

Viet Nam Energy Partnership Group

Technical Working Group 5: Energy Data and Statistics

Report of the 3rd Meeting

Date: 18 April 2019
Location: MOIT meeting room 101, 25 Ngo Quyen, Hanoi
Time: 14:00 – 17:00

Key agenda points:

1. Follow-up on VEPG High-Level Meeting 2018
2. Discussion of status and current activities regarding VEIS and PDP 8 development
3. Member updates and new projects in the field of Energy Data & Statistics
4. Update of tasks: TWG 5 Work Plan 2019

Chair and Co-Chair:

- **Mr. Nguyễn Tuấn Anh**, Head of Planning Division, Electricity and Renewable Energy Authority, Ministry of Industry and Trade (MOIT)
- **Mr. Jakob Stenby Lundsager**, Long Term Adviser, Danish Energy Partnership Programme, Denmark

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 – Presentations

Agreed Conclusions and Actions:

Conclusion / Decision	Action
<ul style="list-style-type: none"> The Chair and Co-chair thanked participants for their active and constructive participation and comments. 	Chair/Co-Chair
<ul style="list-style-type: none"> The Secretariat gave an update on the HLM 2018 and presented a monitoring tool that allows the Chair and Co-Chair and the Secretariat to monitor progress in implementing the VEPG (TWG 5) Policy Recommendations and report to the VEPG Steering Committee. 	Secretariat, Chair/Co-Chair
<ul style="list-style-type: none"> <u>The Chair</u> presented the update on the development of the VEIS and the VEIS Action Plan which was approved by the MOIT Minister on 14/12/2018. GIZ is supporting the MOIT/EREA in the developing the legal framework for the VEIS as well as <u>The Co-Chair</u> introduced the Workplan for 2019 and priorities task list for the year of 2019 (See Annex 4). The work plan forms the basis for the coordination between the Development Partners, the MOIT and the VEPG. <u>TWG members</u> discussed and reflected on the VEIS action plan. 	Chair Co-Chair TWG 5 members
<ul style="list-style-type: none"> <u>The Chair</u> presented progress update on the development of the PDP8. <u>USAID and World Bank</u> presented their activities in support for the development of the PDP8 <u>The TWG members</u> discussed and reflected on the development process of the PDP8. 	The Chair USAID/ WB TWG 5 members
<ul style="list-style-type: none"> The General Statistics Office (GSO) presented their activities in developing the Energy Balance Sheet with the support from the AICS 	GSO/ AICS
<ul style="list-style-type: none"> The Chair, the Co-chair and the Secretariat will consider the date for the next meeting and inform the members as soon as possible. 	Chair, Co-chair and the Secretariat

ANNEX 1 - AGENDA

13:00-14:00 Registration

14:00-14:10 Opening Remarks, overview of the agenda

*Mr. Nguyễn Tuấn Anh
Mr. Jakob Stenby Lundsager*

14:10-14:20 Follow-up on the 2018 High-Level Meeting

*Secretariat: Brief report on the HLM and further process of monitoring/
implementing the TWG Policy Recommendations*

14:20-15:20 Update on VEIS development / TWG 5 Work Plan 2019

*Chair/EREA: Update on VEIS development (approval of VEIS Action Plan)
EVEF/GIZ: The development of the VEIS Action Plan – first outline
TWG Co-Chair: Work Plan 2019 – Tasks and priorities for TWG 5
TWG members: Further updates on current activities on Energy Data & Statistics
Plenary discussion on VEIS implementation and input to TWG 5 work plan
2019*

15:20-15:30 Coffee/tea break

15.30-16.00 Update on PDP 8 development

*Chair/EREA: Update on PDP 8 development
USAID: Current developments and support activities on PDP 8*

16.00-16.20 GSO activities in Energy Data & Statistics

Italy/AICS: The GSO cooperation project and GSO activities in Data & Statistics

16.20-16.30 Conclusions, agreements, closing remarks

*Mr. Nguyễn Tuấn Anh
Mr. Jakob Stenby Lundsager*

ANNEX 2 - PARTICIPANTS

Co-chairs

- **Mr. Nguyễn Tuấn Anh**, Head of Planning Division, Electricity and Renewable Energy Authority, Ministry of Industry and Trade (MOIT)
- **Mr. Jakob Stenby Lundsager**, Long Term Adviser, Danish Energy Partnership Programme, Denmark

Participants

1. **Ms. Tran Hong Viet**, Denmark Embassy
2. **Ms. Vu Thi Thu Hang**, UNDP
3. **Ms. Tran Thuy Duong**, EU Delegation
4. **Mr. Ha Dang Son**, V-LEEP
5. **Mr. Do Tuong**, USAID
6. **Mr. Nicolo Cora**, ITALY
7. **Mr. Daniele Paladini**, ITALY
8. **Mr. Pham Duc Tung**, AfD
9. **Mr. Chu Ba Thi**, World Bank
10. **Ms. Hanh Nguyen**, GGGI
11. **Mr. Moritz Limbacher**, KfW
12. **Mr. Koji Shimizu**, JICA
13. **Mr. Bui Thanh Trung**, JICA
14. **Ms. Truong An Ha**, Vietnam Initiative for Energy Transition
15. **Mr. Nguyễn Hoàng Linh**, MOIT/EREA
16. **Mr. Tran Ha Ninh**, MONRE
17. **Mr. Nguyen Huy Minh**, GSO
18. **Ms. Le Thi Hanh**, GSO
19. **Ms. Phan Thi Tinh**, Custom Department
20. **Mr. Nguyen Quoc Khanh**, Independent Expert
21. **Mr. Doan Van Binh**, Vietnam Academy of Science and Technology
22. **Mr. Phan Binh Minh**, EVN
23. **Ms. Nguyen Lan Chi**, GIZ
24. **Mr. Vo Thanh Tung**, GIZ
25. **Ms. Dang Thi Huong Lan**, GIZ
26. **Ms. Pham Minh Anh**, GIZ
27. **Ms. Le Ngoc Ninh Giang**, GIZ

VEPG Secretariat

- **Mr. Rainer Brohm**, VEPG Secretariat
- **Ms. Nguyễn Phương Thảo**, VEPG Secretariat
- **Mr. Đỗ Quang Nhật**, VEPG Secretariat
- **Ms. Vũ Minh Hiền**, GIZ Support Team

