



EMAS BUSINESS CONSULTING

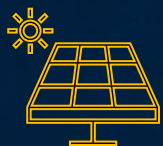
YOUR STRATEGIC PARTNER  
IN GREEN ENERGY PROJECTS

# PV PARK + BESS

Project location :

**TARGU LĂPUȘ, MARAMUREȘ COUNTY**

Energy for the future, available today.  
Sustainable investment, solid returns.



**4 MWp**

INSTALLED CAPACITY



**10 MWh**

STORAGE CAPACITY



**5,74 ha**

LAND AREA



**~5.285 MWh**

ANNUAL PRODUCTION (AC)



**~2.114 t CO<sub>2</sub>**

ANNUAL EMISSION AVOIDED

**A SOLID OPPORTUNITY,  
READY FOR THE FUTURE**

An Integrated project for the production and storage of solar farm energy, designed to generate long-term value in a fully scalable approach.

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🌐 www.emas-energy.com



## PROJECT LOCATION

### TARGU-LĂPUȘ, MARAMUREȘ COUNTY, ROMÂNIA

Strategic site for an reference green energy project



#### PROJECT OVERVIEW :

The land identified for the PV & BESS project is located in Targu-Lăpuș, Maramureș County, in an area with convenient access to energy and road infrastructure.



#### LOCATION:

Targu-Lăpuș, Maramureș County



#### LAND AREA:

5,74 ha



#### DESTINATION :

PV + BESS



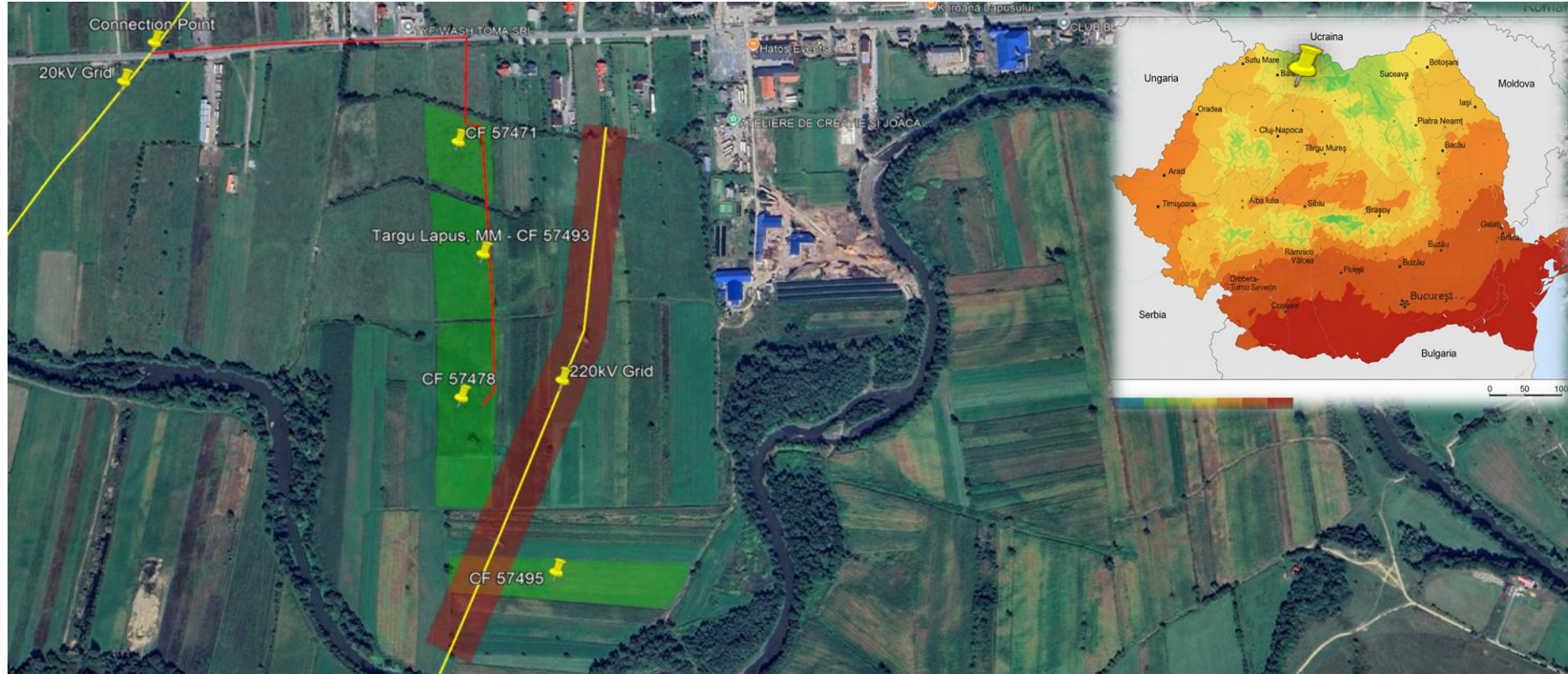
#### STORAGE CAPACITY:

