

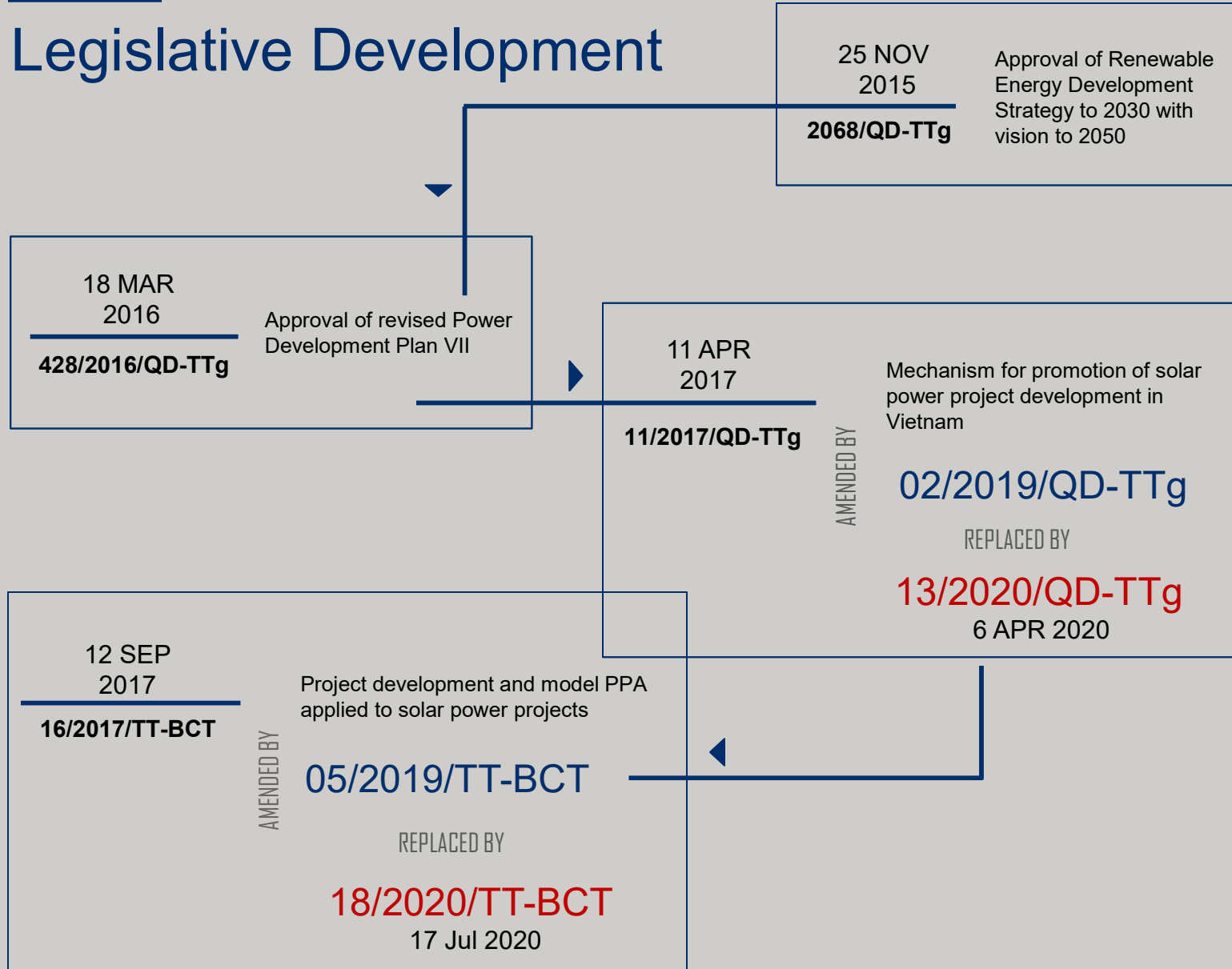


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DPV MARKET DEVELOPMENT Vietnam

