

Viet Nam Energy Partnership Group
TECHNICAL WORKING GROUP 5: ENERGY MARKET
THE SECOND MEETING IN 2022

Date: 30 November 2022
Venue: Thaiholdings, 17 Tong Dan, Hoan Kiem, Ha Noi
Time: 13:30 – 17:00

Main contents:

1. Update from the government on policies and national orientations towards the oil, gas and coal market.
2. To update policies and orientations of the power market.
3. To exchange views on challenges and opportunities for gas, coal and power market in Viet Nam.
4. To agree on focus themes and work plans for year 2022 for VEPG TWG 5 on Energy Market.

Chair/ Co-chair:

- **Ms. Ngo Thuy Quynh**, Deputy Director General of Oil, Gas and Coal Department, Ministry of Industry and Trade (MOIT)
- **Mr Ananth Chikkatur**, Chief of Party, VLEEP II/ USAID

Agreed Conclusions and Actions: (see next page)

Agenda: Annex 1
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AGREED CONCLUSIONS AND ACTIONS:

Agreed Conclusions	Action by
<p>Tentative Workplan of the TWG5 in 2023:</p> <ul style="list-style-type: none"> • Implementing activities of the task force on the Wholesale competitive electricity market • Discussing the implement the development roadmap for a competitive energy market for the oil, gas and coal sectors in accordance with the development strategy, the National Energy Master Plan and the proposal to develop a competitive energy market • In the first 6 months of 2023, TWG5 will only discuss electricity market. • Participate in other meetings of the VEPG including VEPG Steering Committee Meeting, High- Level Meeting and meetings of TWGs. 	<p>Oil, Gas and Coal Department/ MOIT & VLEEP II with the support of the VEPG Secretariat</p>
<p>Implementation of the Task Force on Competitive Electricity Market:</p> <ul style="list-style-type: none"> • Incorporating comments from ERAV and NLDC on the final report and revising the proposal to better reflect the actual need of the market and avoid overlap. • Cooperate with ERAV and relevant stakeholders to conduct a research and organize TF meetings. 	<p>VLEEP II in cooperation with ERAV</p>
<p>Proposed Timeline of the VEPG's activities in 2023</p> <ul style="list-style-type: none"> • VEPG Steering Committee Meeting which was scheduled on 13 December 2022 has been postponed to 2023. • The first round of TWG meetings in 2023: April to May 2023 • 5th High-Level Meeting: May/June 2023 • The second round of the TWG meeting: October to November 2023 	<p>VEPG Secretariat</p>

Annex 1 – AGENDA

13.00-13.30	Registration/Log-In & Guidance for Webinar Users
13.30-13.45	Opening and Introduction <i>Chair Ms Ngo Thuy Quynh</i> <i>Co-chair Mr Ananth Chikkatur</i> <ul style="list-style-type: none"> • Opening and introduction to the Agenda.
13.45-14.00	VEPG Secretariat Report <ul style="list-style-type: none"> • VEPG Secretariat Developments in 2022: <ul style="list-style-type: none"> ○ New VEPG Secretariat and TWG Partners; ○ Task Forces Status; ○ DPs Mapping; ○ 2023 Workplan • Adoption of the Agenda and Q&A.
14.00-15.00	Session 1- Update on EU/Global Power Market and National Energy Master Plan (NEMP) <ul style="list-style-type: none"> • <i>EU-DG ENER</i>: <i>Current State of EU Energy Market and Outlook (20 minutes)</i>; • <i>OGCD</i>: <i>Viet Nam National Energy Strategies (Update on national policies and orientation and Viet Nam Energy Master Plan – Visions on Energy security issues (Supply) and Roadmap towards a Competitive Energy Market. (20 minutes)</i>; • <i>Participants</i>: <i>Q&A. (20 Minutes)</i>.
15: 00-15: 15	Coffee Break
15.15-16.15	Session 2 – Electricity Market Development <ul style="list-style-type: none"> • <i>NLDC</i>: <i>Wholesale power market – Operational updates and work ahead. (15 minutes)</i>; • <i>USAID</i>: <i>Update on activities and findings on REC and Carbon Markets. (15 Minutes)</i>; • <i>Participants</i>: <i>Q&A (30 minutes)</i>.
16.15-17.00	Session 3 – Way forward for the TWG5 and Task Force on Wholesale Power Market <ul style="list-style-type: none"> • <i>The chair</i>: <i>Discuss and agree on TWG5 priority topics and the proposed workplan for the VEPG TWG 5 in 2023 (15 minutes)</i> • <i>USAID</i>: <i>Introduction to the Task Force on Wholesale Power Market and activities (15 minutes)</i>. • <i>Participants</i>: <i>Q&A (15 minutes)</i>
17:00 – 17:15	Closing Remarks <i>Chair Ms Ngo Thuy Quynh</i> <i>Co-chair Mr Ananth Chikkatur</i>

