

# LESSONS LEARNT IN ARRANGING LONG TERM PROJECT FINANCING WITH LOCAL BANKS | VIETNAM

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Astris Finance

Infrastructure & Energy Transaction Advisory

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AF\_2019



Global Transaction Advisory  
Infrastructure & Renewable Energy



**18**  
years

We were established 18 years ago as the advisory arm of the world leader in infrastructure and energy finance, a European banking group with a USD 1 trn+ balance sheet. We became independent through an MBO in 2008

**220+**  
**20 bn**

We have advised on over 220 transactions across virtually all markets globally, translating into more than USD 20 bn of investment in Infrastructure & Energy

**5,000**  
MW

We have advised on more than 60 renewable energy transactions in Europe, the Americas, Africa, India, South East Asia and Japan -- across wind and solar, representing over 5,000 MW of capacity

**#1**  
**#5**

In March 2016 and again in March 2018, we were elected Financial Advisor of the Year for Latin America by IJ Global

In 2017, we ranked #5 in the IJ Global League Tables for Renewable Energy financial advisory

**20**  
Awards

In the past 10 years, our projects have received 20 “Deal of the Year” Awards from globally recognized publications, notably IJ Global and PFI

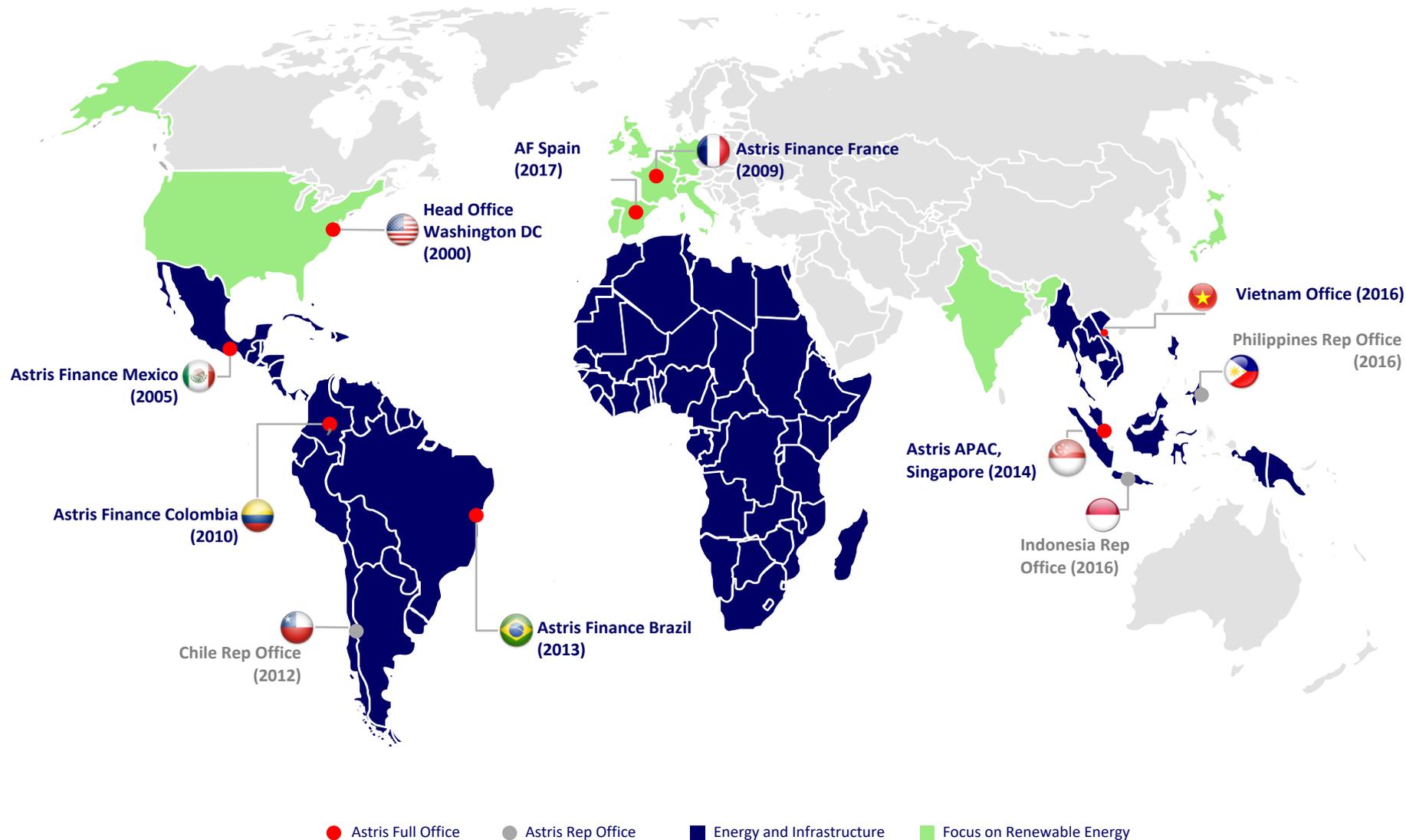
**150+**  
Investors

We have fluid access to over 150 investors specialized in energy and infrastructure globally

