



**APERC Workshop, Washington D.C.
5 November 2012**

4. APEC PREE Phase 3 in the Philippines

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Asia-Pacific
Economic Cooperation



Outline of Presentation

Part 1: Overview of the Philippines EE&C

□ Key Findings

- ✓ The National Energy Efficiency and Conservation Program (NEECP)

Part 2: Philippines PREE Report

□ Recommendations

□ The PREE Team Members



Overview of the Philippines EE&C



Information,
Education and
Communication
Campaign
(IECC)

Standard and
Labeling for
Household
Appliances

Voluntary
Agreement

The National Energy
Efficiency and
Conservation Program
(NEECP)

Fuel
Economy
Run

Philippine
Energy
Efficiency
Project (PEEP)

Recognition
Award

Energy
Management
System/
Energy Audit

Government
Energy
Management
Program (GEMP)



Overview of the Philippines EE&C

Information,
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Voluntary
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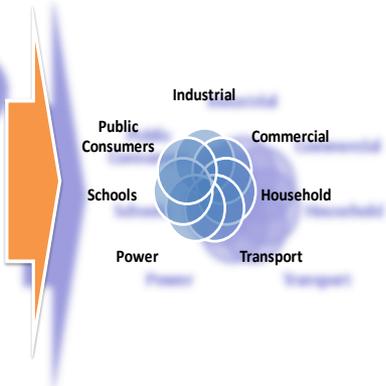
Philippine
Energy
Efficiency
Project (PEEP)

Tri-Media

Seminars/Training-Workshops

EE&C Promotional Materials

Program Launching



Overview of the Philippines EE&C

Standard and Labeling for Household Appliances

AIR CONDITIONERS ENERGY GUIDE
 for cooling capacity of 12,000 Btu/h and above. This model is classified as:

★ ★ ★ ★ ★

lowest ← → highest
MORE STARS MEANS HIGHER EFFICIENCY

ENERGY EFFICIENCY RATIO
 For this model, the minimum EER standard set by the government for the year 2006 is 8.8

10.0

Approximate monthly cost of operating this unit \blacktriangleleft Cost of Operation $\frac{\text{Power Input}}{1000 \text{ W/kW}} \times \text{Monthly Usage}$ \times Electricity Rate \times Power Rate \times Price/kWh

Electrical Appliances Philippines Corporation

Brand : Room Air conditioner Cooling Capacity : kJ/h
 Model : WINDOW Power Input : W
 Type : WINDOW Frequency : 60 Hz
 Voltage : 230 V

REMOVAL OF THIS LABEL BEFORE CONSUMER PURCHASE IS A VIOLATION OF REPUBLIC ACT NO. 7394

For additional information ask your dealer or write / call the Department of Energy, Lighting and Appliance Testing Laboratory, PNO-CRC Compound, Commonwealth Avenue, Diliman, Quezon City, Tel. Nos. 929-04-43, 927-72-01 or 788 9200-04-78.
 website: www.dte.gov.ph

4709228003649
 DOE CONTROL NO.

SINGER PHILIPPINES INC.

Brand : SINGER[®] Rated Voltage : 230 volts
 Model : REF 178A Rated Current : 0.90 ampere
 Type : ONE DOOR Rated Frequency : 60 hertz
 Total Storage Volume : 196 liters Energy Consumption: 0.84 kW-h/24h
 Rated Power Input : 116 watts

ENERGY GUIDE
 REFRIGERATORS AND FREEZERS
 ENERGY EFFICIENCY FACTOR

246

(At standard test condition)

higher EEF means lower operating cost

The daily operating cost of this model will be approximately:

Energy Consumption \times Energy Cost = Cost of Operation
 (kWh/24h) (Price/kWh) (Price per day)

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For additional information ask your dealer or write / call the Department of Energy, Tools and Appliance Testing Laboratory, PNO-CRC compound, Commonwealth Avenue, Diliman, Quezon City, Tel. Nos. 929-04-43, 927-72-01 or Fax 929-04-78.

