### **Energy Investment Forum and Stakeholders Conference**

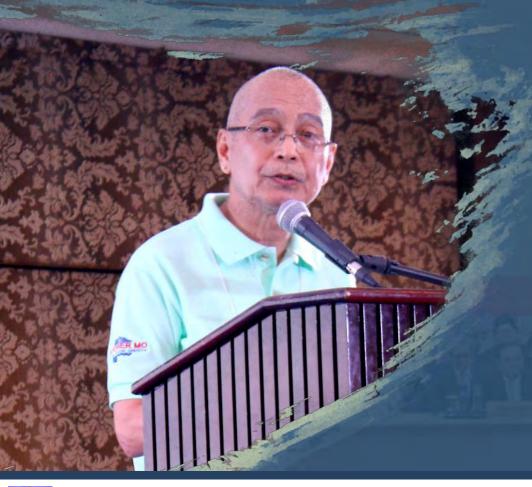
October 3, 2017
Davao City











### Welcome Remarks

"We would like to see close interaction and participation among our stakeholders in order to propel energy development and ensure sustanaible, stable, secure, sufficient, accessible and affordable supply of power in Mindanao"

Dir. Manuel M. Llaneza

Mindanao Field Office Department of Energy









### Keynote Address

"The government is working on a vision to transform our country to an upper middle-income economy by 2022:

The 'golden age of infrastructure' – **DUTERTENOMICS!**"

Message from
Secretary Alfonso G. Cusi, DOE
as delivered by Usec Wimpy Fuentebella



































**Energy Programs** 

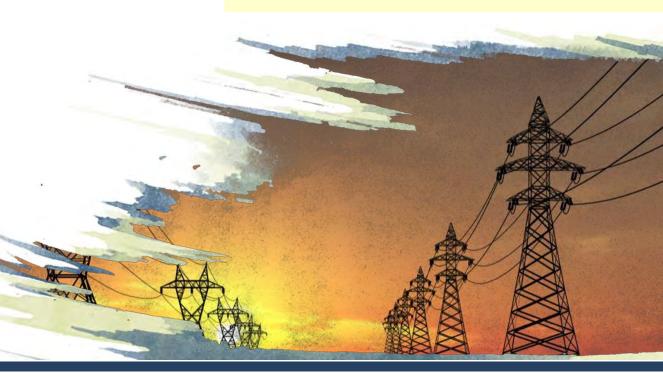
and Investment

**Opportunities** 



- 1. Ensure Energy Security
- 2. Expand Energy Access
- 3. Promote a low carbon future
- 4. Strengthen collaboration among all government involved in energy
- 5. Implement, monitor and integrate sectoral and technological roadmaps and action plans
- 6. Advocate the passage of the Department's legislative agenda
- 7. Strengthen consumer welfare and protection
- 8. Foster stronger international relations and partnerships

## **Energy Programs and Investment Opportunities**









### Mindanao's Power Supply and Energy Demand Outlook



Asst. Sec. Redentor E. Delola

Department of Energy







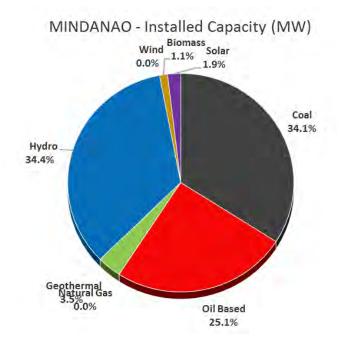
Mindanao's Power Supply and Energy Demand Outlook

















NWRB Water Permit Requirements and Processing, Fees & Charges



Dr. Sevillo D. David, Jr.

Executive Director NWRB















- Legal Framework The Water Code of the Philippines (PD 1067)
- Mandates on NWRB
- Water Rights System as a Tool for Water Resources Allocation
- Process on Securing Water Permits
- NWRB Policies on Hydropower











# LGU Guarantee Corporation's Financing Facility for Energy Projects



Mr. Allan D. Belgica

Relationship Management Department Head, LGU Guarantee Corporation







LGU-GC's
Financing Facility
for Energy
Projects









- Linking public-private partnerships for local development financing
- Mobilize resources of the private sector toward financing local development projects
- Policy reforms for LGU debts (bond floatation, direct loans)
  - Credit guarantee
  - Credit rating
  - Collaboration with NGA
  - Relationship management with financial institutions
  - Guarantee Program Managment

# LGU Guarantee Corporation's Financing Facility for Energy Projects









Experience of Therma South, Inc. in the Implementation of an Energy Project



Mr. Sebastian Lacson

President and COO, Therma South, Inc.







