

Training and Dialogue on Energy Policy

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Country Report Presentation

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**Department of Electricity,
Ministry of Energy and Mines.**

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1. Country Background

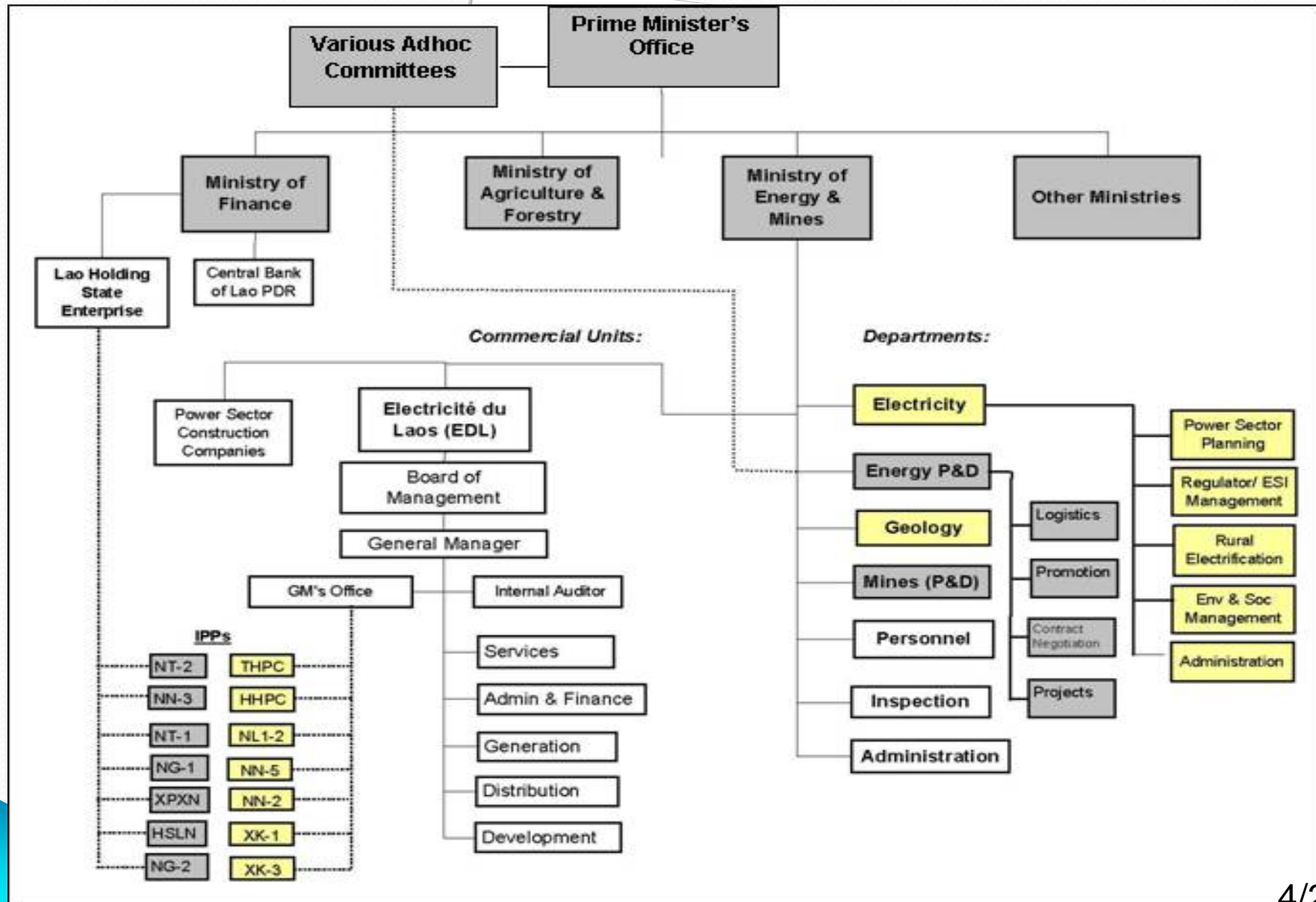


Country: Centrally located in GMR
Mountainous, landlocked country
Border with China, Myanmar,
Thailand, Cambodia and Vietnam.
Area = 236,800 km².

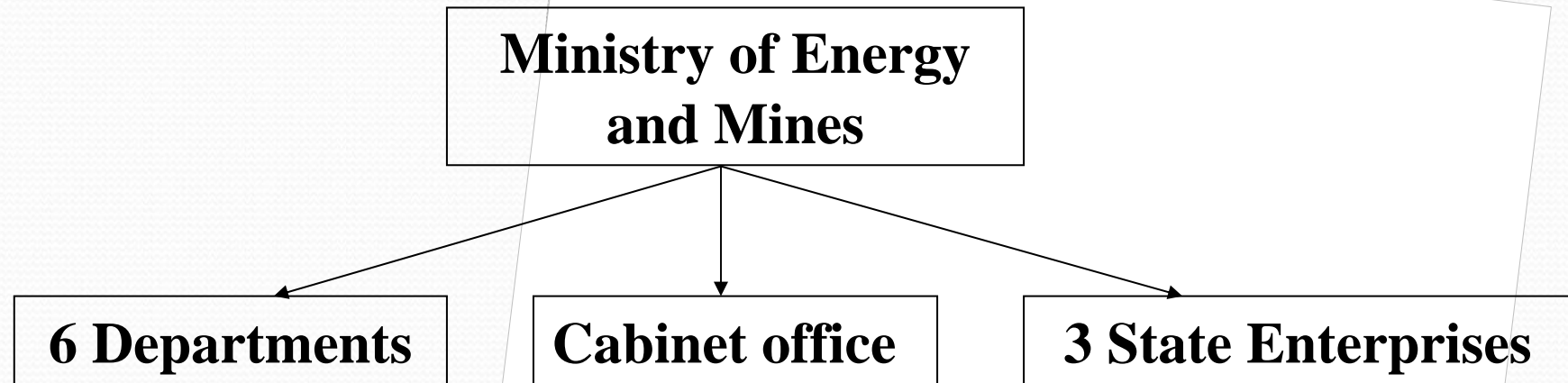
Population: about 6.0 million (2008)
80% in rural areas

