

# THE TOWER COMPANIES: SOLAR POWER PORTFOLIO EXPANSION





# THE TOWER COMPANIES

COMPANY PROFILE

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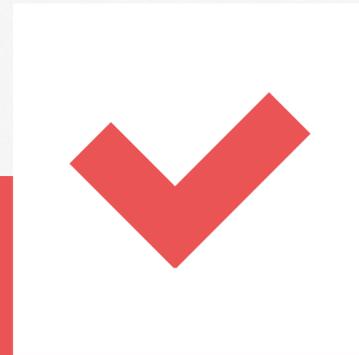
## COMPANY PROFILE

1.

- Founded by Albert Abrasion in 1947
- Continues today, managed by his sons Gary, Ronald and Jeffrey
- Family Owned, Privately Held Real Estate & PM Firm
- Develops, Owns and Manages Property in DC Area

2.

- Leader in Green Building Industry
- Recognized for leadership in sustainable development by
  - U.S. Green Building Council
  - U.S. Department of Energy
  - U.S. Environmental Protection Agency
  - Building Owners and Management Association
  - National Resources Defense Council
  - Institute for Market Transformation



**SUSTAINABILITY LEADERSHIP**



## 2000 TOWER OAKS BLVD.

2000 Tower Oaks Boulevard

- The Tower Companies Corporate HQ
- Built in 2007 and located in Rockville, MD
- First commercial building to achieve LEED Platinum
- Greenest Office Building in MD
- One of the World's Greenest Buildings

## THE TOWER BUILDING

1101 Wootton Parkway, Rockville, MD

- LEED Gold and ENERGY STAR Certified Tower
- Apartment and Office Association of Metro Washington's Green Office Building of the Year Award
- City of Rockville's first ever Environmental Excellence Award for Corporate Leadership in Green Building



# MILLENNIUM BUILDING

1909 K STREET, WASHINGTON, DC 20006

## BUILDING SPECS

- Multi-Tenant Ofc.
- 235,000 SF
- Built in '60's
- Renovated in 1999

## SUSTAINABILITY

- LEED Gold Certified
- ENERGY STAR Certified
- Green Lease Requirements
- LED Lighting
- EV Charging Stations
- Composting Program

## HEALTH AND WELLNESS

- On-site Workout Facility
- Bike Storage/Support Room
- Roof Top Herb Garden

# SOLAR POWER ADDED IN 2014

# COMPLETED SOLAR PROJECT

1909 K STREET, WASHINGTON, DC 20006



**ENERGY**

- Offset 100% of energy consumption
- Rating of 86
- DC's first PV solar array for a Class A building
- Better Buildings Challenge (U.S. Department of Energy)
- 20% reduction goal by 2020

**LEED**

- A Premier LEED Gold Building - Washington, DC's first LEED-EB Office Building
- Green Lease Guidelines for all clients

