

# ***Our View on Indonesia Solar Market - Pros and cons of 4 segments -***

***PT.Quint solar Indonesia  
M.Suzuki  
2022 June***

# Who we are



***Introduction of PT.Quint solar Indonesia***

**Company** : ***PT Quint Solar Indonesia (QSI)***

**Location** : Graha Mas Fatmawati Block B/10, Jl. RS. Fatmawati, No.71  
Kebayoran Baru, Jakarta Selatan, 12150, Indonesia

**Established** : November 28, 2018

**Registration Number**: 8120215112981

**KBLI** : Power Producer, Electrical Installation, Machinery Provider,  
Solar System Provider, Technical Consultation, Installation Engineering Service

**Capital** : IDR 10.6 Billion

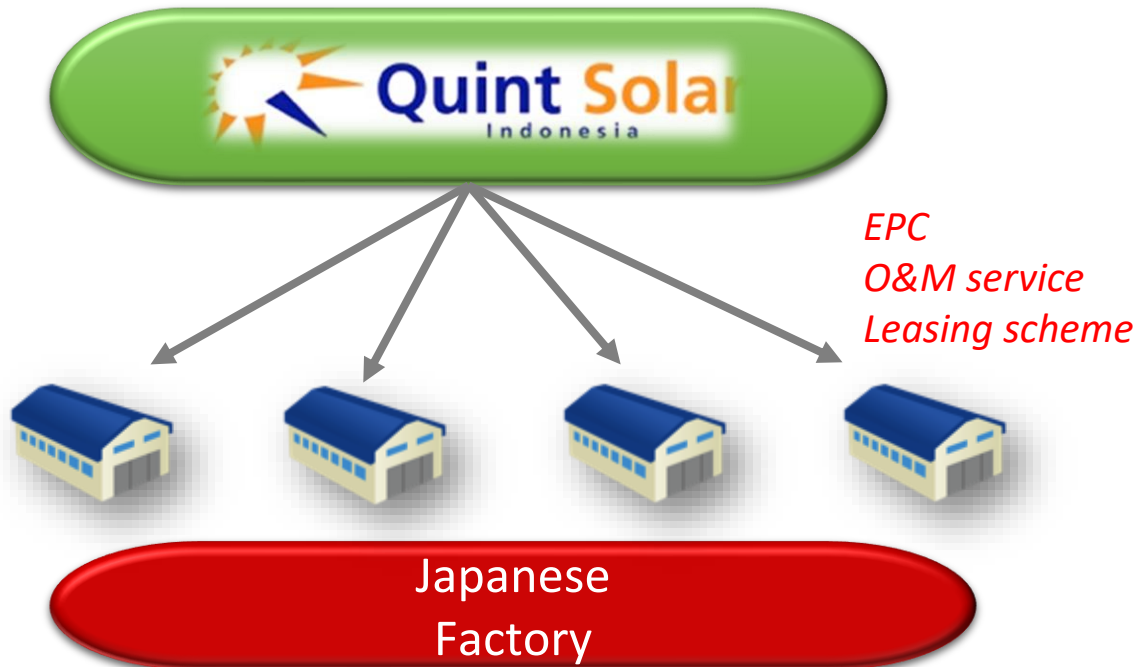
**Investment** : Premium Energy 30.2%  
Matahari Energi Utama 23.3%  
Kazuo Ichihara 23.3%  
Sky Energy Indonesia 11.6%  
Nippon Trinitan 11.6%

**Certification** : SBUJPTL, IUJPTL (Finalized by July 2022)



## **Business model**

- ✓ QSI is currently focusing on Japanese factory (Roof top) in Indonesia, we will provide a full range of Solar system including EPC, O&M service and Leasing scheme.
- ✓ In long run, we will expand business model into Utility scale project such as floating solar.





