

## Viet Nam Energy Partnership Group

### Technical Working Group 2 – Energy Efficiency

### Report of the 4<sup>th</sup> Meeting

**Date:** 2 October 2019, 14.00-17.00  
**Location:** Hoa Binh Hotel, 27 Ly Thuong Kiet, Hanoi  
**Time:** 14:00 – 17:00

#### Key agenda points:

1. Updates on implementation of VNEEP3 / National EE Action Plan (NEEAP)
2. Special topics “MRV Framework for VNEEP3” - “Energy Efficiency Database”
3. Preparation of High-Level Meeting / Stakeholder Forum 2019 (Progress Report)

#### Chair and Co-Chair:

- **Mr. Trịnh Quốc Vũ**, Deputy Director General of DEESD/MOIT
- **Ms. Sitara Syed**, Deputy Resident Representative of UNDP

#### 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 – Assessment of TWG progress, challenges and outlook
- 4.2 – Presentations

## Agreed Conclusions and Actions:

Conclusion / Decision	Action
<ul style="list-style-type: none"> <li>The Chair expressed his gratitude for the contribution and the support from TWG 2 members in the last TWG 2 meeting especially for the inputs on the implementation of VNEEP3. He introduced Ms. Sitara Syed, Deputy Resident Representative of UNDP as the new Co-Chair of TWG 2 on Energy Efficiency.</li> <li>The Co-Chair, Ms. Sitara Syed, introduced herself in the new role of the Co-Chair of TWG 2 and highlighted the importance of Energy Efficiency as a key effort to tackle climate change. She looked forward to working with TWG 2 members and to advance the implementation of the Policy Recommendations of the VEPG.</li> </ul>	
<ul style="list-style-type: none"> <li>The Secretariat provided an update on the VEPG activities and further process towards the HLM 2019. The 4<sup>th</sup> meeting of TWG 2 was used to capture inputs from all TWG members for the development of the VEPG Progress Report and the update of the TWG 2 work plan. Based on all inputs from the meeting the Secretariat will prepare the TWG 2 Progress Report and workplan for 2020 in coordination with the Chair and Co-Chair.</li> </ul>	Secretariat Chair and Co-Chair
<ul style="list-style-type: none"> <li>The Chair and Mr. Lê Bá Việt Bách, DEESD, updated the meeting on the DEESD plan for implementation of the VNEEP3 with focus on (i) the development of the National EE Action Plan (NEEAP) for the 2020-2025 period and (ii), the development of an MRV framework for VNEEP 3 and In addition, Sven Ernedal of EVEF/GIZ presented an elaborate set of Energy Efficiency measures that was provided to DEESD/MOIT as an input to develop the draft NEEAP.</li> <li>TWG 2 members reflected on these inputs and provided valuable inputs and comments on various aspects of the NEEP implementation. The need for enhanced donor support coordination was identified as a key challenge and priority work task for TWG 2. The VEPG Secretariat offered to support this coordination efforts with mapping efforts and coordination facilitation.</li> </ul>	Chair and Co-Chair Secretariat TWG members
<ul style="list-style-type: none"> <li>TWG 2 members further reflected on presentations by Mr. Le Ba Viet Bach/DEESD on the MRV Framework for VNEEP and by experts from the Danish Energy Partnership Programme (DEPP/VETS) on the Energy Efficiency Database. The discussion delivered very relevant information and provided guidance to DEESD for the further VNEEP 3 implementation and for the support of the TWG 2 Policy Recommendations.</li> </ul>	TWG members
<ul style="list-style-type: none"> <li>The Secretariat presented the status of implementation of the TWG 2 Policy Recommendations and collected inputs from all participants on 'Progress', remaining 'Challenges', 'Outlook' for the work of TWG 2 as well as 'Support' from development partners and sector stakeholders.</li> <li>TWG members provided valuable comments and inputs (<i>see Annex 4.1</i>) which will be reflected in the draft TWG 2 Progress Report to be developed</li> </ul>	Secretariat Chair and Co-Chair TWG members

<p>by the Secretariat in coordination with the Chair and Co-Chair and be submitted to the Steering Committee and HLM 2019.</p>	
<ul style="list-style-type: none"> <li>• The Chair and Co-Chair expressed sincere thanks to TWG 2 members for the fruitful discussion on the review of the TWG 2 progress and inputs to the Action Plan for the period 2020-2025. The Chair underlined the need for the development of the MRV framework to ensure the success of the VNEEP 3 implementation. The Chair and Co-Chair with support of the Secretariat will incorporate the comments and suggestions into the draft Progress Report of the TWG to the HLM.</li> <li>• The Secretariat will share all presentations shortly after the meeting and the Report of the Meeting upon approval by the Chair and Co-Chair.</li> </ul>	<p>Chair and Co-Chair Secretariat</p>

## ANNEX 1 – AGENDA

### 13.30-14.00 Registration

### 14.00-14.10 Opening remarks, overview of the agenda

*Mr. Trịnh Quốc Vũ / Ms. Sitara Syed*

- Introduction of Ms. Sitara Syed as new Co-Chair of TWG 2

### 14.10-15.00 Update on current Energy Efficiency Developments

- *DEESD/MOIT*: Introduction and update on current developments
- *EVEF/GIZ*: The development of the National EE Action Plan (NEEAP) – discussion of inputs to first annual action plan
- *Plenary*: Q&A and discussion, feedback from TWG members on priorities for the NEEAP and development partner support activities

### 15.00-15.40 Focus Topic MRV Framework for VNEEP and Energy Efficiency Database

- *DEESD/MOIT*: Introduction - need for a Measuring, Reporting, Verification (MRV) system in the context of VNEEP 3 implementation
- *DEPP/VETS*: Input on the development of the EE Database
- Q&A and plenary discussion

### 15.40-15.55 Coffee Break

### 15.55-16.50 VEPG High-Level Meeting 2019 - TWG 2 Progress and Future Work

- *Secretariat and Chair/Co-Chair*: Update on the HLM 2019 planning and draft TWG 2 Progress Report (monitoring/implementing the TWG Policy Recommendations).  
*Plenary*: Discussion and feedback on achieved progress, remaining challenges and future topics for TWG 2 work.

### 16.50-17.00 Closing of the meeting

*Mr. Trịnh Quốc Vũ / Ms. Sitara Syed*

## ANNEX 2 Participants:

### Co-Chairs

- **Mr. Trịnh Quốc Vũ**, Deputy Director General of DEESD/MOIT
- **Ms. Sitara Syed**, Deputy Resident Representative UNDP

