SOUTHWEST FLORIDA
CLIMATE PROSPERITY STRATEGY

Presented to
The Southwest Florida Regional Planning Council

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EXECUTIVE SUMMARY

Global Urban Development created the Climate Prosperity Project in 2007, with financial support from the Rockefeller Brothers Fund and the Environmental Defense Fund. The Climate Prosperity Project is based on the proposition that responding to the challenges of climate change represents a very substantial economic opportunity. Southwest Florida is one of 8 locations selected to pilot Climate Prosperity Strategies and the Southwest Florida Regional Planning Council has been selected as the lead agency for the Southwest Florida Climate Prosperity Strategy.

Southwest Florida understands that climate and environmental amenities – most notably the Everglades and the Gulf Coast – have always been central to economic prosperity in the region. At the same time the potential for hurricanes and the fact that much of the region is low lying put it at risk in relation to sea level rise. Building on the green assets of the state/region, the Southwest Florida Climate Prosperity Strategy is organized as three initiatives – Green Savings, Green Opportunities, and Green Talent.

Green Assets: The State of Florida and the Southwest Florida region have a strong commitment to climate action and they offer a wide range of green assets that are important for the implementation of a Climate Prosperity Strategy.

- Some of the State assets include: The Governor's Climate Action Team; Florida Solar Energy Center; Sustainable Florida – Collins Center; and the Florida Farm to Fuel® Initiative and the BioFuels Association.
- Some of the regional assets include: the Southwest Florida Branch of the Green Building Council; the Center for Environmental and Sustainability Education at Florida Gulf Coast University; Florida House; and five different county and city sustainability initiatives.

The Green Savings Initiative includes 5 Green Programs:

1. ***Eco-Smart Development***: Establishment of solar powered, energy efficient, walkable communities, such as Babcock Ranch, with associated open space, organic agriculture, and preservation zones. Other such developments include Ave Maria, Big Cypress, Lakewood Ranch, and Green Mile.
2. ***Hurricane/Energy Efficient Retrofits:*** Development and wide implementation of a new type of retrofit that combines hurricane hardening with energy efficiency measures such as insulation, appliance and window replacement, and weather stripping and duct work.
3. ***Green Business Partnership:*** Expansion of the Sarasota Green Business Partnership to the other counties in the region, encouraging environmental stewardship by recognizing businesses that operate in an environmentally responsible manner.
4. ***Climate Adaptation:*** Completion of the Charlotte Harbor Climate Adaptation Strategy, leading to the opportunity to provide Climate Adaptation Consultations to other regions.

5. ***Environmental Mitigation Banking:*** Instituting environmental mitigation banks, such as Panther Island and Big Cypress, to create, preserve, restore, or enhance a wetland, stream, or habitat conservation area.

The Green Opportunities Initiative is composed of 6 Green Programs:

1. ***Biofuel Industry:*** Partnership with the Farm to Fuel® Initiative to expand the number of biofuel vehicles; increase fueling facilities, and expand production, such as the new Verenium owned Highlands Ethanol Project.
2. ***Solar Industry:*** Promotion of the installation and use of solar energy, particularly solar hot water heating.
3. ***Green Inland Port:*** Establishment of a Green Port Policy for the new Inland Port, which will be an off-site warehousing and distribution center to which Florida seaports can ship containers for unpacking.
4. ***Green Incubator/Accelerator:*** Creation of a green dimension for the Southwest Florida Virtual Incubator/Accelerator and the Regional Incubator Network to provide assistance to green and clean tech businesses.
5. ***Sustainable Agriculture:*** Partnership with Florida Certified Organic Growers and Consumers to expand the market for organic agricultural products and to assist farmers to undertake or expand organic farms.
6. ***Ecotourism:*** Partnership with the Society for Ethical Ecotourism – Southwest Florida to support of the ecotourism industry in the region.

The Green Talent Initiative is built around 3 Green Programs:

1. ***Green Talent Program:*** Organization of a Green Talent Leadership Group to design and implement a Green Talent Program to: identify green industry sub-sectors; recruit job candidates; provide job readiness and skill training; and arrange for placement and post-placement support.
2. ***Green Business Education:*** Partnership with one or more Florida educational institutions to develop and implement a Green Business Education Program for clean tech entrepreneurs and green business managers with responsibility for environmental/sustainability programs.
3. ***Location-Neutral Workforce:*** Promotion among retirees, second home owners, and vacationers of "location-neutral" work opportunities that do not require particular locations because of Internet and broadband connections.

Organizational Infrastructure: The organizational infrastructure for the Climate Prosperity Strategy includes all of the different aspects of the Southwest Florida Regional Planning Council. In addition, two new groups are needed: a Southwest Florida Climate Prosperity Learning Network; and a Southwest Florida Green Talent Leadership Group. Implementation of the Climate Prosperity Strategy would be greatly benefited by an additional staff person, assistance from a consultation team, and additional finances.

Conclusion: A Climate Prosperity Strategy offers Southwest Florida the opportunity to build on its traditional strengths – weather, the Everglades, and the Gulf Coast – to turn the climate challenge into a great economic opportunity.

I. THE CLIMATE PROSPERITY PROJECT

Global Urban Development created the Climate Prosperity Project in 2007, with financial support from the Rockefeller Brothers Fund and the Environmental Defense Fund. The Climate Prosperity Project is based on the proposition that protecting the environment need not come at the expense of economic growth. Rather, addressing climate change and environmental disruption can actually be very good for the economy, significantly enhancing prospects for prosperity through increased jobs, incomes, productivity, competitiveness, efficiency, and cost-effectiveness.

In 2008, the Climate Prosperity Project selected eight "pilots" in the country to develop Climate Prosperity Strategies to assist in proving this concept. Southwest Florida is one of those pilots, along with Silicon Valley, the State of Delaware, Metropolitan Seattle, Metropolitan Denver, Metropolitan Portland, Metropolitan St. Louis, and Montgomery County, Maryland.

Elements of a Climate Prosperity Strategy

Each of these regions has agreed to create its own unique Climate Prosperity Strategy. The Climate Prosperity Strategies will vary widely in each area depending on what are the fundamental assets and liabilities, competitive advantages, and industry networks or clusters in that area. However, all of the strategies have a common structure and address three common elements.

The Climate Prosperity structures all include:

- A leadership group.
- A decision making council.
- An association of stakeholders.

The three common elements are:

1) Green Savings: All households, businesses, and governments can save money through increasing energy conservation, resource efficiency, and innovation, not only by using fewer resources, but by reusing more of what previously have been considered as waste products.

2) Green Opportunities: A green economy will be based on a new generation of products and services all of which will create many new businesses and jobs across the entire value chain, in manufacturing and production, marketing and distribution, and wholesale and retail trade. Business, government, and community actions to reduce greenhouse gas emissions will also greatly expand producer and consumer market demand for green goods and services.

3) Green Talent: Making the transition from a resource-inefficient capitalism to resource-efficient capitalism will require green talent – a new generation of green employment and entrepreneurial skills that will help build the essential foundation for a more competitive and productive economy. In addition,

improving the quality of life in localities through environmental and cultural sustainability and related amenities will be one the most effective way for state and local economies to attract and retain a highly skilled and well-motivated workforce of talented people.

Lead Agency: Southwest Florida Regional Planning Council

The Climate Prosperity Strategy in each of the eight regions is organized by a lead agency. In Southwest Florida, the lead agency is the Southwest Florida Regional Planning Council. (See Section IV. below for a description of the Southwest Florida Regional Planning Council.)

Guided by the Southwest Florida Economic Development Strategy Committee, the Southwest Florida Regional Planning Council formulates and manages the on-going Comprehensive Economic Development Strategy (CEDS) for Southwest Florida. In the 2008 CEDS Annual Report, the Southwest Florida Regional Planning Council established the Climate Prosperity Strategy as a 4th Project along with a Rural Catalyst Project, a Regional Incubator Network Project, and an Airport Economic Project.

