



EDL'S POWER PURCHASE POLICY







Organization Structure

MEM and MOF

BOSH

BOD

MD

EDL-GEN

Business-Finance

Technical

Tran. Subs.

Distr.

HP Project

Adm.HR

6 Dep.

8 Dep.

11 Dep.

22 Branches

5 Projects

5 Dep.



Overview of EDL

- **EDL is a state-owned Enterprise under the Ministry of Energy and Mines**
- **Owns and Operates the country's main generation, transmission and distribution assets in Lao PDR.**
- **Manages electricity imports into its grids and exports from its stations**



- **Divide in 3 Parts, consist 22 Distribution Branches around the country**
- **9 Hydropower stations are belong to EDL with total installed capacity 384 MW (Dec 2010)**
- **3 Hydropower Plants with EDL share holder in operation**
- **3,420 Employees**



Highlights of the Year 2011

7 Hydropower Station into Lao Stock Market

387MW

- **EDL-Generation Public Company :**
December 15, 2010 is subsidiary to EDL
- **EDL : 75%**
- **Shares to Public : 25%**
- **Houay Lamphanh Gnai 88Mw, Namkhan 2 130Mw and Namsana 14Mw under construction**



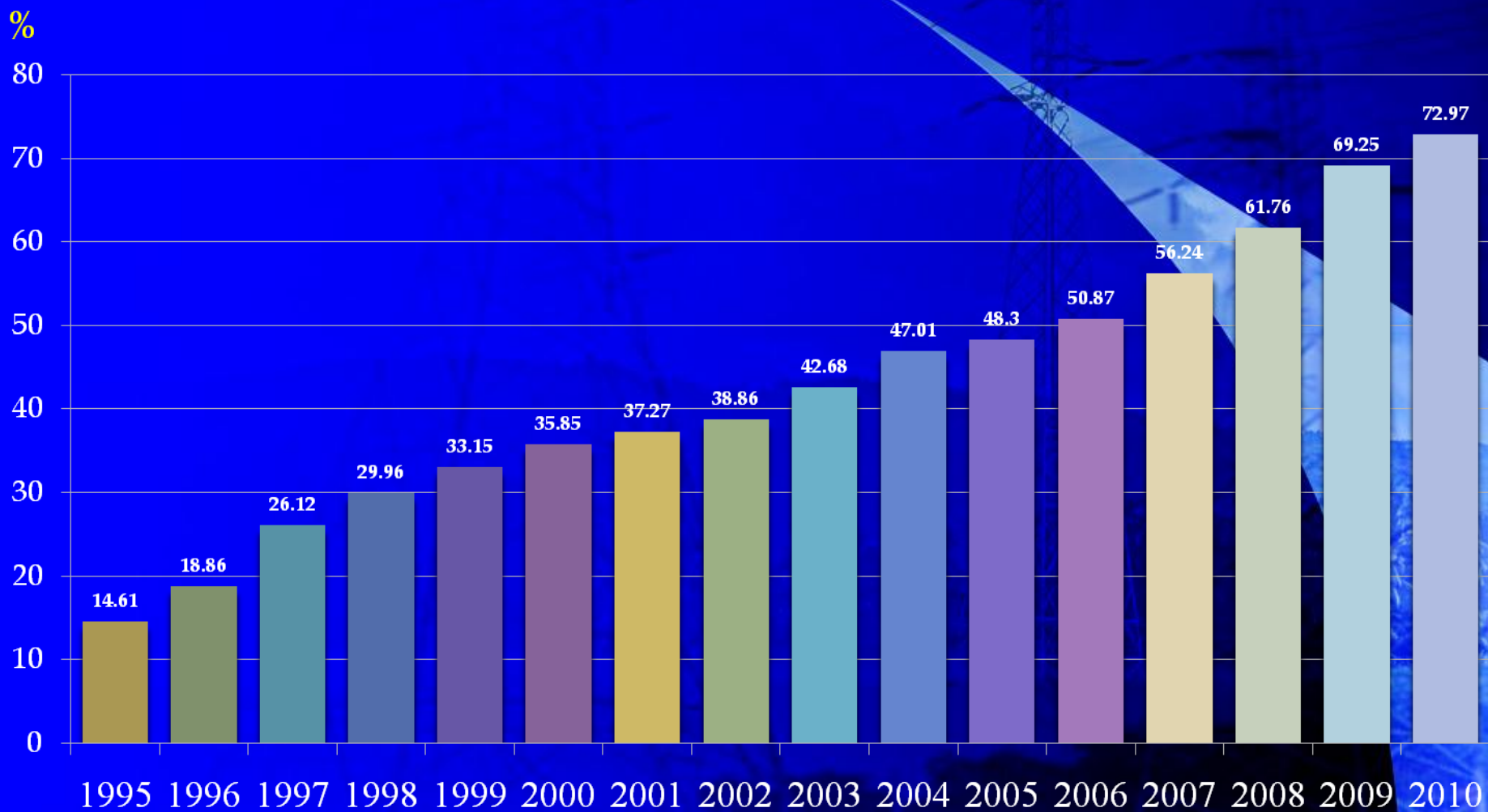
Highlights of the Year 2011

- **Shareholders in operation :** THPC 500Mw 60% HHPC 150Mw 20%, NN2PC 615Mw 25%, NL1-2 100Mw 10%, NNG 5 1120Mw 5%

