

Vietnam Energy Partnership Group Report of Meeting

Event: First meeting of TWG 4 on Energy Access (EA)
Date: 04 April 2018
Location: MOIT Room nr 5, 21 Ngo Quyen, Hanoi
Time: 08:30 – 11:30 PM
Participants: see attached lists of participants and invitees in Annex 1

Chair and Co-Chair of TWG4 on EA:

- Mr. Nguyen Duy Hoa, Manager of Grid network
- Mr. Alejandro Montalban Carrasco, Minister-Counsellor, Head of Cooperation Section, EU Delegation to Viet Nam

Meeting Objectives:

1. To exchange views on challenges for energy access in Viet Nam
2. To agree the 2018 workplan of TWG 4

Presentation: see Annex 2

Minutes: see Annex 3

Agreed actions of TWG 4 on Energy Access

Action	Responsibility	Tentative deadline
1. Approve Minutes of Meeting	Chair & Co-Chair	mid-July
2. Send Minutes of Meeting to all TWG4 members (invited plus those who attended)	Secretariat	mid- July
3. Invite Members to complement information on the DP survey of relevant projects	Secretariat	late- July
4. Suggest names of organisations and persons who should be invited as member of TWG4	Members	end- July
5. Update list of (core and non-core) Members	Secretariat with direction from Chair & Co-Chair	end- July
6. Consult with some Members on their leadership, “in-kind” human resources and actions towards a priority theme (financing; access through off grid solutions; biogas/mass) (EUD has interest in taking the lead on the off-grid theme)	Secretariat with direction from Chair & Co-Chair	mid- August
7. Agree on products/outputs and actions (e.g. workshops, seminars) of TWG4 and consolidate workplan 2018	Chair, Co-Chair, members & Secretariat	mid-August
8. Submit work focus and work plan 2018 to the SC of the VEPPG	Secretariat	mid-July
9. Ask Members for their interest in access to the TWG4 E-library, and their sharing of references through the E-library	Secretariat	mid-August
10. Second TWG 4 meeting in early September	Secretariat	early September

Annex 1 – Participants

No.	Organization (English)	Name
	MOIT	
1	Electricity and Renewable Energy Authority	Nguyễn Văn Thành
2	Electricity Grid and Rural Electrification	Nguyễn Duy Hòa
3	Electricity Grid and Rural Electrification	Nguyễn Văn Dũng
4	ERAV/MOIT	Phạm Quang Huy
5	Planning and Demand Supply Balance Monitoring Dept.-ERAV	Nguyễn Thế Hữu
	MPI	
6	Industry Economic Dept./MPI	Trần Văn Ngọt
	MOF	
7	Department of Debt Management and External Finance	Nguyễn Xuân Thảo
	MARD	
8	Department of Livestock (biogas)	Sir/Madam
	MONRE	
9	Department of Climate change, MONRE	Nguyễn Văn Tuệ
	EVN	
8	National Power Transmission Corporation	Vu Ngoc Minh
9	EVN	Nguuyen Tai Anh
	NGOs	
10	Green Innovation and Development Centre (GreenID)	Nguy Thi Khanh
11	SNV	Bastiaan Teune
	Unis & Ins	
12	Clean Energy and Sustainable Development (CleanED) lab / USTH	Duong Ha Minh
13	Electric Power University	
14	Hanoi University of Technology	Pham Hoang Luong
15	Institute of Energy	Hoang Tien Dung
	Development Partners	

No.	Organization (English)	Name
16	BELGIUM Embassy	Ms. Margot Angot
17	GERMAN Embassy	Mr Martin Hoppe
18	IRELAND Embassy	Nuala O'Brien
19	ROMANIA	Mr. Valeriu ARTENI
19	Denmark	Ms. Tran Hong Viet
20	Denmark	Christian Brix Møller
21	Finland	Marko Saarinen
22		Le Dai Nghia
23	EU DEL	Alejandro MONTALBAN CARRASCO
24		Cecile LEROY
25		TRAN THUY Duong
26		Antoine VANDER ELST
27	Australia Embassy	Justin Baguley
28	United Nations Development Programme, UNDP	Jiri Dusik
29		Đào Xuân Lai
30		Jay Tyler Malette
31	Norway	Tone Slenes
32	Switzerland	David Best
33	South Korea	Yoon Mee Lee
34	World Bank	Franz Gerner
35	German International Cooperation, GIZ	Mr. Ingmar Stelter
36		Mr. Vũ Quang Đăng

No.	Organization (English)	Name
37	German Development Bank, KfW	Mr Daniel Plankermann
38	BTC	Ms Krista Verstraelen
39	AFD, French Development Agency	Mr Fabio Grazi
40		Ms Nguuyen Thi Thanh An
41	ADB	Hyunjung Lee
42	Global Green Growth Institute, GGGI	Nguyet Pham

Annex 2 – Presentations

Viet Nam Energy Partnership Group

TERMS OF REFERENCE FOR TECHNICAL WORKING GROUPS

1. Objectives of Technical Working Groups

Technical Working Groups (TWGs) will contribute to the overall and specific objectives of the Viet Nam Energy Partnership Group (VEPG): prepare inputs into High Level Meetings (HLMs) which will focus on policy dialogue. TWGs will address specific topics within the VEPG thematic areas and must complement dialogues on related matters in other partnerships or TWGs under the VEPG. TWGs study and discuss specific issues to deepen the policy and technical discourse.