The 2008 CEDS Annual Report provides an initial characterization of the Southwest Florida Climate Prosperity Strategy. In that document, the goals and objectives for the Climate Prosperity Strategy are to:

- Educate Southwest Floridians on the economic and environmental benefits of investments in green technologies.
- Attract and retain a cluster of environmentally sustainable and economically efficient businesses.
- Garner the long term economic and environmental benefits of Climate Prosperity.
- Increase the earning potential for Southwest Florida residents and businesses.

The outcomes sought from implementation of a Climate Prosperity Strategy are:

- Green jobs and green profits.
- Environmentally skilled workforce.
- Improved energy efficiency, therefore green savings and reduced greenhouse gas emissions.
- Sustainable business and household practices.
- Environmentally conscious businesses and households.
- Improved quality of life.

What follows is an elaboration of the Climate Prosperity Strategy for Southwest Florida to accomplish these goals and produce these outcomes.

II. CLIMATE PROSPERITY AND SOUTHWEST FLORIDA

Challenges and Opportunities

Climate: Southwest Florida is, of course, no stranger to the idea that climate and the environment are central to economic development in the region, both for good and for ill. Southwest Florida's excellent climate and outstanding environmental amenities – most notably the Everglades and the Gulf Coast – have always been key to economic prosperity in the region.

Southwest Florida certainly also understands adverse climate impacts because of the potential for hurricanes that cross the region. Much of the region is low lying and so any significant sea level rise will put it at risk, particularly at the time of storms.

Economic Strategy: Southwest Florida's primary economic development strategy has been characterized by some as encouraging tourism, leading to the purchase of second homes in the region, resulting in people moving to the region when they retire. In addition to tourism and housing development, the other leading economic clusters in the region have included health care, agriculture, and retail.

Economic Challenges: However, Southwest Florida was overbuilt during the housing boom and has been hit hard by the housing collapse and the national recession. Lee County is the number one county in the country for foreclosures. More than 58,000 people are unemployed in Southwestern Florida – more than 10% of the workforce. Florida used to be low cost state, but prices in Florida have risen to the point that this is no longer the case. The combination of higher costs and economic dislocation is posing serious economic difficulties for Southwest Florida.

While the environmental amenities in Southwest Florida are very strong, regional business and industry are not as strong. Public transit is not well developed, with cars on streets and highways providing the standard mode of transportation. While retirees have traditionally moved into Southwest Florida, young talent tends to leave the region, seeking more lucrative and exciting employment elsewhere.

A large number of sub-divided lots have been platted (an estimated 900,000 in just three of the six counties of Southwest Florida) and are owned but not developed or have very low intensity development. This land use pattern makes land assembly for larger scale mixed-use, retail, commercial, and/or industrial development much more difficult.

Opportunities: The Everglades, the Gulf Coast, and the weather in Southwest Florida constitute a national and worldwide brand presenting the region as a destination for tourists, escapees from the cold north, and retirees, e.g. the visiting the Everglades ranks high on lists of "ten things you must do before you die." The brand could be formulated as something like "Southwest Florida:

Prosperous Gateway to the Everglades and the Gulf Coast – *Thriving from the River of Grass to the Shining Sea*."

Southwest Florida has been very successful at attracting tourists, vacation home owners, and retirees. However Southwest Florida as a region has not fully embraced its brand or determined how to use it to encourage economic development. A Southwest Florida Climate Prosperity Strategy offers a way to embrace the Southwest Florida brand in a way to leads to much more robust economic development.

Green Assets

The first key to the implementation of a Climate Prosperity Strategy for an area is to map the Climate Prosperity assets in the area. A Climate Prosperity Strategy can not be artificially imposed on a region. Rather, the Strategy needs to grow organically up from the assets and the beneficial economic tendencies in the region.

A next step in the Southwest Florida Climate Prosperity Strategy will be to complete a comprehensive Climate Prosperity asset map for the region. However, a very preliminary scan clearly demonstrates that Southwest Florida is a sustainability/climate/green leader, drawing on the regions resources as well as resources in the rest of the state of Florida. A few examples follow.

Examples of State Assets

Governor's Climate Action Team: The State of Florida has demonstrated a strong commitment to reducing Florida's greenhouse gases and increasing energy efficiency. In 2007 during the state-led Serve to Preserve: Florida Summit on Global Climate Change, Governor Charlie Crist signed three Executive Orders aimed at addressing global climate change, reducing greenhouse gases, and increasing the state's energy efficiency. The Executive Orders are:

- Leadership by Example: Immediate Actions to Reduce Greenhouse Gas Emissions from Florida State Government.
- Immediate Actions to Reduce Greenhouse Gas Emissions within Florida.
- Florida Governor's Action Team on Energy and Climate Change.

The State's initiative provides a framework for addressing climate change in Florida, including commitments to reduce emissions and to pursue renewable energy sources such as solar and wind energy, as well as alternative energy such as ethanol and hydrogen.

The Governor's Action Team on Energy and Climate Change is tasked with developing a Florida Climate Change Action Plan that will go beyond the Executive Orders to reduce emissions and recommend proposed legislation for consideration by the Florida Legislature. To date the Action Team has made recommendations addressing power generation, transportation, and state and

local government that are aimed at tracking and reducing green house gas emissions better and establishing energy efficiency and conservation targets.

There are also a number of institutions in Florida that are important assets in relation to a Climate Prosperity Strategy.

Florida Solar Energy Center: The mission of the Florida Solar Energy Center is "to research and develop energy technologies that enhance Florida's and the nation's economy and environment and to educate the public, students and practitioners on the results of the research." The Center was created by the Florida Legislature in 1975 to serve as the state's energy research institute. The Center conducts research, tests and certifies solar systems and develops education programs.

The Center's 150-member staff includes 95 professionals with expertise in engineering, energy research, building science, energy and policy analysis, and education and training.

Sustainable Florida - Collins Center: Sustainable Florida's mission is to "improve Florida's economy and environment, while building a safer, healthier, higher quality of life for all of its citizens." Council activities include:

- Identifying exemplary, sustainable practices of business, government and citizen groups.
- Disseminating these practices statewide through strategic communications, publications and conferences.
- Actively encouraging others to adopt and build upon these best practices to sustain Florida's resources.
- Serving as a change agent in higher education and supporting an agenda that makes sustainability a cornerstone of academic practice.

Sustainable Florida coordinates a Best Practices Awards Program; an Educational Alliance for a Sustainable Florida; regional roundtables; and executive forums.

The Florida Farm to Fuel® Initiative: In 2006, the Florida Farm to Fuel® Initiative was statutorily created to promote production, distribution, and markets for renewable energy from Florida-grown crops, agricultural wastes and residues, and other biomass.

Beginning in 2006, The Florida Department of Agriculture and Consumer Services has hosted annual "Farm to Fuel® Summits" to help Florida take the next steps in promoting the production, distribution, and use of renewable fuels, particularly ethanol.

In 2007, the Florida Legislature established the Farm to Fuel® Grants Program to provide $25 million in matching grants for demonstration, commercialization, research and development projects relating to bioenergy. The Program intends to stimulate investment in energy projects that produce bioenergy from Florida-grown crops or biomass.

The Florida BioFuels Association: The Florida BioFuels Association is a non-profit trade association, with the goal of serving as the clearinghouse and repository for businesses and government agencies looking for information, education and resources regarding the biofuel industry.

The Florida BioFuels Association:

- Develops educational training programs and facilitates conferences related to bio-diesel, ethanol, and other agricultural and waste derived fuels.
- Coordinates with other environmental organizations, municipal and state agencies and acts as a liaison with industry development efforts in the biofuels arena.
- Serves in an incubator role, providing infrastructure development efforts to help support and launch new technologies and existing and new corporations.

Examples of Southwest Florida Regional Assets

Southwest Florida can also draw on a number of regional assets.