Brand Name :
 Model/Type :
 Wattage Rating :

Lamp Specifications *

Light Output : 900 lumens
 Power Consumption : 15 watts
 Efficacy : 60 lumens per watt
 Average Life : 8,000** hours

For lamps of similar light output, higher efficacy means more energy savings

* when tested at standard test conditions
 ** rated average life at 50% failure

dte
 DEPARTMENT OF ENERGY
 PHILIPPINES

dte
 DEPARTMENT OF TRADE & INDUSTRY
 PHILIPPINES



Overview of the Philippines EE&C

Fuel
Economy
Run





Overview of the Philippines EE&C

Government
Energy
Management
Program (GEMP)





Overview of the Philippines EE&C

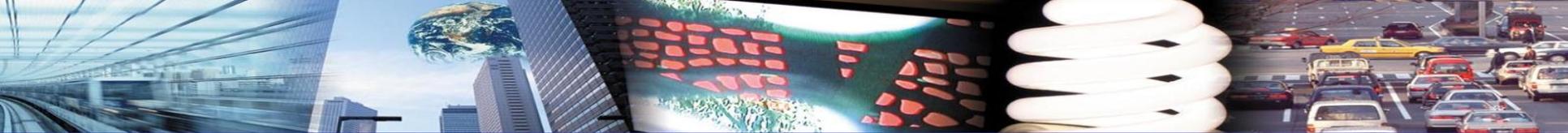
Recognition
Award

Energy
Management
System/
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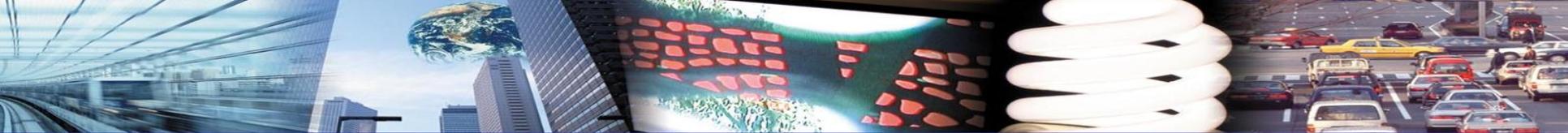
Secretary's Award Recipient: Toshiba





Philippines' PREE Report

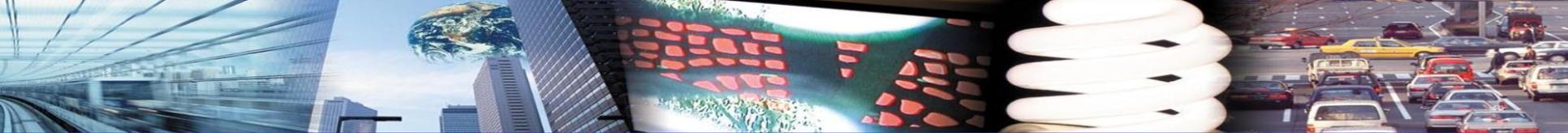
- Institutional Context - 3 Recommendations
- Energy Efficiency Goals, Targets and Strategy - 10 Recommendations
- Energy Data Collection and Monitoring - 2 Recommendations
- Policy Measures (Sectoral Analysis)
 - ✓ Industry Sector - 5 Recommendations
 - ✓ Electricity Sector - 5 Recommendations
 - ✓ Other Sector - 6 Recommendations
 - ✓ Transport Sector - 5 Recommendations



Philippines' PREE Report

- Energy Management - 8 Recommendations
 Mechanism and Training
- Appliances and Equipment - 10 Recommendations

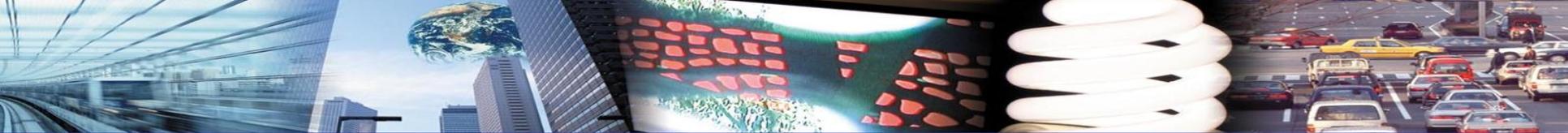
54
Recommendations



Philippines' PREE Report

The Experts' Recommendations

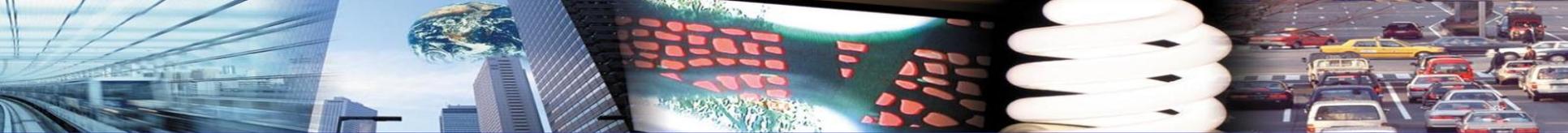
- Create an energy efficiency framework that is focused on the low-income people of the Philippines;
- Set individual sector goals and develop a more robust energy consumption data base;
- Feedback mechanism for information campaign;
- Encourage more industries for energy efficiency and conservation program be part of their own strategies; instead of voluntary make it mandatory;
- Enhance the introduction of electric vehicles which can be coupled with efforts to minimize upstream emissions from electricity generation, through measures taken in the energy sector;



