LAO PEOPLE DEMOCRATIC REPUBLIC PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY

Prime Minister's Office

No. xx/PM

Vientiane Capital, dated xx

DECREE

ON BIOGAS PRODUCTION

- Based on Law on the Government of Lao PDR No 02/NA, dated 6 May 2003;
- Based on the Electricity Law, No 03/NA, dated 08 December 2008;
- Pursuant to Renewable Energy Development Strategy (hereinafter-REDS);
- Refer to the Proposal Letter of the Minister of Energy and Mine, No.

The Prime Minister Issues the Decree:

Section I

General Provisions

Article 1. Objectives

This Decree defines the principles, rules, and measures on the implementation, operation, regulation and supervision of biogas business, to promote biogas energy production, including the on-grid and off-grid option and to develop domestic small and medium size biogas digester, for increasing cleaner energy for self consumption, effective agro-forestry-livestock wastes treatment aiming at creating economically and technically viable promotion mechanism for biogas technology in Lao PDR.

Article 2. Definitions

Terms used in this Decree shall have the following meanings:

- Biogas typically refers to a gas produced by the biological breakdown of organic matter in the absence of oxygen (anaerobic digestion). Biogas originates from biogenic material and is a type of biofuel. This type of biogas comprises primarily methane and carbon dioxide.
- **Biogas** is a renewable energy source which can be
 - Supplied directly to any interested parties, for example, compressed biogas for vehicle.
 - Or converted into heat or/and mechanical and electrical power and supplied any customers, for example, a power utility.
 - Anaerobic process also produces a digested biomass which is an environmentallyimproved and more efficient fertilizer compared to raw manure
 - A biogas plant is the name often given to an anaerobic digester that treats farm wastes or energy crops in a large amount.

Article 3. Types of Biogas Digesters and feedstock production

There are four broad categories of biogas generation technologies as defined by the source material (feedstock) that they consume:

- 1. On-Farm Digesters
 - Using only their own manure for feedstock
 - Using their own manure supplemented by industrial organics
- 2. Centralized Digesters
 - Using manure and/or industrial organics from a number of sources as a feedstock
- 3. Municipal Sewage Treatment Digesters
 - Using municipal organic solid waste as a primary feedstock
- 4. Waste Water Treatment Systems
 - Used by food and beverage processing companies primarily as waste treatment systems. These systems do not necessarily (or are not even necessarily designed for) maximizing biogas production. In these systems the biogas that produced is often either flared off or co-fired into boilers to produce steam.

Article 4. Scope of application

This Decree applies to all individuals and organizations that invest in biogas energy facilities for non-commercial and commercial purpose within the Lao PDR.

Section II

Types of Biogas Production

Article 5. Types of Biogas Production

Based on size and energy supply destination, biogas production can be classified into two types as followed:

- 1. Non commercial biogas digesters
- 2. Commercial biogas production.

Article 6. Non commercial biogas production

Non commercial biogas production is a production of biogas energy for meeting household and on-farm energy demand.

Article 7. Commercial Biogas Production

Biogas production for commercial purpose is a biogas production for heat or/and electricity generation, either for owner's own use and supply to neighboring users or for feeding in to grid. Commercial biogas production utilizes on-farm feedstock or several feedstock sources, such as agro-industrial wastes, municipal solid wastes or waste water treatments.

Biogas production for commercial purpose shall be subject to licensing and regulation procedures as provided for in this Decree.

Section III

Installation, Utilization and Supervision of Non commercial biogas Production

Article 8. Declaration of Installation

Individuals or communities willing to install biogas energy facility for self consumption (heating and lighting) shall declare the project proposal to the District Office of Energy and Mines for registration and assistance.

Article 9. Registration of the Installation

The installation of a non commercial biogas energy facility shall be approved and registered by the District Office for Energy and Mines.

Article 10. Technical Instruction for Installation

The installation of biogas production facility from the initial phase shall be subject to the technical instruction and guidelines provided by the Ministry of Energy and Mines.

The Ministry of Energy and Mines in collaboration with Ministry of Science and Technology and other parties concerned shall issue a technical instruction or guidelines for the installation of biogas digesters.

When such technical instruction or guideline exists, all non commercial biogas units shall be installed in compliance with these instruction and guidelines.

Article 11. Technical and safety requirements for production and utilization of biogas energy

The production and utilization of biogas energy shall comply with the specific technical and safety standards as determined by the Ministry of Energy and Mines and all other legal requirements. The owner shall be responsible for the management, operation, maintenance and safety of the facility.

When such technical instruction or guideline exists, all non commercial biogas units shall be operated in compliance with these instruction and guidelines.

Article 12. Technical Supervision

Technical supervision shall be carried out by the District Office of Energy and Mines on regular manner.

