



## Market Mechanisms Country Fact Sheet : Lao People's Democratic Republic

### National Climate Change Policy in Lao PDR

<b>Name</b>	Strategy on Climate Change of the Lao PDR								
<b>Objective</b>	To secure a future where the Lao PDR is capable of mitigating and adapting to changing climatic conditions in a way that promotes sustainable economic development, reduces poverty, protects public health and safety, enhances the quality of Lao PDR's natural environment, and advances the quality of life for all Lao people.								
<b>Goal</b>	a) Reinforce Sustainable Development Goals of the Lao PDR, including measures to achieve low-carbon economic growth; b) Increase resilience of key sectors of the national economy and natural resources to climate change and its impacts; c) Enhance cooperation, strong alliances and partnerships with national stakeholders and international partners to implement the national development goals; d) Improve public awareness and understanding of various stakeholders about climate change, vulnerabilities and impacts, GHG emission sources and their relative contributions, and of how climate change will impact the country's economy, in order to increase stakeholder willingness to take actions.								
<b>Year implemented</b>	2010								
<b>Existing strategies expected to be updated in the framework</b>									
<ul style="list-style-type: none"> <li>• Environmental Strategy</li> <li>• Biodiversity Strategy</li> <li>• Forestry Strategy</li> <li>• 1 Environmental Education and Awareness strategy</li> <li>• Renewable Energy strategy</li> </ul>									
<b>Priorities areas for Adaptation and Mitigation</b>									
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">1. Agriculture and Food Security</td> <td style="width: 50%;">5. Industry</td> </tr> <tr> <td>2. Forestry and Land Use Change</td> <td>6. Urban Development</td> </tr> <tr> <td>3. Water Resources</td> <td>7. Public Health</td> </tr> <tr> <td>4. Energy and Transport</td> <td></td> </tr> </table>		1. Agriculture and Food Security	5. Industry	2. Forestry and Land Use Change	6. Urban Development	3. Water Resources	7. Public Health	4. Energy and Transport	
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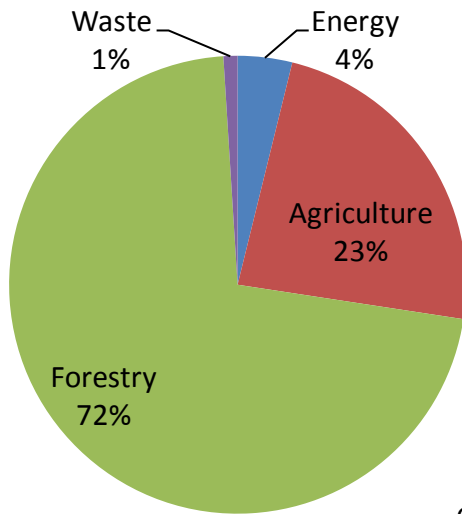
Source: National Environment Committee, 2010, Strategy on Climate Change of the Lao PDR