ANNEX 3 - SUMMARY MINUTES

Agenda item	Summary
Opening remarks	<p><u>The Chair and Co-chair</u> welcomed participants and briefed the TWG on the meeting agenda as well as encouraged members of the TWG to actively join the discussion on the focus topics of the meeting.</p>
Follow-up on the 2018 High-Level Meeting	<p><u>The Secretariat</u> reported on the Policy Recommendations endorsed at the 2nd High-level meeting of the VEPG in November 2018.</p> <p><u>The Secretariat</u> presented the tentative work plan and the timeline for the TWGs, Steering Committee and the High-Level Meeting in 2019 (See Annex 4.3)</p> <p>The Secretariat presented the VEPG website including the new features.</p> <ul style="list-style-type: none"> • The Secretariat introduced new tools to support VEPG members such as the legal database, information on partner events and project milestones (please refer to www.vepg.vn). • The Secretariat invited all TWG members to submit information on project activities or workshops/events to be featured on the VEPG website or to be disseminated to all VEPG members via E-Mailings. • The Secretariat also introduced the new email address: secretariat@vepg.org.vn. (See Annex 4.3)
Update on VEIS development / TWG 5 Work Plan 2019	<p><u>The Chair/EREA</u> introduced the Action Plan for the Establishment of the VEIS which was approved by the MOIT Minister in Decision 4651/QĐ-BCT on 14/12/2018. (See Annex 4.)</p> <ul style="list-style-type: none"> • The VEIS Action Plan is divided into 2 Phases: <ul style="list-style-type: none"> ▪ <i>Phase 1 (2019-2021)</i>: In this phase, the legal framework and information infrastructure will be developed, along with activities in capacity building and awareness raising. The systems will also be tested, and several output products will be produced. ▪ <i>Phase 2 (2022-2024)</i>: The legal framework will be completed and deploy of the investment projects. The capacity will continue to be strengthen as well as complete and enhance the quality of the output products. • In 2019, EREA will formulate the Circular on the Establishment of the VEIS which will layout the several key contents including participating agencies and their relevant responsibilities, input data and sources, data collection forms, and system outputs as well as the organizational structure and focal point in charge of the system management. • In 2019, EREA will also deliver a report on the investment policy for the development of the VEIS and prepare the initial structure such as Human resources, equipment and facilities for the VEIS. <p><u>GIZ</u> presented its support activities for the VEIS Action plan. GIZ activities include:</p>

- Support to EREA for the development of the circular which serves as the legal basis for the establishment of the VEIS.
- Development of feasibility study report under the investment documents so that the VEIS can be financed by state budget.

These activities are part of the indicators for the agreement between the Viet Nam and the EU which should be completed this year.

The Co-Chair introduced the Workplan for 2019 and priorities task list for the year of 2019 (See Annex). The work plan forms the basis for the coordination between the Development Partners, the TWG and the MOIT. The draft work plan for 2019 for TWG includes 3 topics in: (1) legal and Institutional Framework; (2) Data and statistics capacity; and (3) Data and Statistics inventory. The Co-chair highlighted with the TWG that Task 3.2 - Handbook on data collection and management needs additional support.

TWG 5 members shared the following updates on their current projects and ongoing work:

- **USAID/ V-LEEP** is working with EREA on the complete assessment of the methodology of the PDP8.
- **VIEC** is working with a team from Australia to Development a model
- **GGGI** is developing a comprehensive report on Vietnam Renewable Energy
- **AICS** is working with the GSO in support of Energy Balance Sheet.
- **UNDP** is carrying out an assessment of energy auctioning in the Mekong Delta.
- **EVEF/ GIZ** is supporting the VEIS Action Plan through the Budget support of 24 million Euros in the 3 main subsectors on RE, EE and EDS.

The members of the TWG discussed the implementation of the VEIS Action plan and gave their input for the TWG5 work plan. Summarized here are the main comments of the TWG members on this topic

1. The outputs of the VEIS

- The main output from the TWG5 on EDS is to support and promote the work leading to the Establishment of VEIS and to provide policy recommendations and support for the development of an Information Center.
- The outputs of the VEIS also includes
 - 1) (1) Energy Balance Sheet: Currently, there is not a system for regular yearly updates on the energy balance for the whole country. Therefore, the VEIS will be the focal point to update the Energy Balance Sheet.
 - 2) (2) Energy data: The VEIS will also the focal point for the collection of data and statistics in (i) energy consumption, (ii) energy efficiency,

	<p>(iii) energy export and import, (iv) indicators on the development of renewable energy.</p> <p>2. <i>Institutional framework for the VEIS</i></p> <ul style="list-style-type: none"> • The establishment of the institutional framework for the VEIS is a part of the Policy Recommendations which were endorsed at the HLM in 2018. In 2019, the focus will be on the establishment of a legal framework for the VEIS. In 2020, this legal framework will continue to be strengthened via a government decree or a PM Decisions which will be the basis for the institutional framework for the VEIS. The work on the institutional framework will be carried out after the legal framework is established and strengthened. • The first step in creating the institutional framework of the VEIS is the establishment of an Inception Team which will coordinate inter-ministerial work and create a draft work plan. The next step for the institutional framework of the VEIS is the establishment of a Steering Committee.
<p>Update on PDP 8 development</p>	<p><u>The Chair/EREA</u> updated the TWG on the progress of the PDP8 development.</p> <p>The Development of the PDP8 is divided into two (02) phases: (1) Preparation phase and (2) Implementation Phase.</p> <p>1. The preparation phase:</p> <ul style="list-style-type: none"> • Aug, 2018 – Dec, 2018: the MOIT cooperated with the IoE to build the TOR for the PDP8 and the outline of the strategic environmental report which was finished in 2018. • Jan, 2018 – Dec 2019: Research and Support for preparation of PDP8 <ul style="list-style-type: none"> ○ WB, IoE, V-LEEP assessment of power supply capacity by 2030 ○ Wb, V-LEEP, DEPP: Construction of methodology for development of PDP8 ○ IoE and DEPP: building long-term power and development scenarios. ○ JICA, IoE: LNG-based gas-electricity supply chain development. ○ DEPP: Technical specification and costs of power generation activities <p>2. Implementation phase</p> <ul style="list-style-type: none"> • Jul 2019: selection of consultant • Aug 2019- Aug 2020: Development of the Plan and Strategic Environmental Assessment • Sep 2020: stakeholders’ consultation • Dec 2020: Completion and submission of PDP8 for approval <p><u>The Chair/EREA</u> presented some challenges in the development of PDP8 including:</p>