#### #EPOWERMOL

Experience of Therma South, Inc. in the Implementation of an Energy Project









**THERMA SOUTH, INC.** or **TSI** owns and operates the 300-megawatt (2 x 150 MW) thermal power plant

#### **Key Strategies & Approaches**

- Identify and regularly engage stakeholders
- 2. During construction phase, require contractors to give preference to applicants from the host communities
- 3. Work with legitimate community leaders.
- 4. Be sensitive to the aspirations of the local community
- 5. Build the community's ownership of the project.
- 6. Treat them as oppositors, but not as enemies.
- 7. Build the trust of the community.

### Experience of Therma South, Inc. in the Implementation of an Energy Project











BREAKOUT SESSION 1 DOWNSTREAM OIL AND NATURAL GAS

Moderator : Dr. Alvin Culaba BREAKOUT SESSION 2 UPSTREAM SECTOR

Moderator: Mr. Arnulfo Robles BREAKOUT SESSION 3 RENEWABLE ENERGY SECTOR

> Moderator: Mr. Bonar Laureto

BREAKOUT SESSION 4 POWER SECTOR

> Moderator : Mr. Enrique Gallardo

BREAKOUT SESSION 5 ALTERNATIVE FUELS and ENERGY EFFICIENCY SECTOR

Moderator: Ms. Jeanette Laurente BREAKOUT SESSION 6 CONSUMERS

Moderator: Ms. Diwata Paredes







#### **Objectives**

- 1. To inform/educate the public of the policies, plans and programs;
- 2. To strengthen partnership with stakeholders;
- 3. To enhance its Communication Plan with the assistance of stakeholders

Downstream Oil and

**Breakout Session 1** 

Natural Gas Sector

Downstream Oil and Natural Gas Stakeholders





### Relevant 9-Point Agenda

Developing
LNG needs for
the future in
anticipation
of the
Malampaya
depletion

Build a
"common
carrier" LNG
infrastructure
for a future
"Clean Energy
City"



- Expand the natural gas supply source, improve the market, develop critical infrastructures, establish publicprivate partnership and develop skills and competencies to manage the industry
- Potential supply is importation of natural gas and the need to put up the required infrastructure





### Relevant 9-Point Agenda

- Philippine National Standards formulation, development and implementation
- Regular conduct of compliance monitoring









### Relevant 9-Point Agenda

distribution framework for affordability, choice and transparency

Sustain
public
awareness
and consumer
welfare
protection





- Make 'consumer safety' a way of life
- Take immediate action against illegal and unsafe practices
- Take a strong public position on its support to stop illegal activities
- Pass and implement local ordinances that will support the implementation of DOE rules and regulations on petroleum products and facilities











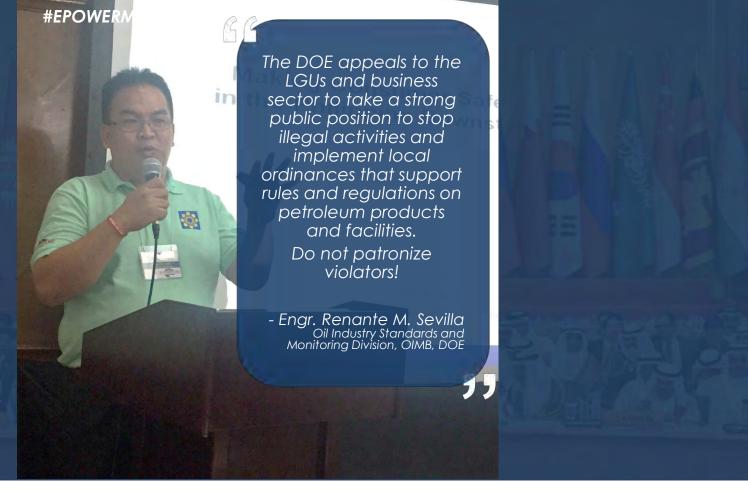


















#### Session 2

### Upstream

#### (Petroleum & Coal Sector)

Target Audience: Petroleum service contractors, coal operating contractors, stakeholders, industry partners, law enforcement agencies, and LGUs

#### **Objectives**

- To introduce the Philippine Conventional Energy Contracting Program (PCECP).
- To address concerns and inquiries on the PCECP
- To seek comments on the Proposed
   Department Circulars for Awarding Coal
   Operating Contracts and Petroleum Service
   Contracts
- To formulate action plan/way forward/timeline for addressing issues and concerns.









