



# SUNPOWER®

## Capital Markets Day

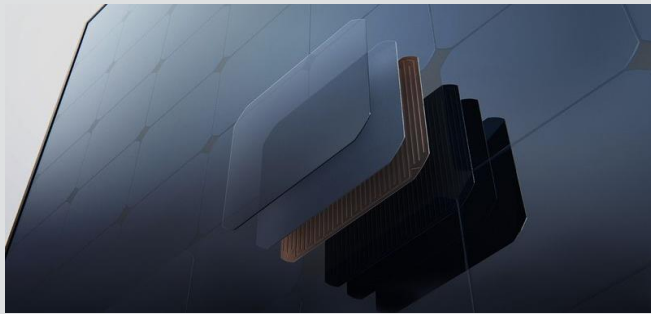
**JEFF WATERS**

CEO, SunPower Technologies

**MARCH 2019**

# The Transformation: Innovation and DG Focus

## Panel Technology and ROW Sales SPT Jeff Waters



- Panel innovation leadership
- DG margin expansion with Maxeon® 5 “NGT”
- PP volume growth with P-Series China JV
- Capital light / low capex model

## NA Commercial SPES Nam Nguyen



- Strong demand – MW up 50% 2019
- Cost reduction – system / scale
- Storage – software / installed base
- Services – customer, grid

## NA Residential SPES Norm Taffe



- Leverage NGT panel advantage
- Expand powerful energy platform
- Exploit New Homes market leadership
- Extend offering to storage & services

Driving MW growth and higher gross margin \$/w across the platform

## SUNPOWER TECHNOLOGIES

# Winning Strategy

### Analog Semiconductors

#### An Ideal Target Market

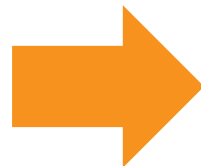
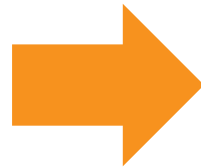
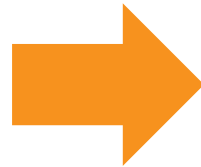
- Many smaller customers, geographically diverse
- Pay for performance, features, quality
- Mid-sized market that's growing

#### Target Market Strategy

- Valued innovation
- Service excellence
- Strong brand; scalable customer engagement

#### Adjacent Market Strategy

- Safely partner with cost-leading competitors in lower-value segments/markets
- Options: License, out-source production, JV
- Leverage OpEx, supply chain, brand



### SunPower Technologies

#### Solar Distributed Generation (DG)

Residential and Commercial

SUNPOWER®  
MAXEON®

#### Solar Power Plant (PP)

SUNPOWER®  
PERFORMANCE

## OUR VISION

# SunPower Technologies



### Continuous Innovation

- Decades of experience, customization and optimization
- Maxeon and Performance Series



### Bringing Meaningful Value to Meaningful Markets

- More power + Better reliability + Better Service = Price Premium
- Distributed Generation (Maxeon) and Power Plant JV (P-Series)
- Leverages SPES customer knowledge in North America



### Leading to Significant Growth in Value

- Dramatic improvement in capacity, capital intensity, and profitability.