Annex 3 – MINUTES

Agenda Item	Summary
<p>Opening</p>	<p><u>Ms. Ngo Thuy Quynh, chair of the Technical Working Group 5 (TWG5)</u>, welcomed participants of the 2nd TWG 5 meeting on Energy Market, and introduced Mr Ananth Chikkatur, the new co-chair of the TWG5.</p> <p>In recent years, Vietnam has set long-term development goals for the energy industry, including the development of a competitive, transparent and efficient energy market, in line with market institutions following a socialist orientation. Concurrently, Vietnam has also developed a project on a competitive energy market with the goal of forming and developing a healthy competitive energy market (coal, gas, electricity), ensuring national energy security, and contributing to meeting the requirements of socio-economic growth.</p> <p>The first meeting of the TWG5 exchanged and discussed the current situation and market development orientation of the energy sub-sectors from the perspective of the Government agencies. It was an opportunity to share expectations of the localities, the implementation of investment and production plans, problems and difficulties of enterprise and the contributions of international organizations to the development of the energy market, in line with current trends towards international integration, thereby promoting cooperation in developing a competitive energy market in Vietnam.</p> <p>The 2nd meeting of the TWG 5 will discuss the energy development strategy through the national energy master plan. This is an important document of the MOIT which orients the development of the energy market toward sustainable energy transition. The meeting, on the other hand, will update development partners' activities that are supporting the development of the electricity market, including the progress of the Task Force on the Electricity Competitive Wholesale Market and eventually discuss priority activities of the TWG 5 in 2023.</p> <p><u>Mr Ananth Chikkatur, co-chair of the TWG 5</u>, introduced himself as the new co-chair of the TWG 5 representing the US government and welcomed the participants to the meeting.</p>
<p>VEPG Secretariat's report</p>	<p><u>Mr Thierry Lefèvre, Team Leader of the VEPG Secretariat</u> introduced the new VEPG Secretariat and new VEPG focal points, TWG co-chairs in 2022; briefed VEPG's activities and proposed focus themes and work plan of the TWG 5 on Energy Market in 2023.</p> <p>In 2022, all Technical Working Groups have organized their first meetings to discuss comprehensive aspects of the energy sector development toward sustainable energy transition. During these meetings, participants discussed policies and technical issues in-depth to make practical recommendations for a sustainable energy transition by establishing and operating task forces. Up to now, 3 task forces have been created and are under operation: Offshore Wind Development Task Force, Energy Efficiency in Buildings, and Wholesale Electricity Market. Development Partners and Stakeholders</p>

