

# CHERRY STREET ENERGY

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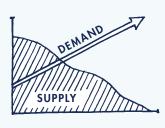
# CHERRY STREET ENERGY

A Renewable Energy Provider

# Who We Are

Global electricity demands have changed the way electricity is delivered and consumed.





LIMITED SUPPLY
Non-renewable sources of energy are unable to meet continued demand

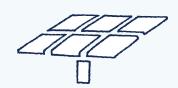


RISING ELECTRICITY COSTS Commercial rates in GA have increased 50% since 2004









SOLAR Harness the sun to generate clean and local electricity



UNLIMITED SUPPLY Choose a renewable energy source



FIXED RATE
Establish lower, predictable energy
costs for the long term

# Market Context



# **HOUSE BILL 57**

The Solar Power Free Market Financing Act of 2015

Signed into law on July 1, 2015. Amends the Territorial Electric Service Act of 1973, allowing for Third Party Ownership of solar in the state of Georgia.

Georgia is the first state in the southeast and the 25th state in the nation to allow for Third Party Ownership of Solar

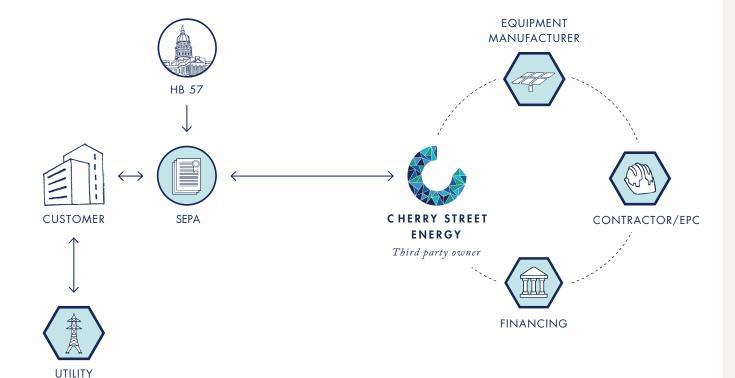
# **SEPA**

Solar Energy Procurement Agreement Commonly called a PPA in other states.

A long term agreement in which the customer (off-taker) buys power at a negotiated SEPA **rate** (\$/kWh) for a specified SEPA **term** without taking ownership of the system.

A Third-Party owns the system and is responsible for all permitting, installation, maintenance, and decommissioning.

# Changes in GA's Energy Market

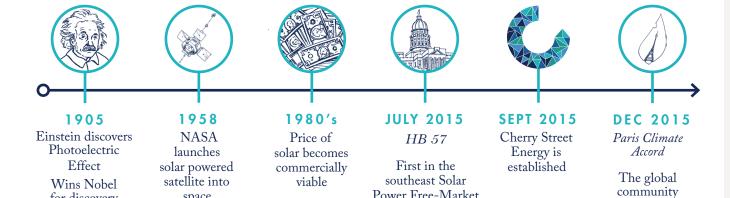




# A BRIEF HISTORY

Solar power is a long-valued, reliable energy solution

# About Solar



# **OUR MISSION**

Do Good and Do Well

# DO GOOD

for discovery

(1922)

- Offer customers a local energy choice.
- Simplify the switch to solar by providing a fully integrated, turn key solution.

space

Contribute to a **healthier future**.

# **DO WELL**

Power Free-Market

Financing Act

Reduce our customer's energy bill.

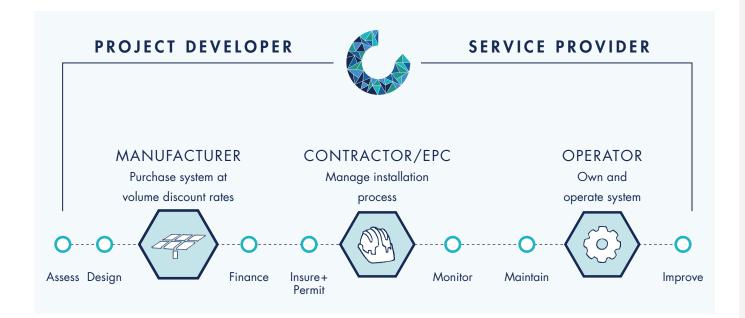
commits to ending

the carbon era

- Provide continued technological innovation.
- Implement a business model with proven, repeatable, and scalable results.



# A FULLY INTEGRATED TURNKEY SOLUTION



## **ASSESS**

- Site evaluation
- Energy audit

## **DESIGN**

- Structural analysis
- Engineering; electrical specifications
- Solar layout

### **FINANCE**

 Cover upfront costs of installation

# INSURE + PERMIT

 Obtain necessary permits and insurance

# **MONITOR**

- 24 hours online system monitoring
- Performance monitoring

## MAINTAIN

- Manage system warranties
- Maintenance
- Repair

# **IMPROVE**

 Safeguard against obsolescence by offering continual innovation

# How We Do It



# CLEAN, MORE AFFORDABLE ENERGY

Solar bill paid monthly, just like utility bill...only at lower cost

# VALUE TO CUSTOMER



# **SAVINGS**

Immediate reduction in energy bill with increased savings expected over time.