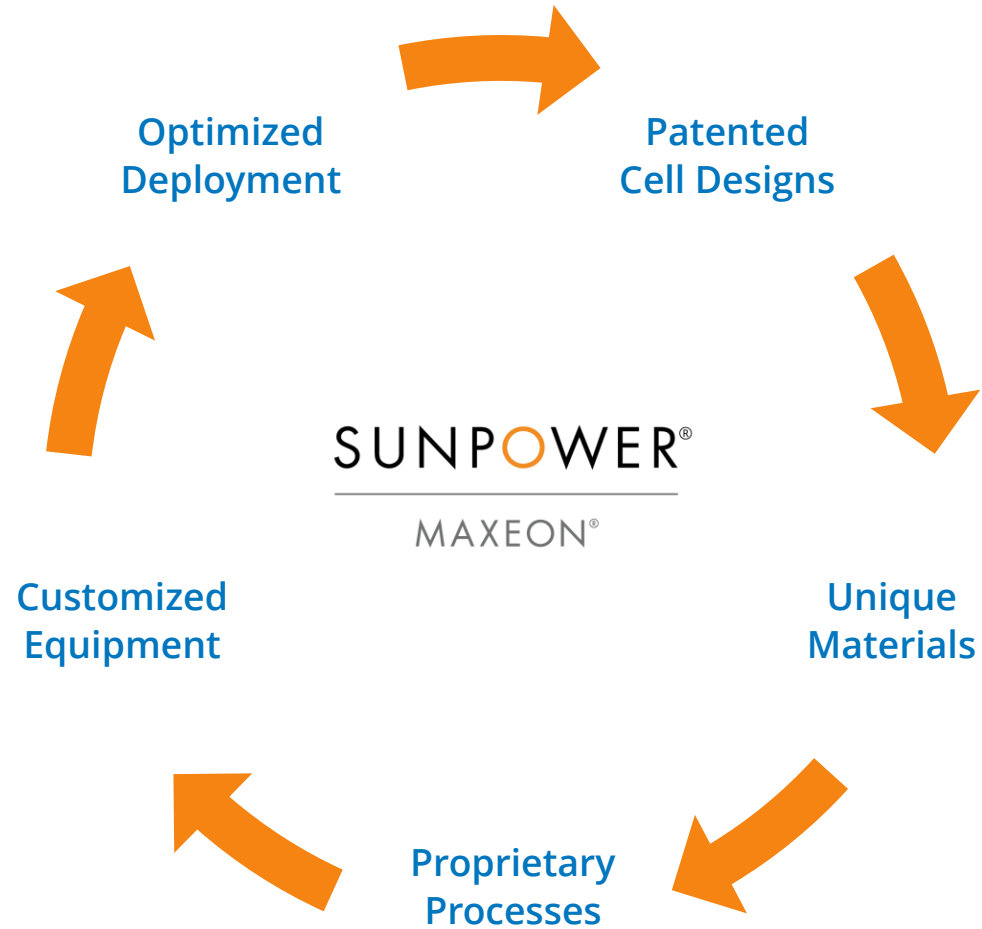
## PROFIT MODEL

# Target Model

<b>Revenue Growth (CAGR)</b>	10-20%	<ul style="list-style-type: none"><li>• Build out of global channel</li><li>• CapEx-efficient expansion</li></ul>
<b>Gross Margin</b>	>15%	<ul style="list-style-type: none"><li>• Fab conversion to new technology (i.e. Maxeon® 5)</li><li>• Premium ASP in DG</li></ul>
<b>Opex</b>	<7%	<ul style="list-style-type: none"><li>• Scalable customer engagement</li><li>• Volume scale with China JV</li></ul>
<b>EBITDA</b>	>10%	

CONTINUOUS INNOVATION

# Unique and Proven Innovation Platform



## CONTINUOUS INNOVATION

# Maxeon® 5

### Highest performance in the industry

- 25% cell efficiency, highest in commercial production
- First residential panel rated at > 400 Watts

### Premium product at competitive costs

- Simplified process: fewer steps, reduced tool count
- Larger wafers > 50% lower cost per watt

### Proven technology running on full-scale line

- Utilizes existing facilities (Malaysia), replacing Maxeon® 2
- 2x manufacturing capacity at half of the CapEx per watt