### Participants

- **Mr. Hoàng Văn Tâm**, DEESD, MOIT
- **Mr. Lê Bá Việt Bách**, DEESD, MOIT
- **Mr. Phạm Văn Tấn**, MONRE
- **Mr. Đinh Gia Nghiêm**, MOST
- **Mr. Koen Duchateau**, EU Delegation
- **Ms. Trần Thùy Dương**, EU Delegation
- **Mr. Antoine Vander Elest**, EU Delegation
- **Mr. Jakob Stenby Lundsager**, Danish Energy Agency
- **Mr. Trần Hồng Việt**, Denmark
- **Ms. Trần Thị Thanh Tâm**, The Netherlands
- **Mr. Jay Malette**, United Nations Development Programme (UNDP)
- **Ms. Vũ Thị Thu Hằng**, United Nations Development Programme (UNDP)
- **Ms. Lê Thị Thanh Thảo**, United Nation Industrial Development Organization (UNIDO)
- **Ms. Phạm Thị Nga**, United Nations Industrial Development Organization (UNIDO)
- **Ms. Jeremy Gasc**, French Development (AFD)
- **Mr. Vũ Quang Đăng**, Asian Development Bank (ADB)
- **Mr. Âu Minh Tuấn**, Asian Development Bank (ADB)
- **Mr. My Ton**, Asian Development Bank (ADB)
- **Mr. Pil-Bae Song**, Asian Development Bank (ADB)
- **Ms. Tạ Hương**, Global Green Growth Institute (GGGI)
- **Mr. Daniele Paladini**, Italian Agency for the Development Cooperation (AICS)
- **Mr. Sven Enerdal**, GIZ
- **Mr. Nguyễn Đỗ Thuýên**, GIZ
- **Ms. Nguyễn Hồng Ngọc Trang**, GIZ
- **Ms. Trần Hà Anh**, GIZ
- **Mr. Chu Bá Thi**, World Bank
- **Mr. Julian Schuetz**, KfW
- **Ms. Đỗ Thị Bích Ngọc**, KfW
- **Ms. Lê Thị Ngọc Bích**, UK Embassy
- **Mr. Henri Wasnick**, Institute of Energy
- **Mr. Yannick Millet**, UNDP/MOC Project
- **Ms. Ngô Hồng Hạnh**, KOICA
- **Ms. Phạm Cẩm Nhung**, WWF – Viet Nam
- **Mr. Simon James**, WWF – Viet Nam
- **Mr. Nguyễn Quốc Khánh**, Independent Energy Expert
- **Mr. Dương Chí Công**, Viet Nam Technology Solutions (VETS)
- **Mr. Hoàng Hải**, Viet Nam Technology Solutions (VETS)
- **Mr. Nguyễn T. Như Văn**, Electric Power University

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
<p><b>Opening remarks, overview of the agenda</b></p>	<ul style="list-style-type: none"> <li>• <u>Mr. Trịnh Quốc Vũ, TWG 2 Chair</u>, expressed his gratitude for the contribution and the support from TWG 2 members in the last TWG 2 meeting especially for the inputs on the implementation of VNEEP 3. He introduced Ms. Sitara Syed, Deputy Resident Representative of UNDP as the new Co-Chair of TWG 2 on Energy Efficiency.</li> <li>• <u>The Co-Chair, Ms. Sitara Syed</u>, introduced herself in the new role of the Co-Chair of TWG 2 and highlighted the importance of Energy Efficiency as a key effort to tackle climate change. She looked forward to working with TWG 2 members and to advance the implementation of the Policy Recommendations of the VEPG.</li> <li>• <u>The Secretariat</u> introduced the agenda of the meeting, followed up on the main outcomes and discussions of the 3<sup>rd</sup> meeting of TWG 2 in April 2019 and introduced the planning for the VEPG in 2019 including the planning for the 3<sup>rd</sup> High-Level Meeting (HLM) and Stakeholder Forum of the VEPG that is tentatively scheduled for 10 December 2019 (<i>see presentation in Annex 4.2</i>).</li> </ul>
<p><b>Update on current Energy Efficiency Developments</b></p>	<ul style="list-style-type: none"> <li>• <u>The Chair</u> underlined that the launch of VNEEP 3 marked a milestone for EE activities in Vietnam’s society and economy. The country started EE activities in 2010 with the introduction of a comprehensive EE legal framework. The approval of VNEEP 3 served as an important step for the implementation of EE law, promoting EE solutions to meet the target of 8-10% reduction on energy consumption of the economy through mobilization of domestic and international.</li> <li>• <u>The Chair</u> shared the DEESD plan for implementation of the VNEEP with focus on: (i) the development of the NEEAP for the 2020-2025 period and (ii) the development of the MRV framework for VNEEP 3.</li> <li>• <u>Mr. Lê Bá Việt Bách, DEESD</u> delivered a presentation on updates on the VNEEP 3. DEESD is now in consultation with Ministries and agencies to establish the VNEEP 3 Steering Committee. The draft Action Plan for the VNEEP 3 (NEEAP) is in progress of consulting with ministries and departments for comments and finalization. DEESD also highlighted the need to establish evaluation indicators for the VNEEP 3. For the 2020-2025 period, both ADB and World Bank are supporting DEESD on developing provincial Action Plans for several provinces.</li> </ul> <p>The TWG 2 members reflected on Mr. Bach’s presentation:</p> <ul style="list-style-type: none"> <li>• <u>World Bank</u> reiterated their commitment to support VNEEP 3 and would work together with DEESD and ADB to discuss support activities and to avoid overlap.</li> </ul> <p>World Bank also shared information about their 3 projects: (i) support for EE solutions for enterprises to improve financing of equipment of</p>

around 100 million USD. WB would like to cooperation here with further DPs, and (ii) a guarantee facility to mobilize 75 milion USD for EE loans (implemented by GCF) which is expected to be start activities next year; and an (iii) a 8.3 milion USD TA grant for training, capacity building and regulatory framework development.

- The Chair agreed on the need for harmonization and coordination of support in the energy efficiency sector. A matrix of support activities from donors will be developed and updated from time to time to avoid overlapping. He also asked the participants to complete the DEESD survey on EE for their report to the minister.

The Secretariat offered support for the coordination and mapping of DP activities.

- ADB updated on their support for VNEEP 3 implementation, e.g. on the development of ESCO regulations, their work with the MOC on the standards for public lighting, support for developing EE Action Plans on provincial level and conducting energy survey to identify the areas for energy efficiency in both central and local level.
- The Danish Embassy updated the meeting on the completion of the second phase of the Danish Energy Programme (DEPP) in June 2020. The next phase will be implemented from mid-2020 to 2025.
- UK shared information about their Low Carbon Growth Programme which has finished the inception phase. The proposed intervention under the programme was endorsed. UK would further coordinate with DEESD regarding support for VNEEP 3.

EVEF/GIZ, Mr. Sven Ernedal, delivered a presentation on the development of the draft National EE Action Plan (NEEAP). The presentation summarized the consultation input on 49 specific EE actions provided to DEESD/MOIT for the development of the NEEAP. Furthermore, it summarized the discussion at the consultation with provincial governments at a workshop in Da Lat in July 2019 (*see presentation in Annex 4.2*).

TWG 2 members reflected on EVEF/GIZ's presentation:

- Members inquired about the inclusion of end-users, start-up communities and other smaller stakeholders in VNEEP 3: The Chair further elaborated that the EE law and the VNEEP includes EE solutions for all kind of the energy users, including designated energy users, the end-users and households. Appropriate measures and legal framework have been designed for each type of user. Also, appropriate activities for various types of energy users will be discussed and included later in the NEEAP for the period 2020-2025.
- Members indicated that there should be a link/integration between EE projects and climate change and sustainable development projects for easier implementation at the local level. Furthermore, there is the need



	<p>to revise Decree 21 to define criteria and guidelines for EE projects that will be funded by EE or Environmental protection funds.</p> <p>The <u>Chair</u> informed that the EVEF/GIZ project is supporting DEESD on reviewing Decree 21 and that DEESD will consult with other DPs and agencies on the planned revision.</p> <ul style="list-style-type: none"> <li>• The representative from <u>MOST</u> suggested the establishment of a long-term public institute to conduct research on EE solutions and standards. The institute would be funded by state budget and human resources will be mobilized from MOIT. He emphasized the importance of EE awareness raising for companies, organizations and individuals beside law enforcement.</li> <li>• Though taking note of MOST's recommendations, the <u>Chair</u> referred to the decision of the government to streamline and reduce the number of focal points in the government mechanism. Moreover, it would require a decree/decision from the government/ PM for the establishment of such an institute. DEESD will take the suggestion into consideration and report to the VNEEP 3 Steering Committee once the committee is established.</li> </ul> <p>The <u>Chair</u> further outlined that increasing awareness and responsibility of companies and the society in general should be based on the two mechanisms including law (legal framework and law enforcement) on EE and an incentive mechanism through an open finance scheme to attract support from the central, localities, and the DPs for the implementation of EE measures in many different sectors.</p> <ul style="list-style-type: none"> <li>• <u>MOET</u> introduced itself as a focal point for public awareness raising, especially youth education about VNEEP 3. MOET has designed and integrated VNEEP 3 components into school curricula from kindergarten to high school level. The <u>Chair</u> added to this information on the promotion program for EE equipment: energy labelling and energy performance standards.</li> <li>• Members further suggested that EVN should consider distributing EE equipment to reduce peak loads as they have the access to all end users.</li> <li>• <u>The Chair</u> also agreed on information sharing about the results of the recent EE survey/study on textile industry with due respect to confidentiality agreements with the companies involved.</li> </ul>
<p><b>Focus Topic MRV Framework for VNEEP and Energy Efficiency Database</b></p>	<p><u>Mr. Lê Bá Việt Bách/DEESD</u> delivered a presentation on the MRV Framework for VNEEP and Energy Efficiency Database. With the objective to ensure the implementation and to measure the performance of VNEEP 3, DEESD indicated the need to develop an MRV framework and relevant energy statistics data (<i>see presentation in Annex 4.2</i>):</p> <ul style="list-style-type: none"> <li>• The MRV framework will require inputs from macro energy statistics and survey results from key energy users as well as reports from industrial sectors. In the past, DEESD could collect comprehensive labeling data from the enterprises. However, from 2016, the government</li> </ul>

