

ANNEX

SUMMARY OF ISSUES

Prepared by
VBF Power & Energy Working Group

I. NEW ISSUES

No.	Issues	Notes	Recommendation
1.	Offshore Wind Power	<i>Global Off-shore wind power is growing rapidly as it is one of the lowest cost renewable energy solutions. Investors see great potential to develop offshore wind power in Vietnam as part of a sustainable energy market. With a long coast line, Off-Shore Wind can help Vietnam build Power Plants closer to high demand locations, and avoid having too many plants at low demand provinces like Ninh Thuan and Binh Thuan.</i>	VBF recommends that MOIT consider developing for large scale offshore wind: <ul style="list-style-type: none"> • Internationally Bankable PPA • Synchronised Permitting, Licensing and Master-planning process in a single one-stop shop • Including EVN NPTC and all stakeholders in a developing a Strategic Grid Transmission Plan. and consider allowing developers to build their own 220kv and 500kv transmission lines • Define the FIT that will be available until 2025.
2.	“Behind the Meter” Power Plants up to 50MW capacity	<i>Producing electricity close to the consumer, behind the meter, for own consumption, using solar or biomass technology is a cost-effective solution to meet local power demand. It removes pressure on the local power distribution grid and benefits EVN by reducing the need for further capital investment in the transmission and distribution network. As no electricity is exported to the grid there is no safety concerns for EVN.</i>	VBF recommends that behind the meter clean energy power plants, that export no power to the EVN Grid are: <ul style="list-style-type: none"> • Exempted from the need to obtain an Operating License up to 30MW capacity • Not required to seek approval in the National Energy Development Masterplan • Required to give EVN reasonable notice

<i>No.</i>	<i>Issues</i>	<i>Notes</i>	<i>Recommendation</i>
			of when the power plant is to be commissioned.
3.	Solar and Battery combinations	<p><i>The provisions for solar/battery were removed from the latest draft of the Solar Decision</i></p> <p>Solar and Battery Storage in combination are an extremely effective way to generate and supply electricity and to avoid high variation in the amount of electricity exported to the grid.</p>	VBF recommends that solar and battery storage combinations are included in the final draft of the Solar Power Decision in 2019.
4.	Draft Solar Power Decisions 2019	VBF PEWG anticipates and welcomes the Draft Solar Power Decision to be finalised and issued in June 2019. However, the new FIT tariff was cut by up to 30% and may be too low to attract investors to invest in solar. The net profit to investors is lower than a one-year deposit account in a Vietnamese bank. There is a risk that due to the low profit offered, high cost of development, uncertainty of grid connection, and the internationally unbankable PPA, that most of the remaining solar power projects (c363 projects) may never be commissioned.	<p>VBF recommends that in Annex 2:</p> <ul style="list-style-type: none"> • The proposed price should be increased, or a new draft PPA should be issued which is bankable for international financing. See below item “Create a Fairer Risk Allocation” in issues from 2018 • Khanh Hoa, Dak Lak, Gia Lai and Phu Yen have a similar yield comparable to most provinces in Region 3, according to the solar yield map of Vietnam. These provinces should in Region 3 not Region 4.
5.	Floating Solar should be prioritised and promoted extensively	Floating solar has none of the problems of overloaded grid capacity (they are located close to existing hydro power plants with grid) and no or very limited negative land use impacts.	<p>VBF recommends that the floating solar:</p> <ol style="list-style-type: none"> 1. FIT be increased to US 9 cents/kWh until 2022, to incentivise investment in floating solar and to compensate investors for higher cost of the equipment 2. Be given priority in the National Masterplan over other power projects.

<i>No.</i>	<i>Issues</i>	<i>Notes</i>	<i>Recommendation</i>
6.	Market Transformation and Liberalisation	Vietnam has committed to improve market access for private sector power developers and allow competitive energy markets to be established: <i>There has been little progress on equitization of the EVN GENCO companies</i> <i>The Vietnam Wholesale Energy Market is the next key step in the liberalisation of energy markets, implementation has been postponed from the original implementation date in 2016.</i>	VBF Recommends that MOIT <ul style="list-style-type: none"> • Proceed with the GENCO equitizations in 2019 • Implement the Wholesale Energy Market in 2020.
7.	Planning Law 2018	The impact of the Planning Law is causing power investors great concern.	VBF requests clarification of the process for approval of new grid-connected electricity generating plants in Vietnam, which VBF hopes will be designed to minimise and simplify the permitting, approval and licensing processes.

