

LAOS

Country at a glance

- Population: 6.2 million (2010) [1]
- Total area: 236,800 sq. km [2]
- Carbon emissions per capita: 3.59 metric tons (2010) [3]
- Energy consumption per capita: 19.8 MWh (2010) [4]
- Percentage of global carbon emissions: 0.01% (2010) [3]



Mekong Barge, Laos

With the Mekong River flowing through Laos, there is huge hydropower potential – estimated at around 26,000 MW. The government intends to develop it to add to the present approximately 4,000 MW presently generated by hydropower.

Mekong Barge, Luang Prabang, Laos by Allie Caulifield. Permission Under CC BY 2.0 www.flickr.com/photos/28577026@N02/3928271590/

Stand on climate change

The Lao People's Democratic Republic (PDR) ratified the UNFCCC on 5 January 1995. The Lao PDR has obtained financial assistance from the GEF (Global Environment Facility) through the UNDP (United Nations Development Programme) for capacity-building to achieve its obligation to the UNFCCC [5].

The Lao National GHG Inventory Project was initiated in 1997 to achieve the following objectives:

- Inventory of sources and sinks of GHG emissions in the Lao PDR
- Assessment of mitigation options in the Lao economy
- Formulating a National Action Plan and Strategy on GHG Emission Mitigation

As there are currently no studies on climatic vulnerability of Lao PDR, this is a priority activity and the government will approach the GEF to support such a study.

National climate change programmes

Lao PDR is in the process of creating legislative and institutional structures for the management of natural resources and environment. The government objective is to incorporate environmental concerns with development planning. Thus, different aspects of environmental policy and management are the responsibilities of different agencies in the Lao government. The overall coordination and management of the environment, including climate change, is vested in the Science Technology and Environment Agency (STEA).

Forestry

- To increase the total forested area from 47% to 70% by actively preserving the existing forests and enriching degraded forestland via intensifying re-afforestation programmes
- To increase the share of conservation areas, wetland inclusive, to ensure the country's forest resources
- To identify the most sensitive areas and to relocate the people living in there; incentives for the adoption of cropping systems more suited to the area
- To clearly define the incentives for private investment in plantations; to provide incentives for private nurseries and restrict the harvesting and selling of timber
- To offer tax incentives for conservation funds
- To provide private management of conservation areas based on benefit-sharing in the long term

Energy

- Energy Conservation
 - > Improvements in energy efficiency through upgrading current technologies
 - Incentives to finance higher initial costs of more efficient equipment, for companies that specialize in financing where the cost of energy saved is the payback
 - Introduction of advanced technologies that are more efficient
- Changes to Transport Sector
 - Public buses to replace "Tuk-Tuk" and two-wheelers
 - ➤ 4 stroke engines to replace two-stroke two-wheelers
- Clean technologies
 - Tax rebates, accelerated depreciation, and other incentive mechanisms for technologies that have better standards
- Alternative Energy
 - To increase the electrification ratio of the rural population via alternative energy schemes such as micro hydropower, wind, solar, biogas, geothermal, etc.
- Power Generation
 - To conduct an Environmental Impact Assessment (EIA) for major hydropower stations to study and monitor the environmental impacts of large hydropower projects, as well as manage, minimize, and mitigate adverse environmental and social impacts of hydropower projects
- The current national electrification ratio stands at 30%, with 16% of the rural population electrified. The government plans to electrify 20% of the total 11000 villages with standalone renewable electrical systems by 2020.

Agriculture

- Pricing water extraction
- Land Tax rebates to farmers who use biogas, duty rebates on biogas equipment and tax rebates for companies that construct biogas plants
- Subsidized pricing, soft loans or tax incentives for sale and distribution of multi-nutrient urea block (MUB)

Transport

Lao's national transportation sector is currently under development. Plans to introduce public transportation infrastructure for both long and short distances have been made. There are currently no measures to regulate the emission standards for vehicles or the maintenance of vehicles and also no means to promote more efficient technology.

• Tax private vehicles to develop better public transport systems

- Limit growth of private vehicles through quotas and encourage private participation in developing public transportation
- Impose emission taxes on vehicles based on age of vehicle, efficiency of vehicle and also incentives to promote inspection and maintenance of vehicles

Ministries involved in climate change/energy policy making [5][6]:

| Ministries involved | Web links |
|--|---|
| Prime Minister's Office | www.laopdr.gov.la/ePortal/home/home.action?reques |
| | t_locale=en_US |
| Science Technology and Environment Agency | www.stea.la.wipo.net/ |
| Ministry of Agriculture and Forestry | dof.maf.gov.la/ |
| Ministry of Public Work and Transportation | www.mpwt.gov.la/en/ |
| Ministry of Public Health | moh.gov.la/ |
| Ministry of Commerce and Industry | laotradeportal.gov.la/index.php |
| Ministry of Planning and Investment | investlaos.gov.la/ |

References

- [1] "World Population Prospects: The 2010 Revision." Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat.
- [2] "CIA The World Factbook." Available at: https://www.cia.gov/library/publications/the-world-factbook/geos/th.html. [Accessed: 12-Mar-2013].
- [3] CO₂ Emissions from Fuel Combustion Statistics database 2012, "Indicators for CO₂ emissions." © OECD/IEA, 2012.
- [4] World Energy Statistics and Balances database 2012, "World Energy Balances." © OECD/IEA, 2012.
- "Lao People Democratic Republic The First National Communication on Climate Change." The United Nations Framework Convention on Climate Change. Available at: http://unfccc.int/resource/docs/natc/laonc1.pdf
- [6] "Lao Ministries, Provinces & Districts." Lao Embassy in Hanoi.



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