

## Chapter 6: Technology Advancement

### Summary:

Prior to the adoption of the Technology Advancement Program, the District had taken a tactical approach to technology advancement goals. The District's incentive program had successes with individual projects displaying strong potential to provide essential emission reductions; however, these efforts lacked an overarching structure or focus. The program's adoption provided a strategic and comprehensive program to identify, solicit, and support technology advancement opportunities. The program was created March 18, 2010 with the understanding that upcoming standards for both ozone and PM2.5 may be impossible to meet without significant advancements in low-emissions technologies from mobile and stationary sources. Ongoing refinement of the program's technology focus areas will target efforts to achieve the greatest impact on the Valley's attainment of air quality standards as well as expedite the health based goals of this plan.

The program has had two rounds of funding and received over sixty proposals for clean technology projects. Eighteen of the proposed projects were selected for funding for over \$3 million, and the District has committed an additional \$3 million for a third round of funding to open in 2012. The District's Governing Board has directed staff to provide special emphasis on projects in this next round of funding that will enhance the capabilities and build capacity of colleges and universities in the Valley. This emphasis will improve the ability of local institutions to engage in future clean technology projects that are specifically suited to the Valley's needs.

The District's Technology Advancement Program will utilize the long term need for zero and near-zero emission goods and people movement to inform near term strategies. The District is collaborating with the California Air Resources Board and the South Coast Air Quality Management District to prepare a document to outline a common vision for attainment of federal air quality standards, as well as greenhouse gas goals and reduced exposure to toxics. This "Vision for Clean Air" document will align the long-term goals for 2050 (greenhouse gasses) and 2035 (75 ppb ozone) with mid-term 2023 (85 ppb ozone) and 2019 (PM2.5) emission reductions needs. While much has been achieved with cleaner cars and trucks, in order to meet these upcoming challenges, new technologies will need to be developed for difficult to address needs such as long-haul goods movement. The Vision for Clean Air will document potential pathways, utilizing technologies we are aware of but are not currently ready for commercialization. These pathways will serve as an opportunity to refine the program's focus areas to bring about the changes identified in the document.

This chapter will provide details of how the District will continue to seek opportunities to fund innovative clean technology project demonstrations, and build capacity at local colleges and universities to bring advanced technologies to the valley that are well suited to the Valley's needs.