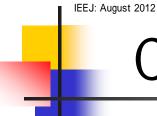
IEEJ: June 2012



# Country report "Lao PDR"

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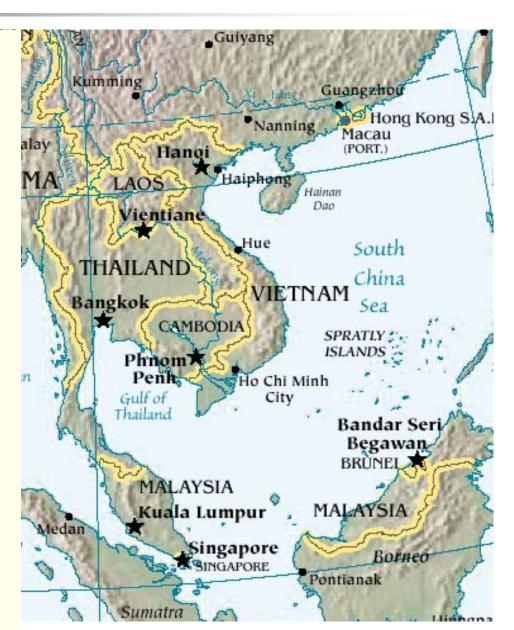


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- Energy outlook in Laos
- Difficulties and bottlenecks in formulating energy policies in Laos
- Interest fields of study for this training
- Conclusion

## **Overview of Laos**

- Country: Lao PDR
- Population 6.2 million (2010)
- Area: 236,800 km²
- GDP around US\$ 1,088 per annum.
- Least developed country





## **Current energy policy and Measure**

## The Power Sector Policy:

- Maintain and expand affordable, reliable and sustainable electricity supply to promote economic and social development;
- Promote power exports as well as domestic power supply to earn revenues to meet Government development objectives with particular emphasis on poverty eradication.
- Develop and enhance the legal and regulatory framework to facilitate power sector development by either public, private or public private partnership;
- Gain capacity building through international technical knowhow and expertise;
- Ensure accountability and transparency of environmental and social impacts and thereby achieve sustainable development.

## **Power Sector Development**

- Memorandum of Understanding on the power exchange program was signed with the Royal Thai Government in 1993 and 1996 under which 3,000 MW is to be supplied to Thailand and subsequently increased 7,000 MW is agreed;
- In 1998 and 2006 MOUs were signed with the Government of Vietnam for 3000 MW and subsequently 5000 MW is agreed;
- In 1999 Agreement on Cooperation in Power Sector was signed with Cambodia;
- Power Sector Strategy developed and updated from time to time;
- Power sector opened to private foreign direct investment;
- Legal framework has been improved from time to time to meet international financing requirements.

### **Existing Hydropower Plants in Lao PDR**

### Plants owned by Electricity du Laos:

No	Name of Power Plant	Capacity (MW)
1	Nam Ngum 1	155
2	Nam Dong	1
3	Xelabam	5
4	Xeset1	45
5	Nam Leuk	60
6	Nam Mang3	35
7	Nam Ko	1.5
8	Xeset2	<b>76</b>

### **Existing Hydropower Plants in Lao PDR (Cont')**

### Plants owned by Electricity du Laos:

No	Name of Power Plant	Capacity (MW)
9	Nam 1-2	100
10	Nam Ngum5	120
11	Nam Nhone	3
12	Tatsalen	3
	Total	604.5

### **Existing Hydropower Plants in Lao PDR (Cont')**

### **Independent Power Producer:**

No	Name of Power Plant	Capacity (MW)
1	Houay Ho	150
2	Theun Hinboun	210 280 (Expansion)
3	Nam Theun2	1,080
4	Nam Ngum2	615
5	Xekaman 3	250
	Total:	2,585

# ODA project for Energy study

- JICA, Data Collection Study on Energy Sector in Laos PDR.
- Energy and Environment Parnership-Mekong, Interlinkages between Energy and Livelihoods-"Data, Training and Scenarios for Sustainable Energy Planning in Lao PDR (INES), Finland.

# **Existing of Energy Policy**



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#### NATIONAL POLICY

DIVISIONMENTAL BAD SOCIAL RUSTO MANAGERS
OF THE HYDROPOWER SECTOR IN LAC POR

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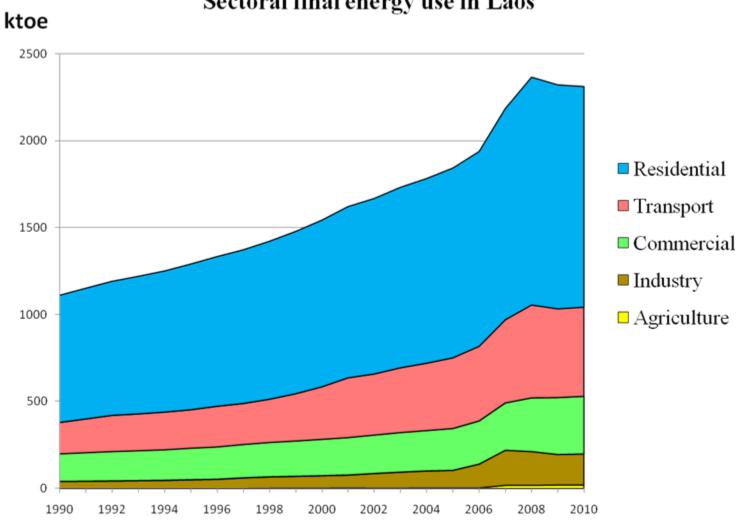
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- This policy base on three principles of sustainability and applies to all large hydropower dams, where large dams are defined as having installed capacity of higher than 50 MW or inundation more than 1000 ha of land at their fully supply level.
- This national policy also applies to hydropower project constructed after 1990.
- An integrated approach to river basin management will be practiced for multiple projects planned to dam a single river.