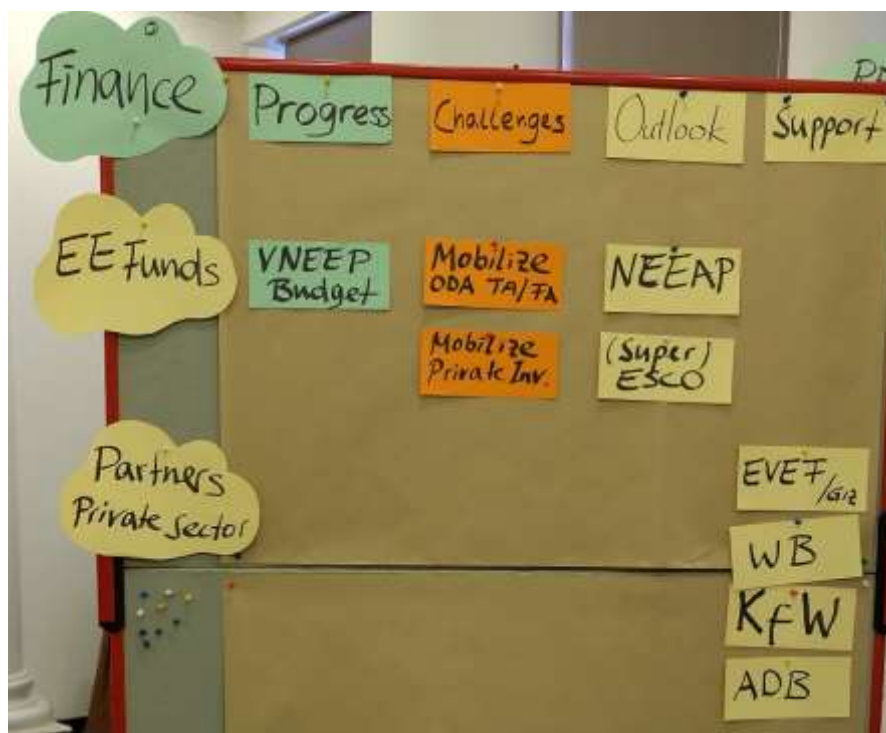
	<p>changed the declaration procedures for EE appliances, DEESD can only collect data on EE appliances from surveys. This should be clarified in the MRV framework.</p> <ul style="list-style-type: none"> <li>• DEESD is discussing with ADB regarding technical assistance on MRV development for VNEEP3. DEESD will develop a concept note on MRV framework support needed.</li> <li>• Due to the interlinkage between the MRV and the NEEAP, DEESD is eager to link all support processes on both topics well together.</li> <li>• Responding to the question on the link between the EE database to the process of establishing the Vietnam Energy Information System (VEIS), the Chair emphasized the VEIS is a broad database which will take time to develop while the EE database will serve particularly for MRV purposes. The EE database will become part of the VEIS in the long-term.</li> </ul> <p><u>DEPP/VETS</u> delivered inputs on the development of the EE Database data (see presentation in Annex 4.2):</p> <ul style="list-style-type: none"> <li>• VETS is working on updating the EE database webpage hosted by MOIT. The objective of the webpage is to provide tools for enterprises to develop their plan and reports, conduct auditing as well as to provide tools/a database for DOITs to make reports to MOIT.</li> <li>• The page can support MOIT to collect statistics of energy growth and emission indicators as well as update list of KEUs submitted to PM. The website is <a href="http://dataenergy.vn">http://dataenergy.vn</a></li> </ul> <p>DEPP/VETS is working with DEESD to design the database page to be user-friendly. The site is under maintenance and revision to add more tools on the energy benchmarking activities in the future.</p> <ul style="list-style-type: none"> <li>• <u>EECB/MOC</u> (Energy Efficiency in Buildings Project) updated the meeting about their upcoming consultation workshop to share the first results/findings of the project. He also indicated the gap between technical and financing aspects of the project and underlined the need to clarify both technical and financial aspects as well as develop a monitoring framework for EE projects.</li> </ul> <p>Further inputs and reflections of <u>TWG 2 members</u>:</p> <ul style="list-style-type: none"> <li>• Members suggested for improved quality control of EE projects/measures in the future NEEAP, that EE projects should address 3 questions on technical feasibility, financing capability and profitability. Depending on the size of the projects, appropriate support can be identified and granted. Once the projects meet these criteria, they can finance themselves.</li> <li>• Taking note of EECB/MOC and further member suggestions, <u>the Chair</u> further shared that only DEUs in 6 industrial sectors have to make compulsory energy auditing reports to the local authorities and implement EE measures. Therefore, without support from the</li> </ul>
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	<p>government and an incentive mechanism, little achievement on EE solution application for enterprises in other sectors can be achieved.</p> <ul style="list-style-type: none"> <li>• <u>ADB</u> informed the meeting about their support for MOIT to design the EE fund and ESCO fund. ADB will invite MOIT to participate in the GMS Workshop to discuss with other countries in the region on the development of these funds. Afterwards, ADB would follow-up by organizing a workshop in Vietnam and invite stakeholders in Vietnam to participate and discuss on these issues.</li> </ul> <p>To support VNEEP 3, ADB is recruiting a consultant firm to develop EE action plans for 6 cities (Can Tho, Da Nang, Hai Phong, Ha Noi, Quang Nam and Quang Ninh). The consultant will draft Action Plans which will serve as a sample for other cities.</p> <p>Regarding new EE projects, ADB is considering a project for EE in buildings.</p>
<p><b>VEPG High-Level Meeting 2019 - TWG 2 Progress and Future Work</b></p>	<ul style="list-style-type: none"> <li>• The Secretariat presented the status of implementation of the TWG 2 Policy Recommendations and collected inputs from all participants on 'Progress', remaining 'Challenges', 'Outlook' for the work of TWG 2 as well as 'Support' from development partners and sector stakeholders.</li> <li>• TWG members provided valuable comments and inputs (<i>see Annex 4.1</i>) which will be reflected in the draft TWG 2 Progress Report to be developed by the Secretariat in coordination with the Chair and Co-Chair and be submitted to the Steering Committee and HLM 2019.</li> </ul>
<p><b>Closing of the meeting</b></p>	<p>The Chair and Co-Chair concluded the meeting with the following remarks:</p> <ul style="list-style-type: none"> <li>• The Chair and Co-Chair expressed sincere thanks to TWG 2 members for the fruitful discussion on the review of the TWG 2 progress and inputs to the Action Plan for the period 2020-2025. The Chair underlined the need for the development of the MRV framework to ensure the success of the VNEEP 3 implementation. The Chair and Co-Chair with support of the Secretariat will incorporate the comments and suggestions into the draft Progress Report of the TWG to the HLM.</li> <li>• The Secretariat will share all presentations shortly after the meeting and the Report of the Meeting upon approval by the Chair and Co-Chair. The next regular TWG meeting will be organized in early 2020.</li> </ul>

