

Viet Nam Energy Partnership Group

TECHNICAL WORKING GROUP 1: RENEWABLE ENERGY

REPORT OF THE 2ND MEETING

Date: 31 August 2018
Location: MOIT meeting room 101, 25 Ngo Quyen, Hanoi
Time: 14:00 – 16:00h

Key agenda points:

1. Introduction of new secretariat to TWG members
2. Update of all TWG members regarding current activities of VEPG partners
3. Discussion of and decision on TWG1 Policy Recommendations

Chair and Co-Chair:

- **Mr. Nguyen Ninh Hai**, Director in charge of New and Renewable Energy Division, Electricity and Renewable Energy Authority, Ministry of Industry and Trade (MOIT)
- **Mr. Martin Hoppe**, First Counsellor, Economic Cooperation and Development - German Embassy

Agreed Conclusions and Actions: (See next page)

Agenda: See Annex 1

Participants: See Annex 2

Minutes: See Annex 3

Inputs: See Annex 4 -

4.1 Issue Paper on Policy Recommendations

4.2 Presentations

AGREED CONCLUSIONS AND ACTIONS:

Conclusion / Decision	Action
<ul style="list-style-type: none"> The Chairs thanked everybody for joining and for the very active and constructive participation. 	
<ul style="list-style-type: none"> The TWG members discussed the draft Policy Recommendations paper. The Secretariat will revise the paper according to the inputs and comments from TWG members. The TWG Chairs will then discuss and adopt the revised paper to make sure that all relevant thoughts and inputs from the group have been considered properly. The final paper will be sent to members for their information. The paper will be submitted to the VEPG Steering Committee for review and adoption and eventually discussed and endorsed by the VEPG High-Level Meeting in November. <i>Note from the Secretariat: Please find the final paper approved by the TWG chairs and the VEPG Steering Committee in Annex 4.1.</i> 	Chair/Co-Chair Secretariat
<ul style="list-style-type: none"> The Chairs encouraged the TWG members to bring in own ideas to develop the agenda of the next meeting. One suggestion would be to combine the meeting with a field trip that focuses on one of the priority areas. E.g. a trip to a PV rooftop system close to Hanoi to discuss solar rooftop issues as key agenda point or further member inputs on ongoing or new projects. All ideas from TWG1 members are welcome, please contact the Secretariat. 	TWG members
<ul style="list-style-type: none"> The Chairs and the secretariat will consider the date for the next meeting and inform the members as soon as possible. Options would be end of November/early December (to reflect on the HLM outcomes and have a special member input or field trip) or next year (potentially after TET holidays end of Feb/early Mar). 	Chair/Co-Chair Secretariat

ANNEX 1 - AGENDA

13:00-14:00 Registration

14:00-14:10 Opening Remarks

- Mr Nguyen Ninh Hai / Mr Martin Hoppe

14:10-14:20 Introduction of the new VEPG secretariat

- Secretariat: Brief introduction and report of secretariat

14:20-14:55 Brief update on partner activities

- Participants: Brief update on current activities by VEPG partners with respect to the focus topics of the TWG

14:55-15:10 Coffee/ Tea Break

15.10-15.45 Discussion of TWG1 Key Policy Recommendations

- TWG chairs: Presentation of “Key Policy Recommendations of TWG 1” (see attached draft issue paper)
- Plenary discussion and decision on paper finalization/adoption

15.45-16.00 Conclusions, agreements, outlook on next meeting, closing remarks

- Mr Nguyen Ninh Hai / Mr Martin Hoppe



ANNEX 2 - Participants

Co-chairs

- **Mr. Nguyen Ninh Hai**, Director in charge of New and Renewable Energy Division, Electricity and Renewable Energy Authority, Ministry of Industry and Trade (MOIT)
- **Mr. Martin Hoppe**, First Counsellor, Economic Cooperation and Development - German Embassy

