R E P R I N T E D F R O M

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EAC Report: Florida is Not Energy Sustainable

by Robert and Linda Farmer, ©1997

For over a year the Energy Advisory Committee (EAC) of the *Governor's Commission for a Sustainable South Florida* has been engaged in intensive 2-day sessions each month to consider the factors affecting Florida's energy future, and make recommendations through the Commission to the Governor that ensure Florida's energy sustainability.

On September 4th, the EAC presented its *Report on Energy Issues,* including 37 recommendations with specific action steps, to the *Commission*'s Quality Communities Committee. The following is our Introduction to the report.

INTRODUCTION

A Global Predicament

There is mounting international concern and scientific evidence that our planet is currently on an unsustainable course:

• even if they last for decades, our fossil fuel resources are finite and will disappear

• our economies are almost totally dependent on fossil and nuclear fuels

• worldwide economic development and increasing population is driving further energy demand, and

• our environment is being severely damaged by our current patterns of energy use.

"The overwhelming balance of evidence and scientific opinion is that it is no longer a theory but now a fact that global warming is real," President Clinton pronounced to the American people as recently as July 24th, 1997.

Florida's Predicament

The Energy Advisory Committee of the *Governor's Commission for a Sustainable South Florida* began its work by asking: What are the energy issues we should be concerned about today? In identifying these issues, the committee found that global concerns for social, environmental and economic degradation are compounded in Florida:

• we have extremely limited commercially-viable fossil fuel resources

• because we are almost totally dependent on outside sources for our fuel supplies, we will continue to face ongoing and potentially increasing energy security concerns

• expected population and tourism growth threaten to push the state to the limits of its carrying capacity, and

• the potential impacts of global warming on our state are staggering — it will not only affect Florida with more frequent and more dangerous storms, but rising sea levels will contaminate our fresh water aquifer, and we face the very real possibility that we will be among the first places on the planet to literally lose ground.

Economic Opportunities

While our energy challenges are real and growing, on the plus side significant developments have occurred in the past decade to position us to meet the challenges of developing a sustainable world, both for today and for the future.

In "Beyond Greening: Strategies For A Sustainable World" (*Harvard Business Review*, January 1997), Stuart Hart reports that "the more we learn about the challenges of sustainability, the clearer it is that we are poised at the threshold of an historic moment in which many of the world's industries may be transformed....The achievement of sustainability will mean billions of dollars in products, services and technologies that barely exist today....Over the next decade or so, sustainable development will constitute one of the biggest opportunities in the history of commerce."

Perhaps the most important message overall that the Energy Advisory Committee has to convey is this: the tremendous potential for economic growth presents an exciting opportunity for Florida to become a world leader in the development of sustainability technologies, *while of necessity* developing our path to a sustainable future. Within our state we have all of the assets at our fingertips — including cutting edge R&D on new technologies using solar and other renewable resources — we simply must ensure that our future and the opportunities are not lost through our poor planning and/or inaction.

Strategic Foresight

Two years ago Texas became "the first state with the foresight to produce a

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strategic plan for systematic integration of renewable energy and energy-efficiency practices into energy development, production and use."

Concerned about their energy future, representatives from state government, sustainable energy industries, utilities, consumer groups, and environmental interests developed a strategic plan for a sustainable energy future for one of our country's oil and gas giants.

Stating that Texas is facing a declining fossil fuel supply, and has experienced economic growth that has shifted the state from energy independence to being a net importer of energy from foreign suppliers, in *Texas Energy For a New Century*, the Texas Sustainable Energy Development Council offers a practical plan "for securing energy independence by reducing our state's growing reliance on outside energy resources".

If Texas is worried about its sustainable energy future, it is all the more certain that Florida's needs are critical.

It is high time we develop and implement a sustainable energy plan for our state.

Florida's Energy Future

Sustainable development is a path of continuous improvement towards the future we all want. Energy issues are a critical component of sustainable development, and responsible planning to move us toward a more sustainable pathway is vital — without a strategic plan, poor energy choices pose a dramatic threat to the future of our economy, environment and quality of life. On our current path, Florida is not energy sustainable.

The *Recommendations* of this report are a start on our path to a sustainable energy future for Florida. They are not all-inclusive, but they do indicate that fundamental changes in the way we think about energy must be made now to get us to that future. Florida's sustainable energy future must be built on the following foundations:

1. Energy Planning: We need a comprehensive state sustainable energy plan, and a timetable for its implementation.

2. Pollution Prevention: Our planning must be based on the use of clean energy resources and technologies.

3. Improving Efficiencies: We must improve energy efficiencies, both in power generation and transportation (the largest users of energy) and by our ever-growing numbers of consumers.

4. Developing Clean, Sustainable Technologies: Solar energy is the one clean, renewable resource Florida has in abundance. We must innovate and build the technologies needed to convert its power into forms we can readily use. In the development of these technologies, Florida has the unique potential to develop a niche and become a world leader while creating a new high tech industrial economy.

5. Barriers & Incentives: Existing government policies relating to energy use should be revisited for applicability, implementation, and enforcement. Barriers to sustainable energy technologies and their use must be removed. Incentives must be provided for the development and use of sustainable energy technologies and energy efficiency measures.

6. Transition Strategies: Natural gas is a relatively benign fossil fuel and should be regarded as a bridging fuel on the path towards clean technologies and energy sustainability.

7. Government As Consumer: Government must lead by example in the application of sustainable technologies within its own infrastructure.

Summary

A sustainable energy plan is a plan for our state's economic growth and environmental and societal improvement.

We have the power of choice to make changes that redirect our resources on a sustainable path, while creating the biggest opportunity in our state's economic history. A new high-tech industrial base will employ many thousands of Floridians in sustainable infrastructure development, and add major new revenue sources to the state's largely tourism-based economy.

The reasons are compelling; we must act now.•

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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).

He is a member of the international Association of Energy Engineers (AEE) and since 1992 has served on the Board of the Southeast Florida Society of Energy Professionals, the local AEE chapter. He is a member of the Sound Science Initiative of the Union of Concerned Scientists, and a member of the United States Association for Energy Economics (USAEE).

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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