Southwest Florida Branch of the Florida Gulf Coast Chapter of the U.S. Green Building Council: The U.S. Green Building Council has created the widely used Leadership in Energy and Environmental Design (LEED) certification system that measures how well a building or community performs in relation to energy savings, water efficiency, CO_2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. LEED provides building owners and operators a concise framework for identifying and implementing: green building design; construction; and operations and maintenance solutions.

The mission of the Florida Gulf Coast Chapter of the U.S. Green Building Council is to "lead the region toward sustainability by encouraging and advancing environmental friendly knowledge and values as they pertain to the built environment and its relationship and impact on nature and human kind."

The Southwest Florida Branch serves Charlotte, Lee, Collier, Hendry, and Glades counties. The branch organizes lectures and tours which educate its members about national issues as well as local applications of green building practices.

The Southwest Florida Regional Planning Council is one of the first organizations to have a LEED certified planner on staff.

The Center for Environmental and Sustainability Education at Florida Gulf Coast University: The Center works toward "realizing the dream of a sustainable and peaceful future for Earth through scholarship, education, and action." The Center seeks to serve the university community, the local

community of the Western Everglades and Barrier Islands, and the wider community of scholars.

Center for Environmental and Sustainability Education Goals include:

- Advancement of innovative educational research methodologies and pedagogies in environmental and sustainability education.
- Education of an ecologically literate citizenry to advance civic engagement in the critical environmental issues of the Western Everglades and Barrier Islands.
- Professional development for educators in environmental education and education for sustainability.
- Provision of opportunities for faculty, administrators, staff, and students from across the campus to engage in scholarly activity, teaching, and service related to environmental and sustainability education.

The Lutgert College of Business, which manages the Small Business Development Center, and the Whitaker School of Engineering are also developing sustainability programs at Florida Gulf Coast University.

Florida House: The Florida House Institute for Sustainable Development in Sarasota is a non-profit organization that works to "build civic capacity around a practice of vision-centered, place-based planning for a sustainable future." The Institute initiated the Florida House Learning Center as a demonstration home and yard featuring environmentally-friendly building, rainwater harvesting, and sustainable landscaping materials and methods. Florida House offers a sustainability toolkit that includes:

- Getting started.
- Creating a comprehensive stakeholder group.
- Doing an inventory of the present state - natural, built, economic and social.
- Creating the vision.
- Developing indicators.
- Building capacity and creating the workplace.
- Creating centers for civic learning and community design.
- Using GIS and place-based planning and decision support tools.
- Implementing over the long term.
- Discovery and design charrettes.
- Sustainable design elements for real estate development.
- Sustainable urban-rural enterprise.

Sarasota County Roadmap to Sustainability: Sarasota County has adopted sustainability as a core ethic and it has created a "comprehensive 'roadmap' to document sustainability achievements and guide strategic goals for programs and policies covering everything from water and waste reduction to green building incentives and official recognition of leading green businesses."

Sarasota County has been joined by the Greater Sarasota Chamber of Commerce, Economic Development Corporation and Sarasota Convention and

Visitors Bureau in embracing long-term economic success, environmental stewardship, and social responsibility as critical to their own missions.

Among its many sustainability accomplishments, Sarasota County was the first American county to sign the 2030 Challenge for carbon neutrality and has the highest level certification of any local government through the Florida Green Building Coalition's Green Local Government Program. A green building and smart growth incentive program has expedited permits for more than 1,300 dwelling units and nine rezone areas committed to green construction. Monthly Sustainable Community Partnership meetings share ideas about the latest innovations in community sustainability.

Other Sustainability Programs: Lee and Charlotte Counties and the cities of Fort Myers and Sarasota also have clearly articulated sustainability programs that are being implemented effectively.

Drawing on the opportunities and the green assets that have been discussed above and others mentioned below, it is possible to formulate a Climate Prosperity Strategy for Southwest Florida.

III. A CLIMATE PROSPERITY STRATEGY FOR SOUTHWEST FLORIDA

As with the other Climate Prosperity regions, the Southwest Florida Climate Prosperity Strategy is organized as a Green Savings Initiative, a Green Opportunities Initiative, and a Green Talent Initiative. Each initiative includes at least five specific Green Programs.

1) Green Savings Initiative

The purpose of the Green Savings Initiative is to encourage businesses, households, and government agencies in South Florida to save energy, resources, and money. The Green Savings Initiative is composed of 5 specific Green Programs, based on Southwest Florida assets and opportunities.

Eco-Smart Communities: The Southwest Florida Region is poised to provide significant leadership nationally in the development of "Eco-Smart" Communities. Perhaps the leading example of Eco-Smart Development in Southwest Florida, Babcock Ranch, is planned as a "solar powered, smart growth, live-where-you-work city of 45,000." (Time, April 2009)

The 17,000 acre city is associated with a 73,000 acre nature preserve and more than half of the 17,000 acres in the city are devoted to greenways, parks, lakes, and other environmental amenities. Babcock Ranch will be a walkable, human scale city, with extensive sidewalks, bike paths, and greenways for alternative vehicles.

Florida Power and Light is building a 75 megawatt solar facility to provide 100% of Babcock Ranch's electricity. All of the facilities – residential, commercial and

public – will be smart buildings connected to a smart grid and all of the buildings will be energy efficient and able to withstand winds of up to 120 mph. An affiliated organic farm will provide the residents of Babcock Ranch with much of their produce.

Babcock Ranch is not alone. Other Eco-Smart Communities in Southwest Florida include Ave Maria and Big Cypress in the Collier County Regional Lands Stewardship Area, Lakewood Ranch, and the Green Mile.

The Southwest Florida Regional Planning Council has some regulatory responsibilities in relation to each of these developments and has interacted and will continue to interact with them to pursue the potential economic and environmental benefits of Eco-Smart Development. The presence of a LEED Certified Planner on the Planning Council's staff is an important aid to this process.

Eco-Smart Developments also will generate green opportunities and require green talent, but, most fundamentally, they are based on green savings through their environmental preservation zones, their energy efficient buildings and transportation, and their solar energy generation. They aspire to be zero carbon and even carbon-negative (taking more carbon out of the atmosphere than they release).

As a key aspect of Southwest Florida's Climate Prosperity Strategy, Eco-Smart Development both symbolizes and exemplifies Southwest Florida's commitment to environmental preservation, economic prosperity, and high quality of life. Eco-Smart Developments attract exactly the type of residents and businesses that Southwest Florida is seeking and contribute to Southwest Florida's brand as the home of a great climate, the magnificent Everglades, and the marvelous Gulf Coast.

Babcock Ranch has already received a substantial amount of national media coverage. As this Eco-Smart Development proceeds, it should be possible to undertake joint marketing of Babcock Ranch and Southwest Florida as an optimal marriage of development and regional preservation efforts.

Hurricane/Energy Efficiency Retrofits: Southwest Florida has been identified by the National Weather Service as one of the most hurricane-vulnerable areas of the United States. Most Southwest Florida buildings need hurricane hardened retrofits to withstand storms with hurricane force winds (74 mph or above). At the same time most Southwest Florida buildings are not energy efficient and need energy efficiency retrofits (including such measures as: ceiling, wall and pipe insulation; replacement of appliances, air conditioning, heating, and lighting with energy efficient models; weather stripping and duct work; window replacement; installation of low-flow faucets and shower heads, hot water heater blankets, etc.)

The industries that provide both hurricane and energy efficiency retrofits are highly fragmented in themselves and the two types of retrofits are not integrated. A home owner or a business who wants to undertake either type of

retrofit has to deal with different contractors and appliances have to be purchased from different suppliers. There is no easy way to arrange financing and the homeowner or business then has to follow the procedures of the energy utilities for obtaining rebates, where those exist.