## ANNEX 4.1 Assessment of TWG Progress, Challenges and Outlook

Policy Framework	Progress	Challenges	Outlook	Support
Establish Legal Framework	VNEEP approved	Provincial Plans	NEEAP development	EVEF/GIZ WB V-LEEP
Sector Targets	Industry Sector Targets	Sectoral Plans	Sectoral Implement.	UNDP UNIDO KOICA ADB UK

Institution Framework	Progress	Challenges	Outlook	Support
Implementing Monitoring Reporting	VNEEP approved	EE Database MRV System	NEEAP Development Sectoral Implement.	EVEF/GIZ DEN WB
Coordination Mechanism	Dep. PM steering c	Provincial Plans Establish EE Networks Linkage w/ VETs Data collection from other plants	Steering Mech.	ADB UK UNDP UNIDO KfW IFC





## **ANNEX 4.2 – PRESENTATIONS**





## Viet Nam Energy Partnership Group Technical Working Group 2 – Energy Efficiency

4<sup>th</sup> Meeting – 2 October 2019  
Hoa Binh Hotel, Ha Noi

### Key Objectives of the Meeting

- **Update on the implementation of the VNEEP 3 and National EE Action Plan (NEEAP)** and TWG 2 member activities
- **Focus topic:** MRV Framework for energy efficiency and EE Database
- **Review of TWG 2 activities and progress** on implementation of VEPG Policy Recommendations in preparation of VEPG High-Level Meeting 2019
- **Outlook – priorities for work of TWG 2** in the field of energy efficiency and support needs for the future

## Agenda

Time	Subject
14.00-14.10	<b>1. Opening remarks, overview of the agenda</b> <ul style="list-style-type: none"> <li>Mr. Trịnh Quốc Vũ/ Ms. Sitara Syed (introduction of new TWG Co-Chair)</li> <li>Brief Secretariat update on VEPG activities</li> </ul>
14.10-15.00	<b>2. Update on current Energy Efficiency developments</b> <ul style="list-style-type: none"> <li><u>DEESD/MOIT Chair</u>: Introduction and update on current developments</li> <li>EVEF/GIZ: Development of the NEEAP – drafting the first NEEAP for 2020</li> <li><u>Plenary</u>: Q&amp;A and member feedback and updates on partner support activities</li> </ul>
15.00-15.40	<b>3. Focus topic MRV Framework for VNEEP and Energy Efficiency Database</b> <ul style="list-style-type: none"> <li><u>DEESD/MOIT</u>: Introduction – need for a MRV system in the context of VNEEP implementation</li> <li><u>Denmark</u>: Input on the development of the EE database</li> <li><u>Plenary</u>: Q&amp;A and plenary discussion</li> </ul>
15.40-15:55	<b>Coffee/tea break</b>
15.55-16.50	<b>4. VEPG High-Level Meeting 2019 - TWG 2 progress and future work</b> <ul style="list-style-type: none"> <li><u>Secretariat</u>: Update on the HLM 2019 planning and presentation of the draft TWG 2 Progress Report (monitoring/implementation the TWG Policy Recommendations)</li> <li><u>Plenary</u>: Discussion and feedback on achieved progress, remaining challenges, future work/priorities of TWG 2</li> </ul>
16.50-17.00	<b>5. Conclusions and closing remarks</b> <ul style="list-style-type: none"> <li>Mr. Trịnh Quốc Vũ/ Ms. Sitara Syed</li> </ul>

## Top 1: Opening and Introduction

### **TWG 2 Chair:**

- Mr. Trịnh Quốc Vũ, Deputy Director General, Department of Energy Efficiency and Sustainable Development, DEESD/MOIT*

### **New TWG 2 Co-Chair:**

- Ms. Sitara Syed, Deputy Resident Representative UNDP Viet Nam*



## Top 1: Secretariat Report on VEPG Activities

### **VEPG Secretariat:**

- *Mr. Rainer Brohm, International Coordinator*

## Follow up on 3<sup>rd</sup> TWG 2 meeting (April 2019)

### **Approved VNEEP 3**

- Presentation and discussion of approved Viet Nam Energy Efficiency Programme 3 (VNEEP 3)
- Next step: Implementation/NEEAP

### **Focus topic Benchmarking EE**

- Experience with benchmarking in the sugarcane, cement and textile sectors (USAID/ V-LEEP)



## Follow up on 3<sup>rd</sup> TWG 2 meeting (April 2019)

### Focus topic Energy Efficiency in buildings

- Experience with Energy Efficiency projects in the building sector (UNDP/GEF, GIZ/AFD/ADEME)



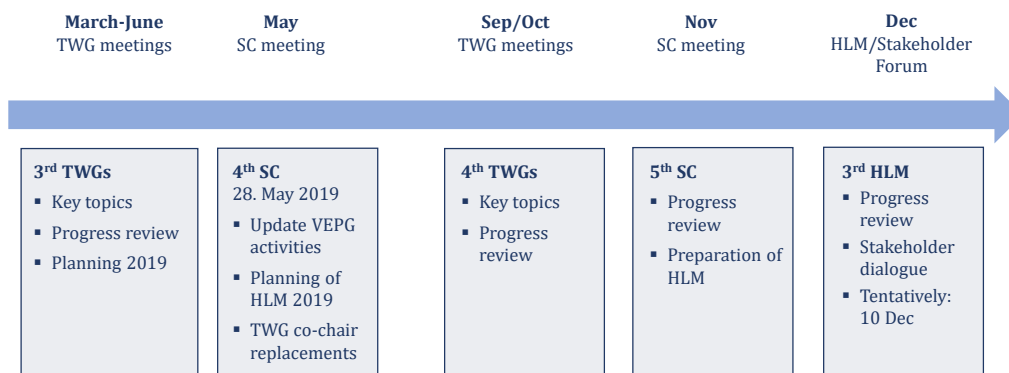
### Discussed recommendations for:

- Government (law enforcement, capacities, EE in public buildings, incentive schemes, monitoring/verifying, strategy, etc.)
- Private sector/academia (EE design and construction practices, energy audits, contract implementation, awareness of customers, university curriculum, etc.)













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## VEPG – Timeline for 2019



## TWG's 4<sup>th</sup> Round of Meetings – Overview

TWG	3 <sup>rd</sup> Meeting		Key Topics/Highlights
<b>TWG 1 RE</b> 		23. Sep 2019	<ul style="list-style-type: none"> <li>• Updates on <b>current policy processes</b> (Solar FIT 2, RTS programme, bioenergy FIT etc.)</li> <li>• Focus topic: <b>RE grid integration</b> (Grid Assessment in Southern Vietnam)</li> </ul>
<b>TWG 2 EE</b> 		2. Oct 2019	<ul style="list-style-type: none"> <li>• Presentation and discussion on <b>draft National EE Action Plan (NEEAP)</b></li> <li>• Discussion of <b>MRV Framework for EE/VNEEP and EE Database</b></li> </ul>
<b>TWG 3 ESR</b> 		12. Sep 2019	<ul style="list-style-type: none"> <li>• Report on first half year of <b>VWEM operation</b></li> <li>• Update on <b>DirectPPA process</b> and pilot scheme</li> <li>• Discussion on <b>priority topics / scope-of-work for TWG 3</b> (competitive power market)</li> </ul>
<b>TWG 4 EA</b> 		3. Oct 2019	<ul style="list-style-type: none"> <li>• Progress and Challenges in <b>Rural Electrification</b></li> <li>• Discussion of <b>Energy Access projects</b> in different VN regions</li> </ul>
<b>TWG 5 D&amp;S</b> 		Nov 2019	<ul style="list-style-type: none"> <li>• Discussion on <b>VEIS Circular and Pre-Feasibility Study</b></li> <li>• Discussion of approved outline for <b>PDP 8</b></li> <li>• Discussion of <b>Energy Balance 2017</b></li> </ul>