Participants

- **Mr. Antoine Vander Elst**, EU Delegation (EUD)
- **Mr. Daniel Plankermann**, German Development Bank (KfW)
- **Mr. Franz Gerner**, World Bank
- **Mr. Vu Quang Dang**, Asian Development Bank (ADB)
- **Ms. Hoang Thi Dieu Linh**, United Nations Industrial Development Programme (UNIDO)
- **Mr. Ivo Hooghe**, Embassy of Belgium
- **Mr. Jay Malette**, United Nations Development Programme (UNDP)
- **Mr. Martino Melli**, Embassy of Italy
- **Mr. Nguyen Duc Tu**, Viet Lao Power
- **Mr. Nguyen Hoai Nam**, Embassy of Australia
- **Mr. Nguyen Van Hoa**, U.S. Embassy in Hanoi
- **Mr. Nguyen Xuan Hoa**, Solar Electric Vietnam/Vietnam Sustainable Energy Alliance (VSEA)
- **Mr. Pham Duc Tung**, French Development Agency (AFD)
- **Mr. Søren Jespersen**, Embassy of Denmark
- **Ms. Asko Ojaniemi**, Embassy of Finland
- **Mr. Tord Thoer**, ACRO
- **Ms. Hari Achuthan**, Aco Investment
- **Ms. Do Minh Tam**, Green Innovation and Development Center (GreenID)
- **Ms. Luiza Girleanu**, Embassy of Romania
- **Ms. Nguyễn Tiến**, Infunde Development Pte. Ltd.
- **Ms. Nguyet Pham**, Global Green Growth Institute (GGGI)
- **Mr. Ingmar Stelter**, German Development Cooperation (GIZ)
- **Mr. Sven Ernedal**, German Development Cooperation (GIZ)

VEPG Secretariat

- **Mr. Rainer Brohm**, VEPG Secretariat
- **Ms. Ngô Tố Nhiên**, VEPG Secretariat
- **Ms. Đặng Thị Hương Lan**, GIZ Support Team (PR)

ANNEX 3 - SUMMARY MINUTES

Agenda item	Summary
Opening remarks	<ul style="list-style-type: none"> The <u>Chair and Co-Chair</u> welcomed participants and encouraged everyone to share information on their ongoing activities and to actively join the discussion on the policy recommendations of TWG1.
Introduction of new VEPG Secretariat	<p><u>The new Secretariat</u> introduced itself and outlined the following:</p> <ul style="list-style-type: none"> Rainer Brohm, the new International Coordinator, started in August and is currently taking over the activities of the former secretariat team. The new team will be complemented by a Project Officer in the first week of September (Ms. Nguyen Phuong Thao) and another Junior Project Officer in October (Mr. Do Quang Nhat). (<i>See PPT presentation in Annex 4.2</i>) Within September the TWG members will be informed about the new VEPG website and contact email address of the secretariat. Until then TWG members can reach the secretariat under the existing email address (vepg.group@gmail.com). <p><u>The Secretariat</u> presented the tentative workplan and timeline for the TWGs, Steering Committee and High-Level-Meeting:</p> <ul style="list-style-type: none"> The Steering Committee (SC) is tentatively scheduled for the first week of October (3.-5. Oct). The High-Level Meeting (HLM) is tentatively scheduled for beginning of November (6.-8. Nov.). Following this, all TWGs have been asked to hold their second meetings before mid-September. Policy recommendations should be developed by TWGs and submitted to the SC by end of September latest.
Brief update on partner activities	<p><u>TWG Members</u> outlined and discussed their current activities in the context of TWG1 focus topics:</p> <ul style="list-style-type: none"> Participating private investors and RE companies (mainly representatives of Vietnam Sustainable Energy Association, VSEA) introduced their activities in Southeast Asia and planned activities in Vietnam (solar energy floating/non-floating, wind energy, transmission infrastructure, hydro energy) and emphasized their interest in the work of TWG1 and their willingness to share the private sector perspective. AfD introduced their current solar and hydro power projects in Central Vietnam. ADB presented their study on RE integration in relation to other ongoing studies (Elia and NLDC) with the objective to avoid overlap. ADB furthermore presented a planned 2-day training with MoIT on battery storage.

- **Italy** presented their new loan programme with app. 50 mio. EUR dedicated to RE and suggested to share more information on partner activities within the TWG and on the VEPG website.
- **GreenID** presented their Green Homes project focussing on residential RE, EE and waste treatment applications and invited all TWG members to join the discussion and ask for more information.
- **UNIDO** shared information on their EE project on eco industrial parks and resource efficiency for industry.
- **GGGI** introduced a new support focus for MoIT on general RE planning to be approved by end of this year.
- **Belgium** shared on their Waste-to-Energy/rice straw focus (*note from the Secretariat: this topic will be part of TWG2's work process on Energy Efficiency*).
- **Finland** emphasized their key focus on Waste-to-Energy and waste management in Vietnam.
- **UNDP** updated the TWG members on their planned IPCC event in October as well as on two issue papers planed for October (Policy brief to extend EE and a paper on private funding opportunities for EE/de-risking strategies).
- **Australia** emphasized its focus on connecting businesses from AUS and VN in the RE sector.
- **USAID** updated on their work on DirectPPAs and informed about the planned public consultation end of October/beginning of November with the aim to get PM approval for a pilot soon after. (*Note from the Secretariat: The DirectPPA topic is planned to be discussed in the 2nd TWG3 meeting on Friday, September 21 at ERAV office*).
- **GIZ** updated on their RE projects with the most recent support of MoIT on the update of the solar FiT (post-June 2019). GIZ also introduced the new head of the RE project, Sven Ernedal.
- **World Bank** informed about results of their RE integration study in three provinces that identified unused grid capacities. WB furthermore updated on their solar activities (Solar Auctioning workshop in September, ongoing Solar Rooftop project HCMC/Danang) and support on PDP8 development (stakeholder workshop planned for September). WB will also focus on battery storage and interconnector capacities with neighbouring countries.
- **TWG members** further suggested to improve coordination on Power System Development aid since this topic is covered by several DPs.

