

# estab. 2011 WE BUILD THE ENERGY OF THE FUTURE

# **ABOUT US**

With over 12 years of experience in the industry, our company is specialised in the design, construction and maintenance of large-scale PV parks. The quality of our services, fast execution and the state-of-the-art technologies, provide efficient and sustainable solutions for our customers.

"Together at WALDEVAR, we're revolutionizing the energy landscape, tapping into the limitless potential of solar power to create a thriving, eco-friendly world for all."

> LEON ARHIRE President



# WHERE **WE ARE**

### **Discover where we are**

### **WALDEVAR RO**

Ilfov-Bucharest, Romania 077191 Bd. Pipera 1B Cubic Center +40 (31) 333 33 33 office@waldevar.com

### **WALDEVAR AT**

Himberg bei Wien, Austria A-2325 Alten Markt 34 +43 (0)664 135 65 95 austria@waldevar.com

### **WALDEVAR US**

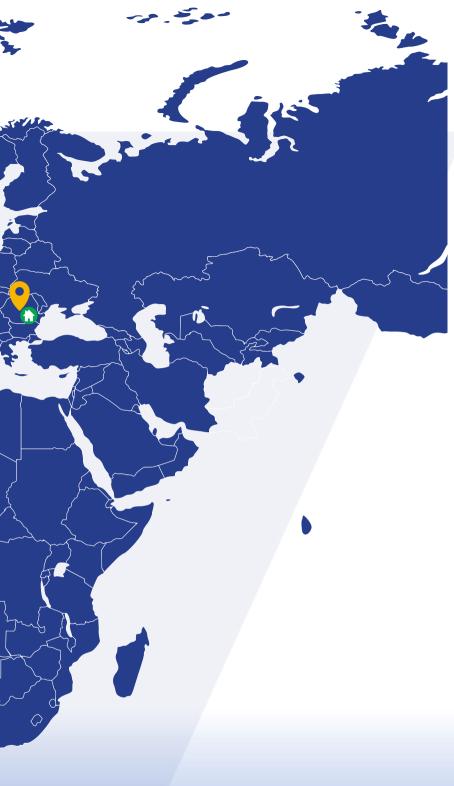
Las Vegas, Nevada 11506 Belmont Lake Dr. +17027673030 usa@waldevar.com

### **WALDEVAR TU**

Tunis, Tunisie Rue du Lac Victoria-Lac 1 +21698646011 tunis@waldevar.com

### **WALDEVAR ES**

Madrid, Spain Comming soon +40 (31) 333 33 33 spain@waldevar.com



### **WALDEVAR PT**

Lisbon, Portugal Comming soon +40 (31) 333 33 33 portugal@waldevar.com

# **Solar Park from A to Z - Full EPC**

### **Mechanical & Civil Services**

- Pull-Out Tests
- Fixed tilt, trackers and rooftop installation
- MV & HV installation
- Testing and Commissioning
- Ligthing, CCTV and security systems
- SS/PV SCADA and PPC installations
- Cold & Hot commissioning
- MV&HV Substation civil works
- MV&HV Grid connection works

### **Engineering & Design**

- Preliminary Design

- monitoring

- Fast response time
- Local professional staff

• Basic and Detailed Design Grid Connection MV&HV **Lines Substation** • SCADA & Control Algorithm

### **O&M Services**

• Central 24/7 technical operation &

• Fault analysis and rectification • Repowering & Revamping

# WHY CHOOSE US?

Experience excellence in solar, as our expert team and rapid construction capabilities turn your green vision into reality.

.

## **MANAGEMENT & STAFF 50**

SITE ENGINEER / SUPERVISOR **100<sup>+</sup>** 

WORKFORCE

# **500**<sup>+</sup>





BUILDING CAPABILITY 2.5 MW / day

600**+** CONTRACTED







### TRANSPARENT COSTS



### WORLDWIDE





# WHY WALDEVAR?

Extensive technical expertise & top specialists in design and execution
Exceptional Human resources with high level of training
Exclusive distributor for S-E Europe for Tier 1 PV Brands
Exclusive distributor for S-E Europe for HW Drilling Company
NO Projects Delays – immediate equipment replacement capability
Prompt technical support & Quality assurance
The largest fleet of ramming machines



### **Goal Maintenance**

Trust our dedicated team and proven expertise to optimize your solar assets, ensuring peak performance and long-lasting sustainability.



