



Country report “Lao PDR”

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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 know-how 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 | 76 |

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')

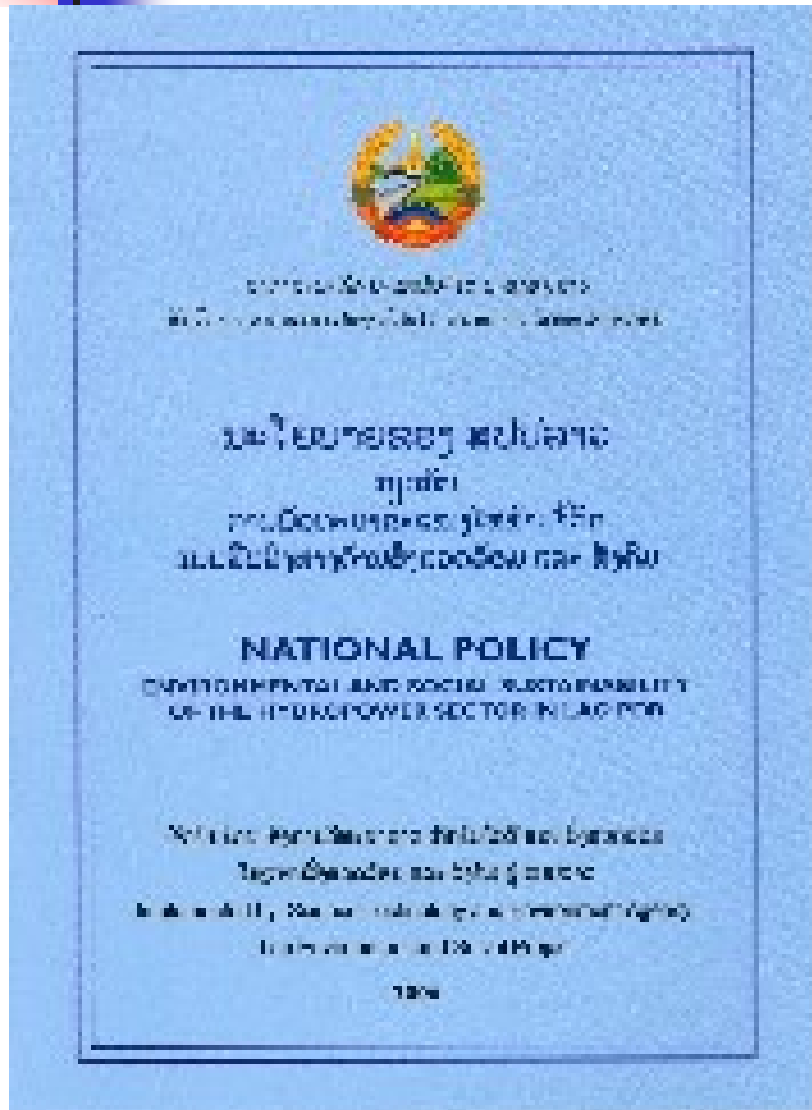
Independent Power Producer:

| 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 Partnership-Mekong, Interlinkages between Energy and Livelihoods-”Data, Training and Scenarios for Sustainable Energy Planning in Lao PDR (INES), Finland.

