

THIRTEENTH CONGRESS OF THE REPUBLIC)
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SENATE

S. No. 1733

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Introduced by Sen. Juan M. Flavier

EXPLANATORY NOTE

As of June 2004, the National Power Corporation (NPC) started charging every household in the major island grids in the Philippines a generation charge of PhP2.2802/kWh for Luzon, PhP2.5238 for the Visayas, and PhP1.5101 for Mindanao. The fuel cost components of these generation charges amount to PhP0.6718/kwh for Luzon, PhP1.1705 for the Visayas, and PhP0.2963 for Mindanao. On top of the above generation charges, the NPC was authorized to recover in full the remaining Net Fuel and Power Cost Adjustment (FPCA) for the Visayas within two months from June 2004 in an amount equivalent to PhP0.0989/kWh. The fuel cost components of the generation charges represent NPC's recovery of fuel costs. Shown in the table below is a comparison of NPC's fuel oil costs for the five-month period before the June 2004-approved generation charge with similar five-month periods for the immediately preceding five-year period.

Net Cost to NPC at PhP/Ltr.	2000		2001		2002		2003		2004	
	Fuel Oil	Diesel Fuel	Fuel Oil	Diesel Fuel	Fuel Oil	Diesel Fuel	Fuel Oil	Diesel Fuel	Fuel Oil	Diesel Fuel
January	6.3269	8.2709	7.2603	11.0958	6.3269	8.2709	8.9863	12.447	9.3849	14.4097
February	6.2658	8.4684	6.9840	11.0236	6.2658	8.4684	9.9205	13.2794	9.9056	16.0454
March	6.5861	8.7414	7.1037	10.0236	6.5861	8.7414	10.9360	15.1300	11.8166	16.4569
April	7.3534	9.7179	7.2187	9.7794	7.534	9.7179	9.9825	14.7438	11.7385	16.4254
May	9.0478	10.6205	7.6528	11.0752	8.0478	10.6205	8.3691	11.6707	12.0280	17.2744

The above figures show an increase in fuel cost by about 60% for fuel oil and 50% for diesel.

On the other hand, for a similar five-year period the average costs of imported coal for the NPC-owned as well as the IPP-owned coal-fired power plants are shown below.

Average Costs of NPC Imported Coal at US\$/MT	2000		2001		2002		2003		2004	
	FOB	Freight	FOB	Freight	FOB	Freight	FOB	Freight	FOB	Freight
Masinloc	27	7.26	25.27	6.50	26.10	3.99	27.34	6.00	50.80	18.8
Pagbilao	22.50	5.27	26.00	5.50	26.54	4.10	26.00	3.70	38.00	15.00
Sual	24.00	5.90	24.00	5.80	27.24	3.60	26.56	6.35	48.18	17.80

The current costs of imported coal for NPC-owned and IPP coal-fired power plants represent an increase of about 52% FOB and 35% freight per metric ton. And the trend of the FOB cost of imported coal for the rest of 2004 indicates a price of US\$65 per metric ton.


At the very least, the increases in the prices of imported fuel oil and coal mean (a) utilization of foreign exchange and (b) burden to the general public by way of additional costs of electricity and other services. And more significantly, fossil-fired power plants contribute to the climatic changes that have caused so much destruction worldwide. Recognizing a duty to help maintain a balance in the environment, the Senate ratified the Kyoto Protocol in October 2003. As a proactive measure to implementing the Kyoto Protocol is the need to re-calibrate the power development program of the country.

Cognizant of the importance of maintaining a sustainable balance between economic development and progress on the one hand, and electric power energy requirements of the economy on the other hand, it has become imperative to focus the quest for security for its energy and electricity requirements to the development of the country's indigenous and environment-friendly energy sources. The Philippine Energy Plan 2004 – 2013 has amply demonstrated the vast renewable energy sources of the country – hydropower, geothermal, wind, solar and biomass, among others. Their development will translate into displacement of imported fossil-fuel, and over time a security in electric energy requirements of the economy.

Equally important in the development of the country's renewable energy sources is the need to establish an investment climate that will enable the Philippines to be at least competitive in attracting foreign investments. Defined, firmed and transparent process must be set in place.

This legislative proposal seeks to make the Philippines achieve security in the electric power requirements of the economy, contribute to the accomplishment of the objectives of the Kyoto Protocol, and most importantly maintain a balanced ecology in the country. The time for addressing the effects of abrupt climatic changes is now.

In view of the foregoing, the early passage of this bill is earnestly urged.


JUAN M. FLAVIER
Senator

THIRTEENTH CONGRESS OF THE REPUBLIC)
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First Regular Session)

SENATE
S. No. 1738

Introduced by Sen. Juan M. Flavier

**AN ACT
PROMOTING THE DEVELOPMENT, UTILIZATION AND
COMMERCIALIZATION OF RENEWABLE ENERGY SOURCES
AND FOR OTHER PURPOSES"**

Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:

CHAPTER I

TITLE AND DECLARATION OF POLICY

Section 1. *Short Title.* - This Act shall be known as the "Renewable Energy Act of 2004".