## High-Level Meeting 2019 – Planning



Proposed date: **10 December 2019**

### Concept of 3<sup>rd</sup> VEPG HLM and 1<sup>st</sup> VEPG Stakeholder Forum:

#### 3<sup>rd</sup> VEPG HLM:

- **Progress review** regarding VEPG Policy Recommendations and TWG work since HLM 2018
- Outlook 2020 and **guidance of VEPG Chairs** for TWGs and Secretariat

#### 1<sup>st</sup> VEPG Stakeholder Forum:

- **Exchange of sector stakeholders** on „hot“ topics (progress/best-practice in VN/international, challenges, etc.)
- Focus topics:
  - **Strategic Sector Planning** (e.g. PDP 8, Party Energy Strategy, sector scenarios/energy mix of the future)
  - **Energy Efficiency** (VNEEP 3, technical solutions, financing, international best practice, industry perspective, etc.)
  - **Integration of Renewable Energy / Distributed RE**

# VEPG Partner Support – DP Project Survey

**SUPPORT OF CURRENT DONOR AND INTERNATIONAL EFFORT IN VIETNAM ENERGY SECTOR**

ID	PROJECT TITLE	DESCRIPTION & STATUS	YEAR OF PROJECT	TOTAL COST	REMAINING COST	IP	FE	EPC	O&M	OT	OTH
001	Power Transmission and Distribution Project - North	Investment for transmission lines for electricity generation and distribution (Gross Capacity: 2000 MW). (Status: Implementation)	2014-2019	2000 MW	1000 MW						
002	Power Transmission and Distribution Project - North	The investment for transmission lines for electricity generation and distribution (Gross Capacity: 2000 MW). (Status: Implementation)	2014-2019	2000 MW	1000 MW						
003	Power Transmission and Distribution Project - North	The investment for transmission lines for electricity generation and distribution (Gross Capacity: 2000 MW). (Status: Implementation)	2014-2019	2000 MW	1000 MW						
004	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						
005	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						
006	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						
007	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						
008	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						
009	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						
010	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						
011	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						
012	Construction of 1100 MW Solar Power Generation Plant (North)	The project consists of 1100 MW solar power generation capacity at 100 MW per MWp. (Status: Implementation)	2014-2019	1100 MW	1100 MW						

- Overview of VEPG partner projects in the energy sector (<http://vepg.vn/resources/vepg-documents/>)
- 80 partner projects with key information included
- **New survey update** running in **September 2019**

# VEPG Partner Support – Legal Database

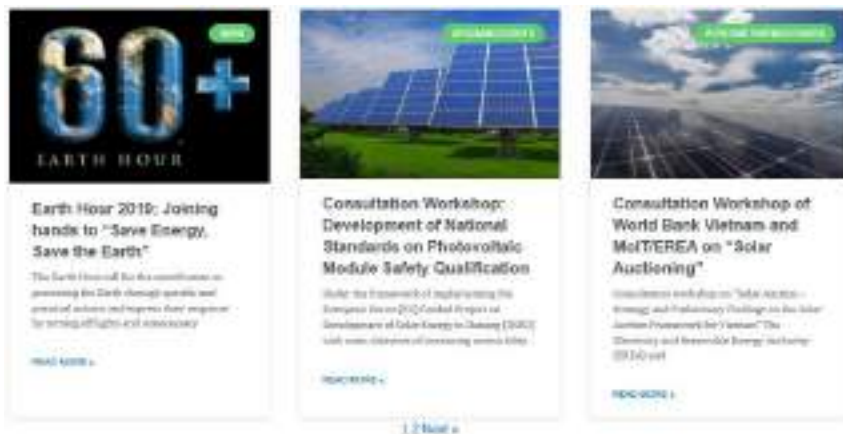
**RECENT LEGAL DOCUMENTS**

- MOIT Decision 2002/QĐ-MCT on the Approval of the Rooftop Solar PV Promotion Program**
  - Effective date: 03/07/2018
  - Legislative type: Decision
  - Signer: MOIT Minister Trần Tuấn Anh
  - DOWNLOAD FOR DETAILS >
- EVN Guideline 3608/VN-ED on Settlement of Outstanding Issues on Rooftop Solar Power**
  - Effective date: 02/07/2018
  - Legislative type: Guidelines
  - Signer: Vice President of EVN Mr. Giang Lâm
  - DOWNLOAD FOR DETAILS >
- MOIT Report 0898-CBT on the Implementation Progress of Power Projects in the Revised PDPF**
  - Effective date: 04/04/2018
  - Legislative type: Report
  - Signer: MOIT Vice Minister Hoàng Quốc Việt
  - DOWNLOAD FOR DETAILS >
- Gov Decree 2708/ND-CP Elaboration of the Planning Law**
  - Effective date: 07/05/2018
  - Legislative type: Decree
  - Signer: Prime Minister Nguyễn Tấn Dũng
  - DOWNLOAD FOR DETAILS >
- MOIT Circular 16/2018/TT-BCT amending Circular 16/2017/TT-BCT on Standardized PPA for Solar Power projects**
  - Effective date: 25/04/2018
  - Legislative type: Circular
  - Signer: MOIT Minister Trần Tuấn Anh
  - DOWNLOAD FOR DETAILS >
- Consultation on Draft Decision on the new Solar FIT**
  - Effective date: 15/04/2018
  - DOWNLOAD FOR DETAILS >

- **Legal Database** online and constantly expanding
- **+30 legal documents** (VN and EN versions).
- PM Decisions, MOIT documents, Consultation Documents, EVN guidelines, etc.

➤ [www.vepg.vn](http://www.vepg.vn)

## VEPG Partner Support – Information Sharing



- VEPG Partner events are featured on the website
- +25 workshops and events featured on website and information disseminated to members via TWG email groups in last 10 months.
- Including e.g. MOIT **Earth Hour events** and support of public **consultation on Solar FIT 2**.

## Top 2: Update on Energy Efficiency Developments

### **DEESD/MOIT: Introduction and general update**

- *Mr. Trịnh Quốc Vũ, Deputy Director General, DEESD/MOIT*

[DEESD presentation](#)

### **EVEF/GIZ: The development of the National EE Action Plan**

- *Mr. Sven Ernedal, GIZ, Head of Project 4E/EVEF*

[EVEF/GIZ presentation](#)

### **Q&A and plenary discussion**

- *Feedback from TWG 2 members on priorities for the NEEAP and related Development Partner/Sector Stakeholder support*

## Top 3: Focus Topic – MRV Framework for EE

### **DEESD/MOIT: Introduction and need for an MRV Framework for EE**

- *Mr. Trịnh Quốc Vũ, Deputy Director General, DEESD/MOIT*

*DEN presentation*

### **Denmark (DEPP/VETS): The development of the Energy Efficiency Database**

- *Representative of VETS Consultants*

### **Discussion / Q&A**

- *Q&A and plenary discussion*

## Tea Break

## Top 3: Progress Review and Outlook for TWG 2 / Preparation of HLM 2019

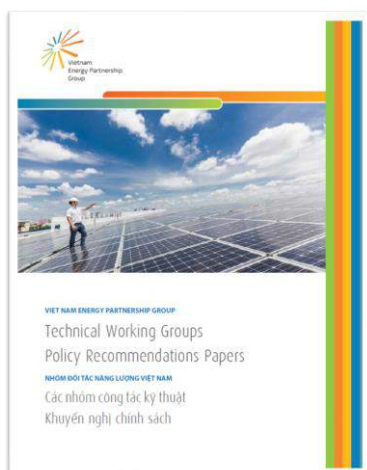
### Progress Review – TWG 2 Policy Recommendations

- Progress on the VEPG / TWG 2 Policy Recommendations
- Review of work of TWG 2

### Challenges and Outlook – Future Scope-of-Work and Priority Topics for TWG 2

- Challenges in the field of energy efficiency
- Priority topics and workplan for TWG 2 – What is the scope-of-work for TWG 2 in the coming year?