Economy: GDP per capita of US\$ 875 (2008)
GDP growth of 7.5%
30.1% of GDP from agriculture
26.5% of GDP from industry
35.8% of GDP from services

2. Lao Power Sector: Organization Chart



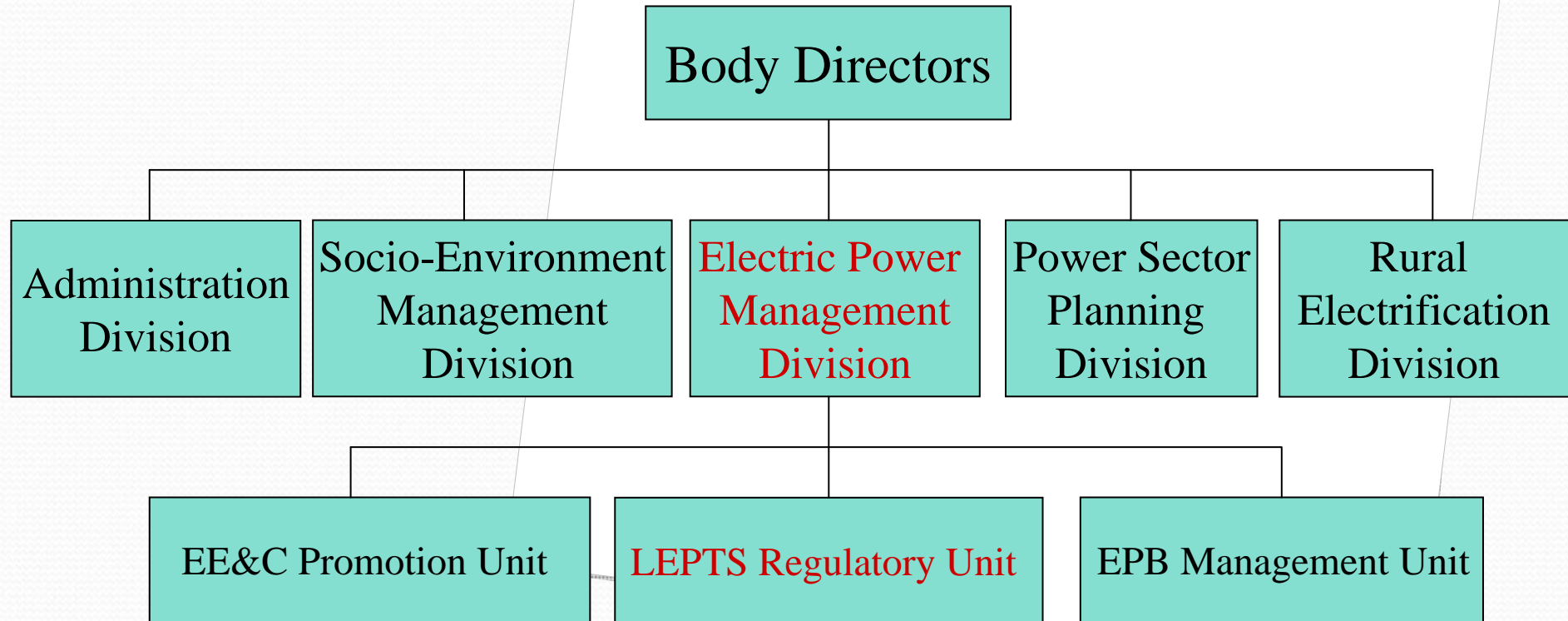
2.1 Organization Chart of Ministry of Energy and Mines (MEM)



- **Department of Electricity (DOE)**
- **Department of Energy Promotion and Development**
- **Department of Inspector**
- **Department of Personal**
- **Department of Mines**
- **Department of Geologies**

- **Electrical du Laos (EDL)**
- **Electricity of Construction and Installation (ECI)**
- **Lao Holding State Enterprise (LHSE)**

2.2 Organization Chart of Department of Electricity (DoE)



LEPTS: Lao Electric Power Technical Standard.

EE&C: Energy Efficiency and Conservation.

EPB: Electric Power Business.

2.3 Overall Duties of DoE

1. Formulating power sector policy, strategic planning and power business management.
2. Establish the rules, regulations and technical standards as required by electricity law.
3. Develop a power development plan for short, medium and long terms.
4. Review and approval the technical reports of power development projects.
5. Inspection of power facilities of power development projects for technical approval.
6. Supervising of electric power business and their power facilities base on the rules and regulations.
7. Promotion of energy efficiency and conservation in country.

3. Power Sector Policy Statement (1)

The statement established four policy objectives for the power sector to:

1. Maintain and expand an affordable, reliable and sustainable electricity supply within the country to promote economic and social development,
2. Promote power generation for export to provide revenues to meet the Government of Lao's development objectives,
3. Enhance the legal and regulatory framework to underpin power sector development, and
4. Strengthen institutional structure, clarify responsibilities, streamline administration and foster commercialization.

