## SURPRISINGLY MORE THAN YOU THINK

## **By Senator Will Espero**

Let me give you a list of every day products\* that we all use. Think of how it might affect us if an essential component became scarce or the price for that component went up 500%.

ASA (pain reliever)	air conditioners	anesthetics	artificial turf
asphalt	awnings	bandages	boat resin
brushes	candles	car battery cases	carpet
car sound insulation	chewing gum	clothing	combs
compact discs	contact lenses	cosmetics	crayons
credit cards	curtains	deodorant	dishwashing liquid
disposable diapers	dolls	eyeglasses	fertilizer
fishing rods	floor wax	food preservatives	golf balls
hair coloring	house paint	ink	insulation
laundry detergent	medicine	milk jugs	movie film
packaging materials	panty hose	pesticides	pillows
plastic bottles	refrigerator linings	roofing	safety glass
shampoo	shaving cream	shoes	shower curtains
sports balls	sun glasses	surfboard	sweaters
telephones	tires	toilet seats	toothpaste/toothbrushes
toys	trash bags	upholstery	vitamins

The common constituent might surprise you – it's petroleum. Yes, the same substance which we pump into our cars also provides most of the items we use in everyday life. According to one source, more than half of our nation's oil consumption is for these and many more products – *more than half of our annual oil consumption*. Each day, according to one source, the U.S. uses 19.6 million barrels of oil, which is nearly two and a half times the next nearest country (China), U.S. oil consumption accounts for one-fourth of the annual oil consumption in the world.

Just 10 years ago, gas costs 90 cents a gallon. Today it's up over \$4 a gallon, nearly five times what it was a decade earlier. That's just gas for cars. Those of you who fly to the mainland have a pretty good idea of how hikes in fuel prices raised airfares.

Calling for forward-thinking energy policy, California Congressman / engineer Jerry McNerney said, "[B]uying millions of barrels of oil from overseas puts money in the hands of countries like Iran and Venezuela that are hostile to America. Achieving energy independence is essential for the economic well-being of California families, for our national security, and for the environment."

With such a great dependency on petroleum, running cars and airplanes is only the beginning of the problems we face if we don't take action to reduce consumption. Research and development has the challenge of finding, in the near future, alternatives to petroleum as a component of these many products so that before the shortage grows or the scarcity drives prices higher, we can make the shift to other resources and not have life interrupted or financially painful.

The Legislature is well aware of biodegradable products such as those distributed by Styrophobia. The company was trying to negotiate a neighbor island farming partnership for the food by-products that would go into making those food container and utensil products. Biodegradables came about mostly as an environmental response to landfill shortages and the "live forever" nature of petroleum-based plastics. Bioplastics hold great promise for using those parts of food that are now mostly thrown away and giving farmers a second source of revenue, and equally importantly, as an alternative to petroleum-based plastic.

The petroleum dependence issue is a major reason why it is critical that we support and encourage our young people to enter fields of science and engineering – to find solutions to our problems.

The 1970s OPEC oil crisis made rationing a part of life in the U.S. Europeans began manufacturing cars that run on compressed natural gas, siting about 2500 stations around the continent that supply this form of vehicle fuel. Brazil is perhaps the most well known country to take a "never again" response to the OPEC oil crisis. Investment in research made it possible for alternative fuels to be developed, and consequently, cars that run on those alternatives. A typical Brazilian fuel station offers ethanol, gasohol, compressed natural gas, and biodiesel. The alternative fuel cars we are familiar with in America are those that follow a second route – vehicles with systems that reduce or substitute petroleum – battery electric, plug-in hybrid electric, hybrid electric, hydrogen fuel cells.

In my next article, I'll talk more about what the Europeans are doing to in the area of renewable energy to gain their independence from the petroleum industry.

Our economic well-being is one crucial facet of the clean energy issue. Also at stake is American freedom and independence. National security is more than a military matter. It is strengthening our country so that we are not vulnerable to those who may want to hurt us by controlling the resources we need. Research and development expended to finding other resources that we can use in place of petroleum is imperative to increasing national security. As fictional Gov. Mike Morris tells the Ohio audience who have come to listen to the candidate in the new movie "Ides of March," the way you get rid of your enemies is you stop buying their products, then they go away.

\*This list was taken from the American Petroleum Institute's "Petrochemical Products" list.