### **Key Strategy**

 Implement the Philippine Conventional Energy Contracting Program (PCECP)





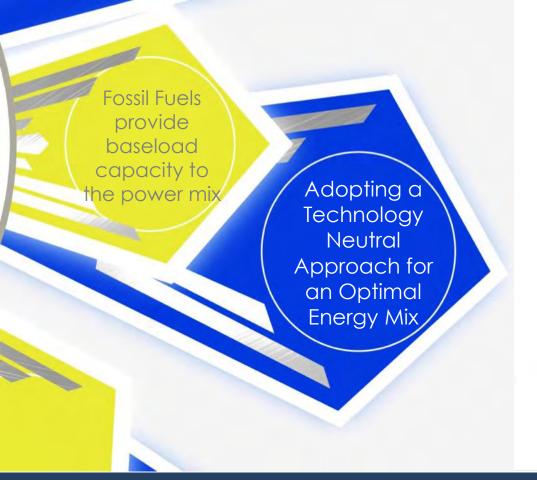
### **Key Strategy**

 To secure investment through competitive and transparent licensing of areas for coal and petroleum exploration in pursuit of energy security and sustainability through effective and reasonable development of all indigenous energy resources in the country









### **Key Strategy**

 Update Resource Assessment through conduct of exploration activities (e.g. drilling, seismic surveys, geological/geophysical exploration)

























#### Session 3

### Renewable Energy Sector

#### **Target Audience**

- General Public/Consumers
- Distribution Utilities/Electric Cooperatives, Electricity End-users
- Local Government Units
- Renewable Energy Developers and Power Generator Companies,

### **Objectives**

- To educate the general public on the existing policies, and plans and programs for the country's Renewable Energy Sector
- To strengthen partnership with all energy stakeholders;
- Inform energy stakeholders and consumers on the current government policy on renewable energy development







### Status of Renewable **Energy Development in** the Philippines

- Since the implementation of the RE Act of 2008, there has been a total of 845 awarded RE projects and an estimated installed capacity of 21.423 mW of RF.
- Renewable Energy Installed Capacity as of 2016 is amounts to 32% of total installed capacity.
- RE accounted for 24% of the 90.979 GWh total gross power generation for the year 2016

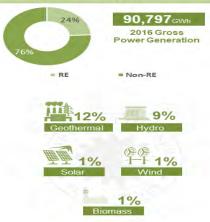
#### **PH Installed Capacity** 2009 - 2016







#### **PH Gross Power Generation** 2009 - 2016



#### AWARDED PROJECTS UNDER RE LAW

RESOURCES	AWARDED PROJECTS		POTENTIAL CAPACITY MW		INSTALLED CAPACITY MW	
	Commercial	Own-Use	Commercial	Own-Use	Commercial	Own-Use
Hydro Power*	451		13,513.63		965.04	
Ocean Energy	6		26.00			
Geothermal**	41		575.00		1,906.19	
Wind	59	1	2,341.50		426.90	0.0006
Solar	196	16	5,567.27	4.286	900.18	3.218
Biomass	51	24	326.68	16.15	389.58	126.78
Sub-Total	804	41	22,350.08	20.436	4,587.89	130.00
TOTAL	845		22,370.52		4,717.89	







### Implement the Renewable Portfolio Standards (RPS)

 Provides electric power consumers with the option to directly source their energy requirements from Renewable Energy

### Implement the Green Energy Option Program (GEOP)

 Provides electric power consumers with the option to directly source their energy requirements from Renewable Energy

#### **Expand the Net Metering Scheme**

 Consumers are encouraged to produce their own electricity from RE sources (e.g. solar and biomass) and therefore become "PROSUMERS"

# Renewable Energy Development Efforts







### The Power of Choice

### **Expand the Net Metering Scheme**

 Net Metering would empower the energy consumers and the general public to produce their own renewable energy power based on their respective demand requirements

### Implement the Green Energy Option Program (GEOP)

 The GEOP is a Renewable Energy Policy Mechanism that would provide the enduser/consumer the option to choose RE resources as their source of energy would







"To inform the stakeholders on the application, processing, awarding and monitoring of Renewable Energy Service Contracts to further the promotion, development, and utilization of Renewable Energy resources in the country."

