

# INVESTORS PRESENTATION

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MAR 2022



"Nothing is More Powerful than an Idea Whose Time has Come"

- Victor Hugo





## THE VISION

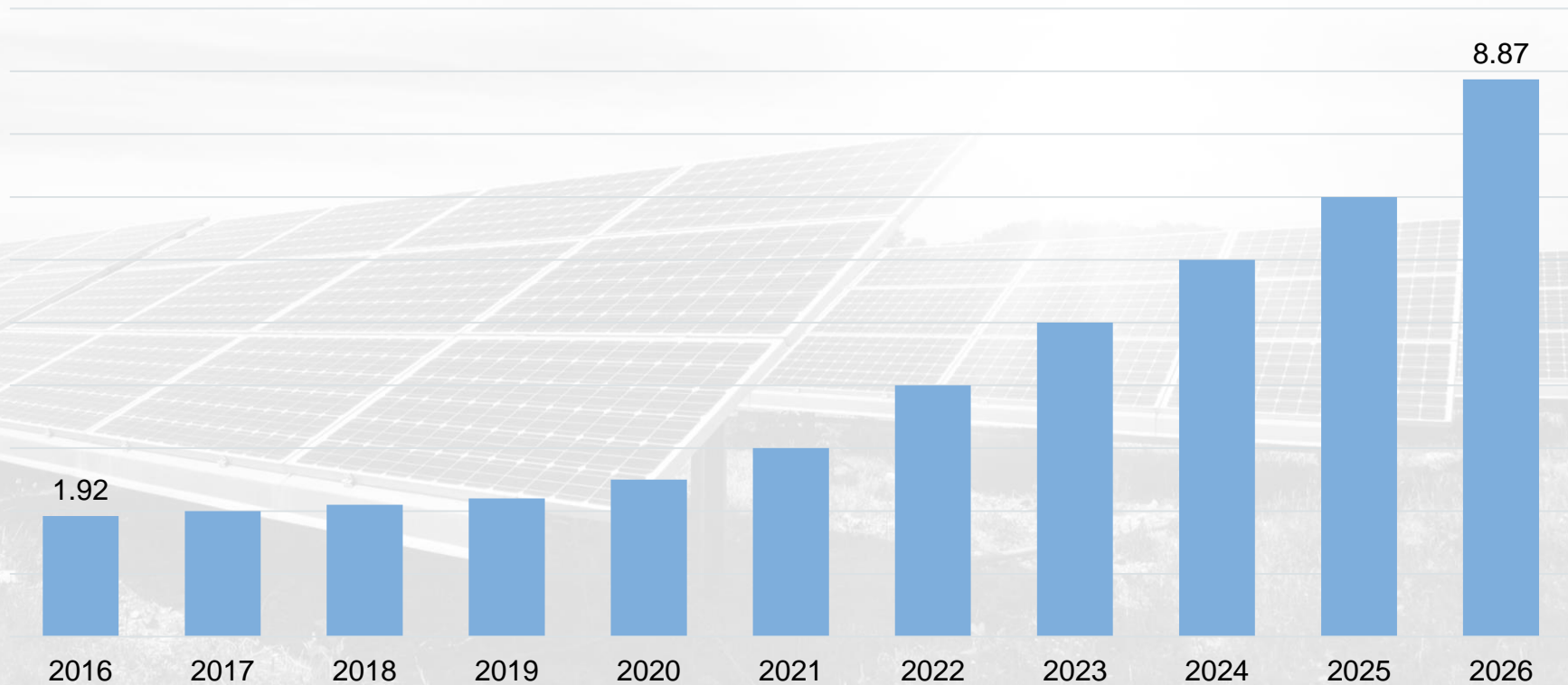
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To become the global leader of autonomous PV cleaning and maintenance



# THE MARKET – SOLAR PANEL CLEANING MARKET

The Solar Panel Cleaning Market exceeded \$2B in 2019 and is about to reach \$9B by Y2026.