We can help mobilize liquidity across the capital structure at a competitive risk-adjusted cost

# Specialized Transaction & Financial Advisory Services

## Local Presence with Global Reach



### **Upstream Development and Bid Stage Mandates**

*We work hand-in-hand with the Project Sponsor team on all matters which have an impact on project feasibility and bankability*

### **Equity Raising**

*We help our developer clients raise strategic and/or financial equity to complement their own equity and leverage their project development added value*

### **Debt Raising**

*Working in close coordination with the Sponsor's PF team, we act as focal point throughout the debt raising process, all the way to financial close*

### **M&A Mandates**

*We handle sell-side and buy-side acquisition mandates based for real assets or portfolios in the infrastructure & energy space*

## The Astris Value Proposition

### Strong Sector Expertise

- We are not only project finance bankers – we are also true sector experts with a long track record of closing deals in specific infrastructure and energy industries
- Our deal teams always include sector experts -- often with a double engineer & finance education -- bringing in-depth knowledge of the technical, business and financing aspects of the project at hand
- We pride ourselves on being heavily involved in development and due diligence phases, helping smoothen the deal process and ensuring a better final outcome

### Flat Organizational Structure

- Our deal teams are small and focused – the same people will be involved in all aspects of the transaction, from origination through modeling, due diligence and on to closing
- Our transaction execution experts are also the ones with the relationships with investors and financing parties, as well as direct technical knowledge of the sectors
- We work in symbiosis with our clients' development and financing teams, acting as an externalized project finance support team helping to achieve clients goals

### True Local Experts

- We have a local presence in all large markets which we cover in Latin America and Europe, and regional coverage in Africa and SEA
- We have chosen to work only in specific markets, where we can bring strong value added – due to our in-depth understanding of the regulatory and legal frameworks, financing markets and business conditions
- We select our clients very carefully, working exclusively with major international, regional and local infrastructure players and with first class renewable energy developers

### Project Finance & Beyond

- We are non-recourse project finance experts: our team members have amassed a very large collective track-record as sponsors, lenders and advisors in Emerging Markets
- Bringing out-of-the-box solutions is in Astris' DNA. We have structured several firsts over the years both in terms of transaction structures or financing sources
- We are experts in risk allocation and contractual structuring, working to minimize the risks taken by our clients and potential recourse on our client sponsors and contractors

# Specialized Transaction & Financial Advisory Services

## An Extensive Track Record with Development Finance Institutions

### MULTILATERALS/BILATERALS



- Contracted Solar Plant, El Salvador (2016)
- Kingston Port, Jamaica (2016)
- Merchant Solar Project, Chile (2014-15)
- First Utility Scale Solar Plant in Chile (2013)
- Road Concession, Jamaica (2011)
- Dominican Republic (2010)



- Contracted Solar Plant El Salvador (2016)
- Kingston Port, Jamaica (2016)
- First Solar Plants in Chile (2013) and Peru (2011)
- Jamaican Toll Road (2011)
- BTA Toall Road, Dominican Republic (2008)



- Gas-Fired Plant El Salvador (ongoing)
- Floating Liquefaction Plant, Colombia (2014)
- Road Concession, Jamaica (2011)



- Solar Plant, Peru (2012)
- BTA Toll Road, Dominican Republic (2010)



AFRICAN DEVELOPMENT BANK GROUP

- Urban train, Ivory Coast (2015)
- Wind Farm, Togo (2012)



- PNG Hydro Project (2016)
- Indian Solar Project (2013)

### TIED FINANCING (ECA's)



- Our Brazilian team has closed 25+ financings with BNDES in the past 10 years in the energy sector



- Urban Train, Ivory Coast (2015)
- Thermal Plant, Dominican Republic (2012)



- Lima Metro Line 2, Peru (2015)



- Thermal Plant, Dominican Republic (2012)



