

New Approaches to Energy sources, policies

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Thanks to the Sun papers for highlighting the importance of Florida energy policy and asking us what we think. (*Higher Energy Costs Coming*, p.1 Sunday 7/17). Here are some thoughts on proper goals, how we can categorize the various energy sources, what costs matter most, and what public policies can help us achieve objectives. It's a given that energy must be safe, reliable and abundant and affordable. After that, I suggest our criteria be a stable climate, creation of jobs and growing the overall economy.

The UN panel and Union of Concerned Scientists tell us that if we are to achieve a stable climate we must reduce emissions of greenhouse gases (GHG) 40-50 percent by 2015 and 70-80% by mid-century. **Fossil fuels** such as coal, oil and gas are the major contributor to GHG emissions. We need policies that leave these fuels in the ground. "**Renewable" energy**" is produced using the sun, wind, etc. or from crops rather than using fossil fuels. But the term "renewable" can be an unnecessary distraction in our quest to reduce GHG emissions because some renewable fuels are GHG emitters. Let's take the Biofuels ethanol and biodiesel for examples. Made from corn and soybeans (or other vegetable oils, animal fats, or recycled restaurant grease) respectively, these fuels have been used to replace gasoline and petroleum diesel. While ethanol and biodiesel may produce less GHG than their fossil fuel equivalents, they still emit. It might be claimed that the GHG emissions benefits of Biofuels are not so bad because the CO₂ released during fuel combustion is offset by the CO₂ captured by the plants from which Biofuels are produced. But, it would be better to forego the emitting activity and enjoy the benefit of the offsetting activity as well. I say let the corn and soybeans grow, capture carbon, and then let's eat them instead of burn them. **Non-combustible sources** are what we need to strive for: solar, wind, nuclear, and hydro power do not emit GHGs.

Two policies will go a long way to achieving our energy goals. At the Florida state level, a **portfolio standard** should require utilities to generate a certain percentage of their power (45% by 2025; 75% by 2050) from non-combustible sources. The clear and firm target date in the law would offer certainty to investors and developers of up-to date, non-emitting sources while helping utilities move away from older, carbon intensive sources of energy. **Carbon Fee and Dividend** is a federal law proposed by Citizens' Climate Lobby. CF&D places a steadily rising fee on fossil fuels and gives all the revenues back to households as a monthly dividend. A border adjustment motivates other countries to put a price on carbon too and stops business relocation. CF&D is good for the economy and good for the climate. A study by Regional Economics Modeling Inc. projects the creation of 2.1 million jobs after 10 years, growth in GDP and real disposable Income, saving 13,000 lives per year in the USA and lowering carbon

emissions 33% in 10 years; 52% after 20 years. A household impact study shows CF&D resulting in a net income gain in our region. As energy prices (for emitting sources) go up, the dividend more than pays for it. Meanwhile people shift from old fashioned to newer, modern sources of energy, saving even more money.

The cost of not changing our energy policy is unthinkable - rising sea level/ global temperatures, drastic weather, loss of species, increased conflict, etc. On the other hand, we have everything to gain with a shift to modern, climate friendly sources of power. In addition to a stable climate, we can save lives, gain jobs and promote a stronger economy with two public policies: a Florida energy portfolio standard (45% reduction in GHGs by 2025, 75% by 2040) and Carbon Fee and Dividend legislation.

Coty Keller commanded two ships before retiring from the Navy. He served as professor or National Security Affairs at the Naval War College. A Florida Master Naturalist, Coty is co-leader of the Port Charlotte/Punta Gorda chapter of Citizens' Climate Lobby. He is the author of *40,000 Pound Carbon Diet: how a middle class American family reduced their carbon footprint 75% (and made money doing it)*