The Chairs concluded this agenda top:

- They thanked all participants for sharing their activities and project updates.
- They encouraged all members of TWG1 to share information on future activities and particularly on planned workshops and events with the other TWG members. The VEPG secretariat is happy to receive information on partner events and forward it to the TWG members. The VEPG can also “endorse” member/partner events to give them a larger platform and audience, include them to the framework of the VEPG and promote member activities in such way.

	<p><u>The Secretariat</u> further clarified that:</p> <ul style="list-style-type: none"> • The new VEPG website will feature VEPG partner projects in a news section. Thus, all VEPG partners and TWG members are encouraged to inform the Secretariat about new projects or milestones in ongoing projects so they can be featured on the VEPG website in the future.
<p>Discussion of TWG1 Key Policy Recommendations</p>	<p>The <u>Co-Chair</u> presented the draft issue paper on “Key Policy Recommendations” that was developed between Chair and Co-Chair and that was sent out to TWG members prior to the meeting. [<i>see PP presentation in a separate file</i>]:</p> <p><u>Summarized are here the main comments of TWG Members on the draft:</u></p> <ol style="list-style-type: none"> 1. <i>On the section on Incentive Regime for Wind and Solar (PPA and FiT):</i> <ul style="list-style-type: none"> • The paper should reflect the high priority of the adjustment of the wind FiT. (<i>Note from the Chairs: By PM decision 39/2018, effective from Nov 2018 the FiT for wind will be raised to 8.5 USct (onshore) and 9.8 USct (offshore) per kWh respectively for projects implemented before 01.11.21</i>) • Another high priority should be the adjustment of the PPA, this could be mutually beneficial for the government and for investors since an improved PPA (de-risking investments and streamlining administrative processes) would allow a lower FiT level. • The paper should include solar rooftop as another high priority and outline the necessity to overcome the current lack of implementation of the net metering regulation. • <u>The Chair’s</u> comment on solar rooftop was that MoIT acknowledges the existing challenge to solve the taxation issues related to the new net metering scheme and currently plans a correction of the legal framework for solar rooftop investments (Decision 11/2017 and related Circular) to avoid these problems. • <u>TWG members</u> noted on this that in case of a correction of the net metering regulation the guiding principle should be to maintain the investment incentive for residential and commercial-industrial solar rooftop applications, e.g. by simplifying the net metering rules to avoid the taxation issues while maintaining the incentive for self-consumption and benefits of balancing generation versus demand. 2. <i>On the sections on competitive procurement and transitional mechanisms</i> <ul style="list-style-type: none"> • TWG members emphasized the high priority of a smooth and transparent transition of different incentive mechanisms, i.e. from FiT to auctioning. • <u>The Chair’s</u> comment on this aspect was that MoIT is currently considering different support mechanisms for the future, i.e. FiT, auctioning, Renewable Portfolio Standards etc., none of them

	<p>“exclusively”. Therefore, the policy recommendations should not reflect or promote exclusive mechanisms but should rather be open for different mechanisms implemented at the same time.</p> <ul style="list-style-type: none"> • <u>TWG members</u> noted on this that in case of parallel application of different support instruments a clear delineation between the instruments, a long-term procurement strategy and a transparent transitional mechanism should be guaranteed. • In the light of the above-mentioned arguments and with the aim to make the paper more concise and stringent, <u>the chairs</u> suggested to merge the two sections on competitive procurement and transitional mechanisms and adjust according to the discussed objective of a “non-exclusive” application of support instruments/mechanisms. <p>3. <i>On the section on Integration of fluctuating Renewables</i></p> <ul style="list-style-type: none"> • <u>TWG members</u> suggested to clarify that the recommendation to “Review the grid codes” also (and explicitly) includes solar rooftop and all RE technologies that feed into the lower and medium voltage level. <p><u>The Chairs</u> concluded this agenda top:</p> <ul style="list-style-type: none"> • The Secretariat will revise the paper according the above discussed inputs from TWG members and make it more concise. • Further comments can be send to the Secretariat in written form until end of next week (Friday, September 7). • The Chairs will then discuss and adopt the revised paper to make sure that all relevant thoughts and inputs from the group have been considered properly. • The final paper will be sent to members for their information (no further round of agreement) and subsequently submit it to the Steering Committee for consideration and further preparation for the HLM.
<p>Conclusions, agreements, closing remarks</p>	<p><u>The Chairs</u> concluded the meeting with the following remarks:</p> <ul style="list-style-type: none"> • The Chairs thanked everybody for joining and for the very active and constructive participation. • The Chairs encourage the TWG members to bring in own ideas to develop the agenda of the next meeting. One suggestion would be to combine the meeting with a field trip that focuses on one of the priority areas. E.g. a trip to a PV rooftop system close to Hanoi to discuss solar rooftop issues as key agenda point or further member inputs on ongoing or new projects. All ideas from TWG1 members are welcome, please contact the Secretariat! • The Chairs and the secretariat will consider the date for the next meeting and inform the members as soon as possible. Options would be end of November/early December (to reflect on the HLM outcomes and have a special member input or field trip) or next year (potentially after TET holidays end of Feb/early Mar).

