

“Energy Policy in Lao PDR”

Phonepasong SITHIDETH.

Technical staff

Ministry of Energy and Mines. (MEM)

Department of Electricity. (DOE)

IEEJ, May 2011

Tokyo Japan

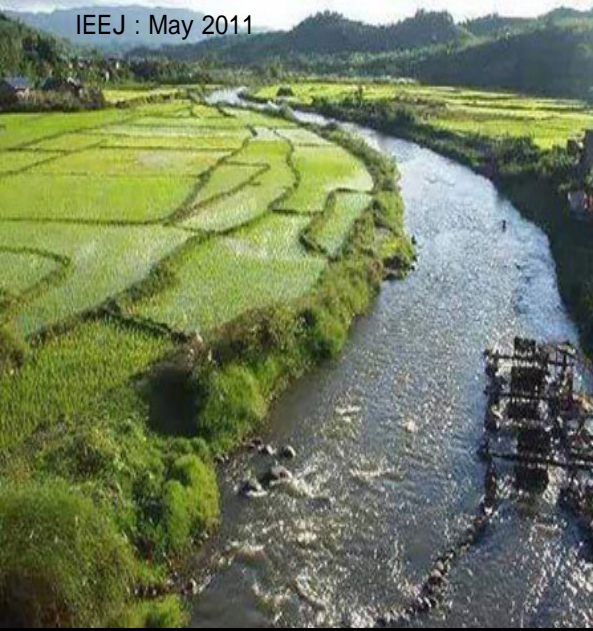
Content

- **Background**
- **Current energy policy and measures**
- **Energy demand and supply (statistics)**
- **Major difficulties and bottlenecks currently faced in formulating energy policies**
- **Expectation**

Background



- Area 236,800 Km² ;
- Population about 6.2 million,
- Over 80% lives in rural areas
- GDP around US\$ 900 per annum. (2010)
- Less developed country
- Hydropower potential 26,000 MW
- Existing installed capacity of 1,804 MW (7%)



- The main economic in Laos
 - Agriculture
 - Power Generation,
 - Mining
 - Services

Background (Power Sector Development)

- MOU with the Government of Thailand (Dec 2007)
 - Recent agreement saw the power purchase scheme expanded to cover the supply of 7,000 MW of electric power to Thailand by 2020.
- MOU with the Government of Vietnam (Jan 2008)
 - 3,000 MW to 5,000 MW for the supply of electricity to by 2020, was agreed in principle.
- In 1999 Agreement on Cooperation in Power was signed with Cambodia.
- Power Sector Strategy developed and update time to time

Current energy policy and measures (1)

- **Government set up 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.

Current energy policy and measures (2)

- In order to meet the government target for the increasing the households electrification from present 70 % of total households to 90% in 2020.

Current energy policy and measures (3)

- **National Policy Environmental and Social Sustainability of the Hydropower sector in Lao PDR (2006)**
 1. Economic sustainability relies upon the maintenance of the renewable resource base, and the use of non-renewable resource rents to support the development of other factors of production;
 2. Social sustainability is based upon the principles of inclusiveness, mutual understanding and consensus;
 3. Ecological sustainability relies upon the avoidance of irreversible environmental impacts such as the loss of biodiversity, accumulation of persistent pollutants, or disruption of ecology cycles

Current energy policy and measures (3)

- **Renewable Energy Development Strategy in Lao PDR (Draft, 2010)**
- **Priorities for development as follows:**
 - Promote sustainable renewable energy development as an important part of ensuring energy supply for social and economic development
 - Provide financial incentives to investors who aim to produce clean energies to meet domestic demand and, who take socially and environmental corporate responsibility in order to increase investments in renewable energy projects
 - Formulate and improve laws and regulations to facilitate renewable energy development.