	<p>interested in Task Forces could contact VEPG Secretariat for more detailed information, and connection with Task Force leads.</p> <p>On the personnel of the VEPG, the year 2022 witnessed some changes in the VEPG Governance, including the new VEPG focal points from the World Bank and MOIT, new co-chair of the TWG2 on RE, TWG3 on Grid Integration and Grid Infrastructure and TWG5 on Energy Market. In particular, the VEPG Secretariat has been transferred from GIZ to the Stantec-led Consortium under the EU - Viet Nam Sustainable Energy Transition (EVSET) Facility, in which the VEPG Secretariat is one of its main components. The other four Facility components include technical assistance to MOIT, Technical assistance to non-MOIT, monitoring the SETP and the SETP communication and visibility.</p> <p>Finally, the Secretariat proposed the TWG5 workplan for 2023, including the priority topics to be discussed, a tentative timeline for two TWG5 meetings to be held in 2023, and other general VEPG activities: VEPG Steering Committee meeting, VEPG High- level Meeting, Donor mapping survey.</p> <p>The proposed workplan and propriety themes are in Annexe 3.</p> <p>In general, the chair agreed with the proposed topics of the VEPG Secretariat for the TWG 5 in 2023 which was based on the results of the 1st meeting of the TWG5 in May 2022, and coordination meetings between the chair, co-chair, and VEPG Secretariat. However, for the topics related to the development orientation for the oil, gas, and coal market, the Oil, Gas and Coal Department should work internally under the direction of the MOIT and Government to determine concrete topics to discuss after June of 2023. Therefore, in the first 6 months of 2023, the TWG 5 will mainly focus on the electricity market. On that basis, the carbon market should be prioritized but apart from oil, gas and coal market, and will require the involvement of other ministries as such the Ministry of Finance, the Ministry of Natural Resources and Environment.</p>
<p>Current State of EU Energy Market and Outlook _EU-DG ENER_</p>	<p><u>Mr Fabian Kreuser, EU-DG ENER</u>, presented the current state of the Energy Market in the EU and outlooks:</p> <p>In terms of the regulatory framework, the European Climate law regulation which was issued on 30 June 2021 is among the most important regulation as the basis for the roadmap to achieve the goal in 2050 and the new 2030 target of reaching at least 55% net greenhouse gas emissions reduction. The regulation is implemented through binding legislation across all Member States and sectors of the economies. The policy has made a huge influence in the energy mix in which, the capacity of oil and gas will be reduced substantially in all scenarios and coal will be entirely eliminated by 2050 in REG, MIX and MIX-CP, and in the meanwhile high-shared renewable sources will be integrated into the energy structure of EU by 2050.</p> <p>Regarding the explanation of the EU gas consumption, in general, the consumption in 2022 was slightly below the gas consumption from 2021, probably due to the energy crisis as the result of the Ukraine and Russia conflict. The gas demand is higher during winter from December to March leading to the high demand of gas heating. In response to the energy crisis, current energy policies currently focus on 3 cornerstones, which are the fundamental solutions to phase out the dependency of the EU on Russian</p>

	<p>fossil fuels: diversifying energy sources, accelerating the clean energy transition, and reducing energy demand.</p> <p>The presentation introduces the METIS, a project initiated by DG ENER for the development of a computer program consisting of modules and datasets, with the aim to further support ENER’s evidence-based policy-making, especially in the areas of electricity and gas.</p> <p>Q&A:</p> <p>ERAV: In the presentation, the EU considers hydrogen as a short-term solution that could only be implemented in the next few years, which areas that the hydrogen would be used for, electric generation or transport, how is hydrogen more cost-effective than other fossil fuel sources; (2) regarding the prices of natural sources, how is the implementation of the regulation of the ceiling prices for traditional energy sources among EU member states. (3) Regarding the target of the EU to increase the proportion of the RE from 40% to 45%, how to ensure the stability of the power system?</p> <p>Answer: To be precise, hydrogen is a medium-term solution. In 2023, the EU is planning to import and produce much more green hydrogen, targeting to reach 17.5GW by 2025. However, hydrogen should not be used for electricity generation because a significant amount of hydrogen would be lost during the hydrogen production process, and the efficiency of the energy used until hydrogen is produced is approximately 40%. Thus, hydrogen is considered golden fuel for industries that need to be decarbonized such as steel production, and transport (as niche Market), but not for power generation.</p> <p>Regarding the policies of energy prices, some cap prices are being discussed: Cap Price of Russian oil products, however, this is not the EU’s initiative, but rather the initiative of G7 countries. The second gap price is for proposed electricity generation. The gas producer is facing high fuel costs, so there would be a cap price for the electricity generation that still enables profits for producers. The third cap price is for gas production, this is proposed but not yet adopted.</p> <p>The target of 45% of renewable energy consists of not only solar and wind power but other various sources such as hydro power, biofuel, etc. It was assumed that there would not be a problem with operating a system up to 60 or 70% of RE in the EU’s power system. One of the most important solutions is a good forecast and some technical solutions such as the investment and development of storage, and efficient grids. A more technical and detailed explanation should be given by ENTSO-e, the official interface between the EU and transmission system operators.</p> <p>NLDC What is the orientation of the EU on the development of Nuclear power in response to the current energy crisis?</p> <p>Answer: The regulation does not influence the energy mix of state members. In other words, the EU commission does not control if there could be a nuclear power in the EU energy mix but it depends on the energy policies of State members. For example, Germany has made a clear decision on the phase-out of nuclear power, while other contrary members like France have plans to make and expand nuclear capacity. In the presentation, there is an estimated presence of nuclear developed until 2030 depending on the technology and the deployment of state members (France and Finland)</p>
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**_Oil, Gas and Coal
Department/
MOIT _**