- The methodology and planning model were modified: the operation model incl. production cost simulation uses higher resolutions (time intervals of hour every 30 min instead of day or weeks)
- The requirement on the characteristic of input data for solar and wind power by hour or by minutes with high spatial resolution.
- Demand forecast in PDP8 shall provide higher level of details with renewable energy integration.
- Forecasting power demand methods should incorporate bottom-up and top-down approach to reflect non-standard load and demand-side management.
- Data on costs and efficiencies of technologies should be updated.
- Complete assessments of scenarios on changes of renewable energy sources with forecast of price fluctuations and risk assessment of conventional fuels.

USAID/V-LEEP and World Bank presented the current developments and their support activities for the PDP8.

- The V-LEEP programme is support the assessment of methodology used in the PDP8. The current methodology using the development of PDP8 is not suitable and data is not sufficient for simulation. The new approach needs to reflect the flexibility and availability of Wind and Solar resources.
- The USAID/V-LEEP needs to involve a larger group (incl. EREA, IoE, etc) to reflect the characteristic the power system in Viet Nam in the future.

The World Bank is contributing to the PDP8 process via several studies and other activities:

- Demand Support Analysis
- Guidance note on Planning methodology
- Issue on Wholesale Power Market and Wholesale Market Innovation
- System reduce analysis
- Integration Analysis
- High-voltage DC transmission power import from China or other options.

The members of the TWG discussed on the progress of the development of the PDP8. Summarized here are the main comments of the TWG members on this topic:

1. PDP8 and Viet Nam's NDC commitment

- The PDP7 has already ensured that Viet Nam will meet its NDC commitments under the framework of the UNFCCC. The PDP8 will not only ensure that Vietnam will meet its NDC target, but it will also

	<p>go beyond that goal to tackle the issues of sustainable development in the power sector.</p> <p>2. <u>Planning Law and the PDP8 development process</u></p> <ul style="list-style-type: none"> • The procedure for the development of PDP8 is different from other PDPs as it has to adhere to the Planning Law. Unlike previous PDPs which was reviewed and approved by the MOIT, under the new Planning Law, the PDP8 has to be reviewed and approved by the PM. • The timeframe for the PDP8 was also different from other PDPs. The PDP8 will set for the period of 2021-2030 with the vision to 2050. This long vision is a challenge for the consulting units for the PDP development. The Planning Law also adding additional procedures for the planning of PDP8 such as the submission the Draft and Cost Estimate to a Committee or tendering process when selecting Consulting Units if the work package is larger than 500 Million VND. • The Planning law also determined whether the projects under 50 MW will be included the city or provincial development plan or to be included in the PDP8. However, currently there is no concrete guidance on incorporating these projects into the PDP8 or the city/provincial plans. <p>3. <u>Auctioning procedures in PDP8</u></p> <ul style="list-style-type: none"> • The MOIT is researching on the auction procedures. For the projects has already included in the PDP8, the MOIT will not appoint the investor but it will create conditions for auctioning procedures. This will allow for the testing of the new FiT. The auctioning process will be done on a competitive and transparent basis.
<p>GSO activities in Energy Data & Statistics</p>	<p><u>The GSO</u> presented on their work on Energy Balance Sheet and the support from the AICS on the project.</p> <ul style="list-style-type: none"> • The GSO has been conducting data collection for the National Statistical Indicator System which includes several indicators on energy production, export and import, energy consumption and energy balance of several key products. • The Energy Balance Table was developed by the Institute of Energy under the MOIT from 2010 to 2015. From 2016 to date, the responsibilities have been transferred to the GSO. The GSO has built the EBT for 2016-2017. The GSO has met several challenges due to the lack of experience in building the Balance table. • AICS/ ISTAT is supporting the GSO under the project “Viet Nam – Improvement of the Statistical System” with the budget of 600,000 Euros in 3 years. The project is supporting the GSO in five areas: (i) energy statistics; (ii) environment and climate change statistics; (iii) Institutional building; (iv) Dissemination of statistical information; and (v) information technology and communication.

	<ul style="list-style-type: none"> The project also supports the GSO in the compilation of the data for the Energy Balance Sheet by support the development of methodology for the energy balance table and compilation of data such as energy import and export, energy account and economic indicators on energy. The data for the Energy Balance Sheet replies on other ministries for inputs, thus, the GSO is looking forward to cooperating and work with other ministries to develop the Energy Balance Sheet. <p><u>The members of the TWG</u> discussed on the presentation of the GSO on Energy Balance Sheet. Summarized here are the main comments of the TWG members on this topic:</p> <ol style="list-style-type: none"> <u>Accessibility of the Energy Balance Sheet:</u> <ul style="list-style-type: none"> The Energy Balance Sheet is a part of National Statistical Indicators Systems. Therefore, it will be published on the Website of the GSO which can be freely accessed. The Energy Balance Sheet will also be published in the National Statistic Handbook. A press conference on the release of the National Statistic Handbook will be held in June 2019 which will include the Energy Balance Sheet for 2016-2017. <u>Duplication of Effort:</u> <ul style="list-style-type: none"> While the building of the Energy Balance Sheet is a task in the VEIS Action Plan, the Energy Balance Sheet will be built with the contribution and input from different Ministries and agencies.
<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 Chair, Co-chair and the Secretariat will consider the date for the next meeting and inform the members as soon as possible.



