

IEEJ:August 2015



ກະຊວງພະລັງງານແລະຍື່ນ
ENERGY AND MINES

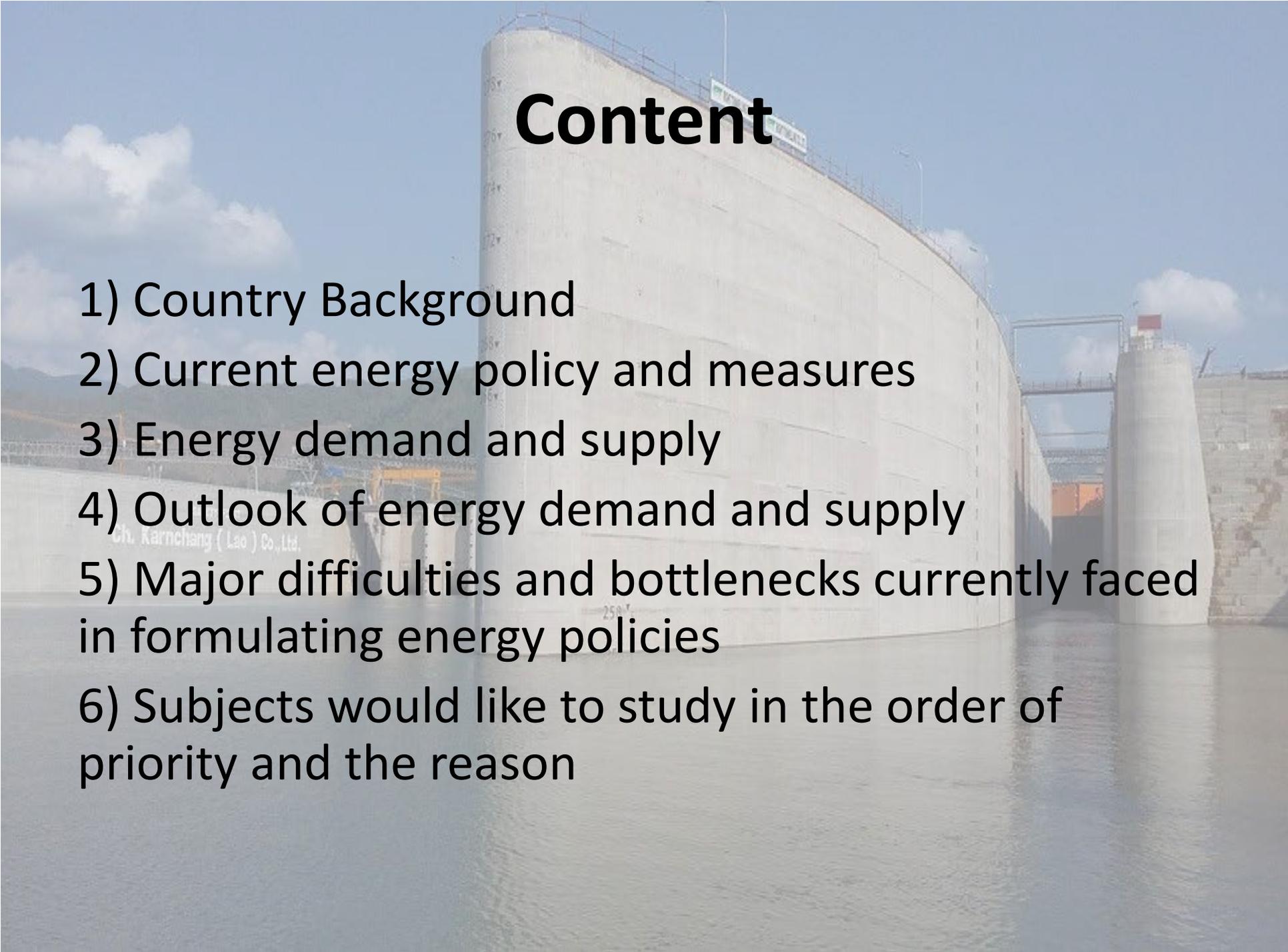
Energy Policy of Lao PDR

2015

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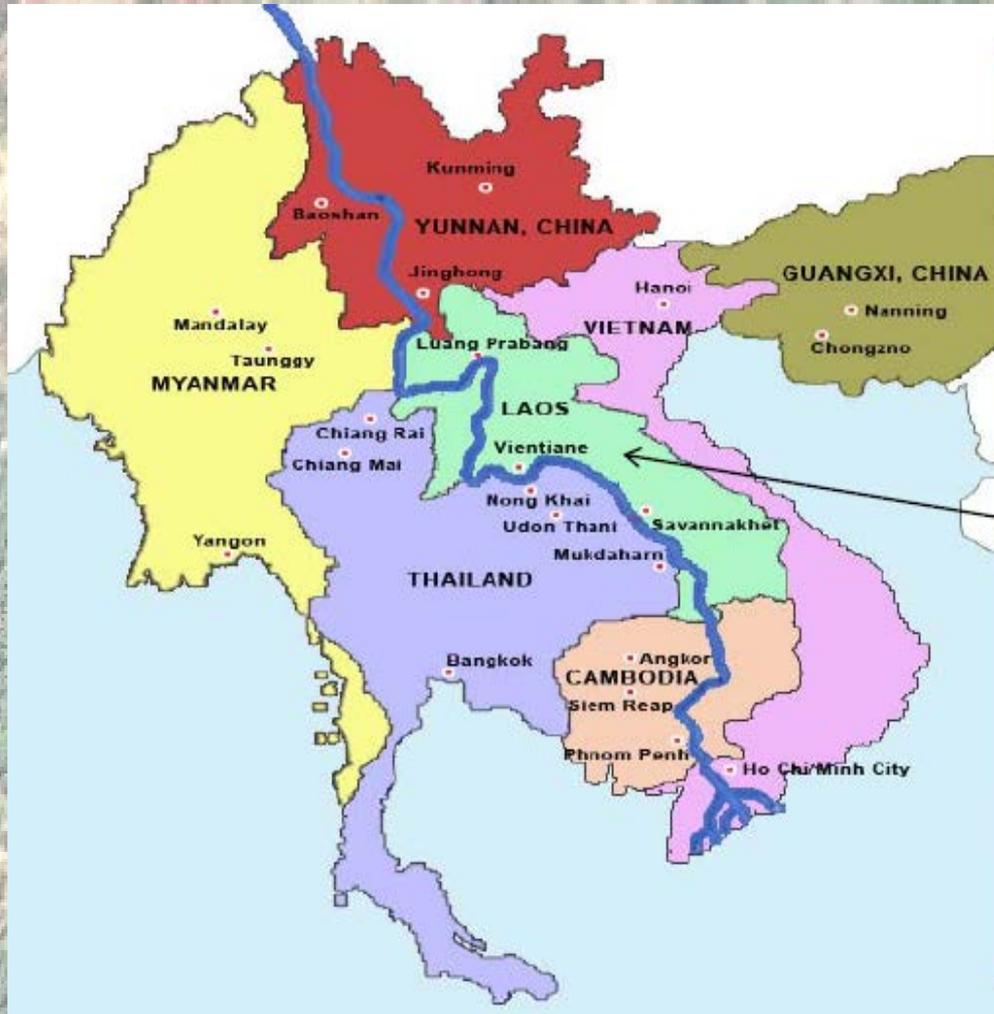
**Energy Policy Training
Program (B)**
NO. J1504286/ID.1584585
Course Period in Japan :
From June 21 2015 to July 11, 2015

Content

The background of the slide is a photograph of a large concrete dam. The dam is a curved wall made of light-colored concrete, with a walkway and railing on top. In the foreground, there is a body of water reflecting the sky. To the right, another part of the dam structure is visible, including a gate or spillway. The sky is blue with some white clouds. The overall scene is a large-scale engineering project in a natural setting.

- 1) Country Background
- 2) Current energy policy and measures
- 3) Energy demand and supply
- 4) Outlook of energy demand and supply
- 5) Major difficulties and bottlenecks currently faced in formulating energy policies
- 6) Subjects would like to study in the order of priority and the reason

Country Background



Area of 236,800 sq km

26 people /square kilometer;

Mountainous area with major

Tributaries of the Mekong

River Covering 35% of total Mekong
River basin.

