

C&I PV ROOFTOP BUSINESS IN INDONESIA PRESENTATION

“WE CAN MAKE A BETTER WORLD TOGETHER”

Prepared for Business Forum: *Webinar Surya Atap untuk Sektor Komersial dan Industri di Jawa Tengah – 6 Oktober 2021*

OUR COMPANY

TMLEnergy

(PT. Tritama Mitra Lestari)

EPC business company in renewable energy
(specialized in PV Solar Energy)

Was Founded in November 2011
as PT. Tritama Mitra Lestari

OUR VISION

Serve energy for a better future

OUR MISSION

Providing solution for increasing demand from
alternative energy source

Address :
Jl. Soekarno - Hatta 541 C, Bandung

1 MWp SOLAR (PV) POWER PLANT MAUMERE, NTT

BUSINESS FLOW & ACTIVITY

Feasibility & Initial Engineering

- Feasibility Study
- Plant Configuration Study
- Interconnection Study
- Detailed Engineering

Project Execution

- Project Management
- Construction Management
- Survey Activities & Drawings
- PV Power Plant Civil Works
- Site Improvements
- Wiring & Installation
- PV Power Plant Mechanical Works
- Testing & Commissioning
- Procurement
- Operator Training

Operations & Maintenance

- Optimization Maintenance
- Monitorings
- Re-Commissioning

COMPANY EXPERIENCES





PV Rooftop System for Commercial & Industrial Sectors

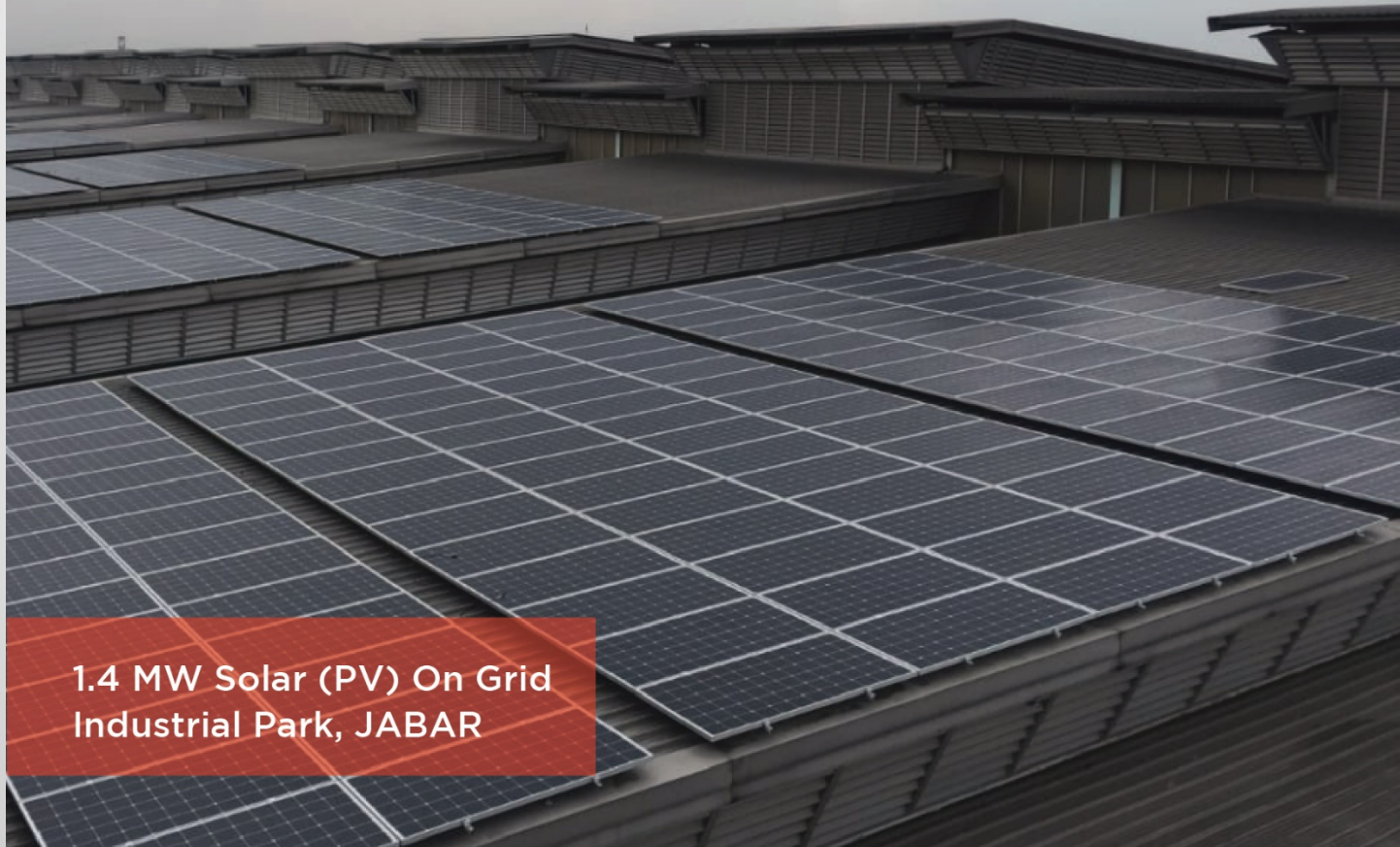
Factory Case Example

PV Application

- Commercial and Industrial



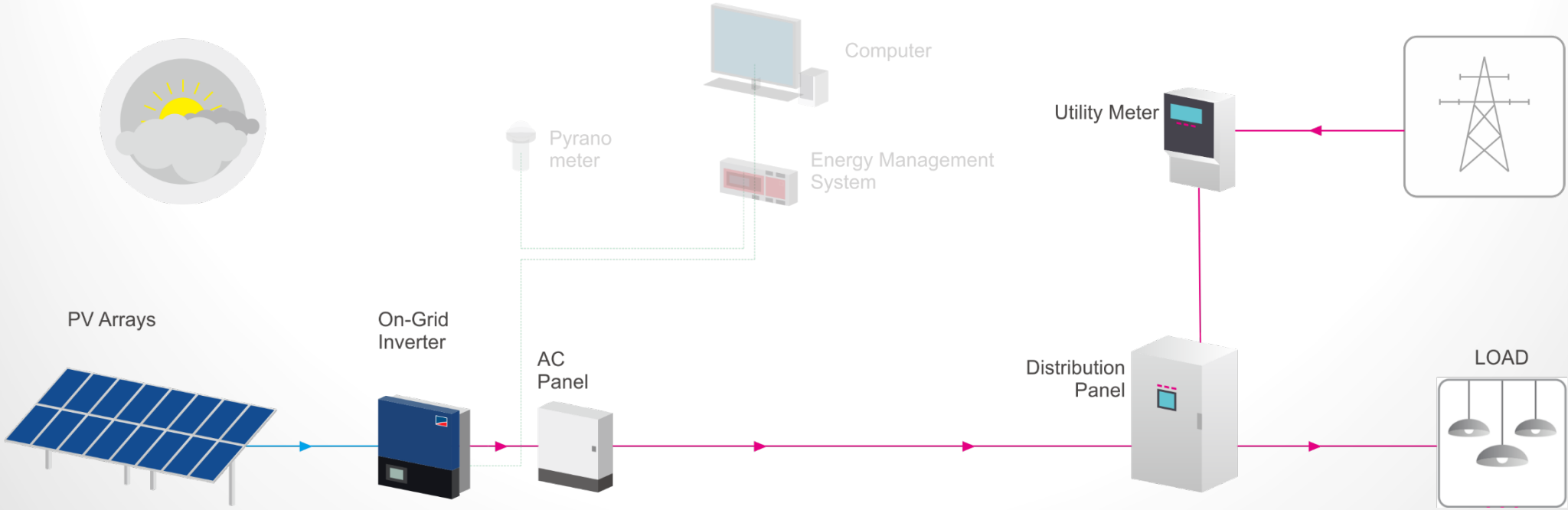
GALLERY PROJECT AT GLANCE (1)



1.4 MW Solar (PV) On Grid
Industrial Park, JABAR



Typical On-Grid Installation



*On Grid system uses utility grid as reference for generating AC Electricity
No battery for energy storage*