Section 2. *Declaration of Policies.* - It is hereby declared the policy of the State to:

- a. Achieve self-reliance in the country's energy requirements primarily through the exploration, development and utilization of renewable energy resources including but not limited to biomass, solar, wind, hydro, geothermal, and ocean energy sources or hybrid systems;
- b. Promote greater private sector investment and participation in the implementation of renewable energy activities and projects;
- c. Prioritize the development and utilization of renewable energy resources and technologies, in view of their environmental benefits, to improve energy security

and catalyze economic development in the countryside through the energization of off-grid communities;

- d. Establish the institutional infrastructure and provide key government inputs to develop national and local capabilities in the use of renewable energy systems, encourage their widespread commercial applications and promote their efficient utilization;
- e. Promote and prioritize the utilization of electrical energy from power generation facilities utilizing renewable energy resources, including but not limited to wind, solar, ocean, hydro, geothermal, and biomass energy, whose facilities are capable of supplying electricity through the Main Grid or Transmission Systems under R.A. 9136, to reduce dependence on imported sources of fuel and to assure the development of facilities which utilize environment-friendly sources of energy;
- f. Promote and prioritize the utilization of renewable energy resources for non-power application; and
- g. Promote people empowerment by providing opportunities for all stakeholders to participate in the development, planning, and implementation of renewable energy projects and activities.

Section 3. *Scope.* – This Act shall provide the framework for the exploration, development and utilization of the country's renewable energy resources, encourage their widespread commercial applications, and promote their efficient utilization, including the development of local capabilities in all aspects of Renewable Energy Systems.

Section 4. *Definition of Terms.* – As used in this Act, the following terms shall mean as follows:

- a. “**Affiliated Renewable Energy Centers**” or “**ARECs**” refer to the institutions established by the Department of Energy (DOE) to provide extension and technical services at the national and local levels in the promotion and dissemination of renewable energy technologies. An AREC refers to any university, college, non-government organization or private volunteer organization certified by the DOE upon its compliance with the technical and legal requirements that shall be imposed by the DOE;

- b. **“Alternative Fuels/Alternative Fuel Systems”** refer to the use of materials, machinery, and/or equipment to generate power using non-petroleum fuels. The machinery and/or equipment may be modified from its original condition or an original equipment manufacturer (OEM) that allow the usage of alternative fuel or that further produce, handle, store, and/or utilize alternative fuels;
- c. **“Biomass Energy Systems”** refer to energy systems which use biomass resources to produce heat, steam, mechanical power or electricity through either thermochemical, biochemical or physiochemical processes;
- d. **“Biomass Resources”** refer to plants and plant materials, trees, crop residues, wood and bark residues, and animal manure or any organic matter that can be used in bioconversion process;
- e. **“Board of Investments”** or **“BOI”** refers to an attached agency of the Department of Trade and Industry created under Republic Act No. 5186, as amended;
- f. **“Department of Budget and Management”** or **“DBM”** refers to the government agency created pursuant to Executive Order No 25, as amended;
- g. **“Department of Energy”** or **“DOE”** refers to the government agency created pursuant to Republic Act No. 7638 whose functions are expanded in R. A. 9136 and further expanded herein;
- h. **“Department of Finance”** or **“DOF”** refers to the government agency created pursuant to Executive Order No. 127, as amended;
- i. **“Department of Science and Technology”** or **“DOST”** refers to the government agency created pursuant to Executive Order No. 128;
- j. **“Department of Trade and Industry”** or **“DTI”** refers to the government agency created pursuant to Executive Order No. 133;
- k. **“Department of Tourism”** or **“DOT”** refers to the government agency created pursuant to Executive Order No. 120;
- l. **“Distribution of Electricity”** refers to the conveyance of electricity from transmission facilities or embedded generators to end-users by a Distribution Utility through its distribution system pursuant to the provision of Republic Act No. 9136 and its implementing rules and regulations;
- m. **“Distribution Utility”** refers to an electric cooperative, private corporation, government-owned utility or existing local government unit which has an

exclusive franchise to operate a distribution system in accordance with its franchise and Republic Act No. 9136;

- n. **“Energy Regulatory Commission” or “ERC”** refers to the regulatory agency created pursuant to Republic Act No. 9136;
- o. **“Generation Facility”** refers to a facility for the production of electricity;
- p. **“Geothermal Energy”** refers to all geothermal fluids whether existing naturally or formed by the artificial introduction of fluids into naturally hot formation, heat energy in the earth, and any by-product derived from them;
- q. **“Geothermal Energy Systems”** refer to machines or other equipment that converts geothermal energy into useful power;
- r. **“Geothermal Resources”** mean (a) all products of geothermal processes, embracing indigenous steam, hot water and hot brines; (b) steam and other gases, hot water and hot brines resulting from water, gas, or other fluids artificially introduced into geothermal formations; (c) heat or associated energy found in geothermal formations; and (d) any by-product derived from them.
- s. **“Government Share”** refers to the amount due the National Government and Local Government Units from the value of renewable energy resources;
- t. **“Green Energy Rating Program”** refers to a program that identifies and recognizes project developers, investors, operators and/or end-users that have participated in the implementation of most successful RE projects and activities;
- u. **“Green Pricing”** refers to pricing scheme wherein electricity consumers agree to pay a premium price for electricity generated using RE sources and technologies;
- v. **“Main Grid”** refers to the high voltage backbone system of interconnected transmission lines, substations and related facilities, located in each of Luzon, Visayas, and Mindanao, or as may otherwise be determined by the ERC in accordance with the implementing rules and regulations of Republic Act No. 9136;
- w. **“Hybrid Systems”** refer to any power or energy generation facility which makes use of two or more types of technologies utilizing both conventional and/or renewable fuel sources, such as but not limited to integrated wind/diesel systems, integrated solar/wind systems, biomass/fossil fuel systems, hydro/fossil fuel systems, integrated solar/biomass systems, integrated wind/fossil fuel systems,

with a minimum of ten (10%) of the annual energy output provided by the RES components of the hybrid systems;