## CONTINUOUS INNOVATION

# Maxeon®: Why It Matters to Customers

### More power per roof

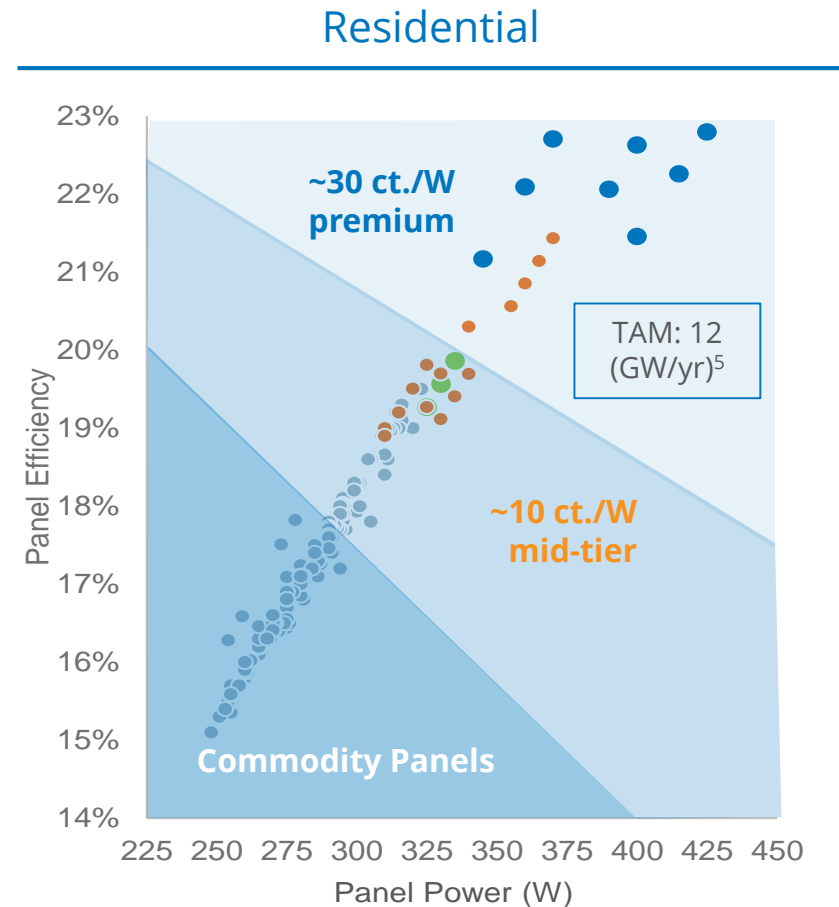
- Better efficiency leads to more power for equivalent sized panels

### More lifetime energy in the same footprint

- Slower degradation
- 50% more energy in the same space over the first 25 years compared to conventional panels.<sup>1</sup>

### Industry's leading warranty

**Commands \$0.30/watt pricing premium in Residential, and \$0.15/watt in Commercial**



<sup>1</sup> SunPower 360W compared to a Conventional Panel on same sized arrays (260W, 16% efficient, approx. 1.6 m<sup>2</sup>), 4% more energy per watt (based on 3pty module characterization and PVSIM), 0.75%/yr slower degradation (Campeau, Z. et al. "SunPower Module Degradation Rate," SunPower white paper, 2013).