Existing of Energy Policy

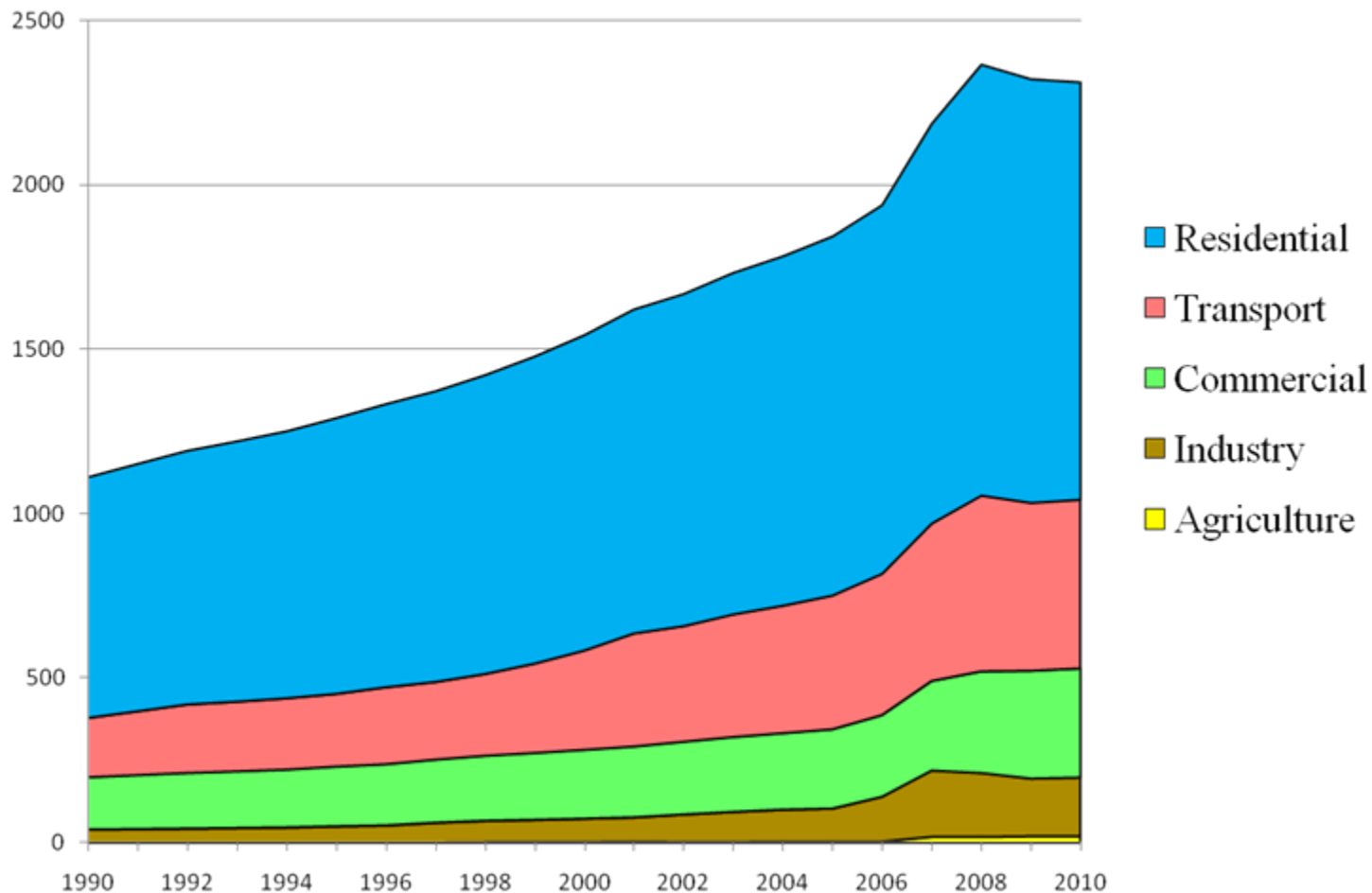


- This policy base on three principles of sustainability and applies to all large hydropower dams, where large dams are defined as having installed capacity of higher than 50 MW or inundation more than 1000 ha of land at their fully supply level.
- This national policy also applies to hydropower project 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

