Clean. Tech.

An energy efficient environment in the perfect business climate.

Business Development Board BDB

Palm Beach County's Economic Development Resource

CLEANTECH TRENDS

ENERGY: Solar/Biofuels/Ocean/Storage/Smart Grid EFFICIENCY: Advanced Materials/Green Building ENVIRONMENT: Water/Air & Environment

Through a solid commitment of our state government and incentive tools, Florida promotes the use of renewable energy sources and stimulates innovation in the clean energy industry while becoming a national model for such initiatives. The resulting surge of innovation is evident throughout the state. In addition, there are county and municipal incentive and assistance programs, as well as financing and access to capital.

The Office of Energy is housed within the Florida Department of Agriculture and Consumer Services, and is the primary organization for state energy and climate change programs and policies. It administers financial incentive programs and the provisions of the Florida Energy and Climate Protection Act, providing recommendations to the Governor and the Legislature, among many other responsibilities. The office works cooperatively with other state entities, including the Florida Public Service Commission and the Florida Energy Systems Consortium, to develop state energy and climate change policies and programs.

There are approximately 54 grants currently underway promoting renewable energy, bioenergy, and renewable fuel; and most importantly, promoting economic development through energy. The Florida Opportunity Fund-Clean Energy Investment Program was created by state legislation as a non-profit organization and is administered by Enterprise Florida. It is a direct-investment program designed to promote the adoption of commercially available energy efficient and renewable energy products and technologies in Florida, increasing the availability of capital through both loan and equity investment instruments.

Florida ranked third in 2012 in clean energy jobs, with more than 8,600 jobs created through more than 500 projects, according to a report released in March 2013 by Environmental Entrepreneurs. Agbioscience boomed in Florida between 2000 and 2010, with related research and development expenditures growing 134% during that time, according to another March 2013 report by Battelle, a global research and development organization.

Florida's leaders made a strong commitment to the Cleantech industry through the development of policies and incentives that accelerate the growth of clean energy and technologies, including the Renewable Energy Property Tax Exemption, the Solar Energy Systems Equipment Sales Tax Exemption, and Qualified Target Industry Tax Refunds, among others.

Cleantech businesses find tremendous advantages in Palm Beach County…our confluence of geography and climate provides significant solar, biomass, and ocean energy sources.

The Florida Numbers:

7th
in cleantech employment with nearly 103,000 jobs /1

No. 1
in annual biomass production /2

1,200
miles of coastline and proximity to the Gulf Stream are well suited for all types of ocean energy R+D and deployment.

9th
among states with 2,000+ wind energy manufacturing jobs and 15 wind-related manufacturing facilities – *including a GE turbine plant* /3

Florida really is the **Sunshine State**
– *home to one of the nation's largest solar photovoltaic plants*

/1: The Brookings Insitute /2: University of South Florida /3: U.S. Wind Industry