## CONTINUOUS INNOVATION

# Performance Series: Why it Matters to Customers

### Highest Efficiency (19%) at a Competitive Price

- Utilizes commodity PERC Cells
- Patented “Shingled” interconnection technology

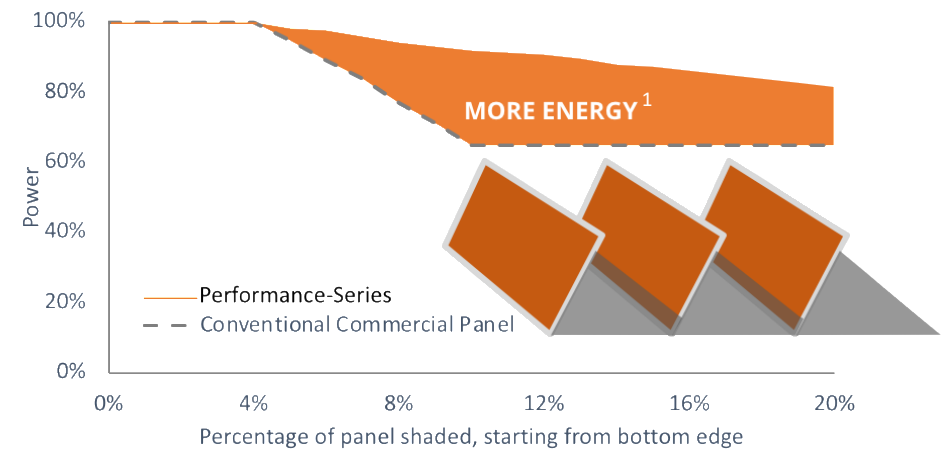
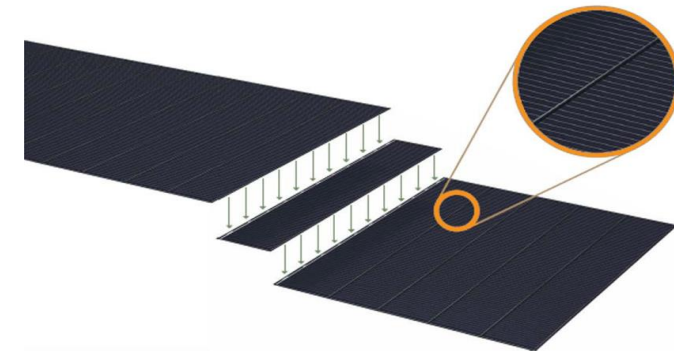
### Reliability Advantages

- Highly resistant to a harsh environment
- Industry leading warranty

### Enhanced Energy Yield

- Patented string design enhances energy yield
- Limits power loss due to shading and dirt build-up
- Enables closer row spacing, reduces installation cost

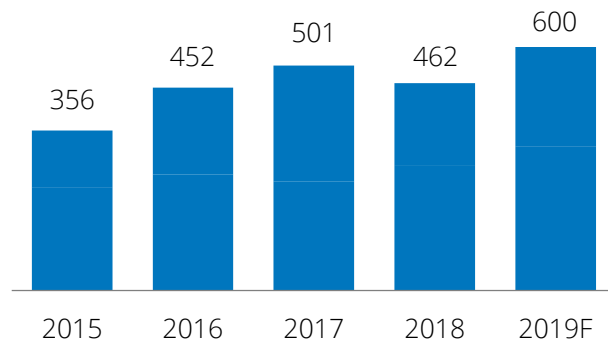
### Commands \$0.04/watt pricing premium in Power Plant



## REVENUE GROWTH

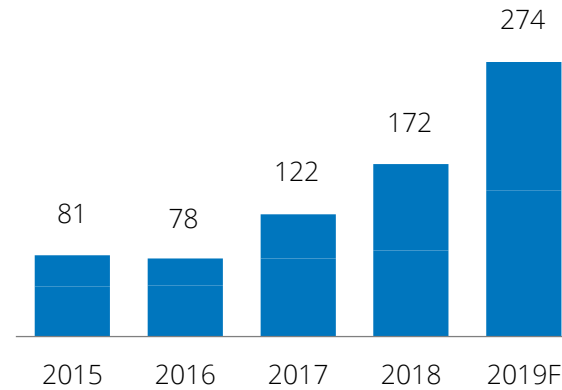
# Global Footprint Enabling Significant Growth in DG

North America (14% CAGR)



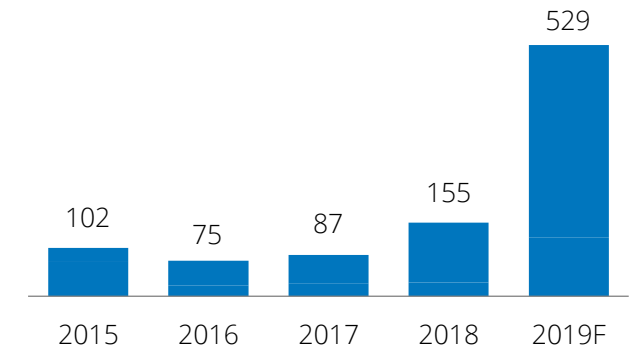
- Growth through SPES, and largest channel
- Upside through Safe Harboring