### SIMPLICITY

Source, install, and produce clean energy, for you.

## **STABILITY**

Cost of Electricity

Budgetary certainty; hedge against future electricity price increases.

# VALUE TO CHERRY STREET



### **RELATIONSHIPS**

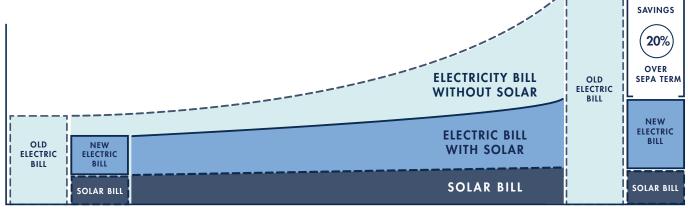
20+ year customer relationship.

### **RETURNS**

Recurring predictable cash flow.

### **LEADERSHIP**

Be a leader in Georgia's transition to renewable energy.



Year 1 New lower electricity bill + SEPA payment < Old electricity bill

Year 20

# The Value Proposition



# Appendix



# How do photovoltaics work?

Sunlight on photovoltaic (PV) modules/solar panels produces direct current (DC) electricity which is converted to alternating current (AC) by a device called an inverter, which is then wired into your main service panel where it feeds your internal power grid.

# How long will PV modules last?

Generally, 25+ years. These modules also have manufacturer warranties. In 2003, BP Solar published the results of their analysis of warranty claims and reported that of more than two million modules in service over nearly ten years, approximately one-tenth of one percent were reported faulty, noting "this represents one module failure for every 4,200 module-years of operation." Put another way, if your system has one thousand modules, you may experience the failure of ten modules in 40 years.

# How do you determine how large a system I'll need?

The size of the system is usually directly proportional to the amount of power you use. As part of the proposal process Cherry Street Energy will perform a site assessment and analyze at least twelve months' worth of utility statements.

# What happens on dark/cloudy days?

Unlike the early days of solar power when systems had to be sized for peak loads, a grid-connected PV system seamlessly switches to draw from the utility grid when needed. As such, Cherry Street Energy uses an annual production target, averaging out sunnier days with cloudy days.

# How much weight will this put on my roof?

PV systems typically weigh no more than 3-4 lbs/sq ft, and most roofs can accommodate 2-3 times that amount of 'dead load' weight and your specific roof load capacity will be taken into account with our proposed design.

# What are the maintenance procedures?

Solar PV systems are solid state technology, have no moving parts and require no maintenance beyond cleaning, which can typically be done with a garden hose. Most systems should be cleaned 2-4 times a year, concentrated in the drier seasons. Inverters are also solid state and require little to no maintenance beyond regularly checking the cooling fan outlets and cleaning when necessary. Mounting hardware is either aluminum or stainless steel and is rust-proof.





# **ROOF MOUNT**





Sample Solar Installations

**GROUND MOUNT** 





**PARKING CANOPY** 







Across industries, America's business leaders are choosing solar to improve their bottom line and prepare for the future.



















































































































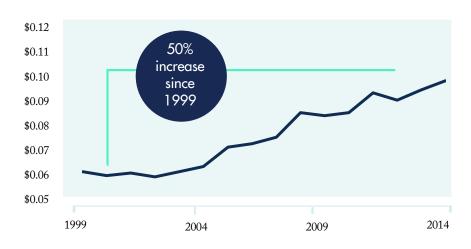






# **HISTORIC**

GA Commercial Rates (cents/KWh)



# **FUTURE**

Rates Continue to Rise

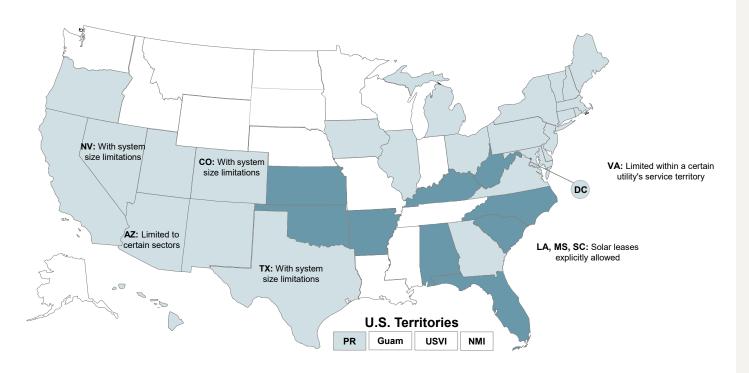
PUBLIC COMPANY	Publicly traded companies have stated financial comittments to shareholders.
ENVIORMENTAL REGULATIONS*	<ul> <li>Costs of Clean Power Plan: GA must reduce emissions by 34% by 2030.</li> <li>\$830 Million: Increased production costs and insufficient reserve margins.</li> <li>\$485 Million: Covers the impacts to fuel program and the retirement of 4,000MW of fossil fueled units.</li> <li>\$70 Million: Transmission Projects</li> </ul>
PLANT VOGTLE	<ul> <li>Construction of two new units. Costs passed on to customers.</li> <li>Three years behind schedule with no tentative completion date.</li> <li>\$3 Billion over budget.</li> </ul>
COAL	Scheduled decommissioning of plants.  • Plant Mitchell  • Plant Kraft
INFASTRUCTURE	Investment in aging grid.  • Power Lines  • Substations  • Distribution Centers