**Pyranometer, computer, and data management system are optional items*

Solar PV System are designed for 20 years lifetime



No Moving Parts



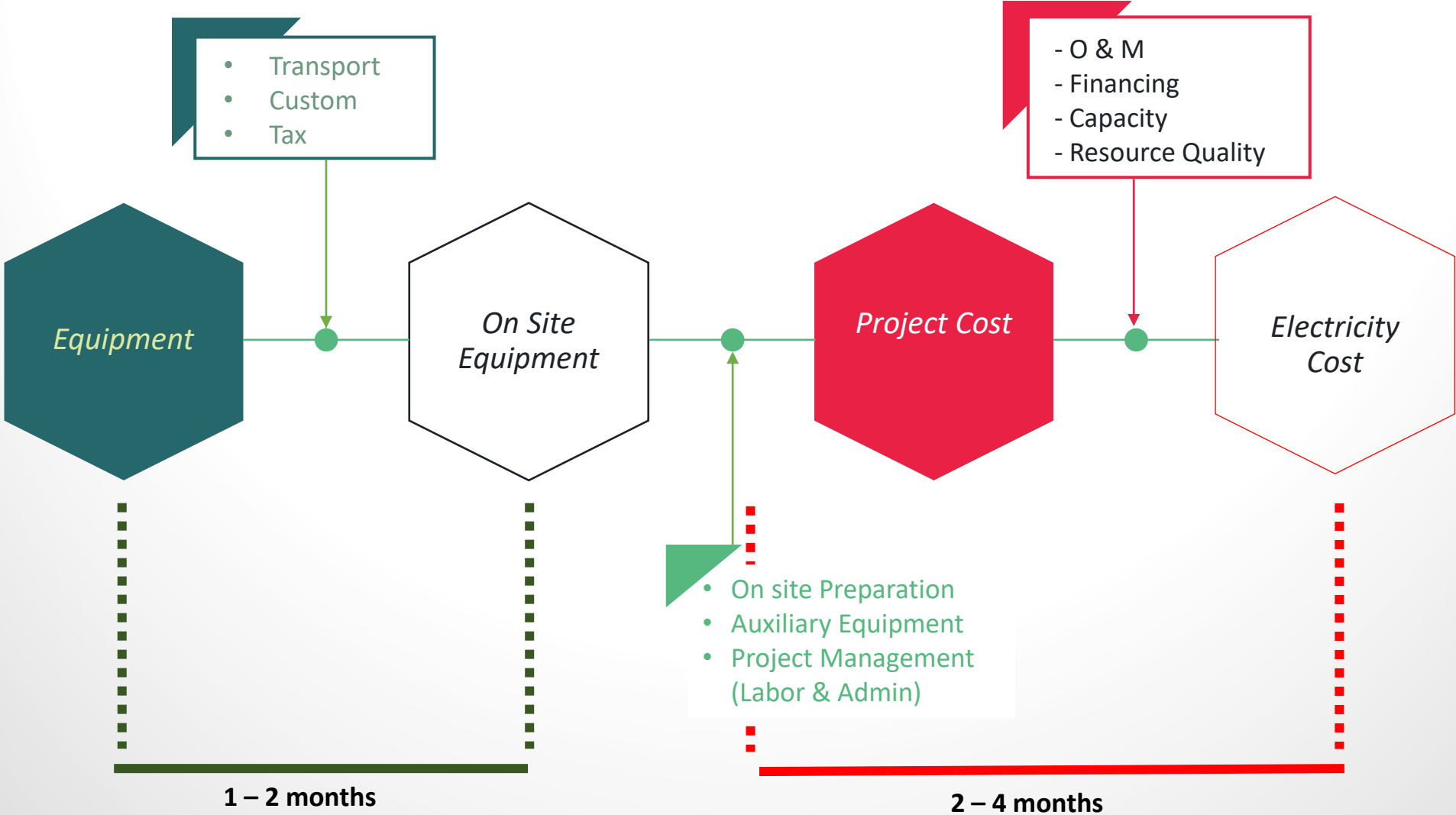
Virtually zero
maintenance



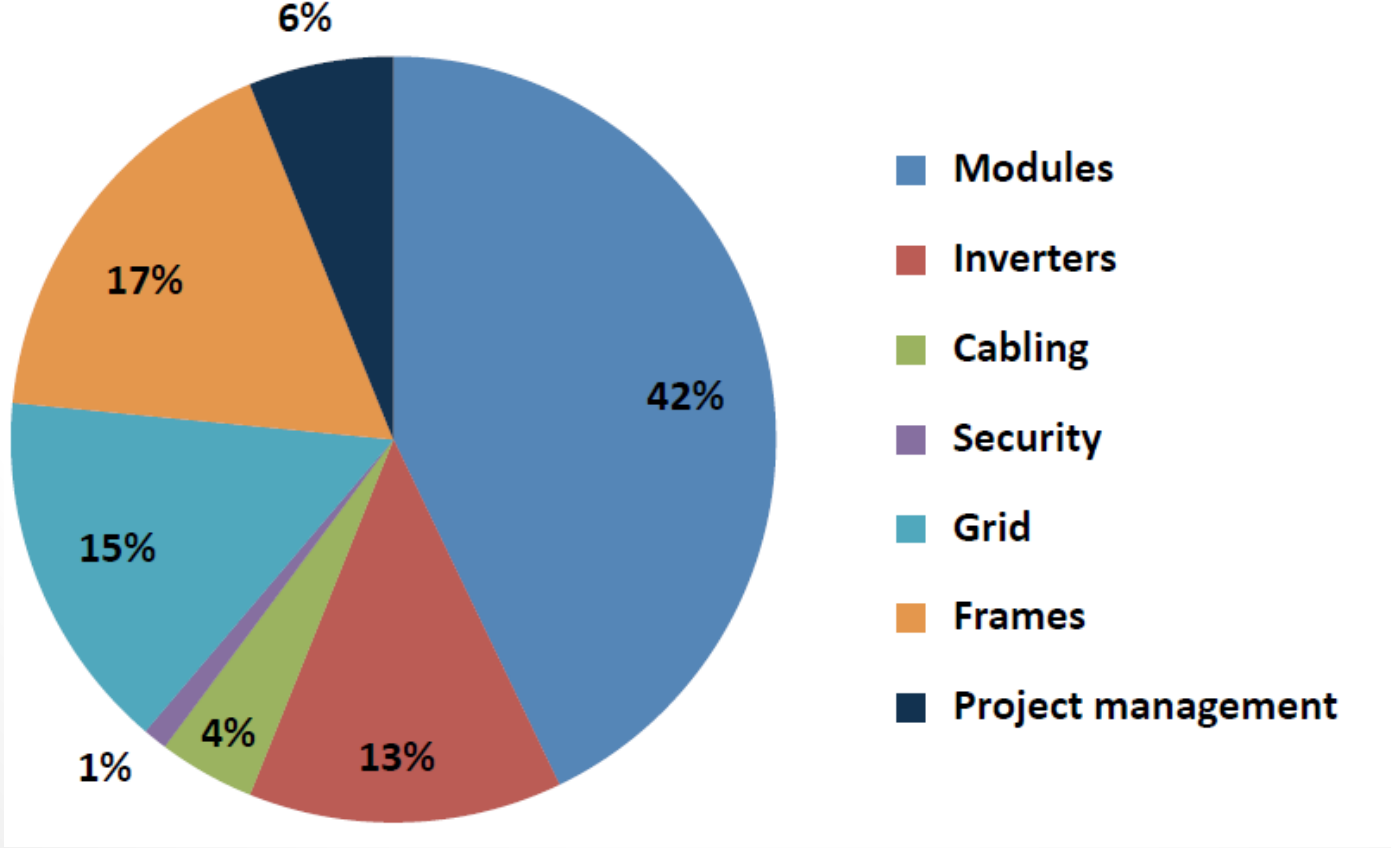
Long product
warranty

Component/Item	Warranty Duration	Remarks
PV Modules – Product	10 Years	Industry Standard
PV Modules – Performance	25 years	With at least 80% power at year 25
Inverter	5 years	Extendable up to 20 years
Module mounting structure	10 years	Industry standard, designed for up to 25 yrs