Philippines' PREE Report

The Experts' Recommendations

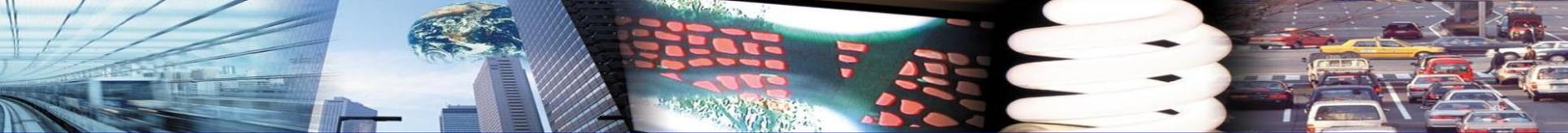
- Strengthen benefits in the sector through the introduction of fuel economy standards, financial (tax) incentives that would favor energy efficient vehicles, transport demand management;
- Strong recommendation for the passage of Energy Conservation Bill



Philippines' PREE Report

The PREE Team Members

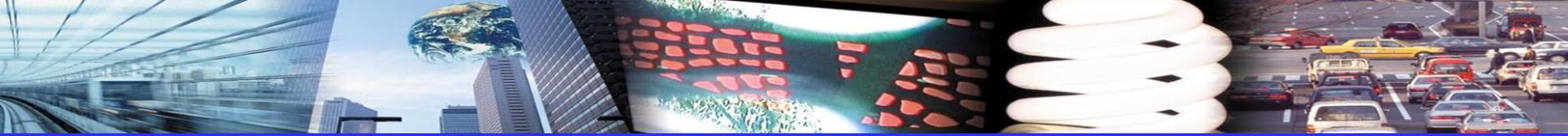
- ❑ **KENJI KOBAYASHI**, Peer Review Team Leader, President of the Asia Pacific Energy Research Centre (APEREC);
- ❑ **BRIAN T. CASTELLI**, Executive Vice President, Programs and Development. Alliance to Save Energy, U.S.A;
- ❑ **KO SAKAMOTO**, Transport Economist, Asian Development Bank (ADB)
- ❑ **CHIN-CHUNG WU**, Chief Planning Division, Department of System Operations, Taiwan Power Company, Chinese Taipei
- ❑ **IWAN RUSTANDI**, Engineer PT. Energy Management Indonesia (Persero), Indonesia

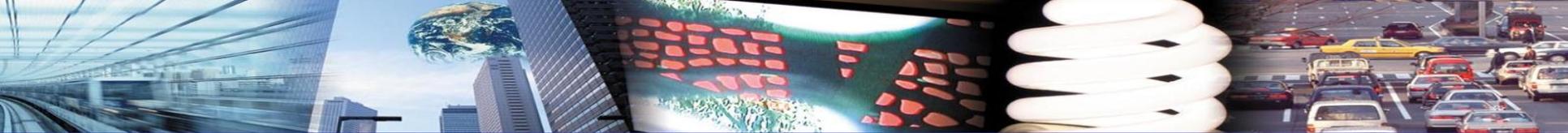


Philippines' PREE Report

(Team Members continued)

- ❑ **ASAWIN ASAWUTMANGKUL**, Department of Alternative Energy Development and Efficiency (DEDE), Ministry of Energy, Thailand
- ❑ **ASRUL SANY HAJI MOHAMMAD ALI**, Chief Technical Assistant, Energy Efficiency & Conservation Unit, Energy Department at the Prime Minister's Office, Brunei Darussalam
- ❑ **BING-CHWEN YANG**, Team Leader, Asia Pacific Energy Research Centre (APERC), Japan
- ❑ **ELVIRA TORRES-GELINDON**, Senior Researcher, Asia Pacific Energy Research Centre (APERC), Japan





The PREE News

THE EXHIBIT OF PHILIPPINE PROGRESS
SINCE 1900

MANILA BULLETIN

THE NATION'S LEADING NEWSPAPER

APEC Reviews RP Energy Efficiency

By MYRNA N. VELASCO

A peer review is being undertaken by the Asia Pacific Economic Cooperation (APEC) to assess the performance of the Philippines on its energy efficiency (EE) programs and policy initiatives.

