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The Question of Energy Sustainability

by Robert Farmer, ©1997

For the Energy Advisory Committee of the Governor's Commission for a Sustainable South Florida, energy sustainability is the central question facing its members today. As most will agree it's a multi-faceted issue delving into the far reaches of energy supply and consumption patterns, and involves our ability to recommend changes and solutions to those patterns for the longer term good and health of (South) Florida, its businesses and its citizens.

On a relative scale I believe it's easier to identify the existing supply and consumption patterns and only slightly less easy for us to agree on the patterns which need to change over time. But the really difficult part, for anyone tackling these kinds of issues, is identifying and defining economic solutions, agreeable to all parties, upon which the changes can be made.

For years the world has known that a combination of energy efficiency, renewables and R&D represent the only bridges to a green and bluer future where the threats of global warming, pollution, and natural resource depletion are reduced to sustainable levels. But how do you get these programs sold in a world where energy resources and the environment have traditionally played second and third place, respectively, to economics?

One recommendation would be to call upon Ralph Cavanagh of the Natural Resources Defense Council (NRDC) to impart his special brand of knowledge and wisdom into the Florida equation.

In December Mr. Cavanagh received the 1996 Heinz Award in Public Policy. The citation states that "Ralph Cavanagh receives the Heinz Award in Public Policy for his highly effective work in creating a model for future energy policy. Professor Cavanagh's work with the Natural Resources Defense Council resulted in perhaps the most ambitious plan for energy conservation ever undertaken. His innovative work allows utilities to profit from energy efficiency. He was able to achieve consensus among utilities, conservationists, consumers and regulators to promote energy savings and a cleaner environment."

Since joining NRDC in 1979, his focus has been reducing the air pollutants produced by the electric utility industry. In 1993 these accounted for 72% of all sulfur dioxide (SO₂) emissions in the US, 33% of all nitrogen oxides (NO_x), 32% of all particulate matter (PM), 23% of all mercury and 36% of all (human) emissions of the dominant greenhouse gas carbon dioxide (CO₂) (from EPA comments to FERC, 1995).

By 1989, he was acknowledging that Californian utilities were losing their appetite for energy efficiency programs,

and proposed that an adversarial future might be avoided if the gas and electric utilities, rate payers, regulators and conservationists were willing to meet in a cooperative effort to make decisions by consensus. As a result Ralph Cavanagh is widely credited for launching the California Collaborative which, since 1990, has reduced Californians' energy bills by over \$2 billion with corresponding reductions in power plant emissions — all with utility-financed energy efficiency measures.

With the coming of deregulation, he has realized new opportunities to restructure the industry in the direction of sustainability. The cornerstone of his approach doesn't change — utilities should be rewarded for improving energy efficiency; profits do not have to be linked to increased electricity use. He proposes changing the economic mechanisms for transforming the market. One example of the mechanisms he champions is a *systems benefit charge* (SBC). In the briefest of descriptions, the SBC is a non-bypassable, usage based fee applied to retail distribution services to cover "public purpose" energy efficiency improvements, renewables, R&D and low-income services. It requires no change in current rates, rate structures or cost allocations among different customer classes. The major feature is that state regulators would make it explicit that customers may not bypass

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their share of contributions by choosing a new supplier of kWh over the integrated grid.

With the four “public purposes” at the forefront, in 1996, he shared in the creation of his most ambitious market transformation project to date. The Northwest Energy Efficiency Alliance came into official existence on October 30th as a multi-state energy conservation partnership funded by the region’s six major investor-owned utilities in Washington, Oregon, Idaho and Montana and the Bonneville Power Administration.

Clearly, a fuller understanding of Ralph Cavanagh’s vision and his energy sustainability model could be of great assistance to us here in Florida. •



Robert Farmer is an energy planning engineer and energy policy specialist. A comprehensive resource on technologies, issues, and policies, he offers clients strategies, briefings, and presentations on planning a sustainable energy future.

His technical expertise includes large scale to small scale power generation, combined heat and power (CHP), marine and surface transportation, and alternative fuel applications.

A Florida resident since 1984, Robert was a member of the Energy Advisory Committee of Governor Chiles’ Commission for a Sustainable South Florida.

He is a Regional member and Market Development Chair of the Gold Coast Clean Cities Coalition (a U.S. Department of Energy program), and a member of the Southeast Air Coalition for Outreach (SEACO, an initiative of the Florida Department of Environmental Protection).

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He is also a member of the Board of Directors of the Tallahassee-based law firm, Legal Environmental Assistance Foundation, Inc. (LEAF), and of Third Planet, a Fort Lauderdale-based public charity.

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