



CITY OF SATELLITE BEACH SOLAR REVIEW

NICHOLAS FRANK SANZONE

SATELLITE BEACH ENVIRONMENTAL PROGRAMS COORDINATOR

THANK YOU FSEC

How we relate to your mission to bring Energy Independence to fruition.

Conduct research: Collaborated with FIT and NASA

Test and certify solar systems: City and community solar projects

Develop education programs: Solar Expo, Events, Workshops, City Website

PRESENTATION OUTLINE:

- Solar energy in Satellite Beach.
 - City position on solar energy.
 - Completed Satellite solar projects.
 - Proposed Satellite Solar Projects.
- SOLSMART
- PACE
- Ready For 100
- The future of solar energy.



SOLAR ENERGY IN SATELLITE BEACH:



portal.sunpower.com

CITY HALL/CIVIC CENTER ARRAY:

- First municipal solar array
- EsaSolar
- System Size 83 kilowatts at peak
- 232 Sun Power panels
- Withstands 160 mph winds
- Ballasted system
- Switched on Sept. 27, 2018



CITY HALL/CIVIC CENTER ARRAY:

To Date:

- Produced: 243,905 kWh
- Abated: 185 tons of CO₂

Equivalent to:

- 19.4 Homes powered for one year
- 57.1 Tons of waste recycled instead of landfilled
- 2,778 seedlings grown for 10 years
- 21,424,858 Cell phones charged
- 185,108 lbs. of coal burned



PELICAN ARRAY:

- First municipal solar canopy
- Florida Power and Light (FPL)
- Free to City via FPL's SolarNow Program
- 25 kilowatts at peak
- 90 solar panels
- Rated to withstand 150 mph winds



PROPOSED SATELLITE BEACH SOLAR PROJECTS.

- New Fire and Public Works

Concept Estimate: 30.02 kW; 76 panels;
producing 1 million+ kWh over lifetime

Finance Estimate: \$80k upfront; \$151k
savings over lifetime; 89% ROI

- Other city assets- not yet started

DRS Community Center

Police Department

Park infrastructure



PROPOSED SATELLITE BEACH SOLAR PROJECTS.

- Floating Solar in a city park
- Solar powered irrigation for the Community Garden
- Solar study with NASA
- Local business to have solar