Population 2014

Female: 3,389 Millions

Total: 7,771 Millions

Total share of GDP

GDP/per Capital: 1,628 US\$

Growth Rate GDP: 8.0%

Total Share of GDP

Agricultural: 23.5%

Industry: 33.2%

Services: 37.4%

Total: 94.1%

Consumer Price Index 2014-2015

Jan: 2.04%

Dec: 2.40%

Inflation Rate 2014-2015

Jan: 122.87

Dec: 123.18

Country Background

- National Goal to graduate from a least-development Country status by 2020
- Energy sector is one of important driving forces to social and economic growth
- Upgraded and revised the policy on sustainable hydro development to ensure that hydropower development is truly sustainable in the longer term and effective mitigation of negative impacts on the local environment and affected population, including protection of the watershed

Current energy policy and measures

- Maintain and expand affordable, reliable and sustainable electricity supply to promote economic and social development. Electrification Ratio to exceed 90% by 2020;
- Improve and expand transmission networks to support the industrialization and modernization policy, and to integrate the power sector in the ASEAN community through its power exchange programs;
- Tap the country's large hydropower potentials with the participation of private developers;
- Promotion of Renewable Energy to reach 30% by 2025 with reasonable feed-in tariff.

Current energy policy and measures

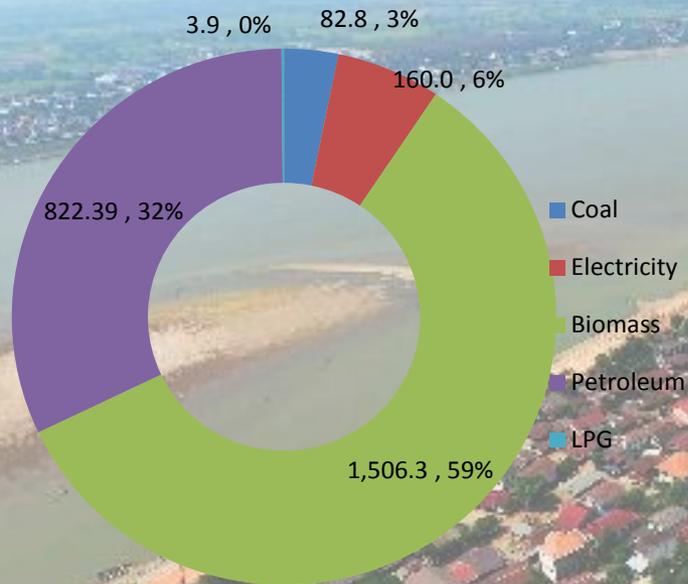
- Government has been approval Promulgation of the “Policy on Sustainable Hydropower Development in Lao PDR”.
- Ministry of Energy and Mines has been approval guideline Policy on Sustainable Hydropower Development in Lao PDR.
- Daft Decree on Electrical Tariff Structure for Support to Agriculture and Industry Growth

Current energy policy and measures

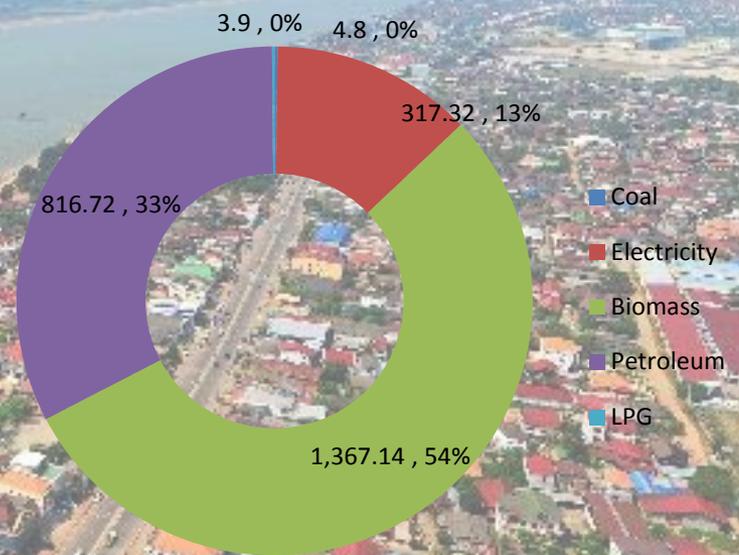
- Daft Decree on Small Hydropower Development for implement to guide monitoring in feasibility study of hydropower
- Development Power Industry Supply
- Development NPDP
- Increase a share of bio-fuel consumption in Transport Sector up to 30% by 2020;
- Establish a National Policy of Renewable Strategic Policy;
- Establish a National Strategic Plan for Bio- fuel development.
-

