







MILESTONE REPORT

FOR

IEA PVPS Workshop Putrajaya, 2nd March 2009

Prepared by: Malaysia Building Integrated Photovoltaic (MBIPV) Project



MILESTONE REPORT

for

IEA PVPS Workshop

Malaysia Building Integrated Photovoltaic (MBIPV) Project

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Introduction

This milestone report is prepared by Component 1 of the Malaysia Building Integrated Photovoltaic (MBIPV) Project to report to the National Project Leader and other higher authorities involved in the MBIPV Project.

Background

On 22nd October 2008, Malaysia officially became a full member of the IEA PV PS. Malaysia is currently actively involved in Tasks 1, 10, 11 and 13. In 2007, Malaysia offered to host the 32nd IEA PV PS Task 1 Experts Meeting and this was subsequently agreed in 2008. The 32nd Task 1 Experts Meeting will convene from 4th – 5th March 2009 in Kota Kinabalu, Sabah. The country members of Task 1 are PV experts in their respective countries. For this reason, a proposition has been brought forward to the 31st IEA PVPS Task 1 Experts Meeting in Sophia-Antipolis, France in June 2008 for an IEA PV PS workshop to be carried out in conjunction with the Task 1 Meeting in Kota Kinabalu, Sabah. The same proposition was subsequently brought forward to the IEA PV PS Exco Meeting in Vienna, Austria in October 2008. The IEA PV PS workshop is a joint effort between the Ministry of Energy, Water and Communications (MEWC) and PTM. PTM believes that the sharing of firsthand know ledge from the Task 1 country members will benefit the participants of the workshop greatly. The workshop which was held on 2nd March 2009 at the Shangri-la Putrajaya Hotel focused on PV Policies and Market Status of Task 1 country members of IEA PVPS.

Objectives of Workshop

- Firsthand knowledge sharing by Task 1 country PV experts from IEA PV PS on PV Policies, lessons learnt and status of PV Market in their country
- Opportunities for high level participants to interact directly with speakers and discuss pertinent issues to PV policies
- Netw orking opportunities with speakers and participants

The workshop was fully sponsored and as such, participants were exempted from paying any registration fee. Target participants are from Government, local PV industry and academics. The workshop has an initial target of 100 participants.

Methodology

It was decided that the organizing of the event be outsourced to an event organizing company. A call for quotation was made on 2nd January 2009 which closed on 12th January

2009. A total of 4 event companies responded to the call for quotation. Based on pricing, the outsourcing of the IEA PV PS Workshop was awarded to World Communications Network (M) Sdn Bhd. The scope of works covered by the event organizer can be found in Annex A. The Task 1 country members who accepted the invitation to speak at the workshop were from: Australia, Austria, Canada, Denmark, France, Germany, Japan, Spain and the United States. The speakers were provided 2 nights' accommodation at Shangri-la Putrajaya Hotel and per diem allow ance to cover any miscellaneous expenses incurred by the speakers. The programme can be found in the promotional material in Annex B.

Messages from Key Speakers

The welcoming speech was delivered by Pn Badriyah Abdul Malek, Undersecretary Sustainable Energy Development Division, Ministry of Energy, Water & Communications. Pn Badriyah is also the main IEA PV PS Exco representative for Malaysia. The key speakers of the workshop are from countries with strong PV policies and hence, PV growth. These countries include Germany, Spain, USA, Japan and France.

Dr Frank Stubenrauch, Head of Renew able Energy Division of Project Management Jülich provided updates on Germany. Germany is the country which leads in PV installed capacity. Germany amended the Electricity Feed Act (EEG) which came into force at the beginning of January 2009. Under this amendment, customers having indirect feed for their PV systems will be paid 25 euro cents per kilow att hour. A press release statement (ChannelPartner, 12th January 2009) commented that "this rate exceeds the feed-in tariff because pow er network costs will also be saved. If electricity prices from the pow er network continue to rise - as is to be expected - the total remuneration will increase accordingly". In 2008, the unconfirmed cummulative PV capacity for Germany is estimated to be 5,300 – 5,550 MW, the installation for 2008 is estimated to be betw een 1,500 – 1750 MW. The cost of PV systems has dropped 15% since 2006 and the 55,000 jobs have been created in 2007 for solar PV and solar thermal.