USAID Vietnam Low Emission Energy Program
Duc Nguyen, Renewable Energy Advisor

Legislative Development



RTS Development Decisions

	Decision 11	Decision 02	Decision 13
Feed-in-tariff	9.35c\$/kWh		8.38c\$/kWh
Regime	Net metering	Net Billing	Net Billing
Threshold	1MWp		1MW or 1.25MWp
PPA terms	20 years, COD by 30/06/2019		20 years, COD from 01/07/2019 to 31/12/2020
Off-taker	EVN		EVN and others
Business models	CAPEX, Leasing		CAPEX, Roof lease, Private PPA
Installations	1,510 systems 18 MWp (EO 2018)	9,314 systems 190 MWp (EO Jun 2019)	53,239 systems 1,437 MWp (YTD)

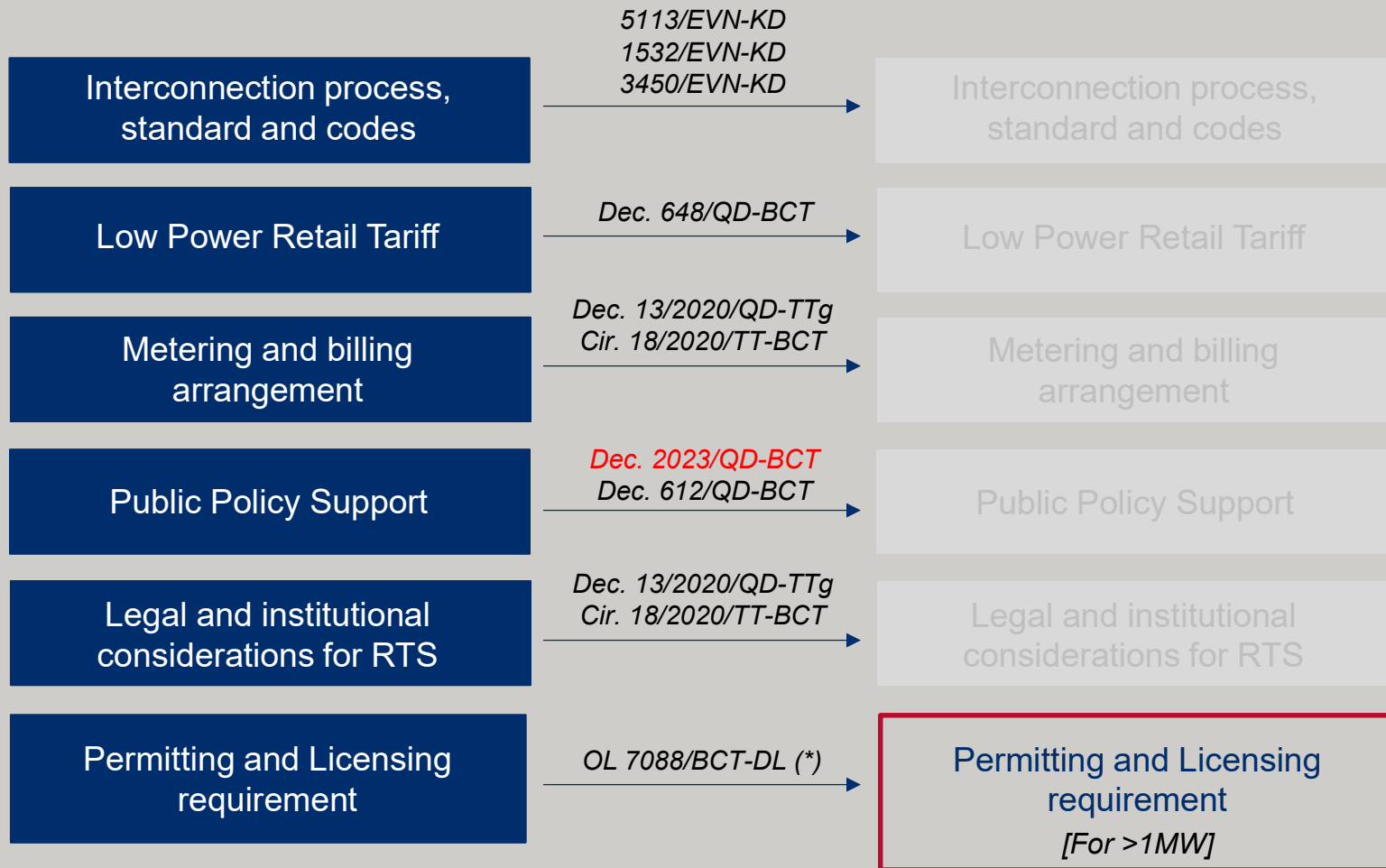
Decision 13/2020/QD-TTg Briefings



- 1** unified nationwide FiT at 8.38c\$/kWh
- S**eparate guidance and new definition
- A**llows other electricity off-takers
- A**llows private PPA
- M**onthly payment
- N**et billing