ANNEX 4.1 – PRESENTATIONS



Viet Nam Energy Partnership Group

Technical Working Group 5 – Energy Data & Statistics



3rd Meeting - 18. April 2019

MoIT, Hanoi

Nguyễn Tuấn Anh

Director of Planning Division
EREA/MoIT
Chair of Technical Working Group 5

Jakob Stenby Lundsager

Long-term Advisor
Embassy of Denmark
Co-Chair of Technical Working Group 5

Agenda



Key objectives of the meeting:

- Follow-up on VEPG High-Level Meeting 2018
- Key topic “Implementation of VEIS and VEIS Action Plan”
- Discussion of TWG 5 work plan and priorities for 2019 and beyond
- Update on PDP 8 development
- Partner presentation: „GSO/Italy cooperation project”

Agenda



Time	Subject
14.00-14.10	1. Opening remarks, overview of the agenda <ul style="list-style-type: none"> Mr. Nguyễn Tuấn Anh / Mr. Jakob Stenby Lundsager
14.10-14.20	2. Follow-up on the 2018 High-Level Meeting <ul style="list-style-type: none"> Secretariat: Brief report on the HLM and process of implementation/monitoring the TWG Policy Recommendations
14.20-15.20	3. Update on VEIS development / TWG 5 Work Plan 2019 <ul style="list-style-type: none"> Chair/EREA: Update on VEIS development (approval of VEIS Action Plan) EU/GIZ: The development of the VEIS Action Plan – current support activities TWG members: Further updates on current activities on Energy Data & Statistics Plenary: Discussion on VEIS implementation and input to TWG 5 Work Plan
15.20-15.30	Coffee/tea break
15.30-16.00	4. Update on PDP 8 development <ul style="list-style-type: none"> Chair/EREA: Update on PDP 8 process USAID/World Bank: Current developments and support activities on PDP 8
16.00-16.20	5. GSO activities in Energy Data & Statistics <ul style="list-style-type: none"> GSO/Italy-AICS: GSO cooperation project and GSO activities in Data & Statistics
16.20-16.30	6. Conclusions and closing remarks <ul style="list-style-type: none"> Mr. Nguyễn Tuấn Anh / Mr. Jakob Stenby Lundsager

Secretariat Updates – www.vepg.vn



Legal database is online! (VN and EN)

RECENT LEGAL DOCUMENTS		
MOIT Circular 05/2019/TT-BCT amending Circular 16/2017/TT-BCT on Standardized PPA for Solar Power projects - Effective date: 25/04/2019 - Legislation type: Circular - Signer: MOIT Minister Trần Tuấn Anh DOWNLOAD FOR DETAILS >	DRAFT Decision on the Mechanisms to Promote Development of Solar Power Projects in Viet Nam - Effective date: 15/04/2019 - Legislation type: Decision DOWNLOAD FOR DETAILS >	Consultation on Draft Decision on the new Solar FIT - Effective date: 15/04/2019 DOWNLOAD FOR DETAILS >
EVN Guidelines 1532/EVN-KD for the Implementation of Rooftop Solar Projects - Effective date: 27/03/2019 - Legislation type: Guidelines - Signer: Vice President of EVN Võ Quang Lâm DOWNLOAD FOR DETAILS >	MOIT Decision 648/QĐ-BCT on Adjustment of Average Electricity Retail Price and Regulations on Electricity Price - Effective date: 20/03/2019 - Legislation type: Decision - Signer: MOIT Minister Trần Tuấn Anh DOWNLOAD FOR DETAILS >	PM Decision 280/QĐ-TTg on the Approval of the National Energy Efficiency Programme (VNEEP) for the period of 2019-2030 - Effective date: 13/03/2019 - Legislation type: Decision - Signer: Deputy Prime Minister: Trịnh Bình Dũng DOWNLOAD FOR DETAILS >

Let us know if you have requests regarding documents!

Secretariat Updates – www.vepg.vn



VEPG partner events can be featured on the VEPG website



Consultation Workshop: Viet Nam Multi-stakeholder Consultation on Sustainable Consumption and Production

As the occasion of the launch of the SWITCH Asia II programme, the Delegation of the European Union to Vietnam, the SWITCH Asia SCP Facility and

[READ MORE >](#)



Workshop on Approach and Preliminary results of the Vietnam Energy Outlook Report 2019

The ESEA and DEA will present the approach and preliminary results of the Vietnam Energy Outlook 2019. The EOL19 was developed by the Electricity and

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Workshop: Solar energy Vietnam: grid integration challenges and opportunities

The workshop "Solar energy Vietnam: grid integration challenges and opportunities" is jointly organized by National University of Civil Engineering (NUCE), Vietnam and K2 Learning - Belgium with the

[READ MORE >](#)

Please send information on your events/activities to the Secretariat!

Secretariat Updates – Contact the Secretariat



New E-Mail of Secretariat: secretariat@vepg.org.vn

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Our location

Viet Nam Energy Partnership Group

Electricity & Renewable Energy Authority (EREA) / Ministry of Industry and Trade (MOIT)

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Top 1. Follow-up on High-Level Meeting 2018

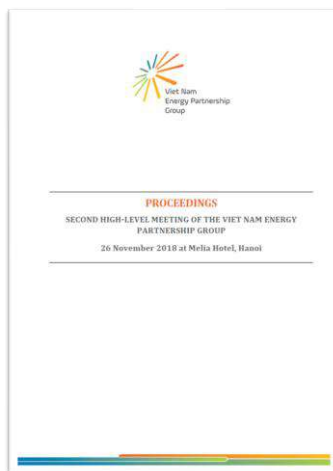


The HLM 2018

- **MoIT Minister and Co-Chairs of VEPG endorsed the Policy Recommendations** from 5 TWGs.
- **190 high-level representatives** from the energy sector (VN government, development partners, private sector, research & science, civil society)
- **Best-practice presentations** on Solar Power development, Energy Efficiency/ESCO models and Rural Electrification.