Mr. Dang Hai Anh, Oil, Gas and Coal Department, briefed the current status of the national energy and national energy development strategy as well as shared some highlights of the master plan on national energy for period 2021-2030 vision to 2050.

The Ministry of Industry and Trade was assigned by the Government to develop an Energy Master Plan for the period 2021-2030, with a vision to 2045. Currently, the plan has been nearly completed and is in the review phase before a submission for approval.

Regarding the energy situation, the presentation compares the growth in energy indicators from 2010 to 2020, typically the total primary energy supply increased by 1.86%, the final energy consumption increased by 1.66%, total primary consumption per capita and CO2 emissions increased significantly. Regarding energy consumption, the demand and demand growth rate for the coal and petroleum industries still account for a large proportion, in 2020, the demand for coal accounted for 31%, and petroleum accounted for 29%. Imports of primary energy increased significantly, from 5.2% in 2015 to 46% in 2020.

Development orientation of energy sector have been determined clearly by sub-sectors:

- Oil and Gas: increase oil and gas reserves and output; improve recovery coefficient, make full use of small mines, marginal residual volume.
- Coal: upgrade existing coal resources to ensure reliability for mining design and promote exploration of new mines, ensuring that exploration is always one step ahead
- Electricity: Rationally develop and diversify types of power sources to effectively exploit the national energy source
- Renewable Energy: strongly encourage and promote the development of renewable energy sources, Prioritize the use of wind and solar energy for power generation.

Q&A

UNDP: Why did the final energy consumption of renewable energy sources decrease in the period 2010-2020 and why will a large amount of hydrogen still be used for power generation while its efficiency is low?

Answer: The final energy consumption of renewable energy sources decreased mainly due to the decrease in biomass energy consumption in households. Although biomass energy consumption in industry increased, the total change decreased as households significantly reduced firewood for cooking and heating.

Producing hydrogen for power generation currently is short-term solution because when integrating high proportion of renewable energy sources into the system, there is a need for a stable source capacity to ensure the stability of the power system. Hydrogen is a stable source and a better alternative to traditional fossil fuels.

IICA: In the coal sub-sector planning, coal mining and exploitation will not change until 2025, however the data on coal power consumption will