**WASTE**

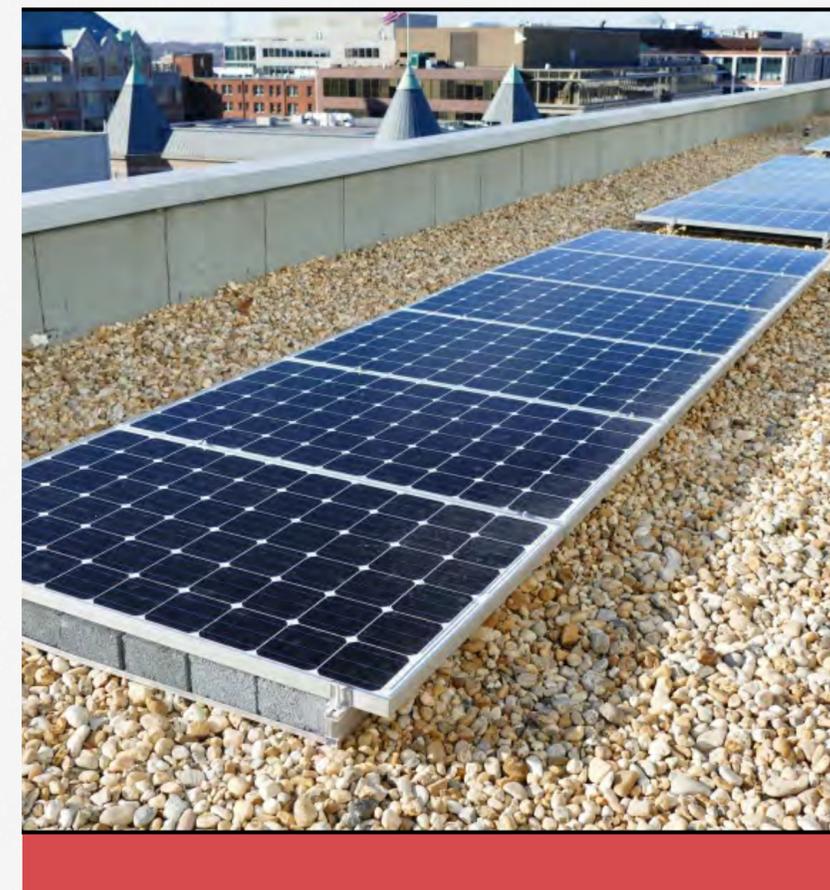
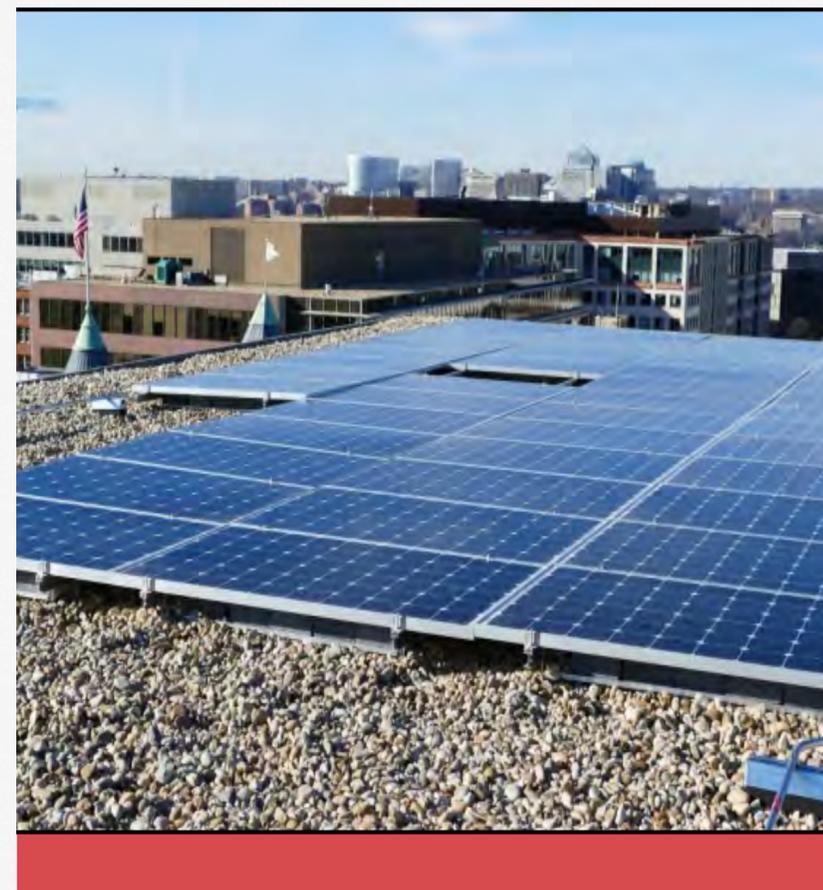
- Industry-leading composting program
- Waste management over 50% landfill diversion rate above the national average

**WATER**

- Efficient building cooling tower
- Rain barrel for irrigation
- Low flow fixtures
- 15% reduction in water use

**VISION STATEMENT**  
The Tower Companies envisions a world where buildings inspire and enrich the lives of their occupants, and create positive social change. In this world, people seek out buildings that better their health and well-being, connect them to thriving communities, and help to sustain the environment.

**MISSION STATEMENT**  
The Tower Companies owns, develops and manages commercial, retail and multi-family residential properties in the DC metro area, while being mindful of our global impact. Our buildings are among the most sustainable in the world, blending sophisticated design, smart growth principles, unparalleled amenities and unrivaled service in a way that transforms expectations about real estate and improves the way people live, work, and play.