2. Thematic Areas

Thematic focus areas of the VEPG include, but are not limited to the following:

- 1) Renewable energy;
- 2) Energy efficiency;
- 3) Structural energy sector development and reform, including power market reform;
- 4) Access to energy;
- 5) Energy data & statistics.

The actual initiation of each TWG will be flexible, with some TWGs set up and functioning earlier than the others, depending on availability of chairs and co-chairs and (immediate) interest of VEPG participants.

As the VEPG is operating, the thematic focus of TWGs may be updated and revised in accordance with the needs and developments in the energy sector as assessed jointly by the Ministry of Industry and Trade and Development Partners (DPs).

3. Structure, Leadership and Membership

TWGs will be chaired by senior representatives from the Ministry of Industry and Trade (MOIT) who are managers at the department level or equivalent.

Each TWG is co-chaired by a senior manager of one of the DPs. The co-chair will be rotated based on agreement between participating DPs, with the rotation coinciding with a plenary HLM of the VEPG.

The TWG chairs and co-chairs' responsibilities include: (i) agreeing on the TWG's annual workplan, subgroups, modes of operation and membership of the TWG; (ii) agreeing the agenda of (e.g. 6-monthly) TWG meetings; (iii) monitoring implementation of TWG workplans; (iv) providing inputs into the overall VEPG annual workplan.

TWG chairs and co-chairs will be assisted by the VEPG Secretariat.

TWGs consist of core members from government agencies and DPs as well as non-core members from businesses, research organisations and NGOs. All members must have adequate technical and/or policy expertise to contribute to discussions and activities.

4. TWG Operations

TWGs will function over a set period with possibility of extension, and will be ended as their missions will be accomplished.

TWG initiation

TWGs will be initiated based on the Terms of Reference, draft inventory of thematic projects, draft gap analysis of issues in the thematic area, draft annual workplan, and a membership proposal, for discussion and approval at its first meeting that will be organised in December or January 2017.

TWG annual workplans

TWGs will design annual workplans that will indicate focal topics, concrete results and timing of activities in the year ahead. Activities could include thematic studies, research, technical / policy reviews and information exchanges, informal working sessions, and electronic exchanges.

The activities could be initiated by the VEPG secretariat, the Chair and Co-Chair or active members and their operational projects.

TWGs will organise subgroups working on specific issues and results, initiate technical reviews, etc., as appropriate.

The annual workplan preparation and coordination of implementation is supported by the VEPG secretariat with inputs provided by the Chair, Co-Chair and any other members.

The annual workplans will consider the outcomes and recommendations of the HLMS, and any request by the TWG members.

The annual workplans will be agreed by a plenary meeting of a TWG, the Chair and Co-Chair, and be made available to all group members.

TWG resources

The VEPG secretariat will assist TWGs with formulation of annual workplans; organisation of meetings including finalising the agenda for approval by the Chair and Co-Chair and sharing of materials with members; membership registration and communication; making logistical arrangements for meetings; disseminating results of the TWG activities; assisting in the development of Terms of Reference for expert inputs into TWG activities; monitoring and reporting of progress with TWG activities.

DPs are expected to provide financial or in-kind support to specific activities agreed by TWGs, such as reviews, research and sharing of findings in policy and technical dialogues of TWGs

and the HLMs. The Ministry of Industry and Trade (MOIT) and possibly other ministries will provide in-kind contributions such as venues for technical meetings, technical expertise and human resources for VEPG activities on an ad-hoc basis.

TWG meetings and coordination

TWGs will limit the number of (coordination) meetings to two or maximum three per year. Some TWG meetings will be held before a VEPG plenary HLM so the outcome of TWG activities could feed into VEPG policy dialogues.

Working sessions in small (sub)groups could be organised to address any special request or proposal made by members.

TWG meetings will focus on specific topics and draft meeting agendas will be circulated in advance with assistance from the VEPG Secretariat. The focal topics will match the annual workplan or ad hoc emerging issues as suggested by group members.

The VEPG Secretariat assists in sharing input materials / findings & recommendations to be presented and discussed at meetings.

TWG meetings will be attended by the VEPG Secretariat staff. The VEPG Secretariat may support a TWG member prior to a meeting where they would give a presentation.

Outcomes and reporting

TWGs will occasionally report summaries of policy and technical recommendations to the Steering Committee, with assistance from the VEPG Secretariat and approved by the Chair and Co-Chair.

