

### National Renewable Energy Program Overview

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# **Presentation Outline**

- \* Energy Reform Agenda
- \* Landmark Laws
- \* National Renewable Energy Program
- \* Status of RE Development
- \* The Way Forward





### Energy Reform Agenda (ERA)





### **Energy Reform Agenda**

#### "Energy Access for More"

A key priority of government to mainstream access of the greater majority to reliable energy services and fuel, most importantly, local productivity and countryside development

**Good Governance** thru stakeholder participation, transparency, multi-sectoral partnership and use of ICT





# Landmark Law Republic Act No. 9513





# RA 9513: Renewable Energy Act of 2008



Accelerate the development of the country's renewable energy resources by providing fiscal and non-fiscal incentives to private sector investors and equipment manufacturers / suppliers.





## RA 9513: Renewable Energy Act of 2008 Declaration of Policies

- 1. Accelerate the exploration and development of renewable energy resources such as but not limited to, biomass, solar, wind, hydro, geothermal and ocean energy sources, including hybrid systems, to achieve energy self reliance through the adoption of sustainable energy development strategies to reduce the country's dependence on fossil fuels and there by minimize the country's exposure to price fluctuations in the international markets;
- 2. Increase the utilization of renewable energy by institutionalizing the development of national and local capabilities in the use of RE systems, and promoting its efficient and cost effective commercial applications by providing fiscal and non-fiscal incentives;
- 3. Encourage the development and utilization of RE resources as tools to effectively prevent or reduce harmful emissions and thereby balance the goals on economic growth and development with protection of health and the environment; and

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4. Establish the necessary infrastructures and mechanisms to carry-out the mandates specified in this Act and other existing laws.



### National Renewable Energy Program NREP (2010-2030)





# National Renewable Energy Program (NREP)

- The National Renewable Energy Program (NREP) outlines the policy framework enshrined in Republic Act 9513.
- The NREP signals the country's big leap from fragmented and halting RE initiatives into a focused and sustained drive towards energy security and improved access to clean energy.
- The NREP sets out indicative interim targets for the delivery of renewable energy within the timeframe of 2011 to 2030
- The NREP lays down the foundation for developing the country's renewable energy resources, stimulating investments in the RE sector, developing technologies, and providing the impetus for national and local renewable energy planning that will help identify the most feasible and least-cost renewable energy development options.



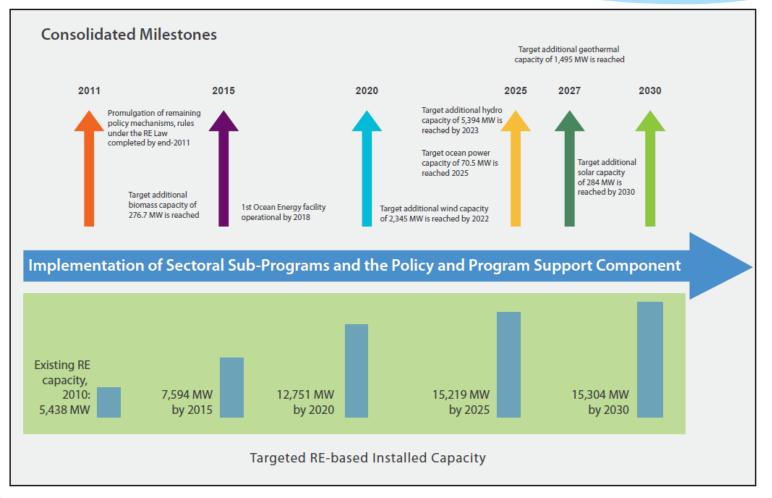
### **NREP Development Framework**

- Policy and Program Support Component
  - RE Mechanisms
- Sectoral Activities / Programs
  - Renewable Energy Industry Services
    - Renewable Energy Service Contracts
  - Resource Development
    - Feasibility, Market, Socio-economic, and Environmental Studies
  - Research, Development and Demonstration
    - Technology transfer / adoption, demonstration projects
  - Technology Support
    - Capacity building, standards formulation, Registration and Rating System development