### Related policy for Climate change initiatives

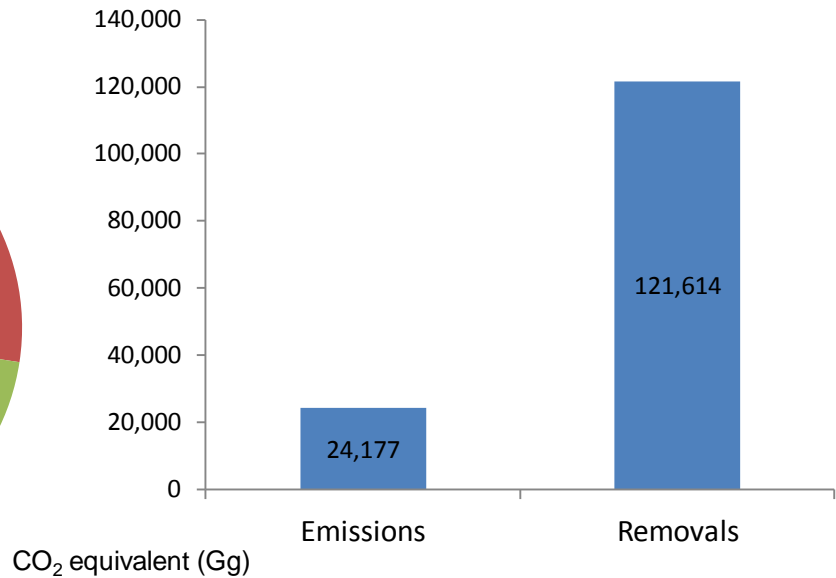
- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>•Environment Law 1999</li> <li>•Water Law 1996</li> <li>•Agriculture Law 1998</li> <li>•Forest Law 1996</li> <li>•Land Use Law 1996</li> <li>•Electricity Law 1997</li> <li>•Mining Law 1997</li> <li>•Road Transportation Law 1997</li> </ul> | <ul style="list-style-type: none"> <li>•Urban Planning Law 1999.</li> <li>•Decree on Social and Environment Impact Assessment, June 2010</li> <li>•Policy on Sustainable Hydro-power Development</li> <li>•Clean Development Mechanism Regulation (in process)</li> </ul> |
|---|---|

# Information on GHG and mitigation action

**GHG emissions by sector**



**GHG emissions and removals**



Source: Lao People Democratic Republic, The First National Communication on Climate Change  
[http://unfccc.int/essential\\_background/library/items/3599.php?rec=j&prifef=2741#beg](http://unfccc.int/essential_background/library/items/3599.php?rec=j&prifef=2741#beg)

## Key Sectors Strategic Priorities for Mitigation in Strategy on Climate Change of the Lao PDR

No.	Sector / Actions	Scope of Actions
1	Agriculture & Food security	<ul style="list-style-type: none"> <li>Reducing methane emissions from rice paddies, enteric fermentation and livestock manure</li> <li>Promoting new technology transfers</li> </ul>
2	Forestry & Land use change	<ul style="list-style-type: none"> <li>Reducing “slash and burn” agriculture, off-site burning and forest fires</li> <li>Integrating forest management including effective mapping and planning</li> </ul>
3	Energy & Transport	<ul style="list-style-type: none"> <li>Promoting 90% of electrification rate by 2020. Accelerating the development of renewable energy (solar, wind and hydro including mini-hydro) and cleaner energy (coal-bed methane and coalmine methane)</li> <li>Introducing energy-efficient lighting, appliances and energy-efficient buildings</li> <li>Promoting the use of alternate energy operated motor vehicles and pursuing environmental sustainable transport strategy</li> <li>Generating public awareness on energy saving by implementing initiatives such as car free day, marking Earth Day and World Environment Day</li> </ul>
4	Industry	<ul style="list-style-type: none"> <li>Improving energy efficiency during the production process</li> <li>Reducing wood waste through improvement of furniture manufacturing techniques and methods</li> <li>Promoting the use of biomass including agricultural residues</li> </ul>
5	Urban Development	<ul style="list-style-type: none"> <li>Applying the 3Rs (reduces, reuse and recycle), composting and landfill gas captured.</li> <li>Upgrading solid waste collection services and management of sewage sludge</li> <li>Promoting environmental sustainable urban development</li> </ul>

Seeking the opportunities under CDM or other flexible and pragmatic financing mechanisms to undertake the development of those measures mentioned above.

Source: Ministry of Natural Resources and Environment

# CDM information

## (1) Current Status of CDM in Lao PDR

Only one CDM project, namely energy efficiency in a beer production process, has been registered by the CDM Executive Board. It is not easy to identify CDM projects in Laos, because the quantity of GHG emissions is quite small and there is not much room to reduce them. As seen in the charts of GHG inventory status in Laos, removals exceed emissions in terms of amount of GHG in 2000 and major emissions source is forestry.