# ONE STOP SHOP

Construction



Panel cleaning



Vegetation Management



Animal Deterrence



Security & Safety



Inspection



Monitoring



# Cleaning

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- Compliant with any topography
- All solar panel types (including Bi-facial)
- Fully autonomous
- Utility scale, C&I and residential
- Opex Cost reduction & NO Capex
- Day & Night
- Water saving
- No physical contact with the solar panel



# Inspection

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- Predictive & preventative maintenance
- Thermal inspection & defects detection
  - Hotspots
  - Microcracks
  - PID & LID
  - Disconnections
- Warranty compliance
- Ancillary Equipment monitoring



# Monitoring

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- AI-based Data Mining (Data Analysis & Statistics)
- Image comparison-based decision making
- One-Stop-Shop Web Application hosted in Azure Cloud
- Realtime notifications & alerts
- Compatible with any industry standard APIs

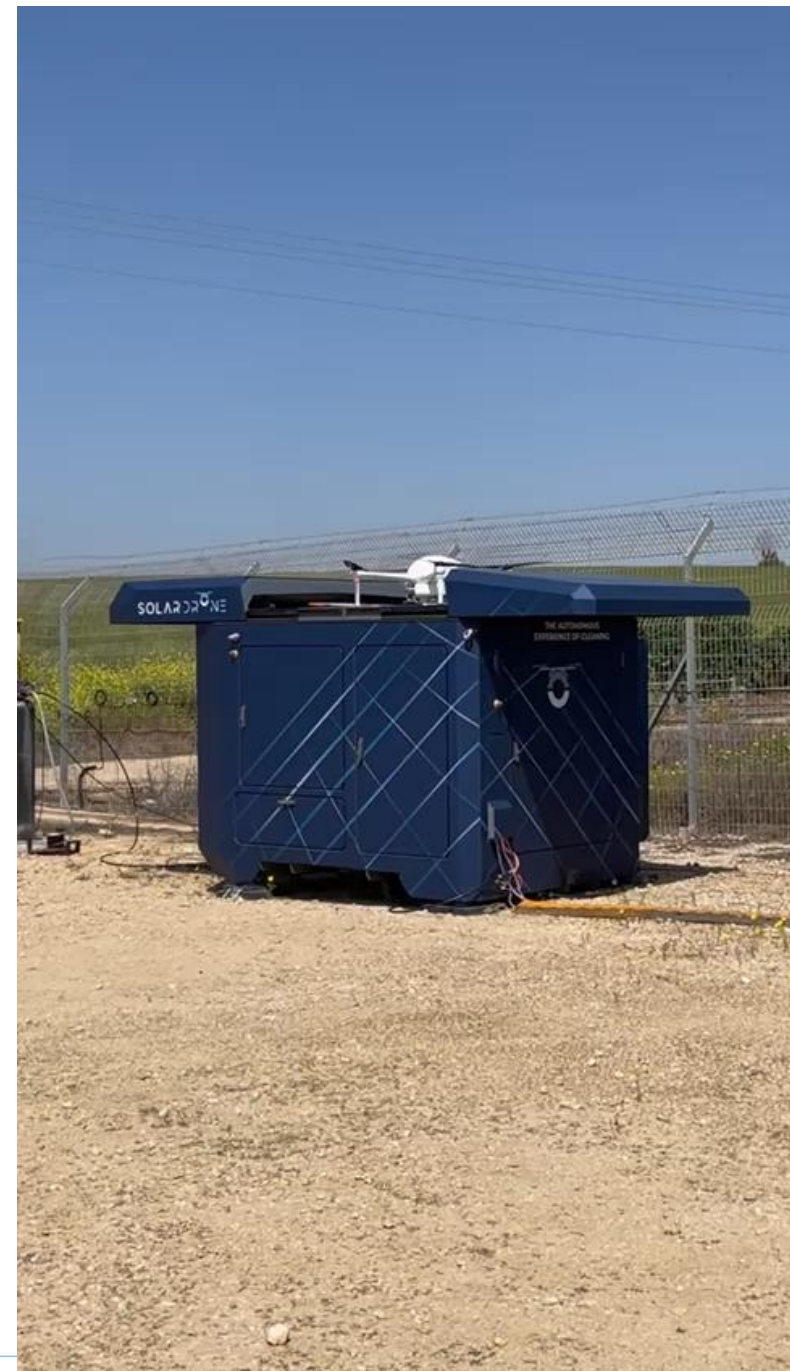




# Security & safety

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- Perimeter & Compound protection
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- Real-time Alerts & Notifications
  - Intrusion
  - Changes in the perimeter
  - Solar fires
- On demand & emergency respond



# Vegetation management

- Maintain utility ROW and control the growth of vegetation and reduce the risk of outages, fires, and other disruptions
- Suitable especially for multi purpose Agri voltaic.



# Animal Deterrence

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- Removal of winged animals
- Significant reduction of bird droppings.



# Construction

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- Site supervision
- Site planning and optimization
- Construction progress monitoring
- As-Built Survey & documentation
- Inventory and materials tracking
- Flood mapping and analysis



# “DRONE IN A BOX” PENETRATION STRATEGY

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- Non-utility scales (floating PV, rooftops & mountain sides, Agri voltaic)



- Integration into high margin, early adopters' markets