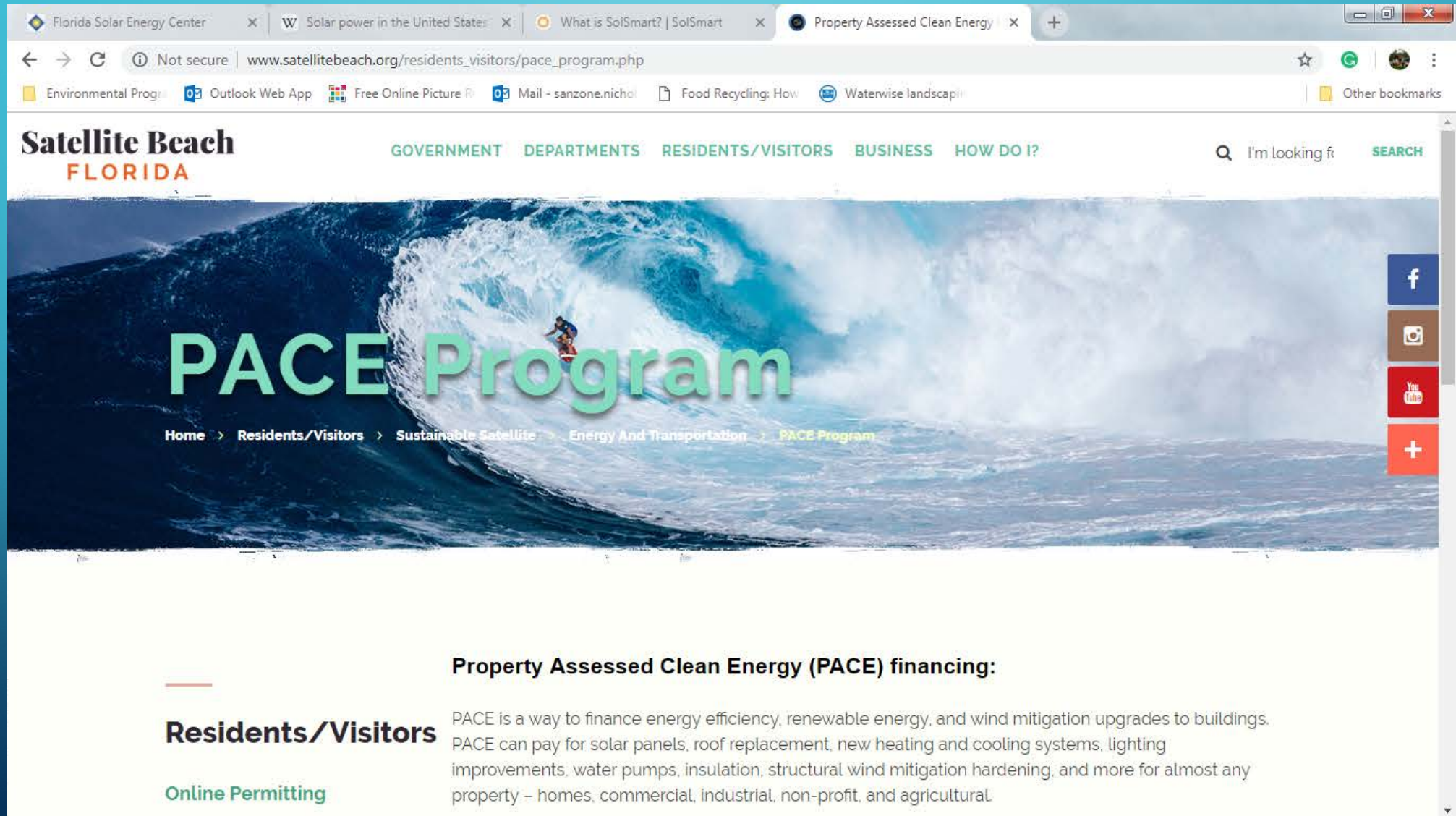


SATELLITE BEACH PROMOTES SOLAR:

- Satellite Beach is one of the first 15 cities in the nation to achieve SolSmart “Gold”
- 2017 SAP GAT #1: City is to run all of its municipal buildings and facilities off of renewable energy by 2037
- Endorses PACE Program



PACE PROGRAM:



Florida Solar Energy Center | Solar power in the United States | What is SolSmart? | SolSmart | Property Assessed Clean Energy

Not secure | www.satellitebeach.org/residents_visitors/pace_program.php

Environmental Progr | Outlook Web App | Free Online Picture R | Mail - sanzone.nicho | Food Recycling: How | Waterwise landscap | Other bookmarks

Satellite Beach
FLORIDA

GOVERNMENT | DEPARTMENTS | RESIDENTS/VISITORS | BUSINESS | HOW DO I? | I'm looking for | SEARCH

PACE Program

Home > Residents/Visitors > Sustainable Satellite > Energy And Transportation > PACE Program

Property Assessed Clean Energy (PACE) financing:

Residents/Visitors PACE is a way to finance energy efficiency, renewable energy, and wind mitigation upgrades to buildings. PACE can pay for solar panels, roof replacement, new heating and cooling systems, lighting improvements, water pumps, insulation, structural wind mitigation hardening, and more for almost any property – homes, commercial, industrial, non-profit, and agricultural.

Online Permitting

PACE PROGRAM:

- PACE is a way to finance energy efficiency, renewable energy, and wind mitigation upgrades to buildings.
- PACE can pay for solar panels, roof replacement, new heating and cooling systems, lighting improvements, water pumps, insulation, structural wind mitigation hardening, and more for almost any property – homes, commercial, industrial, non-profit, and agricultural.

PACE financing pays for 100% of a project's costs and is repaid over a period of up to 20 years through a voluntary non-ad valorem assessment added to the property's tax bill. PACE assessments stay with the property upon sale.

PACE PROGRAM:

- PACE assessments are co-equal in dignity with all other assessments on the tax bill.
- PACE assessments are not considered a loan by credit agencies. Eligibility and interest charged do not depend on an applicant's credit score.
- In Florida PACE financing is governed by Section 163.08 Florida Statutes, "Supplemental authority for improvements to real property".
- A local government must enter into an agreement with a PACE funding provider to allow that entity to place its projects onto the local government's tax bills.
- Satellite Beach has entered into such an agreement with all four PACE funding providers now authorized to operate in Florida.

READY FOR 100

- Aug 7, 2019 SATELLITE BEACH, FL -City Council of Satellite Beach unanimously passed a resolution committing the city to transition to 100 percent clean, renewable energy for the entire community by 2050 and for municipal operations by 2032. one of the first 10 cities in the nation to achieve Ready for 100.



THE FUTURE OF SOLAR ENERGY:

- It is estimated by 2023, there will be 1 terrawatt (1 trillion watts) of solar power capacity across the globe
- 70,000 solar panels will be installed every hour around the world over the next 5 years



RECAP AND HEADLINES

Collaborated with FIT on a off grid city microgrid DOE grant

Collaborated with NASA on a solar capacity study

City Hall solar array

Pelican Park solar array

New municipal buildings to be solar ready

Held a Solar Expo and promoted solar at other events

Worked with FSEC on a Workshop

Have multiple sections on the City Website that relate to solar

NASA DEVELOP LINKS

1. StoryMap Link - <https://arcg.is/0jvC1W>
2. Link to presentation file –
<https://drive.google.com/file/d/1IAXKLQLDUAcIQz9SvrnPieOt6bL1ED-c/view>
3. Link to google share drive (zip) of released materials -
<https://drive.google.com/file/d/1MDB1GqT9HBy9psT6YYRZCh8q3nwS7gXh/view>
4. Link to council meeting where NASA team gave presentation -
<https://www.facebook.com/315217078606298/videos/2592015491109689>
 - This is a Facebook live link to the City Manager FB page. The official recording from the council chambers does not display the desktop with the presentation in real time as the NASA interns speak.