II. ISSUES RAISED AT VBF DECEMBER 2018

<i>No.</i>	<i>Issues</i>	<i>Current status (Solved or Unsolved)</i>	<i>Updated recommendations at June 2019</i>
8.	Create a fairer allocation of risk between private sector investors and the state counter-parties/partners by: Bring the Standard Power Purchase Agreement for solar and wind energy up to	<i>Unsolved</i> Key recommendations in the VBF Mid-term 2017's consultation paper on the draft solar PPA were not implemented in the final PPA version that was issued under Circular No. 16/2017/TT-BCT in September 2017.	VBF recommends that: If the PPA is improved to meet the standard acceptable to international banks, the financing costs of solar power plants can immediately reduce and a Feed in Tariff of US7.5cents would continue to attract foreign direct investment in solar energy to 2021.

No.	Issues	Current status (Solved or Unsolved)	Updated recommendations at June 2019
	<p>international standard</p> <p>(1) Note that risk allocation issue is also directly applicable to PPP projects.</p>	<p>In March 2018, the Standard Wind PPA was amended to improve the right to compensation for the private sector investor if EVN terminates the PPA contract by Circular 02/2019/TT-BCT</p> <p>Solar projects in the first phase of the market (2018 – 2019) have been financed with investors equity and corporate finance leveraged on the existing assets of the investors. Leverage of corporate assets is insufficient to finance Phase II solar and wind markets.</p>	<p>If the Feed in Tariff is reduced as per the Draft Decision #4 (Du thao #4/2019/QD-TTg) without any improvement in the allocation of risk in the PPA however, many foreign investors have signalled their decision to suspend new investments in the Vietnam solar market:</p> <ul style="list-style-type: none"> • MOIT makes the three most important improvements and amendments to the model solar PPA from 1st July 2019 (including: (i) Termination payments, (ii) Curtailment and Failure to take and pay by EVN, (iii) Dispute Resolution / Arbitration Clauses) • It would be logical to also make these improvements and amendments to the standard PPAs for wind power, biomass and waste to energy. • The Government allows foreign financial institutions to have free market access in the clean energy market and ensures that the Phase II markets for solar and wind have adequate project finance to reach the Governments goals of 12,000MW for solar and 6,000MW for wind.
9.	Direct Power Purchase	Unsolved – In progress	VBF recommends that ERAV:

No.	Issues	Current status (Solved or Unsolved)	Updated recommendations at June 2019
	Agreement	<p><i>The US AID VLEEP Programme working in conjunction with ERAV has now entered its fourth year of a five-year programme and there is no defined plan for a Pilot Programme. The Public Consultation Workshop has not been scheduled.</i></p> <p>VBF PEWG, Eurocham GGSC and AMCHAM P&E have each met ERAV in 2018 and sought guidance from ERAV on how a Pilot Scheme will be implemented and when it will commence. VBF wrote to ERAV on 18th April 2019 stating its concern that a Sleeved DPPA is their preferred model.</p> <p>Electricity producers see the DPPA as a simple way to increase open market access. Electricity consumers want greater access to clean energy via DPPAs. Consumers are unwilling to pay more for clean energy and fear that a Synthetic Model may cost more than the current electricity tariff.</p>	<ol style="list-style-type: none"> 1. Considers and replies to the letter from VBF PEWG dated 18th April 2019 2. Set a date for the beginning of a Pilot Scheme using Sleeved DPPAs preferably in 2019 <p>VBF thanks MOIT for the detailed description of the process followed so far in their letter dated 31st January 2019.</p> <p>VBF desires further collaboration with ERAV and thanks ERAV for its attention and interest in VBF members' opinions.</p>
10.	<p>Stimulate Energy Efficiency Investment and Distributed (1) Electricity Generation by Power Consumers</p> <p>(1) "Distributed" Electricity Generation includes Rooftop Solar Energy, Biomass and</p>	<p><i>Unsolved</i></p> <p>The Made in Vietnam Energy Plan 2016, noted that 11% of the total new power generation planned to be built by 2030 would not be needed if energy efficiency investment was stimulated.</p> <p>Decision No. 34/2017/QD-TTg issued on 25 July 2017 on the framework on average retail electricity pricing in the period of 2016 - 2010 and the "Pricing Framework" that was published in December 2017, is</p>	<p>VBF recommends that the Government publish a Roadmap/Pricing Framework for 2021 to 2025 which describes a gradual and steady transition to market-based electricity pricing and which:</p> <ol style="list-style-type: none"> a. Provides electricity consumers with transparency on future price inflation b. Continues the socialised pricing system, supports low income citizens c. Discourages electricity wastefulness