The Tower Companies was able to create a Sustainability Features Infographic just for the Millennium Building.

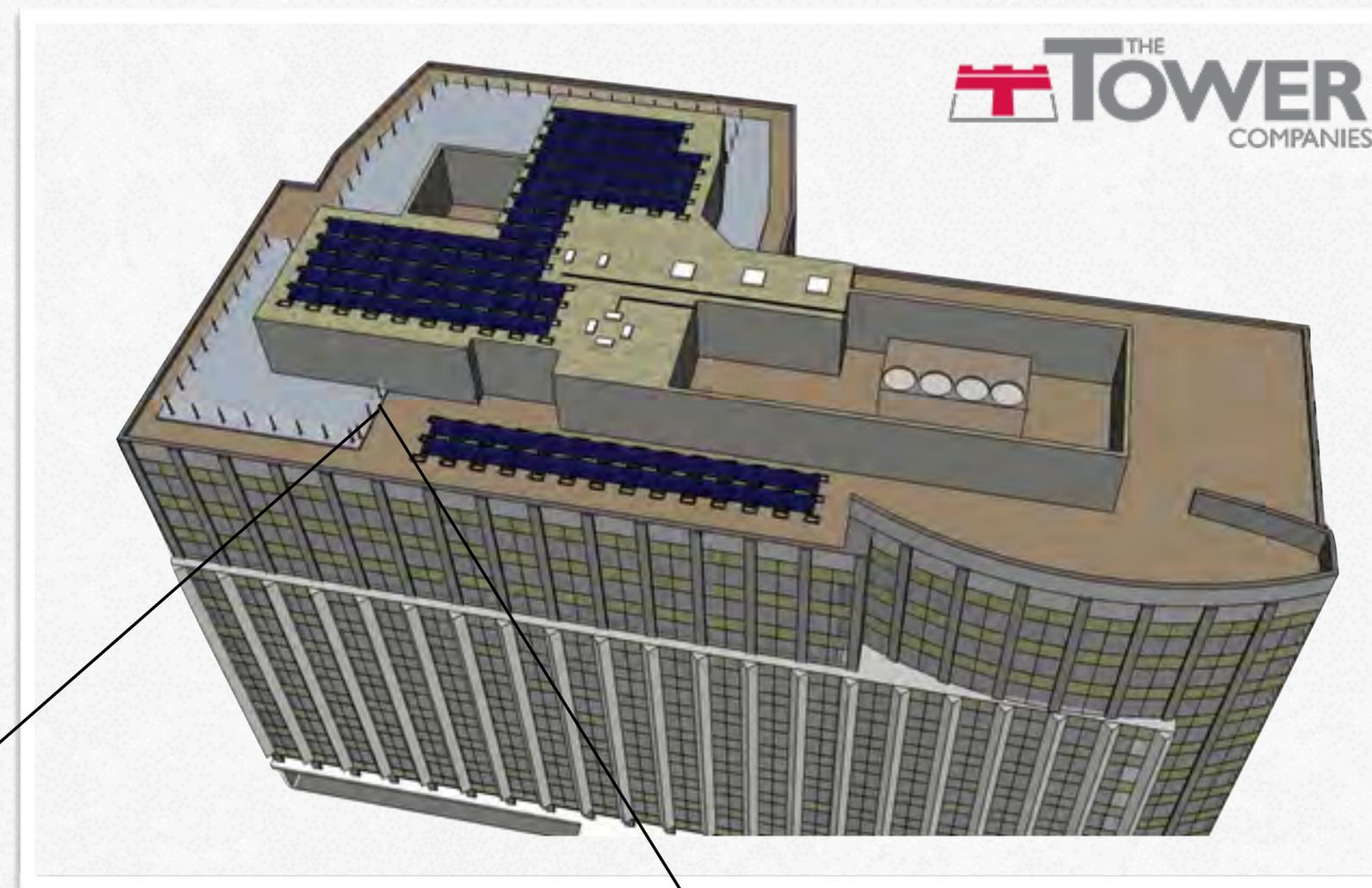
The Tower Companies owns several office buildings in downtown DC. This one was picked because solar installation would not hamper window washing, and tenants could see panels.