- x. **"Hydroelectric Power Systems" or "Hydropower Systems"** refer to water-based energy systems which produce electricity by utilizing the kinetic energy of falling or running water to turn a turbine generator;
- y. **"Hydroelectric Power Development" or "Hydropower Development"** refers to the construction and installation of a hydroelectric power-generating plant and its auxiliary facilities, such as diversion structure, headrace, penstock, substation, transmission, and machine shop, among others;
- z. **"Hydroelectric Power Resources" or "Hydropower Resources"** refer to water resources found technically feasible for development of hydropower projects which include rivers, lakes, waterfalls, irrigation canals, springs, ponds and other water bodies;
- aa. **"Independent Power Producer" or "IPP"** refer to a power generating entity which is not owned by NPC;
- bb. **"Large or Conventional Hydroelectric Power Plants" or "Large or Conventional Hydro Plants"** refer to electric power-generating plants which (a) utilize the kinetic energy of falling or running water (run-of-river or impounding hydropower plants) to turn a turbine generator producing electricity; and (b) have installed capacities of more than 10,000 kilowatts;
- cc. **"Micro-hydroelectric Power Plants" or Micro-hydro Plants"** refer to electric power-generating plants which (a) utilize the kinetic energy of falling or running water (run-of-river hydropower plants) to turn a turbine generator producing electricity; and (b) have installed capacities of not more than 100 kilowatts;
- dd. **"Mini-Grid Systems"** refer to electrical systems composed of interconnected distribution and transmission lines, substations and related facilities that are installed at remote locations and are not connected to the Main Grid;
- ee. **"Mini-hydroelectric Power Plants" or Mini-hydro Plants"** refer to electric power-generating plants which (a) utilize the kinetic energy of falling or running water (run-of-river hydropower plant) to turn a turbine generator producing electricity; and (b) have installed capacities of more than 100 kilowatts but not more than 10,000 kilowatts;

- ff. **“Minimum Renewable Electricity Generation”** refers to the minimum percentage of the total annual electricity generated, transmitted and distributed to electricity customers in a specific jurisdiction and period that will be required to be sourced from RE-based power projects and technologies;
- gg. **“Missionary Electrification”** refers to the provision of electricity service in unviable areas with the aim of bringing the operations in these areas to viability levels;
- hh. **“National Power Corporation”** or **“NPC”** refers to the government corporation created under Republic Act No. 6395, as amended;
- ii. **“National Transmission Corporation”** or **“TRANSCO”** refers to the corporation created pursuant to Republic Act No. 9136 responsible for the planning, construction, and centralized operation and maintenance of high voltage transmission facilities, including grid interconnection and ancillary services;
- jj. **“Ocean Energy Systems”** refer to energy systems which convert ocean or tidal current, ocean thermal gradient or wave energy into electrical or mechanical energy;
- kk. **“Off-Grid Systems”** refer to electrical systems not connected to the wires and related facilities of any Mini-Grid System or the On-Grid Systems of the Philippines;
- ll. **“On-Grid System”** refer to electrical systems composed of interconnected transmission lines, substations and related facilities for the purpose of conveyance of bulk power on the Main Grid of the Philippines;
- mm. **“Power Development Program”** or **“PDP”** refers to the indicative plan for managing electricity demand through energy-efficient programs and for the upgrading, expansion, rehabilitation, repair and maintenance of power generation and transmission facilities, formulated and updated yearly by the DOE in coordination with the generation, transmission and distribution utility companies;
- nn. **“Renewable Energy Developers”** or **“RE Developers”** refer to Filipino individual/s or a group of individuals formed in accordance with existing Philippine Laws engaged in the exploration, development and utilization of renewable energy resources and actual operation of renewable energy systems/facilities;

- oo. **“Renewable Energy Resources” or “RE Resources”** refer to energy resources that do not have an upper limit on the total quantity to be used. Such resources are renewable on a regular basis, and whose renewal rate is relatively rapid to consider availability over an indefinite period of time. These include, among others, biomass, solar, wind, hydropower, geothermal, and ocean energy, and other emerging energy sources using technologies such as fuel cells, hydrogen fuels, among others;
- pp. **“Renewable Energy Systems” or “RES”** refer to energy systems which convert renewable energy resources into useful energy forms, like electrical, mechanical, etc.;
- qq. **“Republic Act No. 9136” or “Electric Power Industry Reform Act of 2001”** refers to the law mandating the restructuring of the electric power sector and the privatization of the NPC;
- rr. **“Rural Electrification”** refers to the delivery of basic electricity services, consisting of power generation, subtransmission, and/or extension of associated power delivery system that would bring about important social and economic benefits to the countryside;
- ss. **“Operating Contract”** refers to a contract or agreement entered into by and between the Government and a Filipino individual, group of individuals or a corporation organized under existing Philippine Laws, involving the exploration, development and utilization of renewable energy resources; The details of the implementation shall be contained in the Implementing Rules and Regulations of this Act;
- tt. **“Operator”** refers to a renewable energy developer, whether alone or in consortium with others, involved in the exploration, development and utilization of renewable energy resources under an operating contract agreement with the Government;
- uu. **“Solar Energy”** refers to the energy derived from solar radiation that can be converted into useful thermal or electrical energy;
- vv. **“Solar Energy Systems”** refer to energy systems which convert solar energy into thermal or electrical energy;