## Overview on the Administrative Procedures in Awarding of RESC









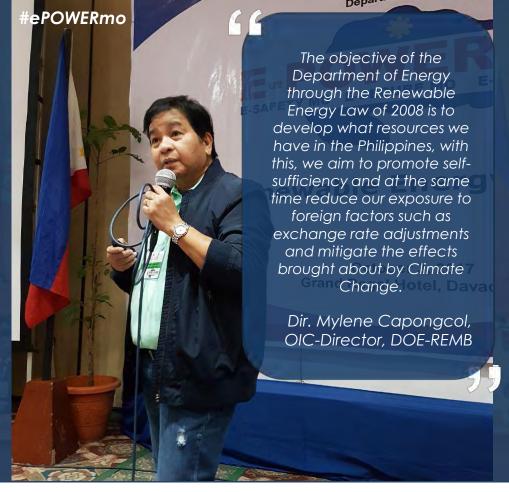


















### **Power Sector**

Target Audience:

Local Government Units, Distribution
Utilities, Indigenous People, Government
Offices, Non-Government Offices, Civil
Society Group

Objectives

- To take into account the stakeholder's inputs/comments about the topics presented
- To facilitate discussion & sharing of experiential learning about the proposed amendment
- To include the public and other related groups in the improvement of existing policies and development of new policies that would expand the operational application of the ER 1-94 program with the end view of attaining equitable, sustainable & inclusive sharing of benefits.









## Enhancement of Access to basic Energy Regulation electricity for all (ER) No. 1-94 IRR to Filipinos by 2022 support total household electrification

### 9-Point Energy Agenda

Strengthen partnerships among DOE, Distribution Utilities/Electric Cooperatives, Private Sector, and Communities for the effective implementation of household electrification initiatives









Access to basic electricity for all Filipinos by 2022

## 9-Point Energy Agenda

 Broaden the Policy Framework for equitable, sustainable and inclusive sharing of financial benefits under the program









### **Session 4 Gallery**









MOA to be entered with DOE include the Generation Company, the indigenous cultural communities of the concerned Ancestral Domains/ Land, and NCIP to access the ER 1-94 funds for Development, Livelihood, Reforestation, Watershed Management Health

I. Environmental Enhancement Projects.

















#### Session #5

# Alternative Fuels and Technology and Energy Efficiency

Industry, Commercial, LGUs, Academe

#### **Objectives:**

- To present and get comments/suggestions on the Energy Efficiency and Conservation Roadmap 2017-2040;
- To involve concerned sectors and energy efficiency advocacy groups in the development of new policies and/or strengthen existing policies to increase energy efficiency investments (technology, services, financing, etc.)
- To present and explain the benefits of practicing Energy Management System and the Energy Management Standard: ISO 50001; and
- To explain the United Nations Industrial Development Organization's Philippine Industrial Energy Efficiency Project.







### Alternative Fuels and Energy Technologies Roadmap

#### GOAL:

To ensure stable supply of energy through fuel and technology diversification with focus on EV, LPG, CNG, LNG, hybrid EV and other non-transport energy technologies



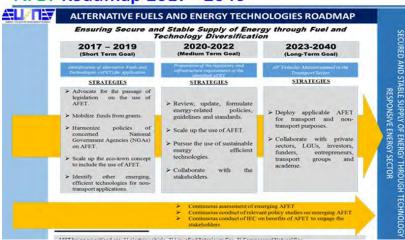
Energy
Efficiency and
Conservation
Roadmap







#### AFET Roadmap 2017 - 2040



## Energy Efficiency and Conservation Roadmap

#### **GOAL**:

Measurable reduction in energy intensity consumption across key economic sectors







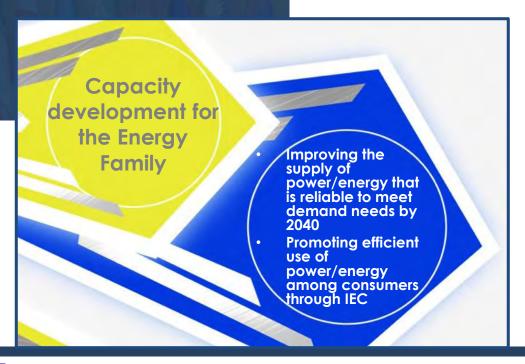
### **Top 3 Priority Strategies**

- Creating public buy-in
- Providing enabling market environment
- Sustaining the growth of local use





