



ASTRASUN
SOLAR

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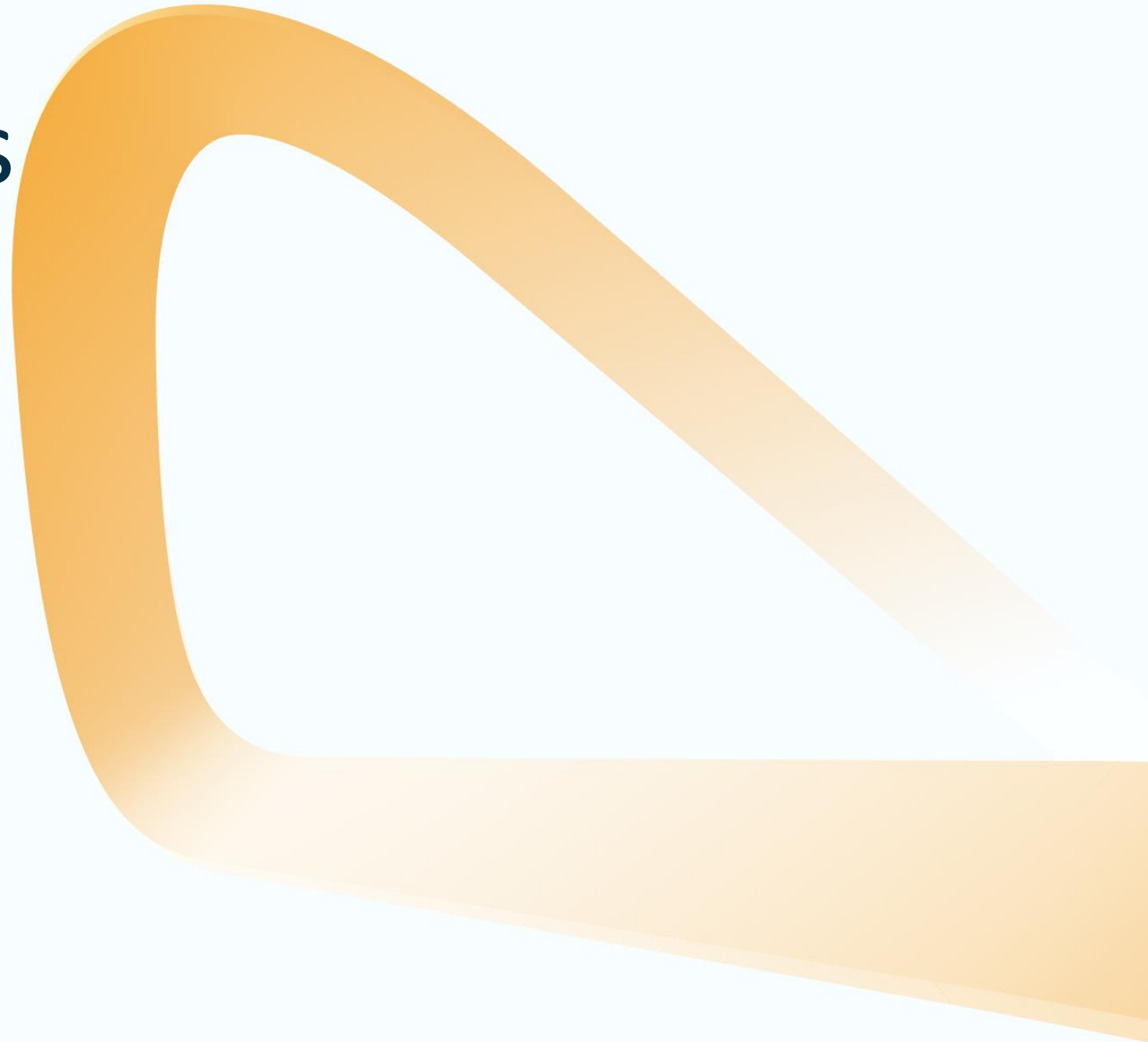
Hungary & Romania

How to Renew our Future?

Presentation for for market players and decision makers

„I would give all of my knowledge for the half the knowledge I will have 10 years from now”

ASTRASUN has
exceptional
market
knowledge in
Hungary &
Romania



SOLAR POWER PLANT DEVELOPMENT, EPC, INSTALLATION, RENEWABLE ENERGY PRODUCTION

Founded in 1998

Transparent, stocklisted by BÉT in Nov. 2022.

15-20 employees + 250+ partners, suppliers,
subcontractors

We have a R&D class at Óbudai University for hydrogen
production

Own machineries

Office in Budapest and Bucharest, Timisoara

160+

Project developed in the past

1200+MWp wind and solar project development in progress

Factory for PV. Modules, cells, ingot

CAN YOU JUMP IT?

THE BIG CHALLENGES ARE QUITE SIMILAR IN HU & RO

- Quick changes in legislation
- RO: Green Certificate issue – 8-10 years stop
- HU: Grid Connection Stop – will be cca. 6 years stop



ENVIRONMENT FRIENDLY or NOT?