- ww. **"Small Power Utilities Group" or "SPUG"** refers to the functional unit of the National Power Corporation mandated under Republic Act No. 9136 to pursue missionary electrification function;
- xx. **"Transmission of Electricity"** refers to the conveyance of electricity through the high voltage backbone system;
- yy. **"Unviable Area"** refers to a geographical area within the Franchise Area of a Distribution Utility where immediate extension of distribution line is deemed not feasible;
- zz. **"Wind Energy"** refers to the energy that can be derived from wind that is converted into useful electrical or mechanical energy;
- aaa. **"Wind Energy Systems"** refer to the machines or other related equipment that convert wind energy into useful electrical or mechanical energy;
- bbb. **"Waste-to-Energy Technologies"** refer to systems which convert biodegradable materials such as animal manure, agricultural waste, etc. into useful energy through chemical processes such as anaerobic digestion, fermentation and gasification, among others;
- ccc. **"Wholesale Electricity Spot Market" or "WESM"** refers to the wholesale electricity spot market created pursuant to Republic Act No. 9136;

CHAPTER II

ORGANIZATION

Section 5. *Implementing Agency and Its Powers and Functions.* – In addition to its existing mandate, the DOE shall have the following powers and functions under this Act:

- a. Formulate, implement and regularly update a comprehensive Renewable Energy Policy Framework (REPF) which shall be aimed at accelerating the exploration, development and utilization of renewable energy sources to attain the goals of energy self-sufficiency, energy affordability, rural electrification, poverty

eradication, social equity, economic development, income enhancement, sustainability and environmental protection;

- b. Formulate and implement policies for the development, promotion and commercialization of applications of renewable energy resources;
- c. Establish a mechanism for the integration, rationalization and coordination of the various activities, projects and programs on renewable energy of all government agencies and instrumentalities;
- d. Provide all necessary and appropriate support services in the implementation of the REPF including the facilitation of entry of foreign expertise and resources in order to accelerate the pace of technology transfer and development of local expertise, the launching of a vigorous information and promotion drive, updating of relevant environmental regulations, and the institution of delivery mechanisms for the dissemination of viably proven applications;
- e. Develop and implement specific policies, mechanisms and procedures encouraging the participation of the private sector including IPPs, private individuals, civil society groups, non-governmental organizations, private volunteer organizations, academe and other interested parties;
- f. Be the sole and exclusive authority responsible for the regulation, promotion and administration of RE resources;
- g. Encourage the development of a program to quantify and certify Greenhouse Gas (GHG) Allowances from RE projects;
- h. Expedite processing, certification and approval of applications for RES projects thru the establishment of relevant model operating contracts, standards, procedures, terms and conditions;
- i. Charge reasonable fees in connection with the filing, processing, evaluation and approval of applications for RES projects;
- j. Require the RE developer to post a bond or guarantee of sufficient amount in favor of the Government and with surety or sureties satisfactory to the DOE upon the faithful performance by the RE developer of any or all of the obligations under and pursuant to the RE operating contract within sixty (60) days after effective date of the contract;
- k. Within 6 months from approval of this Act, promulgate in consultation with all stakeholders, including other government agencies, such as the National Water

Resources Board (NWRB), Department of Environment and Natural Resources-Environmental

Management Bureau (DENR-EMB), Energy Regulatory Commission (ERC), Department of Finance (DOF), Department of Trade and Industry (DTI), among others, such rules and regulations as may be necessary to implement the objectives and provisions of this Act;

1. Generally exercise all powers necessary or incidental to attain the purpose of this Act and other laws vesting additional powers on the DOE.

Section 6. *Institutionalization of Affiliated Renewable Energy Centers (ARECs)*. – There shall be established ARECs to serve as a support to the extension and technical services of the DOE in the field implementation of renewable energy projects pursuant to the objectives of this Act. An AREC can be a recipient of donations/grants from DOE and other donor agencies so as to develop and strengthen their capabilities to effectively perform their responsibilities under the Renewable Energy Policy Framework. The Affiliated Non-conventional Energy Centers (ANECs) shall be known as ARECs upon evaluation and accreditation of the DOE.

Section 7. *Roles of Other Agencies and Institutions*. – This Act mandates the following agencies and institutions to perform or carry out specific functions and responsibilities:

- a. Cooperating Research Institutions (CRIs), duly accredited by the DOE, in collaboration with DOST shall implement research and development projects and activities consistent with the priorities in the REPF. Such activities include the conduct of research activities, pilot studies and demonstration projects as well as technical support and consultancy services;
- b. The National Transmission Corporation (TRANSCO) shall ensure the interconnection and access of RE generating facilities to the grid;

- c. ERC is mandated to set the rules in the computation of rates that allow fair economic returns for RE systems developers/operators serving remote, off-grid and unviable areas;
- d. NPC-SPUG, in the performance of its missionary electrification functions, shall give priority to renewable energy sources and technologies for the energization of remote and rural areas;
- e. The BOI, in consultation with DOE and other stakeholders, shall include renewable energy projects and activities in its annual Investment Priorities Plan to attract both domestic and foreign investors; and
- f. The DOF and the DBM shall provide sufficient fund allocation for the full implementation of this Act.

CHAPTER III

ON-GRID RENEWABLE DEVELOPMENT

Section 8. *On-Grid Renewable Energy Generation.* – The DOE shall develop and implement a Renewables Portfolio Standard (RPS) that mandates all grid-users, particularly the distribution utilities and electricity suppliers, a percentage utilization of electricity from eligible RES and targets fifty per cent (50%) RES capacity of the total generation on the Grid. The timetable and scheme of implementation for this target shall be stipulated in the REPF and the Philippine Energy Plan.