Current energy policy (Renewable Energy)

■ **Targets for 2025 ***

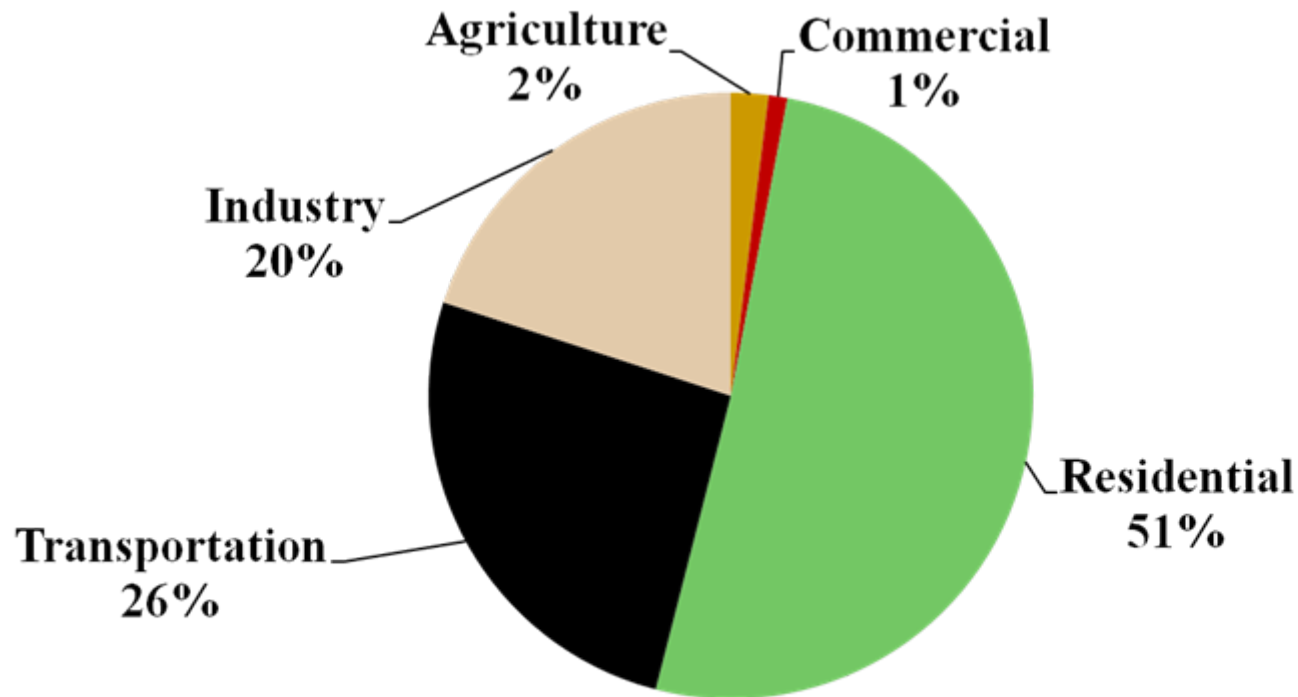
- The Government aims to increase the share of renewable energies to 30% of the total energy consumption in 2025.
- To reduce the importation of fossil fuels, the Government outlines a tentative vision to reach 10% of the total transport energy consumption from bio-fuels

Current energy policy (Renewable Energy)

- Financial measures which include:
 - Policies on subsidizing tariffs bought from energy until 2015, especially the revision of the tariff rate, in reference to appropriate technological and economic conditions
 - Policies on the supply of investment capital to assist in initial investment on renewable energy, including low interest loans for the investment in the production of renewable energy
 - Improve law and regulations related to renewable energy