ANNEX 4.1 – ISSUE PAPER ON POLICY RECOMMENDATIONS

(The issue paper on recommendation was approved by the Co-chairs of the TWG 1 and the Steering committee at the 3rd meeting of the Steering Committee on 05/10/2018)

VEPG - Technical Working Group No. 1 - Renewable Energy

Issue Paper on Policy Recommendations

1 Background

In the Steering Committee Meeting on 11.07.2018, the Chair VM Vuong, and the Co-Chair Ambassador Angelet asked the TWG Chairs and Co-Chairs to agree on specific policy recommendations in time for the next scheduled Steering Committee Meeting in early October 2018. Recommendations would then be endorsed by the Steering Committee and presented at the High-Level Meeting tentatively scheduled in early November 2018.

In its first meeting, TWG 1 agreed on the following priority topics:

- Focus on wind and solar energy as the renewable energy (RE) sources with the highest potential;
- Review of current incentive regime (PPA and FiT for wind and solar energy);
- Basic design features of competitive procurement;
- Transitional mechanism on the road to auctions;
- Integration of fluctuating renewable energy in the national grid.

2 Review of current incentive regime (PPA and FiT for wind and solar energy)

While the current FiT regime for wind (Decision No. 37/2011/QD-TTg and related circular) has so far only led to very limited investment (e.g. only 200 MW of wind energy within 7 years), the most recent trend for solar (Decision No. 11/2017/QD-TTg and related circular) seems more positive with several projects now seeking approval. The current incentive regime for wind and solar energy has been reviewed in several studies. As a result, at PM's Decision No. 39/2018, effective from November 2018 the FiT for wind power will be raised to 8.5 USct (onshore) and 9.8 USct (offshore) per kW/h respectively for projects implemented before 01.11.2021.

2.1 Revision of PPA for solar and wind energy

1)

There is wide consensus that the main reason for lack of investment has been the fact that the standard power purchase agreement (PPA) does not correspond to international standards by putting major financial risks on the RE projects and that several issues should be revised. The most critical features include¹:

- Transmission and distribution risk: PPA relieves EVN from its payment obligations even where it is unable to take power due to a breakdown of the transmission or distribution grid. Transmission and distribution risk would generally be assumed by the purchaser. Where the purchaser cannot take power due to a breakdown of the transmission or distribution grid, minimum take-or-pay obligations should remain in place for the terms of the FiT.
- Limited off-taker obligation: There is no compensation payment if EVN is unable to take the electricity, whether due to EVN's failure to cooperate with implementation or otherwise.
- Termination clause: In the event of termination due to EVN's default, the termination payment amount is limited to the value of the seller's actual electricity output during the past year up until the performance suspension. This is an unreasonably low amount.
- Dispute resolution: The governing law is Vietnamese law. In the event of failure to negotiate or mediate, the dispute may be litigated before Vietnamese courts only. There is no provision for international arbitration in a neutral venue as it is common for infrastructure projects.
- Off-taker payment risk: While not directly related to the form of contract, it should be noted that the risk of the off-taker is critical. The fact that EVN has received a first international rating is highly appreciated. When moving to a competitive wholesale market, it should be ensured that the counterparty has an adequate risk profile.

¹ Source for items 1-4: IES (2018)

- Future compatibility with the Vietnamese wholesale power market: Options should be considered that make it possible to integrate wind and solar energy contractually into the power market in the medium term.