# WHAT WE DO

Our services cover the entire lifecycle of pv power plants



**Project Development** 

We develop projects in-house

### **Operations and Maintenance**

We provide a full range of O&M services, including monitoring and inverter maintenance.









### **Procurement**

We procure and trade PV components to fit any project location, design and budget.



### Construction

We design and build on-and off-grid installations, including energy storage solutions.

# WALDEVAR Energy - Pullout Tests (POT) Services **Experience: Conducted over 2 GW of Pullout Tests in PVPP**

#### Installation Methods:

- Direct Driving.
- Pre-Drilled Piers up to 60% & 90% of Pile Diameter.
- Micropiling

#### Field Evaluation and Campaign Design:

- Comprehensive geotechnical surveys.
- Customized field campaigns tailored to soil characteristics.

**Customization and Optimization:** • Tailored testing protocols and optimization

- strategies.

#### **Continuous Monitoring:**

- Real-time tracking of driving times, loads, and displacements.
- Accurate data collection for informed decision-making.

### **Quality Assurance:**

- International standards and best practices.
- Use of advanced tools for precise measurements and analysis.

Load Testing: • Vertical Tensile and Compression Tests • Lateral Load Tests

• Detailed performance reports and system improvement recommendations.

# **Solar Engineering with Waldevar**

Speed up design and maximize yield potential projects.

## Get a high-resolution survey of your entire site

Extract key linework and automate creation of shading objects

Import directly in design software such as PVsyst, Helios3D, PVcase



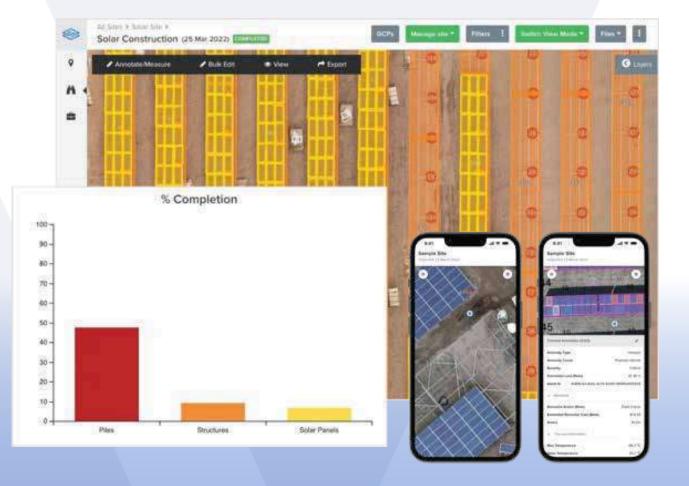
	•	•		•		٠	٠		٠	٠	٠	٠	•	٠	•	•	٠	•	٠	•	•	•	•	٠	•	٠	•	•		•	•			0
									٠			٠		٠	•	٠	٠	٠	٠	٠					۲	٠	٠	۰	•	٠	۲			٥
				•	$\mathbf{x}$										٠				٠		•	•	•	•	•		•	•	•	•	•	1	-	
	4		140		$\hat{\mathbf{z}}$	¥										•	•		٠	•	•				•	•	•		•					
÷	្				÷																				•		•		•		•			
	a.																																	
+	à.						÷.																•											
÷	3	5	-	¥0	×.		÷.				÷	*	*																					
÷	2	1		43		2		4			4	-																						
2	5	$\sim_2$	÷.	2	$\mathbf{v}$	$\sim$		1											-							2								
	14																																	
30) 196																									-	0				-				
ar Th																		-	-								-							
ai i																									-	2								
																		÷.	÷.	ŝ.						ũ.		-		-				
									32										÷.	1					÷.	ŝ.	1			2				
									84												1				÷.	1		-	-	-				
																9	3	3	<u></u>	8	1	1	1	1	2	0	0	1		1				
																		2	÷.	<u>_</u>	÷.	1	1	2	2	2	1	2	1	1	2			
									1051 1045										÷	÷.	1	2	4		2	2	2	2	1	2				
									1000										2	÷.				- 20		0	Ξ.				1			
									20										÷	ŝ.	÷.			2	0	0	<u>.</u>	0						
																			÷	2					5	ē.			÷.		2			
																			÷	8		5.		- 8	8	Ĵ.	1		1		1			
																				ं	5	500	1	- 20	<u>,</u>	0		1		1	1			
																			3	1			1	1	÷	0		•	1	•	•			
																								1			÷.			1	*			
																						-		1	÷	Č.					*			
															-04 -05																*			
																												•	•		•			
																								•	•	•	•	•	•	•	•			
																											•	÷.	٠	•	*			
																			1	3	18	1	1						•	1	2			
																									100		122	100			1.00			