However, integration of the two types of retrofits is greatly to be desired. A "whole building" approach to hurricane and energy retrofitting is the most cost effective way for residences and commercial buildings to become hurricane safe and energy efficient. There is a natural sequencing to different retrofit measures that should be followed. For example, roof bracing and the installation of gussets should precede blowing in ceiling insulation. To proceed the other way would mean that the ceiling insulation would cause serious problems for the installation of the hurricane roof measures.

There is an opportunity for Southwest Florida to pioneer the creation of an integrated approach to hurricane and energy efficiency retrofits. Once established in Southwest Florida, this approach to integrated hurricane/energy retrofits could be exported to other regions that are at risk for hurricanes and need energy efficiency retrofits.

National best practices for city/regional energy retrofits, suggest that development of a Southwest Florida integrated approach to hurricane/energy retrofits will involve:

- Identification or constitution of an intermediary to oversee the program.
- Formulation of guidelines for integrated hurricane/energy retrofits. (Both My Safe Florida Home and the Florida Green Building Coalition are substantial resources for the guidelines.)
- Establishment of relationships with auditors and contractors.
- Identification of financing, rebate, tax credit, and other existing incentives and potential development of new financing options.
- Undertaking a pilot phase for the program including:
  - ✓ Performance of hurricane/energy audits; recommendation of the type of retrofit needed.
  - ✓ Selection, by the customer, of the appropriate retrofit option and the contractor to undertake that option.
  - ✓ Oversight of the master- and sub-contractors to complete the retrofit.
  - ✓ Implementation of an educational program to assist customers to implement behavioral changes to live in an optimally hurricane safe, energy efficient fashion.
- Marketing and scaling of the hurricane/energy retrofit program on a regional basis.

Staff of the Southwest Florida Regional Planning Council have undertaken research on what an integrated hurricane/energy retrofit program would involve and Florida House is developing an approach to this opportunity.

The Green Business Partnership: The initial Green Business Partnership was launched through a grant awarded by the Florida Department of Environmental

Protection to Sarasota County to encourage environmental stewardship by recognizing businesses that make an extra effort to operate in an environmentally responsible manner.

As an aspect of the Green Savings Initiative, the Southwest Florida Climate Prosperity Strategy can pursue expansion of the Green Business Partnership to the other 5 counties that compose the Southwest Florida region.

In Sarasota County, the Green Business Partnership includes businesses, business organizations, and local governments and is open all businesses in Sarasota County, regardless of type or size. The program provides businesses with some staff support and a comprehensive checklist of solid waste management, employee wellness, and water and energy conservation practices, while encouraging employee engagement through the formation of "green teams."

To become a certified Green Business Partner, a company must:

- Commit to the program by agreeing to display the program seal and adopting a Green Business Pledge:

  > "[Name of business] believes that a successful business is dependent upon a healthy environment. We pledge to demonstrate our environmental stewardship by reducing waste and conserving natural resources, and by operating an environmentally responsible business."

- Implement the required environmental standards indicated on the application and checklist.
- Participate in an on-site visit to verify that the business meets the required standards.

To date, the Green Business Partnership has certified 82 Sarasota County green businesses. According to the Partnership, benefits of green certification include:

- Cost savings generated by waste reduction and water and energy conservation.
- Market exposure through a listing in an on-line Green Business Partnership Directory and through a marketing plan that includes advertisements and news releases.
- Increased sales to customers seeking more environmentally sound alternatives.
- Healthier work environments because many of the program standards create a safer, healthier working environment.
- Increased productivity through improved employee morale and efficiency.

Expansion of the Green Business Partnership to Charlotte, Glades, Lee, Hendry, and Collier Counties will offer the benefits of green certification much more widely.

Climate Adaptation: Most experts believe that there will be some sea level rise due to the climate change that has already happened and that this sea level rise will increase until adequate climate protection strategies have been implemented globally. Sea level rise, of course exacerbates the danger from storm surges. Therefore vulnerable areas need to identify and implement climate adaptation strategies.

Charlotte Harbor is one of six estuaries selected by the U.S. Environmental Protection Agency (EPA) in its "Climate Ready Estuaries" effort to build local ability to adapt to changes in weather patterns and protect sensitive coastal ecosystems and economies from the potential effects of climate change.

The Charlotte Harbor Climate Ready Estuary Project focuses on how changes to the climate could impact the local environment and what adaptations are available to minimize or avoid negative effects of these weather changes.

Once the study is completed, the region will have a climate adaptation strategy to implement, which, in addition to its green savings dimension, will have significant green opportunities and green talent implications.

Once the Southwest Florida Regional Planning Council has guided implementation of the Charlotte Harbor climate adaptation strategy, there will be opportunities to provide consulting to other regions to replicate the Charlotte Harbor strategies to address the climate risks and develop climate adaptation strategies.

Environmental Mitigation Banking: Environmental mitigation banking involves creation, preservation, restoration, or enhancement, of a wetland, stream, or habitat conservation area. Once it has received approvals by regulatory agencies the mitigation bank can sell credits to developers with projects impacting neighboring ecosystems. Southwest Florida has embraced mitigation banking.

EarthMark Companies operates Big Cypress Mitigation Bank linking Big Cypress National Preserve and the Okaloacoochee Slough conservation areas. Big Cypress Mitigation Bank includes the restoration of 4 square miles of a citrus grove to its natural state after 50 years of intensive agricultural activity. The project supports the continued preservation of critical habitat of an assortment of endangered indigenous wildlife species including the Florida Panther and wood storks.

The Wetlandsbank Group operates Panther Island Mitigation Bank, providing a wetland restoration and enhancement program and benefiting both the freshwater wetland systems and habitat in the Corkscrew Regional Eco-System Watershed. The total Mitigation Bank site is 2,778 acres. Restoration and enhancement of wetland functions will provide associated benefits to significant wildlife species. Existing agriculture/grazing fields on the site will be restored to a combination of marsh and pine areas and the infestation of exotic vegetation has been eradicated.

Instituting new environmental mitigation banks can make an important contribution to the natural side of Green Savings in Southwest Florida's Climate Prosperity Strategy.

2) Green Opportunities Initiative

The Green Opportunities Initiative includes six specific business development opportunities that are uniquely suited to Southwest Florida.

Biofuels Industry: Southwest Florida is on its way to becoming a leader in the transition to biofuels. For example, as an aspect of the implementation of the Sarasota County Roadmap to Sustainability, the County has converted 580 diesel vehicles to bio-diesel accessed through three fuel sites. This program is saving an estimated 58,500 gallons of fossil fuels annually.

Verenium Corporation a pioneer in the development of next-generation cellulosic ethanol is building its first commercial-scale cellulosic ethanol facility in Highlands County just across the northern boarder from the Southwest Florida counties. The Company has entered into a long-term agreements with Lykes Bros. Inc., a large scale agri-business, to provide the necessary feedstock of agricultural biomass for conversion to fuel from approximately 20,000 farmable acres adjacent to the site.

The Highlands Ethanol Project has been awarded a $7 million grant as part of Florida's "Farm to Fuel" initiative designed to stimulate the development of a renewable energy industry in Florida. The Highlands facility will be the first in the State of Florida to use next-generation cellulosic ethanol technology to convert renewable grasses to fuel, rather than using food crops. The cellulosic ethanol technology was pioneered at the University of Florida Institute of Food and Agricultural Science.

Cellulosic ethanol is a renewable fuel source produced from natural, plant waste products and dedicated energy feedstocks such as sugarcane waste (bagasse), switchgrass, sorghum, rice straw and wood chips. Next-generation cellulosic ethanol uses advanced enzyme science to reduce the cost of ethanol production and enable access to a wide variety of biomass. Unlike traditional ethanol manufactured from corn or sugar, cellulosic ethanol production utilizes non-food, plant biomass as its feedstock source.