- Same dispute between agriculture and pv/wind farms
- Difficult land status changes



SIMILAR RISKS & PRICES:

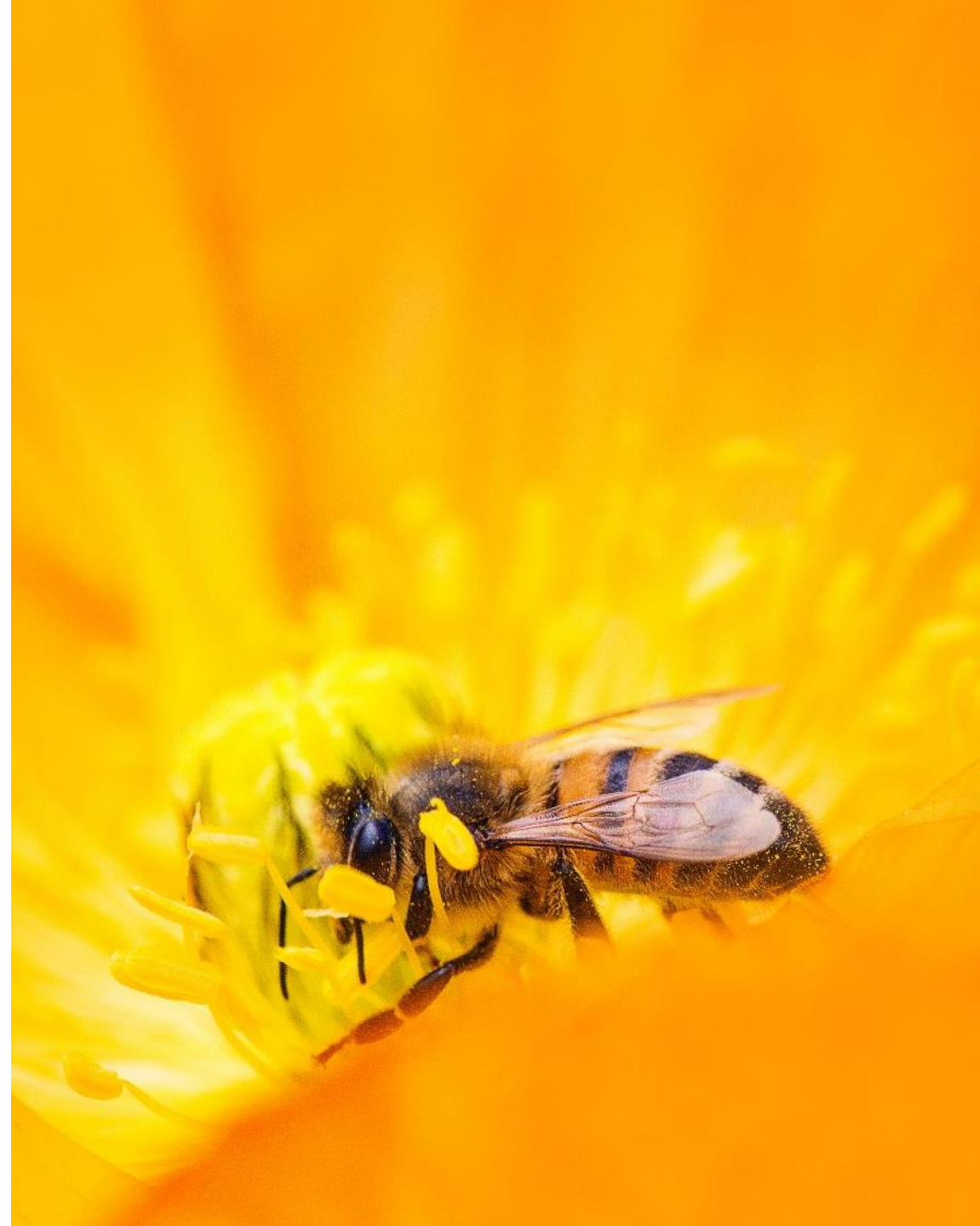
- **INFLATION:**
- HUF: 20,1% - RON: 16% - EUR: 10,7%
- ROBOR: 8,39% - BUBOR 16,41% - EURIBOR 2,686%

- **HIGH TAXES ON INCOME:**
- HU: EBITDA - Robin Hood Tax 31%, 2% HIPA, 9% TAO (CIT)
- RO: 450 RON (90 EUR) Price cap + 80% tax above 16% CIT



GOOD NEWS = GOOD POTENTIAL

- Solar radiation: high (1250-1350 MWh/MWp) in both countries
- Wind: Romania is very good at Black Sea, Danube. Hungary seems to be ok, but wind was blocked for years, now starts again.



BAD NEWS:

Ukrainian conflict generates higher costs and higher return expectations!



TRENDS AND ANSWERS

WORKFORCE:

There is a temporary lock on HMKE (small scale) pv systems in Hungary, so skilled workforce is available for the expected 6000 MWp project installation in Romania.

This might save the hungarian small enterprises and reduces the installation costs in Romania.

WHAT ASTRASUN IS DOING RIGHT NOW:

Project development and investment in both countries.

Factory for pv modules in Romania, factory for metal subconstructions in HU.

R&D in hydrogen production:
first large scale projects are coming in HU and RO.



HOW TO REALIZE?



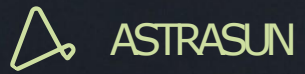
WE NEED A

GUARANTEED MIN. INCOME:
90 EUR/ MWh + yearly inflation

RENEWABLES PRODUCE THE CHEAPEST ENERGY

It would boost the local production of ingot-wafer, cells, modules.

It speeds up any energy intensive industry.
Otherwise: RRP (RNNP) is a gift to China not to Europe!



IT IS TIME TO
UNITE OUR
FORCES



THANK YOU FOR YOUR
ATTENTION!

Attila Keresztes, dr.



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