TWGs will prepare annual reports, with assistance from the VEPG Secretariat and approved by the TWG Chair and Co-Chair. The reports will summarise:

- The TWG's activities undertaken over the year;
- Achievements, outcomes of TWG activities;
- Inputs and recommendations (to be) made to the VEPG plenary HLM;
- A tentative workplan for the following year.

TWG No. 4 meeting

ACCESS TO ENERGY PROJECT MAPPING; BARRIER AND GAP ANALYSIS

AE – Project mapping

The main development partners (DPs) currently supporting Viet Nam's energy sector are

- World Bank (WB),
- Asian Development Bank (ADB),
- Japan International Cooperation Agency (JICA),
- European Union (EU),
- *Agence Française de Développement* (AFD),
- *Kreditanstalt Für Wiederaufbau* (KfW, German Development Bank),
- German Agency for Technical Corporation (GIZ), and
- Denmark (Embassy, DEA).
- Also supporting are Switzerland (Swiss Economic Cooperation, SECO); Australia; South Korea; the United States Agency for International Development (USAID); Belgium; Finland; the United Kingdom; UNDP; and UNIDO. Financing is also happening by e.g. the ASEAN Infrastructure Fund (AIF). Some assistance was recently completed, by e.g. Spain, Norway, SNV, and financing by the European Investment Bank (EIB).

Survey

This brief survey was carried out online and through email - it was sent to more than 70 recipients to update “an overview of energy sector ODA projects in 2015” by the European Union.

This survey is not an exhaustive overview of all DP support because some may not have been invited or did not respond. However, it includes updated information from the main DPs on their energy projects in Viet Nam.

Results

The VEPG Secretariat has received updated information on 51 projects.

There are still DP updates pending and details missing, but the total reported budget of these 51 projects (see below) is Euro 2,354,761,400 in those ongoing projects:

1. The biggest DP is the WB (Euro 1,573mn with 19 projects going on focus on policy development which includes the areas of energy efficiency, renewable and sustainable energy; power sector reform and market development; and power trade strategy),
2. GIZ (Euro 528mn)
3. EU (Euro119 m; Energy Sector Policy Support Programme to enhance Access to Sustainable Energy in Rural Areas of Vietnam).

Summary table

Development Partner (DPO)	Amount (EURO)
Agence Française de Développement (AFD)	na
Embassy of Australia in Vietnam	4,666,667
Embassy of Denmark	3,000,000
EU	119,785,000
GIZ	528,500,000
KfW	100,000,000
UNDP	9,512,833
UNIDO	7,614,296
USAID	7,811,421
World Bank	1,573,871,183
Total	2,354,761,400

Table of focus: Projects scores related to TWG

TWG 1 (RE)	TWG 2 (Energy Efficiency)	TWG 3 (Energy Sector Reform)	TWG 4 (Energy Access)	TWG 5 (Data & Statistics)
96	87	50	48	34

From the survey replies, the main counterparts and recipients of this support are the Ministry of Industry and Trade (MOIT) and its departments and agencies such as the Electricity Regulatory Authority of Vietnam (ERAV), and Electricity Vietnam (EVN) and its subsidiaries

Other implementing agencies are the Ministry of Science and Technology (MOST), the Ministry of Natural Resources and Environment (MONRE), the Ministry of Planning and Investment (MPI), and the municipalities of Ha Noi, HCM City and Da Nang.

Shift in Focus

Compared with the previous reports on ODA to the energy sector (EU 2015; ADB 2014), there has been a clear shift of focus.

In the past, most ODA was spent on selected large infrastructure investments, including fossil fuel electricity plants, electricity transmission and distribution networks.

Currently, renewable energy (RE), energy access (EA) and energy efficiency (EE) are attracting more funding as some donors are showing their intention to shift their strategic plan for Vietnam's energy sector.

This shift is consistent with the "energy for all" targets as set under Sustainable Development Goal nr.7 *"Ensure access to affordable, reliable, sustainable and modern energy for all"* and in line with the Government's commitment to a sustainable and greener energy sector.

NHÓM ĐỐI TÁC NĂNG LƯỢNG VIỆT NAM

CHƯƠNG TRÌNH ĐIỆN KHÍ HÓA NÔNG THÔN

*Nguyễn Duy Hòa – Phụ trách phòng Lưới Điện/EREA
Chủ tịch Nhóm Công tác Kỹ thuật về Tiếp cận điện năng*



NỘI DUNG

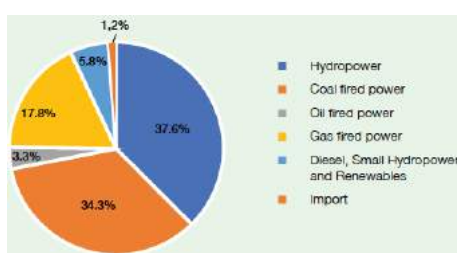
- ▶ Giới thiệu chung
- ▶ Chương trình điện nông thôn 2013-2020
 - ▶ Mục tiêu
 - ▶ Kế hoạch triển khai
 - ▶ Nhu cầu vốn đầu tư
- ▶ Các kết quả đến năm 2016
- ▶ Các rào cản khó khăn
- ▶ Thảo luận



