



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Juan A. Vasquez	Project Number S0837
Project Title Eco-Breeze	
Abstract	
Objectives/Goals To determine if solar-powered fans can cause enough air circulation to decrease the ambient temperature inside automobiles in warm climates.	
Methods/Materials Materials: DC Motor Cardboard Housing Solar panel A small fan Duck-tape solder gun Method-The Solar Fans were placed in the identical positions on the dashboards of three different models of vehicles over a period of time. Everything fifteen minutes the vehicles internal ambient temperature was taken and recorded, and subsequently graphed. The outside temperature was compared to the inside temperature so that it could be compared and contrasted giving us a perspective on the efficiency and effectiveness of our contraption.	
Results Within a time span of two hours and thirty minutes, the solar fans reduced the Honda Civic's internal temperature by five degrees Celsius, the Honda Accord's by three degrees Celsius, and the Honda Pilot's by 2 degrees Celsius.	
Conclusions/Discussion Solar-powered fans can cause enough air circulation to decrease the ambient temperature inside automobiles in warm climates.	
Summary Statement Utilizing a reusable natural resource to decrease the ambient temperature in the interior of a vehicle in warm climates.	
Help Received Teacher helped conduct experiments.	