## VEPG 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** were asked to focus work on supporting the implementation of the Policy Recommendations.
- **Monitoring Matrix** with information on 40 recommendations with timeline, indicators, progress status and DP support developed for each TWG.
- **Ongoing evaluation/assessment** of progress during current phase of 4<sup>th</sup> round of TWG meetings (September/October)
- Presentation of **Progress Report for HLM 2019** (submitted for SC review before next SC meeting (November 2019).

## TWG 2 Policy Recommendations – Monitoring of Progress

Topic 1: Policy framework for energy efficiency Enhance and strengthen the legal framework for Energy Efficiency in general and for ESCO models in particular.				
Establish Energy Efficiency (EE) with VNEEP 5 as a priority topic and strengthen the respective legal framework including incentive and sanctioning mechanisms across all sectors, social activities in a tailor-made approach for the specific target groups.	Short-Term (end of 2019):	Implementation of VNEEP 5 and review of relevant policy instruments, sub-law decrees, etc.	Partially Completed	VNEEP5 approved by PM (13.3.19) Ongoing: Development of Action Plan (NEEAP)
	Medium-Term (end of 2020):	Include specific and mandatory EE targets for key energy users/sectors.	Partially Completed	VNEEP5 approved by PM (13.3.19) Ongoing: Development of Action Plan (NEEAP)
	Long-Term (post-2020):	Include specific and owned EE targets for Ministries, sectors, provinces and cities.		

## TWG 2 Policy Recommendations – Monitoring of Progress

Topic 2: Institutional framework for energy efficiency and enforcement Enhance and strengthen the institutional framework for Energy Efficiency for improved implementation and enforcement.				
Implement VNEEP with a robust monitoring and reporting system with greater transparency that helps to track the progress, facilitate prioritization, and provide incentives for taking action by concerned stakeholders.	Short-Term (end of 2019):	Implement VNEEP 5 and review relevant policy instruments, sub-law decrees, etc.	Partially Completed	VNEEP5 approved by PM (13.3.19) Ongoing: Development of Action Plan (NEEAP)
Establish coordination mechanisms such as a Government Steering Board for EE on Deputy Prime Minister level to facilitate inter-ministerial decision making and strengthen implementation, enforcement and monitoring.	Short-Term (end of 2019):	Establish a Government Steering Board for EE on Dep. PM level	Partially Completed	VNEEP5 approved by PM (13.3.19) Ongoing: Development of Action Plan (NEEAP)



## TWG 2 Policy Recommendations – Monitoring of Progress

→ Financing energy efficiency					
Theme 2	Develop a supportive financing and investment to mobilize domestic and international resources and ensure long-term stable funding and access to financing for energy efficiency.				
	<b>Establish innovative and inclusive financing mechanisms</b> (including a dedicated Energy Efficiency fund to mobilize all resources from national and international institutions and public and private sectors for EE implementation and ensure long-term and stable funding support to EE.	<b>Short-Term</b> (end of 2019):	Develop dedicated Energy Efficiency Fund	<b>Ongoing</b>	VNEEPS approved by PM (13.3.13) Ongoing: Development of Action Plan (NEEAP)
	<b>Create an investment environment that attracts and leverages private and public sector resources for EE measures (in particular, public funding of pilot initiatives and new efficiency technologies, partnerships with international and national financial institutions and the private sector, implementation of designed financing mechanisms)</b>	<b>Medium-Term</b> (end of 2020):	Review existing financing mechanisms and financing framework and develop new solutions/partnerships.	<b>Ongoing</b>	VNEEPS approved by PM (13.3.13) Ongoing: Development of Action Plan (NEEAP)

## TWG 2 Policy Recommendations – Monitoring of Progress

→ Technical capacity and awareness raising					
Task 4	Raise awareness and build technical capacities of key public and private sector target groups as well as end users to increase demand for EE solutions and activities.				
	<b>Raise awareness and build capacities of key target groups</b> (including energy managers, private sector and ESCOs).	<b>Medium-Term</b> (end of 2020):	Develop and implement capacity measures for EE stakeholders/target groups	<b>Ongoing</b>	Ongoing: Development of Action Plan (NEEAP) Development of capacity building measures (EU/GIZ)
	<b>Show updates on EE best practices and gains and advanced EE technologies with justified cost savings and other co-benefits among key target groups</b>	<b>Medium-Term</b> (end of 2020):	Develop and implement a public database on Energy Efficiency.	<b>Ongoing</b>	Ongoing: Development of Action Plan (NEEAP)
	<b>Build capacities of ESCOs and end-users specifically in developing and operating EPC models.</b>	<b>Medium-Term</b> (end of 2020):	Develop further instruments and measures for specific capacity building and awareness-raising for ESCO models.	<b>Ongoing</b>	Ongoing: Development of Action Plan (NEEAP)
	<b>Develop and implement a public education campaign to raise awareness and improve ability of individuals to reduce energy waste and to create a clean environment.</b>	<b>Long-Term</b> (end of 2021):	Develop a public education campaign and other awareness raising measures.	<b>Ongoing</b>	Ongoing: Development of Action Plan (NEEAP)

## Discussion: Key Questions

### Progress

- Which policy recommendations have been fully implemented? What have been the driving factors (including special commitment from the government, donor support, etc.)?
- Which policy recommendations are progressing well? What is the status? What have been the main factors driving this progress (including special commitment from the government, donor support, etc.)?

### Challenges

- Which policy recommendation are progressing only very slowly or have not progressed at all? What are the main challenges/bottlenecks impeding progress?
- Which actions are required to advance those policy recommendations?

### Outlook

- Are all the policy recommendations still relevant? Those that are not, why?
- Are there any new developments that require the addition of new policy recommendations?
- Which new developments, which could potentially have a positive/negative impact on specific policy recommendations, must be taken into account?
- Are there any new DP (or other stakeholder) programmes/projects foreseen for the next reporting period that will contribute to the implementation of the policy recommendations (projects/activities in the pipeline)?

## Outlook Topics for Future Work of TWG 2

- **NEEAP implementation as new guidance/key work plan for TWG 2 in 2019/2020**
  - 16 key objectives of VNEEP 3
  - Measures and activities of NEEP 2020  
(option: official draft to be discussed in next/extra focus meeting)
- **Potential further focus topics:**
  - Energy Efficiency in Industry
  - Energy Efficiency in public buildings/spaces
  - Energy Efficiency in Transport

## Closure of the Meeting

*Mr. Trịnh Quốc Vũ, Deputy Director General, DEESD/MOIT*

*Ms. Sitara Syed, Deputy Resident Representative UNDP Viet Nam*





MINISTRY OF INDUSTRY AND TRADE

## UPDATED PROGRESS OF VIET NAM NATIONAL ENERGY EFFICIENCY PROGRAM IN THE PERIOD 2019 - 2030 (VNEEP 3)

Hanoi – 02/10/2019

 **BỘ CÔNG THƯƠNG**

The National Energy Efficiency Programme in the period 2019-2030 issued by the Government via Decision No. 280/QĐ-TTg dated 13 March 2019.

- Under consultation with Ministries and departments to establish the Programme Steering Committee
- Develop Action Plan for the VNEEP 3: In progress of consulting ministries and departments for comments and finalization
- Establish evaluation indicators for the VNEEP 3
- Prepare Action Plan for 2020

Thank you for your attention!