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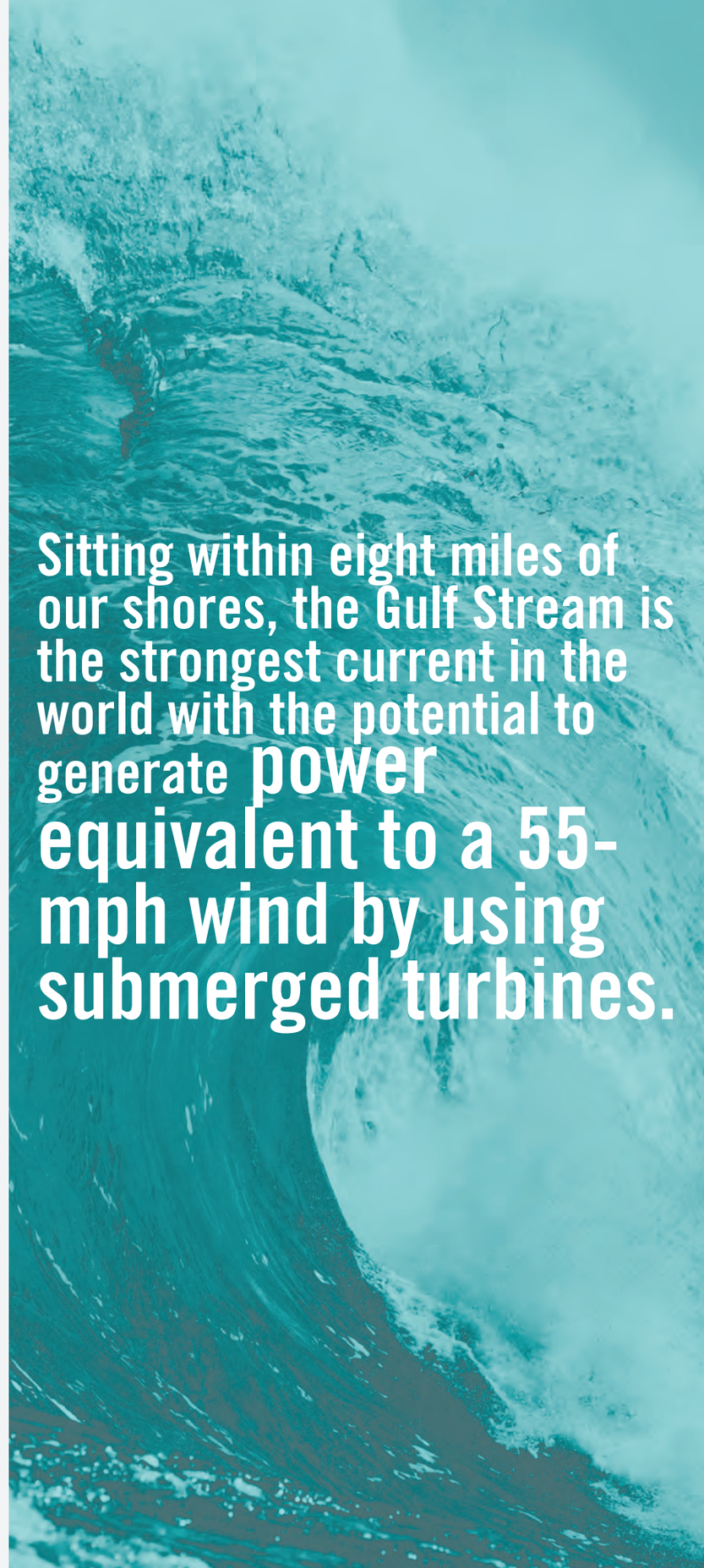
Innovation & Resources

Innovation is a priority in Palm Beach County, and our climate of collaboration creates a competitive environment for new companies to thrive. Palm Beach County's strong educational institutions, quality workforce, progressive business policies, industry affinity groups, and diverse research and development assets allow Cleantech innovators to flourish.

With companies developing hydrogen fuel cells, solar panel advancements, and waste-to-energy technologies, Cleantech businesses find tremendous advantages in Palm Beach County. Additionally, our county's confluence of geography and climate provides significant solar, biomass, and ocean energy resources. Sitting within eight miles of our shore, the Gulf Stream is the strongest current in the world with the potential to generate power equivalent to a 55-mph wind by using submerged turbines.

Palm Beach County's Cleantech industry mirrors the state's Cleantech cluster and includes Energy (solar, biofuels, ocean, storage, smart grid), Efficiency (advanced materials, green design and construction, automation), and Environment (air, water/wastewater, land/agricultural, bioremediation, environmental monitoring).



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Throughout Palm Beach County, builders, architects, developers, and allied industries are embracing sustainability programs of all types and employing practices that reduce negative environmental and health issues. Palm Beach State College (PBSC) and Florida Atlantic University (FAU) have LEED-certified buildings on their campuses. PBSC was the first Florida state college to achieve LEED Platinum certification for a campus building, its Technical Education Center on the Belle Glade campus.