Assoc Prof Dr. Vicente Salas of Universidad Carlos lii De Madrid presented an update on Spain. PV installations for 2008 in Spain reached an unconfirmed record of 2,200 MW and cummulative capacity of nearly 3,000 MW. 65% of these installations are solar farms. The Royal Decree 1578/2008 has created attractive feed-in tariff which puts Spain second in the lead after Germany in terms of the total PV capacity installed.

Ms Izumi Kaizuka of RTS Corporation provided an update on PV status in Japan. The Residential PV Programme which is a subsidy programme that ended in 2005 saw a revival

in January 2009. Japan is considering implementing the feed-in tariff based on surplus PV electricity generated and the feed-in rate is double the normal tariff. The feed-in tariff is supposed to be implemented in the year 2010.

Ms Carol Anna, a senior communicator for the Department of Energy's National Renew able Energy Laboratory provided updates on USA.Under President Obama, clean energy is gaining priority in the President's national agenda. President Obama's \$787 billion American Recovery and Reinvestment Act of 2009, which was passed on February 17 2009, dedicated \$16.8 billion to the Department of Energy's Office of Energy Efficiency and Renew able Energy. This is a tenfold increase over the \$1.7 billion the office received in fiscal year 2008. In addition, the U.S. federal Investment Tax Credit legislation is expected to help create a more stable business environment for solar energy. The existing tax credit was set to expire on January 1, 2009. Then, on October 3, the Emergency Economic Stabilization Act of 2008 was passed. The new Act will extend the 30% commercial investment tax credit for eight years and eliminates the \$2,000 monetary cap for residential solar electric installations.

Mr. André Claverie from the French Agency for Environment and Energy Management provided update on the PV status in France. The Grenelle "1" Law was adopted by Parliament (October 2008) and Senate (February 2009). Under the first phase of the "Grenelle of Environment", there are 50 measures to promote Renewables and Environmental Quality (HQE). For PV, these measures include feed-in tariffs for PV which will be maintained until 2012, decision for tariff for a new category of application in buildings, clarification of fiscal aspects relating to solar PV (e.g. income tax, VAT, etc.) and simplification of administrative steps to install PV. These measures are expected to increase PV market from €400m in 2007 to an estimated €2,000m in 2012 and employment in PV industry from 2,100 in 2007 to an estimated 13,000 in 2012.

The workshop concluded with a closing speech by Ir Ahmad Hadri Haris, Head of Renewable Energy Unit of Pusat Tenaga Malaysia and the alternative IEA PVPS Exco representative from Malaysia.

Presentation slides from the speakers at the IEA PVPS workshop are available from <u>www.mbipv.net.my/past_events.htm</u>.

Outcome & Impact Analysis

Although the initial target for the workshop was 100, the total and final number of registrations reached 180. On the final week leading to the event, the hotel seating capacity

was subsequently increased from 100 to 150. On the day of the workshop, the total number of participants turning up was 149; the attrition rate is 16% and this is higher than the attrition rate of National PV Conference 2008 of 11%.

Profile of participants

The objective of this workshop is to create PV awareness among the decision makers



especially those from the government ministries, government agencies and academics. This pie chart shows the composition of government versus industry participants. From the chart, the government sector represented 57% of the total participants. In comparison, only 15% of the total

partic

ipants registered for the National PV Conference 2008 held on 14th August 2008 were from the government sector. Foreign participants made up 9% of the total participants registered for the workshop. This remains rather consistent with the National PV Conference 2008 which registered 11% foreign participation.









VIPs in the spirit of camaraderie

Opening speech by Pn Badriyah Abdul Malek, Ministry of Energy, Water & Communications



Izumi Kaizuka presenting Japan's PV status



Participants at the IEA PVPS workshop



Morning tea break & networking moments



Carol Anna presented Obama's New Energy Plan



Emcee by Azah Ahmad, MBIPV Project



Dr Frank Stubenrauch on Germany's PV status



Dr Vicente Salas on Spain's explosive growth



Closing speech by Ir Ahmad Hadri Haris, PTM

Analysis on Feedback from Participants

At the end of the workshop, feedback forms were collected at the registration table in exchange for a copy of Photon International magazine, SURIA 1000 notebook and brochures on PV Customer Guide and Quality Assurance Scheme. 85 of the participants returned their feedback forms. A sample of the feedback form can be found in Annex F. The follow ing is an analysis based on the feedback forms received.