The Highlands plant is expected to produce up to 36 million gallons of cellulosic ethanol per year and provide the region with about 140 full-time jobs, once commercial operations begin. Verenium anticipates breaking ground on this facility in the second half of 2009, and expects to start producing fuel in 2011. Additional jobs will be created during the 18-to-24 months of construction on the plant, which is estimated to cost between $250 million and $300 million to build.

The Southwest Florida Climate Prosperity Strategy views biofuels as an important domestic and, potentially, export industry that can be a driver of job growth. Partnership with the Florida Farm to Fuel® Initiative and the Florida BioFuels Association can help develop a robust regional biofuel industry, including: expansion of the number of vehicles using biofuels; increase in the number of fueling facilities, and expansion of the production capability. In a region with little public transit, conversion of cars and trucks to biofuels is the best option for reducing transportation caused green house gas emissions.

Solar Industry: Southwest Florida has a significant number of larger scale solar installations completed and in process. In addition to the 75 megawatt facility planned for Babcock Ranch, Florida Power and Light has completed its Sunshine Energy Solar Array at Rothenbach Park in Sarasota County, which has 1,200 photovoltaic (PV) panels, producing 250 kilowatts of energy.

Florida Gulf Coast University and Regenesis Power have started construction on the 16-acre solar energy farm on the Florida Gulf Coast University campus that will produce 2 megawatt of energy. Regenesis is also installing a solar hot water heating system on campus. Florida Gulf Coast University will use this project to teach and conduct research into renewable energy sources to benefit the business community and the construction industry as well as the general public.

However, since the expiration of the State of Florida solar rebate, installation of residential and commercial PV systems has stalled, although Southwest Florida solar companies continue to install systems outside of the state.

However solar thermal (hot water) systems remain cost effective. According to Regenesis – a national energy company with a presence in Southwest Florida – the all-in leveraged cost of PV systems is approximately $.16 a kilowatt hour, whereas the comparable cost for solar hot water systems is $.05 - $.06 a kilowatt hour.

The Florida Solar Energy Center has a program to assist cities and regions to develop promote solar thermal initiatives, including how to address:

- Program requirements.
- System certification.
- System sizing.
- Program client and site selection criteria.
- Program installation requirements.
- Program solar system inspection criteria.
- Solar contractor requirements.
- Program training development.
- System warranties.

Solar Thermal can be an important aspect of Southwest Florida's Climate Prosperity Strategy and the Southwest Florida Regional Planning Council can

collaborate the Florida Solar Energy Center and other partners to develop a Solar Thermal Program for Southwest Florida.

Regenesis is a potential partner in implementing a regional Solar Thermal Program for Southwest Florida. Regenesis is proposing to work with the water utilities to establish a system whereby:

- A large number of solar hot water systems would be installed at no up-front cost to customers.
- The water utility would meter hot water usage and the customer would pay a fixed monthly charge to the water utility for the hot water, leading to a reduction in the customer's energy bill of approximately $15 to $18 per month.
- The utility would, in turn, pay Regenesis through a power purchase agreement, with Regenesis continuing to own the solar hot water systems and be responsible for maintenance for the life of the systems.
- Regenesis would obtain third party financing to cover purchase and installation of the solar hot water systems.

Green Inland Port: U.S. Sugar is partnered with Hilliard Brothers ranch to develop an Inland Port on as much as 8,000 acres of land in Hendry County. This partnership is in the process of submitting early development applications to the Port of Palm Beach.

This Inland Port is a distribution center that will be designed as a complement to South Florida's crowded seaside ports in Miami, Fort Lauderdale and Riviera Beach. It would be an off-site warehousing and distribution center to which the ports could ship containers for unpacking, thus speeding the offloading of large freighters. It is thought that the need for the Inland Port will become even greater, when retrofitting the Panama Canal for larger container ships is completed and the larger container ships from the Pacific Rim countries can come through the Panama Canal and do not have to dock on the West Coast.

The partnership combines U.S. Sugar's industrial expertise, railroad network, and resources with Hilliard's land holdings - 8,000 acres that include the Airglades Airport and lie well out of the way of Everglades restoration plans.

In a measure of the Inland Port's scope, one study predicted that it could generate as many as 32,000 jobs and $164 million in tax revenue by 2015. The Inland Port is being seen as a potential cure to the economic devastation that's anticipated to hit Glades communities following U.S. Sugar's exit from farming. U.S. Sugar is completing a deal to sell 73,000 acres of its farmland to the state for Everglades restoration with options to purchase the rest later.
U.S. Sugar is exploring other ventures as well, including ethanol production.

The movement for "Sustainable Shipping" is growing rapidly and the Inland Port in Florida could improve its competitiveness and reduce environmentalist opposition by adopting a Green Port Policy.

For example, the Port of Los Angeles, the largest container port in the U.S., is a leader in the Sustainable Shipping movement. The Port of Los Angeles states: "Utilizing the tenets of sustainability, the Port works toward the best interests of the community, environment, and economy. These principles are practiced through integral considerations during planning, design and construction, and throughout operations and maintenance of Port facilities and structures."

The Port of Los Angeles has specific sustainability plans that address:

- Energy and water.
- Procurement.
- Contracting.
- Waste.
- Non-toxic product selection.
- Air quality.
- Training.
- Public Outreach.

As another example, the Port of Long Beach has a Green Port Policy that includes six basic program elements:

1. Wildlife – Protect, maintain or restore aquatic ecosystems and marine habitats.
2. Air – Reduce harmful air emissions from Port activities.
3. Water – Improve the quality of Long Beach Harbor waters.
4. Soils/Sediments – Remove, treat, or render suitable for beneficial reuse contaminated soils and sediments in the Harbor District.
5. Community Engagement – Interact with and educate the community regarding Port operations and environmental programs.
6. Sustainability – Implement sustainable practices in design and construction, operations, and administrative practices throughout the Port.

As an aspect of a Climate Prosperity Strategy for Southwest Florida, the Inland Port has the opportunity to develop its own Green Port Policy that should address the three areas of Green Savings, Green Opportunities, and Green Talent as they relate to the development of the Inland Port and the ancillary development that takes place in its vicinity. A Green Inland Port is a major Green Opportunity.

Green Incubator/Accelerator: A consortium of Southwest Florida economic development, business, and educational organizations have affiliated with BrainFoodToGo to create a Southwest Florida branded "virtual" incubator/accelerator that offers free information, insights and inspiration to business owners, aspiring entrepreneurs, and innovators.

The Southwest Florida version of this virtual incubator/accelerator can be accessed at www.economicdevelopmentfoundation.org. The BrainFoodToGo content is provided by Electromedia Technologies Corporation and the Center for Business Ownership, supplemented by users of the site.

The principal functions of the virtual incubator/accelerator help venturers:

- Construct and validate a business model.
- Recruit experienced "helpers".
- Formulate a strategic vision.
- Prepare a business plan.
- Secure funding.
- Obtain a physical site and acquire the required fixtures, equipment and materials.
- Institute the necessary financial controls.
- Market and sell.
- Monitor/audit operations.
- Provide interaction with other venturers.

BrainFoodToGo encourages participants not only to learn from the site, but also to contribute to the content used on the site. However, BrainFoodToGo and the Southwest Florida Virtual Incubator/Accelerator do not have a green business dimension.

As an aspect of the Southwest Florida Climate Prosperity Strategy, the Southwest Florida Regional Planning Council can make a connection between the Virtual Incubator/Accelerator and the Green Business Partnership to provide green business content for users of the Virtual Incubator/Accelerator as well as to provide incubation/acceleration services for certified green businesses.

The Southwest Florida Regional Planning Council has received a grant from the Federal Economic Development Administration to undertake a Feasibility Study for a Regional Incubator Network. One aspect of the services provided by a Regional Incubator Network should be the type of green business information and assistance provided by the Green Business Partnership.

If the Regional Incubator Network proves feasible and is launched, then it will be able to provide assistance to the emerging Clean Tech sector in Southwest Florida, including businesses operating in the hurricane/energy efficiency retrofit, biofuel, solar, energy storage, water conservation and treatment, sustainable agriculture, and recycling spaces.