2.2 Improvement of incentive mechanism for rooftop solar PV

There is wide consensus that the existing net metering scheme (Decision 11/2017/QĐ-TTg and related Circular) has not yet initiated relevant investments mainly due to a lack of implementation and unsolved taxation questions. Therefore, these issues should be addressed in a revision of the regulation with the objective to maintain the investment incentive for rooftop systems for a wide range of applications and investor types. The most critical features include:

- Taxation: If cash-flow related taxation issues cannot be solved in the short-term, a revision of the net metering regulation could aim at simplifying the scheme by transforming it to a non-cash-flow based system (net billing or net banking model) that still allows self-consumption with excess energy export to the grid and the balancing of solar generation and demand.
- Nation-wide standards and grid codes: The development of nation-wide grid connection procedures and grid-codes for low and medium voltage rooftop connections could streamline investment processes and reduce monetary and time costs for investors.

3 Future of wind and solar support mechanisms (including auctioning)

There is a wide consensus that competitive procurement regimes and well-designed auctions of renewable energy capacity have helped to decrease the cost of electricity internationally.

But there is also the case for FiT regimes. Internationally, they have proven to be successful in triggering RE markets, in some cases specifically for defined types of projects or technologies (such as solar rooftop and small/medium scale RE projects) or to be successful transitional mechanisms to competitive auctioning models. The working group members noted that MoIT currently works on an extension of the solar FiT (on a lower level and with de-risking measures applied).

Certain basic design principles should be taken into consideration during the development of the future RE procurement framework:

- Harmonization: There are differing views on whether all energy technologies should follow the same overall regulatory framework. There is consensus however that the current set of policies should be streamlined and harmonized in order to make procurement and contract management simpler, more transparent and more efficient.
- Non-discrimination: There should be no discrimination of RE technologies as compared to thermal power projects and there should be equal treatment of local and foreign investors.
- Ensure long-term compatibility with the Vietnam Wholesale Electricity Market (VWEM).
- Design tailored to the Vietnamese environment: It should be recognized that there is a trade-off between risks born by investors and the public sector that has a major impact on prices. GoV should take risks where it has a comparative advantage to the private sector.
- Long-term signalling: There should be a clear and long-term procurement strategy or targets that guide investors as it will lead to significant cost reductions. In case of a parallel application of different support mechanisms (such as FiT and auctioning) it should be made sure that there is a clear delineation between different instruments (e.g. each applying for different project types and/or sizes). Furthermore, a long-term procurement strategy (auctioning scheme) should be in place as well as a transitional mechanism in case a change of mechanism applies for specific technology or project types.

4 Integration of fluctuating renewable energy in the national grid

While investment in wind and solar energy has been limited, there is a large and growing pipeline of projects with applications of up to 26 GW (20 GW for solar and 6 GW for wind power). Since a high share of applications are for projects in the Central / Southern part of the country (Ninh Thuan, Binh Thuan, Dak Lak), there is growing concern with respect to the capacity of the national grid to absorb the power.

Few studies are available that thoroughly assess the impact of fluctuating RE on the stability of the national grid. Current studies point to the fact that in the period to 2020, transmission capacity in the critical part is up to 3 GW and therefore sufficient in the short term. In order to avoid specific bottlenecks, the following recommendations should be taken into consideration:

- Comprehensive monitoring of applications / approvals and transparent system of prioritizing project applications as opposed to a first come, first served basis.
- Investments in grid expansion should take into consideration potential development of RE generation in regions with high technical potential (relieve bottlenecks); investments should be included in medium and long-term investment plans to mobilize sufficient public funding and concessional loan financing.
- Designation of zones for RE (e.g. in line with the auction strategy).

- Power system planning and development of renewable energy: Increase the frequency at which the national PDP is updated; the PDP should follow a comprehensive and integrated optimization model including grid and RE capacity planning.
- Review of grid codes taking into consideration requirements of fluctuating RE and specifically also addressing rooftop projects and the related challenges of grid connection and grid integration at the lower and medium voltage level.



ANNEX 4.2 – PRESENTATIONS



Viet Nam Energy Partnership Group

Technical Working Group 1 – Renewable Energy

2nd Meeting - 31. August 2018

MoIT / EREA, Hanoi

Nguyen Ninh Hai,
 Director in charge New and Renewable
 Energy Division, EREA/MoIT
 Chair of Technical Working Group 1

Martin Hoppe,
 Head of Economic Cooperation and
 Development, German Embassy
 Co-Chair of Technical Working Group 1