Energy demand and supply 2014

Energy Supply 2014



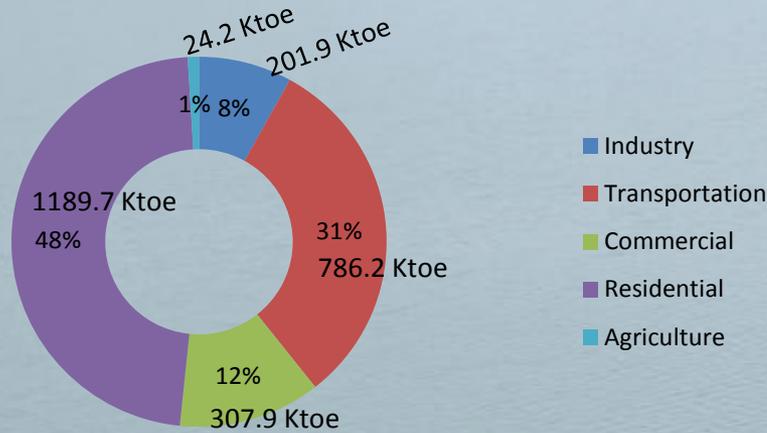
Energy Demand 2014



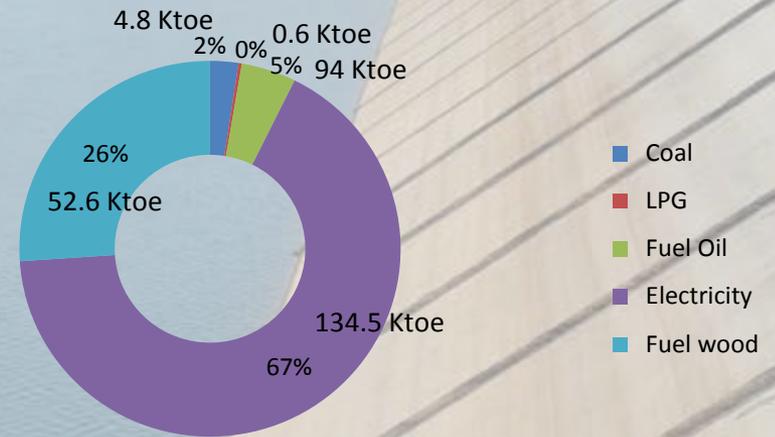
1257.7 Ktoe

Energy demand and supply

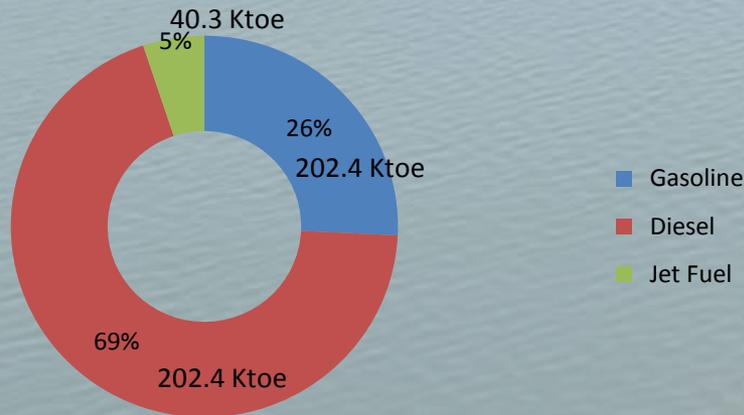
Final Energy Consumption 2014



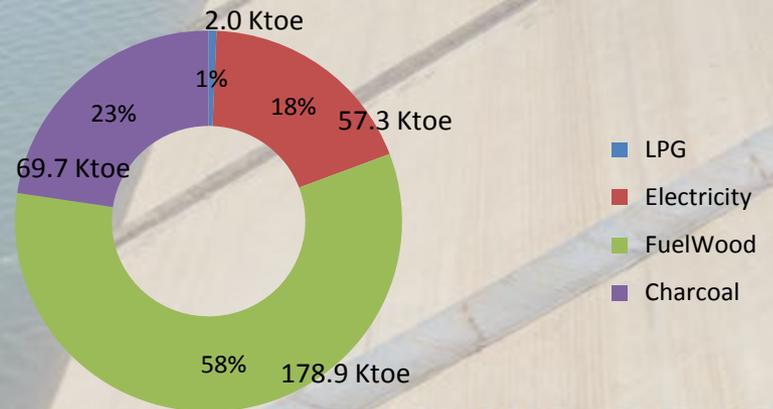
Industry Final Energy Consumption 2014



Transportation Final Energy Consumption 2014

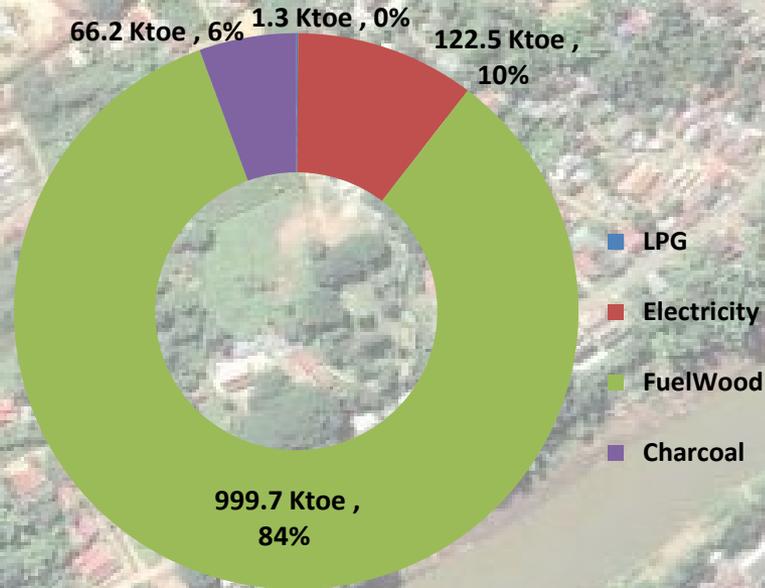