Giới thiệu chung

- ▶ Công suất lắp đặt và cơ cấu nguồn điện tính đến 31/12/2016

Owner	Capacity MW	%
Vietnam Electricity	25,884	61.4
PetroVietnam	4,435	10.5
Vnacomín	1,785	4.2
BOT and other investors	10,031	23.9
Total	42,135	100



Nguồn: Báo cáo 2017 - EVN

Giới thiệu chung

- ▶ Hệ thống truyền tải quốc gia
- ▶ Mạng lưới phân phối điện

Item	Unit	Quantity
500 kV lines	km	7,446
220 kV lines	km	16,071
500 kV transformers	MVA	26,100
220 kV transformers	MVA	41,538

Item	Unit	Quantity
220 kV lines	km	108
110 kV lines	km	19,335
Medium and low voltage lines	km	495,688
220 kV transformers	MVA	3,250
110 kV transformers	MVA	52,360
Medium and low voltage transformers	MVA	89,609

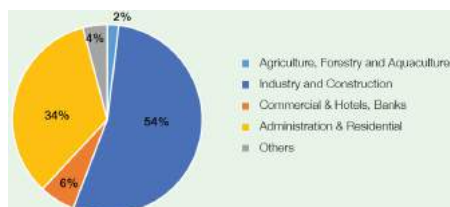
- ▶ Kế hoạch mở rộng hệ thống truyền tải quốc gia đến năm 2030

Item	Unit	2016-2020	2021-2025	2026-2030
500 kV substation	MVA	26,700	26,400	23,550
220 kV substation	MVA	34,966	33,888	32,750
500 kV lines	km	2,746	3,592	3,714
220 kV lines	km	7,488	4,076	3,435

Nguồn: Báo cáo 2017 - EVN

Giới thiệu chung

▸ Tỷ lệ điện tiêu thụ theo đối tượng khách hàng



▸ Điện khí hóa nông thôn

Year	2011	2012	2013	2014	2015	2016
Communes	98.72%	99.36%	99.57%	99.70%	99.85%	99.97%
Rural households	96.65%	97.19%	97.85%	98.05%	98.49%	98.65%

Nguồn: Báo cáo 2017 - EVN



Chương trình điện nông thôn (2013 – 2020)

▸ Mục tiêu:

- Cung cấp điện cho khu vực nông thôn, miền núi, hải đảo.
 - Năm 2015: ~ 98% số hộ dân nông thôn có điện,
 - Năm 2020: hầu hết số hộ dân nông thôn có điện, với mục tiêu:
 - 57 xã được cấp điện;
 - 12.140 thôn, bản được cấp điện.
 - 1.288.900 hộ dân được cấp điện.



Chương trình điện nông thôn (2013 – 2020)

▶ Mục tiêu:

- ▶ Phát triển lưới điện cung cấp điện cho các trạm bơm tưới quy mô vừa và nhỏ khu vực Đồng bằng Sông Cửu Long
 - ▶ Xây dựng mới các tuyến đường dây trung áp 3 pha để cấp điện cho các trạm bơm điện quy mô vừa và nhỏ đã được quy hoạch đầu tư đến năm 2020;
 - ▶ Cải tạo các tuyến đường dây trung áp 3 pha hiện có không đảm bảo kỹ thuật và an toàn; nâng cấp các tuyến trung áp 1 pha thành 3 pha để cấp điện cho các trạm bơm điện 3 pha;
 - ▶ Sau khi thực hiện đầu tư đồng bộ lưới điện trung, hạ áp và các trạm bơm điện 3 pha quy mô vừa và nhỏ, sẽ có khoảng 768.900 ha diện tích đất nông nghiệp và nuôi trồng thủy sản được hưởng lợi từ dự án;
 - ▶ Cấp điện cho khoảng 22.000 hộ dân chưa có điện thuộc 998 thôn, ấp.
- ▶ Tăng cường cấp điện cho các huyện đảo, xã đảo: Ưu tiên cấp điện ổn định, liên tục cho các đảo tiền tiêu bằng điện lưới quốc gia hoặc những nguồn năng lượng tái tạo ổn định, liên tục để phát triển tạo động lực cho việc kinh tế - xã hội khu vực biển đảo và tăng cường an ninh quốc gia và chủ quyền biển đảo.



Chương trình điện nông thôn (2013 – 2020)

▶ Phạm vi Chương trình

- ▶ Thực hiện trên địa bàn nông thôn của toàn quốc, trọng tâm:
 - ▶ địa bàn khu vực miền núi, vùng sâu, vùng xa, biên giới và hải đảo, vùng đồng bào dân tộc ít người, vùng có điều kiện kinh tế - xã hội đặc biệt khó khăn;
- ▶ Cấp điện cho các trạm bơm tưới quy mô vừa và nhỏ, kết hợp:
 - ▶ cấp điện cho các hộ dân nông thôn và các vùng nuôi trồng thủy sản tại 13 tỉnh khu vực Đồng bằng Sông Cửu Long;
- ▶ Cấp điện lưới quốc gia cho các đảo tiền tiêu, trọng yếu trong việc phát triển kinh tế, xã hội và an ninh chủ quyền biển đảo khu vực Vịnh Bắc bộ, Biển Đông và vùng biển khu vực Tây – Nam của Tổ quốc.