Cost Structure and Lead Time for General PV System

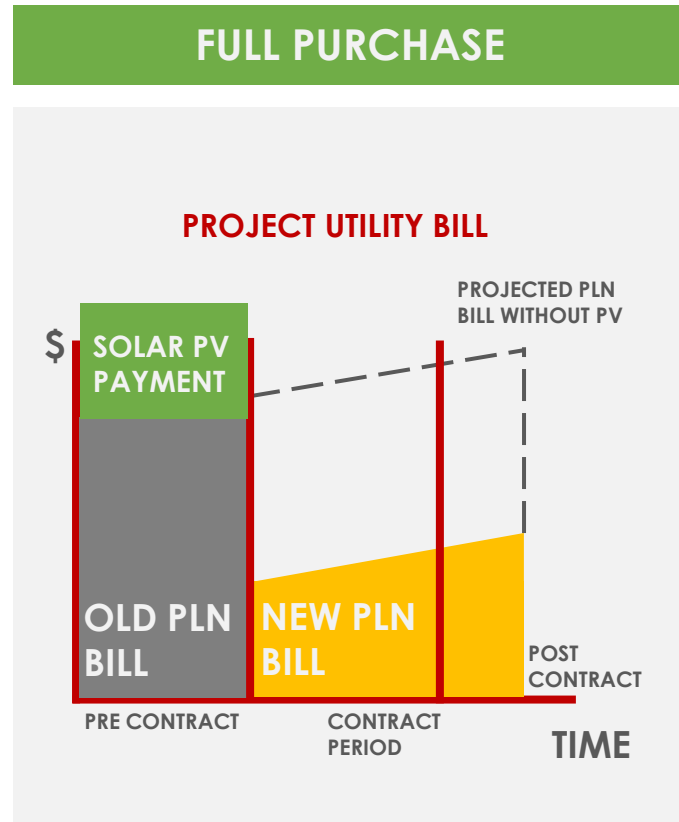


PV System Cost Structure for Utility Scale



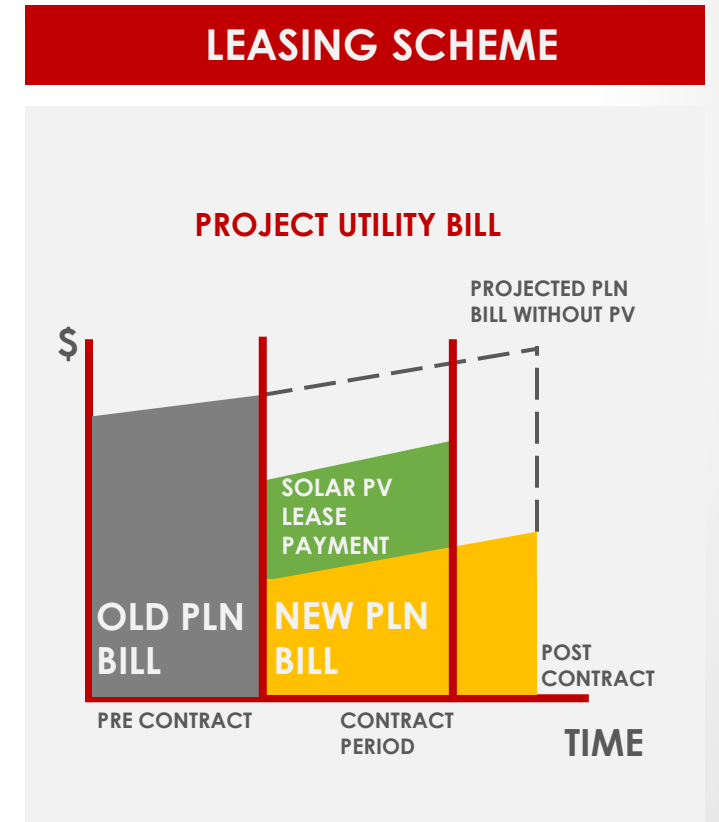
Source: World Bank, 2015, Utility Scale Solar Power Plants, A Project Developer's Guide