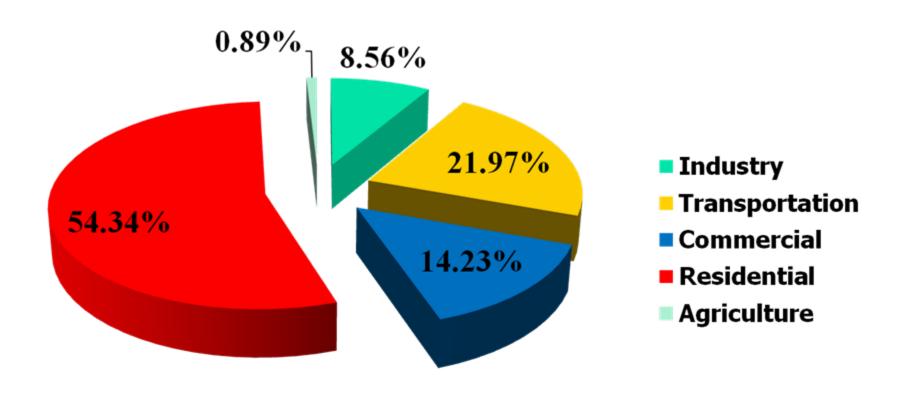
## History of Energy consumption in Laos





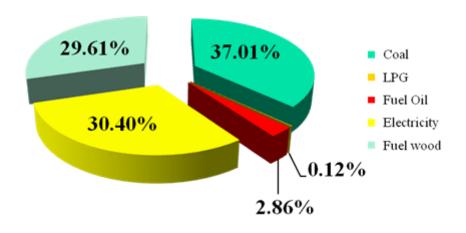


### **Energy Consumption by sector**

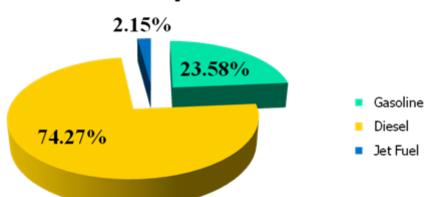


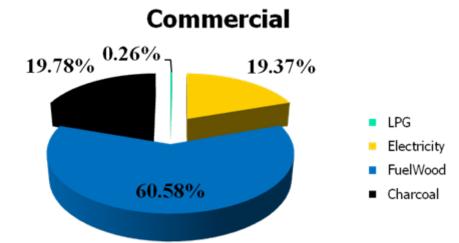
### **Energy Consumption by sector in Laos (Cont')**

### **Industry**

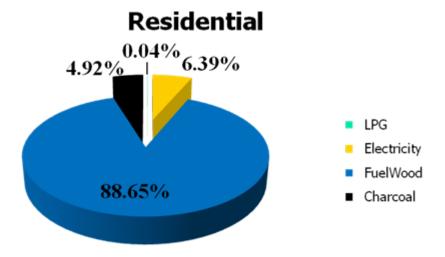


### **Transportation**

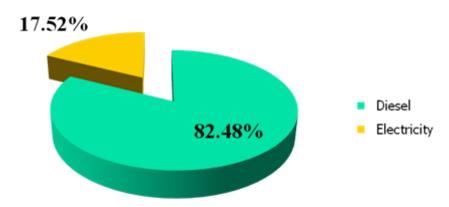




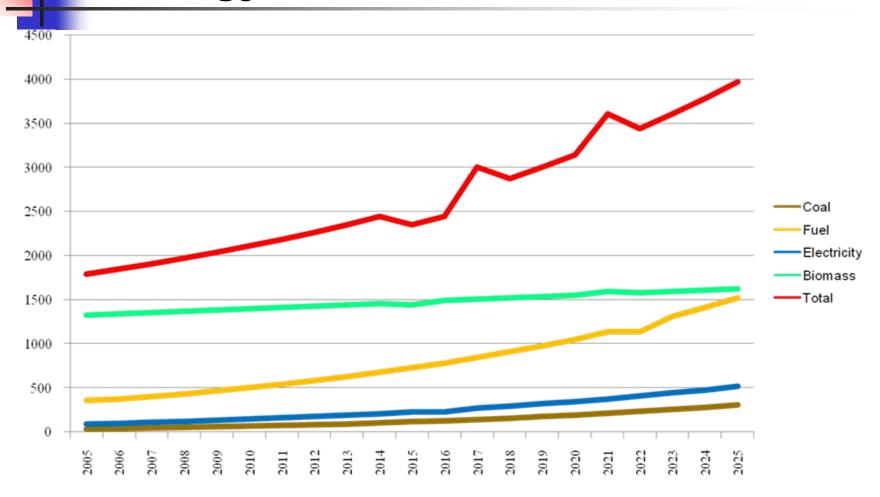




### **Agriculture**



## **Energy outlook in Laos**



Source: MEM, 2011

# Major difficulties and bottlenecks currently faced in formulating energy policies

- Lack of an integrated national energy policy,
- Lack of data and information of all subsectors of energy,
- The limitation of manpower,
- Mandate among agencies are not clearly described and co-ordinated.

## Interest subject

- The formation energy policy of energy sector,
- Indicator for energy security,
- The prospect of energy sector.

## Conclusion

- Hydropower resource is the most abundant energy resource in Lao PDR
- All petroleum products consumed are imported
- Energy use in the country is mainly in the form of traditional fuels, i.e. the use of biomass such as wood and charcoal for cooking and heating in rural areas
- Review the existing policy measures with view to developing more cost effective policies and to adjust the new energy policy.



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# Thank you very much

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