Section 9. *Minimum Renewable Electricity Generation Policy.* – To create an initial market for RES facilities and promote greater environmental sustainability within the electric power industry, DOE and other industry participants shall develop a mechanism to implement a minimum electricity generation policy from renewable energy in the Wholesale Electricity Spot Market (WESM). The DOE shall determine the optimum value of said percentage share of renewable energy in the WESM based on the implementation of the Renewables Portfolio Standard. The DOE in consultation with other industry participants shall set the proper timing for the implementation of the same.

Section 10. *Intermittent Renewable Energy Generation*. – Specific for power generating facilities using intermittent RE sources such as wind and solar among others, the DOE, in coordination with TRANSCO and other industry participants, shall facilitate the interconnection of these facilities to the Main Grid and shall formulate production predictability incentive schemes (capacity forecast premium).

Section 11. *Green Pricing Advocacy*. – The DOE shall provide the necessary support to the Green Pricing Advocacy that promotes the choices and preferences of electricity end-users for environment-friendly renewable energy sources and technologies mechanism for the implementation of a Green Pricing Program.

CHAPTER IV

OFF-GRID RENEWABLE ENERGY MARKET

Section 12. *Off-grid Renewable Energy Development Program*. – The utilization of renewable energy resources in power generation in energizing off-grid barangays and households shall be prioritized; Provided, However, that the same will promote social economic returns in said concerned areas. Consistent with the provisions of Section 70 of the Republic Act No. 9136 and the Rules and Regulations promulgated therefor, the DOE, NPC-SPUG and National Electrification Administration, through the Rural Electric Cooperatives established in accordance to Law, shall prioritize the type of renewable energy technologies and systems on a least-cost basis. The DOE shall endeavor to devise schemes for the standardization of renewable energy equipment for efficient utilization.

Section 13. *Off-Grid Renewable Energy Zones*. – Consistent with the Policy herein provided, the President of the Republic of the Philippines is hereby empowered to establish off-grid renewable energy zones / sites / areas, where abundant renewable energy sources have been determined to exist, upon the recommendation of the DOE.

Section 14. *Promotion of Hybrid Systems*. – The use of hybrid systems and applications for off-grid areas shall be pursued because of its potential effectiveness in

providing reliable supply of power for rural development. The DOE shall formulate policies and guidelines to remove barriers to the effective design and use of hybrid systems. Appropriate financial and fiscal incentives will likewise be granted as provided in Sections 20, 21 and 23 of this Act to firms and entities duly certified by DOE.

CHAPTER V

OTHER RENEWABLE ENERGY MARKETS

Section 15. *Promotion of Non-Power Renewable Energy Systems.* – The DOE shall develop specific support programs for business entities, marketers and distributors of, among others, solar water heaters, windpumps, biomass-fired-thermal systems and other non-power renewable energy equipment such as engines, machines and/or equipment capable of using alternative fuels or fossil/alternative fuel blends as energy source. DOE shall ensure that these entities can also avail of the incentives provided for renewable energy markets and activities as specified under Section 24 of this Act.

Section 16. *Renewable Energy and Ecotourism.* – The DOT, in collaboration with the DOE, shall develop technical and financing support programs for ecotourism projects using renewable energy systems and establish accreditation system for the use of environment-friendly renewable energy resources in facilities located or to be constructed in tourist spots, such as beaches, spas, resort areas, cultural centers, etc. The DOT and DOE shall prepare a priority list of ecotourism projects with renewable energy component to promote viable investments in remote and rural areas. The BOI shall incorporate the same in the annual preparation of its Investment Priorities Plan.

CHAPTER VI

GOVERNMENT SHARE

Section 17. *Uniform Government Sharing Scheme.* The Production Bonus, Special Privilege Tax under Section 14 of Executive Order 462, as amended by Executive

Order 232 and Section 10 (1) of Republic Act No. 7156, respectively, and other royalties on RE development projects, shall be equal to at least one and one half per centum (1.5%) of the gross proceeds. Accordingly, provisions of said Laws inconsistent herewith are hereby amended.

The distribution and allocation of Government Share / Special Privilege Tax / Royalty shall be in accordance with the Sections 290, 292 and 294 of Republic Act No. 7160, otherwise known as the "Local Government Code of 1991"; Provided, That, for the period of not exceeding five (5) years, the National Government Share, equivalent to sixty per cent (60%) of the production bonus, special privilege tax and royalty shall be waived for the country's first 300-megawatt cumulative RE capacity additions starting from the date of approval of this Act.

The government share, as provided in Presidential Decree No. 1442 and its Implementing Rules and Regulations, payable by the service contractor shall be equal to at least two per centum (2%) of the gross revenues of the contractor from the sale of geothermal steam. Such government share shall be made payable to the National Government and the Local Government Units on or before the 20th day of the month following the end of each calendar or fiscal quarter and shall be fully tax deductible. In case of integrated steamfield and power plant operation by a contractor, the government share of at least two per centum (2%) shall be based on the gross sales of geothermal steam used for generating power at a transfer price to be set by DOE based on a generally acceptable criteria to be prescribed by DOE. The share of the Local Government Units from this government share shall be made by the service contractor in accordance with Republic Act No. 7160.

CHAPTER VII

ENVIRONMENTAL COMPLIANCE

Section 18. *Compliance with Environmental Regulations.* – All renewable energy explorations, development, utilization, and RES operations shall be conducted in

accordance with existing environmental regulations as prescribed by the DOE and/or any other government agency.

Section 19. *Mandatory Restoration Work.* – In all cases where the proposed hydroelectric power development entails the closure or stoppage of existing water outlets, passageways, connections, conduits, apertures or the like from the water source, it shall be mandatory for the hydropower operating contract holder to restore or reengineer such water outlets, passageways, connections, conduits, apertures or the like on its account or expense, and in such manner that existing users or appropriators shall not be permanently deprived of their use or appropriation.