10 MWh



#### GRID CONNECTION :

LEA 20 kV Targu Lapus - Oras 1 OHL  
in-and-out connection (~500m)



#### EXCLUSIVE ACCESS

County Road  
DJ109F



#### GRID PROXIMITY

20kV Targu Lapus - Oras 1 OHL



#### FAVORABLE TOPOGRAPHY

Flat, arable land, ideal for a  
photovoltaic power plant



#### LAND STATUS

Extravilan land, available  
for energy development



#### EXCELLENT SOLAR POTENTIAL

High annual solar irradiation

# INVEST IN THE FUTURE OF ENERGY

## SOLAR PARK + BATTERY ENERGY STORAGE SYSTEM (BESS)

### TARGU-LĂPUȘ, MARAMUREȘ COUNTY

An integrated renewable energy project that combines solar power generation with intelligent energy storage to maximize value and support Romania's energy transition.



CLEAN ENERGY



SMART STORAGE



ATTRACTIVE RETURNS



#### HIGHLIGHTS PROJECT

INSTALLED CAPACITY  
4 MWp



STORAGE CAPACITY  
10 MWh / 2h



LAND AREA  
5,74 ha



AVERAGE ANNUAL CYCLES  
2 cycles / day



CHARGING PRICE RANGE  
0 ÷ 60 €/MWh



ANNUAL EMISSIONS AVOIDED  
~2.114 t CO<sub>2</sub>

#### ESTIMATED ANNUAL REVENUES



■ PV  
~ € 167.025

■ BESS  
~ € 670.104

(Combined scenario)

#### FINANCIAL PERFORMANCE



IRR (Project)  
~15%



Simple Payback  
~5 years



Discounted Payback  
~6 years

#### TOTAL CAPEX INVESTMENT



~ € 3,055  
million

PV + BESS + grid connection  
EPC + contingency

#### BESS REVENUE STRUCTURE – MULTIPLE VALUE STREAMS



BALANCING MARKET  
800 ÷ 1000 €/MWh  
(Servicii de echilibrare)



DAM ARBITRAGE  
~ 100 €/MWh  
(Arbitraj ziua anterioara)



IDM ARBITRAGE  
~ 200 €/MWh  
(intraday trading)