With abundant water recourse, amount of power generation from hydropower plants have been increased and support the growth of export earning recently. As GHG emissions from exist power plants in Laos are nearly zero, renewable energy projects including hydropower and energy saving projects in which activity site is connected to power grid system in Lao face issues that those projects could secure relatively low amount of certified emission reductions (CERs) under current rule.

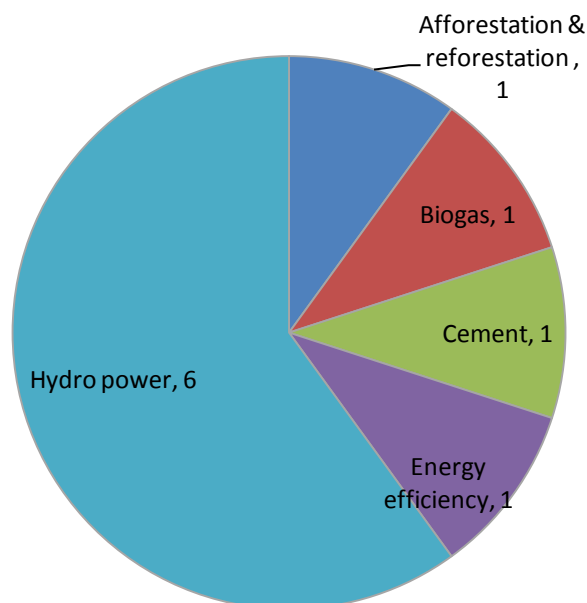
Though power is generated from mainly hydro, 88% of energy demand source is consisted of non renewable energy. Due to lack of electricity supply and small number of manufacturer, the share of electricity in total energy source is small. The Government aims to increase the share of renewable energies to 30% of the total energy consumption in 2025 and increase rural electrification coverage area from 70% to 90% in 2020. Participation of the private sector is expected to achieve the targets. It is required to solve this issue with establishing a new mythology or mobilising other new market mechanisms to enhance implementing projects with market mechanism measures.

In addition, waste management sector which is not effected by energy composition has potential to develop projects, because waste management service by municipality as well as measures utilising them as resources (biogas, compost and recycles) is not disseminated.

### Basic Information (as of November 2011)

Project Status	Number
CDM projects registered at CDM executive board	1
CDM projects at or after the validation stage	8
CDM projects approved by Lao PDR's DNA	10

### Summary of CDM Projects approved by DNA (as of November 2011)



## (2) CDM Project Information

Name of CDM Project	Type of Project	Project Proponent	Project Developer	Submit PDD	Issue Letter of Approval	Status
Beer Brewery in Lao PDR	Energy efficiency	Beer Brewery	Proact International Inc	22/05/06	18/01/07	Registered 2007/4/7
Xeset II Hydropower Project	Hydro power	EDL	Earthsystmslao	21/08/08	01/07/09	Completeness check
TBEC LIG Biogas Project	Biogas	Lao Indochina Group	Thai Bio Gas .co.,ltd	10/11/10	12/04/11	Validation
Nam Lik 1 Hydropower Project	Hydro power	Hydro Engineering. Co.,Ltd	ASIANETSER- VICE		7/11/11	Validation
Nam Lik 1-2 Hydropower Project	Hydro power	Nam Lik 1-2 Power.Co.,Ltd	Nam Lik 1-2 Power.Co.,Ltd	13/12/10	9/8/11	Validation
Nam Sim Hydropower Project	Hydro power	Nam Sim Power. Co.,Ltd	Nor Power as And ASIANETSER- VICE		7/11/11	Validation
Xekhaman 3 Hydropower Project	Hydro power	Xekhaman 3 Power Co.,Ltd	Xekhaman 3 Power Co.,Ltd	05/04/11	9/8/11	Validation
Lao Cement Alternative Fuels Project	Cement	Lao Cement Co.,Ltd	Lao Cement Co.,Ltd, Joint with the Climate Control Strategies GmbH	07/12/10	10/03/11	Validation
Rubber base agro-forest system for sustainable development and poverty reduction	Afforestation & reforestation	Lao Thai Hua Rubber Co., Ltd.	Lao Thai Hua Rubber Co., Ltd.	18/09/09	18/05/10	Validation
Nam Ngum 5 Hydropower Project	Hydro power	Nam Ngum 5 Hydroelectric. Co.,Ltd	Sino Hydro Power.Co.Ltd		7/11/11	Before validation