Energy demand and supply

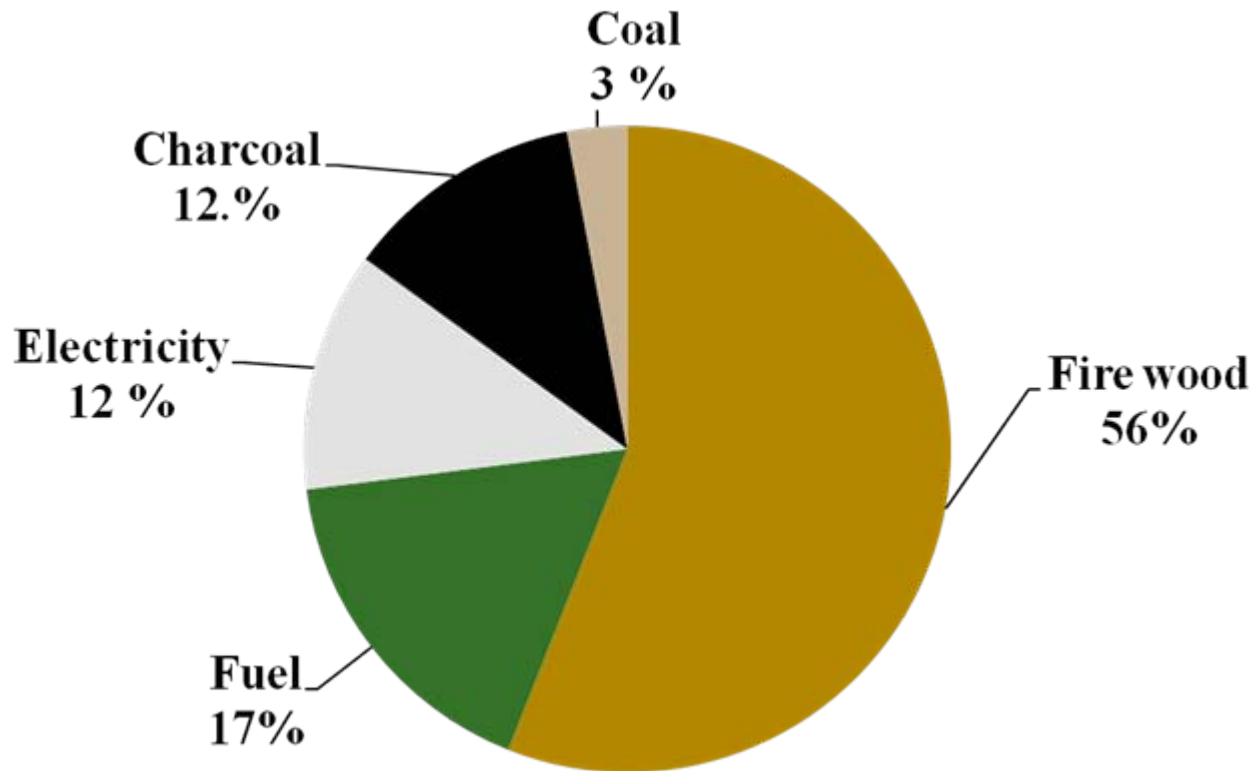
- Energy use based on sectors



Source: MEM, 2011