Agenda

VEPG TWG 1
 Renewable Energy

Time	Subject
14.00-14.10	1. Opening remarks, overview of the agenda <ul style="list-style-type: none"> Mr Nguyen Ninh Hai / Mr Martin Hoppe
14.10-14.20	2. Introduction of the new VEPG secretariat <ul style="list-style-type: none"> Secretariat: Brief introduction and report of secretariat
14.20-14.55	3. Brief update on partner activities <ul style="list-style-type: none"> Participants: Brief update on current activities by VEPG partners with respect to the focus topics of the TWG
14.55-15.10	Coffee/tea break
15.10-15.45	4. Discussion of TWG1 Key Policy Recommendations <ul style="list-style-type: none"> TWG chairs: Presentation of "Key Policy Recommendations of TWG 1" (see attached draft issue paper) Plenary discussion and decision on paper finalization/adoption
15.45-16.00	5. Conclusions, agreements, outlook on next meeting, closing remarks <ul style="list-style-type: none"> Mr Nguyen Ninh Hai / Mr Martin Hoppe

1. Opening Remarks

VEPG TWG 1
Renewable Energy

Key objectives of the meeting:

- Update regarding current activities of VEPG partners and TWG members (focus themes)
- Discussion and decision on TWG 1 Policy Recommendations to the HLM
- Agreement on further work process and meeting schedule

2. Introduction Secretariat

VEPG TWG 1
Renewable Energy

New secretariat (GIZ team)

- **Rainer Brohm**, International Coordinator
(Tel. 093 63 00 552)
- **Ms Ngyuen Phuong Thao**, Project Officer
(start 4.9.)
- **Mr Do Quang Nhat**, Junior Project Officer
(start 1.10.)



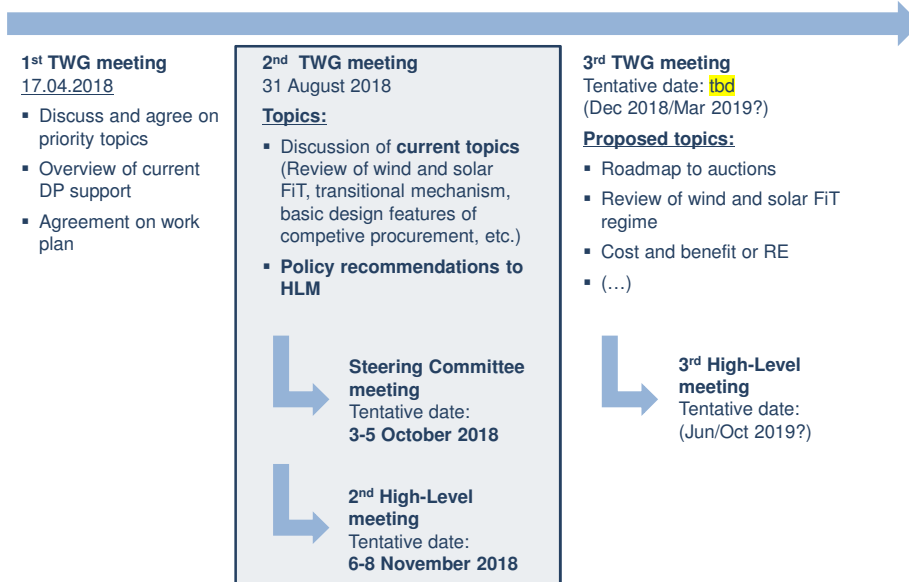
Contact:

VEPG Secretariat
c/o EREA / MoIT
23 Ngo Quyen

Email: vepg.group@gmail.com (soon to be changed – secretariat@vepg.vn)
Website: coming soon...

2. Introduction Secretariat – Update on Timeline

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Renewable Energy



3. Update on Member Activities

VEPG TWG 1
Renewable Energy

Participants: Brief update on new (!) activities:

- Current activities by members with respect to focus topics of TWG

Coffee/tea break

4. Discussion of TWG 1 Policy Recommendations

Paper content / key recommendations (overview)

1. Background
2. Review of current incentive regime (PPA and FIT wind/solar)
3. Basic design features of competitive procurement
4. Transitional mechanism on the road to auctions
5. Integration of fluctuating renewable energy in to the national grid

4. Discussion of TWG 1 Policy Recommendations

VEPG TWG 1
Renewable Energy

1. Background

Page 1

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In its first meeting, TWG 1 agreed on the following priority topics:

- Focus on wind and solar energy as the renewable energy (RE) sources with the highest potential
- Review of current incentive regime (PPA and FIT for wind and solar energy)
- Basic design features of competitive procurement
- Transitional mechanism on the road to auctions
- Integration of fluctuating renewable energy in the national grid

4. Discussion of TWG 1 Policy Recommendations

VEPG TWG 1
Renewable Energy

2. Review of current incentive regime (PPA and FIT for wind/solar energy)

Page 1

The current FiT regime for wind (Decision No. 37/2011/QD-TTg and related circular) and solar energy (Decision No. 11/2017/QD-TTg and related circular) have only led to very limited investment (e.g. only 200 MW of wind energy within 7 years). The current incentive regime for wind and solar energy has been reviewed in several studies. A revision of the wind FiT has been proposed several times from MOIT to OoG without a final decision.

