyone, regardless of mode of travel. Such accommodations may include sidewalks, bicycle lanes, crosswalks, wide shoulders, bus pullouts and audible pedestrian signals.