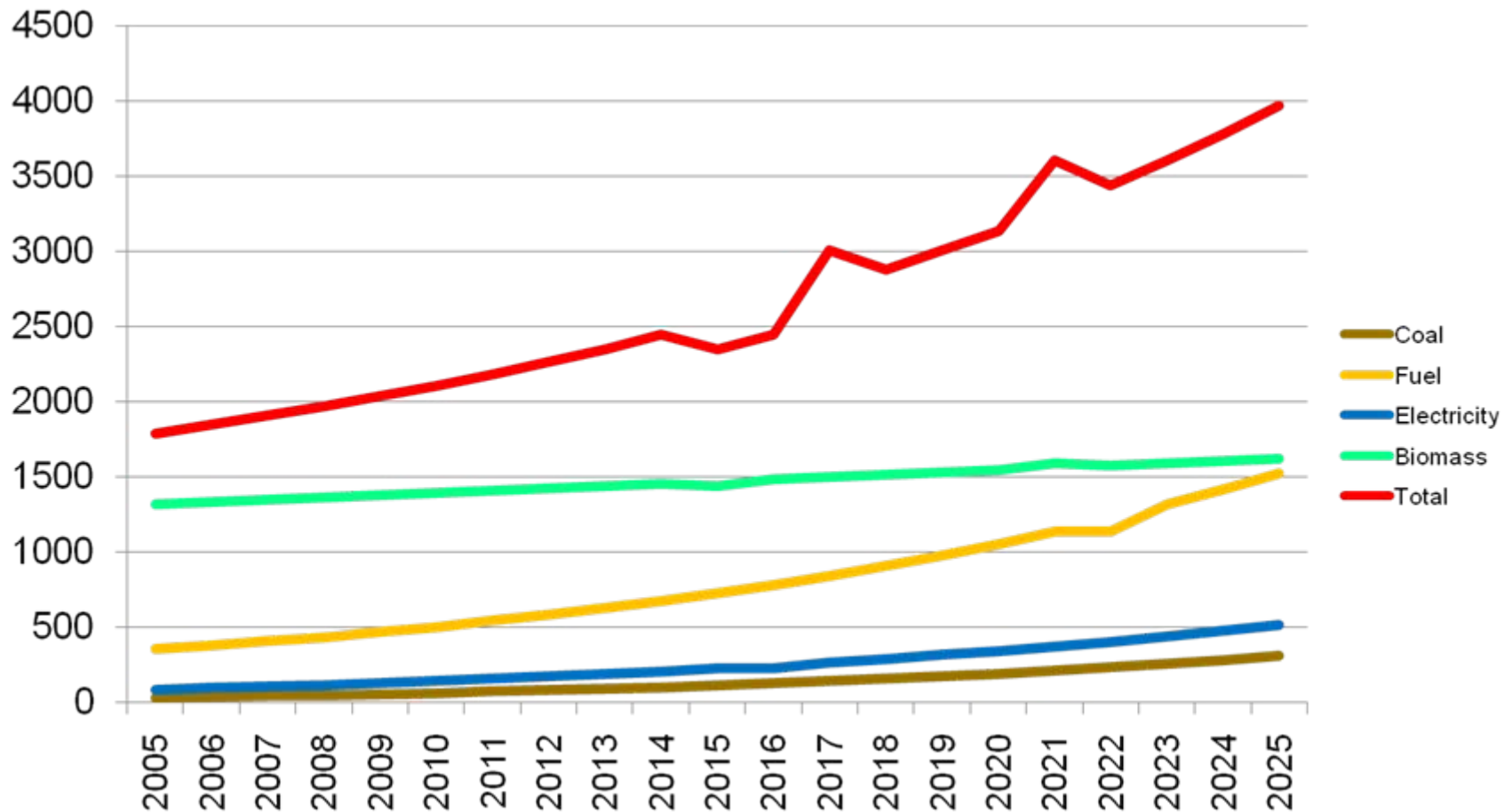
Energy demand and supply (2)

Energy demand and consumption



Source: MEM, 2011

Energy demand estimation (kTOE)