Chương trình điện nông thôn (2013 – 2020)

▶ Nhu cầu vốn đầu tư

- ▶ Tổng nhu cầu đầu tư: ~36.410 tỷ đồng, trong đó:
 - ▶ ~ 28.600 tỷ đồng - Đầu tư cấp điện cho các xã, thôn, bản chưa có điện bằng lưới điện quốc gia;
 - ▶ ~ 2.438 tỷ đồng - Đầu tư cấp điện cho các trạm bơm tưới quy mô vừa và nhỏ từ lưới điện quốc gia;
 - ▶ ~ 4.054 tỷ đồng - Đầu tư cấp điện cho các đảo từ lưới điện quốc gia;
 - ▶ ~ 1.310 tỷ đồng - Đầu tư cấp điện từ các nguồn ngoài lưới điện quốc gia.



Chương trình điện nông thôn (2013 – 2020)

▶ Cơ cấu nguồn lực thực hiện Chương trình

- ▶ 85% Tổng mức đầu tư (TMĐT) được hỗ trợ từ nguồn NSTW, 15% TMĐT do chủ đầu tư thu xếp;
- ▶ Nguồn vốn ngân sách Trung ương (NSTW) được huy động từ nguồn cân đối NSTW giai đoạn 2013-2020 và nguồn tài trợ ODA;
- ▶ Dự án do Ủy ban nhân dân tỉnh (UBND) làm chủ đầu tư: Các tỉnh cân đối từ nguồn ngân sách địa phương;
- ▶ Dự án do EVN làm chủ đầu tư: Các Tổng Công ty điện lực cân đối vốn tự có hoặc vay trong nước.



Chương trình điện nông thôn (2013 – 2020)

▶ Kết quả thực hiện Chương trình đến hết 2015

- ▶ Số xã chưa có điện mới được cấp điện: 40 xã (đạt 70,1% mục tiêu);
- ▶ Số thôn, bản mới được cấp điện: 2.250 thôn, bản (đạt 90% mục tiêu);
- ▶ Số hộ dân được cấp điện mới và cấp chính thức: 165.828 hộ dân (đạt 17,7% mục tiêu);
- ▶ Khối lượng hoàn thành: 3.802 tỷ đồng, trong đó:
 - ▶ 1.238 tỷ đồng vốn NSTW cấp hàng năm;
 - ▶ 1.509 tỷ đồng vốn cấp phát từ nguồn tài trợ ADB;
 - ▶ 636 tỷ đồng vốn đối ứng của EVN;
 - ▶ 80 tỷ đồng vốn đối ứng của các địa phương;
 - ▶ NSTW nợ khối lượng hoàn thành dự án Cấp điện huyện đảo Lý Sơn là 333 tỷ đồng.



Chương trình điện nông thôn (2016 – 2020)

▶ Mục tiêu 2016-2020

- ▶ Số xã chưa có điện được cấp điện đến trung tâm: 17 xã (đạt 100% số xã có điện);
- ▶ Số huyện đảo được cấp điện ổn định bằng nguồn điện năng lượng tái tạo: 01 huyện (Bạch Long Vỹ) và cấp điện lưới quốc gia 02 huyện (Cồn Cỏ, Lý Sơn);
- ▶ Số đảo, xã đảo được cấp điện lưới quốc gia: 8 đảo, bao gồm đảo Cái Chiên, huyện Hải Hà và đảo Trần, huyện Cô Tô, tỉnh Quảng Ninh; đảo Cù lao Chàm, tỉnh Quảng Nam; đảo Nhơn Châu, tỉnh Bình Định; các xã đảo: Hòn Nghệ, Tiên Hải, Nam Du, An Sơn của tỉnh Kiên Giang (các đảo Sơn Hải, Hòn Thơm do EVN đầu tư);
- ▶ Số thôn, bản được cấp điện: 9.753 thôn, bản (đạt 100% số thôn, bản có điện), với khoảng 29.300 cụm dân cư;
- ▶ Số hộ dân nông thôn được cấp điện từ lưới điện quốc gia khoảng 1.090.900 hộ dân (đạt 99,9% số hộ dân nông thôn có điện);
- ▶ Số hộ dân được cấp điện từ nguồn điện năng lượng tái tạo ngoài lưới điện quốc gia khoảng 21.300 hộ;
- ▶ Phát triển lưới điện để cấp điện cho khoảng 2.581 trạm bơm điện quy mô vừa và nhỏ tại các tỉnh Đồng bằng Sông Cửu Long đã được quy hoạch đầu tư đến năm 2020 nhằm chủ động công việc tưới tiêu, tăng hiệu quả sử dụng đất nông nghiệp và nuôi trồng thủy sản cho khu vực Đồng bằng Sông Cửu Long.