	<p>gradually decrease by 2050. What is the exploited coal used for and will it be adjusted to reflect the net zero emissions target?</p> <p>Coal mining output in the plan has been adjusted downside compared to the previous baseline scenarios, especially in hard rock minerals and areas where is difficult to mine. In addition, coal will be used not only for the energy sector but also for non-energy purposes such as the production of nitrogenous fertilizers and chemical products, or coal gasification for hydrogen production.</p> <p>Therefore, the data on coal mining and consumption is not merely for power generation and energy, but also for other industries. Coal output for the power industry will be controlled in accordance with Power Development Plan VIII, towards the net zero targets.</p> <p>AES expected that the MOIT could share publicly more information about the national development strategy of Renewable Energy and necessary requirements for investors so that enterprises and investors could have a basis to plan for their investment, especially in large-scale projects such as building LNG storage tanks, the offshore wind which requires a lot of capital and long construction time.</p> <p>The chair shared that during the process of developing the Power Development Plan VIII, the MOIT has published the draft to consult with and collect comments from relevant ministries, international organizations and associations. It is assumed that project owners and investors would grasp the basic trend through the direction of the draft PDP VIII. On this basis, investors and enterprises can make pre-feasibility reports and cost estimates, as well as timelines for their projects.</p> <p>VLEEP II/USAID: what is the estimated demand for oil and Gas in transport and the government orientation or trends in the decarbonization of transport, for example, e-mobility?</p> <p>Answer: In the energy master plan and other plans, the MOIT considers all sub-sectors, including transportation. The MOIT has taken into account the development trend of electric vehicles in Vietnam. Recently, the government has made a decision regulating carbon reduction in transportation, including a specific roadmap to stop the production of gasoline cars by 2030. However, the MOIT cannot assure that this alternative route could be successful and timely as expected. This issue has been calculated in the scenarios in the energy master plan for 2050, however, these figures need to be updated every 5 years or 10 years due to the unpredictable changes of the actual situation.</p> <p>The Institute of Energy calculates the growth rate of the demand for petroleum in transportation by 2030 according to the growth rate of vehicles, closely following the calculations of the Ministry of Transport and the Decision No. 876 of the Prime Minister. To support the goal of net zero emissions by 2050, the Institute of Energy calculates and proposes solutions on replacing gasoline with specific green fuels.</p> <p>Co-chair, VLEEP II/USAID: How the carbon capture is reflected in PDP VIII and energy master plan.</p>
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	<p>Answer: Currently, the MOIT is researching carbon capture solutions mainly for the oil and gas sector, specifically for the oil sub-sector. Although the MOIT has received several recommendations and suggestions on carbon capture in the gas sub-sector; the latest draft of PDP VIII has been completed and submitted to the government. On the other hand, the technology is still new and not yet applicable to Vietnam. However, in the next stage, when this technology has been developed at a reasonable cost, the MOIT will consider and propose it in the power planning of Vietnam.</p>
<p>Overview of the _NLDC_</p>	<p><u>Mr Nguyen Thai Minh, national load dispatch center (NLDC)</u> shared the overview of the Vietnam Wholesale Energy Market and future development orientations.</p> <p>The competitive energy market has been supported by different policies built since 1995. From 1995 to 2011 was the commercialized and prepared period for the market. After the approval of the Electricity Law and Electricity Regulatory Authority of Viet Nam (ERAV) in 2011, the competitive market was piloted and then since 2012, Viet Nam has officially run the competitive wholesale market.</p> <p>According to the NLDC's roadmap, the Vietnam power market is divided by 3 segments/periods: Vietnam's Competitive Generation Market from 2011 to 2016, Viet Nam Wholesale Electricity Market from 2016 to 2021, and Viet Nam Retail Electricity Market from 2021 onwards. However, the actual process has been delayed, the retail electricity market has not been piloted in 2021 then the market is not able to fully operate in 2023.</p> <p>In the competitive wholesale electricity market, Vietnam currently has power generation corporations directly participating in the electricity market and signing power purchasing contracts with EVN, including GENCO1, GENCO2, GENCO 3, PV power, TKV, and IPPs. The entities that indirectly participate in the electricity market include BOT, multi-purpose strategic hydroelectric power plant (SMHP) which are dispatched by the National load dispatch center.</p> <p>In the completed wholesale electricity market, the power corporations will be able to sign purchase contracts directly with the generating entities. Qualified customers can sign contracts with those generating entities and participate in the spot market.</p> <p>The trend of renewable energy development in recent years has had a significant influence on the direction of the electricity market. Total renewable energy sources account for 27% of the total installed capacity of Vietnam's power system. This is a relatively high proportion of RE compared to the power structure of countries in the region. However, the high proportion of RE is causing many challenges in the operation of the electricity market, especially leading to the difficulty of price forecasting.</p> <p>In the coming time, Vietnam will continue to develop and complete the competitive wholesale electricity market and move towards the competitive retail electricity market through the following 6 key development aspects: Developing DPPA mechanism, ancillary service market, mechanisms for BESS and smart grid, developing mechanisms for VRE to participate in power market, revising current market rules, grid codes; and developing new financial mechanisms.</p>