High-Level Meeting 2018

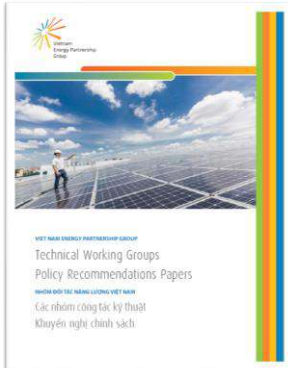


Proceedings of the HLM 2018

- Available for download at www.vepg.vn



VEPG - TWG 5 Policy Recommendations



Implementation of the VEPG Policy Recommendations

- **MoIT Minister and Co-Chairs of VEPG endorsed the Policy Recommendations from 5 TWGs.**
- **Technical Working Groups** are asked to focus work on supporting the implementation of the Policy Recommendations.
- **Review of progress in HLM 2019 (and 2020).**

VEPG - TWG 5 Policy Recommendations



Implementing the VEPG Policy Recommendations

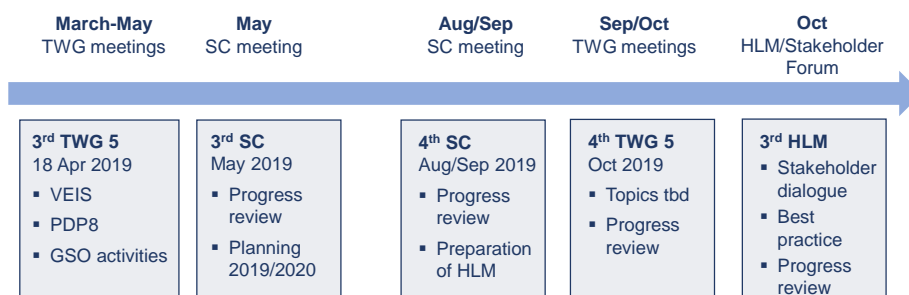
→ Matrix for monitoring progress in implementation

Policy Recommendations/TWG 5 Data & Statistics	Timeliness	Instruments & Indicators	Status	Responsible Government Agency	Reporting OP	Ongoing activity
Topic 1: Establish the legal framework for Vietnam Energy Information System (VEIS) Establish a strong, coherent and clear legal framework for the collection, processing and dissemination of energy data and statistics in Viet Nam.						
Issue a MoIT decision on the approval of the VEIS Roadmap and Action Plan.	Short-Term (end of 2019); VEIS Roadmap and Action Plan	Issue MoIT decision on VEIS Roadmap and Action Plan approval.	Completed	MoIT/NERA	EU/GIZ 4E support on VEIS	VEIS Action Plan (MoIT Decision 4651/2018) issued on 14.12.2018
Develop and issue a legal decision on the implementation of the VEIS Roadmap and Action Plan.	Short-Term (end of 2019); MoIT Circular	Issue MoIT Circular on VEIS implementation.	Ongoing	MoIT/NERA	EU/GIZ 4E support on VEIS	Development of MoIT Circular Issuing of VEIS regulation as part of VKEEP PM Decision (issued on 1.3.2019) PM Decision on VEIS to be developed until 2021
Parallel preparatory work should be conducted on the terms of reference for the coordination platform, a multi-annual VEC work plan and the drafting of data sharing agreements.	Short-Term (end of 2019); MoIT Circular	Develop further preparatory work (ToR for coordination platform, workplan etc.)	Ongoing	MoIT/NERA	EU/GIZ 4E support on VEIS	Development of MoIT Circular

VEPG – Planning 2019



VEPG Planning 2019



Top 2. VEIS – Implementation and Action Plan



EREA/MoIT: Update on VEIS development

- Update on approval of VEIS Action Plan

EU/GIZ :

- Developing the Action Plan – Support Activities

TWG Co-Chair:

- Work Plan 2019 – Tasks and Priorities

All TWG Members:

- Updates on current activities
- Q&A / Discussion



Coffee Break

Top 3. Update – PDP 8 Development



TWG Chair/EREA:

- Progress, key issues and challenges of PDP 8 development

USAID: Support for PDP 8 development

- V-LEEP support for Production Cost Model Training for PDP 8.

World Bank: Support for PDP 8 development

- WB support for PDP 8 development

Plenary discussion

- Your questions and comments!
- Q&A

Top 4. Partner Project – GSO/ISTAT Cooperation



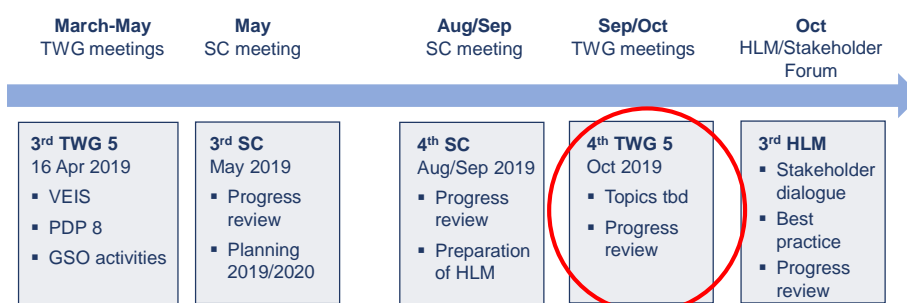
GSO/Italy-AICS input:

- GSO cooperation project and GSO activities in Energy Data & Statistics

Plenary discussion

- Your questions and comments!
- Q&A

Outlook 2019 – TWG 5 Workplan



Topics for 2019/2020?

- VEIS implementation (follow up)
- International best-practice in Energy Balancing/Energy Data Systems
- PDP 8 development (follow up, data & methodology)
- Other sector stakeholder inputs / energy scenarios (EOR, private sector, CSO/think tanks)



*Thank you for your attention
and participation!*



**DEVELOPMENT PROGRESS OF
THE NATIONAL POWER DEVELOPMENT PLAN FOR THE
PERIOD OF 2021-2030 WITH THE VISION TO 2050 (PDP 8)**

**Ph.D Nguyen Tuan Anh
Director of Planning Division
Electricity and Renewable Energy Authority (EREA)**

CONTENTS

- Progress of the development of PDP 8
- Challenges in the development of PDP8 and requirements on power and energy data

PROGRESS OF THE DEVELOPMENT OF PDP 8

■ Preparation Phase

- Aug 2018 – Dec 2018: Development of terms of reference of the Plan (outline of the Plan and planning cost, outline of the strategic environmental assessment (SEA) report)
- Jan 2018 – Dec 2019: Research and support for preparation of PDP 8
 - Update of progress of power resources and assessment of power supply capacity by 2030 (IE, WB, V-LEEP)
 - Construction of methodology for development of PDP 8 (WB, V-LEEP, DEPP)
 - Building of long-term power and energy development scenarios (IE, DEPP)
 - VRE integration (WB, V-LEEP, DEPP)
 - LNG-based gas-electricity supply chain development (Japan, IE)
 - Technical specifications and costs of power generation technologies (DEPP)

PROGRESS OF THE DEVELOPMENT OF PDP 8 (continued)