Effectiveness of Promotional Channels for the Workshop

It should be noted that no advertisement on the IEA PV PS Workshop was carried out. From



the chart, it can be seen that invitation via email and/or fax was the most effective promotional means for the workshop, accounting for 59% of the promotional channel. Word of mouth and website event announcement were at 19% and 16% respectively and in reality, were almost equally effective in

promoting the workshop.

Value of firsthand knowledge on PV policies



One third of the participcants felt that the firsthand know ledge sharing by the Task 1 country members on PV policies were excellent and invaluable to them. A majority (61%) of them felt the value of the know ledge was good. There were only 6 % who felt the know ledge gained were little value to them.

Ratings on lessons learnt from other countries

55% of the participants felt the lessons learnt from other countries' presentations were good. 31% indicated that the lessons learnt were invaluable to them. 14% of the participants were lackadaisical about the value of the lessons learnt. There was no poor rating for value of lessons learnt from other countries.



Value of Knowledge Gained on status of PV market in other countries.



64% of the participants felt that the value of knowledge gained on status of PV market in other countries were good and valuable to them. 29% indicated high value in the market information. Only 7% of them felt the information on PV market was of average value. There was no poor rating for value of knowledge gained on status of PV market in other countries.

Effectiveness of Networking Opportunities

59% of the participants indicated that the networking was effective and good. 27% felt the networking was only average while 13% rated the networking as excellent. Only 1% indicated that the networking opportunity was poor.



Rating on overall impression of the workshop 60% of the participants felt the workshop was good. 33% rated the overall workshop as excellent. Only 6% rated the overall workshop as average. There was no poor rating on the overall impression of the workshop.

Some of the participants commented that overall workshop can be improved through:-

- distributing the proceeding in advance;
- proper moderation of Q&A;
- longer w orkshop session maybe full day;
- smaller group, the event w as too big to be classified as a 'w orkshop';
- more opportunities to network with speakers;
- more time allocated for speakers;
- speakers should touch on technical aspect of PV technology;
- less speakers for more info;
- presentation by IEA PV PS new member, Malaysia;
- briefing on Malaysia's plan on PV;
- exhibition of PV providers and suppliers;
- provide contact details of all participants;
- To include climate change in the topic.

Rating on the Organization of the Workshop

60% felt that the organization of the workshop was good. 30% rated the organization as excellent and 11% rated as average. There was no poor rating for the organization of the workshop.



Some of the participants commented that the organization of the event can be improved through:-

- provide screen projection for back audience;
- logistics of people manning the AV equipment;
- more product brochures from manufactures/integrators;
- venue the hall is too long;
- provide maple phone for speakers;
- the LCD projector w as out of focus during the start of the w orkshop;
- tables too close and space is a constraint;
- directional signs were not adequate;
- snacks were not fantastic for a 5-star hotel;
- feedback microphones were distant and not portable stilled response from the audience;
- proper Q&A approach.

Comments on MBIPV Website



Participants were requested to give a feedback on the website. 70% of those who returned their feedback forms have visited the MBIPV's website, www.mbipv.net.my. 78% of these participants felt that the website provided good information on BIPV. 12% felt the information was invaluable. 7% felt the website was average and 3% felt the website was poor.

Participants who had visited the website commented that the website can be improved by:-

- providing more tips on PV and hybrid PV;
- including more graphical presentations use less w ords;
- sectorizing the website to suit different viewers (e.g. members of the public, industry, students, etc) so that it will be more user friendly;
- updating frequently, at least on monthly basis;
- providing related links with other countries;
- providing more technical information such as statistics, forecasts and existing projects;
- information is too 'cramped', needs to improve organization;
- showing more local BIPV installations;
- providing more educational materials to the consultants on FiT.

Media Report

In this workshop, media conference is not part of the programme. How ever, members of the press were still invited to the event. The number of media turnout was only 3; they were from the New Straits Times, Utusan Malaysia and Berita Harian. The sample of press invitation and press release can be found in Annexes C and D respectively. How ever, there was no media publications follow ing the workshop.