- Floating Liquefaction Plant, Colombia (2014)



- Container Port in Columbia (ongoing)
- Road PPPs in Argentina (ongoing)
- Gas Fired Plant El Salvador (ongoing)
- Solar Plants, Peru (2011 to 2014)



- First Solar Plant, Dominican Republic (2013)



# Astris Finance

## Recent Awards



- *IJ Global - Financial Advisor of the Year for the Americas (March 2016)*
- *IJ Global - Financial Advisor of the Year for the Latin America (March 2018)*
- *IJ Global Americas Multi-Source Financing Deal of the Year (2015)*
- *PFI Americas P3 Deal of the Year (2015)*
- *TXF Export Credit Deal of the Year (2015)*
- *IFLR Americas: Project Finance Deal of the Year (2016)*

## 2018 Landmark Closings in Latin America, Europe and South East

### Asia



Latin America



- Cerro Dominador USD 1 bn senior + mezz debt package
- Largest solar project ever in Lat Am
- Dual PV / CSP technology
- Complex electricity market
- Sponsor: Tier 1 PE Fund



Europe



- Sale of independent RNW IPP Langa to ENGIE
- 300+ MW of operating assets
- 500 MW of pipeline with PPA's
- Final leg of a five year development structured by Astris



SE Asia



- Financial close for 40 MW Dam Nai wind project in Vietnam
- First ever project finance deal in Vietnam non-hydro RNW sector
- Financing pushed limits of local banking market

# Our Work in the Renewable Energy Sector

Over 50 mandates in the past 5 years – across sectors & geographies and across the RE value chain

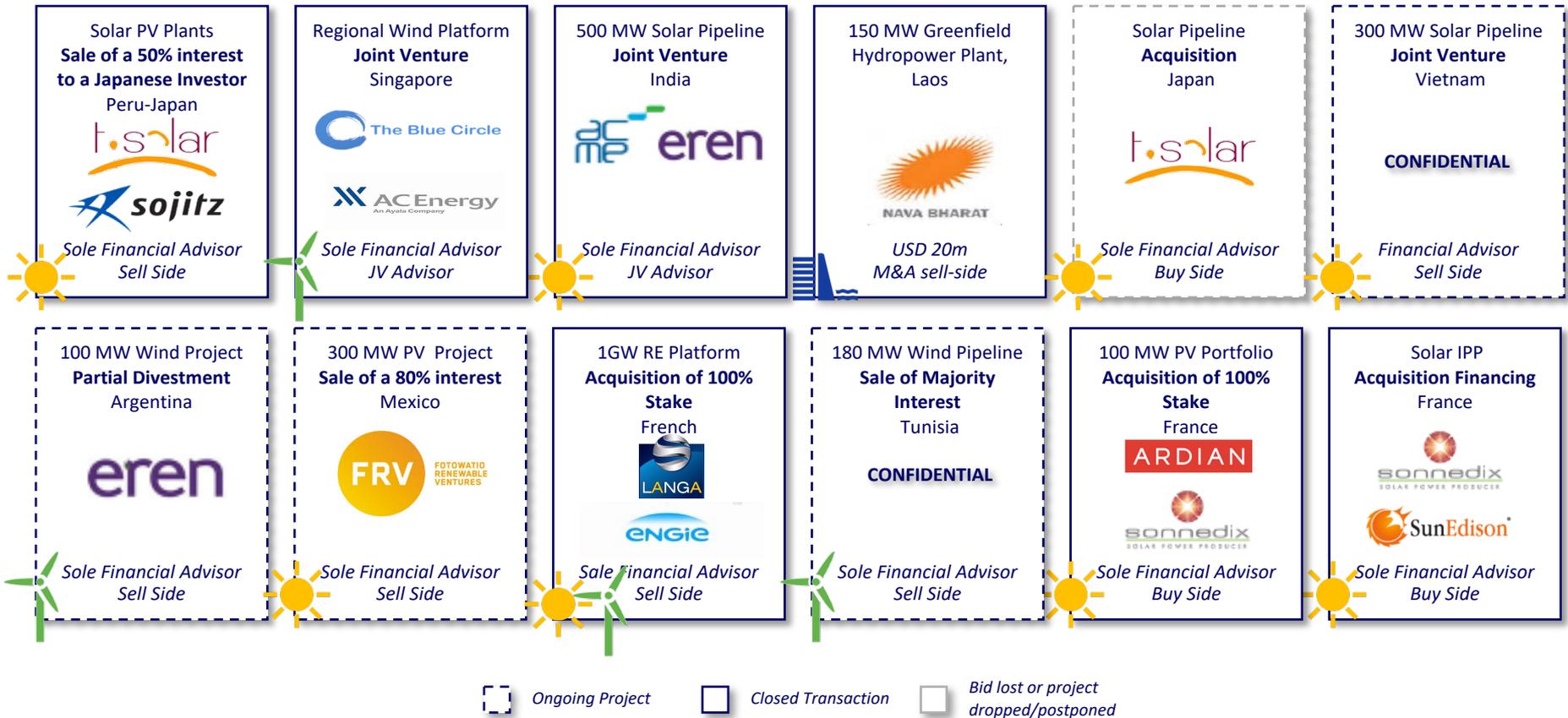
- Astris has been active in Renewable Energy since 2009
- We have advised on more than 60 transactions in the past 5 years, in Europe, the US, LatAm, Japan, India and South East Asia
- We have a very deep understanding of the key technical aspects and are very involved in due diligence
- We have structured a number of firsts in the RE space, notably the first wrapped bond RE deal in EM, one of the first fully merchant deals in Chile and the refinancing of a 100-asset portfolio in France, and the first long-term project financing in Vietnam

