

## Wireless Diplomatic Planet.Net

### EcoGreen

#### An Honest Dialogue

There are areas in the broad EcoGreen Dialogue that do require analysts, much less any rational observer, to suspend disbelief.

Put aside the argument that climate warming due to greenhouse gases, even if causative in its scale and impact to have any current or lasting effects, is a minor contributor to overall climate change. The Sun and the long term climate cycle direction overwhelm any contribution that coal and oil based (carbon energy) industries have made over the past several hundred years to climate changes. [See: Climate Change Factors]

This does not mean carbon-based energy pollution should not be reduced or eliminated.

This does not mean that we should be hostage to a potentially hostile supply of foreign oil that is diminishing in its quantity and increasing in its cost to refine as the newer supplies are deeper under lands and seas, thicker and less viscous (lumps of dense "tar" that require massive inputs of steam heat to liquefy and pressure push through the wells and pipes) and contain more bad elements (particularly higher sulfur content levels – more "sour"). Saudi Light Crude in contrast is more like cold honey in its color, density and relatively "sweet" (lower levels of sulfur).

Most prominently today, green businesses are based on the populist political view that industries are bad and ruin the earth. These efforts focus primarily on the smokestacks and tailpipes that blow burnt carbons and chemicals into the air and flush contaminants into the waters. These green businesses either urge regulations to support or impede markets or they provide services related to meeting existing regulatory mandates.

Setting mileage per gallon standards across an auto maker's production fleet is one example.

Creating carbon credit instruments and the markets that will trade them as incentives for businesses to reject or modify prescribed carbon-based fuel practices and adopt qualifying renewable energy alternatives is another example. [See: The Carbon Credit Impossibility, below]

These businesses are more advertising campaign than solution to the large scale realities. They bring the EcoGreen discussion that is valid into the consciousness – but they do not honestly reveal the genuine problems that need to be addressed, and which can be addressed.

Green businesses that target clean air, uncontaminated waters and foods, and cost-effective energy and resource utilization and renewal are exactly where the real EcoGreen dialogue should be focused.

There are "green" businesses that can and will be large enterprises with a balanced and positive impact on the quality and availability of clean air, uncontaminated waters and foods, and cost-effective energy and resource utilization and renewal.

Those "real-EcoGreen" dialogues require proper alignment with those goals, standards for the technologies and practices that relate to their effectiveness in achieving those goals, and the use of common sense analysis to consider the layers of causes, effects, truths and consequences that result from their activities, as well as the ability to evaluate and adjust when extremes and unintended consequences overwhelm the situation.

In every enterprise, there will be the immediate gain or advantage as well as the overall, system-wide effects. After all, enterprise seeks to find advantages.

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With EcoGreen, the roots of the glossy items have to be examined. It is a balancing act during the handover from traditional carbon-based energy dependency to alternative energy sources.

Two examples illustrate the balancing that is required.

First, the Scandinavian countries are using the revenues from their North Sea oil production to “green” their own industries and infrastructure. The Saudis, the Kuwaitis, Exxon and BP are also taking their oil based revenues and investing in technology and alternative energy systems. How do you balance between the impacts of that carbon-based energy and the ultimate green energy that it is funding? In a linear equation, the more revenues they extract from carbon-based energy, the more green energy we will ultimately achieve.

Second, conservation and systems that can add efficiency to the power distribution networks in the US confront a regulated price environment that does not reward either conservation or efficiency. Smaller and smarter users are not rewarded. Gaming the system back-fires on the users because the rules of the game are hard-wired to pay for the maximum capacity that they have built plus their operating costs of actual electricity production.

There are many practical conservation, efficiency and price-sensitive strategies and applications that buildings and homes can already employ, without installing alternative energy systems, to reduce the amount of electricity they use. Adjusting the hours during which electricity is used also brings utilization operating efficiencies (more generators running at constant levels of performance) and cost reductions to consumers as their demand is shifted away from peak high-priced periods to the lower-priced off-peak periods.

These are effective arbitrages for today even if strategies to take advantage of existing pricing inefficiencies only last until enough users join in to reach the tipping point of conservation at which utilities will respond and raise their rates to avoid shortfalls in their revenue streams.

Why is that?

Utilities have power generation available to meet peak requirements. As reductions in electricity use are achieved either through more efficient appliances, timers that turn off unused appliances, or shifting of uses to off-peak periods, i.e., being smaller and smarter - the overall cost structure of the utilities will not change.

They still will have generation capacity available for the peak demand level – and whether that capacity is used 50% of the time during any one day or only 5% of the time during any one day, the utility will have the full cost of 100% of that generating capacity in its charges.

The net to users, under the current pricing regulations and structures, is that as demand is reduced overall and portions of that demand are shifted to lower-priced off-peak periods, the net bill to the user may decline slightly, temporarily, but the user’s bill will quickly be raised back to or above the prior levels.

The utility will have to charge more for its regular output, and raise prices on its off-peak output, in order to pay for 100% of the capacity that they have installed and in reserve. The formula is not based on pay for play, but on pay for capacity costs and operating costs spread across the demand base – even if that demand base is smaller or smarter.

Paradoxically, over time, as more growth-based demand arrives, the utilities will have the capacity ready to power-up, and they will have higher rates in place since the reductions and efficiencies had the consequence of raising the price structure in advance of the increased demand.

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There is also the reduced incentive for investment by the utility during that rubber band period between reduced demand and lower priced off-peak periods for the electricity and the growth-based demand appearing. That delay in re-investment by the utility and the slower pace of its investments in newer technology and replacing its older, less-green, power plants with more efficient, more-green power plants has serious implications on the entire economy of EcoGreen enterprise.

What incentives other than a short term pricing arbitrage (lower electric bill to the user) can conservation and efficiencies have in reality?

How do technologies and systems that increase efficiency in use with combinations of demand reduction (get smaller) and demand time-shifting (get smarter) create enterprises and strategic partnerships with the installed industry of electrical generation and distribution?

These questions have not approached the difficulties that alternative energy investments – on both a macro-industrial scale (wind-farms, solar farms, etc.) and micro-scale (home and business solar panels and net-metering regimes) – will face confronting the regulated utilities.

The EcoGreen Dialogue is one of the most interesting, the most complex and continual discussions that we will have over the next decade.

Have you changed the future today?

David W. Alvey, Executive Director and Editor

Send your responses to:  
dalvey@diplomaticplanet.net – Subject: EcoGreen (Honest Dialogue)

Climate Change Factors:  
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