# **Solar Construction with Waldevar**

Track project progress and compliance with payment milestones

Monitor and resolve deviations from design

Manage land use and ground conditions



# Health, safety and security

At Waldevar, we firmly believe that our organization's sustainable growth is intrinsically tied to our steadfast commitment to health, safety, and environmental (HSE) excellence. Our top priority is ensuring the well-being and safety of every individual associated with us - be it our employees, contractors, or valued stakeholders. Our endeavor extends to not only preventing workplace incidents, but also to actively preserving our environment by mitigating potential pollution.



### Key risks: On-site

- Trac safety
- Labour and working conditions
- (own and subcontractor workers) Contractor safety and monitoring
- Security and emergency preparedness

# Vov opportunitioo:

### Key opportunities:

- Training and awareness
- Open reporting culture
- Lessons learned
- Technological developments

# Human rights and security

While pursuing renewable energy ventures, there might be environmental and societal implications. At Waldevar, we diligently work to reduce any adverse effects, amplify local advantages, and foster open communication with all project contributors. Throughout our endeavors, we prioritize human rights and give special consideration to the groups most susceptible to impact.



### Key risks:

- Labour and working conditions in direct
- WALDEVAR activities and our supply chain
- Land access and economic and /or physical displacement
- Use of security forces



### **Key opportunities:**

- Further improving processes by streamlining risk identification and management
- Transparency and reporting
- Capacity building and training
- Sustain social license to operate

# **OPERATIONS AND MAINTENANCE (0&M)**

The PV plant and its components are designed to last 25-30 years, following best practices in regulation, risk management, asset management, monitoring, inspection, data analytics, maintenance, and optimization. **WALDEVAR** ENERGY will monitor the plant 12 hours daily and the 400/33kV substation 24/7, using a remote monitoring system. Monthly reports will detail performance-impacting incidents, with the Owner having full data access.

Monitoring will use the SCADA system for both the PV plant and substation.



# **OPERATIONS AND MAINTENANCE (0&M)**

### THE REMOTE MONITORING SERVICES INCLUDE

- Web portal to control installation.
- Production faults identification
- Equipment related faults identification.
- Real time reporting (15-minute delay)
- Performance Ratio calculation (temperature adjusted)
- Keep operational data for five years.
- Comparison of actual data vs. projections
- Real time alarm management
- Default analysis.
- Software updates.



# **OPERATIONS AND MAINTENANCE (0&M)**



### **PREDICTIVE MAINTENANCE**

- and SCADA algorithms.
- deterioration.
- and impacts.
- sensors will be selected.

• WALDEVAR ENERGY will monitor the PVP and 400/33kV Substation daily, including weekends and holidays. • Predictive maintenance will use forecasts derived from sensor data • WALDEVAR ENERGY will evaluate

trends and events indicating device

• Manufacturers must provide a complete list of device status and error codes with detailed descriptions

• Intelligent equipment with sufficient • The monitoring software must offer basic trending and component comparison between PV sites.

# **PERSONNEL STRUCTURE**







Number of ANRE IV A/B certified eng.: 5 pers.

Number of ANRE III A/B certified eng.: 6 pers.

