County, Florida saw the need to develop an overarching community-wide, strategic vision to sustain its economic potential, social capital and environmental resources. It is anticipated that energy and dimate issues will be at tipping points in the next ten years, so *community engagement* policies are critical toolsets for local governments now.

Governments that engage these issues in a vacuum and that treat people as clients instead of citizens will not be prepared for these emerging threats. When asked to focus on solutions, not problems citizens can build wide investment in recommendations that enhance participatory democracy in creative and culturally relevant ways. Citizens may be disempowered, by well-meaning efforts of their representative governments "going solo". It is critical that all stakeholders formulate the response to energy and environmental challenges. And in Florida the challenges faced are daunting: severe vulnerability to rising sea levels, the third largest consumer of fossil fuels in the US (4.6 Trillion Btu) and expenditures of \$60B for these imports. Shared governance on these issues means that the responsibility and authority to address them does not rest with local government alone, but also depends upon citizen action, leadership and stewardship to create a more sustainable Florida.

Problem Assessment: Faced with rising energy costs, finite fossil fuel energy, and looming climate crises, Alachua

Program Implementation: As a process, this program addresses ICMA Core Beliefs in the power of representative democracy as a motivating force to deal with potential cataclysmic issues in an ethical and sustainable manner for all sectors of society. Alachua County is, in essence, shrinking its *carbon footprint* by growing its *civic footprint*. People through community, not technology, are the transformative solution to these interlinked crises. Between June 2007 and December 2008, the Alachua County Energy Conservation Strategies Commission (ECSC) established 204 categorized goals based on the guiding principles of energy use: first, to reduce consumption; second, to enhance energy efficiency; and finally, to promote renewable energy deployment. It employed an innovative use of an all volunteer, 15 person advisory board in conjunction with web-based, information sharing technology and an *aggressive* community outreach program (170 meetings in 2008 alone) as a cost effective way of drafting a

comprehensive report on energy use, its relationship to climate change and local socio-economic impacts, including actions that can be implemented by the Board of County Commissioners and the community at large. Approximate program costs were \$28,000 for three quarters time of a staff liaison and printing costs to assist the Chair of the advisory board coordinate public meetings and documentation. Two unpaid interns and a community volunteer were also invaluable resources.

ECSC members and staff used Microsoft SharePoint as an innovative application of technology to organize a massive array of information into a library of resource documents, articles, work-in-progress, and calendar of meetings. The site can be found at http://energy.alachuacounty.us. Archived information on the site continues to stimulate an ongoing public dialogue about the challenges and economic opportunities of an energy-uncertain world.

Through the use of this technology and a series of *roundtable discussions*, community dialogues were hosted with local banks, the Chamber of Commerce, construction and real estate industry, University of Florida, citizen groups, municipalities, and utilities. Collectively, 53 topical presentations to civic and community groups between July 2007 and October 2008 have moved Alachua County to a more sustainable energy future.

For quality and creativity, at the broadest perspective, the ECSC answers the Board of County Commissioners' goals of enhancing and preserving quality of life, creating community partnerships and striving for excellence in county government to promote economic growth and environmental stewardship. ECSC members recognized that local government will not have all the resources for, or the answers to, all energy and climate challenges. Because of this, creativity and quality are enhanced by the need for strategic partnerships. These exercises in governance have contributed to green collar economic growth and environmental responsibility by: identifying employment opportunities that will grow new local businesses around discards and recyclable materials at an in-design Resource Recovery Park (300 direct jobs, 300 indirect jobs); encouraging alternative energy deployment and manufacturing

weatherization initiatives (a public/private and faith-based partnership for a 10,000 Home Weatherization Initiative). **Results:** *Economic Viability/Security* - The initiative enhances the economy of the community by emphasizing the market-based transformation from fossil-fuel dependence to a low-carbon, material reuse and alternative energy based economy. As a result, ECSC green collar businesses are now targeted industries for recruitment/development shared with the Chamber of Commerce and local workforce board. This focus contributed to the 2009 national

recruitment (4 MegaWatts of Solar Photovoltaic deployed per year); and the promotion of community-wide building

recognition through the U.S. Chamber of Commerce's Institute for a Competitive Workforce Region of Excellence

Award and the Florida City and County Management Association 2009 Program Excellence Award for Community

Sustainability.

