

Climate Change in California

Southern California Edison (SCE) is a proven leader in reducing emissions through the deployment of clean technologies and investments in energy efficiency. SCE currently is working with state officials and other business leaders to help develop an approach to climate policy that is comprehensive, cost effective, equitable and sustainable.

Current Laws

AB 32: In September 2006, California enacted landmark greenhouse gas legislation. AB 32 requires the California Air Resources Board (CARB) to develop regulations and market mechanisms to reduce California's greenhouse gas emissions to 1990 levels by 2020, resulting in about a 30 percent reduction.

In December 2008, CARB finalized its scoping plan, which provides the broad outline of how that nearly 30 percent reduction will be realized. The scoping plan calls for most of the emissions reductions (about 80 percent) to be achieved through mandatory, command-and-control measures; the rest of the reductions will be achieved through a regional cap-and-trade program.



For the electricity sector, the draft CARB scoping plan calls for increasing the use of renewables from 20 percent to 33 percent; achieving significant gains in energy efficiency; and increasing reliance on cogeneration or combined heat and power systems, which produce both electricity and thermal energy.

CARB will spend 2009 and 2010 developing regulations to implement the scoping plan measures. CARB already has finalized regulations requiring major sources of greenhouse gases to report their emissions. The first reports are being issued this year, covering emissions from calendar year 2008. Subsequent reports will have to be verified by an independent third party.



SB 1368: Also enacted in 2006, SB 1368 requires the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC) to adopt greenhouse gas performance standards for investor owned and publicly owned utilities for long-term procurement of electricity. In 2007, the CPUC and CEC adopted an emissions performance standard that essentially prevents the construction of new coal-fired plants without carbon sequestration – a process for permanently storing carbon dioxide in secure underground geologic formations - as well as preventing new contracts of more than five years with existing coal-fired power plants.

The Western Climate Initiative (WCI): Launched in February 2007 by the governors of Arizona, California, New Mexico, Oregon and Washington, the WCI's goal is to develop regional strategies to address climate change. The initiative expanded to include the states of Montana and Utah, and the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec. The partners set a regional goal to reduce greenhouse gas emissions by 15 percent below 2005 levels by 2020. The WCI issued design recommendations for a regional cap-and-trade program in September 2008. The first phase will begin in 2012 and cover the electricity sector and large industrial sources; a second phase will begin in 2015 and expand to include transportation fuels and residential, commercial and industrial fuels not already covered in the first phase.

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SCE's Environmental Leadership



With the direction and support of the CPUC, SCE already emits fewer greenhouse gases today than it did in 1990.

SCE's award-winning energy-efficiency programs have helped customers save more than 5 billion kilowatt-hours over the last five years, reducing greenhouse gas emissions by more than 2 million tons – the equivalent of removing 250,000 cars from the road.

SCE is the nation's leading purchaser of renewable energy. In 2008, SCE delivered 12.6 billion kilowatt-hours of renewable energy, more than any U.S. utility. SCE's current generation mix – 50 percent natural gas, 21 percent nuclear, 16 percent renewable, 8 percent coal and 5 percent large hydro – produces about 0.29 metric tons of carbon dioxide per megawatt-hour, approximately half the national average.

Future Challenges

While SCE has already done much to reduce its carbon footprint, the utility knows it will have to do even more to help California achieve its ambitious greenhouse gas goals.



During the next two years, SCE will help customers save an additional 2 billion kilowatt-hours, reducing greenhouse gas emissions by another 1 million tons. In September 2009, SCE launched another tool to help customers manage their energy use. The Edison SmartConnect program will enable customers to see how much energy they are using and how much it is costing them, which will help customers conserve. SmartConnect has the potential to reduce greenhouse gas emissions by 365,000 metric tons per year.



Significant increases in the use of renewables will require the construction of new transmission lines. In March 2008, SCE began construction of the largest wind transmission project in the United States – the Tehachapi Renewable Transmission Project. When all of the phases are developed, it will include a series of new and upgraded high-voltage transmission lines capable of delivering 4,500 megawatts of electricity from wind farms and other generating companies in Northern Los Angeles and Eastern Kern counties.

SCE also is ready to help other sectors reduce their carbon emissions, especially the transportation sector. Having customers fill up at the plug instead of the pump can result in significant greenhouse gas emissions reductions. By 2020, electric transportation may account for up to 9 percent of SCE's total annual energy, reducing greenhouse gas emissions by 10 million metric tons.

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