OPTIONS FOR PURCHASE



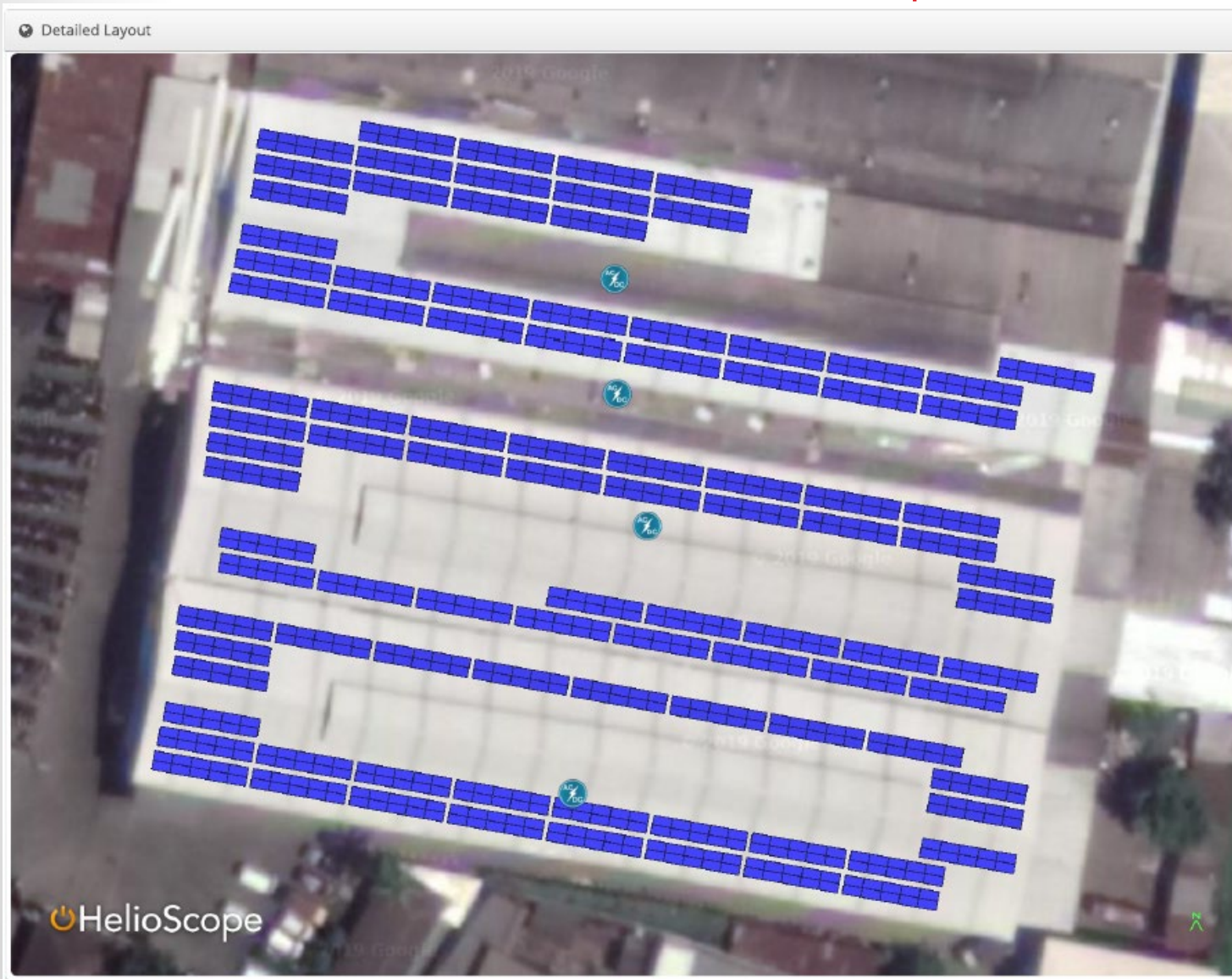
HIGH SAVING FOR ENERGY COST ✓

or



- NO INITIAL CAPEX** ✓
- OPERATION AND MAINTENANCE INCLUDED** ✓
- CUT ELECTRICITY BILL** ✓
- LOWER RISK** ✓

TML-USOLAR Scheme for PT XXX– Jepara, Jawa Tengah