3. Power Sector Policy Statement (2)

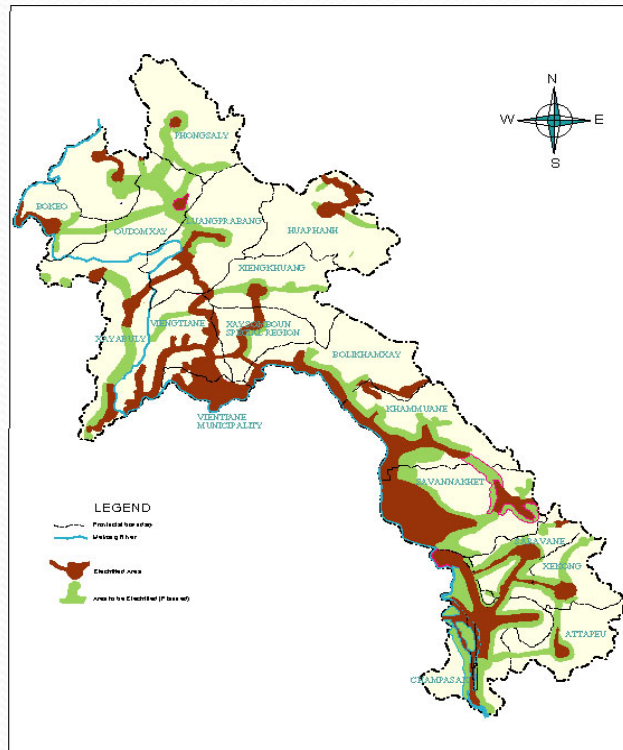
The associated action plan identified three priority areas for the power sector:

- (i) Expansion of rural electrification,
- (ii) Commercialization of EdL, and
- (iii) A strategy for financing power sector development.

For development of hydropower projects focus was placed on two categories:

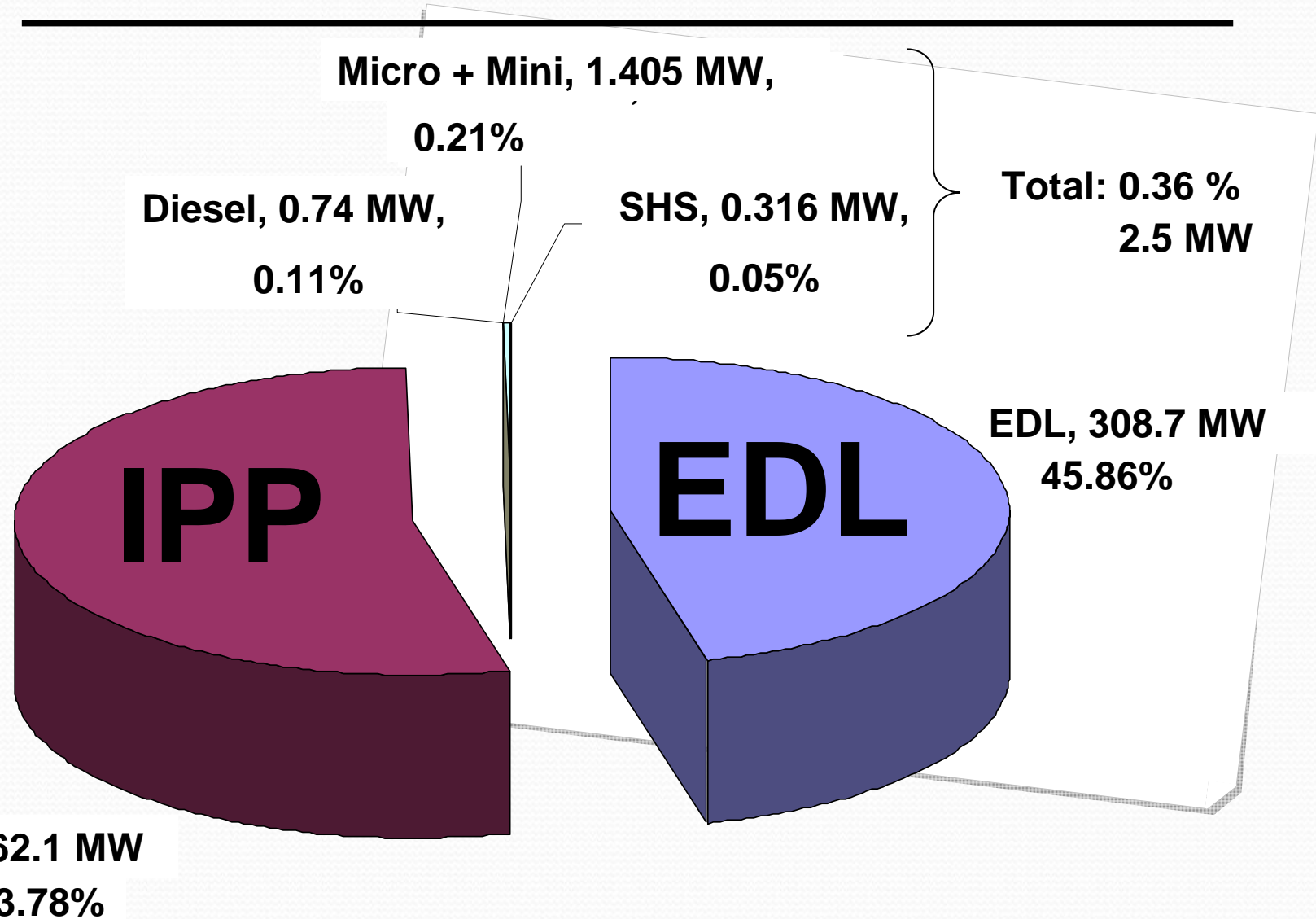
- (i) Domestic generation projects, and
(100 MW or less, built and operated by EdL)
- (ii) Export generation projects.
(exceed 100 MW, built and operated by IPP)