In all other cases where the proposed RE development projects shall affect the environment in any manner, the RE operating contract holder shall be mandated to implement appropriate restoration works in the affected areas to its original conditions.

A RE operating contract holder in an area shall open a “Trust Account” jointly in the name of the contractor, the DOE and the concerned municipality/ies or city/ies wherein an amount equivalent to at least one centavo (Php 0.01) per kilowatt-hour or electricity sold shall be deposited in a commercial bank on a quarterly basis to cover the cost of environmental assurance, restoration, re-engineering and rehabilitation works. This amount shall be determined by the Secretary of the DOE, in consultation with the concerned host community/ies and local government unit/s based on environmental assurance requirement of each project.

CHAPTER IX

GENERAL INCENTIVES

Section 20. *Incentives for Renewable Energy Projects and Activities.* – All RE developers and operators of renewable energy facilities, as duly certified by the DOE and in consultation with the DOF and DTI, shall be entitled to the following privileges:

a. *Tax and Duty-free Importation of Machinery, Equipment and Materials.* – Within the duration of a RE operating contract, importation of machinery and equipment, and materials and parts thereof, whether or not shipped with such machinery and equipment, including control and communication equipment, shall not be subject to tariff duties and value-added tax: *Provided*, however, that the said machinery, equipment, materials and parts are:

1. not manufactured domestically in reasonable quantity and quality;
2. directly and actually needed and shall be used exclusively in the RE facilities for transformation into energy, and transmission of electric energy to the point of use; and
3. covered by shipping documents in the name of the duly registered Operator to whom the shipment will be directly delivered by customs authorities:

Provided further, that prior approval of the DOE is obtained before the importation of such machinery, equipment, materials and parts are made;

b. *Tax Credit on Domestic Capital Equipment.* – A tax credit equivalent to one hundred percent (100%) of the value of the value-added tax and custom duties that would have been paid on the machinery, equipment, materials and parts had these items been imported shall be given to a RE operating contract holder who purchases machinery, equipment, materials and parts from a domestic manufacturer for purposes set forth under sub-paragraph 2. of the immediately preceding paragraph (a). *Provided further*, that prior approval by the DOE was obtained by the local manufacturer. *Provided finally*, that the acquisition of such machinery, equipment, materials, and parts shall be made within the validity of the RE operating contract;

c. *Real Estate Tax Exemption.* – Any provision of existing Laws to the contrary notwithstanding, all lands, including easements, civil works, equipment, machinery, and other improvements of a registered RE developer actually and exclusively used for RES facilities shall be exempted from the payment of any real estate tax; *Provided*, That the activities they engage in exhibit high social economic returns and necessary to assist reasonable recovery of large investments.

- d. *Value-added Tax Exemption.* – The sale of electricity generated from RE facilities shall be exempt from the ten percent (10%) value-added tax based on the gross receipts;
- e. *Income Tax Holiday and Exemption.* – Within seven / twelve (7) / (12) years following the actual commercial operation of a RE facility, the RE operating contract holder shall be fully exempt from income taxes levied by the National Government.
- f. *RE Production Predictability/Forecast Premium/Bonus.* – RE contract holder shall be entitled to a share of RE Production Premium/Bonus proportionate to the actual power generation from its RE facility as determined by the DOE. For this purpose, there is hereby established a Production Premium/Bonus Fund and for which one centavo (Php 0.01) for every kilowatt-hour sold shall be collected from every generating facilities by the TRANSCO and/or system market operator.

Section 21. *Hybrid and Cogeneration Systems.* The tax exemptions and/or incentives provided for in Section 20 shall be availed of by RE operating contract holders of hybrid and cogeneration systems, utilizing both RE sources and conventional energy; Provided, however, that tax exemptions and incentives shall apply only to the equipment, machinery and/or devices utilizing renewable energy sources.

Section 22. *Non-Fiscal Incentives for RE Developers.* Within ten (10) years following the effectivity of this Act, all RE operating contract holders shall have the following additional incentives, subject to the DOE's review every three (3) years.

- a. *Priority Dispatch* – RES utilizing biomass, wind, solar, geothermal, hydro, and ocean energy shall have the first right to supply electrical energy, up to its maximum capacity, to any grid whether or not any fossil power generating facility is operating therein subject to the Renewables Portfolio Standards provided under Section 8 hereof.
- b. *Exclusion from Payment of Ancillary Services* – Any RES may be excluded from any obligation to pay “Load Following and Frequency Regulation”, “Spinning Reserve”, “Back-up Reserves”, and “Energy Imbalances”; (or “to exclude RES from any requirement to provide ancillary serves”);

- c. *Exclusion from Payment of Interconnection and Wheeling Charges* – Any RES may be excluded from any requirement to pay interconnection and wheeling charges as required under existing laws;
- d. *Exemption From The Universal Charge.* – Power and electricity generated through RES for the generator's own consumption and/or for free distribution in the off-grid areas shall be exempted from the payment of the Universal Charge provided for under Section 34 of Republic Act No. 9136.

Section 23. *Incentives for RE Commercialization* – All manufacturers, fabricators and suppliers of locally-produced RE equipment and components duly recognized and accredited by the DOE, in consultation with DOST, DOF and DTI, shall be entitled to the following privileges.