	<p><u>Q&A:</u></p> <p>AES: What are the obstacles in implementing the next phase of the competitive wholesale electricity market and the roadmap to develop the new financial mechanism mentioned in the presentation?</p> <p>NLDC: The main obstacles when implementing the next phase of the competitive electricity market are costs and distribution prices. Currently, Vietnam’s electricity market does not have a distribution price, when implementing a competitive wholesale electricity market, we face difficulties in pricing mechanisms. The price mechanism needs to be adjusted in accordance with the design of the electricity market, especially for the retail market</p> <p>Up to now, Viet Nam is still lacking the legal framework related to the roadmap for the development of the financial mechanism (particularly the derivatives mechanism). Those development points mentioned in the presentation are the results of research and recommendation of the NLDC based on experience or other countries.</p> <p><u>The US Embassy:</u> (1) The presentation mentioned nodal prices of the competitive wholesale electricity market in the long-term, would this lead to nodal pricing for retail prices? (2) Can renewable energy plants with a capacity of over 30MW directly participate in the market?</p> <p><u>Answer:</u></p> <p>NLDC: The node pricing of the wholesale market does not influence the pricing of the retail market, these pricing mechanisms can be developed independently. In fact, the concept of node pricing is generally used only for the wholesale market.</p> <p>Technically, RE power plants with a capacity of over 30MW can participate directly in the competitive market. However, currently, RE plants are operating at FIT prices, therefore project owners do not have the motivation to participate in the electricity market.</p> <p><u>UNDP:</u> Mechanism of trading surplus electricity of RE plants in the wholesale market</p> <p><u>Answer:</u> The wholesale electricity market is transacted through a transmission network, connected to at-least a 110kW transmission line, usually requiring plants with a capacity of over 30 MW while small power plants should be connected to the distribution network for consumption to ensure the economic efficiency. Therefore, small-capacity renewable energy plants should not generate electricity on the distribution grid to participate in the wholesale market, but other mechanisms would be considered to deal with the excess power.</p> <p><u>VEPG Secretariat:</u> Could NLDC be separated to dispatch independently with EVN in the competitive market and what are the bottlenecks of DPPA?</p> <p><u>Answer:</u></p> <p>According to the long-term roadmap approved by the Prime Minister in Decision 168, NLDC will be restructured in two phases to create its legal entity: (1) transfer NLDC to a one-member limited liability company under EVN and (2) separate NLDC completely independent from buyers and sellers in the electricity market. Currently, relevant agencies have developed a proposal to convert NLDC from a center into a one-member limited liability</p>
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	<p>company. The proposal has been submitted to the Prime Minister by the Commission for the Management of State Capital at Enterprises for approval.</p> <p>The main bottleneck of the DPPA is the current legal system. According to a new decree on the functions and authorities of the Government, the Prime Minister no longer has the authority to issue a decision to pilot the DPPA. The EREA is reviewing the current legal documents to submit the DPPA pilot project to the competent authority for approval.</p> <p>IICA: Roadmap to develop ancillary service market, particularly frequency modulation for renewable energy plants, and pumped storage hydropower plants</p> <p>ERAV: The MOIT has issued a regulatory document on contract templates for ancillary services. Regarding the frequency modulation service, it will be trading on the spot market along with regular electricity transactions.</p>
<p>Update on activities and findings on REC and Carbon Markets _USAID_</p>	<p>Ms Jennifer Leisch, VLEEP II/USAID briefly introduced the Renewable Energy Certificate (REC) market in Vietnam.</p> <p>Renewable Energy Certificates (RECs) are market-based instruments, in the form of virtual certificates, that track the renewable attributes of electricity from generation to consumption. It allows customers to purchase the environmental attributes associated with the generation of renewable power, without directly purchasing the electricity. RECs can be used for both voluntary and compliance purposes all over the world. Now it is voluntary market in Vietnam.</p> <p>RECs are useful for both companies and policymakers. On the one hand, RECs help consumers or corporations meet their sustainability commitment. This is one way to claim that an entity is using renewable energy. For policy maker, RECs could help to leverage private sector investment. It also supports various policies in tracking compliance to national regulations as well as supports the utility offerings for example green tariff.</p> <p>RECs registration in Viet Nam has been slowly going. I-RECs have been active in Viet Nam since 2014 governed by a foundation, a non-profit organization. Local issuance of I-REC certificates is administered by an independent entity.</p> <p>In conclusion, there are some key notes on RECs that Vietnam could consider when developing the RECs market: having access to RECs and registering for RECs is an essential precondition for any investors who want to build generation projects. Secondly, RECs must adhere to international standards to be credible otherwise RECs would have no value. Additionally, National REC and Carbon Market must be carefully designed to avoid double counting.</p> <p>Q&A:</p> <p>AES: (1) Is there any local regulation for the REC market in Vietnam (2) In principle, the DPPA is doing a similar thing with REC, how DPPA can compete with the REC market when the REC price is relatively cheap in Viet Nam (3) Is there any way for bilateral agreement for REC to be sold and purchased between RE developers and customers, and a way for RE developers to be able to sell it for a longer term under a bilateral agreement.</p> <p>Answer:</p> <p>(1) VLEEP II is working with the MOIT on legal assessment for REC and how to develop a legal framework related to REC market</p>