A statement from the Department of Energy (DOE) said the process, which is done under the auspices of the APEC Peer Review on Energy Efficiency (PREE) will run from February 6 to 12. It will basically pore over the developments and hurdles being encountered in the Philippines Energy Efficiency and Conservation (EE&C) Program.

Energy Undersecretary Loreta G. Ayson acknowledged that the five-day program "will let the DoE showcase its past, current and future EE&C programs."

At this point though, she emphasized that achieving long-term benefit of the program, such as injecting lifestyle change on end-users, is still an "uphill battle".

"Changing old habits," she noted, "will be the most critical component of the government's information and education campaign (IEC) - being one of the core components of the EE program."

"We have to become diligent in spreading the benefits and advantages of becoming more energy efficient," Ayson said.

The APEC peer review of the EE initiatives has been anchored on a declaration made in Sydney, Australia in 2007 - aiming to attain a region-wide energy intensity reduction of at least 25 percent by 2030.

The program, the DOE said, encourages "all APEC economies to set individual goals and action plans for improving energy efficiency, and review progress through the voluntary APEC Energy Peer Review Mechanism."

While going through the process, Energy Secretary Rene D. Almendras

enthused that "we should be humble enough to accept ideas from a broad spectrum of individuals in realizing our developmental goals as this will allow us to craft better policies and programs which will help the country in the long run."

The Philippine target will be to generate annual savings of 3,455 KTOE and around 8.95 million tons of carbon dioxide avoidance from 2010 to 2030 with an active participation from the private sector.

The main objectives of the program, the energy department reiterated, are centered on information sharing relative to energy efficiency performance and policies among member-economies.

It is similarly hoped that such will provide "opportunities for learning from other member-economies" as well as in exploring how energy efficiency's overall sectoral goals and action plans can be effectively formulated.

The process also delves into monitoring progress toward attaining energy efficiency goals and providing recommendations for voluntary implementation.

The team deployed for the Philippine review of EE program composed of: Kenji Kobayashi, president of the Asia Pacific Energy Research Center (APEREC); APEREC Team Leader Dr. Bing-Chwen Yang; Brian Castelli, executive vice president for programs and development of Alliance to Save Energy in Washington DC; Iwan Rustandi, engineer of PT Energy Management Indonesia; Dr. Chin-Chung Wu, Planning Division chief of Taiwan Power Company's Department of System Operations; Asawin Assutunangkul of the Department of Alternative Energy Development and Efficiency of Thailand's Ministry of Energy; Asrul Mohammad Ali, chief technical assistant of Brunei Darussalam's Department of Energy; and APEREC Senior Researcher Elvira T. Gelindon.



UNIQLO, JAPAN'S POPULAR UNIQLO brand in the Philippines, with the SM Group, on the Philippines, Inc., and Na Director, UNIQLO Asia, &

UNIQLO

(Cont'd from page B-1)

Retail Act, each retail outlet required with a minimum investment of \$80,000 or an estimated \$16.6 million for 20

Otoma, who admitted that their women's products are popular in the Philippines, said that they may increase their sourcing country as the company expands and demand for its products improves.

He said that such move will only mean supplying to its stores but to support its expansion other countries in the region.

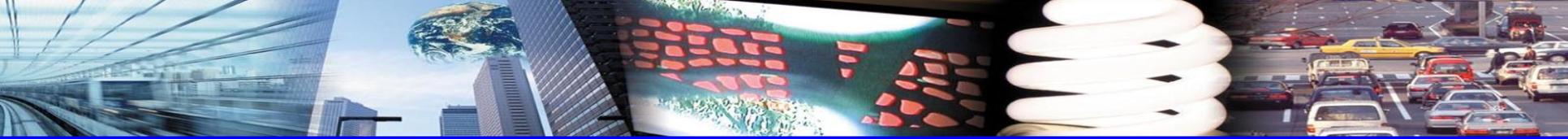
"Basically, we want to be in all of the 10 ASEAN countries we want to get into the six countries

Loans...

(Cont'd from page B-1)

November's 22.5 percent. In RFPs, lending decreased percent from end-November percent.

BSP noted that the loan production activities, bulk of the loan portfolio, went up by 20.1 percent in December to P2.541 trillion from P2.225 billion in November. Both the loan portfolio and consumer loan



APEC Peer Review on Energy Efficiency in Thailand

Thank you very much for your kind attention.

APERC

www.ieej.or.jp/aperc