

DOCKET**09-ALT-1**DATE APR 27 2010RECD. APR 27 2010

From: "George, Kiran" <kgeorge@Exchange.FULLERTON.EDU>
To: "docket@energy.state.ca.us" <docket@energy.state.ca.us>
Date: 4/27/2010 7:49 PM
Subject: Docket No. 09-ALT-1

Hello,

I am Kiran George, a Computer Engineering professor at Cal State University, Fullerton. I have always been a big advocate of alternative energy and personally believe that alternative energy is the best way to go to reduce America's dependence on foreign oil which is a threat to our national security and our economy as much of it comes from the world's most unfriendly and/or unstable regions of the world.

I try to inculcate awareness and the importance of alternative energy as much as I can in classes I teach. I try to include varied topics that focus on alternate means for fuel and energy for the senior undergraduate design projects and each time I do my students are thrilled to work on such projects and excited to be a part of something "Green". The most recent project has been about proposing and implementing a "Fully Automated Solar-Powered Biodiesel Processor" that produces biodiesel from waste vegetable oil (WVO), readily available from fast-food restaurants on campus.

<http://www.csufbiodiesel.com/theproject.html>
<http://kgeorge.ecs.fullerton.edu/StudentResearch.pdf>

I am a proud owner of a Honda Civic GX, which continues to hold the title of "greenest vehicles of 2010" and "greenest vehicle on earth" for the seventh consecutive year [American Council for an Energy-Efficient Economy (ACEEE)].

http://www.greencars.org/highlights_greenest.htm

Few of the reasons why I choose Civic GX are as follows:

- 1) 98% of all natural gas used in the U.S. is from North America. U.S. now has an estimated resource of over 2,000 trillion cubic feet of natural gas, which is massive!
- 2) According to the EPA, cars running on natural gas cut overall toxic emissions by 93-95%.
- 3) California has the most number of CNG refueling stations in the US (around 180).
- 4) The city I reside in, Riverside, promotes vehicles running on alternate energy by providing incentives such as rebates and subsidized CNG fuel.
- 5) Federal tax credit and California Clean Vehicle Rebate.
- 6) Possibility of obtaining "clean air stickers" that will allow me to drive in the car pool lane, which in turn allows me to spend less time on the road and more time with my family. (my total commute per day is 78 miles)

However, after I bought my car, to my utter dismay I learnt that CNG vehicles are not offered California Clean Vehicle Rebates anymore which truly is a shame. Currently, only Electric vehicles and medium size CNG vehicles are offered the rebates. Furthermore, all the "clean air stickers" will expire in January of 2011!

It has been predicted that by 2015 there will only be an estimated 31,347 natural gas vehicles sold in the U.S., compared to 684,980 in India and 327,106 in China.

<http://earth2tech.com/2009/10/19/natural-gas-vehicles-finally-set-to-grow-in-u-s-over-next-5-years/>

I cannot speak for China, but in my home county, India, I could go to any one of the zillion dealerships and get my gasoline car converted to a dual fuel vehicle for \$500 in a matter of hours!! My family in India has got a couple of cars converted and they have been working safely and efficiently for the past decade. The conversion kits have evolved so much that with the push of a button you can go from gasoline to natural gas and vice versa.

<http://www.autogas-india.com/about.html>

<http://dir.indiamart.com/impcat/gas-conversion-kits.html>

I believe the successes of developing countries like India and China in this area is due to the availability and possibility of the low cost for conversions and is readily accessible to the large middle class in these countries. If India and China can do it, I am pretty sure we can do it here in the US. In this respect, we here in the U.S. have a lot of catching up to do!!

To promote alternative energy such as CNG in US, in my opinion, the concerned authorities should:

1) Provide further incentives/rebates to buyers like me to offset the incremental cost to buy a car which uses alternative fuel and is environmentally friendly. For example, I could have bought a gas version of Honda Civic and saved \$6000. My decision to buy a Civic GX (CNG version) makes environmental sense, but does not make any financial sense!

Providing incentives for medium-size CNG vehicles is great, but it will not make as much environmental impact as the light CNG vehicles since the total number of light vehicles in US will any day be more than medium-size ones.

2) Provide car pool lane access to drivers in populous area like LA and Orange county.

3) Educate people about the environmental impact of alternative energy and options they have. For example, some of the people in my university did not even know Honda made CNG cars or how readily available CNG fuel was in Southern California.

If you (authorities) "Build It, They Will Come"!!

Sincerely,

Kiran George

Kiran George, Ph.D.
Assistant Professor
Computer Engineering
Cal State Fullerton
Phone: (657) 278-2640
Email: kgeorge@fullerton.edu
Website: <http://kgeorge.ecs.fullerton.edu>