Number of certified

**Over 80 employees with specializations in:** 

- Electrical Engineering
- Power Engineering
- Electromechanical Engineering
  - Electrical Technology

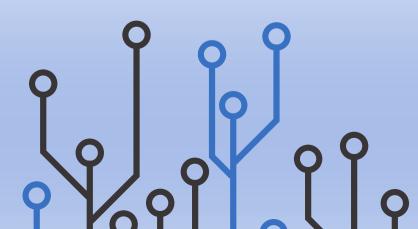
ANRE E1+E2 certification for Design and Execution of electrical installations, transformer stations, and power stations at any standardized voltage.

Number of ANRE II A/B

certified eng.: 7 pers.

# Engineering, procurement, installation, testing and commissioning for:

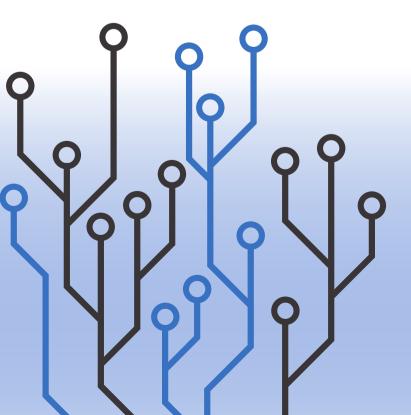
- PV Plant – 20kV TS and UGL
- Plant – 20kV TS and UGL
- **-----7.3** MWp Green Solar Power PV Plant – 20kV TS and UGL
- **Prod&Distribution PV Plant –** 20kV TS and UGL
- Energy PV Plant – 20kV TS and UGL
- Interconnection Substation
- 110/30kV Transformer **Substation**



modernization of the electric power distribution infrastructure (electrical stations, transformer substations, cable networks)

**Design Phases: Solution and Operational Limitation Study, Documentation for Urbanism** Certificate and required approvals, **Technical Documentation for Building Permit, Technical Projects,** and Execution Details