	<p>(2) It is argued that DPPA will require REC market. REC will settle the environmental attribute which will be associated with DPPA. This is an essential pre-condition to the contract. The REC should be bundled with DPPA rather than being competitive with each other.</p> <p>(3) RE Developers absolutely can sign long-term bilateral agreements, however, given the uncertainty of the policies for REC and changes of the technologies and technical standards, the RE project developers would face a lot of challenges when signing a long-term agreement.</p> <p>NLDC: 2 companies offering the REC: the International REC standard and TIGR, most of the international companies have a need for RECs, how those companies can apply for RECs (2) How REC works, for example if a green steel plant needs to consume green RE power to apply REC?</p> <p>Answer: The company does not need to own a contract with the RE generator to apply REC. They can buy RECs through a broker and can purchase REC which could be equivalent to the total amount of electricity consume that they need to use for their company in the previous year. The company can purchase RECs from a variety of sources such as solar, wind. Right now in Vietnam, there are 4 million units of 4 million MWh of REC available for trading. There are REC access in the market. When the supply is less than the demand, the price of the REC will go up and become more valuable.</p> <p>ERAV: how to measure and convert electricity from RE to REC, should it be based on the actual output in the past or the expected output in the future</p> <p>Answer: Based on the real generation that has occurred, so it is always converting from MWh, how much has been produced and delivered to the grid, but it's separated from selling electricity, it's the electricity of issuing REC. So the GENCO must prove and show evidence to EVN that they generated that much electricity during that period of time in that location.</p>
<p>Way Forward _ Chair _</p>	<p>The chair presented the topics to be focused on for TWG5 in 2023:</p> <ul style="list-style-type: none"> • Implementing activities of the task force on the Wholesale competitive market: <ul style="list-style-type: none"> - Establishing the Task Force, and developing an operational plan for the Task Force; - Implementing activities in the operational plan, organizing meetings between Task Force members; - Researching and consulting with entities, organizations, enterprises, and experts and producing performance reports. • Discussing the implement the development roadmap for a competitive energy market for the oil, gas and coal sectors in accordance with the development strategy, the National Energy Master Plan and the proposal to develop a competitive energy market • Participate in other meetings of the VEPG including the VEPG Steering Committee Meeting, High- Level Meeting and meetings of TWGs
<p>Update on the process of the Task Force</p>	<p>Mr Ananth Chikkatur, VLEEP II/USAID updated the progress of the Task Force of the Electricity Competitive Wholesale Market. The main objectives of the Task Force are to share the international experience of countries that have been successful in the field and exchange views of different players,</p>