MINISTRY OF INDUSTRY AND TRADE

# PROPOSAL ON MONITORING AND EVALUATION OF THE VIET NAM NATIONAL ENERGY EFFICIENCY PROGRAM IN THE PERIOD 2019 - 2030 (VNEEP 3)






Hanoi – 02/10/2019

 **BỘ CÔNG THƯƠNG**



## Contents

-  Monitoring and evaluation contents
-  Existing status of database for monitoring work
-  Proposal





## I. VNEEP 3 Monitoring and Evaluation

### 1. Objective of the monitoring and evaluation

To assure the VNEEP 3 to be implemented in accordance with the Programme's set targets, on schedule, and adaptable to existing conditions in timely manner.

### 2. Monitoring and evaluation contents

The National Energy Efficiency Programme in the period 2019-2030 was issued by the Government via Decision No. 280/QĐ-TTg dated 13 March 2019.

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## I. VNEEP 3 Monitoring and Evaluation

### *Indicators to be monitored for the VNEEP 3*

No.	Targets	Indicator to 2025	Indicator to 2030
1	Reduce total national commercial energy consumption (compared with the business-as-usual scenario)	5.0 -7.0%	8.0 -10.0%
2	Formulate regulations on energy consumption benchmarking	10-15 industries	-
	Develop technical guidelines on energy saving and efficiency for production industries	15-20 industries	-
3	Reduce power loss of the whole power system	< 6.50%	Less than 6%
4	Lower the average energy consumption of industries compared to that in the period of 2015-2018.		
	- Steel making industry	3.0 -10.0 %	5.0 - 16.50%
	- Chemical industry	7.0 %	10.0%
	- Plastic industry	18.00 - 22.46 %	21.55 - 24.81%

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***Indicators to be monitored for the VNEEP 3***

No.	Targets	Indicator to 2025	Indicator to 2030
	- Cement industry	7.5 %	10.89%
	- Garment textile industry	5.0 %	6.80%
	- Alcohol, beer and beverage industry	3.0 - 6.88 %	4.6 - 8.44%
	- Paper industry	8.0 - 15.8 %	9.9 - 18.48%
5	Key transportation enterprises to develop and conduct the programme to disseminate energy saving skills	100%	
	Reduce gasoline consumption in transportation against demand forecast		5%
	Set energy consumption benchmarks for various types of transportation		Motorbikes and 9-seater cars or smaller.
6	Disseminate and promote energy efficiency in industrial parks	70%	90%
	Disseminate and promote energy efficiency in industrial parks	50%	70%

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***Indicators to be monitored for the VNEEP 3***

No.	Targets	Indicator to 2025	Indicator to 2030
7	Key energy consumption facilities to apply energy management system	100%	
8	Construction works governed by national technical regulations on energy efficiency buildings to comply with such regulations	100%	
	Conduct energy labeling for construction materials requiring thermal insulation		50%
9	Increase the number of construction works certified green buildings, and energy efficiency.	80	150
10	Develop more market transformation programs on energy performance	05	
11	Number of energy managers and energy auditors trained	3000	5000
12	Schools with communication and teaching activities on economical and efficient use of energy.	60%	100%
13	Provinces and centrally-affiliated cities to develop and approve energy efficiency and conservation plans in their localities	90%	100%

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## I. VNEEP 3 Monitoring and Evaluation

### Indicators to be monitored for the VNEEP 3

No.	Targets	Indicator to 2025	Indicator to 2030
14	Network of cleaner production and energy efficiency units in provinces and cities	50	
15	Viet Nam Energy Data Center	01	
16	National energy efficiency and conservation training centers	02	50%
17	Energy-efficient urban models	01	9.9 - 18.48%
18	Demonstration models of investment loans for energy saving and energy efficiency projects	05	150
19	Energy efficiency laboratories	02	
20	Pilot Foundation for Promoting Energy Efficiency and Conservation	01	5000

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## II Status of relevant statistical data

### 1. Energy statistics of Viet Nam in 2015

- As implementation results of the VNEEP 2, published in 2017
- Contents of the Energy Statistics
  - + Overview of Viet Nam's energy sector in 2015
  - + Provided statistical data of economy, society, coal, petroleum, gas and power
  - + Overall energy settlement in 2013, 2014, 2015
  - + Energy balance in 2013, 2014, 2015
  - + Energy consumption by industries
  - + Overall economic-energy indicators of Viet Nam

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## 2. Energy use benchmarks for some industries

- Circular 02/2014/TT-BCT dated 16/1/2014 prescribing energy saving and efficiency measures in industry; Prescribing energy consumption rate in chemical industry.
- Circular 19/2016/TT-BCT dated 14/9/2016 stipulating energy consumption benchmark in beer and beverage production industry
- Circular 20/2016/TT-BCT dated 20/9/2016 stipulating energy consumption benchmark in steel making industry.
- Circular 24/2017/TT-BCT dated 23/11/2017 stipulating energy consumption benchmark in paper industry.
- - Circular 38/2016/TT-BCT dated 28/12/2016 stipulating energy consumption benchmark in plastic industry
- Circular 52/2018/TT-BCT regulating energy consumption benchmark in seafood processing industry, applicable for industrial processing of catfishes and shrimps

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## 3. Report on energy use of designated energy users

## 4. Energy efficiency consultancy network

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### III. Recommendations

- To accomplish the VNEEP 3 Action plan To develop specific monitoring and evaluation program based on indicators, activities and tasks assigned to provinces, cities, ministries and departments.
- Proposals:
  - + To develop energy statistics for the period 2016 - 2018.
  - + To assess the implementation of regulations on energy consumption rate in some industries
  - + To establish energy use benchmarks for some other industries
  - + Provinces and centrally affiliated cities, ministries and departments to annually report the VNEEP 3 implementation results
  - + To report energy use status of designated energy users
  - + To coordinate with relevant stakeholders and organizations to supervise the VNEEP 3 implementation
  - + Permanent office to promptly report and propose adaptations to the Programme's activities to suit conditions.

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Thank you for your attention!

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## Technical Working Group 2 – Energy Efficiency

The development of the National EE Action Plan (NEEAP)

Hoa Binh Hotel  
2 October 2019

Implemented by **giz**

## Agenda

1. EU - Viet Nam Energy Facility (EVEF) – Energy Efficiency:  
Main activities
2. Workshop on Five-Year NEEAP for DOIT's in Da Lat
3. GIZ Draft Viet Nam National Energy Efficiency Action Plan  
(NEEAP)

## EU-Vietnam Energy Facility Energy Efficiency component Main activities 2018-19

06/11/2019

The EU - Viet Nam Energy Facility

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### Component 1A: Energy Efficiency – Main Activities 2019

#### **A.4.2 Development (and implementation) of Viet Nam National Energy Efficiency Programme No. 3 (VNEEP3)**

- Counterpart: DEESD/MOIT
- Time frame: June – September 2018
- Scope: EVEF/4E national consultant peer-reviewed VNEEP3 and submitted comments to DEESD/MOIT; consultation workshop in Da Nang (July 2018)
- EVEF/4E+ Output:

Decision No. 280/QD-TTg by the Prime Minister on approval of the National Program on economical and efficient use of energy in the period of 2019-2030 dated March 13<sup>th</sup>, 2019

06/11/2019

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## Component 1A: Energy Efficiency – Main Activities 2019

### A.4.1 Review of Decree 21/2011

- Counterpart: DEESD/MOIT
- Time frame: May – December 2019
- Consultant: Vietnam Energy Conservation and Energy Efficiency Association (VECEA)
- Scope: Review Decree 21/2011 based on an in-depth appraisal of shortcomings of relevant provisions of the Decree and interviews with public and private sector stakeholders
- EVEF/4E+ Output: Draft Report Decree 21/2011 (Nov-19)

## Component 1A: Energy Efficiency – Main Activities 2019

### A.4.5 Prepare an EE Action Plan for the development and implementation of Vietnam Energy Efficiency Programme (VNEEP 3)