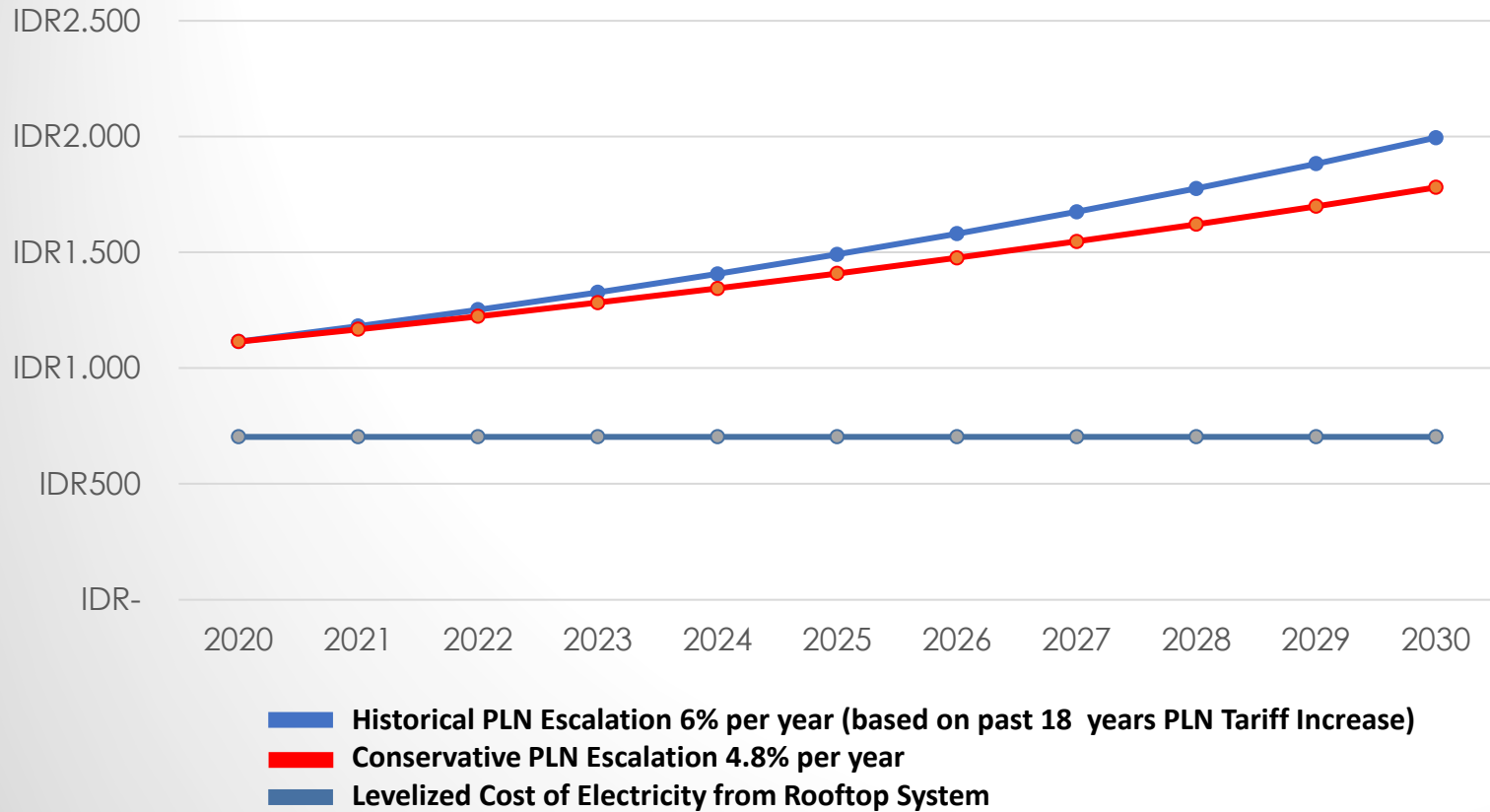


Potential Capacity:
500 kWp

Potential Energy
Generated:
666.351 kWh/year



TML-USOLAR Scheme for PT XXX– Jepara, Jawa Tengah



Estimated Capex:
Rp. 4.951.750.000 (exc. PPN)