Khó khăn & vướng mắc

▶ Về nguồn lực

- ▶ Do những khó khăn về nguồn lực, nên trước đây ngành Điện mới tập trung đầu tư phát triển nguồn điện, lưới điện truyền tải, phân phối để đảm bảo cấp đủ điện cho nhu cầu phát triển kinh tế-xã hội của đất nước. Việc đầu tư lưới điện hạ áp nông thôn chủ yếu dựa vào các dự án có nguồn vốn ngân sách nhà nước (NSNN), các dự án ODA và sự đóng góp của nhân dân dưới sự chỉ đạo của UBND các cấp, công tác tổ chức đầu tư chủ yếu do chính quyền cấp xã, các Hợp tác xã và thôn, bản triển khai thực hiện.

▶ Về công tác quy hoạch

- ▶ Do một thời gian khá dài công tác quy hoạch dân cư, quy hoạch sử dụng đất, quy hoạch điện v.v còn chưa đầy đủ và đồng bộ nên lưới điện nông thôn phát triển theo khả năng huy động các nguồn vốn của từng địa phương, từng xã, huyện mà không theo quy hoạch nên nhiều nơi mang tính **chấp vá, cũ nát và chưa tính đến phát triển phụ tải** sau này nhất là phụ tải các xã, thôn, bản lân cận chưa có điện, chưa chú ý đúng mức đến vấn đề kỹ thuật và hành lang an toàn lưới điện.

▶ Về an toàn

- ▶ Một số khu vực do địa phương quản lý (đặc biệt là miền Bắc) lưới điện hạ áp còn sử dụng dây trần, bán kính cấp điện lớn không đảm bảo các tiêu chuẩn kỹ thuật và an toàn, dẫn đến chất lượng điện kém, xảy ra nhiều tai nạn, tổn thất điện năng trong lưới hạ áp còn khá cao.

Khó khăn & vướng mắc

▶ Về hoạt động kinh doanh

- ▶ Tiêu thụ điện tại các vùng nông thôn ít, doanh thu bán điện thấp trong khi khối lượng và chi phí vốn đầu tư quá lớn. Hầu hết các dự án cấp điện nông thôn không đảm bảo tính khả thi về kinh tế-tài chính nên đã hạn chế quá trình đầu tư cấp điện nông thôn.
- ▶ Các xã chưa có điện chủ yếu là các xã đảo, các xã vùng núi cao bị cô lập về địa hình, số hộ dân chưa có điện chủ yếu sống ở các thôn, bản vùng sâu, nằm quá xa lưới điện quốc gia, dân sống rải rác nên đầu tư cấp điện có chi phí quá lớn, suất đầu tư cao, nên không thể huy động và điều tiết được nguồn vốn để đầu tư đồng bộ, dàn đều giữa các vùng, miền. Vì vậy, cần phải có những chính sách đặc biệt của Chính phủ để giải quyết việc cấp điện được cho các thôn, bản và đồng bào dân tộc vùng sâu, vùng xa và hải đảo.

Cảm ơn sự chú ý của Quý vị!

Thảo luận

Annex 3 – Minutes TWG 4 meeting 4 April 2018

Agenda item	Summary
Opening remarks	Chair and Co-Chair welcome participants and indicate their priorities for the TWG
TOR of TWGs	Secretariat presented the generic TOR as approved by MOIT. Participants agree, and made no comments
Access to energy project mapping	<p>Secretariat presented the mapping of DP supported projects / investments. <u>EUD</u></p> <ul style="list-style-type: none"> • Interesting to have the pipeline of projects. Maybe some projects are in the past and others are ongoing. But would be interesting to know what is coming. Can we cross check with official ODA information from MPI? Also, regarding DPs that are difficult to reach, MOIT and/or MPI might be able to identify them <p><u>Hanoi university</u></p> <ul style="list-style-type: none"> • Mapping is useful. Trend is obvious that the donors support the government focus. 98.6 percent electrified now <p>Participants are invited to provide further feedback to the Secretariat on their projects</p>
MOIT on provision of energy access, rural electrification	<p>[see PP presentation by MOIT in a separate file] Further clarifications by MOIT:</p> <ul style="list-style-type: none"> • About 2% of households have no access to the grid in remote areas. According to the Programme 2013-2020: most will have access, meaning nearly 1.3 million people in addition to the baseline. We will supply remote mountainous disadvantaged areas. • Also e.g. water pumping stations in the Mekong Delta will benefit from the grid extension (electrification of small and medium pumping stations). Also to aquaculture in Mekong Delta • Island districts will get priority investments in cables to islands for sustainable access to the national power grid. There is also RE and diesel generation on islands • But capital demand for this is huge: 36 trillion VND or 1.5bUSD. The plan is that 15% is from investors such as EVN and localities/provinces; 85% central budget • We are also calling for ODA and credit from financial institutions. Also counterpart funding local budget and EVN • There are 2 ways to help the 2% without access: (a) the national grid; (b) on the spot supply with RE (small hydro), biogas, solar PV etc. The cost of (b) is below grid extension. But there are technological barriers to RE and local capacities are a challenge that we need to address. Training is needed to improve the capacity of managers, and awareness raising of people on RE. There are some service companies that provide offgrid sources. But the lifecycle is not up to expectation without maintenance, i.e. systems break down very fast. Sustainable access is then not met and the initial costs are at the same time very high. Therefore, MOIT are looking for such a large amount of investment capital. RE technology and price is improving. In coming time EREA will consult MOIT and the Government to accelerate and promote RE in remote areas where there is no grid yet or cannot reach.

