

# The Effect of Inflation and the Pandemic on a Southern California Solar Company: A Case Study

## Energy Curtailment

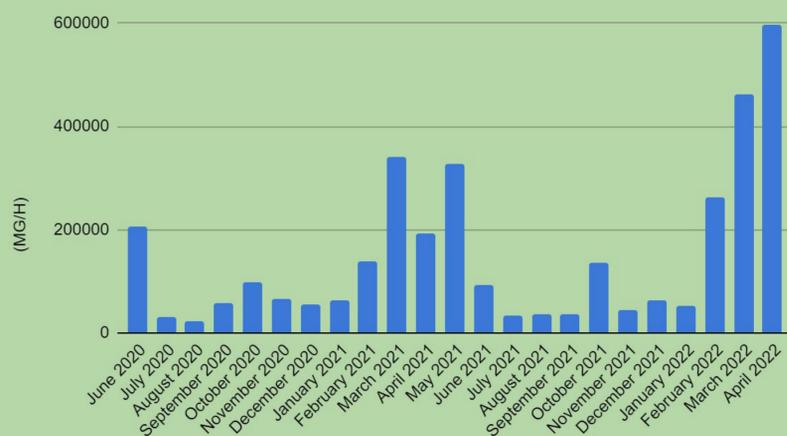
The reduction of output of renewable energy due to decreased demand

California Solar Energy Capacity in Megawatts



Solar panel energy output sometimes outpaces energy demand. There has been a reduction in commercial energy needs, but an increase in residential energy needs.

Energy Curtailment in California in Megawatt Hours



Energy companies will need to find a way to be profitable in the long term when energy supply outpaces energy demand.

Adrian Avila  
California Polytechnic State  
University, San Luis Obispo  
aavila33@calpoly.edu

**Abstract:** Solar energy has problems that can affect its growth in the long term such as lack of government incentives, high cost, and energy curtailment. California is a state that has been encouraging the use of solar energy and has introduced incentives for its citizens to install solar. Because of this, solar companies in California may be able to more adequately circumvent solar issues than companies in other states. In interviews with a southern California solar company, a discussion was had to find out why they were doing so well while other industries struggled to keep up. It was concluded that the solar industry will see immense growth in the future despite the problems they now face. Company responses were limited to residential and commercial solar installation in southern California.

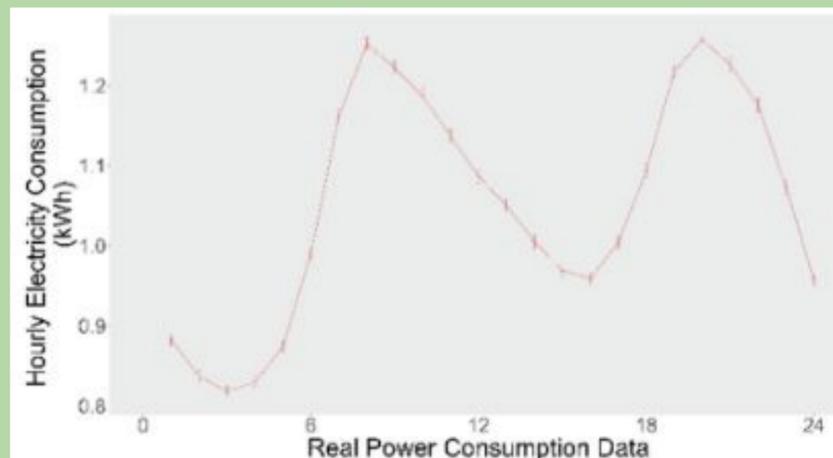
**Key Words:** Solar Energy, Covid, Inflation, Energy Curtailment, Employee Retainage

## Residential Power Consumption Change



Figure 1 to the left shows energy consumption data in Arizona before the pandemic (Ku, 2022).

Figure 2 to the right shows energy consumption data in Arizona after the pandemic (Ku, 2022).



The Investment Tax Credit



The state of California's incentives have made it more affordable for homeowners to install solar but more needs to be done

## Case Study

The pandemic affected this southern California solar company better than most companies.



The case study was done through formal interviews with a solar company based in Glendale, California. They perform a wide range of solar jobs which are composed mainly of residential solar installation as well as some commercial.