■ Implementation phase

- Jul 2019: Consultant selection
- Aug 2019 – Aug 2020: Development of the Plan and Strategic Environmental Assessment
 - Assessment of current state and forecast of energy and power demands
 - Building of power supply and electrical grid development plan
 - Investment capital and economic-financial analysis of power development options
 - Environment and environmental protection during power development
- Sep 2020: Stakeholders Consultation
- Dec 2020: Completion and submission of PDP 8 for approval

CHALLENGES IN THE DEVELOPMENT OF PDP 8 AND REQUIREMENTS ON ENERGY DATA

- Modification of the methodology and planning model: operation model (production cost simulation) comprising of time intervals (e.g. an hour, 30 minutes) for the entire year instead of typical days or weeks
- Requirements on characteristic input data for solar and wind power by hour or by minute with high spatial resolution
- Demand forecast in PDP 8 shall be provided with a higher level of details to serve as input data for the operating model for purposes of renewable energy integration research
 - Development of load charts for more regions, which is appropriate for transmission nodes of the system
 - Load charts with a higher resolution (at hour or minute level)

CHALLENGES IN THE DEVELOPMENT OF PDP 8 AND REQUIREMENTS ON ENERGY DATA (continued)

- Power demand forecasting methods should be incorporated with Bottom-up and Top-down approaches to more fully reflect non-standard loads and the existing and future demand side management programs
- Data on costs and efficiencies of technologies should be updated: Update of assumptions on costs and efficiencies for all power sources based on modern trends as input for the long-term power generation expansion plan models
- For a more complete assessment of the scenarios on increase or decrease of renewable energy sources, it is necessary to analyze and make detailed forecasts of price fluctuations and risk assessment of conventional fuels (such as gas and coal).

Thank You for Your Attention!

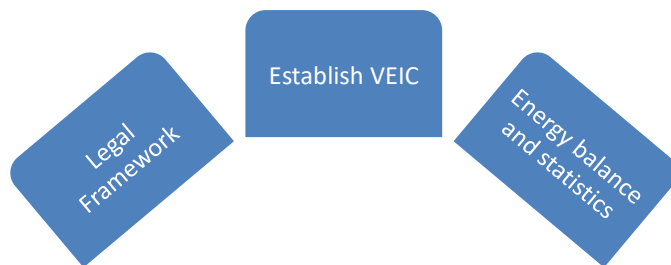
TWG5 Workplan 2019

Viet Nam Energy Partnership Group
Third meeting of the Technical Working Group 5
(TWG5) on Energy Data and Statistics
18 April 2019

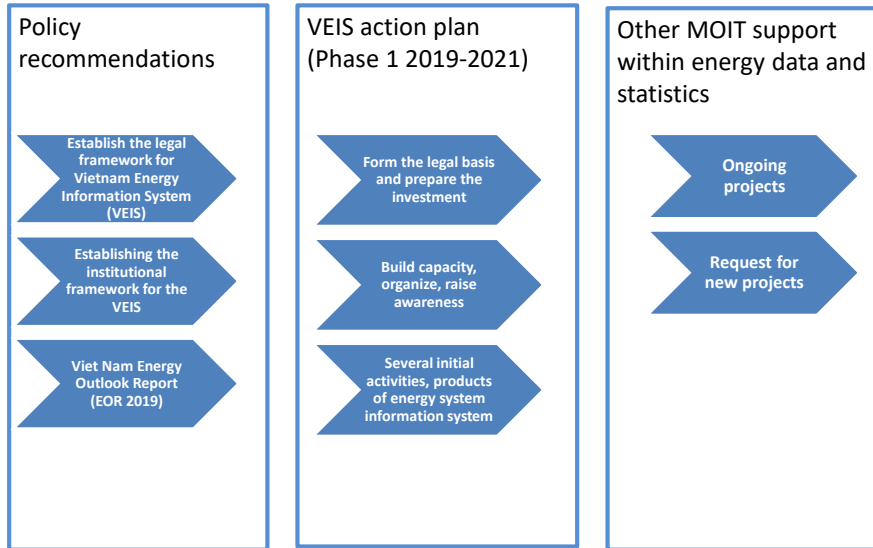
Last year for TWG5

- June 2018: 1st TWG5 meeting: Establishment and Workplan 2018
- September 2018: 2nd TWG5 meeting: EOR19 and policy recommendations
- November 2018: VEPG HLM, endorsement of policy recommendations
- December 2018: Minister approval of Roadmap for VEIS

- Workplan 2018: 3 focus themes and 17 tasks



General direction for TWG5



Draft Work Plan 2019 for TWG5

Legal and institutional framework	Data and statistics capacity	Data and statistics inventory
<ul style="list-style-type: none"> • VEIS circular and feasibility study • State budget for institutional structure of VEIC • Organisational structure in VEIS 	<ul style="list-style-type: none"> • Energy balance development • Handbook on data collection and management • Training in energy modelling • Utilise EOR19 for PDP8 	<ul style="list-style-type: none"> • Inventory of existing energy data • Integrated RE database • Database of modelling data • Technology catalogue for power generation

WP 2019: Legal and institutional framework

- Focus: Support building the legal and institutional framework for the VEIS

Task	Description	Time line	Development partner
1.1 VEIS circular and feasibility study	VEIS approved under VNEEPIII. Next step: Develop a circular for VEIS incl. VEIC structure and responsibilities, annual budget (based on FS on hardware, software, database, etc.)	End 2019	EU/GIZ is currently supporting this task
1.2 State budget for institutional structure of VEIC	Include in Medium Term Public Investment Plan 2021-2025	End 2019	No support needed
1.3 Organisational structure in VEIS	Conduct research on best practice for and draft a proposal on VEIS cross-institutional organisation	Mid 2020	Support needed

WP 2019: Data and statistics capacity

- Focus: To build capacity within energy data and statistics

Task	Description	Time line	Development partner
3.1 Energy balance development	Enhance the quality of Vietnam energy balance in correspondance with international standards	2020	Istat is currently supporting GSO in this task but further support may be needed for MOIT
3.2 Handbook on data collection and management	Develop handbook for guidance of data collection and management based on circular details	End 2020	Support needed
3.3 Training in energy modelling	Training in Balmore and TIMES conducted in 2018	End 2020	Denmark support in TIMES training
3.4 Utilise EOR19 for PDP8	Utilize the knowledge, findings, recommendations and under EOR19 for the PDP VIII	End 2019	Denmark support in EOR19 development