Conclusion

Malaysia's recent official membership to the IEA PV PS paved the way to have an IEA PV PS workshop in the country. There is tremendous PV knowledge held in totality by all Task 1 country members. The workshop aimed to achieve PV knowledge parity for a small pocket of population in Malaysia at a cost-justifiable rate. To recap, the original objectives of the IEA PV PS Workshop were to obtain firsthand knowledge sharing by Task 1 country PV experts on PV Policies, lessons learnt and status of PV Market in their country, provide opportunities for high level participants to interact directly with speakers and discuss pertinent issues to PV policies and finally, to promote networking among speakers and participants. The feedback forms show ed that the participants by and large do value the information and knowledge gained on PV policies in their countries. It is hoped that this workshop which has target audience primarily from the government sector will adopt the same priority for PV and other renew able energies in the national agenda.

Annex A: Scope of Works for Event Organizer

A Call for Quotation Event: ½ day Workshop Date: Monday, 2nd March Venue: Putrajaya Shangri-Ia Hotel Deadline: 5pm on Monday, 12th January 2009



SCOPE OF WORKS FOR EVENT MANAGEMENT:

NO	DESCRIPTION	DEADLINE	REMARKS
Regi	istrations		
1	Carry out invitation and follow up with the	3 w eeks before	Invitation list will be
	target participants (200 pax) – email, tax and follow up by calls	event	provided by IVIBIPV
2	Prepare the registration list and undate	On-aoina until	By emailing the list to
-	everyday to the team (target : 100 pax)	the day before	the MBIPV
	No registration fee.	event	
3	Media invitation and organize press conference	A week before	
Hote	l Coordination		
1	Liaise with hotel – do the booking and		Shangri-la Putrajaya
	coordinate the event on the day		
2	Book speakers' accommodations		Approx 6 - 8 speakers
			For 2 nights stay
3	VIP Car parking for secretariat & VVIPs		
4	Coordinate with hotel on buffet lunch & coffee		
	break for w orkshop		
Pre-	event		
1	Printing of feedback form & programme (100	The day before	
	pax)	event	
2	Coordinate with driver to deliver the marketing	The day before	
	toolkits (to and fro)	event	
3	Organise the marketing toolkits (buntings, door	The day before	
	gifts) to be arranged at the event	event	
4	Printing of personalized nametags and lanyard	The day before	
_		event	
5	Set up must completed by evening of 1 st March	The day before	
		event	
Othe	ers		
1	Handle flow of event	Actual day	Minimum 4
2	Sufficient manpower for registration (main +		
	media)		
3	Organise, distribute (teedback form and door		
	gift) and collect the feedback form during event	A	
4	 Compile media publications of event 	A week after	
	 Analyze feedback forms 	event	

Annex B: Promotional Material







An Invitation to the IEA PVPS Workshop

Monday, 2nd March 2009 Putrajaya Shangri-La

On October 2008, Malaysia officially became the first ASEAN country to be a full member of the International Energy Agency Photovoltaic Power Systems Programme (IEA PVPS). The Photovoltaic Power Systems Programme is a collaborative R&D Agreement, established within the <u>International Energy Agency</u>, and conducting projects on the application of solar photovoltaic electricity. IEA PVPS operates worldwide via a network of national teams in member countries. The current country members of IEA PVPS are: Australia, Austria, Canada, Denmark, EPIA, European Union, France, Germany, Israel, Italy, Japan, Korea, Malaysia, Mexico, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

The Ministry of Energy, Water and Communications and Malaysia Energy Centre (PTM) is pleased to announce a solar photovoltaic (PV) workshop endorsed by the IEA PVPS. PV experts from country members of the IEA PVPS will share firsthand knowledge on PV Policies, lessons learnt and status of PV Market in their country. The workshop will also provide networking opportunities with speakers and participants sharing a common passion for solar PV development in their countries.

Programme:

8:30 am	Arrival of participants
9:00	Arrival of Guest of Honour
	Opening Speech by Yang Berusaha Pn Badriyah Hj Abd Malek , Undersecretary Sustainable Energy Development Division, Ministry of Energy, Water & Communications
9:20	Role of PVPS & Australia PV Market, Mr. Greg Watt , Task 1 Operating Agent, IEA PVPS
9:40	Status of PV Policy and Market in France, Mr. Andre Claverie , ADEME French Agency for Environment and Energy Management
10:00	Status of PV Policy and Market in Austria, Mr. Roland Bruendlinger , Arsenal Research
10.20	Coffee break
10:50	Status of PV Policy and Market in Denmark, Mr. Peter Ahm, PA Energy Ltd
11.10	Status of DV Boliov and Market in Canada Mr. Looof Avoub CanmatENEDCV
11.10	Status of FV Folicy and Market in Ganada, MI. JOSET Ayoub, Cannetenengt
11:30	Status of PV Policy and Market in Japan, Ms Kaizuka Izumi, RTS Corporation
11:30 11:50	Status of PV Policy and Market in Canada, Mr. Josef Ayoub, Cannet ENERGY Status of PV Policy and Market in Japan, Ms Kaizuka Izumi, RTS Corporation Status of PV Policy and Market in Germany, Dr. Frank Stubenrauch, Forschungszentrum Jülich GmbH
11:30 11:50 12:10 pm	Status of PV Policy and Market in Canada, Mr. Josef Ayoub, Cannet ENERGY Status of PV Policy and Market in Japan, Ms Kaizuka Izumi , RTS Corporation Status of PV Policy and Market in Germany, Dr. Frank Stubenrauch , Forschungszentrum Jülich GmbH Status of PV Policy and Market in US, Ms Carol Anna , National Renewable Energy Laboratory
11:30 11:50 12:10 pm 12:30	Status of PV Policy and Market in Canada, Mr. Josef Ayoub, Caninetenergy Status of PV Policy and Market in Japan, Ms Kaizuka Izumi , RTS Corporation Status of PV Policy and Market in Germany, Dr. Frank Stubenrauch , Forschungszentrum Jülich GmbH Status of PV Policy and Market in US, Ms Carol Anna , National Renewable Energy Laboratory Status of PV Policy and Market in Spain, Assoc Prof Dr Vicente Salas Merino , Universidad Carlos III de Madrid
11:30 11:50 12:10 pm 12:30 12:50	Status of PV Policy and Market in Canada, Mr. Josef Ayoub, CaninetENERGY Status of PV Policy and Market in Japan, Ms Kaizuka Izumi , RTS Corporation Status of PV Policy and Market in Germany, Dr. Frank Stubenrauch , Forschungszentrum Jülich GmbH Status of PV Policy and Market in US, Ms Carol Anna , National Renewable Energy Laboratory Status of PV Policy and Market in Spain, Assoc Prof Dr Vicente Salas Merino , Universidad Carlos III de Madrid Q&A
11:30 11:50 12:10 pm 12:30 12:50 1:10	Status of PV Policy and Market in Canada, Mr. Josef Ayoub, CannetENERGY Status of PV Policy and Market in Japan, Ms Kaizuka Izumi , RTS Corporation Status of PV Policy and Market in Germany, Dr. Frank Stubenrauch , Forschungszentrum Jülich GmbH Status of PV Policy and Market in US, Ms Carol Anna , National Renewable Energy Laboratory Status of PV Policy and Market in Spain, Assoc Prof Dr Vicente Salas Merino , Universidad Carlos III de Madrid Q&A Closing Remarks, Ir Ahmad Hadri Haris , Malaysia Energy Centre (PTM)

IEA PVPS Workshop

2 March 2009 Putrajaya Shangri-La

REGISTRATION FORM

Registration fee is fully sponsored by the Government of Malaysia. Each organization is limited to 2 pax.

Name:		
Job Title:		
Phone:		
Email:		
Name:		_
Job Title:		_
Phone:		
Email:		
Company:		-
Address:		
Nature of Business:		
Tel:		
Fax:		
Website:		
Please contact:		
Adrian, email: adrian@w ork	d.com.my	
Tel: 603 – 2166 3661 Fax:	603 – 2166 4661	
ada Malavsia.	Putrajava Shangri-La Hotel	

Pusat Tenaga Malaysia, No. 2, Jalan 9/10, Persiaran Usahawan, Seksyen 9, 43650 Bandar Baru Bangi Selangor Darul Ehsan, MALAYSIA http://www.mbipv.net.my

Taman Putra Perdana, Presint 1, 62000 Wilayah Perseketuan Putrajaya, MALAYSIA <u>http://www.shangri-la.com/en/property/</u> <u>kualalumpur/putrajayashangrila</u>



Annex C: Press Invitation



TO: THE CHIEF REPORTER

INVITATION TO PRESS LUNCHEON

IEA PVPS WORKSHOP: INTERNATIONAL SOLAR PHOTOVOLTAIC EXPERTS CONVENE IN MALAYSIA

Venue: Putrajaya Shangri-la Hotel Date: Monday 2nd March 2009 Press Luncheon: 1:00 pm