The Millennium Building Solar Project allowed The Tower Companies to utilize several financial incentives and expand sustainability initiatives.

# COMPLETED SOLAR PROJECT

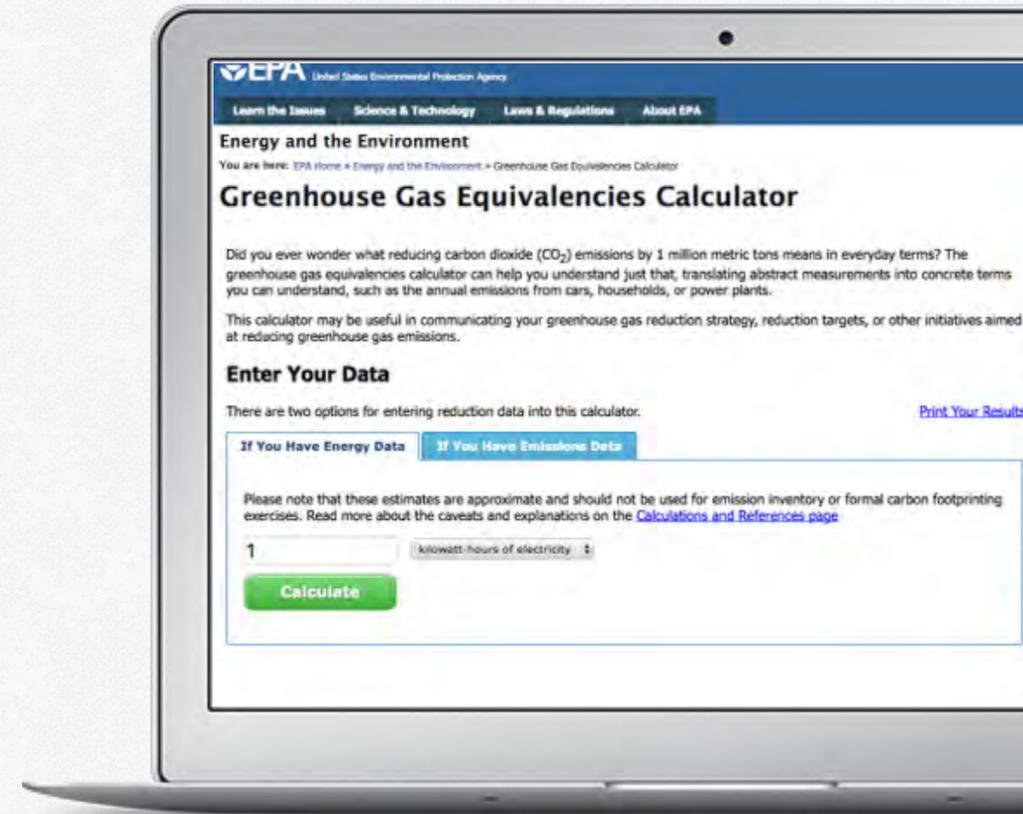
1909 K STREET, WASHINGTON, DC 20006

1. Total System Size: **29.43kW**
2. No. of 270W panels: **109**
3. Est. Annual Production: 37,500 kWh, 1%
4. Project Included Educational Signage and Real-time Status Board

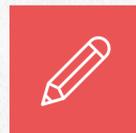


# WHAT IS A KILO-WATT HOUR?

MEASURING SOLAR SYSTEM IMPACT



<https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>



## Equivalency Results

The sum of the greenhouse gas emissions you entered above is of Carbon Dioxide Equivalent. This is equivalent to:

25.9 Metric Tons

### Greenhouse gas emissions from



### CO<sub>2</sub> emissions from

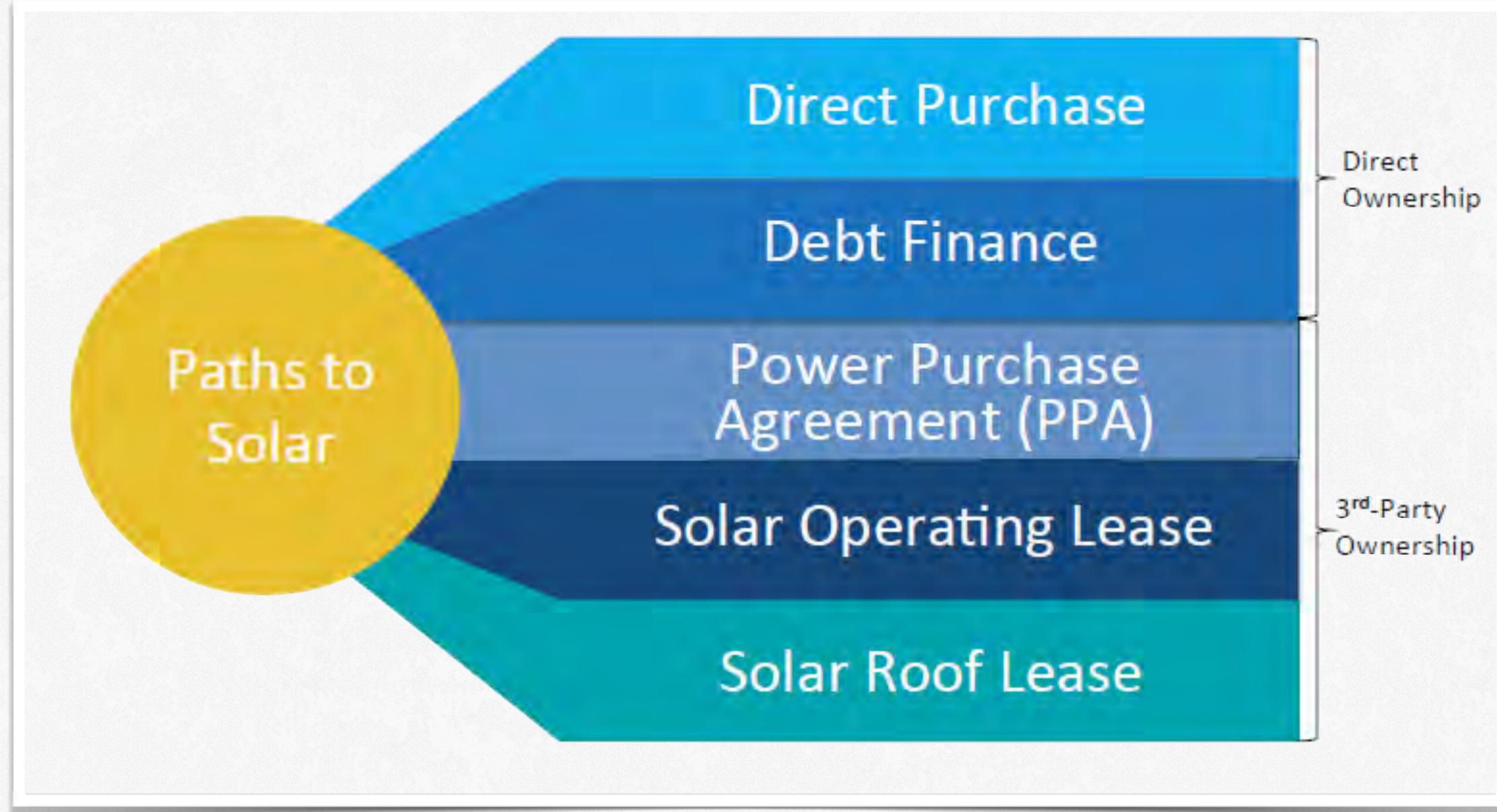


# CHOOSING THE RIGHT PATH

THE TOWER COMPANIES APPROACH

## PRIMARY OPTION: DIRECT PURCHASE

The Tower Companies develops and manages properties, making direct purchase the best option to ensure tax incentives, energy savings and ensure long-term ROI



# POTENTIAL INCENTIVES FOR SOLAR POWER

THE TOWER COMPANIES APPROACH



NOTE: Incentives depend on ownership model

Middle Column: MD/DC SREC Income and Roof Repair Costs (scope dependent)

