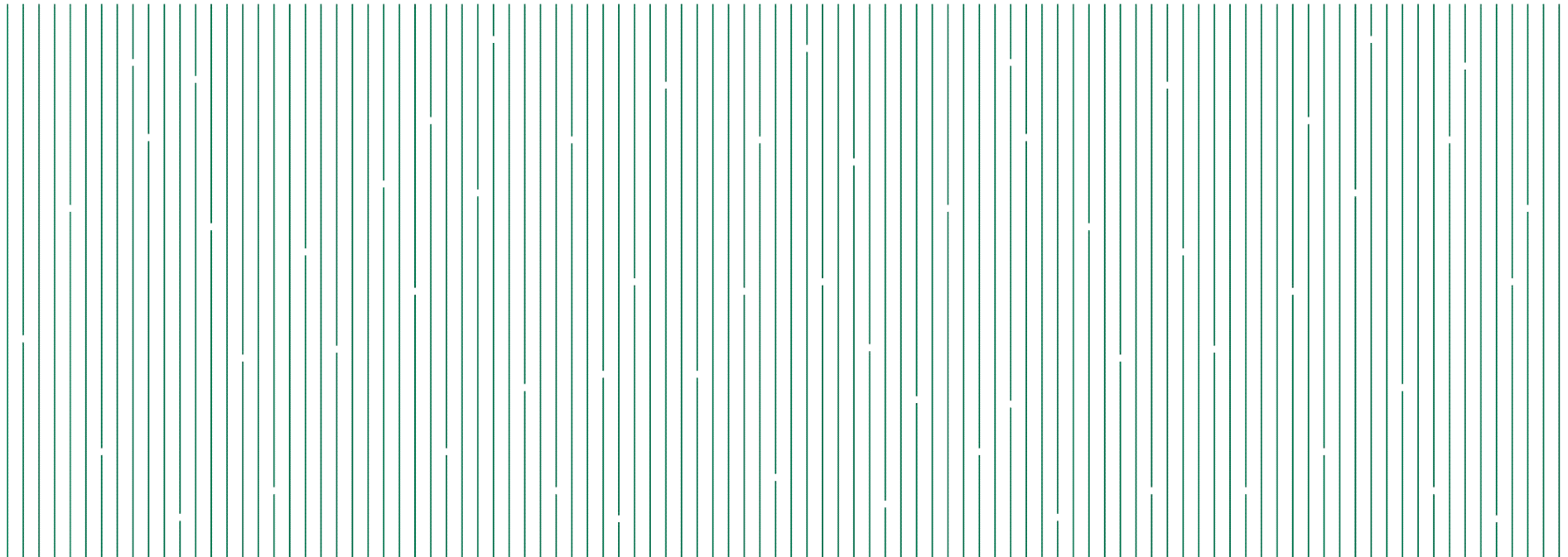


# SUPPORTING POLICIES FOR CLEAN ENERGY IN VIETNAM

May 2017



# DRAGON CAPITAL GROUP

The first investment manager in Vietnam established in 1994

- Clean Development Investment Manager in HCMC, Vietnam/Bangkok, Thailand
- Biggest player in Vietnamese listed equity; total AUM of US\$ 2bn
- With significant fixed-income, property and private-equity platforms
- Co-founded domestic investment firm, Vietnam Fund Managers (VFM) in 2003
- Investor in leading stock broker Ho Chi Minh Securities Co (HSC)
- Offices in HCMC, Hong Kong, Bangkok, U.K.
- Regulated by Hong Kong's SFA and United Kingdom's FCA



# INVESTMENT INCENTIVES FOR CLEAN DEVELOPMENT

Support from the GoV is one of the key market drivers

RE Sources	Supporting Mechanism	Price (US cents)	Note
Solar PV	Feed-in-Tariff (FIT)	9.35c/kWh	Dec 11/2017/QD-TTg
Small hydro-power	Avoided cost Tariff (ACT)	~5c/kWh	Adjusted annually by MOIT
Wind	FIT	7.8c/kWh	Dec 37/2011/QD-TTg
Biomass	FIT	7.34 – 7.55c/kWh	Dec 942/2016/QD-BCT
Waste-to-energy	FIT	7.28 – 10.05c/kWh	Dec 31/2014/QD-TTg

## ***Other investment incentive for RE Developments:***

- Long term Standard Power Purchase Agreement (e.g. 20yrs Wind PPA)
- Income indexed to US\$ dollar (Not small hydro)
- Import duty exception on Equipment
- Corporate Income Tax exemption and reduction – fairly normal (10% CIT rate in 15 years, tax holiday first 4 years from taxable income, 50% reduction in the next 9 years)

# SOLAR INCENTIVES IN UAE & ABU DHABI

Utility scale solar projects that are cheaper than coal

Location	Project Name	Utility	Bid Date	Installed Capacity (MWp)	LCOE (US¢/kWh)
Maktoum Solar Park, UAE	Sheikh Maktoum Solar Park Phase III	DEWA	May 2016	200 MWp	<b>3.95</b>
				200 MWp	<b>3.65</b>
				200 MWp	<b>2.99</b>
Sweihan Solar Park, Abu Dhabi	Sweihan Solar Project	ADWEA	Sept 2016	350 MWp	<b>2.42</b>
					<b>2.53</b>
					<b>2.60</b>
					<b>2.92</b>
					<b>3.09</b>
					<b>3.64</b>





# DE-RISKING TO ACHIEVE A LOWER COST OF ENERGY

RISK is a project cost and low risk UAE = 7% IRR, Vietnam perceived High Risk = 15%+ IRR

## UAE & Abu Dhabi

- Very high CUF>25%
- Low EPC costs at \$0.90/Wp 2016
- Low construction period risk
- Debt finance concessionary rate 4% “all in”
- Pre-defined and developed site provided for free at Makthoum and Sweihan Solar Parks
- DEWA and ADWEA take up to 51%-60% equity stake and accept no or low equity returns for 1st 10 years

## Vietnam

- Good but not exceptional; CUF~16%
- EPC costs at \$1.1 - \$1.3/Wp\*\* 2016
- High development risk, licenses, import
- Commercial debt at 8% - 11% - variable
- Land clearance and compensation responsibility of the Project Developers
- EVN creditworthiness remains a significant risk with foreign banks/investors

\*\* *Theoretical as no projects were built 2016*

*Risk mitigation by government to encourage private investment/ Meet 12,000 MW target*

# | QUESTIONS