<p><u>VLEEP/II/USAID</u></p>	<p>therefore to propose recommendations that are suitable to the actual situation of Viet Nam.</p> <p>The Task Forces has been established by the chair and co-chair in August 2022. The proposed deliverable is a report on Recommended Actions for a VWEM of the Future. The first draft is expected to be completed in April 2023 and the final report would be launched in June 2023.</p> <p>The report will illustrate the Viet Nam Wholesale Electricity Market in 2025 which will have 15 min interval pricing and dispatch, allows market-only generators (no CFD or PPA price with EVN), supports DPPA transactions and increases the cap on market price over time. The fully competitive wholesale electricity market in 2030 would be proposed to have multiple nodal/zonal Local Marginal Prices at 5 min interval pricing and dispatch as well as forward capacity markets and ancillary service market; and supports large customers buying directly from the market.</p> <p><u>Discussion</u></p> <p><u>ERAV:</u> In the previous period, VEPG had various meetings to discuss many aspects of the electricity market thoroughly. The contents of the report of the task force, thus, should be reviewed carefully to ensure the usefulness and avoid overlapping. However, most of the key points presented in the Task Force have been discussed and/or clearly specified in the MOIT decision 8266 for the wholesale market.</p> <p>Technically, there are also some unreasonable/controversial issues proposed in the Task Force. Firstly, “Allows market-only generators (no CFD or PPA price with EVN)”: there could not be any entities that only participate in the spot market without a guaranteed tool such as CfD contracts. Secondly, the point “increase the market ceiling price, depends mainly on input fuel prices. When the price of coal and oil increases, the cap price would increase, vice versa.</p> <p>The content of the report is not only related to the scope and authority of the ERAV and the Ministry of Industry and Trade, but also includes the contents of the scope of NLDC.</p> <p>It is suggested to focus on solutions for the market in response to the energy crisis and create a link between the electricity market and the input fuel market, especially in the context that Vietnam is importing coal and would need to import LNG and gas in the future. The Task Force could target more on the correlation between the primary fuel market and the electricity market and measurements to manage risks from fluctuations in fuel prices, such as Government subsidies to support businesses and households</p> <p><u>NLDC:</u> the task force should also focus more on the demand response of the power market, not on designing the market. Another problem is to pay attention to the ancillary service market</p>
<p>Closing</p>	<p>Chair Ms. Ngo Thuy Quynh delivered the closing remarks, thanked the speakers for their detailed presentations on various aspects of the energy market and the delegates for their participation and comments/inputs. The Task Force will incorporate comments from ERAV and NDLC to be more practical and useful to the government to develop a competitive wholesale electricity market in Vietnam. Throughout an active and productive day of work, the TWG discussed the policies and orientations of the EU and Vietnam energy market, as well as an update on the current status of the Vietnam</p>

	<p>Wholesale Electricity Market and the introduction of RECs as an essential instrument to track the renewable attributes.</p> <p>The VEPG Secretariat will consolidate comments/ inputs of the delegates, recommendations and support proposals of the development partners to the chair and co-chair for consideration and discussion in the next meeting.</p> <p>The Chair announced the closing of the meeting./.</p>
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Annex 3: Presentations

Presentations are available for download below:

English:

<https://vepg.vn/documents-of-the-2nd-meeting-of-the-twg5-on-em-30-nov-2022/>

Vietnamese:

[Tài liệu phiên họp lần 2 nhóm CTKT 5 ngày 30/11/2022 - Viet-Nam-Energy-Partnership-Group \(vepg.vn\)](#)