



WHY RENEWABLE ENERGY?

- **Climate Protection**—We are running out of time to protect our climate. Staying below 1.5°C of warming, and well below a catastrophic 2°C of warming, will require aggressive action to undo our dependence on fossil fuels.
- **Air Quality**—We need to eliminate the use of fossil fuels to clean up the air in the Los Angeles basin, which despite improvements in recent decades, still consistently fails to reach federal air quality standards and remains a major public health threat. More than 1.6 million people in Los Angeles suffer from asthma, many of them children. LADWP's adoption of a 100% renewable electricity portfolio that includes the most advanced air quality protection technologies and minimizes any type of in-basin combustion will be a critical step toward remedying this persistent problem.
- **Fresh Water**—Fresh-water supply constraints represent a serious threat in Los Angeles, which stands to get more severe with climate change and population growth. Non-coastal fossil-fuel and nuclear power use approximately 40% of fresh water in the United States. Renewable energy technologies like wind and solar, by contrast, use little water. Therefore, eliminating fossil and nuclear power production is a critical part of a sustainable water strategy for Los Angeles.
- **Flexibility and Reliability**—Renewable electricity technologies are more flexible than fossil fuel power and can therefore better ensure a reliable energy supply in the Los Angeles region, which is prone to earthquakes and other disasters. Investigators at Stanford University tested a new grid integration model and found that renewable energy can ensure reliable power for most locations worldwide <http://web.stanford.edu/group/efmh/jacobson/Articles/I/CombiningRenew/CONUSGridIntegration.pdf>.
- **Local Jobs Creation**—Transitioning to a 100% renewable power supply will also increase the City's potential to create more local jobs. Investments in clean, renewable energy create more jobs than the same investments in coal, oil and gas.
- **Costs**—The Solutions Project at Stanford University estimates that reaching 100% renewable energy for all forms of energy in 2050 would pay for itself in three years through air pollution and climate cost savings alone. They estimate \$127.9 billion in avoided health care costs, 12,528 avoided air pollution deaths per year, **and \$161 annual energy cost savings per person** <http://thesolutionsproject.org/infographic/#ca>. The DWP hasn't modeled 100% renewable electricity, so we can't know the costs that DWP predicts. We do know from two recent scenarios that the added costs of reaching 65% renewables versus 50% renewables amount to less than 1 cent per kilowatt hour (less than \$5/month for the average customer), and with less capacity shortfall (i.e., with more energy available).
- **Demonstrating Leadership**—Finally, most other large cities in California have already adopted 100% renewable electricity targets, including San Diego, which is targeting 2035, and San Francisco, which aims to get there by 2030. They are joined by hundreds of other cities across the nation and the world with similar or even more ambitious commitments. By pursuing 100% renewable electricity by 2030, Los Angeles can assure its position as a national and international frontrunner in advancing clean energy.