Highlights:

- i) Dialog session with Malaysia Energy Centre concerning renewable energies
- ii) Focus subject: Policy and Support mechanisms in various countries such as the feed-in tariff
- iii) Sharing by countries on successful solar photovoltaic programmes: Germany, Japan, Spain, USA, Australia, Austria, Sweden, Canada, Denmark and France

RSVP: Adrian at (o) 03-2166 3661, fax) 03-2166 4661 email <u>adrian@world.com.my</u>

1) Stern, N. (2007): The Economics of Climate Change - Stern Review, Part IV: Policy Responses for Mitigation

The famous Stern Report on the financial costs of global climate change was published by the former chief economist of the World Bank, Nicolas Stern. Part IV of the report (Policy Responses for Mitigation) gives a short overview of the existing of incentives for renewable energy projects and differentiates between price based (e.g. RE-FiT Laws) and quantity based (e.g. Tradable Green Certificates) support mechanisms. It argues that both have proven to be effective in the past "but existing experience favours price-based support mechanisms" (pg.366) and a comparison of tradable quotas and feed-in tariffs reveals that the latter achieves "larger deployment at lower costs" (pg. 366).

2) Federal Environmental Agency (2006): Monitoring and evaluation of policy instruments to support renewable electricity in EU Member States - Final Report

The report compares feed-in tariffs and quota systems (Tradable Green Certificates (TGCs) / Renewable Portfolio Standards (RPS)). In this respect, the report concludes that "feed-in tariffs (FiTs) have been successful in triggering a considerable increase of RE technologies in almost all the countries in which they have been introduced and where their effectiveness was not significantly hampered by major barriers (administrative barriers, grid access, etc.)" (pg. 88). In addition, the report states that "the risk premium required by investors can be minimised by the high level of price security given by feed-in tariffs, thus lowering the overall costs for consumers and assuring relatively homogenous premium costs for society over time" (pg. 88).

3) United Nations Development Programme (2008): Promotion of Wind Energy – Lessons Learned From International Experience And UNDP-GEF Projects, Chapter 1: Public Policies

The report stated that "feed-In tariff policies have been very effective in Germany, Spain and Denmark, leading to the world's first, second and fifth installed wind energy capacities. France and Portugal have also used Feed-In tariffs to become fast growing wind energy countries with 810MW and 695MW installed in 2006, bringing them to 10th and 9th place in terms of installed capacity" (pg. 16).

4) International Energy Agency (2008): Deploying Renewables – Principles for Effective Policies

The report summarised that "feed-in Tariffs are more effective and cheaper than quotas for Renewable Energy".

5) Ernst & Young (2008): Renewable Energy Country Attractiveness Indices

The report concluded that "feed-in Tariffs are cheaper than trading system" whereby comparing the cost to consumer in delivering renewable electricity, "the Germany's EEG is cheaper at 2.6 p/kWh as compared to United Kingdom's Renewable Obligation (RO) at 3.2 p/kWh" (pg. 13). The report also summarised that "feed-in tariffs have the benefit of curbing the cost to the energy consumer of renewable in the context of rising oil prices" (pg. 4).

Annex D: Press Release

TO : THE NEWS EDITOR For immediate release:



"SOLAR PHOTOVOLTAIC EXPERTS FROM INTERNATIONAL ENERGY AGENCY PHOTOVOLTAIC POWER SYSTEMS PROGRAMME (IEA PVPS) CONVENE IN MALAYSIA"

MALAYSIA ENERGY CENTRE (PTM) PROVIDES PLATFORM FOR SOLAR PHOTOVOLTAIC EXPERTS TO SHARE KNOWLEDGE

Kuala Lumpur, Monday (2nd March 2009): Malaysia, since October 2008, officially became the first ASEAN country to be a full member of the International Energy Agency Photovoltaic Pow er Systems Programme (IEA PVPS). The IEA PVPS Executive Committee representative from Malaysia is Pn Badriyah Abdul Malek, Undersecretary, Sustainable Energy Development Division, Ministry of Energy, Water and Communications. Each year, country members of the IEA PVPS convene for national exchange of know ledge on solar PV development in each country. In 2009, Malaysia is host to the 32nd IEA PVPS Task 1 Experts Meeting.

