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## California's New Environmental Business Development Opportunities

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## **CALIFORNIA'S NEW ENVIRONMENTAL BUSINESS DEVELOPMENT OPPORTUNITIES**

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We are all aware that California is facing economic challenges, but these challenges also create entrepreneurial opportunities. Today, a variety of partnerships among State, Federal, commercial, and private environmental restoration stakeholders is addressing these challenges. These partnerships include State and Federal regulatory agencies, such as the U.S. and California Environmental Protection Agencies (EPA and Cal EPA); the U.S. Department of Energy (DOE) and its National Laboratories; and private enterprises, particularly small environmental businesses.

### **Regulatory Agencies**

The purpose of regulatory agencies is to protect human health and the environment, not to develop the industrial sector. However, the environmental industry exists because, unlike any other sector of the economy, this industry was created by Federal and State regulatory agencies. Once these agencies promulgated the first environmental laws, the environmental restoration industry was born.

These Federal and State agencies are in a strange situation: they have developed regulations and yet do not have the methodologies and technologies with which to effectively comply with the promulgated regulations. As a result, the various regulatory agencies have had to rely on the private sector to develop the type of expertise, hardware, and software needed to meet compliance.

Regulatory agencies are often criticized because they fail to establish national standards, leaving industries and technology developers no solid target to aim for. This is because Congress has decided that it is best to leave regulatory targets as health-base levels. These health- or risk-base levels may vary from site to site, waste stream to waste stream, and, of course, from State to State, depending upon what local constituencies and local governments feel are in their interests and the level of protection with which they are comfortable. The Federal Government has not seen any reason to take that power away from local control.

The EPA Office of Research and Development has a responsibility to encourage the development of technologies to implement regulations and has set up a number of programs to do that. Perhaps the most widely known program is the Superfund Innovative Technology Evaluation Program. This program's prime purpose is to develop cost and performance data for innovative technologies. The basic principal behind this program is to allow technology developers to have access to real sites without worrying about Superfund liability. EPA also sponsors the Small Business Innovative Research Program, which allows the Federal Government to enter into cooperative research and development agreements with private technology developers.

### **The California Environmental Technology Partnership**

California has the highest environmental standards in the world, which have helped create a vital sector in California's economy, specifically the large and growing number

of firms and other organizations that develop new technologies, manufacture and market environmental technologies and products, and provide environmental services to the Nation. California currently has a strong national and international market presence, but we are in danger of losing this competitive edge. Japan, Germany, and other countries are strongly supporting their environmental industries through targeting and supporting technology development, adopting aggressive marketing strategies, and providing significant export assistance. California is meeting this challenge.

The California Technology Partnership, created in September 1992, consists of the California Trade Commission and Cal EPA. This partnership is a cooperative effort of many people throughout the State, involving State government, industry, academia, financial institutions, public interest groups, and Federal, regional, and local governments. The mission of the partnership is to preserve and promote California's environmental standards and to recognize, assist, and promote California-based companies that research, develop, produce, and market environmental technology goods and services in California.

The California Technology Partnership is counseled by the Environmental Technology Advisory Council (ETAC), which is made up of high-level industry leaders, State government, academia, public interest groups, financial institutions, and Federal, regional, and local governments. The first major effort of the Council is to help develop a Strategic Plan for California's environmental technology industry. The Plan includes various goals, objectives, and specific missions for California State agencies and others focused on the partnership's mission. The Plan is a document that projects 10 years of strategic goals and objectives. It also outlines what we expect to accomplish in the next 12 months. The Plan proposes a unique and dynamic public/private partnership that has goals that benefits us all.

The Strategic Plan affects everyone in California. For example, some of the highlights of the Strategic Plan include:

- Promoting full-scale tests and demonstrations of new environmental technologies.
- Certifying environmental technologies (part of AB 2060).
- Demonstrating new site remediation technologies at closing military bases.
- Finding new ways to streamline California's regulatory requirements for testing and demonstrating new technologies.
- Promoting consistency of regulatory requirements and standards.

The State will be a first purchaser of new California-produced environmental technologies and products and is trying to develop a tax credit incentive system for development and use of environmental technologies. The State is also evaluating the use of multimedia pollution credits and promoting strategic partnerships between technology developers and large companies or consortia that are potential users of these technologies.

The State will expand programs to support environmental technologies marketing and export assistance. This initiative will help California's environmental technologists increase their sales to domestic and international markets. Cal EPA has a Directory of about 1,200 environmental companies. This Directory will assist environmental companies interested in exporting their technologies to foreign countries.