# Project Records ( Industrial roof Top )





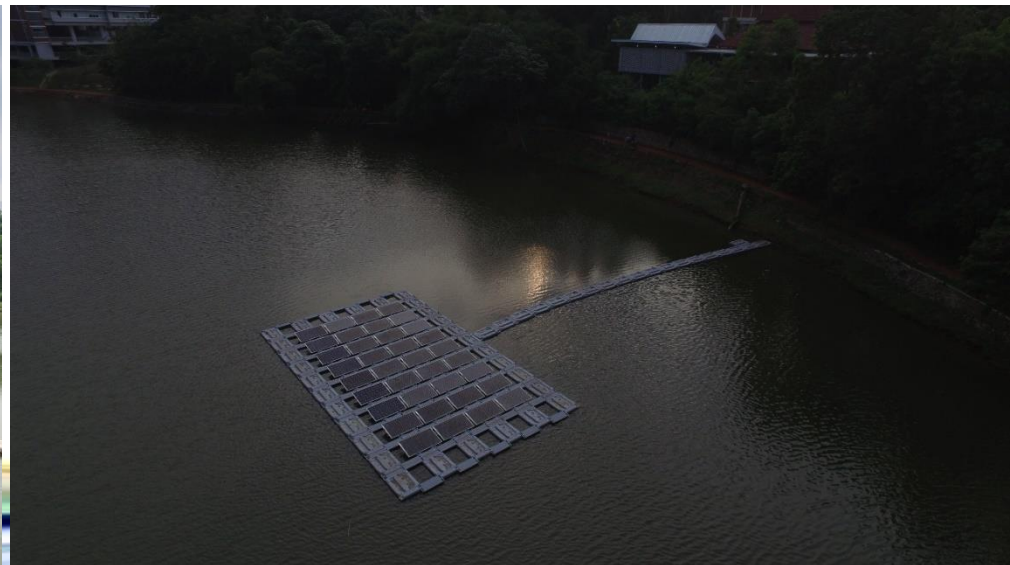
# Project Records ( Commercial building roof Top )





# Project Records ( Floating solar )

Joint project University Indonesia



# Who I am

Manabu Suzuki



*1992 Joined **Hitachi High-Tech Corporation***

*Assigned to Factory Automation Systems Department*

*2000 Marketing Manager, Semiconductor Manufacturing Equipment, **ASML** (Netherlands)*

*2010 Head of Solar EPC Project, **Hitachi Co Ltd.** (Total 200MW)*

*2014 **Japan Renewable Energy Co., - Goldman Sachs IPP company -***

*GM of solar power investment division. (Total 400 MW)*

*2018 Owner and Managing Director, **Premium Energy Co., Ltd.***

*2018 President Director of **PT. Quint Solar Indonesia***

*to the present*












# ***Our View of Indonesia Solar Market***

***- Pros and cons of 4 segments -***

# 4 segments of Indonesian solar Market



Category	Government Target (GW)	Typical Project size	Image of Project	
Utility Scale Project (B to G)	40GW over	3,000KW over	 <p>Ground Mount</p>	 <p>Floating Solar</p>
Off grid Project ( B to G )		300KW to 2,000KW With Battery	 <p>Off Grid project with Battery</p>	
Industrial Roof Top (B to B)	3.7GW By 2025	100KW to 3,000KW	 <p>Industrial roof top</p>	 <p>Industrial roof Top</p>
Residential Roof Top (B to C)		1KW-3KW	 <p>Residential roof top</p>	 <p>Residential roof top</p>



# **Utility Project ( B to G )**



## **[pros]**

- ✓ *Utility projects are generally attractive to investors with following reasons.*
  1. *The Off taker of project is PLN and being considered as bankable IPP project as like other projects (i.e Geothermal, Hydro, coal fire plant)*
  2. *Project size are typically mid-large scale which is good for using project finance.*
  3. *The steady cashflow due to the nature of sun irradiation and low maintenance cost.*