- a. *Tax and Duty-free Importation of Components, Parts and Materials* – All shipments necessary for the manufacture and/or fabrication of RE equipment and components shall be exempted to importation tariff and duties and value added tax; Provided, however that the said components, parts and materials: (a) are not manufactured domestically in reasonable quantity and quality at reasonable prices; (b) are directly and actually needed and shall be used exclusively in the manufacture/fabrication of RE equipment; and (c) are covered by shipping documents in the name of the duly registered manufacturer/fabricator to whom the shipment will be directly delivered by customs authorities: Provided further, that prior approval of the DOE was obtained before the importation of such components, parts and materials were made;
- b. *Tax Credit on Domestic Capital Components, Parts and Materials* – A tax credit equivalent to one hundred percent (100%) of the value of the value-added tax and custom duties that would have been paid on the components, parts and materials, had these items been imported shall be given to a RE equipment manufacturer, fabricator, and supplier duly recognized and accredited by the DOE, who purchases RE components, parts and materials from a domestic manufacturer. Provided, that such components, materials and parts are directly needed and shall be used exclusively by the RE manufacturer, fabricator and supplier for the

manufacture, fabrication and sale of RE equipment. Provided further, that prior approval by the DOE was obtained by the local manufacturer.

- c. *Local Taxes* – All duly recognized and accredited RE equipment manufacturers/fabricators shall be exempted from taxes and fees imposed by local government units, such as real estate tax on lands, local business tax, building permits fees, among others; Provided that the manufacturing/fabricating facilities are in compliance with the established performance standards certified by the DOE;
- d. *Special Realty Tax Rates on Equipment and Machinery* – Any provision of the Real Property Tax Code or any other law to the contrary notwithstanding, realty and other taxes on civil works, equipment, machinery, and other improvements of a DOE recognized and accredited RE manufacturer, fabricator and supplier of RE equipment shall not one percent (1%) of their original cost of such civil works, machinery, equipment, devices and/or other components;
- e. *Value-added Tax Exemption* – Exemption from the ten percent (10%) value-added tax on (i) the gross receipts derived from the sale of locally-manufactured RE equipment and components; (ii) imported and locally purchased machinery, equipment and devices described in items (a) and (b) hereof; and (iii) other local Value-Added Tax.
- f. *Income Tax Holiday and Exemption* – For seven (7) years starting from the date of recognition/accreditation, a RE manufacturer, fabricator and supplier of RE equipment shall be fully exempt from income taxes levied by the National Government.

Section 24. *Renewable Energy Trust Fund.* – A Renewable Energy Trust Fund is hereby created to:

- a. Finance the research, development, demonstration and promotion of the widespread use of renewable energy systems;
- b. Conduct resource assessment studies for biomass, solar, wind, hydro, tidal current, and ocean energy; and
- c. Conduct such other activities necessary to carry out the objectives of this Act.

For this purpose, an amount of One Billion Pesos (Php1,000,000,000.00) shall be allocated as seed money for the trust fund which shall be sourced from the following:

- A: Fines and penalties
- B: Mandatory RES Contributions
- C: Fees exacted pursuant to this Act
- D: Demonstration Earnings
- E: Grants
- F: Donations
- G: RE Production Predictability/Forecast Premium/Bonus

The DOE shall manage and administer the said fund subject to existing government accounting and auditing procedures. The DOE, in consultation with other government units and agencies, is hereby authorized to manage and disburse the funds to be used solely for the purposes enumerated herein in the form of grants, loans, equity investments, loan guarantees, and insurance or to access other local or international funds pursuant to the provisions of this Act.

CHAPTER X

GENERAL PROVISIONS

Section 25. *Creation of Renewable Energy Bureau.* – In accordance with the power of the Secretary and with the approval of the President, the Renewable Energy Bureau is hereby created for the effective management and administration of the renewable energy resources and development. The Renewable Energy Bureau shall have the following Divisions: Hydropower Division; Geothermal Division; Solar and Wind Division and Ocean and Biomass Division.

The Renewable Energy Bureau shall have the following powers and functions:

- a. Assist in the formulation and implementation of policies for the efficient and economical transformation, conversion, processing, refining, market packaging

and financing, transportation and storage of hydro, geothermal and other renewable energy resources such as wind, solar, biomass and ocean; and ensure their efficient and judicious utilization.

- b. Monitor sectoral energy consumption and conduct efficient utilization audit, technical training, energy management advisory services, and technology application projects on efficient energy utilization.
- c. Develop, promote and commercialize applications of biomass, solar, hydro, wind, wood and charcoal and other renewable energy resources including new and more efficient and economical transformation, conversion, processing, refining, marketing, distribution, transportation and storage technologies for renewable energy resources.
- d. Assist in the implementation of an integrated rural electrification program to effectively address the energy self-sufficiency in rural communities and implement, monitor and regularly review the implementation program for efficient administration.
- e. Provide information on renewable energy technologies and develop short-and long-term renewable energy technology development strategies.
- f. Monitor the implementation of renewable energy projects in coordination with the Department of Environment and Natural Resources, National Water Resources Board, National Commission on Indigenous People and other government agencies to ensure compliance with the existing regulations and prescribed environmental standards.
- g. Monitor and supervise renewable energy projects implemented by government and private institutions including, affiliated renewable energy centers.

Section 26. *Product Standards and Testing Procedures.* – The DOE, in consultation with the Bureau of Product Standards, shall if necessary, establish product standards and testing procedures for selected renewable energy products, equipment, devices and accessories in consonance with existing international renewable energy testing and product standards. The DOE and DTI shall jointly identify and designate laboratories and research facilities as accredited renewable energy testing laboratories to undertake the testing and labeling of renewable energy products, systems and devices according to the approved standards and procedures.