4. Current Electric Power Situation (statistics) (2008)



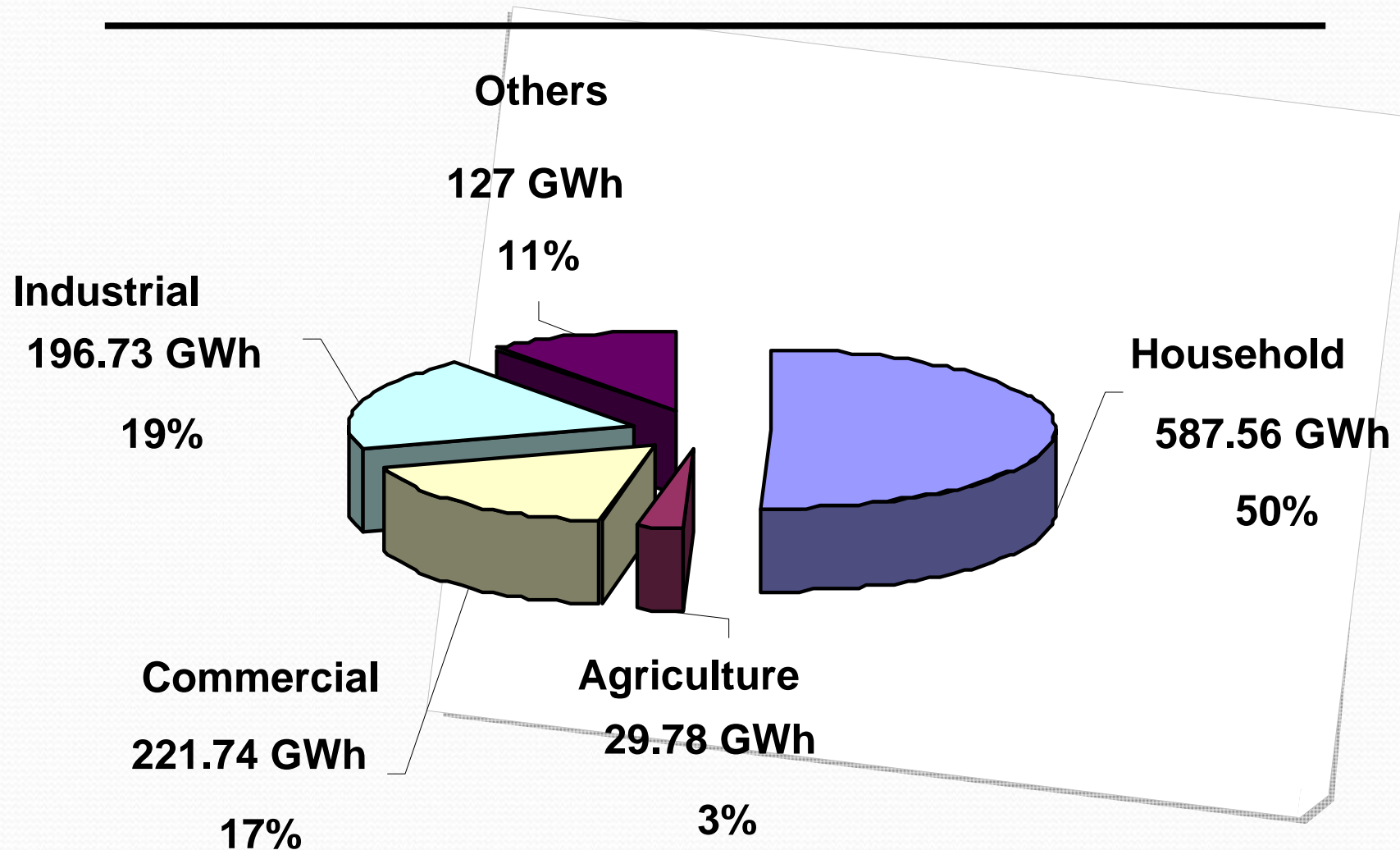
- **Total Installed capacity : 673.3 MW**
 - Hydropower: 672.2 MW
 - Diesel: 740 kW
 - Solar: 316 kW
- **Total Electricity Generation : 3,716.9 GWh**
(IPP: 1,939.3 GWh, EdL: 1,777.6 GWh)
- **Total Electricity Exporting : 2,315.4 GWh**
- **Total Electricity Importing : 844.5 GWh**
- **Total Electricity Supply : 1,915.7 GWh**
- **Total Electrified Households: 63%**