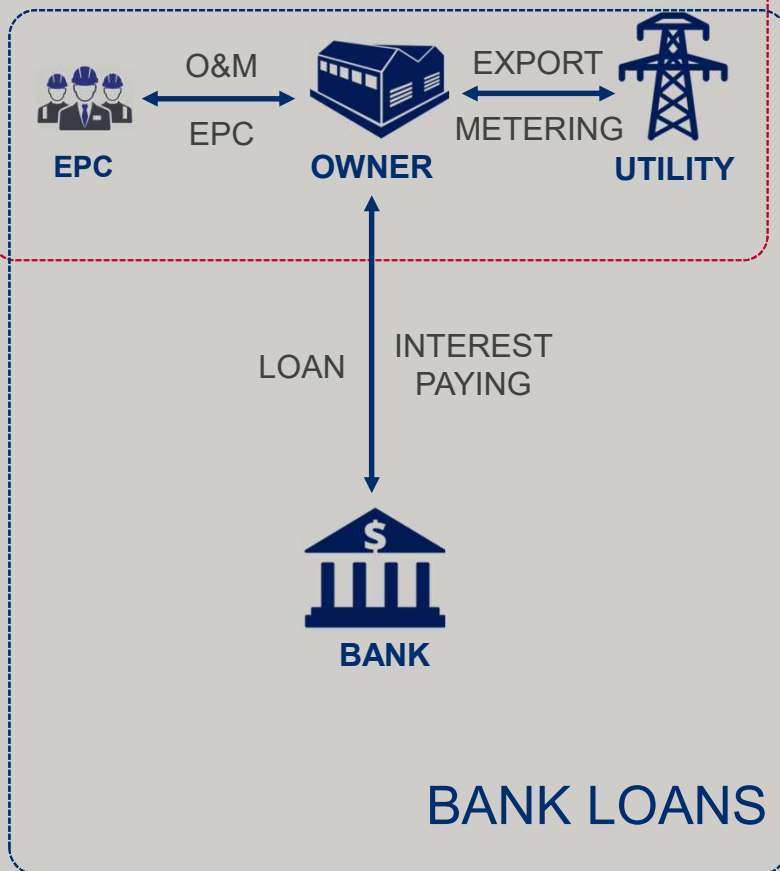
- L**ower FiT
- L**ate issuance
- 1** MW speed-bump
- S**hort effectiveness date
 - Reduce readiness;
 - Into another gold rush;
 - Concern on system price;
 - Concern on EPC quality/construction safety