Europe (36% CAGR)



- Doubled market share since 2015
- Strongest dealer network in the region (450+)

APAC/ROW (51% CAGR)



- Australia up 8X over last two years with recently revitalized dealer channel (200+)
- Significant new account growth with new channel investment in SE Asia (10+ countries) and MENAT, Africa and Latin America

## REVENUE GROWTH

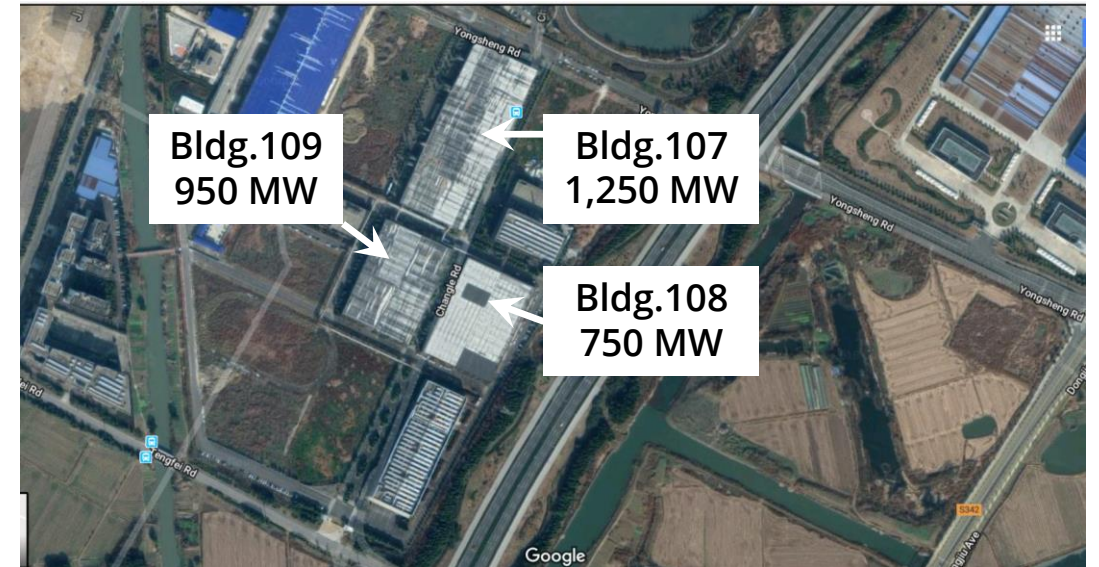
# China Partnership Strategy for Power Plants

JV between SunPower (20%), DEC and TZS in Tianjin, China

Cap-Ex light engine that has quickly grown Performance-Series capacity

- Cell Fab producing 1.2GW Mono-PERC cells
- 2GW Module Factory for Performance-Series
- Option for SunPower to offtake 2/3 of total capacity
- Additional expansion in plans for as soon as 2020

SunPower planned offtake of ~900MW in 2019



## CONTINUOUS INNOVATION

# Winning Strategy

### Maxeon® 5 delivering world's best panels for Distributed Generation, with a transformational effect on our business

- Making the world's best panel for DG even better, driving significant price premium
- Twice the capacity with ½ the CapEx per watt
- 50% lower cost per watt

### Performance-Series and China JV enabling differentiated position in Power Plant

- Best performance driving price premium
- Low-CapEx approach to quickly access 1GW+ of new capacity

### Strong and steady business model

SUNPOWER®  
MAXEON®

SUNPOWER®  
PERFORMANCE

Revenue Growth (CAGR)	10-20%
Gross Margin	>15%
Operating Expenses	<7%
EBITDA	>10%