WP 2019: Data and statistics inventory

- Focus: To build inventories within energy data and statistics

Task	Description	Time line	Development partner
4.1 Inventory of existing energy data	Develop a list of energy information and data from sources inside and outside the industry and trade industry.	End 2019	Support needed
4.2 Integrated RE database			SECO/World Bank is supporting in this task
4.3 Database of modelling data	Database giving a detailed insight in input data for modelling purposes	End 2020	Denmark support in basic database, to be coordinated with World Bank and USAID
4.4 Technology catalogue for power generation	Catalogue close to finalisation, launch planned in May 2019	Mid 2019	Denmark support in this task

VIETNAM ENERGY INFORMATION SYSTEM (VEIS)

**Ph.D Nguyen Tuan Anh
Director of Planning Division
Electricity and Renewable Energy Authority (EREA)**

Content

- **Legal basis**
- **Activities in 2018**
- **VEIS Action Plan**
- **Operation Plan in 2019**

LEGAL BASIS

- The Government's Resolution No. 123/NQ-CP dated November 24, 2017 on signing the Financing Agreement of Program for “Energy Sector Policy Support and Enhancement of Access to Sustainable Energy in Countrysides, Mountainous Areas and Islands”
- Financing Agreement No. ACA/2016/037-972 for the “Energy Sector Policy Support Programme to enhance Access to Sustainable Energy in Rural Areas of Vietnam” signed in December 2017
- Indicator 4 of the Financing Agreement: Establishment of Vietnam Energy Information System
- Decision No. 280/QD-TTg dated April 13, 2019 of the Prime Minister on approval of the National Energy Efficiency Programme in the period of 2019 – 2030 (VNEEP) (Section 3, list of prioritized activities)

ACHIEVEMENTS IN 2018

- Report on the performance of Indicator 4 of the Financing Agreement to the Minister
- Draft of the Action Plan for “Establishment of the Vietnam Energy Information System”
- Submission for approval of the Action Plan for development of the Vietnam Energy Information System
- Decision No. 4651/QD-BCT dated December 14, 2018 promulgating the Action Plan for establishment of the Vietnam Energy Information System

VEIS ACTION PLAN – BASIC CONTENTS

- **Period of 2019-2021:**
 - Develop legal framework and information infrastructure
 - Build organizational capacity and raise awareness
 - Test the system and several output products
- **Period of 2022-2024:**
 - Complete the legal basis and deploy investment projects
 - Strengthen capacity development
 - Complete and enhance the quality of output products

ACTIVITIES IN 2019

- Formulate the Circular on establishment of the Energy Information System
 - Participating agencies and relevant responsibilities
 - Input data and sources
 - Data collection forms
 - System outputs
 - Organizational structure/Focal point in charge of system management

ACTIVITIES IN 2019 (continued)

- Report the investment policy for the development of information systems
 - System design
 - Cost estimation
- Initial infrastructure for VEIS
 - Human resource
 - Equipment and facilities

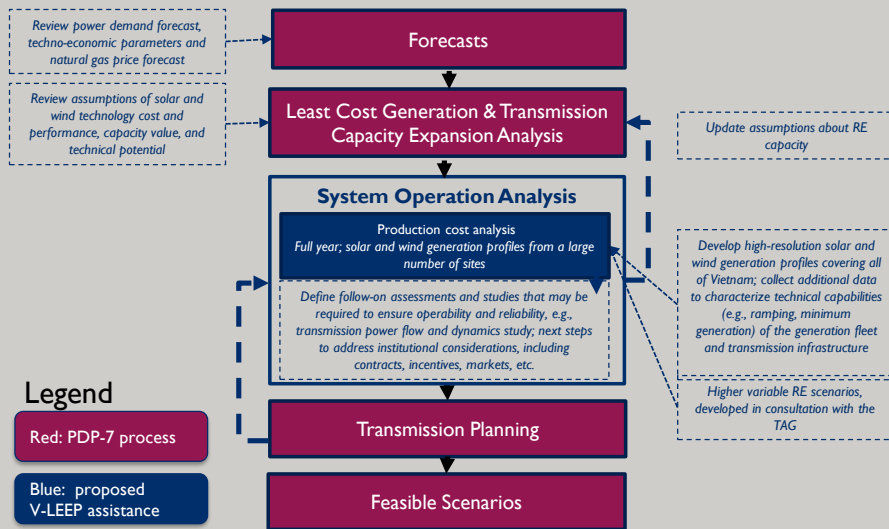
Thank You for Your Attention!



VEPG TWG5 meeting: V-LEEP Support for Production Cost Model (PCM) Training for PDP

Ha Dang Son
April 18, 2019

New for PDP 8: Production Cost Modeling



PCM Brief-Out

Production Cost Modeling Requires Rigorous Training Program

Hands-on training will be provided to Modeling Working Group

Suggested Composition of the Modeling Working Group:

EREA
IEVN
EVN/NLDC
ERAV

USAID V-LEEP/NREL/HNEI

Production cost models can be complicated; our training approach employs regular, hands-on practice sessions with experienced users

PCMI Brief-04c

3

Training Objectives

Members of the modeling working group will be able to:

- Understand the role of production cost modeling in power system planning
- Build and run a validated, production cost model of Vietnam based on PDP 7 revised
- Analyze modeling outputs, such as:
 - Ramping needs
 - Extreme events
 - Transmission congestion
- Modify the model to analyze scenarios from PDP 8's capacity expansion projections; test for reliability
- Perform customized modeling and analyses relevant to each participating institution (EREA, IEVN, NLDC, ERAV)

PCMI Brief-04c

4

Hands-On Training Topics, First 6 Months (Webinar)

Training Topics for Modeling Working Group	Month
Import of power system data from PSS/E Thermal unit modeling	1
Load profiles Hydro data and modeling	2
RE profile generation	3
Reserve products and requirements Multi-phase modeling	4
RE forecast modeling and analysis	5
Model validation	6