4.1 Power Generation in Lao PDR (2008)



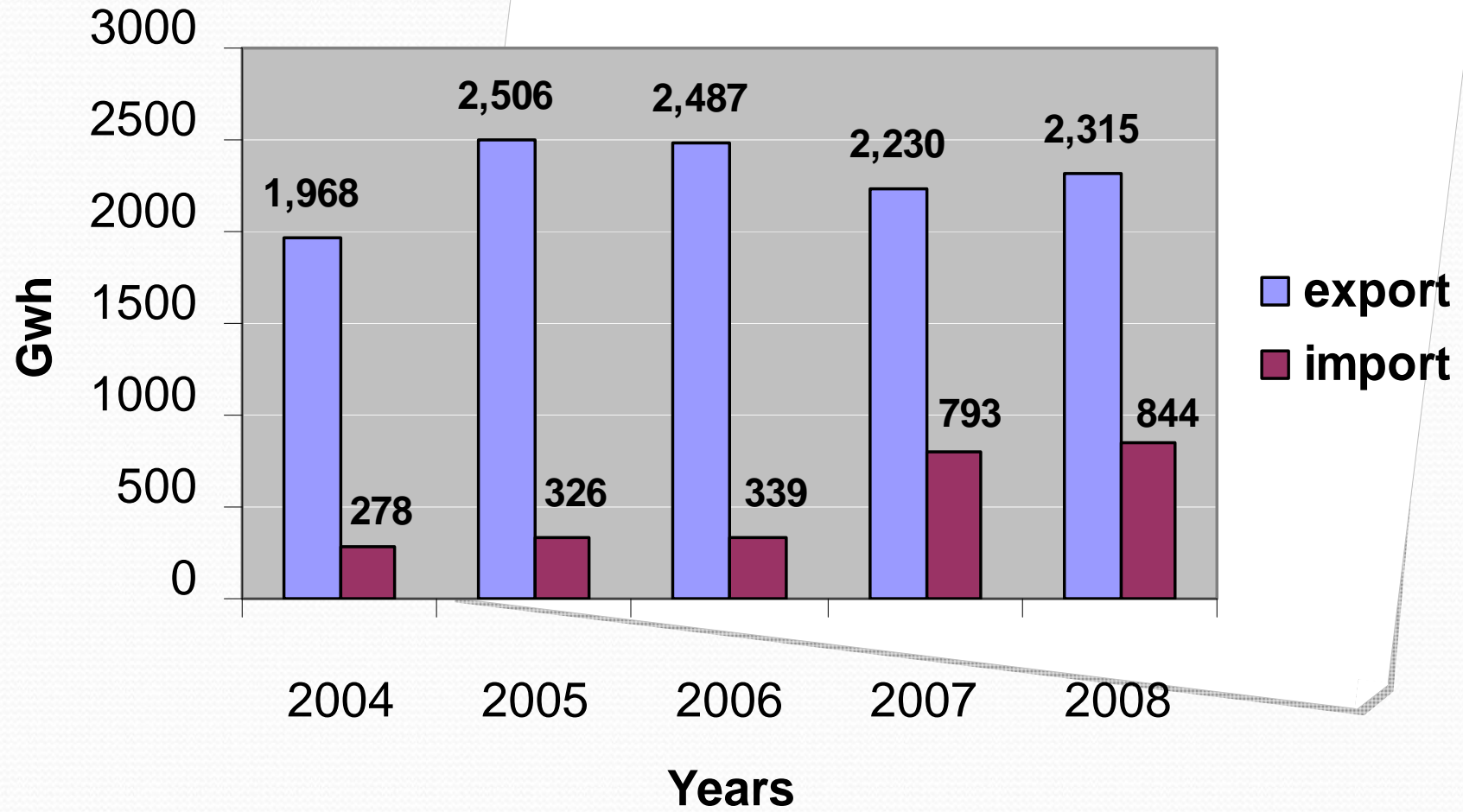
Total Install capacity: 673.3 MW

4.2 Electricity Consumption (2008)