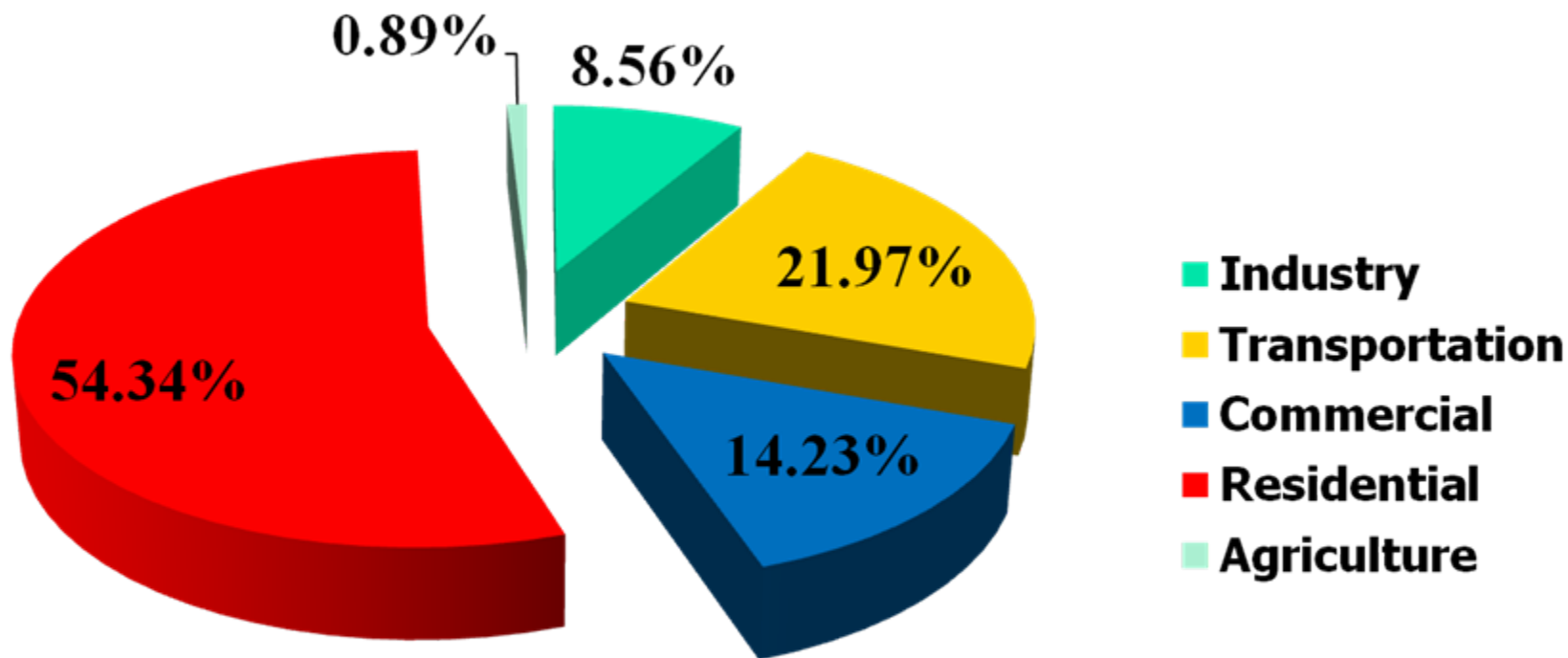
Sectoral final energy use in Laos

ktoe



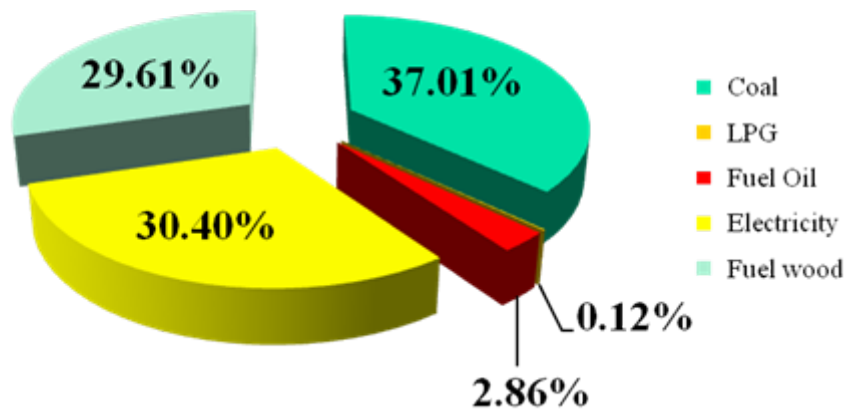
Energy Consumption by sector in Laos

Energy Consumption by sector

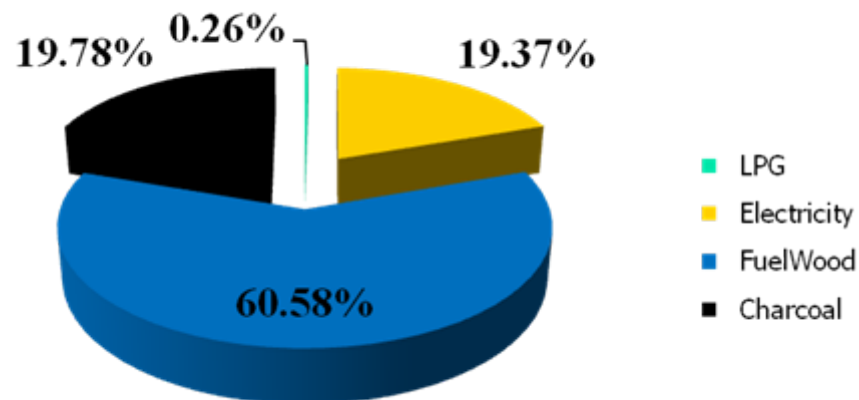