### Automation and Beneficiary for grid connection to the SEN



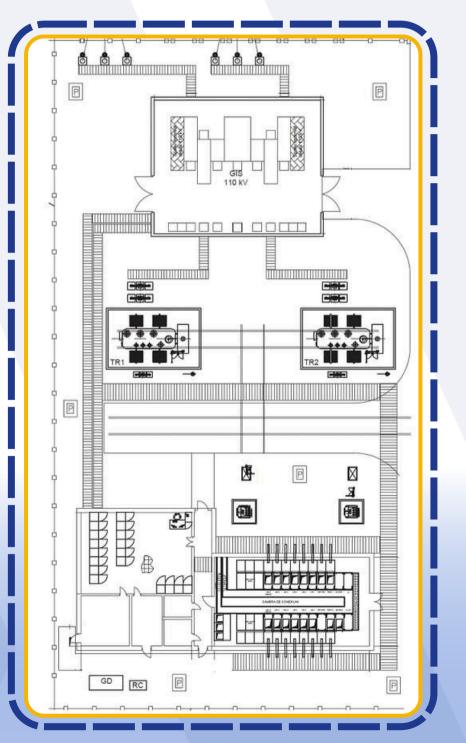
### **EXAMPLES OF PROJECTS IN THE FIELD OF ELECTRIC SUBSTATIONS**

### ZnO+CT 0 0 TC O ÓÓ Ó () SB -3 38 2 10 < 🛛 Ro Ro k T1

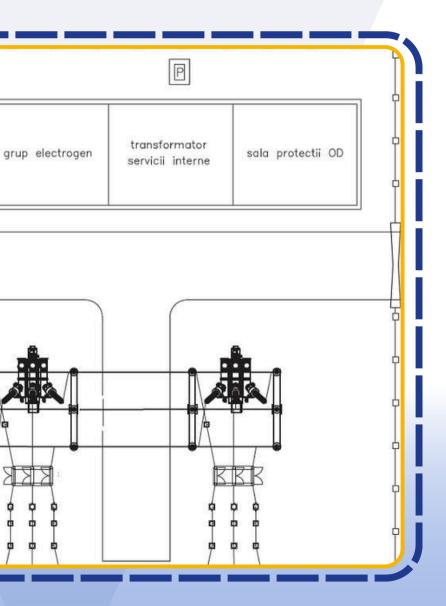
**CONNECTION TO EXISTING 110/20 KV** 

**ELECTRIC SUBSTATION** 

### **110 KV/MT TRANSFORMATION STATION**



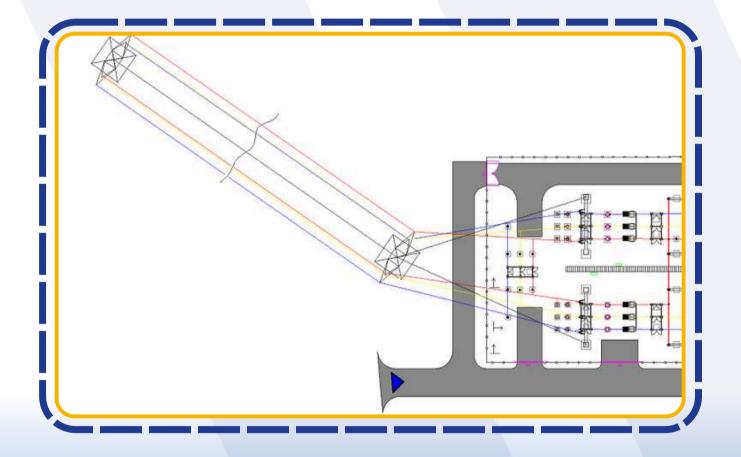
### **110 KV CONNECTION STATION WITH HYBRID MODULES**

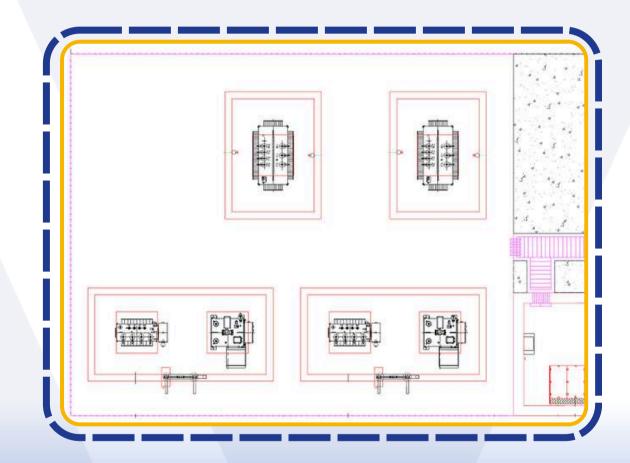


### **EXAMPLES OF PROJECTS IN THE FIELD OF ELECTRIC SUBSTATIONS**

110 KV CONNECTION STATION WITH INLET-OUTLET CONNECTION TO 110 KV TRANSMISSION LINE AND 110 KV/MT BENEFICIARY STATION

### RETECHNOLOGIZATION OF 20/6 KV ELECTRICAL SUBSTATION





# **Reference List Over 10MWp Projects**

Power	Beneficiary	Location	Туре	Year
195MWp	SOLAR REVOLUTION SRL / ENEL GREEN POWER/ PETROM/ LUCFLOR	GIURGIU	TRAKER 2P	2024
73MWp	SHIKUN&BINUI ENERGY SATU MARE SRL	SATU MARE	SKELA FIX 2PIOS 2100	2024
54MWp	INVL / SOLAR REVOLUTION	DOLJ	TRAKER AXONE DUO 1P	2024
34MWp	INVL/ ALERION ITALIA	OLT	FIX 2P	2024
27MWp	ALERION ITALIA/COMPANIA DE APA/ ALM POWER GROUP	TELEORMAN	1P TRAKER STRUCTURE	2022
23MWp	BABA ANA SOLAR GREEN ENERGY/ ELA ENERGY PH SRL/ SWISSCAPS ROMANIA	PRAHOVA	ALUMIL FIXA 2P HELIOS 2100	2023
19MWp	SOLAR ENERGY ULMENI SRL/ PC SUN ENERGY PRODUCTION SRL / ENGIE GREEN	CALARASI	SKELA FIX 2P / TRACKER 1P	2022
15MWp	HERMES SOLAR / SKELA INDUSTRIES	ARGES	TRACKER 1P / FIXA SKELA/MECAD	2024
12MWp	ICD OCTAGON/HEXAGON DEVELOPMENT SRL/COMPANIA DE APA	ARAD	FIXA 2P HELIOS 2100	2023
<10MWp∑24MWp	MULTIPLE	EUROPE WIDE	MULTIPLE	2023