 2018  2017-18  2016-17  2015-16	<p>Wind Power Plant 40MW Vietnam</p>   <p>USD 45m Sole Financial Advisor</p>	<p>Rooftop Solar Portfolio financing Singapore</p>  <p>USD 25m Sole Financial Advisor</p>	<p>Portugal Portfolio Refinancing</p>  <p>EUR 80 m Sole Financial Advisor</p>	<p>France 350 MW PV Portfolio Refinancing</p>    <p>EUR 1.500 m Sole Financial Advisor</p>
	<p>Brazil 250 MW PV Plants</p>  <p>USD 250 m Sole Financial Advisor</p>	<p>El Salvador Providencia Solar Plant</p>  <p>USD 100 m Financial Advisor</p>	<p>Japan Gunma PV Plant</p>  <p>USD 120 m Sole Financial Advisor</p>	<p>Chile Los Loros PV Merchant</p>  <p>USD 120 m Sole Financial Advisor</p>
	<p>France Delta Solar Acquisition</p>   <p>Sole financial Advisor</p>	<p>India Joint Venture</p>    <p>USD 150M Sole financial Advisor</p>	<p>Peru &amp; Chile Tacna &amp; Panamericana PV Power Plants</p>   <p>USD 310 m Sole Financial Advisor</p>	<p>Thailand 50 MW Solar Plant PV</p>  <p>USD 180 m Bid Stage Financial Advisor</p>

# M&A Track Record

## An Unparalleled Track Record On the Global Renewable Energy M&A Market

Since 2008, we have closed more than 30 sizable M&A and financing deals on four continents for an aggregate amount of more than \$4bn. We are currently having more than 12 other renewable energy mandates in France, Mexico, Uruguay, El Salvador, Vietnam, Italy and Portugal. In France alone, during the last three years Astris worked on more than 1,000 assets of solar and wind



# Vietnam: Debt Financing of 40 MW Wind Farm

## First Ever Non-recourse Domestic Project Financing of a Foreign-Owned Wind Project (2018)

In April 2017, Astris was mandated by a leading developer of wind farms in South-East Asia and a Singapore-based private equity fund to advise on the debt financing on a non-recourse basis of one of the first foreign-controlled wind project to reach construction phase in Vietnam

- The Project consists in the design, construction, operation and maintenance of a 40MW wind farm in Ninh Thuan Province, Vietnam. The Project is subdivided into two phases: (1) A first phase of 6 MW and (2) a second phase of 34 MW.
- **A central part to the advisory mandate was (i) to quickly come up with different financing structures in the context of a non-bankable PPA and sub-optimal creditworthiness of the offtaker and (ii) advise the Sponsors on the most-likely structure to bring the financing to closing within the timing constraint of a phased Project development**
- Astris played an instrumental role in structuring a long term senior debt financing on a non-recourse basis on the premise that the Project had to be banked on the back of the standardized wind PPA template (Circular 32) and a FIT at eq. USD 7.8 cents / kWh
- With this approach, Astris structured three possible financing options and ran a detailed market read with different sources of capital relevant to each of these options -- ultimately selecting the local currency financing option:
  - Dong-denominated term loan from tier 1 domestic banks on a non-recourse basis
  - USD term loan financing from DFIs (with no MoF guarantee)
  - Hybrid ECA-backed and domestic term loans on the back of a domestic credit enhancement mechanism
- Phased development/construction of the Project required the specific structuring of the loan in order to enable the refinancing of a portion of the development equity within the parameters pre-agreed with the lender
- Phase 1 reached COD in October 2017. Debt financing closed and funded in July 2018



