



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Jonah S. Mau	Project Number S0916
Project Title Dirty Energy	
Abstract Objectives/Goals My project was to determine whether or not dirt build up has an effect on the amount of energy made by a solar panel. Methods/Materials Two Identical solar panels were placed outside on a table, while the sun was out, the experimental solar panel was covered with dirt that ranged from 10mL of dirt all the way to 100mL of dirt, 10mL of dirt being added every trial until 100mL of dirt was reached. The control solar panel was clean of dirt. Each solar panel was connected to a current sensor and a voltage probe to see how much energy was made by the two solar panels, four trials for each amount of dirt were done over the lapse of a week. Results After 100mL of dirt had been applied to the experimental solar panel 26% of its energy was lost as compared to the clean control solar panel. Conclusions/Discussion My conclusion is that a solar panel loses energy when dirt builds up on it, and that cleaning your solar panels will ensure that you get the most energy that you can out of them.	
Summary Statement My project tested the difference in the amount of energy made between two solar panels, one that is clean and one that is dirty, to see how much energy is lost when dirt builds up on a solar panel	
Help Received Mr. Magni, my teacher, helped me with any questions i had, he also proof read my work.	