The Ministry of Energy, Water and Communications (MEWC) and Pusat TenagaMalaysia (PTM) have provided a platform for these solar photovoltaic (PV) experts from country members of the IEA PV PS to share firsthand know ledge on PV Policies, lessons learnt and status of PV Market in their countries. The speakers for the workshop are from Germany, Japan, Spain, USA, Australia, Austria, Canada, Denmark and France.

According to Ir Ahmad Hadri Haris, Malaysian alternate representative of the IEA PVPS Executive Committee and Head of Renewable Energy Division in Pusat Tenaga Malaysia said, "Malaysia is fortunate to have these IEA PVPS country members to share with us their expert opinions on policy and market development in their country. Existing experiences on policy mechanisms by other countries for solar PV favour price-based support mechanisms; a comparison of tradable quotas and feed-in tariffs reveals that the latter achieves larger deployment at lower costs (Stern Report). Germany and Spain have flourishing solar photovoltaic growth which is largely attributed to the feed-in tariff mechanism. US is fast becoming an important solar PV market especially under the New Energy Policy driven by

President Barack Obama and some states are seriously considering the feed-in tariff as well".

The feed-in tariff (FiT) is one of the world's most effective RE promotion mechanisms; pioneered by Germany through their RE Act (since 2000) and today Germany is the country with the highest installed grid-connected PV capacity in the world (approx 3,860 MWp). The feed-in tariff allows owners of solar PV (and other RE) systems to be connected to the grid and to receive monthly revenue from the utilities at a rate above the normal market rate as set by the Law. The feed-in tariff typically involves a contract betw een the utility and the PV systems ow ner for a fixed period of term, say 20 years.

In Malaysia, the Ministry of Energy, Water and Communications is developing a holistic Renew able Energy (RE) Policy and Action Plan. Feed-in tariff has been identified as the key mechanism to accelerate RE deployment in the country concurrently with other initiatives which will then develop a sustainable and growing RE industry and applications.

For more information on solar photovoltaic, please visit <u>http://www.mbipv.net.my</u> or email to <u>weinee@mbipv.net.my</u>

OPENING SPEECH NOTE ATTACHED AT END OF PRESS RELEASE.

MBIPV Project

The MBIPV Project is initiated by the Government of Malaysia with co-financing from Global Environment Facility (GEF) disbursed through United Nations Development Programme (UNDP). The main objective of MBIPV Project is to reduce long-term cost of solar BIPV technology that will reduce emission of greenhouse gases into the environment and will address long-term energy supply security for the country. The project was officially launched on 25th July 2005 by Y.B. Tun Dr. Lim Keng Yaik, the former Minister of Energy, Water and Communications. MBIPV Project is implemented by Pusat Tenaga Malaysia under the authority of **Ministry of Energy, Water and Communications**.

For enquiries:

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Phone :	012 385 0968

Annex E: Nametag design









Annex F: Sample of Feedback Form

D		
Malaysia	Energy	Centre





Ministry of Energy, Water and Communications, Malaysia

IEA PVPS Workshop 2 March 2009 at Putrajaya Shangri-La Hotel

No	Questions				
1	How did you get to know about the event? (Plea	use tick (/))			
	Wobsito	From co	<u></u> collegaue/ friends		
		Othere			
	Invitation by email/ fax	Others,	piease sp	ecity :	
>	For questions 2, 3, 4 and 5, please tick whichever i	is applicable,	, based or	n the rating	belo
No	Description	Excellent	Good	Average	Po
2	What did you appreciate most about the event?	>	1	II	
	 Firsthand knowledge on PV policies 				
	 Lesson learnt from other countries 				
	 Status of PV market in other countries 				
	Interaction and networking				
3	Overall impression of the event – was it worth				
	alienaing/ participaling?				
4	How do you rate the organization of the event?				
4	How do you rate the organization of the event? How can we improve for future events?				
4	How do you rate the organization of the event? How can we improve for future events?				
4	How do you rate the organization of the event? How can we improve for future events? Have you visited our website,				
4	How do you rate the organization of the event? How can we improve for future events? Have you visited our website, www.mbipv.net.my?				
4	How do you rate the organization of the event? How can we improve for future events? Have you visited our website, www.mbipv.net.my? If so, kindly rate the website?				
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