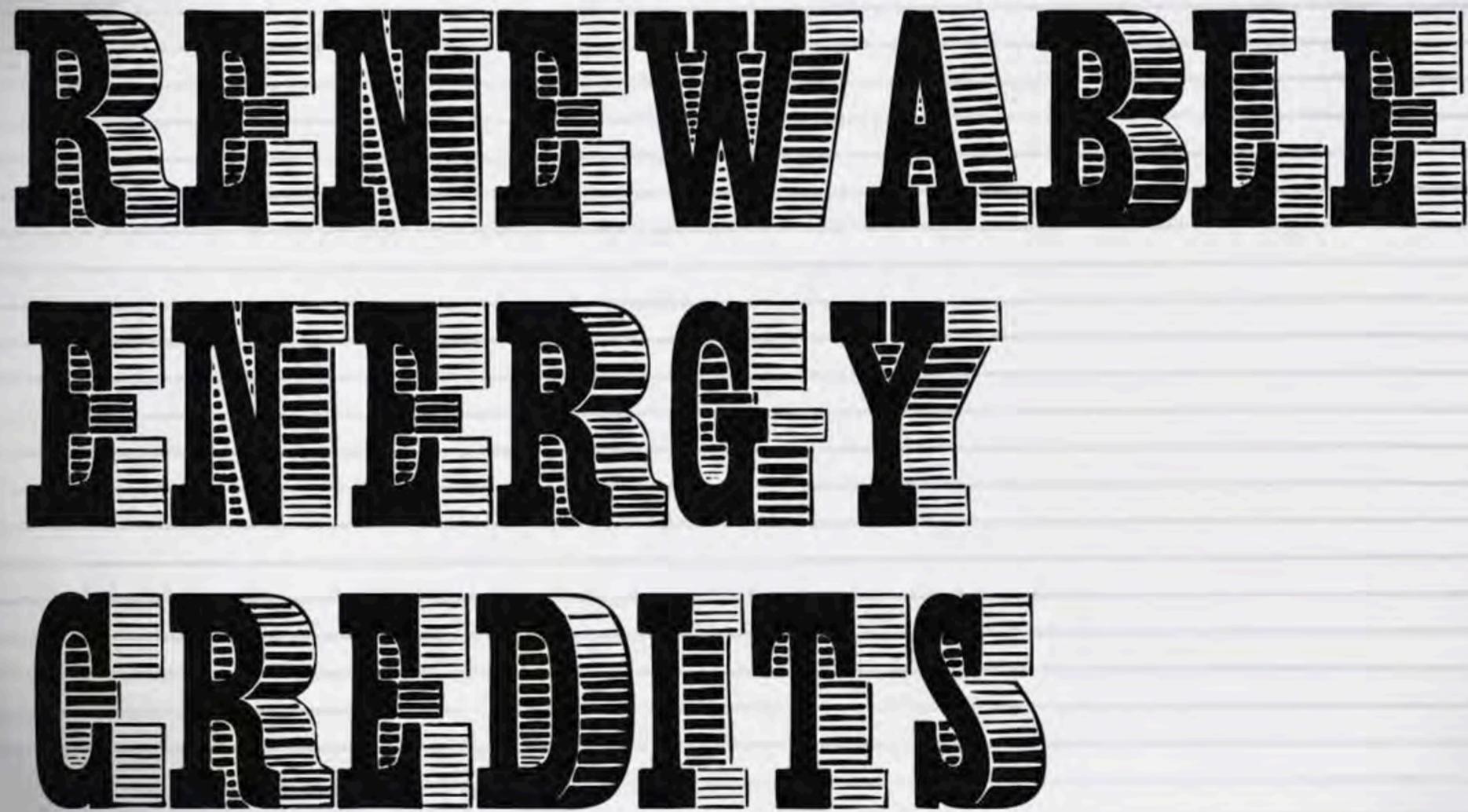
Not Shown: Bonus/Accelerated Depreciation, a very important affordability aspect

Extended 50% in first year for 2015, 2016, and 2017 and the phases down to 40% in 2018, 30% in 2019

Pro forma factors in all costs and incentives, gives break even year (example: The Pearl)