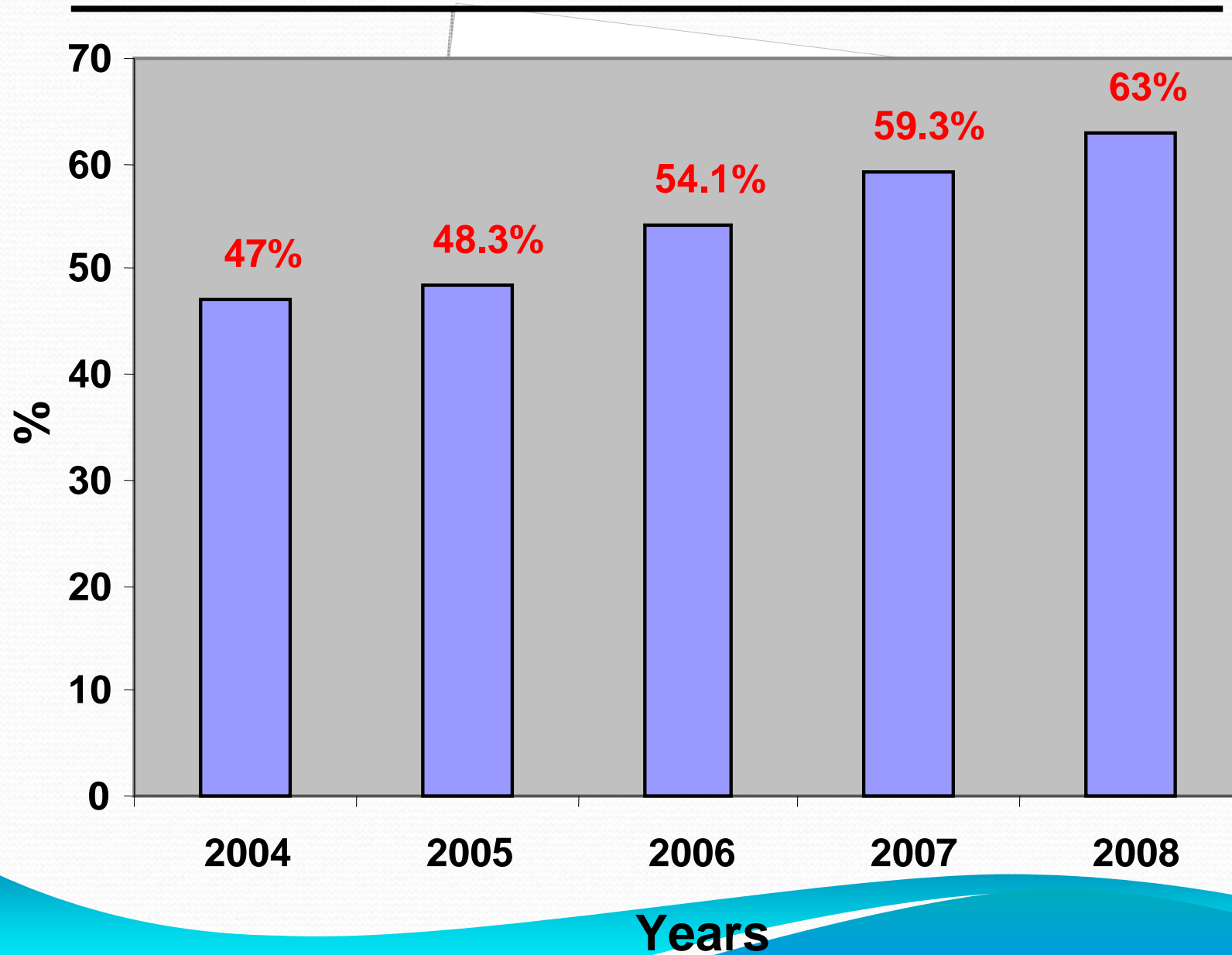


Total Electricity Consumption: 1,163 GWh

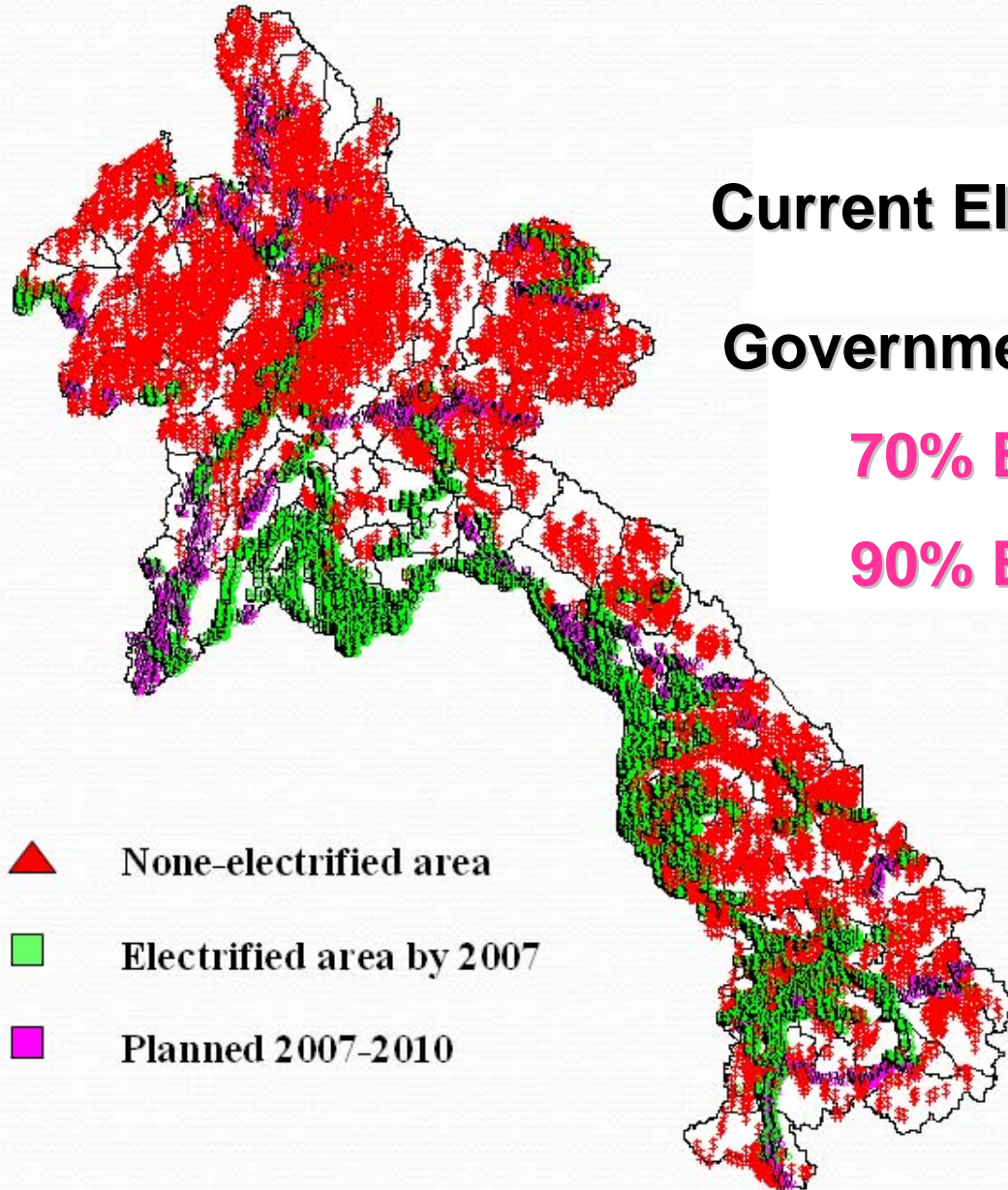
4.3 Electricity Import-Export



4.4 Country Electrification Rate