### **U.S. DOE**

In the past two years, DOE Oakland Operations Office has put out four environmentally related solicitations in the Commerce Business Daily and in the DOE Forecast of Contracting and Subcontracting Opportunities. DOE sent out over 900 solicitations to small companies throughout the country (but got only 28 responses). Some of the DOE initiatives being implemented at our Laboratories to help small companies include:

- Any procurement that is \$25 thousand or under is automatically set aside for small companies; so only small companies can compete. In the case of construction contracts, any procurement that is \$3 million or under is restricted to small businesses as well.
- DOE is currently looking at increasing the small purchase threshold, which would restrict competition to small businesses on any procurement where the value is \$100,000 or below. This may increase small business participation by almost \$200 million in any given year.
- DOE Oakland Operations Office also publishes an annual forecast. It contains not only DOE contracting opportunities with the point of contact and a phone number, but also briefly describes the procurement requirement, the SIC code, and whether it is a small business set-aside. The forecast will also identify the dollar range of the procurement.
- DOE and its Laboratories are looking for ways to take current environmental contracts and break them down into smaller requirements, which would make them more attractive for environmental small businesses to bid on.

DOE publishes procurement requirements in the Commerce Business Daily. All Federal agencies are required to advertise their requirements in that publication. DOE also publishes procurement requirements in the Small Business Exchange and the Pacific Daily Builder.

DOE is considering the establishment of procurement centers throughout the United States. All DOE site managers, as well as DOE offices, would be required to electronically advertise on a daily basis all the solicitations that are being issued. DOE would provide procurement assistance and resources to help prepare bids, review documentation, and understand Government regulations.

The DOE environmental restoration marketplace is a \$6 billion-a-year annual program. Approximately \$300 million a year is spent on technology development. As a technology developer, the most valuable way to get work out of the DOE is to contact the people who run the integrated programs and demonstrations, and the site remediation projects. The DOE National Laboratories are now required to work with

industry. More than 100 businesses are working with DOE on technology development. Most of these companies got their money from working closely with the people at the Laboratories and determining where the technology gaps were and where their technologies would best fit the needs of DOE's Office of Environmental Management.

Think dual use. DOE is like Japan. If you have something they don't want, it takes a long time to negotiate; but if you have something they really want, they move very fast. They can move fast when they want to, and clearly, they have a need for business.

### **California Environmental Enterprise**

The California Environmental Enterprise (CEE) is a joint project or partnership among three of the National Laboratories in Alameda County: Lawrence Livermore National Laboratory, Lawrence Berkeley Laboratory, and Sandia National Laboratories, each with its own special strengths, size, and technology relating to the environment. The partnership, in conjunction with the Institute of Environmental Solutions, maintains close contacts with developers, regulators, and banking and investment industries. The purpose of CEE is to: (1) capitalize on the expertise of technology in the National Laboratories with which we are networked, both in Alameda County and nationally; (2) accelerate the transfer of DOE-generated technologies into private hands and private industry; and (3) accelerate land reuse and redevelopment of impaired properties. The CEE came into being through an effort made initially by Leo Duffy of DOE, who recognized the changing mission of DOE and the National Laboratories. He convinced the Laboratory directors of the need to collaborate and to involve industry so that U.S. taxpayers would get a better return on their huge investment.

The CEE is the forerunner of what may be several similar enterprises scattered about the country. Each enterprise will be centered around a network of DOE National Laboratories, universities, local industries, and local regulators. CEE is going to operate in a businesslike mode. CEE will interact with private industry, offering a wide range of products and services of value. Here are some of the pivotal opportunities the CEE will offer:

- Technology brokering where we can help make matches between problem holders and technology providers. This would help people with impaired properties who need help in finding solutions. It might also help business collaborators find useful technologies.
- Creating public and private partnerships to demonstrate commercialized technologies. CEE offers a program that would give affiliate industry members access to laboratory expertise. Members of the affiliates' program, would be entitled to a certain number of hours of free advice or consulting time from experts that CEE would bring in from the National Laboratory network.
- Assisting small businesses to secure funding through the Special Assistance Program for small businesses and to participate in CRADAs and other types of opportunities.
- Providing an Information Systems Service, which would give industry access, often electronically, to information they might need.

- Providing an Education and Training Program that would help private industry train environmental restoration managers.

In summary, by forming stakeholder partnerships early in the environmental decision-making process, significant benefits can be realized. The regulatory process can be streamlined and innovative, cost-effective technologies can be applied, and California jobs can be created.