Section IV

Installation, Utilization and Supervision of

Commercial Biogas Projects

Article 13. Approval of biogas production facility

Developers, individuals or legal entities, who wish to invest in a biogas production facility with commercial purpose shall first submit an application consisting of a short description of the proposed installation to the Provincial Department of Planning and Investment for consideration and approval.

The Provincial Department of Planning and Investment shall issue the approval to the applicant within fifteen (15) working days starting from the date of submission of the complete application in accordance with this Decree.

Article 14. Operation Licensing Authority

The Authority with power and authority to issue license for installation or construction and operation of biogas production projects for commercial purpose shall be:

- The Provincial Department of Energy and Mines for facility with treatment capacity of less or equal to 30 tons per day;
- The Ministry of Energy and Mines for facility with a treatment capacity higher than 30 tons per day.

Article 15. Licensing Conditions

Developers, individuals or legal entities, who wish to install and operate a biogas production facility shall submit an application to the relevant licensing Authority as specified in Article 14. The application shall include the following documents:

- 1. Brief project description; including proposed site location,
- 2. Feasibility Study or Business Plan;
- 3. Technical Design;
- 4. Financial Plan;
- 5. Environmental Certificate;
- 6. Operation and Maintenance Plan.

Article 16. License Terms and Conditions

The Ministry of Energy and Mines shall develop a standard license terms and conditions for licensing, regulation and supervision of biogas energy system for commercial purpose including regulation and supervision procedures that shall be implemented and complied with by the operation licensing authority.

Article 17. Consideration of the Application

The Provincial Department of Energy and Mines shall issue the Operation License to the applicant within fifteen (15) working days starting from the date of submission of the complete application in accordance with this Decree.

When the licensing Authority is the Ministry of Energy, the delay to issue the Operation license to the applicant is extended to thirty (30) working days starting from the date of submission of the complete application in accordance with this Decree.

In case of rejection, the licensing Authority shall provide written reasons for its decision.

Should the licensing Authority fail to reply during the period of consideration and in absence of a written notification to the applicant that the period of consideration is extended, the authorization is granted.

Article 18. Technical and Safety Requirement for the Utilization

The biogas facility shall be operated in accordance with the technical and safety standards issued by the Ministry of Energy and Mines and all other legal requirements.

Article 19. Technical Supervision

After commercial operations have commenced, the operator shall submit quarterly reports to the Provincial Department of Energy and Mines.

The operator shall provide access to the biogas facility to the staff of the Provincial Department of Energy and Mines for inspection purpose whenever required, either regular or risk-based inspection. The inspector's visits shall take place during normal business hours and shall be subject to prior notice whenever possible.

Inspection of Biogas Facility shall at least cover:

- 1. Compliance with the requirements of the relevant laws and regulations;
- 2. Compliance with terms and conditions of Operation License;
- 3. Compliance with Technical and Safety Measures;
- 4. Compliance with terms and conditions of Environmental Certificate or Environmental Management Plan;
- 5. Compliance with Business Plan;
- 6. Compliance with Operation and Maintenance Schedule.

Article 20. Principle on Price Determination

Determination of biogas energy price shall be based on market principles in the Lao PDR. The State shall intervene only if there is a need to regulate the price of energy to support the socio- economic development in rural and remote areas where people have no access to grid system.

Section VI

Access to Technical and Financial Assistances

Article 21. Technical Assistance

Ministry of Energy and Mines and its relevant departments and divisions, in collaboration with Ministry of Science and Technology and other parties concerned shall provide technical assistance to any biogas project developers.

Article 22. Conditions for Financial Assistance from the Rural Electrification Fund

Developers and investors in biogas production may apply for financial assistance from Rural Electrification Fund when the following conditions are met:

- 1. Facility located in a remote off grid area;
- 2. No other better alternative for electrification;
- 3. Project financially and operationally sound.
- 4. Fund available from the REF;

Article 23. Other Funds likely to be mobilized to support biogas industry

In addition to the fund from the REF, biogas system developers may appropriately apply for financial assistance from other financial sources such as Poverty Reduction Fund, Small and Medium Enterprise Development Fund, Environmental Fund, Renewable Energy Fund.

Article 24. Application for Investment Incentives under the Law on Investment Promotion

Biogas system developers shall be eligible to obtain all investment and other fiscal incentives defined in the law on investment promotion of the Lao PDR.

Article 25. Additional Incentives defined by the Government

To promote the development of biogas industry, the Government will make recommendations to the National Assembly or its Standing Committee for consideration of approval of additional investment incentives under the principles defined in Article 59 of the Law on Investment Promotion 2009 and such additional investment incentives shall be published and made available to all developers or investors in renewable energy.