There is wide consensus that the main reason for lack of investment has been the fact that the standard power purchase agreement (PPA) does not correspond to international standards by putting major financial risks on the RE projects and that several issues should be revised. The most critical features include:

- Transmission and distribution risk: PPA relieves EVN from its payment obligations even where it is unable to take power due to a breakdown of the transmission or distribution grid. Transmission and distribution risk would generally be assumed by the purchaser. Where the purchaser cannot take power due to a breakdown of the transmission or distribution grid, minimum take-or-pay obligations should remain in place for the terms of the FIT. This would customarily be addressed in the form of a capacity payment.

4. Discussion of TWG 1 Policy Recommendations

VEPG TWG 1
Renewable Energy

2. Review of current incentive regime (PPA and FIT for wind/solar energy)

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- Termination clause: In the event of termination due to EVN's default, the termination payment amount is limited to the value of the seller's actual electricity output during the past year up until the performance suspension. This is an unreasonably low amount, particularly if the generator has a number of years to still run on its FIT.
- Dispute resolution: The governing law is Vietnamese law. In the event of failure to negotiate or mediate, the dispute may be litigated before the Vietnamese courts. There is no provision for international arbitration as it is common for infrastructure projects in a neutral venue (e.g. Singapore) and forum under internationally accepted rules, unless agreed otherwise.
- Off-taker payment risk: While not directly related to the form of contract, it should be noted that the risk of the off-taker is critical. The fact that EVN has received a first international rating is highly appreciated. When moving to a competitive wholesale market, it should be ensured that the counterparty has an adequate risk profile.
- Future compatibility with the Vietnamese wholesale power market: Options should be considered that make it possible to integrate wind and solar energy contractually into the power market in the medium term.

4. Discussion of TWG 1 Policy Recommendations

VEPG TWG 1
Renewable Energy

3. Basic design features of competitive procurement

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There is a wide consensus that competitive procurement regimes and well-designed auctions of renewable energy capacity have helped to decrease the cost of electricity. For solar energy in particular, there is a strong case for GoV to move from the current FIT regime to a competitive auction regime, especially concerning large-scale auctioning due to their economies of scale.

Certain basic design principles should be taken into consideration during the development of auction framework:

- Harmonization: There is wide array of different procurement mechanisms for RE and conventional power projects, IPP and BOT projects etc. There are differing views on whether all energy technologies should follow the same overall regulatory framework. There is consensus however that the current set of policies should be streamlined and harmonized in order to make procurement and contract management simpler, more transparent and more efficient.

4. Discussion of TWG 1 Policy Recommendations

VEPG TWG 1
Renewable Energy

3. Basic design features of competitive procurement

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- Non-discrimination: There should be no discrimination of RE technologies as compared to thermal power projects and there should be equal treatment of local and foreign investors.
- Ensure long-term compatibility with the Vietnam Wholesale Electricity Market (VWEM).
- Design tailored to the Vietnamese environment: It should be recognized that there is a trade-off between risks born by investors and the public sector that has a major impact on prices. GoV should take risks where it has a comparative advantage to the private sector.
- Long-term signaling: There should be a clear and long-term procurement strategy or targets that guide investors as it will lead to significant cost reductions.
- The recommendations for PPAs above apply equally in the case of competitive procurement.

4. Discussion of TWG 1 Policy Recommendations

VEPG TWG 1
Renewable Energy

4. Transitional mechanism on the road to auctions

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TWG members recognize that the legal and regulatory changes required to introduce auctions on a larger scale will take a certain time (up to 5 years by some estimates).

In order to encourage further development of projects and send a signal of policy continuity to investors and developers, TWG members recommend to introduce a transitional mechanism until the legal and regulatory framework for auctions of solar energy projects is fully in place.

Options for a transitional mechanism include extending the solar FiT, possibly at a lower level and revise the standard PPA in line with the recommendations above.

4. Discussion of TWG 1 Policy Recommendations

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5. Integration of fluctuating renewable energy in the national grid

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While investment in wind and solar energy has been limited, there is a large and growing pipeline of projects with applications of up to 26 GW (20 GW for solar and 6 GW for wind power). Since a high share of applications are for projects in the central / southern part of the country (Ninh Thuan, Binh Thuan, Dak Lak), there is growing concern with respect to the capacity of the national grid to absorb the power.