Sustainable Agriculture: Southwest Florida has a strong sustainable agriculture industry, with a significant number of organic farms, a network of 7 farmers markets, a number food stores and super markets featuring organic produce, and an export market to other regions of Florida and areas of the country.

Florida Certified Organic Growers and Consumers (FOG) provides education for growers, consumers, educators, media and general public about organic and sustainable agriculture.

FOG provides free technical assistance for Florida farmers who commit to transition to organic production or the reduction of pesticide use. Participants are paired with crop advisors experienced in organic approaches. The Southwest Florida Climate Action Strategy can engage FOG to: increase the market for organic agricultural products and assist farmers to undertake organic farming.

***Ecotourism**:* The Everglades and the Gulf Coast offer a wide array of opportunities for ecotourism and there are a large number of ecotourism businesses operating in the Southwest Florida region. Ecotourism engages directly with Southwest Florida's Everglades/Gulf Coast brand.

The Society for Ethical Ecotourism – Southwest Florida (SEE SW FLA) is dedicated to establishing and maintaining a professional code of ecotourism ethics in order to encourage an awareness and stewardship of Southwest Florida's natural heritage. SEE SW FLA provides:

- Environmental education and awareness to encourage behaviors that contribute to the sustainability of Southwest Florida's natural ecosystems and resources.
- Promotion of professionalism and integrity within the ecotourism industry by providing and maintaining a certification/recognition program for ecotour operators.

The Southwest Climate Prosperity Strategy can engage SEE SW FLA to collaborate in marketing ecotourism in Southwest Florida and in strengthening the ecotourism industry.

3) Green Talent Initiative

[Note: Much of this Green Talent section has been adapted from *Sustainable Economic Development Strategies: Initiatives and Programs for Cities and Regions*, a paper soon to be published by Urban Sustainability Associates. The Council for Adult and Experiential Learning and Sustainable Systems collaborated closely in the creation of the relevant section of *Sustainable Economic Development Strategies*.]

The purpose of a Green Talent Initiative is to build a new generation of green employment and entrepreneurial skills. There is much talk today about green jobs. From the perspective the Green Talent Initiative, a green job can be seen as any job that supports any form of sustainability. However, a narrower and more useful approach identifies "green skills" as the distinguishing factor in a green job. In this sense, the concept of green jobs refers to:

- Jobs in clean tech industries.
- Construction jobs in green new construction and retrofits.
- The environmental/sustainability related jobs in businesses that are going green.
- The environmental/sustainability related jobs in public agencies.

The significant expansion of green talent using green skills in green jobs addresses many of the key problems currently facing the Southwest Florida and the U.S. — unemployment, the recession, the environmental crisis and climate change, and dependence on foreign oil.

Examples of Programs and Resources

Although this is a relatively new field, there are a number of examples of successful programs from around the country to draw from and Florida has some important resources to focus on a Green Talent Initiative.

Green Jobs Programs: There are various examples of green jobs programs in existence now and many more in formation. Three examples follow.

To create one of the first green jobs programs in the country, the City of Oakland allocated $250,000 to an experienced job training organization, the Cypress Mandela Training Center, and to Laney Community College to fund the Oakland Green Jobs Corps through January 2010. The Oakland program provides low- and moderate-income residents with training for jobs such as solar panel installation, energy-efficiency construction and retrofits, and work related to biofuels, such as car and truck maintenance, production and fuel stations.

The Los Angeles Green Careers Training Initiative, another model already in existence, was developed by the Los Angeles Apollo Alliance in conjunction with the City of Los Angeles Green Retrofits Program. The Green Careers Training Initiative seeks to create green career ladders in construction, the public sector, public and private power companies and emerging energy industries by (1) connecting low-income inner-city residents to union apprenticeship and community college training programs that prepare them for living wage jobs; and (2) providing upgrade training to existing workers within those industries.

The University of Illinois at Chicago Center for Urban Economic Development, the Center on Wisconsin Strategy, and Green for All have produced a Workforce and Economic Development Strategy for the Chicago Climate Action Plan (CCAP), seeking to ensure that an appropriately-skilled workforce exists in Chicago to carry out the work of CCAP. This Strategy has two central goals:

1. Connect *green-collar job opportunities* from CCAP to populations and communities in need, and ensure that entry-level jobs are linked to career paths to self-sufficiency; and
2. Support the *growth of green businesses* developing and producing goods and services that further CCAP goals, and add to Chicago's economic base.

The plan estimates that investments in CCAP implementation could generate up to 5,000 direct jobs in areas like:

- Energy auditors and efficiency measure installation workers.

- Landscape design, installation and maintenance.
- Recycling and reuse.
- Renewable energy installation.

Development of the Chicago green jobs strategy will include: assessment; strategy development; hiring a City of Chicago coordinator; funding, implementing, and evaluating pilot programs; and developing additional strategies and implementation plans.

Green Entrepreneurship: Green Entrepreneurship is another major aspect of a Green Talent Strategy. Top universities, such as Stanford, Yale, University of California Berkeley, and Columbia, are incorporating sustainability in their Master of Business Administration (MBA) programs and research, and using this orientation as a strategic advantage in attracting professors, students, and corporate partners.

The Aspen Institute is positioning itself as a center for encouraging this evolution. Aspen Institute publishes:

- *Beyond Grey Pinstripes,* which ranks the top 100 MBA programs in the country that incorporate social and environmental stewardship into their curriculum and research.
- *A Closer Look at Applied Sustainability Centers,* which presents best practices for sustainability centers at higher education institutions.

Through its Teaching Innovation Program, the Aspen Institute provides a forum for the exchange of innovative ideas about MBA curriculum and provides networks of business school faculty and business practitioners with resources for teaching, research, and curriculum development in relation to corporate social and environmental stewardship.

The Southwest Florida Workforce Development System: The Agency for Workforce Innovation is Florida's lead state workforce agency, directly administering the state's Labor Market Statistics program, Unemployment Compensation, Early Learning and various workforce development programs.

Workforce development policy and guidance in Florida is provided by Workforce Florida, Inc. Workforce Florida, Inc. and the Agency for Workforce Innovation are partners in the Employ Florida network which includes 24 Regional Workforce Boards who deliver services through nearly 90 One-Stop Career Centers around the state.

The Southwest Florida Workforce Development Board, Inc. is member of the Employ Florida Network for Southwest Florida. The Southwest Florida Workforce Development Board is a partnership between business, labor, education, community, and government services. The Board oversees One Stop Career Centers and workforce development initiatives in Charlotte, Collier, Glades, Hendry, and Lee Counties. The Board also establishes coordinates establishment of a Regional Targeted Occupations List, a Qualified Programs List, and an Eligible Training Providers List.

The seven One Stop Career Centers in Southwest Florida are designed to provide individuals with access to employment, education and training services from different programs and providers at a single location. The Centers have self-service activities as well as staff-assisted services, designed to meet particular customer job search needs, including:

- Job search assistance.
- Self-service resources.
- Referral and placement.
- Employment counseling.
- Career and skills assessment.
- Information about local, state and national labor markets.
- Child care resource and referral.
- Eligibility determination for Medicaid, food stamps and cash assistance.
- Career preparation workshops.
- Information on filing Unemployment Insurance Claims.
- Financial aid and training program resources.
- Referral to education and training programs—GED preparation.

The One Stop Career Centers also include Business Services Centers to assist businesses looking for workers with:

- Qualified applicants for job openings.
- Onsite interview offices and meeting rooms.
- Recruitment and Job Fair assistance.
- Labor market information.
- Resource Library of business material, periodicals, government required forms and posters.
- Business specific Workshops and Seminars.
- Worker Compensation issues.
- Unemployment Insurance issues.
- Hiring and retention best-practices.
- Job Description and Personnel Manual development.
- Employed Worker Training Applications.