Market Conditions



Conventional models

SELF-FINANCE

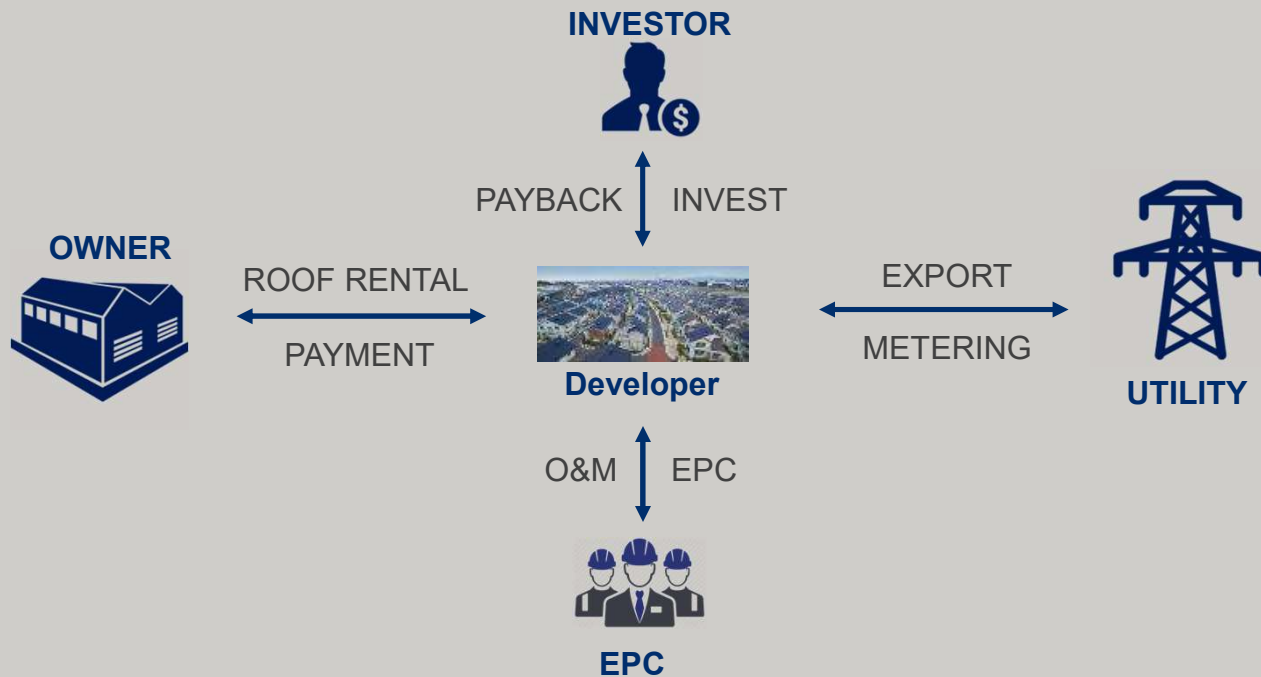


PROJECT FINANCING – GENERAL LOAN TERMS AND CONDITIONS

Loan Terms	Condition
Loan amount	Up to 70% of project CAPEX
Loan tenor	Up to 7 years
Grace period	No later than the COD of the Project Debt Service
Debt Service Reserve Account (DSRA)	Minimum amount equivalent to principal and interest payment of the next 3 months
Security Measure	<ol style="list-style-type: none"> (1) Future assets formed from bank loan (2) Rights arising from asset of the project (3) Shares/ Contributed Capital of the SPV (4) Corporate Guarantee (preferred – opt) (5) Other independent collateral (preferred – opt)
Revenue	Flow through the borrower's account at Bank
Legal Status	<ol style="list-style-type: none"> (1) Execution, completion and transfer all necessary legal documentation in form and Substance agreed between the Borrower and Lender (2) PPA and PCA signed with PCs and/or private PPA with private buyer (non-EVN) (3) Rooftop lease agreement (4) Other conditions upon each project
Lending rates (*)	12-month deposit rate (*) + margin (2-3.5%) p.a

(*) Assumption from interviews with local bank representatives + Vietnam solar white paper