Section 27. *Manpower Development Program.* – The DOE, in coordination with other government units and agencies, shall ensure sustained manpower development programs to increase the education, expertise, training, skills and awareness of planners, implementors, trainers, technicians, and beneficiaries in the national and local levels in appropriate aspects of renewable energy development and utilization.

All foreign RE technology suppliers shall be required to conduct technology transfer activities to their proposed users and beneficiaries of the technology. The DOE shall ensure that capacity building sessions are incorporated into the work plan of the foreign technology suppliers prior to project implementation.

Section 28. *Information Management.* – The DOE shall create, maintain and regularly update an information system of renewable energy resources, technologies, suppliers, companies and projects for the purposes of, but not limited to:

1. Formulation of annual energy and power development plans of the country;
2. Information dissemination to the public who are interested to invest in renewable energy generation projects or in research and development studies, etc.;
3. Monitoring and evaluation of existing technologies and projects; and
4. Formulation of appropriate policies.

As such, the information system shall be backed up by a reliable database and shall include all relevant information for the development and commercialization of renewable energy systems. The DOE shall be responsible for the development of the institutional mechanism to ensure sustained maintenance and upgrading of the information exchange system.

Section 29. *Information Dissemination and Education Program.* – The DOE is hereby mandated to conduct outreach program that will disseminate information on renewable energy development and utilization. The DOE in collaboration with other government agencies, particularly the Office of the Press Secretary-Philippine Information Agency, shall conduct nationwide promotional campaigns to educate and raise the national consciousness on the greater advantages and benefits of the widespread use of renewable energy towards energy self-sufficiency, environmental protection, etc.

Section 30. *Financial Assistance Program.* – Government financial institutions such as the Development Bank of the Philippines (DBP), the Philippine National Bank (PNB), the Government Service Insurance System (GSIS), the Land Bank of the Philippines (LBP) and other private and government institutions that are now engaged or may hereafter engage in financing of renewable energy projects shall in accordance with and to the extent allowed by the enabling provisions of their respective charters or applicable laws, accord high priority to applications for financial assistance by individuals, enterprises, and industries participating in RE development, utilization and commercialization, duly recommended and endorsed by the DOE.

Section 31. *Adoption of Waste-to-Energy Technologies in Livestock Farms and Slaughterhouses.* – For pollution control purposes, large-scale livestock farms and slaughterhouses shall be required to adopt waste-to-energy facilities such as biogas systems. The DOE shall facilitate the provision of technical assistance, in coordination with existing private companies and suppliers, in the adoption of the technology. The DOE shall coordinate with the DENR for the regular monitoring and compliance to this provision.

Section 32. *Demonstration Project Earnings.* – The DOE shall have the option to use earnings derived from the operation of RE demonstration projects to fund solely additional pilot and demonstration projects.

Section 33. *Program Appropriations.* – The amount necessary for the implementation of this Act shall be taken from the current fiscal year's appropriation of the DOE. Thereafter, such sum as may be necessary for the operation and maintenance of the Renewable Energy Policy Framework shall be included in the annual budget of the DOE under the General Appropriations Act. Any unutilized funds at the end of the fiscal year shall be reallocated back to the program.

CHAPTER XI

FINAL PROVISIONS

Section 34. *Implementing Rules and Regulations.* – The DOE shall promulgate the rules and regulations necessary to implement the provisions of this Act within six (6) months after its effectivity.

Section 35. *Reportorial Requirements.* – The CRIs, ARECs, private entities engaged in renewable energy business operations and other concerned agencies and institutions are hereby required to provide the DOE all information that it may deem necessary and in accordance with the regulations for the effective monitoring, management and development of the overall Renewable Energy Policy Framework. The information and technical data shall remain confidential for a period stipulated in the regulations, which shall not exceed five (5) years. The DOE, therefore, shall formulate reportorial system for the scope and frequency of submission of the said information.

Section 36. *Penalty Clause.* – The DOE shall formulate and promulgate appropriate penalties to any person who willfully violates violations of rules or regulations provided in this Act shall, upon conviction, be punished by a fine of not less than One hundred thousand pesos (P100,000.00), or by imprisonment of not less than two (2) years but not more than five (5) years, or both, at the discretion of the court; Provided, That if the violations committed by a juridical person the penalty provided shall be imposed on the official or employee thereof responsible for the violation; Provided, That if the violation is committed by a government official or employee including those in government-owned or controlled corporations he/she shall, in an additional to the promulgated penalties provided, be subject to disciplinary administrative proceedings and penalties.

Section 37. *Official Development Assistance.* – The provision of Executive Order No. 230 of 1986, on the power of the NEDA Board, and the rules and regulations governing the evaluation and authorization for the availment of Official Development Assistance notwithstanding the privatization of renewable energy facilities as provided

for in this Act shall be eligible for foreign loans and grants without further evaluation by the NEDA Board, subject to Section 21, Article XII of the Constitution.

Section 38. *Separability Clause.* – If for any reason or reasons, any part or provisions of this Act shall be held unconstitutional or invalid, no other part or provision hereof shall be affected thereby.

Section 39. *Repealing Clause.* – All laws, orders, doctrines, decrees, rules and regulations or parts thereof, including EO 462, EO 232, RA 7156, RA 7160, and PD 1442, among others, inconsistent with any of the provisions of this Act are hereby repealed, amended or modified accordingly.

Section 40. *Effectivity Clause.* – This Act shall take effect fifteen (15) days after its complete publication in at least two (2) newspapers of general circulation.

Approved,