# Designated National Authority (DNA) Information

## (1) DNA Structure

DNA

Ministry of Natural Resource and Environment

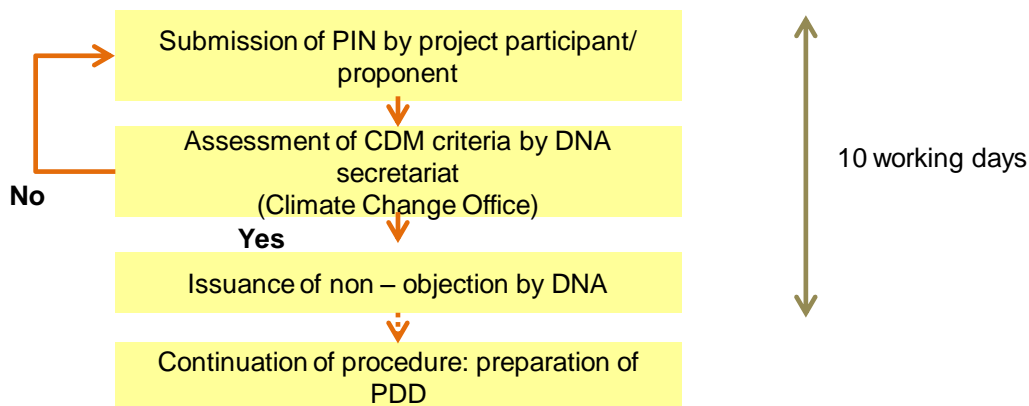
### DNA Function and Responsibilities

- Development of decree, guideline and criteria on CDM implementation
- Evaluation of CDM projects
- Preparation of CDM potential projects
- Submission of PIN/PDD to issue a formal letter of endorsement or approval by Minister of Natural Resource and Environment
- Dissemination of available CDM information for public access
- Management and coordination of the CDM business and investment in Lao PDR

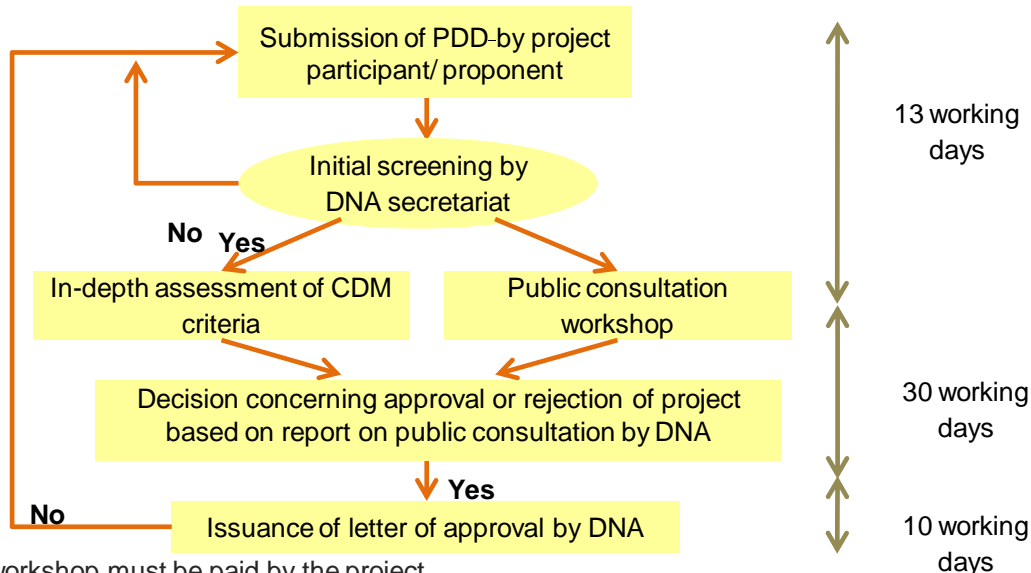
Source: Ministry of Natural Resources and Environment