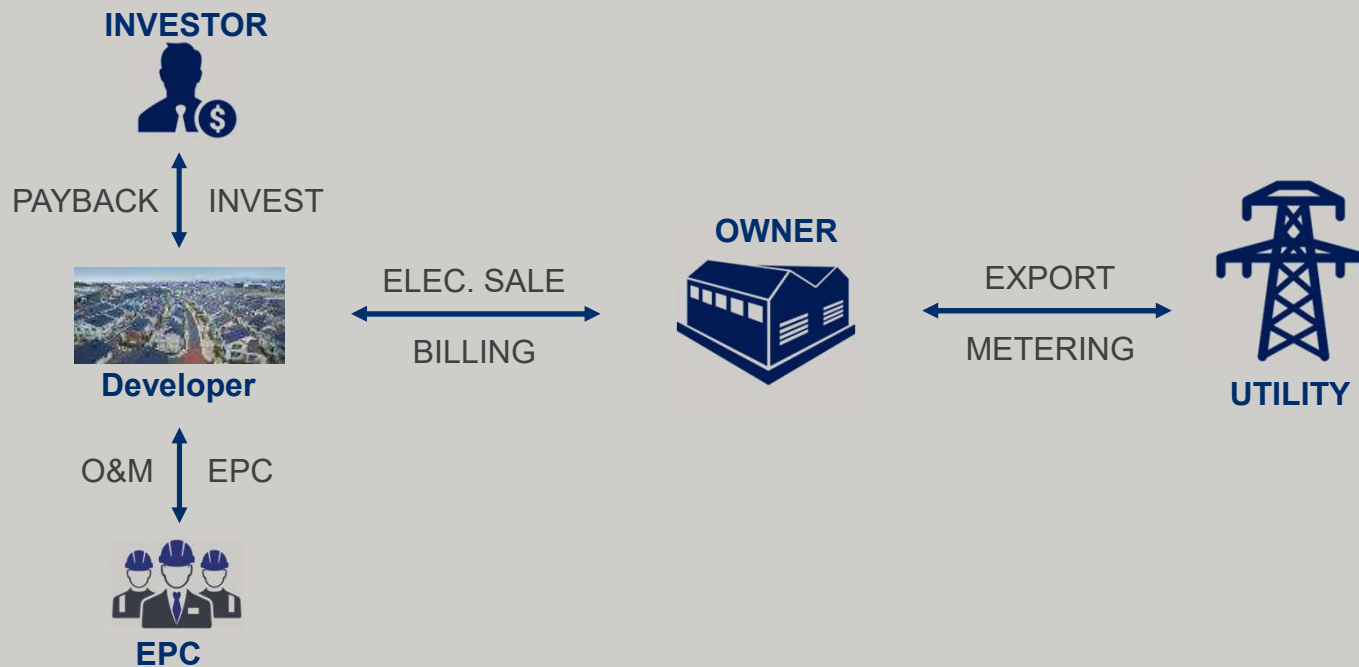
Modern Models | ROOF LEASE



DESCRIPTION

- The roof owner lease the roof to RTS developer and receive monthly payment
- RTS investor to invest, install, O&M for the PV system and **sell all generated electricity to EVN**