Article 26. Access to carbon finance and issuance of green certificates

The biogas system developers are encouraged to access carbon finance through the intermediation of the Designated National Authority.

MEM shall issue necessary certification required for accessing carbon finance following the procedure in place.

In addition, green certificates shall be issued by the Ministry of Science and technology upon request by the developers and in accordance with procedures in place.

Section VII

Biogas Energy Supply

Article 27. Biogas Energy Supply

Developers of biogas energy system for commercial purpose may supply energy to neighboring users or to a distribution company.

The terms and conditions of such supply shall be negotiated and agreed between the developers and the distribution company or neighboring users.

Article 28. Conditions for Supply

The conditions for the supply of biogas energy are the following:

- 1. Meeting the demand of the users or buyers;
- 2. Be financially competitive;
- 3. Meeting the distribution company technical standards and energy requirements, if the producers wish to supply to the power utility grid.

Section VIII

Regulation and Supervision of Biogas Energy Business

Article 29. Roles of Ministry of Energy and Mines

Ministry of Energy and Mines shall centrally and uniformly manage biogas energy development and production throughout the country.

Article 30. Powers and Duties of Ministry of Energy and Mines

In the administration and inspection of biogas energy production, the Ministry of Energy

and Mines has the following powers and duties:

- 1. To elaborate on the strategic plan relating to the development of biogas energy production;
- 2. To draft a master plan regarding the development of biogas energy production, including short-term, medium term and long term plans for the development of biogas energy production;

- 3. To consider applications and approve the establishment of biogas energy systems for commercial purpose for which the Ministry of Energy and Mines is licensing authority;
- 4. To issue operation license for biogas energy systems for commercial purpose for which the Ministry of Energy and Mines is licensing authority,
- 5. To develop technical standards and guidelines for biogas energy systems in collaboration with other parties concerned;
- To organize provision of technical assistance and training support on installation and construction of biogas energy production to its Provincial Departments or District Offices for Energy and Mines;
- 7. To coordinate and cooperate with international organizations and foreign authorities for the development of biogas production;
- 8. To summarize and report the status of the development of biogas industry in the country to the Government;
- 9. To coordinate with other sectors and concerned local authority for the administration of the biogas energy business.

Article 31. Powers and Duties of the Provincial Department of Energy and Mines

In the administration and inspection of biogas energy production, the Provincial Departments of Energy and Mines has the following powers and duties:

- 1. To elaborate own biogas energy business development in accordance with the Ministry of Energy and Mines' master plan;
- 2. To consider applications and approve the establishment of biogas energy production plants for which the Provincial Department of Energy and Mines is licensing authority;
- 3. To issue operation license for biogas energy production for commercial purpose for which the Provincial Department of Energy and Mines is licensing authority;
- 4. To proceed to technical inspections of biogas facilities;
- 5. To suspend or remove operation license when developers materially breach the license terms and conditions;
- 6. To provide technical instruction for biogas energy production investment within its scope of responsibility;
- 7. To gather and prepare information on potential and feasibility of biogas project development in the province;
- 8. To coordinate with other sectors and concerned local authority for the management of the biogas energy production business;

9. To gather data on feasible commercial biogas projects and report to MEM.

Article 32. Powers and Duties of the District Office for Energy and Mines

In the administration and inspection of biogas energy production, the District Office of Energy and Mines has the following powers and duties:

- 1. To provide technical assistance and support for non commercial biogas production;
- 2. To disseminate and provide training on technical guidelines or instructions of the Ministry of Energy and Mines to non commercial biogas owners;
- 3. To disseminate strategic policy and plan of the Ministry of Energy and Mines regarding the promotion of biogas production;
- 4. To regulate and supervise the non commercial biogas production;
- 5. To summarize and report the status of biogas energy development and production to the Provincial Department of Energy and Mines.
- To exercise other rights and other duties related to biogas energy production as assigned by the Provincial Department of Energy and Mines or defined by laws and regulations of the Lao PDR.

Section IX

Awards and Sanctions

Article 33. Incentives towards outstanding business operation

Individuals, organizations or legal entities that have had an outstanding performance in implementing this Decree, mainly in biogas energy activities and environmental protection shall receive rewards and other incentives accordingly to the laws and regulations.

Article 34. Measures against the Violators

Individuals, organizations or legal entities that violate this Decree shall be subject to measures depending on the seriousness of the violation in the form of education, discipline, fine, damage compensation or penalties accordingly to the laws and regulations.

Section X

Final Provisions

Article 35. Implementation

The Ministry of Energy and Mines and other relevant ministries, organizations and parties concerned have the duty to efficiently implement this Decree.

Article 36. Effectiveness

This Decree is effective from the date of signature herein.

Any regulations and provisions which are contradicted with the provisions of this Decree shall be cancelled.

Prime Minister of the Lao PDR