Agenda item	Summary
	<ul style="list-style-type: none"> • On energy access, electricity access the Government could provide resources. Some households have electricity but not reliable, as lines are obsolete or poor and power is not up to standard compared to quality of supply in urban areas. We should have reliable, stable and efficient supply everywhere, which should be our focus. • There is also thermal / heat access such as biomass and solid waste for heating. We must promote efficient supply of biogas for example. For that we need to have additional information. <p><u>GreenID</u></p> <ul style="list-style-type: none"> • Many households still have no access, at the moment about 1m. In GreenID we have 2 models: centralised such as in a remote area in Daklak; and solar power supply in An Giang [stand-alone] because grid extension is difficult and local people have a miserable life. • In An Giang 40 households without access where the local company refused to establish the connection. Also a church and a water supply system are now electrified. In An Giang we have household-scale solar system with 1 panel/family. We explain re operation so that it does not break down. • In Daklak solar is converted to 220V but in An Giang it is 12V • In remotest areas the demand is for household use, not production • In Daklak we charge VND2000; VND7000 for 20l water. Local people run it and keep the proceeds for repairs. Some equipment is cheap. We have an application to monitor the system on a daily basis. We have contracted a Vietnamese company for the equipment and on the spot training of local technicians; alternatively, they call people from the company to fix problems <p><u>EUD</u></p> <ul style="list-style-type: none"> • On electrification we know the challenges and are providing assistance to MOIT. The national programme should also consider offgrid solutions that are important for us. Prefeasibility studies will be done in 26 provinces. Also as mentioned by GreenID. We also need to listen to the provinces what the challenges are, also as per MOIT. The budget is also a challenge. <p><u>Hanoi university</u></p> <ul style="list-style-type: none"> • Rural electrification is a big challenge. We must pay special attention to mini-grids. If we want to disburse and get households to access electricity, mini-grids are necessary. Off-grid is easier. Mini-grid that will be connected to the master grid is more challenging. • To serve remote households with traditional energy is also important. We can do biogas and improved cookstoves. • Equipment for cleaner and greener energy must be improved and supported as well. A survey of poor households shows they could afford energy efficient (EE) devices, e.g. efficient lightbulbs

Agenda item	Summary
	<p><u>GIZ consultant</u></p> <ul style="list-style-type: none"> • New customers and supplies must be addressed, and we also need to look at existing demand and customers as the existing grid also needs improvement. Electricity quality is important too, not only quantity. • To connect the last households is very costly and we need to prioritise. Off grid supply to people far away from the grid is about people who have no ability to repay extension. If 20km away we should go for off grid. But the capacity may not be enough for the demand of eg a household enterprise. All provinces must follow the same standards. <p><u>MPI, Department of Industry</u></p> <ul style="list-style-type: none"> • In remote areas we must mainstream energy saving. Some concentrated households can combine sources of energy, also biomass to electricity, and solar PV with water purification. • The population is not concentrated. We are delayed in implementation and MOIT must provide diversified solutions depending on potential in a region. Good that RE cost has come down, but there are still technical challenges, e.g. maybe the inverter is not of good quality. Ethnic people maybe not maintain the equipment well, and as we monitored we saw it is not up to expectation. • There are foreign companies with good research on solar power. Also, bigger systems to be connected to the grid, the larger solar farms. Also, storage of solar power is a challenge. • We need small scale non-refundable projects to research what to do and we need help with training. • Now equipment not produced in VN and must import. • Also biomass, rubbish can be used. We have pilot projects with local equipment, not perfect. • Need to assess which islands suitable for wind or solar and see if there is potential for cables.
<p>Proposed focus themes and workplan 2018 of TWG 4</p>	<p><u>Co-Chair</u></p> <p>We have proposed three themes as focus of TWG4:</p> <ul style="list-style-type: none"> • Financing • Improve access through off grid solutions • Biogas/mass etc. <p>We must discuss this first. Then we must agree on our products/outputs and we need leaders, people who work on a subject. If we cannot agree and finalise this today then the secretariat will consult further.</p> <p><u>Chair</u></p> <ul style="list-style-type: none"> • We collect the key issues and submit to the Steering Committee (SC) <p><u>MPI, Department of Industry</u></p> <ul style="list-style-type: none"> • We are clear on the challenges of rural electrification. We have 5 TWGs, and could combine with 1, 2 and 3. • MPI is coordinating ODA, and also Green Growth (by 2020). In the