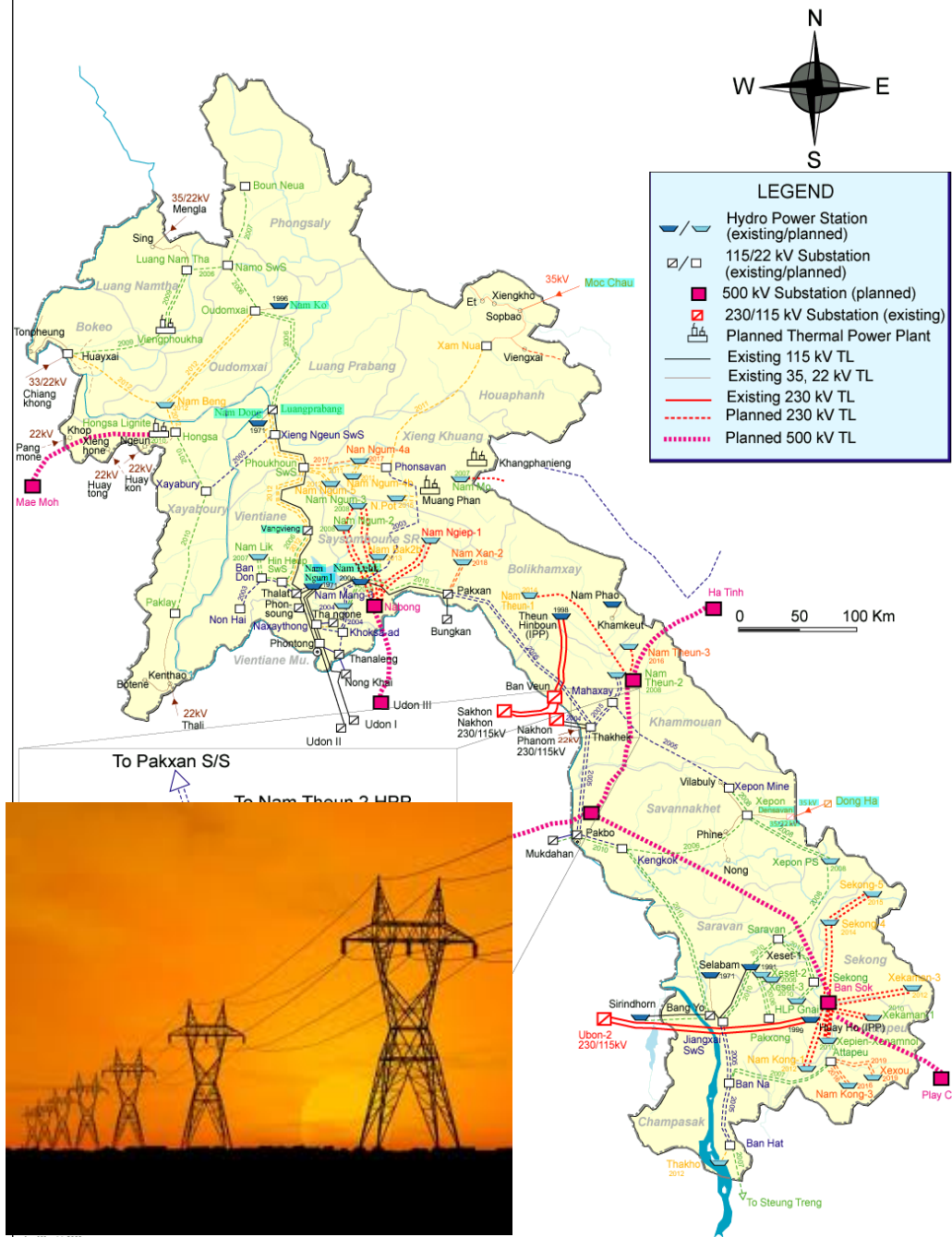
Source: MEM, 2011

Major difficulties and bottlenecks currently faced in formulating energy policies

- There is a lack of an integrated national energy policy and no clear or existing vision to cover all energy sub-sectors.
- In the area of baselines and scenarios, the main gap is lack of data and information of all sub-sectors of energy.
- The limitation of manpower with the knowledge of know-how, experience and skills in strategic planning and those of implementing the plans.
- Responsibilities among agencies, which are in charge of energy sector, are not clearly described and co-ordinated.

Major difficulties and bottlenecks currently faced in formulating energy policies (cont'd)

- Lao PDR has not yet Policy on Energy Efficiency as well as the legal framework and public campaign on energy efficiency and conservation.
- Establish appropriate incentive policies to facilitate the development of renewable energy and fairness for the consumers
- Set up, improve and implementation the regulations and existing laws to develop effectively develop the electricity sector.
- Promote the renewable energy for the rural electrification to result in poverty reduction



- Transmission Line is not connected all country
- Promoting 500 kV grid development within the Greater Mekong Sub-region (GMS) to integrate the power systems of Lao PDR and its neighbors.
- Lack of human resource
- Budget constraint

Conclusion

- Hydropower resource is the most abundant energy resource in Lao PDR
- All refined petroleum products consumed in the country 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

Expectation

- To improve my skill and experience from Japan and other countries, in order to my future work on Energy policy.
- All policy



Thank you for your attention

Contact : report@tky.ieej.or.jp