### Metka EGN Mytilineos - Calugareni-Kinisi 130 MWp Soltec traker 2P - Feb 2024





# CJR LUSO ENERGIE SRL - Satu Mare 70MWp Fixed structure - Feb 2024



# **ENEL GREEN POWER - CALUGARENI 63 MWp** PVH tracker structure - Apr 2022 - Apr 2023



## INVL SRL- Iancu Jianu, Filiasi, Bobicesti Miria 51 MWp Corab fix 2P - Feb 2024





# ALERION (ITALIA) - ROATA 21 MWp Convert single-axis tracker - Aug 2022 - Dec 2022



# HERMES Solar - Topoloveni 14 MWp PVH traker axone 1P - Feb 2024



**Alerion Italia- Alexandria 13 MWp** Valmont 1P traker structure - Oct 2022 - Mar 2023



## Baba Ana Solar Green Energy - Baba Ana 12 MWp Fixed structure - June 2023



# **ELA ENERGY PH SRL - BALTESTI 11 MWp** Alimil Fixed - Jan 2023 - Apr 2023

> **ENGIE Green - Calarasi 11 MWp** Tracker 1P ZIMMERMANN - Mar 2023 - Jun 2023



# (FULL EPC) IRIDEX - OLTENITA 1&2 (11 MWp) Fixed structure - December 2022 - March 2023



# ICD OCTAGON DEVELOPMENT SRL - Lipova 8MWp Alumil fixa 2P helios 2100 - Jan 2023 - May 2023





**NEXTE - Prundu Bargaului 7 MWp** Fixa 3P MOUNTING SYSTEMS - Jul 2022 - Mar 2023



**Alerion Italia - Plesoi 5 MWp** Valmont 2P traker structure - Nov 2021 - Oct 2022



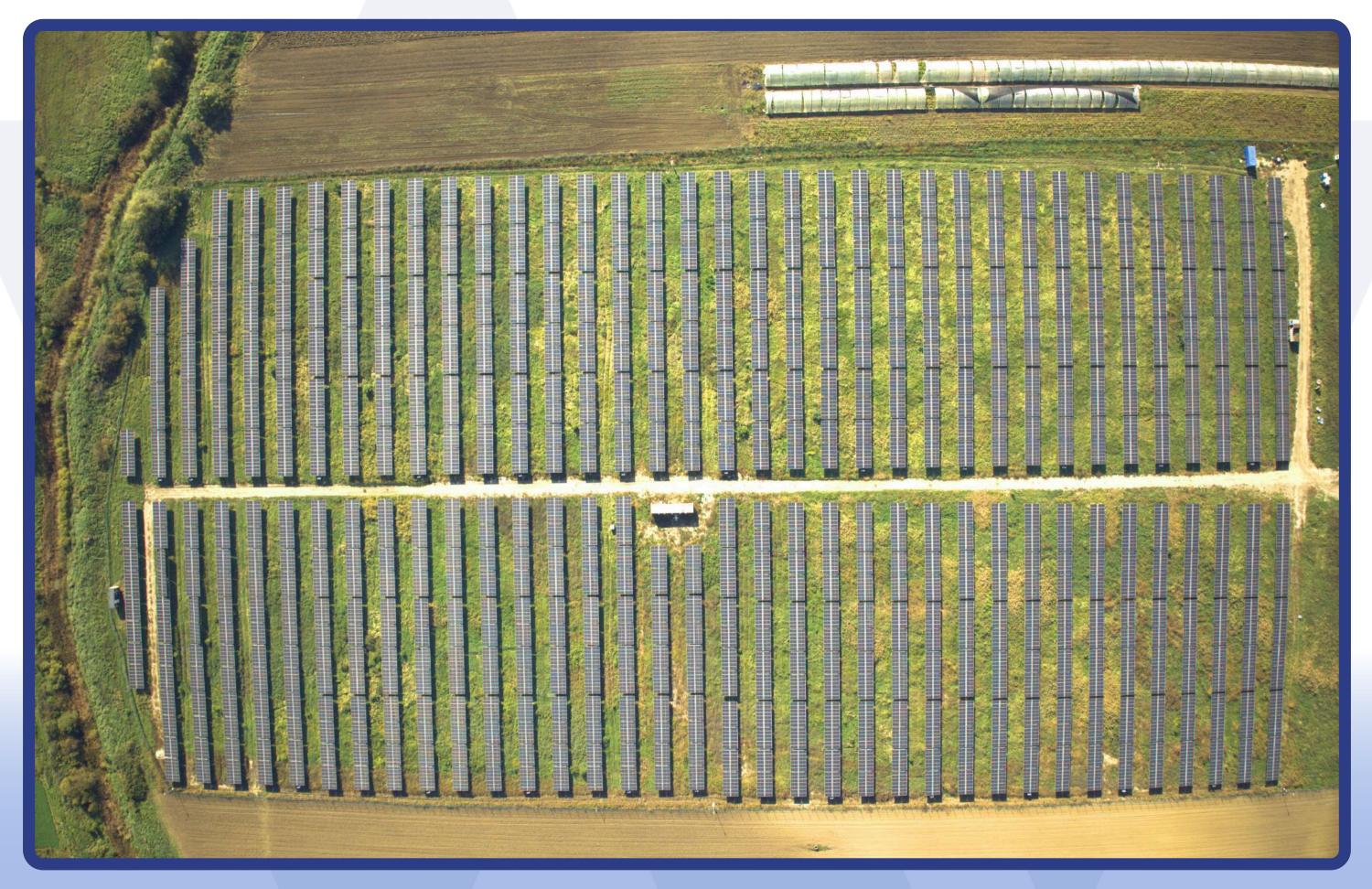
**Alerion Italia- Gradinari 5 MWp** Valmont 2P traker structure - Nov 2021 - Jul 2022



Alerion Italia- Rosiorii de Vede 5 MWp Valmont 2P traker structure - Sep 2021 - Feb 2022