Commercial Final Energy Consumption 2014

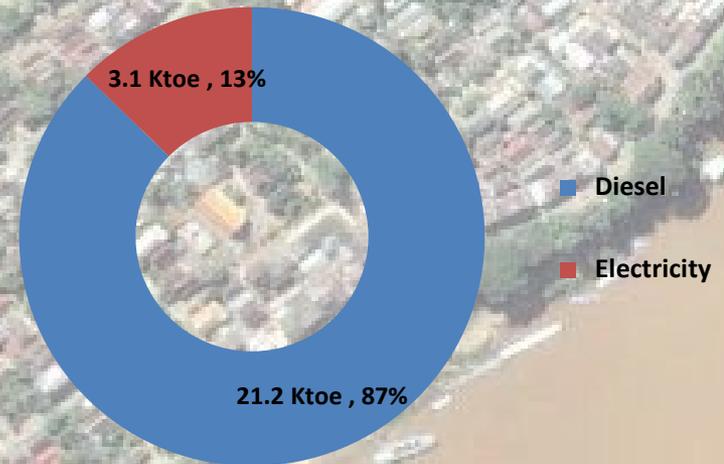


Energy demand and supply

Residential Final Energy Consumption 2014



Agriculture Final Energy Consumption 2014



Outlook of energy demand and supply

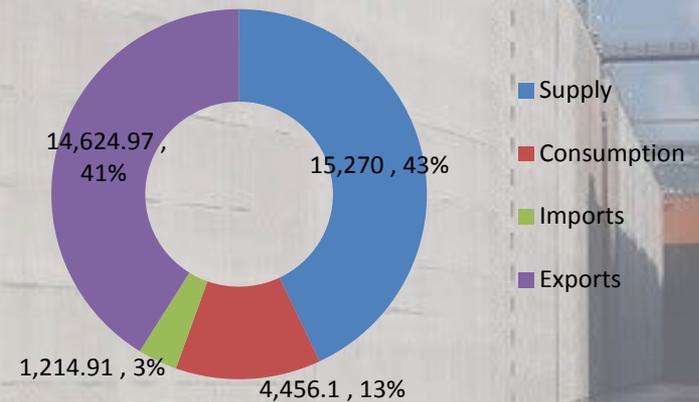
The most important aspect of the energy outlook of Lao PDR is that the country is net exporter of electricity generation from hydropower using abundant water resource