# ROADMAP



**COMPLETED**

### POC

A POC successfully completed in June 2021.

06/21

**COMPLETED**

### Pilot V1

First prototypes deployed for testing and improvement in Israel

03/22

### First Purchase Order & Initial income

Customer receiving first order of V1.5 device

06/22

### Commercial V2 Drone

Fully developed product meeting industrial cleaning standard

09/22

### International Sales

in Israel, Spain, UAE, APAC and USA

07/23

# ENTRY BARRIERS

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- **Time to Market**
  - Unique Cleaning related IP, owned solely by Solar Drone
  - Autonomous monitoring capabilities
- **Joint venture with Airobotics**
  - Patented , 5Y development, proven technology with exclusivity rights for renewable energy segments
  - Mutual IP - enables cleaning of at least 500,000 solar panels/year using a single system.
- **Regulation**
  - BVLOS Federal Approval – Coming soon from FAA



# THE TEAM

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**Shmuel  
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Founder &  
CEO



**Netanel  
Yannay**  
CTO



**Mickey  
Boguslavsky**  
CFO



**Shai  
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VP Marketing  
& BizDev



**Bar  
Ben David**  
Social Media Manager





# CASE STUDY- “DRONE IN A BOX” VS. MANUAL CLEANING

Capacity 100 MWp PV field	Manual Cleaning(\$,000)	Robotic Solution(\$,000) (*)	Solar Drone(\$,000)	Assumptions	Incremental change
CAPEX	\$60,000	\$61,000	\$60,000	\$10K/MWp	
Annual Yield	\$8,588	\$8,853	\$8,721	1,650 SH, 0.18 NIS/kWh	
O&M excluding Cleaning Expenses	-\$3,203	-\$3,203	-\$3,000	3% additional yield	
Cleaning	-\$375	-\$100	-\$453		
Interest on loan	-\$3,646	-\$3,706	-\$3,646	80%/17 years/3%	-2%
<b>Developer Operational Cash flow</b>	<b>+\$1,911</b>	<b>+\$2,400</b>	<b>+\$2,169</b>		<b>-10%</b>
<b>Developer Equity IRR</b>	<b>+12.9%</b>	<b>+16.9%</b>	<b>+15.2%</b>		<b>-1.7%</b>
<b>NPV , 5%</b>	<b>+\$10,873</b>	<b>+\$16,927</b>	<b>+\$14,191</b>		<b>-\$2,736</b>

## (\* ) Robotic solutions:

Need 200 m rows

Don't fit countries with high humidity or rain

Can't handle floating PV, rooftops & mountain sides

THANK YOU



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**SOLAR DRONE**