Great value was placed on incorporating partnerships and stakeholder involvement with the business community. Chamber of Commerce representatives, the business and financial communities were recruited to engage in special meetings to assist defining the implications of an energy scarce world. Through this, the partners were able to envision new private sector enterprises, job creation and financing alternatives. In December of 2009, this effort resulted in the recruitment of the lithium-ion battery manufacturer, Bren-Tronics to a brownfield industrial site redesigned as an eco-industrial park. This technology, its 15 and growing jobs will be a strategic local and national asset for years to come.

Related to business recruitment and workforce excellence, another initiative impacted by the ECSC report was the Innovation Gainesville project rolled out in January 2010. This was a strategic partnership between the University of Florida, health care industry, the Chamber of Commerce and local governments to revise land use regulations within targeted activity centers to act as economic magnets for knowledge-based, green collar employment centers.

Environmental and Social Integrity - The initiative reduces the environmental footprint of the community by analyzing past and present conditions of County government and community measures in CO2 emissions, energy

consumption, building stock and dependence on energy intensive fossil fuel manufacturing, transportation and agriculture production. Trending analysis for greenhouse gas emissions is ongoing. In 1998, estimated emission for Alachua County operations was approximately 17,525 tons CO₂e. Draft reports for 2008 suggest emissions at 28,000 tons CO₂e. A significant increase in emissions is due to the trucking of waste for disposal outside of the County. ECSC recommendations address this issue through a 2009 to 2011 design of a local, anaerobic digestion plant. At this location, food waste for energy production would reduce the County's hauling footprint 25%. In addition, 36 kW of photovoltaic panels are powering County waste management structures as of June 2009, meeting 15% of the compound's energy needs.

ECSC energy conservation recommendations for County operations are estimated to reduce utility consumption 30% by the end of 2010. October 2009 air conditioning upgrades to the County Administration Building will save \$43,000 per year alone. And in February 2010, the Commission directed that all utility savings be deposited into an Energy Efficiency Reinvestment Fund, establishing a revolving pool of dollars specifically for continued operational upgrades to building energy systems. ECSC solutions that reduce the environmental footprint of the community were defined in December 2009 around a massive, weatherization program. As designed, over the 15 year life of the residential upgrades, $150,000 \, \text{Tons} \, \text{CO}_2\text{e}$ would be eliminated and a 19% reduction in energy consumption for $6,000 \, \text{low-income}$ households. A first in the nation Feed-in Tariff program was also supported by the ECSC. Started in January 2009, this program will deploy 4 MW of photovoltaic power in Alachua County every year till 2016.

Replication - Alachua County has continued to share its findings and replicate the advisory board process with surrounding communities via community presentations, websites with video on demand and the local government television channel. Professional and leadership organization presentations to the Florida Association of Counties and the Alliance for Innovation Transforming Local Governments are another, ongoing means of disseminating the methodology and content of the report with other counties and states.

Lessons Learned: Overwhelming support from all citizens and stakeholders occurred because of the active engagement strategy of the ECSC. Participants in the process were challenged to see a shared governance perspective to find solutions, without fixating on barriers. Dynamic processes are intense, but rewarding for constituents as results were brought forward for immediate application even before the release of the final report. Out of the final 204 recommendations, the following five "opportunity" areas can be surmised for communities wishing to design a more sustainable city or county:

- 1. Implement a weatherization & energy efficiency upgrade program for all residential and commercial building stock. For every \$1 million invested in weatherization, 52 jobs are created. Related ECSC proposals would generate 1,196 local, green collar jobs for a large numbers of unemployed construction workers as well as youth employment opportunities. In 2009, 120 youth (many in juvenile justice) and adults have been trained as retrofit specialists.
- 2. Create community employment opportunities & grow new local businesses ("relocalization") around discards and recyclable materials. The Institute for Local Self Reliance estimates that a regional population base of 1 million people will support 1500 jobs and generate \$250 million for the local economy.
- 3. Develop sustainable mobility infrastructure (focus on public transportation) independent on fossil fuel consumption. ECSC recommendations influenced the long range transportation modeling of Peak Oil impacts as well as a soon to be built Bus Rapid Transit based transportation system.
- 4. Maximize local food production not dependent on fossil fuel based herbicides, pesticides and fertilizers. Efforts are underway through the County's review of its Comprehensive Plan to preserve agricultural lands, bring together community stakeholders and support interlocal government initiatives for food security.
- 5. Maximize local, renewable (non-fossil fuel based) energy production. For Alachua County this translates to solar power. Per megawatt, solar panels have the potential to generate more jobs (15.2 in the manufacturing sector and 7.1 in construction) than wind, geothermal or biofuel energy.