from the Mekong River and tributaries. It is also said that the country has extensive coal resource, which expected to cover almost all domestic demand for coal with the exception of some coal deposits, has not been conducted. On the other hand, it has few petroleum resource, so all petroleum products are imported.

Outlook of energy demand and supply

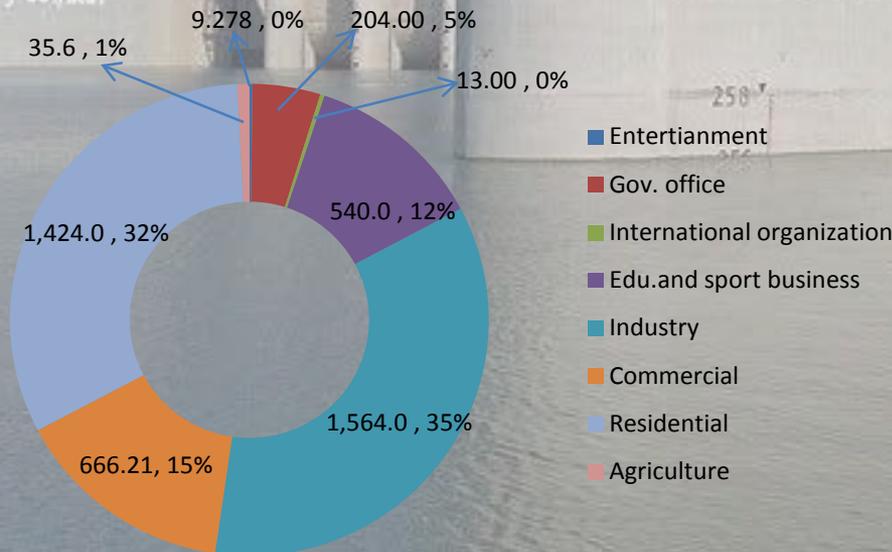
Hydropower Projects is Operating in 2014