Modern Models | **LEASING** Private PPA

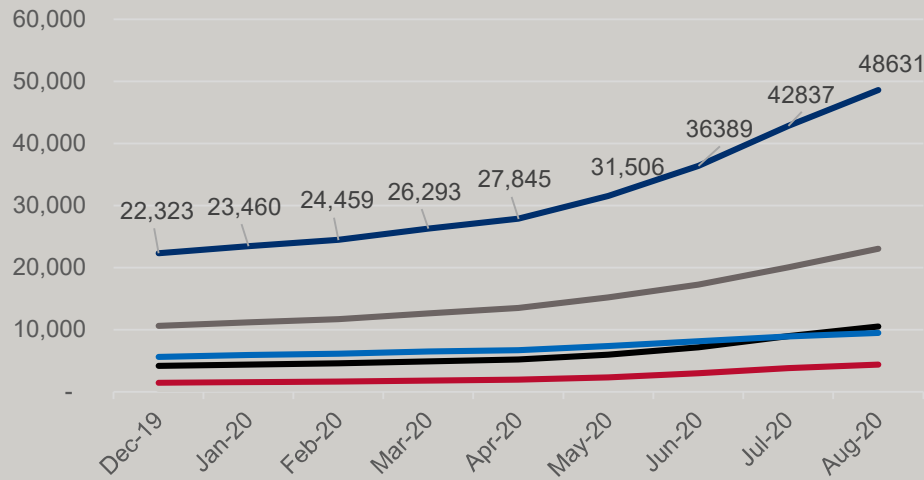


DESCRIPTION

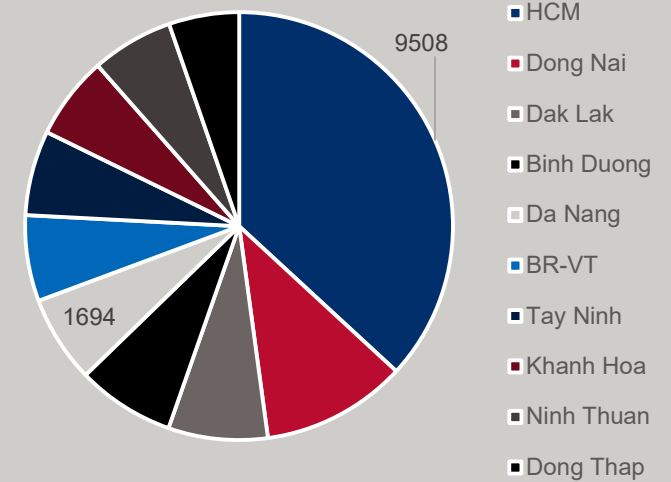
- RTS investor to invest, install, do O&M for the PV system, **sell all or part of generated electricity to the roof Owner** and remaining electricity to EVN (if any).
- The payment scheme between RTS investors and roof Owner is negotiated through private PPA.
- For excess power sold to EVN (if any), standardized PPA will applied.

RTS Market Outlook - YTD

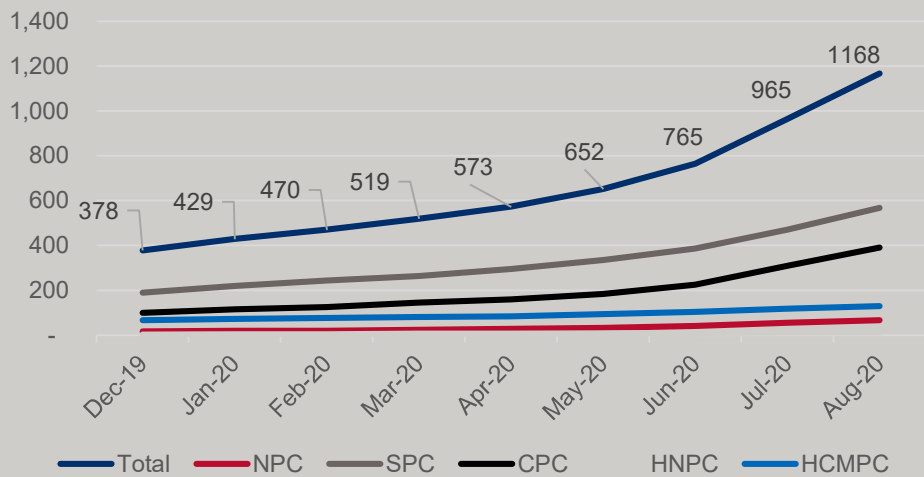
Total Installed Systems



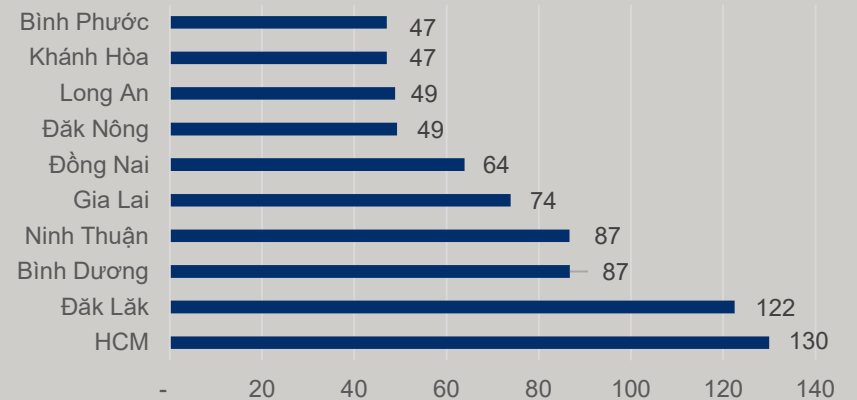
Top Installations by cities/provinces



Total Installed Capacity (MWp)

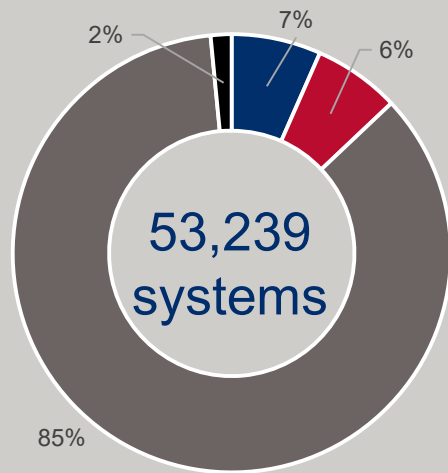


Top installed capacity by cities/provinces (MWp)