PCH Brief-Out

5

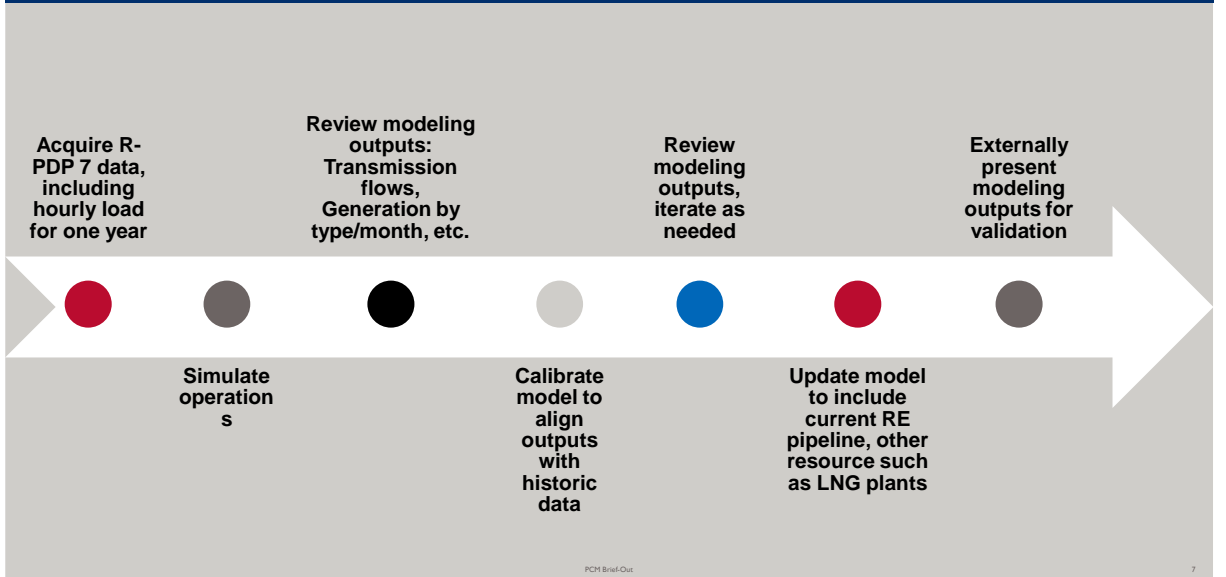
Training Objective (Month 4): Multi-Phase Modeling Training Activities

- Objective: Set up production cost model to be able to model all desired phases
- Steps:
 1. Understand basic phases: Hydro/Storage scheduling, Day-Ahead Market, Intra-Day Market, Real-time Market
 2. Set up individual phases within production cost model
 3. Setup required prosperities within software to link phases
- Advanced topics:
 - Decomposition techniques (e.g., temporal and spatial)
 - Introduce “market inefficiencies”

PCH Brief-Out

6

Model Validation: Process



Thank you!

USAID Vietnam Low Emission Energy Program (V-LEEP)
Component 1: Low Emission Strategy Development for the Energy Sector



Thank You

8



GENERAL STATISTICS OFFICE OF VIETNAM

Overview on energy statistics and
status of GSO and ISTAT project

Hanoi, April 2019



1. Energy Statistics

- **In compliance with the Statistics Law 2015 on National Statistical Indicator System**
- **Conducting on monthly and quarterly basis**
 - Production volume of: Electricity, coal, oil, gas, LPG
 - Export/ import volume: Electricity, coal, oil, gas, LPG
- **Conducting on yearly basis:**
 - Production volume of: Electricity, coal, oil, gas, LPG
 - Export/ import volume: Electricity, coal, oil, gas, LPG
 - Energy consumption/ GDP
 - **Energy balance of some key products**



2. Data sources

- Ministry of Industry and Trade
 - General Department of Vietnam Customs
 - Petroleum, Coal, and Power Corporations
 - Monthly/ yearly enterprise survey
 - Household survey
-



3. Energy Balance Table (EBT)

- From 2010 to 2015: developed by Institute of Energy (IoE) under MOIT
 - From 2016 to date: GSO has built the Energy Balance Table for 2016 -2017
 - Achievements:
 - Developed energy balance table to enable international comparability
 - Categorized final energy consumption following level-2 economic branches
 - Drawbacks
 - Failure to classify products in details
 - Unavailable data source of some items
 - Quality of processing data collected through surveys on energy consumption
 - Energy account/ analysis, EBT-post forecast
-



4. Overview of GSO – ISTAT project

- ✓ Project name: “**Vietnam – Improvement of National Statistical System**” funded by the Government of Italy through the Italian Agency for Development Cooperation (AICS), and implemented by the Italian National Institute of Statistics (ISTAT)
 - ✓ Budget: € 600,000
 - ✓ Time frame: 3 years (2018-2021)
 - ✓ 59 man/week of ISTAT’s technical assistance, 3 site visits to Italy for (1) institutional building (2) energy and environment statistics (3) dissemination of information and information technology
-



4. Overview of GSO – ISTAT project

- ✓ **Objectives of the Project:** To support GSO to enhance its capacity in five areas:
 - ✓ **Energy statistics**
 - ✓ **Environment and climate change statistics**
 - ✓ Institutional building
 - ✓ Dissemination of statistical information
 - ✓ Information technology and communication
-



4. Overview of GSO – ISTAT project

- ✓ **Energy statistics:**
 - ✓ Assessment, survey
 - ✓ Improvement of energy statistics system, production/ dissemination of energy data and indicators system
 - ✓ Further collection, processing and dissemination of figures and characteristic data
 - ✓ Compilation of energy balance table
-



4. Overview of GSO – ISTAT project

- ❖ **Improvement of energy statistics system, production/ dissemination of energy data and indicators system**
 - ❖ Mapping of statistical demand and concept framework
 - ❖ Determination of strategy on strengthening cooperation and exchange data
 - ❖ **Further collection, processing and dissemination of figures and characteristic data**
 - ❖ Integration of data sources
 - ❖ Strategies/ tools of collecting and processing enterprises'/ households' data
 - ❖ Sampling method/ support tools
 - ❖ Development/ modification of survey questionnaires
 - ❖ Dissemination of statistical data on energy via website
-



4. Overview of GSO – ISTAT project

- ❖ **Compilation of energy balance table**
 - ❖ Methodology of developing the energy balance table (in kind/ energy) for energy products
 - ❖ Export/ import data
 - ❖ Energy account and economic indicators on energy
-



Thank you for your attention!