Resource Organizations

Florida Atlantic University's Southeast National Marine Renewable Energy Center (SNMREC) is taking the lead with its cutting-edge research and innovation. SNMREC scientists and related companies are developing ocean energy technology systems and components of tomorrow. SNMREC is working on ocean energy permitting, policy development, education and workforce development, public outreach, standards development, and economic analysis. Several companies are pursuing the commercialization of proprietary technologies for ocean energy generation or providing engineering services and hardware for these projects.

Florida Crystals Corporation is a pioneer in the production of clean, renewable energy. The company owns and operates the largest biomass power plant in North America, located near Lake Okeechobee in western Palm Beach County. In operation for more than a decade, its Renewable Energy Facility uses sugar cane fiber and recycled urban wood waste as fuel to power its sugar operations and tens of thousands of homes, reducing our dependence on foreign oil by one million barrels annually. Florida Crystals collaborates with leading universities on research projects to develop advanced liquid biofuels from sugar cane waste and other biomass.

The Florida Institute for the Commercialization of Public Research, on the Boca Raton campus of Florida Atlantic University, facilitates the commercialization of new discoveries generated by publicly funded research, including Cleantech, Life Sciences, and more. Working collaboratively with Florida's universities and research institutions, the Institute delivers both company building and company funding programs to create the leading products and companies of tomorrow.

NextEra Energy, Inc. is making major investments in solar thermal, photovoltaic, and hybrid plants. As the largest company involved in wind, solar, and energy conservation in the United States, NextEra and its Florida Power & Light subsidiary operate three major solar energy projects: two large photovoltaic solar plants and the first "hybrid" energy center combining solar thermal technology with existing combined-cycle generation units. These three projects make Florida one of the largest suppliers of utility scale solar power in the nation. Another subsidiary, NextEra Energy Resources, is a top generator of wind power with nearly 90 wind facilities in North America. Florida Power & Light's Energy Smart Florida program is a groundbreaking energy initiative in smart grid technologies, which includes intelligent devices on the electric grid, enhancements that monitor the performance of the grid, and smart meters. The benefits of Energy Smart Florida include more information and control over electricity usage, enhancing system efficiency and reliability, preventing power outages, quick identification of trouble spots, and faster repair and restoration. The initiative also creates a platform for a

Who We Are

The Business Development Board of Palm Beach County is the official public/private economic development organization for Palm Beach County and Enterprise Florida. Founded in 1982 as a not-for-profit corporation, our primary purpose is to attract and retain new industry, business investment, high-quality jobs, and workforce development through corporate relocations, expansions, and international trade, stimulating economic energy, promoting business diversity, and enriching the County's vitality. The Business Development Board is essentially your one-stop resource for information on relocating your business to or expanding in Palm Beach County.

The BDB offers free and confidential services, including:

- Site inventory on available industrial buildings, land, and office space.
- Site tours conducted by our relocation and expansion staff.
- Information on grants, financial assistance, and incentives available through the State of Florida, Palm Beach County, and local municipalities.
- Government zoning and permitting information.
- Introductions to elected officials and local business leaders.
- Local buyer and supplier information and resources.
- Available services and rates for utilities, communications, and transportation.
- Introductions to the Workforce Alliance employee-training programs.
- Review of available housing and cost-of-living data.
- Demographics and labor market information.
- Introductions to public and private educational institutions.
- Overview of Palm Beach County's lifestyle, including recreational and cultural amenities.

During the past five years, the BDB has assisted companies that have created more than 10,000 direct jobs with average salaries greater than $58,000, resulting in more than $595 million in capital investment to Palm Beach County and an economic impact that exceeds $4.1 billion. Our economic development work in the county is enhanced through our partnerships with the County Commissioners, Palm Beach County's Department of Economic Sustainability, Workforce Alliance, Chambers of Commerce, educational institutions, and our 38 municipalities. The BDB's ongoing commitment to the pursuit of economic prosperity is one reason why Palm Beach County is THE place to live, work, learn, and play.