- **Key aspects of Astris' role included**
  - Extensive analysis of the competitiveness of the 3 financing options considered on the back of a **complex financial model able to run and compare multiple financing scenarios in different currencies**
  - Coordination of discussions with 10+ domestic and international lenders
  - Organization of detailed beauty contest among top 3 local banks
  - Coordination of financial due diligence and credit approval processes until financial close
  - Coordination of negotiation of term sheet and final credit documentation, including loan agreement and security documents
  - Assistance in management of loan disbursements

# Vietnam: Debt Financing of 49.5 MW Solar Farm

## Second Domestic Project Financing of A Foreign-Owned Solar Project – Closed in March 2019

In September 2018, Astris was mandated by a leading European Renewable IPP, developing a pipeline of several GWs in wind and solar projects worldwide, in connection with the debt financing of a 49.5 MW solar farm in Vietnam.

Securing a non-recourse debt financing in four and half months from initial DD to signing of the Credit Agreement

- The Project is a 49.5MW solar farm in central Vietnam. The project includes the design, construction, operation and maintenance and targets to commercial operation by mid-2019
- **A central part to the advisory mandate was (i) to advise the Sponsor on the most-likely project financing structure to close a local financing within the timing constraint and (ii) to closely cooperate with domestic banks to assure the project to be handled as a matter of priority**
- Astris played an instrumental role in optimizing the bankability of the projects and addressing the potential lenders' concern on certain project's and sector's risks in an environment where the number of credit applications for solar farms increased significantly though only a few passed Credit Committee's stage
- **Astris ran parallel credit processes and negotiations with the three local banks to increase the chance to receive credit approval in time**
- Leveraging its capacity to execute in Vietnam and in Vietnamese, Astris has led day-to-day discussion with banks at different levels (branch / FDI / Legal) while coordinating tasks with local partner and Project consultants/advisors.
- Astris' un parallel experience in managing credit process with local banks enabled to contributed to complete this credit assessment in **two months** from initial discussion with the preferred banking partner
- Having brought the Project's development at credit documentation stage, teams are working intensively to close the debt financing by year-end



- On the back of Astris' successful closing of the first wind farm project earlier the year, **Astris is leveraging its experience in the sector to fast-track the credit process and enhance the chance of reaching financial closing**
- **Astris pursues its efforts to bring best project finance standards in the domestic banking market** in order to increase the number of local currency project debt financings

### Key Achievements: Bridging the Banking Culture Gap

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- DSCR calculation: waterfall vs bottom up
- Debt sizing parameters: min DSCR vs payback period
- Repayment schedule: CFADS vs CFAPR
- Equity Determination: Shareholder Loan vs Preferred Share
- Legal perspective as a state owned bank
- Bank internal dynamics/ Multi level relationship management
- Cash distributions: cash sweep v. cash lock-ups

# Debt Financing Considerations

Mapping Out The Debt Financing Options on a no or limited-recourse basis

## OPTION #1: ONSHORE VND FINANCING

VND-Denominated Term Loan

Security Package

- Project Finance-type Security Package
- Limited Recourse Guarantee  
(no-direct recourse against the Sponsors and limited in time during construction)

- (1) In any of the Offshore USD financing structure, a (small) tranche of the financing will be in Dong when USD financing
- (2) The Guarantee can either have full scope, ie covering all PPA-related risks or a partial scope covering only main PPA risks, such as curtailment or change in law (“PRG”)
- (3) Commercial banks are more willing to take PPA-related risks by cross-collateralizing other Vietnamese assets / revenues or by requiring a sponsor’s support to cover specific risks such as curtailment or change in law
- (4) Availability of credit insurance products remain challenging due to the absence of a recourse to intl. arbitration under the PPA or cost of insuring EVN-related risks

## OPTION #2: OFFSHORE USD FINANCING

USD-Denominated Term Loan

DFI-sourced Financing (1)

ECA-backed Financing (1)

Commercial Banks (3)

Credit Enhancement Mechanisms

Guarantee by domestic bank (2)

[Credit Insurance] (4)

Balance sheet or Cross-collateralization (4)

Security Package

- Project Finance-type Security Package
- Sponsor’s support during Construction or operation with respect to specific PPA-related risks (4) depending on the USD financing structure

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