No.	Issues	Current status (Solved or Unsolved)	Updated recommendations at June 2019
	<i>Waste to Energy produced by consumers close to the point of consumption</i>	<p>not clearly linked to a market-based pricing system for electricity and suggests that electricity prices will increase at a rate less than current CPI. This price signal will deter investment in energy efficiency, not stimulate it.</p> <p>Decision 280/2019/QD-TTg on Energy Efficiency set out goals for the scale of efficiency and mechanisms to encourage investment from 2019 – 2030.</p> <p>However, the current tariff structures do not recover the cost of making and delivering electricity to consumers and may require an increasing amount of public subsidy due to the unavoidable increase in the cost of making and delivering new electricity from 2020 to 2025.</p> <p><i>(Reference US AID Power Pricing Study 2017, World Bank Report EVN A Financial Recovery Plan 2016).</i></p>	<p>d. Stimulates all electricity consumers to invest in Distributed Clean Energy Generation and Energy Efficiency</p> <p>e. Introduces fair and transparent tariffs for those consumers who can afford to pay the full cost of electricity and removes the cross subsidy given to industrial electricity consumers</p> <p>f. Protects key industries with national importance, such as fertilizer, steel and cement production</p> <p>g. Tariff Reform - two key actions:</p> <ul style="list-style-type: none"> ✓ Revise the daytime hourly tariff for Commercial and Industrial (C and I) consumers to help reduce the peak demand and the peak load on the transmission system and to reduce transmission losses. ✓ Create regional variation in retail tariffs to reflect the different regional prices in the wholesale electricity market and the variation in the cost of making and delivering electricity in each region.
11.	The Government role and the Private Sector role in cooperation for power transmission	<p><i>Ongoing</i></p> <p><i>The recent rapid growth of clean energy and future expansion of gas power has set new challenges for grid transmission development and safety.</i></p>	<p>VBF supports:</p> <p>a. EVN's and MOIT's urgent attention on the upgrade of the transmission grid and distribution lines to support clean energy and gas power development. A stable</p>

<i>No.</i>	<i>Issues</i>	<i>Current status (Solved or Unsolved)</i>	<i>Updated recommendations at June 2019</i>
			<p>grid that minimises curtailment and operates safely and efficiently with renewable energy is of great importance to developers and consumers of electricity.</p> <p>VBF recommends MOIT:</p> <ul style="list-style-type: none"> b. allow distributed or “behind the meter” electricity generation from the bio-mass, solar, wind and other renewables by private developers at residential, commercial and manufacturing buildings This will reduce the pressure on the power transmission and distribution system, help offset the Peak Load Demand and reduce the risk of unscheduled power outages. c. speed up decision making and setting regulation to encourage development of gas-fired and LNG facilities.
12.	<p>Remove any remaining regulatory barriers to rooftop solar installations in homes and businesses</p> <p>a. Clarification of the regulations for solar rooftop energy to define the legality of third-party utility power supply agreements.</p>	<p><i>Partially solved (Subject to Draft Decision #4 Du thao #4/2019/QD-TTg being finalised and issued)</i></p> <p><i>a. Solved</i></p> <p>Under Official Letter No. 1210/BCT-DTDL dated 7 February 2018 of the MOIT to the VBF, it was clarified that pursuant to Article 3.2, Circular No. 12/2017/TT-BCT, a <u>Power Operation License</u> requirement is exempt if the installed capacity is less</p>	<p>Re: c. VBF Recommended in its submission to the solar energy rooftop draft regulations in 2017 that the exemption from the requirement to obtain Power Operation Licence should be increased from 1MW to 3MW. VBF recommends that MOIT considers increasing the exemption to 3MW to fully capture the benefits of investment in solar rooftop energy systems.</p>