- 29 Projects
- Capacity: 3200 MW
- Install Capacity Generation : 15,270 Gwh

Electricity 2014, GWh



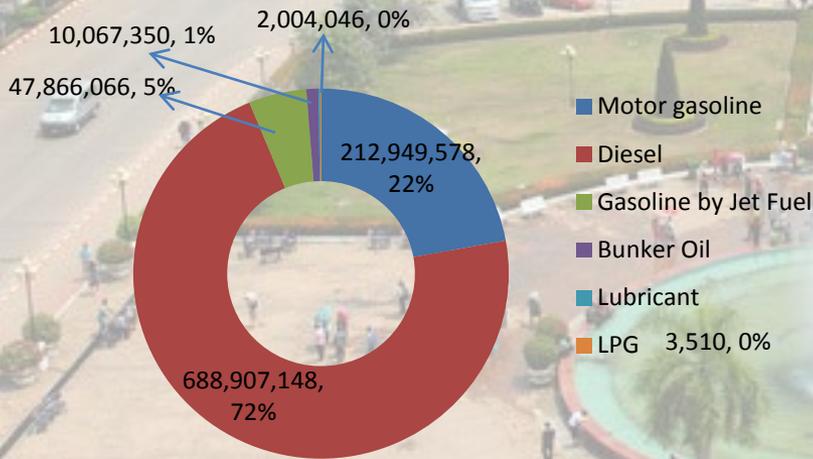
Electricity Consumption 2014, Gwh



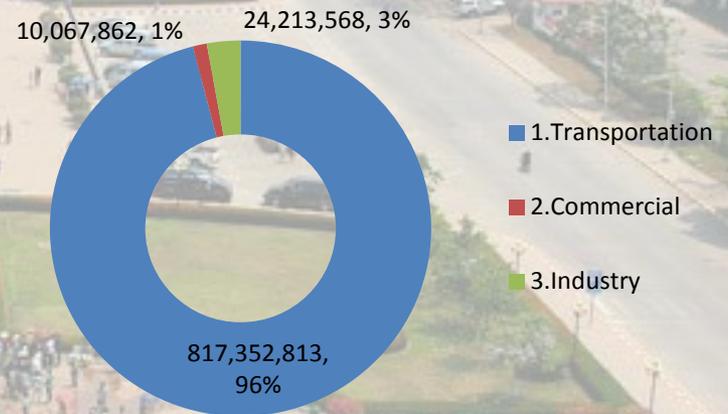
Outlook of energy demand and supply

Import Petroleum 100% from Thailand 70% and Vietnam 30%

Petroleum Import 2014, Liters



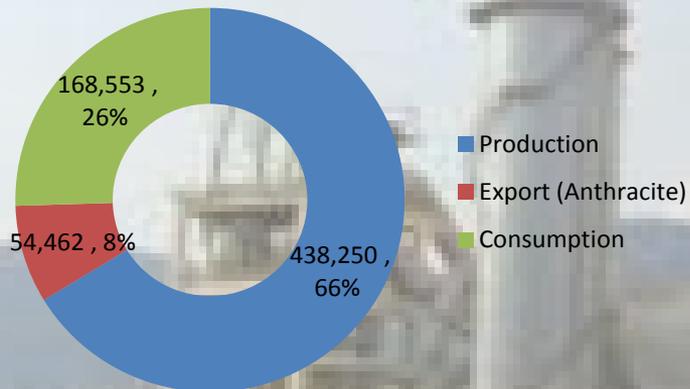
Petroleum Consumption by Sector 2014



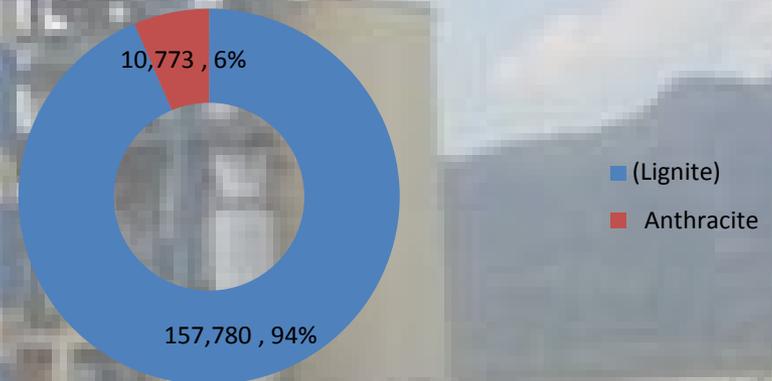
Outlook of energy demand and supply

Coal: 2014, Most of all Coal using for industry sector, Especially use in cement factory

Coal 2014, Ktoe



Coal Consumption by Industry 2014, Ktoe



Major difficulties and bottlenecks currently faced in formulating energy policies

- No integrated national energy policy and no clear on existing vision to cover all energy sub-sector
- Certain energy policy mainly focuses on electricity
- Manpower with the sufficient and strong knowledge of know-how, experiences and skill strategic planning is still limited.
- Responsibilities among related agencies are not clearly described and coordinated.
- We problem with summary energy data

Subjects would like to study in the order of priority and the reason

- How to the formulation of future activities for energy policy making
- How to formulate an action plan describing
- How to prepare energy data base for energy demand forecast
- How to Using Simple E
- What is good tool for energy policy making