## (2) DNA Approval Procedure

### PIN Procedure



### PDD Procedure



\*The cost for the workshop must be paid by the project participant/proponent. The estimated cost is less than USD5,000 per workshop.

### (3)DNA Approval Criteria

Sustainable Development Criteria	
Category 1: Environment	Category 2: Social
➤Reduction in air pollution	➤Concrete contribution to poverty alleviation
➤Reduction in water pollution	➤Contribution to gender equality and social inclusion
➤Reduction in soil pollution	➤Stakeholder consultation
➤Biodiversity conservation and protection of endangered species	➤All groups, both men and women, have equal access
➤Rational use of mineral resources	➤Creation of employment in the country
➤Sustainable use of forest resources	➤Improvement of community infrastructures & services
➤Protection of archaeological, cultural, historical and spiritual heritage and sites	➤Nuisance and risks for the people in the vicinity of the project area
Category 3: Economic	Category 4: Transfer of Technology and Knowledge
➤Share of project budget spent in-country	➤Transfer of appropriate and best available technology (BAT)
➤Reduced dependence on imported fossil fuels	➤Capacity building of local stakeholders and industries/businesses
➤Reduced dependence on imported energy	

**Project proponents must submit 10 copies of each following document in English and Lao to the DNA.**

- PDD(in English only)
- Completed Sustainable Development Checklist form
- Executive summary
- Any relevant official approvals from applicable ministries, provincial governments or other authorities as required for the project
- Information on the environmental and social impact of the project and/or an approved environmental and/or social impact assessment if it is required under Lao law

Source: Ministry of Natural Resources and Environment

## Relevant Information

### Kyoto Protocol Ratification Status

Ratification of the UNFCCC	4 April 1995
Ratification of the Kyoto Protocol	6 February 2003
Appointment of WREA as the DNA	15 July 2003

Source: Ministry of Natural Resources and environment  
<http://maindb.unfccc.int/public/country.pl?country=LA>

### UNFCCC Related Works

Lao PDR's First National Communication	1 October 2000
Lao PDR's National Adaptation Programme of Action	1 May 2009

Source:  
[http://unfccc.int/essential\\_background/library/items/3599.php?rec=j&riref=2741](http://unfccc.int/essential_background/library/items/3599.php?rec=j&riref=2741);  
[http://unfccc.int/essential\\_background/library/items/3599.php?rec=j&riref=6765](http://unfccc.int/essential_background/library/items/3599.php?rec=j&riref=6765)

### Contact Information

#### DNA in Lao People's Democratic Republic

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#### References

- Ministry of Natural Resources and Environment (Former Water Resources and Environment Administration, Department of Environment, Prime Minister's Office of Lao PDR)  
<http://www.wrea.gov.la/wrea/>
- Market Mechanism Group, Institute for Global Environmental Strategies  
 CDM Capacity Building Activities in Lao PDR  
<http://www.iges.or.jp/en/cdm/laos.html>

*Akiko Fukui, IGES Market Mechanism Group December 2011*

#### Acknowledgement

The valuable information and comments for CDM projects and a DNA structure in Lao PDR were provided by MONRE. IGES would like to express appreciation for its support in making the CDM Country Fact Sheet of Lao PDR.