# Energy Rate Analysis



CHERRY STREET ENERGY

# STATES THAT ALLOW FOR THIRD-PARTY OWNERSHIP July 2016



26

At least 26 states (plus DC & Puerto Rico) explicitly authorize third-party solar PPAs. through policies that exempt PPA transactions from utility regulation.

15

15 states do not address PPAs through state level policy. PPAs in these states may be subject to utility regulation on a case-by-case basis.

9

9 states have policies that explicitly prohibit or restrict PPAs.

# TPO Map



INITIAL TERM	20 Years
PAYMENT TERMS	Monthly, based on consumption
ANNUAL INCREASES	Contracts may provide for annual increases
SYSTEM OWNERSHIP	Cherry Street Capital and its subsidiaries own the system
SERVICES PROVIDED	<ul> <li>Professional-grade monitoring with web access at no cost to the customer</li> <li>Responsible for all insurance, operations, and maintenance costs. Including inverter replacement</li> </ul>
CUSTOMER OBLIGATIONS	<ul> <li>Provide access to property for design, installation, operations, and maintenance and inspection of the system</li> <li>Maintain insurance for damage to building</li> <li>Maintain a consistent level of shading throughout the initial term</li> </ul>

# Overview of SEPA Terms



### SUMMARY

On May 12, 2015, Georgia took a giant leap forward in the development of distributed solar power in the state, out pacing all other states in the region. With the enactment of HB 57, The Solar Power Free-Market Financing Act of 2015, Georgia became the first state in the Southeastern U.S. to legislatively approve private sales of electricity from onsite solar systems as a means of financing solar energy for Georgia businesses, institutions, schools and homes. The forward-thinking legislators in Georgia's General Assembly, led by the bill's sponsor, Representative Mike Dudgeon (R-Johns Creek), recognized that the ability to use the free market to finance solar systems in the most efficient and cost-effective ways the free market offers, is a right of property owners throughout Georgia. No longer can Georgia businesses, institutions and residents be told that the law prohibits the purchase of electricity from an onsite solar system financed by a third party that is not an electric utility. "Georgia has created a market for solar energy financing that did not previously exist in the state or any other Southeastern states," said Steve O'Day, head of the Sustainability Practice Group at Smith, Gambrell & Russell, LLP, and one of the principal negotiators of the legislation. "It is the hope of all that worked on this legislation that Georgia will see a surge in free market financing and development of solar energy projects at businesses, institutions and homes across the State."

### WHAT THE LAW DOES

The Solar Power Free-Market Financing Act establishes that "solar energy procurement agreements" (SEPAs), known elsewhere in the country as "power purchase agreements" (PPAs) are a lawful way to finance the construction and operation of a solar electric generation system. A solar company can now finance the construction of solar panels for a home, business or institution in Georgia, including public schools, government buildings, colleges and universities, military bases, etc., and be repaid for the system through payment by the property owner for the electricity produced by the solar system. What does it take to qualify as a SEPA?

- SEPAs include any agreement—leases, PPAs, etc.—in which a solar company pays for the installation and operation of the solar system, and payments to the solar company "are based on the performance and output of the solar technology installed on the property", that is—payment for the electrical output of the system.
- The solar technology must be installed on property owned or operated by the person or entity using the power from the system.
- The solar system must be connected to the utility's distribution system "on either side of the ... meter."
- The design capacity of the solar system must be at or below the "capacity limit", which is a peak generating capacity, stated in alternating current (AC), that is no greater than:
  - 10 kW (kilowatts) for a residential system.
  - 125% of the actual, or expected, maximum annual peak demand of the premises the solar system serves, for all non-residential systems.
- The solar system complies with all applicable state and local laws.
- The solar company or the property owner/operator notifies the local electric utility at least 30 days before the solar system becomes operational.
- Interconnection with the utility grid complies with the following:
- For residential systems of 10 kW or less, and commercial systems of 100 kW or less: applicable safety, power
  quality, and interconnection requirements established by the National Electrical Code, National Electrical Safety
  Code, Institute of Electrical and Electronics Engineers, and Underwriters Laboratories
- For larger systems: additional requirements only as "necessary to protect public safety, power quality, and system reliability."

### **REFERENCE:**

www.sgrlaw.com/blog/2015/05/a-win-for-solar-energy-in-georgia-the-solar-power-free-market-financing-act-becomes-law-2/

# **HB57**