4.5 Government Targets on Electrification Extension






Current Electrification Rate: 63%

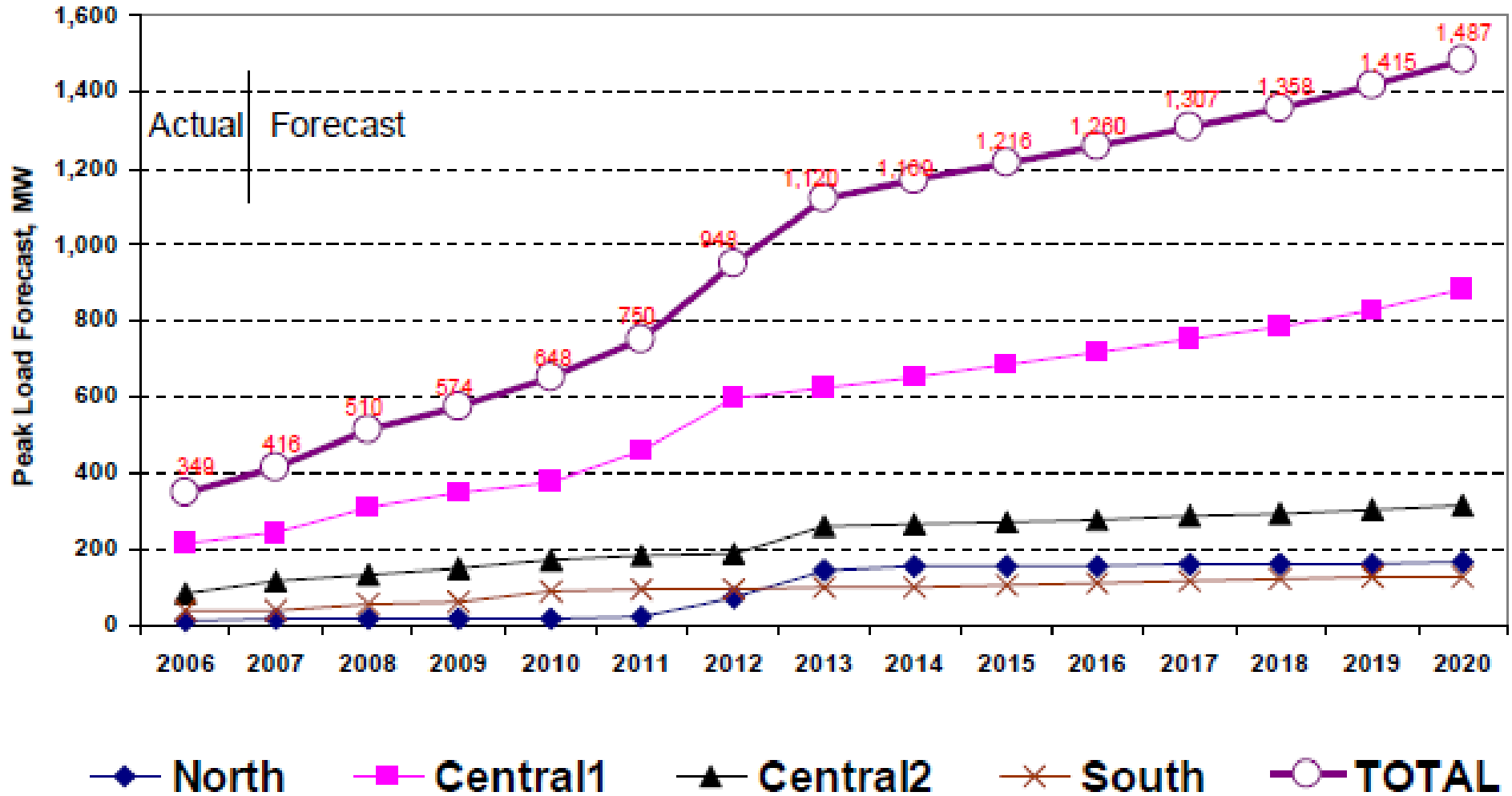
Government Targets:

70% Electrified by 2010

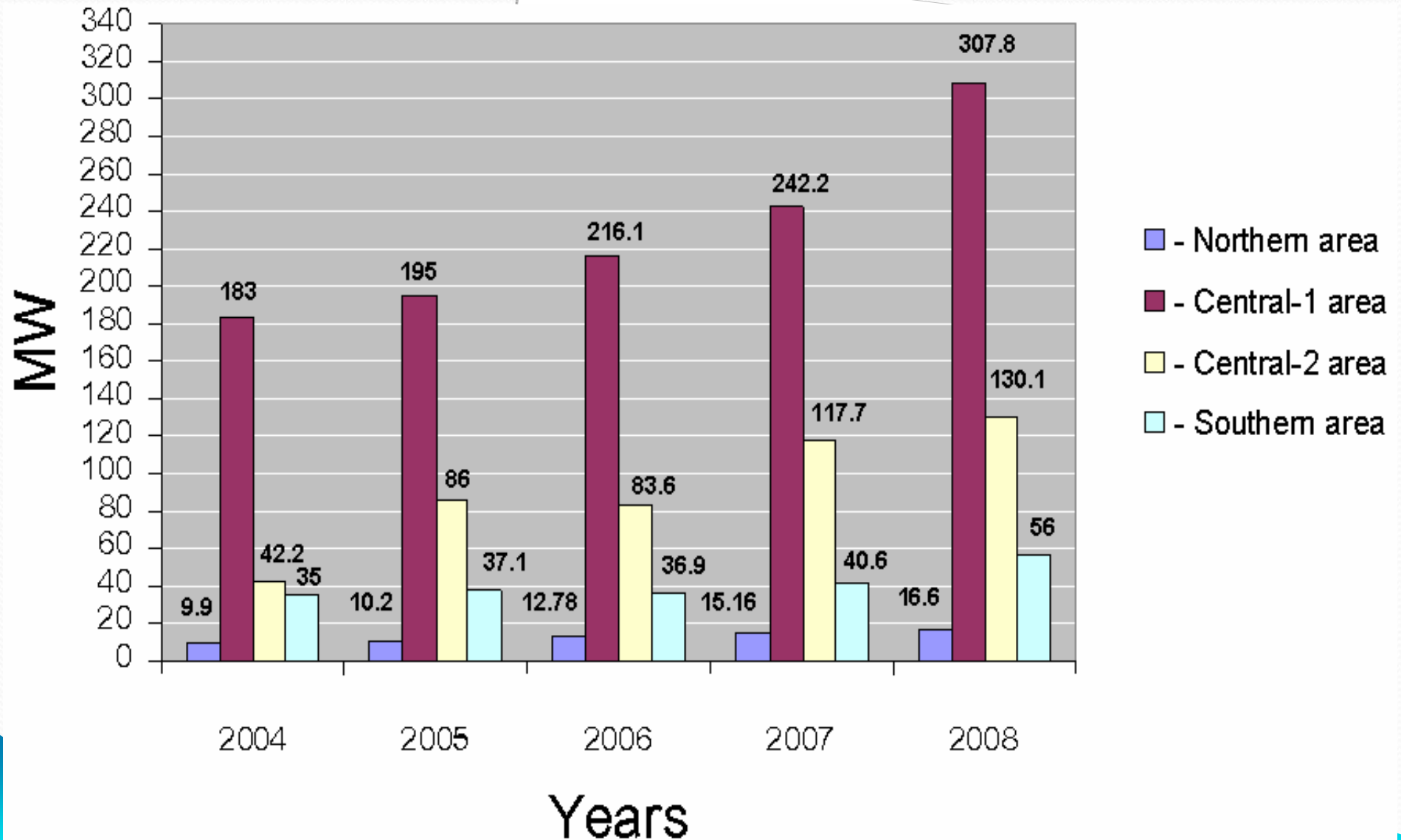
90% Electrified by 2020

-  None-electrified area
-  Electrified area by 2007
-  Planned 2007-2010

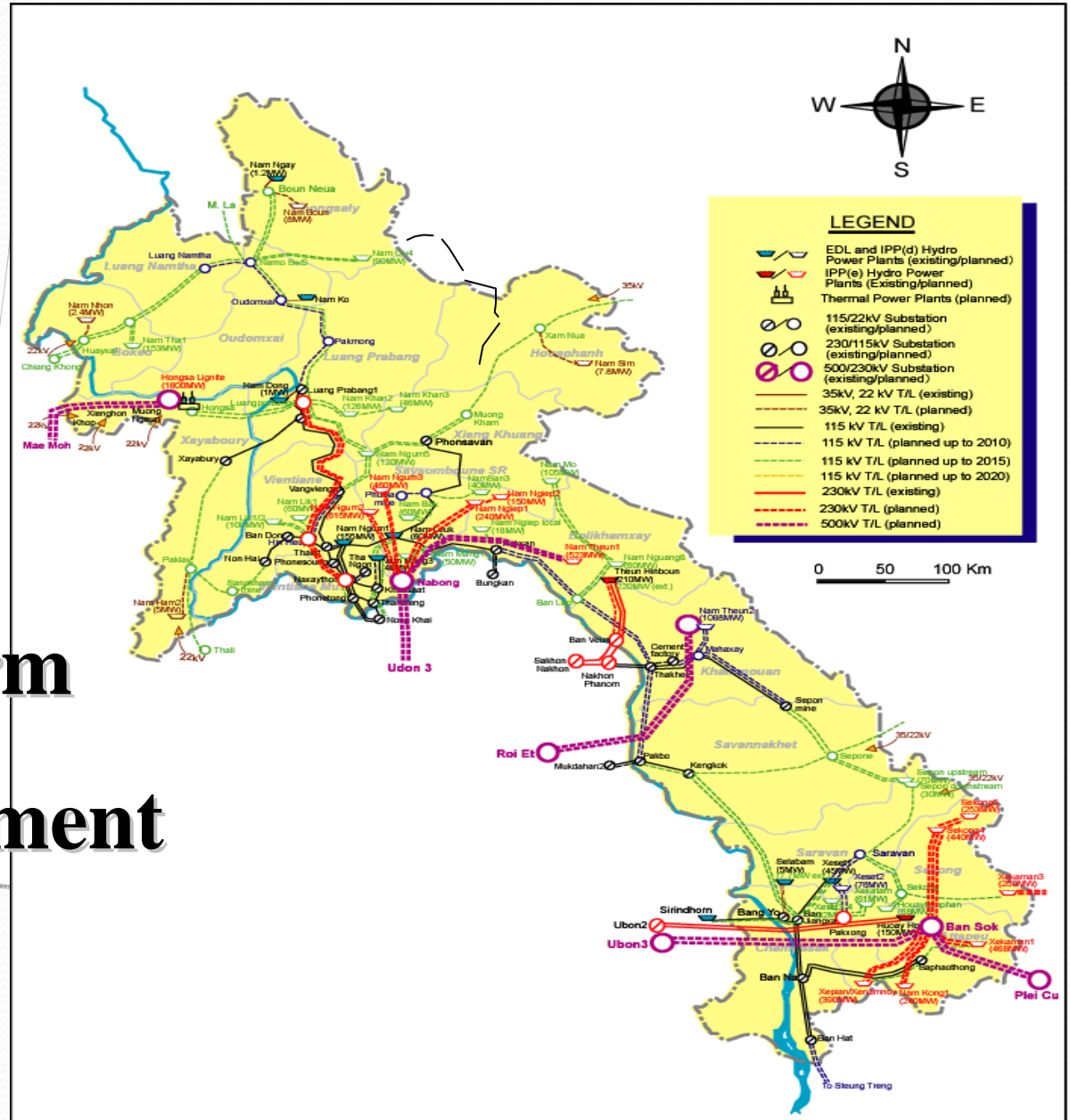
5. Demand Forecast by EDL



5.1 Maximum Daily Load



5.2 Long-Term Power Development Plan



Map 3.3-1
Planned Power System Diagram
in year 2015

6. Expectation

My expectations for the training course:

- 1. To understand of energy policy of Japan.**
- 2. To get knowledge and skill on energy policy formulation of Japan.**
- 3. To improve the skill on energy demand forecasting.**
- 4. To share and exchange the ideas with others participants on energy policy formulation.**

**Thank you
for your attention**

Electricity Tariffs

Unit: Lao kip

Category of consumers	2007	2008	2009	2010	2011
Residential consumers					
0-25 kWh	154	177	203	234	269
26-150 kWh	284	293	301	310	320
>150 kWh	773	773	773	773	773
Non-residential consumers					
Agriculture	329	345	362	380	399
Government	694	684	674	665	656
Industry	625	616	607	599	591
Commercial	835	835	835	835	835
International organization	1,077	1,077	1,077	1,077	1,077
Entertainment	1,106	1,106	1,106	1,106	1,106
Medium Voltage					
Agriculture	279	293	308	323	340
Government	590	581	573	565	557
Industry	531	524	516	509	502
Commercial	709	709	709	709	709

Exchange rate: 1 USD= 8,472 kip