BUSINESS DEVELOPMENT BOARD
BDB PALM BEACH COUNTY'S Economic Development Resource

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Scripps Energy Laboratory is focused on the critical areas of energy and alternative fuel. The scientists at The Scripps Research Institute's Florida facility are developing the next generation of chemistry as they uncover keys to cleaner, lower temperature combustion and efficient fuels.

Infrastructure & Real Estate

Palm Beach County stretches from Florida's southeast Atlantic coast westward to Lake Okeechobee. With a surface area of 730 square miles, "Lake O" is the largest freshwater lake in the southeastern U.S. and the second-largest in the continental U.S. Aside from being a vital freshwater resource for all of South Florida, its greenbelt creates some of the richest agricultural lands in the country – primarily for sugar cane and vegetables. Palm Beach County's access to national and global markets, via every major mode of transport (air, water, rail, and roadway), offers the perfect corporate environment for the Cleantech industry.

Palm Beach County has ample commercial and industrial real estate that will accommodate corporate headquarters, research & development, or manufacturing facilities. There are over 500 acres of identified "Shovel-Ready" land for commercial and industrial projects, and several buildings available with 30,000 square feet or more of contiguous Class-A office space suitable for corporate headquarters. If turnkey space is not required, there are several hundred acres of land and numerous buildings offering sizes, zoning, and usage for almost any commercial or industrial need. For more information on the real estate currently available in Palm Beach County, please visit the "Available Properties & Land" section of our website, *www.BDB.org*.

The Educated Workforce

Thanks to strong educational systems and workforce initiatives, Palm Beach County is proud of its diverse talent pipeline that provides current and future Cleantech companies with the skilled workers and forward thinkers needed for a competitive advantage.

The School District of Palm Beach County is the 11th-largest in the continental U.S. and the fifth-largest in the state of Florida with 173 accredited schools serving 174,000 students in grades K-12 who speak 141 languages/dialects. Our school grades are among the highest in the state, and The School District of Palm Beach County is the only urban district in the state to have earned an "A" rating from the Florida Department of Education for eight straight years. The Palm Beach County Public School System offers elementary and middle schools with STEM (Science, Technology, Engineering, Math) programs and high schools with STEM-related Career Academies. STEM education creates critical thinkers, increases science literacy, and enables our next generation to become innovators. *www.palmbeachschools.org.*

A wide variety of high-tech and innovative programs and degrees are available that reflect the growing opportunities and ever-changing needs of the Cleantech industry. Bachelor of Science and Master of Science degrees are available at our higher education institutions in many disciplines of biology (marine, botany, molecular), environmental studies, oceanography, bioinformatics, ecology, marine ecology, biomedical sciences, coastal zone management, and marine environmental sciences. Those institutions preparing students for employment in the Cleantech industry include:

At **Florida Atlantic University's (FAU)** College of Engineering and Computer Science, sustainability courses are offered in the Department of Ocean & Mechanical Engineering, the Faculty Honors Fellows Program, and the Civil, Environmental, and Geomatics Engineering programs. In addition to SNMREC, FAU has extensive research programs funded by business, industry, and government. Its research faculty has demonstrated leadership in focused research initiatives including assistive technologies, environmental issues, building materials, corrosion, renewable energy, robotics, autonomous vehicles for ocean exploration, and nanomaterials.

Palm Beach State College (PBSC) offers multiple Cleantech education pathways. Students choose from degrees and certificates in fields like Sustainable Construction and Alternative Energy Engineering Technology. Skills may be "greened-up" with short-term courses given by the College's Center for Green Construction & Energy: prepping for LEED exams, studying smart-grid technology, earning water treatment certification, and much more. With an eye on emerging Cleantech industries, PBSC's Institute for Energy & Environmental Sustainability (IEES) develops green workforce education. Through IEES' efforts, students gain hands-on experience working with campus-installed, state-of-the-art clean energy technologies, including wind turbines, a biofuels learning lab, a wind/solar-assisted electric car-charging station, and "smart-metered" classroom buildings.

Launch
Relocate
Expand
Develop

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