## **[ Cons ]**

- ✓ *Some potential risks are observed as following points.*
  1. *Uncertainty for land acquisition(Grand mounting) or water rights(Floating solar) for international investors.*
  2. *Possibility of curtailment of generated KWh due to Utility network condition.*
  3. *Unclear strategy and guideline regarding usage of solar panel made in Indonesia ( TKDN ) which would be cost burden against international products.*

## Off grid project ( B to G )



### **[Pros]**

- ✓ *Off grid projects are generally attractive to investors with following reasons.*
  1. *The Off taker of project is PLN and being considered as bankable IPP project.*
  2. *Electricity tariff being set to higher price considering battery cost.*

### **[ Cons ]**

- ✓ *Some potential risks are observed as following points.*
  1. *Uncertainty for land acquisition.*
  2. *Possibility of curtailment of generated KWh due to Utility network condition.*
  3. *Lack of consideration of Battery life expectation as IRR point of view.*
  4. *Unclear strategy and guideline regarding usage of solar panel and Battery made in Indonesia ( TKDN ) which would be cost burden against international products.*



# **Industrial roof Top ( B to B )**



## **[Pros]**

- ✓ *Industrial roof top projects are attractive to investor with following reasons.*
  1. *Strong motivation for solar installation by international factories due to leadership of SDGS, ESG driven.*
  2. *As like the trend in world wide, some of factories roof would be considered as bankable for investment standpoint.*
  3. *No need for land acquisition and straight to project starting.*

## **[ Cons ]**

- ✓ *Some risks are observed as following points.*
  1. *Domestic factories are not driven by renewable but pay-back time mostly.*
  2. *Not allowed to 3<sup>rd</sup> party's commercial PPA/IPP on roof top solar in general.*
  3. *Possibility of limitation of solar capacity ( Not 100% capacity ) by the Utility.*
  4. *Possibility of restriction of power generation on weekends and holidays.*
  5. *Some contradicting points of regulation ( SLO, Izin-operation ) with ESDM guideline*

## **Residential Roof Top ( B to C )**



### **[Pros]**

✓ *Following points are good points*

- 1. Small project is easy to start and no regulation risk such as SLO and capacity charge.*
- 2. The electricity price for house is most expensive and early pay-back time is expected.*

### **[ Cons ]**

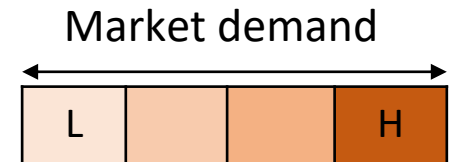
✓ *Following points to be considered as business obstacle*

- 1. Individual projects are too small to conduct direct business of Japanese Investors, therefore need local business partners.*
- 2. Lack of awareness and recognition of solar power itself among individuals thus still need a time for market rising.*



# 3 segments of Indonesian solar Market ( Business timing)

- ✓ Our view on 3 segments in terms of business timing is described as following chart.  
The Industrial roof top is first leading segments among of solar market in Indonesia while Utility scale and residential roof top are slow for rising market.



<i>Business segment</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>
Utility Scale (B to G)							
Off grid project (B to G)							
Industrial Roof top (B to B)							
Residencial Roof top (B to C)							

## Summary ( our view )

	Market Attractiveness for Japanese Investor	Start Market Booming	Consideration Point
Utility Scale (B to G)	★★★	2024	<ul style="list-style-type: none"><li>• Difficulty of land/surface right acquisition or usage</li><li>• KWh curtailment risk</li><li>• TKDN regulation for Panel &amp; Battery</li></ul>
Off grid Project ( B to G )	★	2024	
Industrial Roof top (B to B)	★★★★	2021	<ul style="list-style-type: none"><li>• Market opening for PPA</li><li>• Install capacity limitation</li><li>• KWh curtailment on weekends and holidays.</li></ul>
Residencial Roof top (B to C)	★	2026	<ul style="list-style-type: none"><li>• Incentives for house owner individuals</li></ul>