# WHAT ARE SOLAR RENEWABLE ENERGY CREDITS?

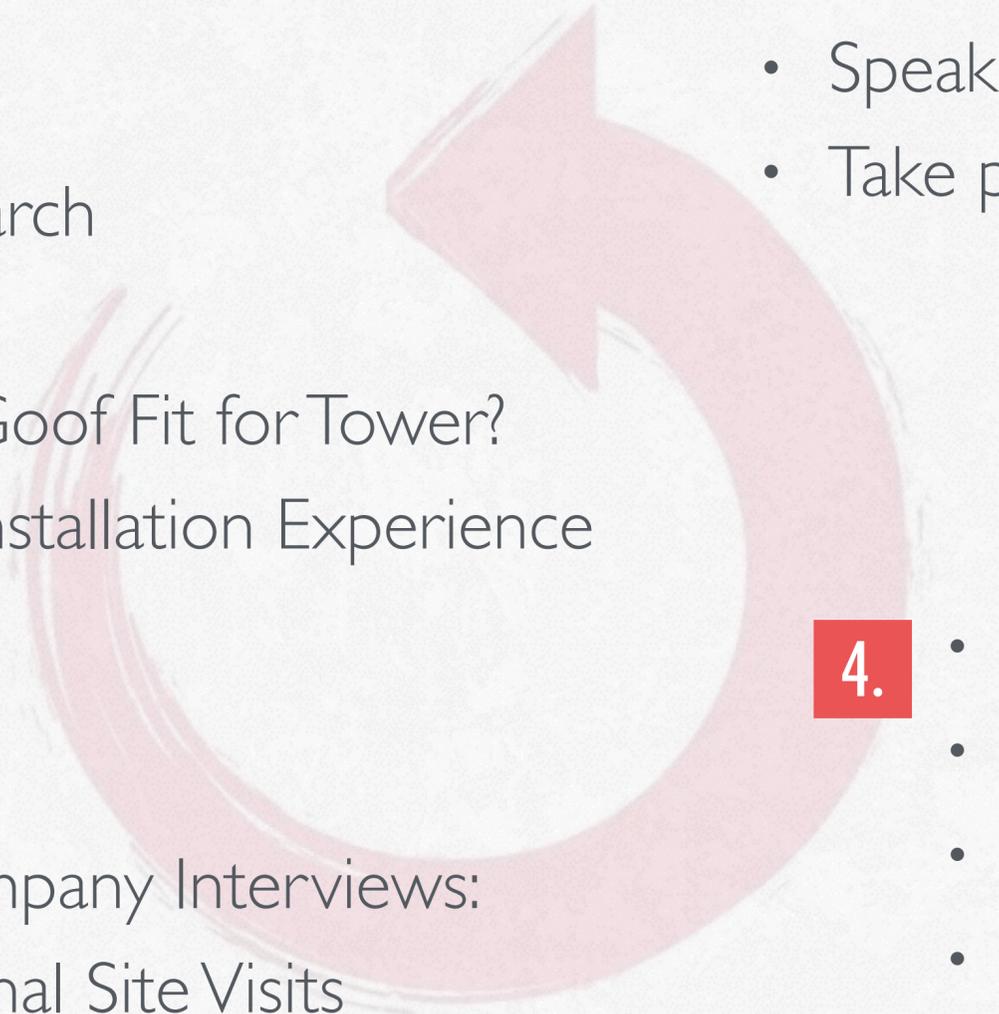
THE TOWER COMPANIES APPROACH

A graphic showing the words "RENEWABLE ENERGY CREDITS" written in a hand-drawn, 3D block font on a sheet of lined paper. A green arrow points to the top of the word "RENEWABLE".

**RENEWABLE  
ENERGY  
CREDITS**

# EXPANDING SOLAR PORTFOLIO

THE TOWER COMPANIES APPROACH

- 
- 1.** • Site Visits:
    - Building and Roof Walk Through
    - Investigate Roof Condition
    - Speak with on-site maintenance personnel
    - Take pictures
  - 2.** • Solar Company Initial Research
    - Are Initial Ideas Feasible?
    - Is the Solar Company a Good Fit for Tower?
    - Do they have the Right Installation Experience
    - Narrow Options Down
  - 3.** • Solar Company Interviews:
    - Additional Site Visits
    - Obtain Project Proposal
    - Review Proposal/Structure Options
    - Provide Project Feedback
  - 4.** • Select Installers for Viable Projects
    - Recommend Project Specs to Owners
    - Obtain Necessary Permits/Variations
    - Construction/Installation Begins