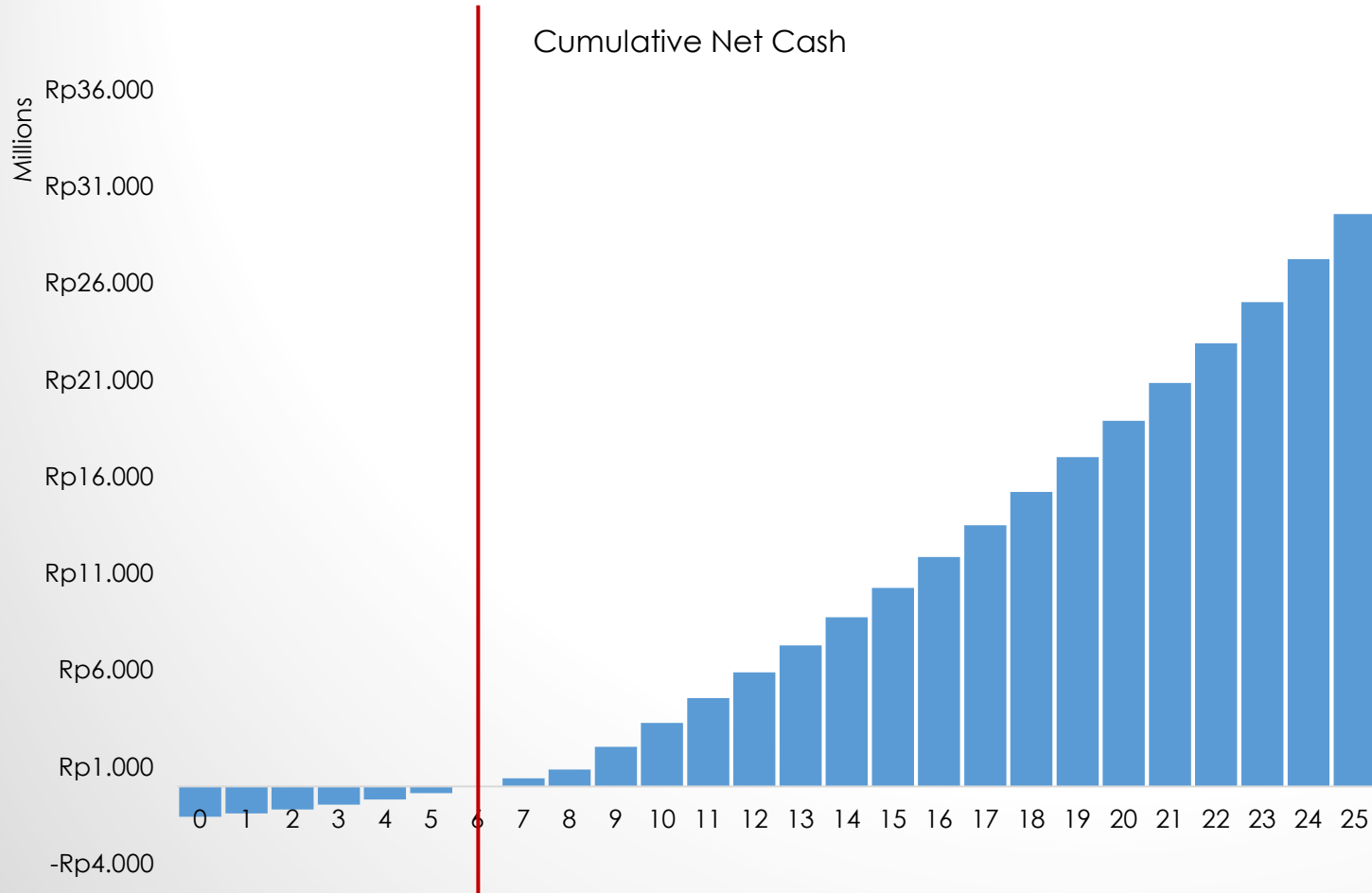
Expected Monthly Savings:
Rp. 62.825.880,-

Total Accumulative Savings until 25 years:
± Rp. 9,6 M,-

Up to 8 Years Installment Period



Simple Payback Period



INPUT

Tariffs Rate **Rp 1066 /kWh**

PLN Tariffs escalation **4,8%**

PV annual degradation
0.7%

Payback Period



5.36

**YEARS PAYBACK,
25 YEARS LIFETIME**





THANK YOU