# Relevance to DOE's Energy Lantern



- Promote the implementation of the Energy Efficiency and Conservation Roadmap 2017-2040
  - -highlights the national and international policy cohesion and various policy instruments
- Enhancement of local manpower capacity building
  - -partnership with SUCs/TESDA for skills development and technology transfer
- Promotion of use of Energy Management System (EnMs) along with System Optimization Approach for improvement of industrial energy efficiency





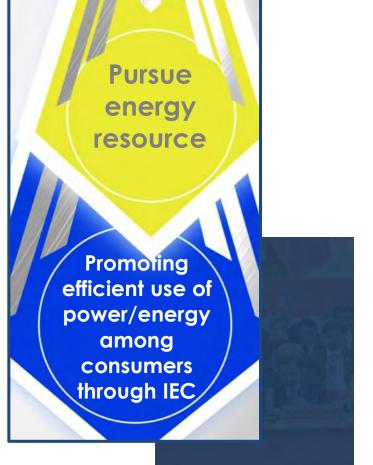


## Key points

- Nationwide IECs for the promotion of new generation and indigenous energy technologies/innovations and promotion of energy efficiency (EE) strategies
- Implementation of the Government Energy Management Program (AO 110)
  - -conducted survey to government buildings to know the potential energy savings
  - -retrofitting of lighting system and replacement of airconditioning
  - -inclusion of EE measures in residential building code in LGUs







## Key points

- Introduction of advance, lowemission and environment-friendly energy technologies
  - -diversification of fuel supply
  - -investment for infrastructure and facilities
  - -promotion of alternative fuels and more efficient technologies
  - -formulation of comprehensive energy technology development and adoption plan
- Promotion of low carbon (energy efficiency) strategies
  - energy smart cities, green building program, minimum energy performance standards, energy standards and labeling program

















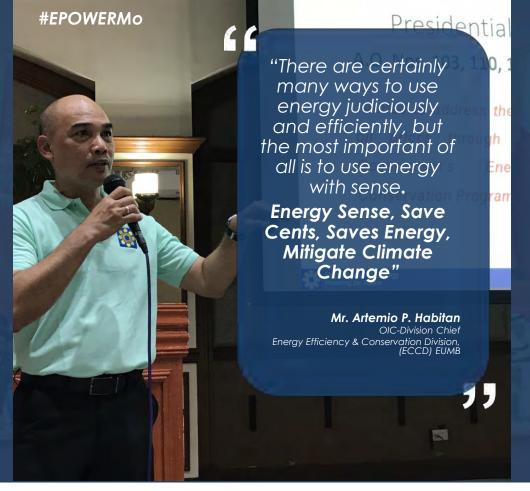




























- To create awareness on Gender and Development as mainstreamed in the Energy Sector
- To create awareness among consumers of their rights and responsibilities
- To enhance the knowledge of students on energy-related topics involving the energy supply chain, energy safety and efficiency









- Conduct of Information, Education and Communication (IEC) campaigns on Energy Safety Practices & Efficiency Measures (ESPEM) nationwide
- Implements projects such as ENEReady, Girls and Science, S&T Scholarship, EnerKids and EnerSmart

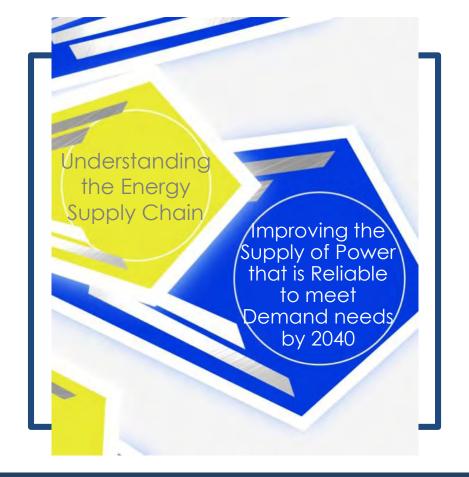












- Inform the consumers of the relationship of power demand and supply chain through the process of generation, transmission and distribution.
- Educate the consumers on how WESM works especially the Merit Order Table









Energy LABELS or Energy Guides are colored yellow labels often seen in appliances and lighting products. It has numbers that shows how effective the power consumption of the equipment is.

















## Session 6 Gallery































