



IN THIS ISSUE

- 2 **Solar Energy for Everyone**
Jermaine Baylark
- 3 **Selling Sustainability**
Jermaine Baylark
- 4 **Are Fuel Cell Cars the Future of Transportation?**
Phoo Khine
- 4 **Student Workshops Support Community**
Jomel Bautista
- 5 **A Farewell to Brandon Sauer**
Jomel Bautista

the GREEN INSIDER





SOLAR

ENERGY FOR EVERYONE



JERMAINE BAYLARK

In an effort to combat global climate change the Obama administration has made plans to initiate a program to help low and middle income Americans get access to solar energy. The Obama administration says it intends to triple the capacity of solar and other renewable energy systems it installs in federally subsidized housing by 2020, making it easier for homeowners to borrow money for solar improvements. Another aspect of the plan involves starting a nationwide program to help renters gain access to solar energy. The President's senior advisor for climate issues Brian Deese described the plan as "part of a bigger picture effort to try to drive innovation." At the same time of this announcement there was another development involving commitments totaling over \$520 million from charities, investors, states, and cities to pay for solar and energy-efficiency projects for lower-income communities.

Installing solar panels or other energy efficient devices in your home is normally a non-viable option for lower and middle class citizens but the efforts shown by the Obama administration illustrate that national efficiency is becoming a bigger topic in national government. This alongside other efficiency programs such as Green For All allow for everyone to take a part in conserving the planet regardless of wealth.



SELLING SUSTAINABILITY



JERMAINE BAYLARK

For years lighting companies have been predicting a time when LED bulbs will become the standard, replacing not only traditional incandescent lights, but halogen and compact fluorescents as well. That time has come for one global retailer, Ikea.

Beginning September 1, 2015 the company will sell only LED bulbs, part of its overall sustainability efforts. The company had planned a major investment in compact fluorescent lights, but it redirected it to LEDs. Chief sustainability officer of Ikea said, "Some of these technologies have to be driven faster." Besides from this plan, Ikea has also working on reducing its energy and including more renewables in store in hopes of producing as much renewable energy as the total in consumes globally by 2020.

Ikea is leading the way for other corporations that want to start offering more sustainable items in their stores. By selling LEDs on a large scale Ikea is increasing the chances of these types of bulbs entering households thus reducing that household's energy consumption. In the near future one could hope that big franchises such as Walmart and Target will start to become more energy conscience in the realms of the types of products they sell to consumers and the internal workings of individual stores.



GREEN ROOMS

- Do you live in the residential halls on campus?
- Are you interested in sustainability?
- Do you want to learn how you can be more sustainable in your room in the halls?

Sign up today to get your room Green Rooms certified by your trusted and trained RA!

<http://powersavecampuscpp.weebly.com/green-rooms.html>

Fuel cell cars have always been imagined as the cars of the future, with fuel cell technology giving off only water as a by-product. (More information about fuel cell technology can be read in the June Newsletter). The market of fuel cell cars is still developing with Toyota, Honda and Hyundai Cube who are incorporating it to fit into their competitive electric car market. Government is also taking part by providing incentives to people to own fuel cell cars and by developing hydrogen fuel stations that are scheduled to open in California by year 2016. But are fuel cell cars really the sustainable cars of the future?

To answer this, researchers from Swiss Federal Laboratories for Material Science and Technology analyzed the life cycle assessment for the use of fuel cells, including how they are produced, their life service, and how they can be recycled. The research produced several results that reveal that fuel cells are not always environmentally friendly. The reason being is that fuel cell cars runs with compressed hydrogen. Compressed hydrogen nowadays has to be manufactured by electricity and if the electricity is not coming from a renewable source, the fuel cell car cannot claim itself as environmentally friendly. Also the compressed hydrogen, which is produced by electricity, is converted to electricity again in the fuel cell to run the car. This makes the fuel cell car inefficient in comparison its counterpart gasoline engine cars which do not need to generate electricity to function. Another reason is that fuel cells require rare metals such as platinum. Unless another suitable material is to replace platinum, the price of the fuel cells would increase due to the shortage of platinum metals in the near future. Moreover, fuel cell vehicles when compared to its counterparts, are found to have a greater environmental impact according to EU power mix.

The EU power mix accounts for the total generation of electricity from nuclear, solar, wind, biomass, etc. It is always a good idea to trace back the sustainable roots for newly developed technology. Utilizing energy efficient methods and sustainable manufacturing processes, fuel cell cars will contribute to a smaller carbon footprint and the start of a transformation to more sustainable society.

ARE FUEL CELL CARS THE FUTURE OF TRANSPORTATION?

STUDENT WORKSHOP SUPPORT COMMUNITY

For the past two years, the Alliance has received a grant from the Los Angeles Department of Water and Power (LADWP) to implement the PowerSave Schools program at fifteen of Los Angeles Unified School District's most energy intensive middle and high schools. The program teaches integrated demand side management concepts, including energy efficiency, demand response and distributed generation to empower students to promote energy conservation. During the two years of the program, Alliance staff have worked closely with students and faculty team leads to create connections between the environmental/financial costs of energy waste and easy, convenient ways to save. The successful program reinforces the idea that students can significantly influence the energy efficiency of schools by creating a culture in which energy conservation is "the new normal." Students completed a wide range of lessons that incorporated follow-up activities directly related to their campus energy-conservation campaign, turning the school into a living laboratory in the process. As students saw success on campus they soon started to veer off-campus. At Eagle Rock High, students created an energy auditing certificate for local businesses, visiting 55 sites in one month to deliver energy saving recommendations!



A FAREWELL TO BRANDON SAUER



JOMEL BAUTISTA

The Cal Poly Pomona PowerSave Campus has recently parted ways with one of our strongest interns, Brandon Sauer. Brandon has been a member of the team for 3 years and has grown significantly as a project coordinator and leader. Brandon has been a key part of the program's growth and a key aspect of many of their innovative projects. Brandon took out much of his free time to train our recently received interns Jermaine and Phoo on various procedures. He has done it all, from being a tabling master during Campus Conservation Nationals and Mega Energy Competitions, to being the representative speaker for Cal Poly Pomona at several PowerSave Campus summits. During his term, Brandon brought metrics to new heights and definitely became a metrics guru. His expertise in Computer Science brought a dynamic to the Cal Poly Pomona team that we will dearly miss.

After graduating this past Spring from Cal Poly Pomona, Brandon landed a career in the computer science field. Though it is tough to see such a hardworking intern go, we know that Brandon will bring his skill set and help out the team he works with next. We hope this program has provided him a memorable experience and we wish him the best with his future endeavors.

CONTACT US!

Jomel Bautista jomelgbautista@gmail.com
Jermaine Baylark jermainebaylark@gmail.com
Phoo Khine phoo.93@gmail.com

POWERSAVE CAMPUS GENERAL INQUIRIES:

greencampus.cpp@gmail.com
powersavecampuscpp.weebly.com