- Counterpart: DEESD/MOIT
- Time frame: January 2019 – March 2020
- Consultants: Dr. Albrecht Kaupp, Senior Backstopping EE Expert; 4E/EVEF NEEAP national consultants
- Scope: Design and write a **National Energy Efficiency Action Plan (NEEAP)** for the period 2019-2030 and present the NEEAP to various stakeholders
- EVEF/4E+ Output: Draft NEEAP (Jun-19), Final Draft NEEAP (Dec-19)



## Workshop on Five-Year NEEAP for DOIT's in Da Lat

06/11/2019

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## Workshop for DOIT's in Da Lat (July 2019)

- High Level event with participation of MOIT Vice Minister, DEESD Director General, Officials from 30 DOITs and private sector representatives
- Presentation of the draft NEEAP by EU-Viet Nam Energy Facility
- Study to allocate energy efficiency targets for localities
- Introduction on taxes, funds and loans to the investment in energy-saving projects by UNIDO
- Draft Guidelines on developing NEEAP 2019-2030 for cities and provinces
- Exchange of experience by several DoITs from the implementation of VNEEP 1 and 2 and discussions how to implement VNEEP 3

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## GIZ Draft Viet Nam National Energy Efficiency Action Plan (NEEAP)

06/11/2019

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### The proposed NEEAP structure to satisfy 16 special objectives of Decision 280

Decision No. 280/QĐ-TTg by the Prime Minister divides the VNEEP 3 into two periods 2019-2025 and 2026 and 2030.

Based on Decision 280 and drawing on international best-practice GIZ has proposed to DEESD a NEEAP structure for the VNEEP 3 (2020-25) implementation including:

1. 49 ACTIONS
2. A wide range of ACTIVITIES to implement 49 ACTIONS
3. About 117 quantifiable INDICATORS how to spell success

06/11/2019

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## Special Objectives and Targets of Decision 280

SO	Special objective	Target
1	Saved 5 to 7 % of the national energy consumption	6%
2A	Enhance policy mechanism and legal EE&C regulations	LRA tbd
2B	Finalized and supplemented energy consumption norms	10-15
2C	Developed and disseminated technical guidelines	10-15
3	Reduced technical losses of power T + D networks	< 6.5%
4	Further reduced average consumption of 7 designated sectors	Specific
5	All transportation companies provided fuel saving training	100%
6A	Industrial parks approached and apply EE&S solutions	70%
6B	Industrial zones approached and apply EE&S solutions	50%

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## Special Objectives and Targets of Decision 280

SO	Special Objective	Target
7	DEUs are applying energy management solutions as regulated	100%
8	Ensured compliance and implementation of EE building regulation	tbd
9	Certified "green" buildings that prepared and implemented <u>F</u> EEAP	80
10	Market transformation and MEPS for 5 popular products	5
11	Trained and certified energy managers and energy auditors	3,000
12	All schools conducting dissemination and training on EE&C subject	60%
13	Provinces and municipalities prepared and implement their <u>L</u> EEAP	56
14A	Developed and maintain network of EE&C production facilities	50
14B	Developed and maintain a national energy management network	tbd

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## Special Objectives and Targets of Decision 280

SO	Special Objective	Target
15A	Established and sustainably operate energy data center of Vietnam	1
15B	Established and sustainably operate EE&C training centers	at least 2
15C	Prepared plan and implemented urban EE&C model	at least 1
15D	Implemented debt and equity financed actions of FEEAPs	at least 5
15E	Established and sustainably operate EE laboratories	at least 2
16	Established and sustainably operate foundation for an efficient society	1
17	Established and sustainably operate "Energy Star" like web portal	1

## Color Coded NEEAP 2020-2025 Tree Structure



**LRA-Grey**: Improving the legal EE framework actions

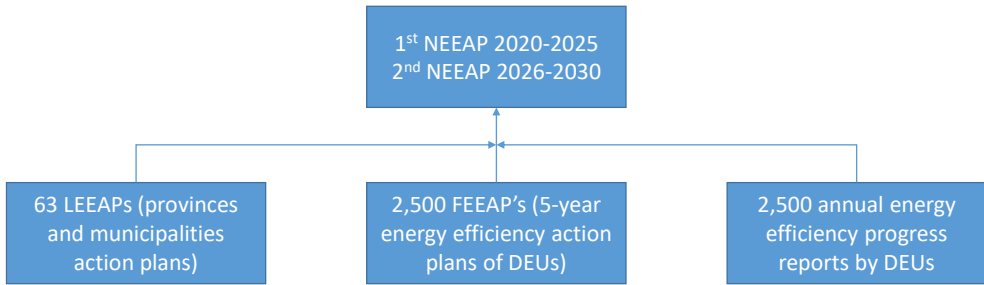
**CD-Blue**: Capacity development actions

**PR-Brown**: Public relation actions

**Q-Green**: Quantifiable energy saving actions

**Red**: Funding the NEEAP. These funding acquisition actions are particularly important since the NEEAP should only list actions that are backed up by a NEEAP budget plan of secured financing

# Bottom-up approach of NEEAP



## 4 Power Plant Choices To Match Or Avoid 7,500 GWh Demand Increase

			
<ul style="list-style-type: none"> <li>- 1 GW Coal Power</li> <li>- <b>7,500 GWh/year</b></li> <li>- 1.3 – 1.8 Billion USD</li> <li>- Construction 5 year</li> <li>- LCOE = 8 Cts/kWh</li> <li>- Life 30 years</li> <li>- 1-3 Investors</li> </ul>	<ul style="list-style-type: none"> <li>- 5 GW of 50 MW PV</li> <li>- <b>7,500 GWh/year</b></li> <li>- 4 Billion USD</li> <li>- Construction 2 year</li> <li>- LCOE = 8 Cts/kWh</li> <li>- Life 20-25 years</li> <li>- 100 Investors</li> </ul>	<ul style="list-style-type: none"> <li>- 5 GW Rooftop PV</li> <li>- <b>7,500 GWh/year</b></li> <li>- 6 - 8 Billion USD</li> <li>- Construction 7 year</li> <li>- LCOE = 14 Cts/kWh</li> <li>- Life 20-25 years</li> <li>- Need 100,000 roofs and investors</li> </ul>	<ul style="list-style-type: none"> <li>- <b>N</b>egawatt plant</li> <li>- <b>7,500 GWh/year</b></li> <li>- 1- 3 Billion USD</li> <li>- Construction 5 year</li> <li>- LCOE = 4 Cts/kWh</li> <li>- Life 5-20 years</li> <li>- Need thousands to Millions investors</li> </ul>

## Designated and Voluntary NEEAP Stakeholders (Decree 21/2011)

### A. Private sector MEU

> 1,000 TOE/y is a DEU

### B. Private sector building >500 TOE/y is a DEU

### C. All State-budget funded enterprises are DEUs

### D. Residential consumers using EE technologies or participating in EVN managed DSM

The unknown numbers and market of not registered and therefore voluntary MEUs (Section 25 of Decree 21/2011) that have not been notified but act like a DEU by following the DEU obligations.

## Final Messages

The legislation on EE is the only legislation forcing energy users to make more profit

But that requires

- Comprehensive awareness and capacity development campaigns for all stakeholders
- Qualified and substantial energy services (i.e. ESCO) and involvement of the energy supply sectors in EE
- Qualified monitoring and verification experts to quantify and certify energy savings
- Energy managers are appointed and empowered to develop and implement the facility energy efficiency action plans (FEEAPs)
- Simplified annual energy performance reporting structure of at least 2,500 major energy users (MEUs)
- Criteria to convince the MEUs
  - Feasibility (“the project should be technically feasible”)
  - Affordability (“the investment should be within the financial means of the company”)
  - Profitability (“the project should have a reasonable payback period”)

## Disclaimer

### The EU - Viet Nam Energy Facility

This project is co-financed by the European Union and German Federal Ministry for Economic Cooperation and Development (BMZ).

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