No.	Issues	Current status (Solved or Unsolved)	Updated recommendations at June 2019
	<p>b. Net Metering credits for power delivered to EVN</p> <p>Increase the exemption allowed from the Operating License from 1MW to 3MW</p>	<p>than 1MWp in cases where electricity generated is sold to other entities, and accordingly, rooftop solar projects with installed capacity of less than 1MWp are exempt from Power Operation License requirement.</p> <p><i>b. Solved</i> Circular 5/2019/TT-BCT clarified the payment process for EVN to use when paying for solar rooftop electricity exported to the grid.</p> <p><i>c. Unsolved</i></p>	<p>VBF suggests that EVN considers:</p> <p>a. Requiring that a solar rooftop system owner gives EVN reasonable notice of the commissioning of any rooftop solar system that exceeds 1MW, b. EVN can set reasonable limits on the amount of electricity that can be exported from the grid from rooftop solar projects that exceed 1MW, c. to specify times and dates when electricity may not be exported to the grid from rooftop solar systems that exceed 3MW.</p>
13.	<p>Improve the Quality and Efficiency of Power Projects included in the National Energy Development Masterplan</p> <p>VBF recommended a Selection Criteria to determine which grid-connected solar and wind energy projects would to be included in the National Energy Development Masterplan in the submission to the December 2017 Mid-Term Meeting</p>	<p><i>Unsolved</i></p> <p><i>The criteria that are particularly relevant are:</i></p> <p><i>1. Land Clearance and Compensation. There are no critical issues such as, impacts on Protected National Forests, Endangered Wildlife, Ethnic People, or on large numbers of effected households and livelihoods.</i></p> <p><i>2. The Grid Connection must be ensured and can be maintained even if all planned new power projects in that immediate area are also executed</i></p> <p><i>3. The Project Sponsor must be able to provide tangible evidence of their ability to invest equity and raise finance to execute the whole project including guarantees for level of power generation</i></p> <p><i>4. The Project Sponsors have a track record of success in developing infrastructure investments, including energy generation projects in Vietnam, or in SE Asia</i></p>	<p>VBF welcomes the MOIT feedback and advice on the usefulness of the selection criteria.</p> <p>VBF also proposes a public (EVN, MOIT) and private sector (VBF PEWG) cooperation to analyse the clean energy projects:</p> <p>a. included in the National Energy Development Masterplan and b. seeking inclusion in the national Energy Masterplan</p> <p>against these criteria to assess the costs and benefits of implementing these projects.</p>

No.	Issues	Current status (Solved or Unsolved)	Updated recommendations at June 2019
		markets.	
14.	Partnership with VBF in Energy Policy Development and Financing Strategies for the energy sector	<p><i>Unsolved</i></p> <p><i>There is no clearly defined role for the private sector representative organisations in developing PDP #8</i></p> <p>As 70% of energy power generation investment is to come from the private sector, probably now also including investment in the transmission grid, the need for closer direct communication and cooperation is very clear.</p> <p><i>VBF PEWG has produced a draft updated Made in Vietnam Energy Plan 2 - 2019, describing how Vietnam's domestic resources can meet Vietnam's future energy demand, without the need to import fuel or electricity. MVEP 2 recommends full utilisation of and prioritisation of:</i></p> <ul style="list-style-type: none"> • <i>Renewable Energy</i> • <i>Energy Efficiency Investment by consumers</i> • <i>Gas as a flexible baseload, displacing imported coal</i> 	<p>VBF welcomed the MOIT offer (MOIT Letter of 31st January 2019) to work in cooperation directly with the private sector on PDP #8. VBF would like to meet MOIT and define the manner of that cooperation.</p> <p>VBF PEWG offers its assistance from its Clean Energy Programme resources to support PDP#8 to include content developed in cooperation with VBF PEWG on the following areas:</p> <ul style="list-style-type: none"> • Market Analysis: what is the current status of investors, financiers, technology and service providers. • Finance sources and conditions: what can be relied upon to finance the market development in PDP #8 and what needs to be changed to implement the financing at the lowest possible cost • Consumers attitudes to electricity: What do consumers want from their electricity supply and how price sensitive is the market?
15.	Issue for MPI, (subsidiary role for MOIT, and MONRE and MOF) What is the state of Vietnam's	<p><i>Unsolved</i></p> <p>There have been no new significant climate finance mechanisms implemented that effectively support private sector clean energy in Vietnam.</p>	VBF recommends that MPI notify climate finance funds that support for clean energy or energy efficiency programmes using Climate Funds is deemed to be "country supported" and the Government of Vietnam has no

<i>No.</i>	<i>Issues</i>	<i>Current status (Solved or Unsolved)</i>	<i>Updated recommendations at June 2019</i>
	Readiness for Climate Finance Support Mechanisms for the private sector?	<p>Climate Finance Support Mechanisms such as GCF, ICF wish to enable low carbon private sector businesses in Vietnam to grow and help meet the National Determined Commitment on Green House Gas emissions reductions</p> <p>The mechanism of obtaining evidence of “Country Support” for clean energy and the Non-Objection Letter process, seems to be complex, slow and difficult to conclude successfully.</p>	<p>objection to the proposed programme if the outcome of the activity is, either:</p> <ul style="list-style-type: none"> a. A goal of the PDP currently in effect or b. A goal of the INDC Action Plan <p>VBF PEWG offers its assistance to MPI to develop proposals to the global and bilateral climate finance funds that help to open markets for private sector investment and facilitates increasing investment in Vietnam’s adaptation and mitigation of climate change.</p>