#### Renewable Energy Outlook 2011-2030

#### Under the "National Renewable Energy Program"





# **Policy Support**

- Establishment and Implementation of Renewable Energy Policy Mechanisms
  - Renewable Portfolio Standards
  - Feed In Tariff System
  - Off-Grid Renewable Energy Development
  - Renewable Energy Market and Registrar
  - Net Metering
  - Green Energy Option
- Administration of Renewable Energy Trust Fund
- Continuous monitoring and review of implemented RE Policies
- Impact Assessment of RE Policies and mechanisms implemented





### Renewable Energy Targets, 2011-2030

Sector	Short Term	Medium Term	Long Term	Total
	2011-2015	2016-2020	2021-2030	
Geothermal	220 MW	1,100 MW	175 MW	1,495 MW
Hydropower	341.3 MW	3,161 MW	1,891.8 MW	5,394.1 MW
Biomass	276.7 MW	0	0	276.7 MW
Biofuels	•DC on E10 in 2011 •Mandatory E10 to all Gasoline by 2012 •PNS for B5 by 2014 •DC on B5 by 2015 •Mandatory B5 to all Diesel by 2015	•PNS for B20 & E85 by 2020 •DC on B10 and E20 by 2020	•DC on B20 and E85 by 2025	
Wind	200 MW	700 MW	1,445 MW	2,345 MW
Solar	50 MW	100 MW	200 MW	350 MW
Ocean Power	0	35.5	35	70.5
Total	1,088 MW	5,096.5 MW	3,746.80 MW	9,931.3 MW





### Status of Renewable Energy Development





### Updates on RE Policy Mechanisms

#### **Renewable Portfolio Standard (RPS)**

- Mandatory (percentage) utilization of RE generation system in on-grid systems
  - For Department of Energy's finalization

#### Feed-in-Tariff (FIT)

- Priority connection to the grid
- Priority purchase and transmission of and payment for by grid system operators
- Fixed tariff for 20 years
- To be applied for generation utilized in complying with RPS

#### **Net-Metering Rules and Interconnection Standards**

• Connection / sale of customers' RE generation to the grid

#### **Renewable Portfolio Standards (RPS) for Missionary Areas**

- Mandated minimum percentage of RE generation
  - For NREB's finalization

#### **Green Energy Option Program**

• End-users' option to purchase electricity from RE facilities (open access)

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• For Department of Energy's finalization



#### Summary of RE Projects (as of September 2014)

#### AWARDED PROJECTS UNDER RENEWABLE ENERGY (RE) LAW

RESOURCES	AWARDED PROJECTS		POTENTIAL CAPACITY MW		INSTALLED CAPACITY MW	
	Grid-Use	Own-Use	Grid-Use	Own-Use	Grid-Use	Own-Use
Hydro Power	389	1	6,160.01	1.50	118.93	
Ocean Energy	5		25.00			
Geothermal	41		750.00		1,866.19	
Wind	58	1	2,054.40	0.006	33.00	
Solar	84	5	1,354.156	1.594	22.00	
Biomass	42	25	333.45	5.80	147.80	143.18
Sub-Total	619	32	10,677.016	8.90	2,187.92	143.18
TOTAL	651		10,685.916		2,331.10	



#### Summary of RE Projects (as of September 2014)

#### PENDING PROJECTS UNDER RE LAW

RESOURCES	PENDING PROJECTS		POTENTIAL CAPACITY MW		INSTALLED CAPACITY MW	
	Grid-Use	Own-Use	Grid-Use	Own-Use	Grid-Use	Own-Use
Hydro Power	115		920.80		697.80	
Ocean Energy	1		6.00			
Geothermal	2		60.00		-	
Wind	2		-		-	
Solar	11	2	146.50	-		
Biomass	6	1	103.50	1.00	-	
Sub-Total	137	3	1,236.80	1.00	697.80	-
TOTAL	140		1,237.80		697.80	





### **The Way Forward**

- Setting of Renewable Portfolio Standard (RPS)
- Implementation of the Feed-In-Tariff (FIT) System, Netmetering and Green Energy option, etc.
- Establish Energy Investment Coordinating Center and Linkages with other Government Regulatory Agencies
- Resource Inventory and Establishment of RE Database
- Capacity Building / Information, Education and Communication Campaigns
- Investment Missions / Business Meetings
- Mainstreaming of RE Industry
  - Public Consultations
  - Regional and Area-based Development Plan



# THANK YOU FOR YOUR ATTENTION!





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