The Obama Administration Stimulus Program provides green jobs funding for Workforce Investment Systems. Most Workforce Investment Systems do not have green jobs programs. A Green Talent Initiative can help the Southwest Florida Workforce Investment Board and the One Stop Centers develop programs to respond to their new green jobs responsibilities.

Development of a Green Talent Initiative

Design and implementation of a Green Talent Initiative is a key to the Southwest Florida Climate Prosperity Strategy.

To undertake a Green Talent Initiative, a Green Talent Leadership Group needs to be constituted. The Leadership Group should involve the Southwest Florida

Workforce Investment Board, community colleges, universities, relevant public agencies, the utilities, and other green industry leaders.

The Green Talent Leadership Group can be coordinated by the Southwest Florida Workforce Development Board, Inc., a community college, a university, or an outside national workforce intermediary.

The role of the Green Talent Leadership Group is to develop a Green Talent Program, implemented first as a pilot and subsequently as a full Program.

Green Talent Program: A Green Talent Strategy involves:

- Prioritizing a few industry sub-sectors, such as commercial and residential energy retrofits, solar installers, and green new construction.
- Defining the job requirements and the career ladders for these sub-sectors.
- Completing research on education/training resources and capacities in the Southwest Florida region.
- Outlining a pilot Green Talent Program that includes provision for recruitment of candidates, job readiness and skill training, placement, and post-placement support.
- Modifying the Regional Targeted Occupations List, the Qualified Programs List, and the Eligible Training Providers List maintained by the Southwest Florida Workforce Investment Board to include the industry sub-sectors and the training programs initially targeted by the Green Talent Program.
- Benchmarking the proposed Green Talent Program with other green workforce development initiatives.
- Undertaking fund raising, locating sources of public and foundation funding, submitting applications, and obtaining funding.
- Implementing the pilot Green Talent Program.

Once the pilot is successful, the same strategy can be used to bring on other industry sub-sectors related to green and clean-tech businesses in the city/region to create a full scale Green Talent Program.

The Green Talent Leadership Group should monitor progress and make mid-course corrections. Based on the success of the pilot and the lessons learned, the Green Talent Program will be able to expand the number of potential workers and businesses served in the initially targeted industry sub-sectors as well as to diversify into other industry sub-sectors.

A wide range of different types of employment opportunities can be derived from the Green Programs that are the components of the Green Savings Initiative and the Green Opportunities Initiative discussed above. They include:

- Consultation and other resources to assist businesses to go green.
- Green construction contractors and workforce to build Babcock Ranch and the other Eco-Smart Communities.
- Workforce to maintain the different green systems in the Eco-Smart Communities.

- Hurricane/Energy Retrofit auditors, contractors, and contracting company employees.
- Biofuel workforce.
- Solar hot water contractors and workforce.
- Green construction contractors and workforce to build the Green Inland Port.
- Workforce to maintain the different green systems in the Green Inland Port.
- Entrepreneurs, management teams, and workforce for the green businesses utilizing the Virtual Incubator/Accelerator and for the green businesses that are developed within the Incubator Network.
- Green farmers and sustainable agriculture workforce.
- Ecotourism workforce.

Green Business Education Program: Green business education develops entrepreneurs who may then succeed at starting up clean-tech businesses. Green business education is also important to educate the managers in green businesses with responsibility for environmental programs.

The universities and colleges in Southwest Florida do not appear to have sustainable business education programs to address entrepreneurship and management training in relation to green and clean-tech businesses. The Southwest Florida Climate Prosperity Strategy would be greatly benefited by partnering with one or more educational institutions to develop and implement a Green Business Education Program.

A Green Business Education Program can be undertaken at the university level, the college level, and/or the community college level. There are many models to choose from and clear best practices are beginning to emerge. The Aspen Institute offers resources to assist in this process.

Location-Neutral Workforce: With the emergence of the Internet and broadband communications a whole new category of "location-neutral" workers is emerging. This category includes anyone who does not need to be in a particular location to do their work. Rather, all they need is their smart phone, their computer, and broadband connectivity. The Southwest Florida Regional Planning Council has taken a lead role in promoting strong broadband infrastructure in the region and the state.

Many different types of knowledge work fall into this category. Education and consulting, programming, website design, product design, sales, and workers in Internet mediated businesses are just a few examples of this type of location-neutral work. This is a growing category of work for retirees who want to make extra money, for winter-home residents who want to continue working while enjoying warm weather, and for people who want to live in a place with a good climate and other quality of life amenities.

This type of location-neutral work tends to be inherently much more climate friendly, because it does not involve commuting. It typically deals with and

moves around information and knowledge electronically rather than dealing with and moving around material objects.

Southwest Florida is uniquely situated to promote and cater to location-neutral workers, because:

- Climate, physical environment, and quality of life amenities are Southwest Florida's strengths.
- The region already has a very substantial population of winter home owners and retirees.
- Wireless broadband is readily available from a variety of service providers in most urban areas in Southwest Florida.

Promoting location-neutral entrepreneurs and workers can be an important aspect of Southwest Florida's Green Talent Initiative by:

- Establishing a network of Southwest Florida location-neutral entrepreneurs and workers to share best practices and encourage collaboration.
- Developing a section on the Virtual Incubator/Accelerator to address the opportunities for and the needs of location-neutral entrepreneurs and workers.
- Working with the broadband companies to develop a marketing effort to encourage Southwest Florida retirees and part-time residents to start a location-neutral business.
- Promoting Southwest Florida as a place for location-neutral workers to locate.
- Encouraging the Eco-Smart Communities to develop services for location-neutral businesses and workers and market to them.

Taken together, the Green Talent Strategy, the Green Education Program, and a Location-Neutral Workforce Program would constitute a robust Green Talent Initiative.

IV. ORGANIZATIONAL INFRASTRUCTURE

Implementation of the Southwest Florida Climate Prosperity Strategy requires an organizational infrastructure, much of which is already in place.

Southwest Florida Regional Planning Council

The Southwest Florida Regional Planning Council (Planning Council) is the leadership group for the Climate Prosperity Strategy and it is optimally organized to play its role.

The Southwest Florida Regional Planning Council is one of 11 state-mandated Florida Regional Planning Councils. The Mission of the Southwest Florida Regional Planning Council (Planning Council) is to:

> "work together across neighboring communities to consistently protect and improve the unique and relatively unspoiled character of the physical, economic, and social worlds we share…for the benefit of our future generations."

The 34 member Planning Council, which meets monthly, is composed of 24 local elected officials, 5 gubernatorial appointees, and 5 Ex-Officio members representing Florida State Agencies. The Planning Council coordinates economic development, coordinates economic development, transportation, and emergency management planning for the six county Economic Development District, including Sarasota, Charlotte, Glades, Lee, Hendry, and Collier Counties.

The Planning Council has 27 staff. In addition to an Executive Director, Planning Director, and General Counsel, the Planning Council has staff focused on comprehensive planning, economic development hurricane preparedness and sea level rise, global information system and graphics analysis, and hazardous materials and homeland security. It is of note that the Planning Council has the first U.S. Green Business Council Leadership in Energy and the Environmental Design (LEED) certified planner.

The Planning Council is responsible for:

- Providing technical and planning assistance to the 6 Southwest Florida counties.
- Reviewing and maintaining local comprehensive plans.
- Acting as a clearinghouse for federal and state agencies.
- Undertaking economic development, transportation planning, and emergency management planning activities.
- Producing Strategic Regional Policy Plan, mandated by the Florida Legislature, as a guide for shaping the region's future, a framework to review local plans and large scale developments, and a policy document to guide all of the Planning Council's activities.
- Managing and maintaining the Comprehensive Economic Development Strategy, including implementation, evaluation, and up-dating.

The Planning Council has a number of Committees. A 35 member Economic Development Strategy Committee – composed of 18 private sector representatives, 10 community leaders, 4 higher education representatives, and 3 public officials – prepares the Comprehensive Economic Development Strategy (CEDS) for Planning Council review and approval.