#### TRANSACTION PROCESS



NDA



DETAILED  
INFORMATION



DUE  
DILIGENCE



INDICATIVE  
OFFERS



SPA &  
CLOSING

#### A SOLID OPPORTUNITY, BUILT FOR THE FUTURE

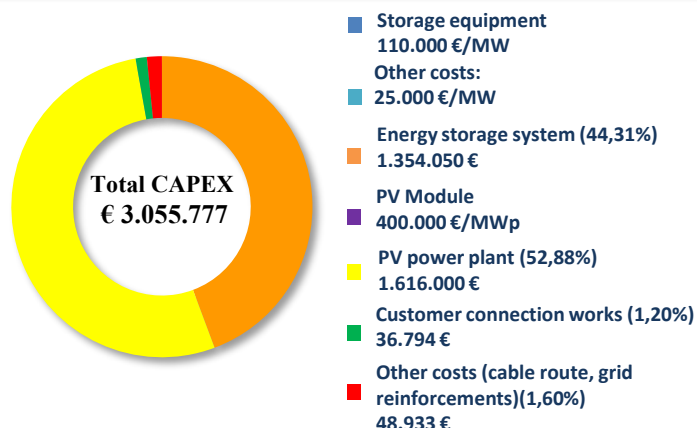
High-quality assets, attractive returns and strong growth potential in a market with long-term expansion.



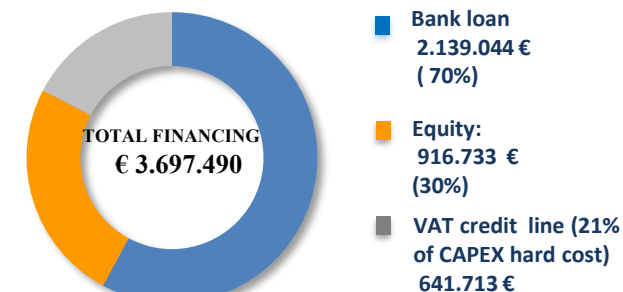
### 1. PROJECT ASSUMPTION

|                              |                            |
|------------------------------|----------------------------|
| Project name                 | Hybrid PP, Targu-Lăpuș ,MM |
| Installed power              | 4 MWp                      |
| Annual AC production         | 1.308 MWh/MWp/year         |
| PV annual degradation        | 0,5% p.a.                  |
| Installed storage capacity   | 10 MWh                     |
| Charge/discharge cycles/day: | 2h                         |
| BESS degradation             | 3% p.a.                    |
| Energy sales price (base)    | 70€/MWh                    |
| Balancing market price       | 350€/MWh                   |
| DAM market price             | 90€/MWh                    |
| IDM market price             | 120€/MWh                   |
| Inflation                    | 3% p.a.                    |

### 2. PROJECT COSTS (CAPEX)



### 3. CAPITAL STRUCTURE



### 4. FINANCING ASSUMPTION

|                                |             |     |
|--------------------------------|-------------|-----|
| Equity                         | 916.733 €   | 30% |
| Bank loan                      | 2.139.044 € | 70% |
| Loan (Leverage)                | 70%         |     |
| VAT credit line (21% of CAPEX) | 641.713 €   |     |
| Loan interest rate             | 2,68%       |     |
| Debt margin                    | 4,00%       |     |
| Loan maturity                  | 10 years    |     |
| Grace period                   | 12 months   |     |
| Loan term                      | 108 months  |     |
| Cost of equity                 | 30%         |     |
| Interest rate                  | 7,20%       |     |
| Profit rate                    | 16%         |     |
| WACC                           | 8,60%       |     |

### 5. KEY FINANCIAL INDICATORS



### 6. FINANCIAL SUMMARY

|                                             |               |
|---------------------------------------------|---------------|
| Annual revenue (Year 1)                     | 837.130 €     |
| Cumulative revenue (20 years)               | 16,74 mil €   |
| Annual operational costs                    | 72.239 €      |
| Net present value (NPV)                     | 694.781 €     |
| IRR Project                                 | 15 %          |
| IRR Equity                                  | 32 %          |
| Payback period                              | 6 years       |
| Inverter/PCS replacement (Year 12)          | 366.000 €     |
| Estimated CO <sub>2</sub> emissions avoided | ~2.114 t/year |



**STABLE  
PROJECT**



**PREDICTABLE  
REVENUES**



**REDUCED RISKS**



**ATTRACTIVE  
PROFITABILITY**



**ADDITIONAL  
INVESTMENT**



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