Energy Consumption by sector in Laos (Cont')

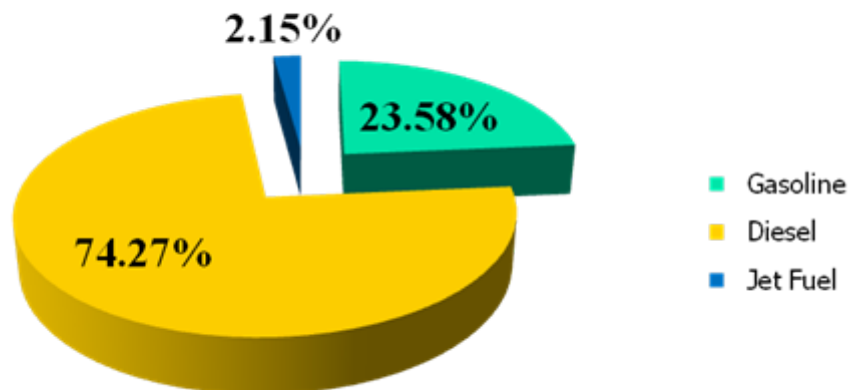
Industry



Commercial

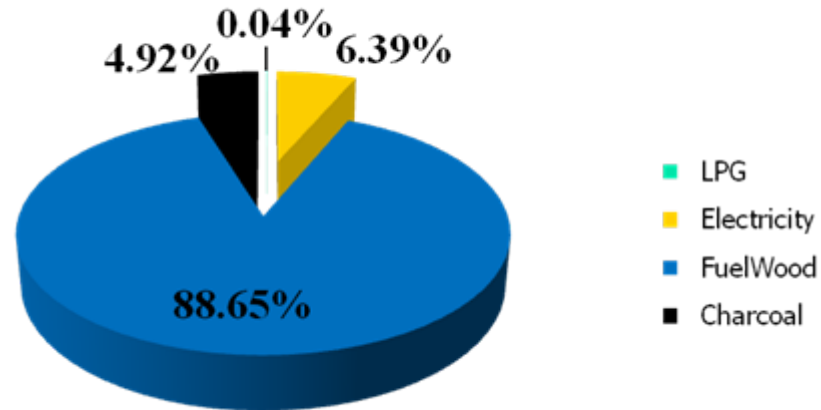


Transportation

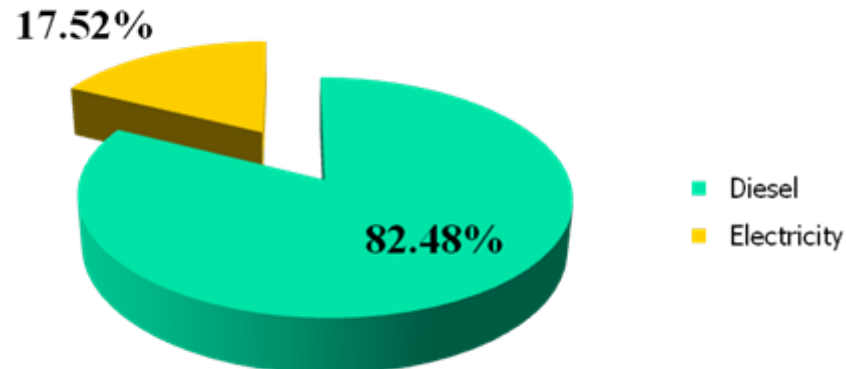


Energy Consumption by sector in Laos (Cont')