The Planning Council has recently established a Climate and Energy Subcommittee with special responsibility in relation to Southwest Florida's Climate Prosperity Strategy.

The Planning Council maintains working relationships, reciprocal affiliations and/or memberships with a wide range of business organizations, community organizations, leadership programs, civic groups, and other stakeholders,

including the Florida Chamber of Commerce, Chamber of Southwest Florida, Chamber Alliance, and local Chambers of Commerce, American Planning Association, Urban Land Institute, American Institute of Architects, and the Florida Green Building Coalition (Southwest Florida).

Public involvement and support are crucial to successful implementation of the Climate Prosperity Strategy for Southwest Florida. The Southwest Florida Regional Planning Council has established a Climate and Energy Subcommittee to provide guidance to the Climate Prosperity Strategy, among other responsibilities. The regional planning process is inclusive and incorporates a high level of public involvement; all meetings are publicly noticed and include opportunities for public comment, the Southwest Florida Regional Planning Council website is updated regularly, and an online survey form for comments is available via the website (www.swfrpc.org).

Implementation with Current Organizational Infrastructure

Most of the Southwest Florida Climate Prosperity Strategy can be implemented using the organizational infrastructure that is already present. In fact, it is one of the core principles of the Climate Prosperity approach to economic development that it provide an organizing principle that enables current structures to accomplish their missions much more effectively, to the benefit of the region economically, socially, and environmentally, without requiring prohibitively large additional financial resources.

The policy-making groups for the Southwest Florida Climate Prosperity Strategy are already established through the Planning Council itself, the Economic Development Strategy Committee, and the Climate and Energy Committee. However, close collaboration with the Governor's Climate Action Team will also certainly be essential

Green Savings Initiative: To a large degree, the organizational resources required for implementing the Green Savings Initiative are also already in place:

- Planning Council staff already has a regulatory and advisory role in relation to Eco-Smart Developments and Planning Council staff assisted the Babcock Ranch developers to embrace the Eco-Smart perspective. The Planning Council LEED certified planner can be of great assistance to this process.
- Planning Council staff is engaged in exploring the idea of Hurricane/Energy Retrofits and Florida House is already developing an approach to accomplishing this objective.
- The Green Business Partnership already exists for Sarasota County. It just needs to be expanded to the other counties.
- The Planning Council is coordinating the Charlotte Harbor Climate Ready Estuary Project, which will largely lead to the knowledge required for the Climate Adaptation Program.
- Both EarthMark and Wetlandsbank Group, the coordinators of the two major mitigation banks in the region, are full service organizations.

Green Opportunities Initiative: The Green Opportunities Initiative can call on comparable implementation resources, for example:

- Planning Council staff reviews major biofuel installations and the Florida Farm to Fuel® Initiative and the Florida Biofuels Association can be turned to for assistance.
- The Florida Solar Energy Center was established to assist cities and regions to establish solar energy systems – particularly solar hot water systems – and Regenesis is prepared to implement a regional solar hot water system.
- The Planning Council is required to review and interact with the plans for an Inland Port and can play a role similar to the role the Planning Council is playing in relation to Eco-Smart Development by encouraging the developers to make the project a Green Inland Port. Once again, the Planning Council's LEED certified planner can make an important contribution to this process.
- It is the mission of Florida Organic Growers to promote sustainable agriculture and assist organic farms and farms wishing to become organic.
- SEE SW FLA is set up to promote ecotourism and certify ecotourism organizations.

Green Talent Initiative: The Green Talent Initiative can work with the Southwest Florida Workforce Investment Board, as well as with regional universities and colleges.

Additional Organizational Infrastructure That Is Needed

However, some modest additional organizational infrastructure would be very helpful in implementing the Southwest Florida Climate Prosperity Strategy.

Southwest Florida Climate Prosperity Network: It would be useful to establish a Southwest Florida Climate Prosperity Network including representatives from:

- The county and city sustainability programs (Charlotte County, Lee County, Sarasota County, the City of Fort Myers and the City of Sarasota).
- Regional sustainability resource organizations such as The Green Business Partnership, the Southwest Florida Branch of the U.S. Green Building Council, The Center for Environmental and Sustainability Education at Florida Gulf Coast University, Florida House, and SEE SW FLA.
- Statewide sustainability organizations such as the Governor's Climate Action Team, Sustainable Florida – Collins Center, the Florida Solar Energy Center, the Biofuels Association, and, possibly, the sustainability programs at the University of Florida, Florida State University, and Florida Atlantic University.
- The developers of Eco-Smart Developments, including Babcock Ranch, Ave Maria, big Cypress, Green Mile, Lockwood Ranch, and the Inland Port.

A Climate Prosperity Network could:

- Hold networking meetings quarterly or semi-annually to share learning and best practices, network, and explore ways to assist one another.
- Collaborate in organizing and/or co-sponsoring forums and educational events addressing Climate Prosperity, sustainability, green business, etc. These events should be open to everyone in Southwest Florida to build the constituency for Climate Prosperity.
- Maintain connection between meetings with a social networking internet site.
- Provide advice to the Southwest Florida Regional Planning Council on ways to improve and expand the Southwest Florida Climate Prosperity Strategy.
- Identify new Climate Prosperity Green Programs.
- Undertake collaborative projects.
- Mobilize the Climate Prosperity Network at an annual Climate Prosperity Summit and Expo.

Southwest Florida Green Talent Leadership Group: As discussed above, the role of a Green Talent Leadership Group is to guide development and implementation of a Green Talent Program.

The Green Talent Leadership Group should involve the Southwest Florida Workforce Investment Board, community colleges, universities, relevant public agencies, the utilities, and other green industry leaders. The Green Talent Leadership Group could be coordinated by the Southwest Florida Workforce Development Board, a community college, a university, or an outside national workforce intermediary.

Additional Organizational and Financial Resources That Are Needed

It would also be useful to have some additional organizational resources that are not currently in place and some additional financing would be very helpful.

To implement a strategy with the multi-faceted dimensions of the Southwest Florida Climate Prosperity Strategy as described above in this paper, it would be very useful to be able to use some assistance from a team of outside consultants who have had experience with the design and implementation of such strategies. The team of consultants should include expertise in:

- The theory and practice of Climate Prosperity, sustainability, green business, smart growth real estate, green finance, and green jobs.
- Overall economic development strategy design and implementation.
- Collaborative coalition building.
- Design and implementation of workforce development initiatives.

It would be very helpful to have one or more new staff at the Southwest Florida Regional Planning Council dedicated to the development, organization, and implementation of the Southwest Florida Climate Prosperity Strategy. Even the

right additional part-time staff person could make a very significant contribution.

While, as discussed above, it would be possible to implement much of the Southwest Florida Climate Prosperity Strategy outlined in this paper without additional funding, additional funding could make a very important contribution. Funding would be used for:

- Consultation.
- Additional staffing.
- Programmatic expenses.
- Administrative expenses.

Funding of as little as $50,000 and as much as $500,000 could be beneficially utilized. A larger amount of funding would mean that the Southwest Florida Climate Prosperity Strategy would be implemented much more rapidly and broadly and Southwest Florida residents, businesses, community organizations, and government agencies would benefit much more extensively.

V. CONCLUSION

A Climate Prosperity Strategy offers Southwest Florida the opportunity to build on its traditional strengths of weather, the Everglades, and the Gulf Coast, take advantage of its economic, social, and environmental opportunities, while addressing its liabilities and threats.

A Climate Prosperity Strategy points the way to jobs and environmental protection, business success and social progress, economic prosperity and sustainability.

A Climate Prosperity Strategy can help Southwest Florida become the Prosperous Gateway to the Everglades and the Gulf Coast, with an economy and a quality of life that is thriving from the River of Grass to the Shining Sea.