Alerion Italia- Draganesti Vlasca 4 MWp Valmont 2P traker structure - Sep 2021 - Oct 2021





Alerion Italia- Sadova 4 MWp Valmont 2P traker structure - Sep 2021 - Feb 2022



**TRANSAVIA - Miercurea Sibiului 4 MWp** Fixa 2P elektra plan e-plan solar - Nov 2022 - May 2023



**Alerion Italia - Dobresti 4 MWp** Valmont 2P traker structure - Oct 2021 - Feb 2022



### COMPANIA DE APA ORADEA - Oradea 3 MWp Lestat 1P - Sep 2023 - Dec 2023



**COLINA SOLAR - Veresti 2 MWp** Structura fixa ALUMIL- Sep 2023 - Nov 2023



**Petrom - Cosmesti 2 MWp** Structura fixa 2P- Oct 2022 - May 2023



## **SKELA Industries - Stefanesti 1 MWp** Fixa Skela/Mecad - Jun 2021 - Aug 2021



**INFORM LYKOS - Otopeni 1 MWp** Fixa gold profil - Jun 2022 - Aug 2022



**COMPANIA de APA ARAD - ARAD 1 MWp** Fixa 2P lestat - Sep 2023 - Dec 2023



**Think Blue Solution - Ghinesti 1 MWp** Fixa gold profil/ambient confort - Mar 2022 - May 2022

## **OUR CLIENTS & PARTNERS**











**ALERION** CLEANPOWER







SUNOVA SOLAR







# next

# SUNNERG



## TURCHI



# estab. 2011 WE BUILD THE ENERGY OF THE FUTURE

#### CONTACT US

+40.313.333.333
+40.742.222.226
office@waldevar.com

#### **VISIT US**

Cubic Center Bd. Pipera 1B Romania, Ilfov, Voluntari **www.waldevar.com** 

#### JOIN US

0	waldevarenergy
f	waldevar
in	waldevar