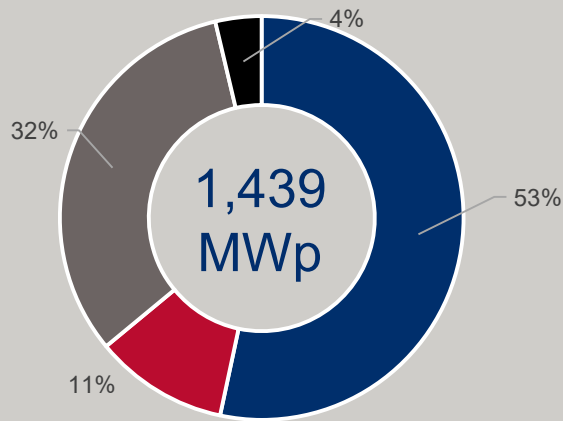


RTS Market Outlook – YTD

Installed System by Segments

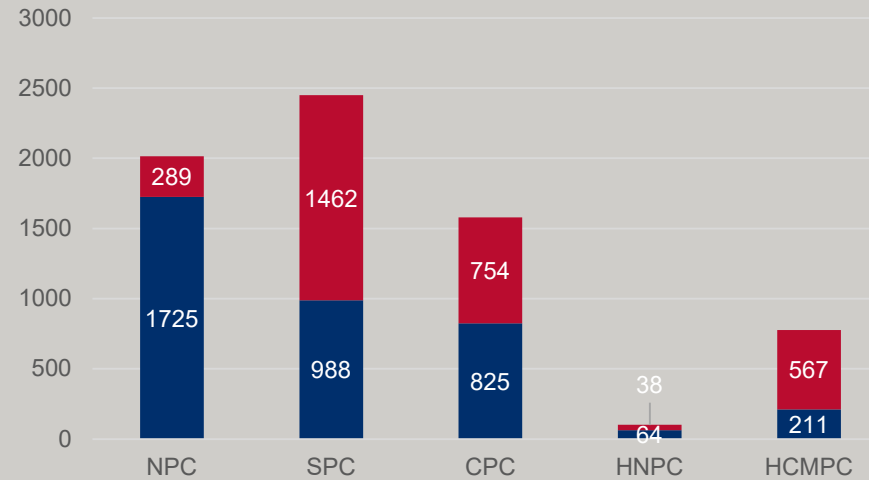


Installed Capacity by Segments

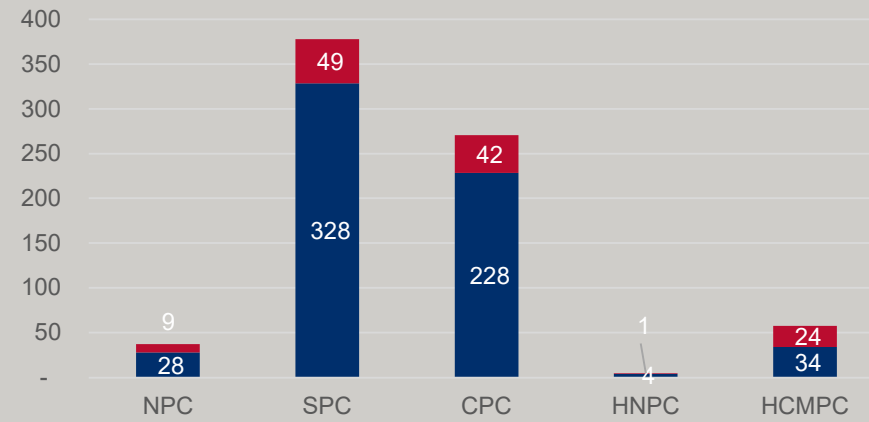


■ Industrial ■ Commercial ■ Residential ■ Administrative

C&I Installed systems



C&I Installed Capacity (MWp)



■ Industrial ■ Commercial



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THANK YOU

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