

**EXECUTIVE DEPARTMENT  
STATE OF CALIFORNIA**



**EXECUTIVE ORDER S-7-04**  
by the  
**Governor of the State of California**

WHEREAS, hydrogen, a non-carbon energy carrier which can be made from clean renewable energy, is ideally suited to address global, regional and local energy and environmental challenges; and

WHEREAS, the State of California is a world leader in renewable energy production, efficiency and conservation, clean air and emission controls, environmental goals and planning, as well as creating, promoting and commercializing new technologies and industries; and

WHEREAS, hydrogen-powered vehicles and infrastructure can lead to energy independence; offer zero or near-zero smog-forming emissions; reduce health problems due to motor vehicle-related air pollution; reduce water pollution from oil and gasoline leaks; lower global warming pollution; improve fuel economy; quieter and smoother operation; as well as provide economic and workforce benefits to help California meet current and future energy needs; and

WHEREAS, the economic feasibility of a hydrogen infrastructure is enhanced by building hydrogen energy stations that power vehicles as well as supply electricity for California's power needs; and

WHEREAS, air pollution can cause or aggravate a wide range of serious health problems including cancer, birth defects, respiratory illnesses such as asthma and emphysema, heart and blood ailments, nervous system toxicity and early death; and

WHEREAS, children are more acutely affected by air pollution and have a higher incidence of harm from dirty air; and

WHEREAS, health problems caused by air pollution result in direct and indirect costs of hundreds of billions of dollars per year in California; and

WHEREAS, even after years of improvements in vehicle emissions technologies and effective emissions regulation, California has some of the worst air quality in the country; and

WHEREAS, much of the State of California does not meet state or federal health-based air quality standards, is at risk of not meeting federal air quality "attainment" status and may thereby lose billions of dollars in federal funds; and

WHEREAS, California is committed to Environmental Justice to ensure a clean and sustainable environment for all Californians; and

WHEREAS, the California Legislature has taken a leadership role to address petroleum dependence by passing AB 2076, which resulted in a report by the California Energy Commission (CEC) and the Air Resources Board (ARB) that found: California's oil refining capacity has not been able to keep up with growing demand for fossil fuel; the state faces a future of increasing petroleum dependence, supply disruptions, and rapid and frequent price volatility; without major efforts to reduce petroleum dependence, meeting future petroleum needs would require that California accept major expansion of refining capacity, delivery infrastructure and increased dependence on foreign energy supplies; and

WHEREAS, California is the home to the California Fuel Cell Partnership, a unique collaborative of eight auto manufacturers, four energy supply companies, two fuel cell technology companies, and seven government agencies, seeking to advance practical environmental transportation solutions with new fuel cell vehicle and hydrogen infrastructure technologies. The California Fuel Cell Partnership is the first public private partnership to test fuel cell vehicles under real day-to-day driving conditions; and

WHEREAS, California is also the home of the California Stationary Fuel Cell Collaborative, a public-private organization that includes 16 government agencies, two public electric utilities, the University of California, as well as major fuel cell technology companies, end users, energy supply companies, local government agencies and municipalities, research institutions, and developers; and

WHEREAS, state government organizations have been leading both research and commercial advances in energy and transportation technologies; and

WHEREAS, local governments and regional government agencies also are taking a leadership role to advance hydrogen and fuel cell vehicle technologies; and

WHEREAS, many of California's prestigious universities, national laboratories, and research institutions are leaders in advancing hydrogen, fuel cells, renewable energy, advanced vehicle systems and infrastructure technology through commercialization strategies and partnerships; and

WHEREAS, several studies have estimated that hundreds of thousands of manufacturing and support services jobs will be created when fuel cells gain market shares in the power and vehicle markets, and California is poised to receive many of these jobs and related investment and export opportunities because of its educated workforce and robust automotive and fuel sectors; and

WHEREAS, auto manufacturers have publicly announced their intention to commercially market "tens of thousands" of hydrogen and fuel cell vehicles within this decade, providing that a hydrogen infrastructure is available; and

WHEREAS, California has one of the nation's largest public fleets and the largest private sector vehicle market in the United States and has set a precedent of pushing for vehicle emissions reductions and clean vehicle technologies; and

WHEREAS, California's commitment to clean energy surpasses that of any other state, and California offers the best opportunity to hasten the commercialization of hydrogen and fuel cell technologies.

NOW, THEREFORE, I, ARNOLD SCHWARZENEGGER, Governor of the State of California, by virtue of the power vested in me by the Constitution and statutes of the State of California, do hereby issue this order effective immediately:

IT IS ORDERED that the State of California is committed to achieving a clean energy and transportation future based on the rapid commercialization of hydrogen and fuel cell technologies; and

BE IT FURTHER ORDERED that California's 21 interstate freeways shall be designated as the "California Hydrogen Highway Network" and the California Environmental Protection Agency and all other relevant state agencies including but not limited to State and Consumer Services; Department of Finance; Business, Transportation and Housing; Education; Health and Human Services; and Resources, shall work with state legislators and key stakeholders, including local and regional government organizations, educators, energy providers, automakers, fuel cell products suppliers, financing entities, non-governmental organizations, and community based organizations including those representing Environmental Justice communities to implement this Executive Order, plan and build a network of hydrogen fueling stations along these roadways and in the urban centers that they connect, so that by 2010, every Californian will have access to hydrogen fuel, with a significant and increasing percentage produced from clean, renewable sources; and

BE IT FURTHER ORDERED that the California Environmental Protection Agency, in concert with the State Legislature, and in consultation with the California Energy Resources Conservation and Development Commission and other relevant state and local agencies, develop a California Hydrogen Economy Blueprint Plan for the rapid transition to a hydrogen economy in California due January 1, 2005, and to be updated bi-annually thereafter containing recommendations to the Governor and the State Legislature and shall include, but not be limited to, the following:

- Accelerating progress in hydrogen use, including public incentives and financing mechanisms such as general obligation bonds, or revenue bonds with repayment mechanisms; joint power agreements, procurement agreements, competitive master contracts, and partnerships with public and private entities; a review of immediate financing opportunities via the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA).
- Promoting environmental benefits (including global climate change) and economic development opportunities resulting from increased utilization of hydrogen for stationary and mobile applications; policy strategies to ensure hydrogen generation results in the lowest possible emissions of greenhouse gases and other air pollutants.

BE IT FURTHER ORDERED that the State of California will commit to achieving the following by 2010:

- The state will commit to negotiate with auto makers and fuel cell manufacturers to ensure that hydrogen-powered cars, buses, trucks, and generators become commercially available for purchase by California consumers, businesses and agencies including state, regional and local; and
- California's state vehicle fleet shall include an increasing number of clean, hydrogen-powered vehicles when possible to be purchased during the normal course of fleet replacement; and
- Safety standards, building codes and emergency response procedures for hydrogen fueling installations and operation of hydrogen-powered vehicles shall be in place and permit agencies, building inspectors and emergency responders shall receive appropriate training; and

Appropriate incentives shall be provided to encourage the purchase of hydrogen powered vehicles and to encourage the development of renewable sources of energy for hydrogen production; and

I FURTHER DIRECT that as soon as hereafter possible, this order shall be filed with the Office of the Secretary of State and that widespread publicity and notice be given to this order.



**IN WITNESS WHEREOF** I have here unto set my hand and caused the Great Seal of the State of California to be affixed this the twentieth day of April 2004.

/s/ Arnold Schwarzenegger

Governor of California