

The Government of the Philippine Republic



**Department of Energy** 



Renewable Energy Management Bureau



# RAPID WIND ENERGYDEVELOPMENT IN THE PHILIPPINES

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## **Outline of Presentation**

- Favorable RE Market
- II. Enabling Policy
- III. Adversaries and Allies
- IV. Historical Development and Individual Performance of RE Resources
- V. Immediate Step



## Favorable RE Market

#### FEED-IN TARIFF (FIT) SYSTEM

- 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 compliance with RPS.



# Favorable RE Market

#### FEED-IN TARIFF (FIT) RATES

RE TECHNOLOGY	APPROVED RATES (PHP/kWh)	INSTALLATION TARGET (MW)			
Run-of-River	5.90	250			
Hydro					
Biomass	6.63	250			
Wind	8.53 (FIT 1)*	(with initial target of 200)			
	7.40 (FIT 2)*	400**			
Solar	9.68 (FIT 1)*	(with initial target of 50) 500**			
	8.69 (FIT 2)*				

#### Note:



<sup>\*</sup> Feed in Tariff (FIT) rates for solar was revised in April 2015 (resolution no. 6, series of 2015) from Php 9.68 to 8.69/kWh covering additional target of 450 MW and the second FIT rate for wind energy was issued by the ERC at Php 7.40/kWh covering additional target of 200MW under ERC Resolution No. 14, series of 2015.

<sup>\*\*</sup> Amended targets for wind energy and solar power up to March 15, 2016.

# **Enabling Policy**

- In 2012, around 200 RE service contracts are pending not only due to long and complicated permitting process but also assignment of sites by the applicants.
- Many of the RE developers turned out to be not serious or "pseudo developers".
- On May 28, 2013, the DOE issued the Department Circular No. DC2013-05-0009, a "Guidelines for the Selection Process of Renewable Energy Projects under FIT System and the Award of Certificate for FIT Eligibility" aimed to streamline the permitting process and encourage RE companies to push through with their investments.



# **Enabling Policy**

- Project can apply for FIT once it reaches electromechanical completion (80% completed).
- Upon validation of project's successful commissioning, the DOE issue a Certificate of Endorsement for FIT eligibility to ERC on a "first-come-first-serve basis" until the maximum installation target is fully subscribed.



- Strongly opposed and widely debated at the on-set of implementation, specifically the FIT eligibility requirement of successful commissioning that claimed to cause financial gap.
- Serious developers race against time and each other to complete their projects and be declared to have reached Commercial Operation date.



- Right after the issuance of the rules, 303.90MW and 90MW of wind energy projects were successfully completed in 2014 and 2015, respectively.
- These include the Southeast Asia's largest single wind project (150 MW) to date, and second largest project (81 MW) in 2014 – REN21 2015 Report.
- The government easily determined the pseudodevelopers from serious ones.



- Out of 88 wind energy service contracts issued, 33
   (38%) were terminated because of non-performance of
  their work programs.
- Expansion in the installation target and full subscription of the same are strong indications of private sector interest/support; and effectiveness and efficiency of the rules.



# Awarded and Terminated/Relinquished Wind Energy Projects, 2009-2015

YEAR	AWARDED WESC	TERMINATED /RELINQUISHED			
2009	11				
2010	10	_			
2011	3	7			
2012	4	14			
2013	7	2			
2014	<b>15</b>	10			
2015	5	-			
TOTAL	55	33			

Note:

- 21 WESCs were terminated prior to issuance of the FCFS Rules.
- 12 WESCs were terminated after the issuance of the FCFS Rules, the Department further eliminate the fly-by-night developers.



# Historical Development & Performance of RE Resources

RESOURCE	2009-2013		2014		2015		TOTAL	INSTALLATION	
	PROJECTS	INSTALLED CAPACITY	PROJECTS	INSTALLED CAPACITY	PROJECTS	INSTALLED CAPACITY	INSTALLED CAPACITY	TARGET	ACCOMP.
Biomass	8	97.206	1	12	5	108.5	217.706	250	87.08%
Geothermal	-	-	2	50	1	10	60		
Solar	-	-	1	22	6	122.4	144.4	500	28.88%
Hydro Power	5	15.9	4	16.65	2	14.82	47.37	250	18.95%
Ocean	-	-	-	-	-	-	-		
Wind	-	-	4	303.9	2	90	393.9	400	98.48%
TOTAL	13	113.106	12	404.55	16	345.72			

Note: Capacity in MW Source: www.doe.gov.ph

Top performing resource/technology is WIND vis-à-vis the achievement of installation target in the medium term.

RE capacity addition reckoned from the passage of RE Law = 1,003.80 MW Recorded under Net-Metering Scheme = 1.605 MWp





# Other RE/Wind Markets

- Net-Metering
- Renewable Portfolio Standard
- Green Energy Option



# Immediate Step

- Issuance of next wind installation target and FIT rate;
  - While waiting, RE project may enter into bilateral agreement with distribution utilities or market its generation at WESM under "Must and Priority Dispatch Rules" as price taker.



# www.doe.gov.ph