Agenda item	Summary
	<p>past Viet Nam received a lot of ODA, but now it is a MIC and must focus on the preferential loans, refinancing in provinces and EVN. We are also facing the public debt problem. The poor, the 2 percent is important – Decision 2081 aims for access by 2020. But capital from state budget 100m. EU provided 100m and also ADB but we must consider the public debt and we are looking for all sources. We try to use the credit as efficiently as possible.</p> <ul style="list-style-type: none"> • Tariff is also a challenge. The feed-in-tariff (FiT) for wind is not in line with production cost and we need to think (MOIT is reviewing this). And VN does not have a master plan on wind and need that so that we can invite investors to come. <p><u>ADB</u></p> <ul style="list-style-type: none"> • We are very supportive of the energy access. Waiting for Government decision on financing, ADB investment project. • Many challenges in the rural area to electrify. Must learn from past experience. ADB project will also be a complex process to plan and implement (procurement and operations). In the past WB project also met some challenges that we need to learn from. • Should have national programme and in parallel other solutions. Co-exist or in the long run connect to the national system. • Also some ideas from other countries and come up with other solutions for reaching out to other communities • Financials? Investment cost in rural areas is higher than urban but same tariffs. Bad supply quality is because of lack of funds. Need clear financial mechanism or the same will continue. So what is the financing gap in the rural area and how can that be off set by different mechanisms? This is an opportunity to work together. ADB rural electrification and also small hydro completed last year that we will evaluate this year. WB also has recommendations. • TWG should stocktake the lessons learned and then develop different ways of doing in the future <p><u>Chair</u></p> <ul style="list-style-type: none"> • We submitted to Government how to use the preferential loan from ADB. But a key objective is welfare, social security, and therefore electrification is planned mostly from the state budget. If we have loans then the Government will have to repay. Therefore, MOIT and ADB are submitting a mechanism to the Government in which it has to guarantee the repayment. The Government has also set a percentage for the provinces to pay. But will the local authorities balance this with their budget and also repay a part? We also work with MPI to get the feasibility study (FS) approved, especially the financing scheme and then we will be able to know how to borrow <p><u>GIZ consultant</u></p> <ul style="list-style-type: none"> • On financing. Viet Nam is very successful on electrification and the last part is difficult. Now localities must re-borrow and interest rate no longer preferential. In the South there is high demand. EVN interest is less for achieving the objectives.

Agenda item	Summary
	<p data-bbox="475 271 608 300"><u>Secretariat</u></p> <ul data-bbox="523 309 1390 371" style="list-style-type: none"> <li data-bbox="523 309 1390 371">• To look into ways of financing is one of the questions proposed for the TWG4 work <p data-bbox="475 416 528 445"><u>ADB</u></p> <ul data-bbox="523 454 1390 517" style="list-style-type: none"> <li data-bbox="523 454 1390 517">• Yes, we must find new ways, and including a new role of Government too, not just local entrepreneurs. <p data-bbox="475 562 528 591"><u>EUD</u></p> <ul data-bbox="523 600 1390 736" style="list-style-type: none"> <li data-bbox="523 600 1390 663">• We must look at the mapping exercise: who are the donors already worked on this, actors already involved in this? <li data-bbox="523 669 1114 698">• EU can promote mini-grids, e.g. with GreenID <li data-bbox="523 705 1031 736">• Sustainability is key, as MOIT stressed.
<p data-bbox="193 781 440 880">Conclusions, agreements, closing remarks</p>	<p data-bbox="475 781 576 810"><u>Co-Chair</u></p> <ul data-bbox="523 819 1390 1064" style="list-style-type: none"> <li data-bbox="523 819 1390 918">• On each proposed theme for TWG4 we need partners to take it up, sponsor this, e.g. through workshops, seminars that relate to the theme. The EU can do this on mini-grids <li data-bbox="523 925 1350 954">• We need to hear about commitments from partners now or later <li data-bbox="523 960 1390 1064">• Please contact the Secretariat if you have the ability to actively contribute with “in-kind” human resources for example. That will be consolidated into our work plan and submitted to the SC. <p data-bbox="475 1108 539 1137"><u>Chair</u></p> <ul data-bbox="523 1146 1390 1498" style="list-style-type: none"> <li data-bbox="523 1146 1390 1209">• We are sorry for equipment problems this morning, but we have received comprehensive inputs, for which we are grateful <li data-bbox="523 1216 1390 1279">• The Chair, co-Chair and Secretariat will discuss further and reflect. Then we will fine tune our report to SC of the VEPG <li data-bbox="523 1285 1270 1314">• The Secretariat has mapped three themes / areas of work. <li data-bbox="523 1321 1390 1498">• When you access to documents, e-library, then decide what you can do. This is initial workplan. Share with us your ideas on the themes and perhaps support workshops etc. we hope we have provided sufficient information. We will be having future meetings and develop good recommendations to the SC.