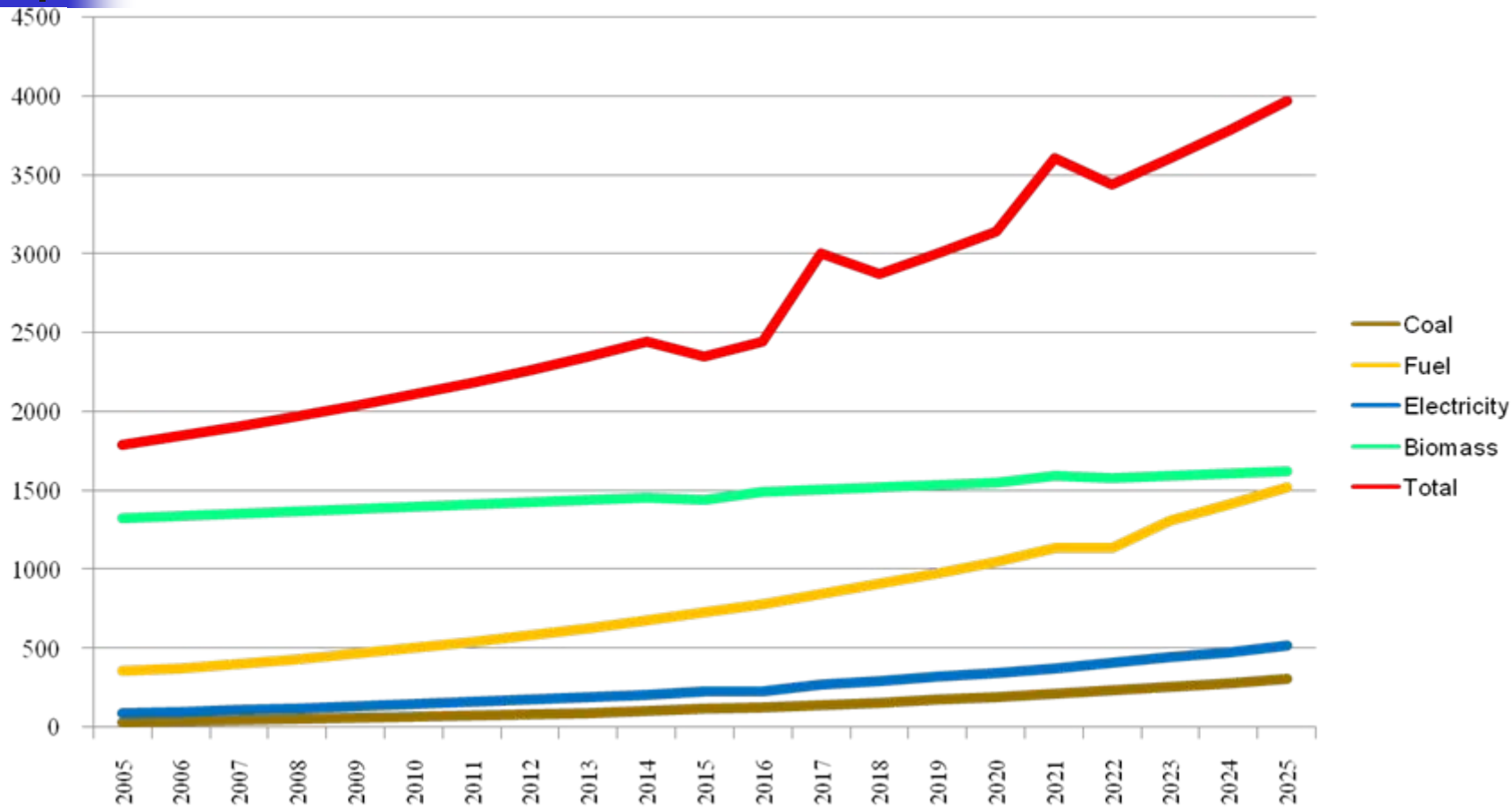
Residential



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 sub-sectors 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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Department of Statistic, Ministry of Planning and Investment
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Thank you very much

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