Few studies are available that thoroughly assess the impact of fluctuating RE on the stability of the national grid. Current studies point to the fact, that in the short term to 2020, transmission capacity in the critical part is up to 3 GW and therefore sufficient in the short term. In order to avoid specific bottlenecks, the following recommendations should be taken into consideration:

4. Discussion of TWG 1 Policy Recommendations

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- Comprehensive monitoring of applications / approvals and transparent system of prioritizing project applications as opposed to a come first / served first basis
- Investments in grid expansion should take into consideration potential development of RE generation in regions with high technical potential (relieve bottlenecks); investments should be included in medium and long term investment plans to mobilize sufficient public funding and access ODA and concessional loan financing
- Designation of zones for RE (e.g. in line with the auction strategy)
- Power system planning and development of renewable energy: Increase the frequency with which the national PDP is updated; the PDP should follow a comprehensive and integrated optimization model including grid and RE capacity planning
- Review of grid codes taking into consideration requirements of fluctuating RE

4. Discussion of TWG 1 Policy Recommendations

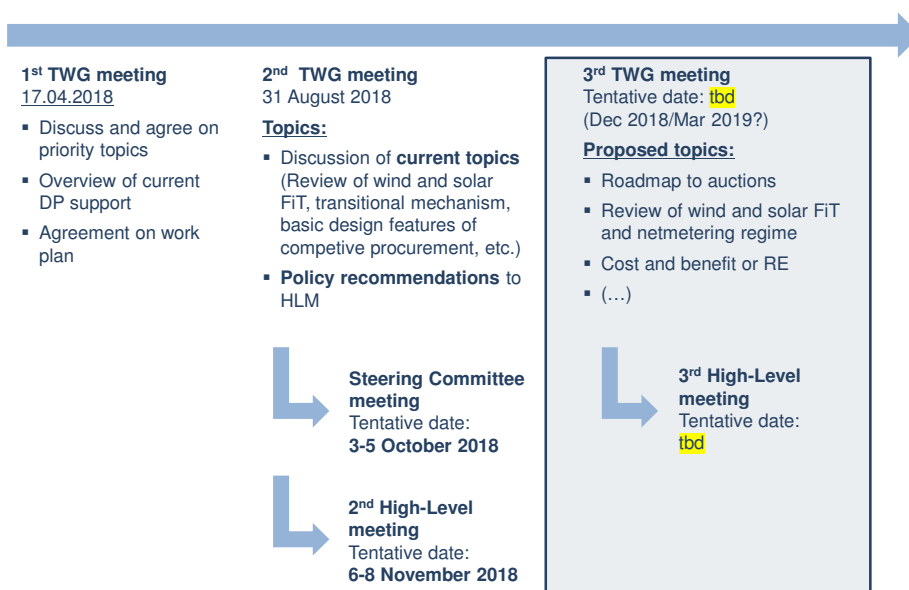
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Conclusions

- **Decision on paper and adoption for submission to SC/HLM**
- (In case of suggested amendments, the secretariat will include these to the paper and consolidate it).

5. Closing Remarks, Outlook and Meeting Schedule

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*Thank you for your attention
and participation!*

BACKUP: Priority Themes (from 1st meeting) Track 1 - Assessing the potential and integrating RE

1. Costs and benefits of renewable energy generation

- Assessing the full costs and benefits of renewable power generation compared to thermal power generation in the long term
- Results of this analysis can provide input to the new Power Development Plan or inform the INDC process

2. Integrating and planning renewable energy in the transmission system

- Identification of (expected) priority areas for RE investment
- How can GoV ensure that RE generation can be effectively integrated without jeopardizing the stability of the system
- What major investments in the transmission network are needed?
- The challenge of matching grid capacity and renewable investments

3. Integrating renewable energy into the environment

- Scarcity of land is a challenge – what are feasible land-use combinations between solar / wind energy and agriculture or other commercial land uses?

BACKUP: Priority Themes (from 1st meeting)

Track 2 – Support mechanisms for solar and wind power

1. Review of current FiT regime

- Drawing lessons learnt from wind power FiT
- Need for transitional mechanism from current FiT to auctions (after June 2019)
- What other regulatory changes may be required (eg. PPA)
- Review of first experience with rooftop PV installations

2. Beyond FiTs: competitive procurement of renewable energy generation

- There is an international consensus that well designed auctions can lead to more competitive prices
- Discuss basic design features for auctions
- Roadmap for implementing (pilot) auctions

3. Beyond FiTs: renewable energy generation and the power market

- The case for direct power purchase agreements to leverage private investments
- Ensuring compatibility of the new renewable investments with the future competitive wholesale market

4. Technical standards and grid codes

- Discuss need for updated standards and grid codes for wind and solar installations