		2009	2010	%
Installed Capacity	MW	384.74	384.74	0.00
Energy Generation	GWh	1,545.31	1,552.72	0.48
Energy Import	GWh	819.43	998.98	21.91
Domestic Sales	GWh	1,901.29	2,228.15	17.19
Export Sales	GWh	229.53	341.29	48.69
Domestic Sales Revenue	Million US\$	126.73	153	20.8
Revenue from Export Sales	Million US\$	8.35	13.60	62.87
115KV Transmission line	Km-Circuit	2,364.42	2,588	9.45
Medium Voltage Network	Km-Circuit	14,754.25	16,018	8.57
Low Voltage Network	Km-Circuit	12,334.54	13,180	6.85
Substation 115/22KV	MVA	790	790	0.00
Distribution Transformer	MVA	1,922.42	2,142	11.42
Branches		22	22	0.00
Number of Comsumer Meter	Units	709,143	782,517	10.35
Number of Employee		3,420	3,491	2.08
Energy Loss	%	11.98	10.78	-10.02

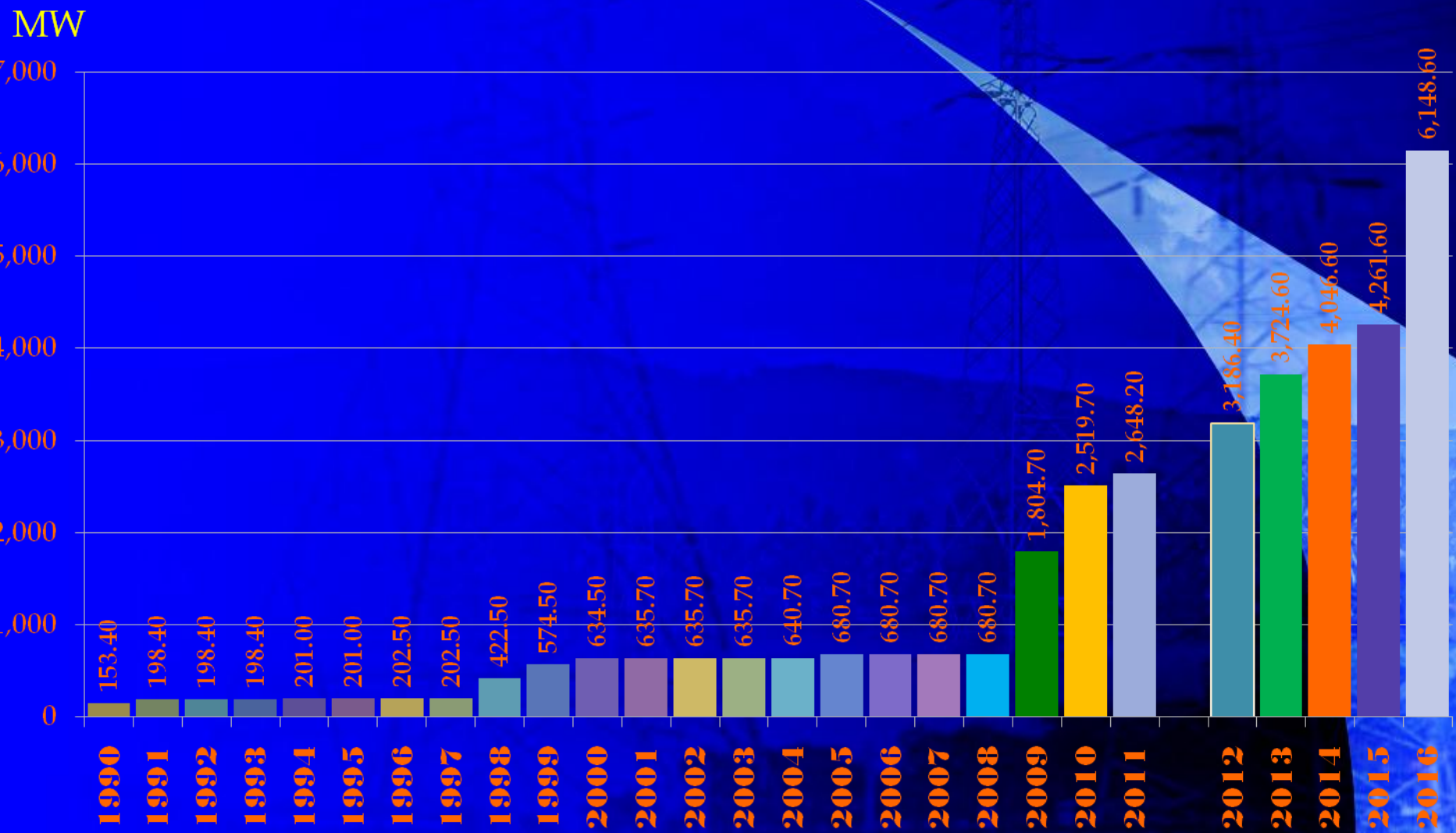


Country Householder Electrification rate





Hydropower Installed Capacity in Laos





Projects Completed in Year 2009-2010

- **Nam Theun 2 (1,088MW) scheduled COD in 2009**

- EDFI of France 35%
- EGCO of Thailand 25%
- ITD of Thailand 15%
- LHSE of Laos 25%

World Bank, Asian Development Bank and MIGA providing PRG

**17 private banks lending 70% of project cost
75 MW for domestic market**

- **Nam Ngum 2 (615MW) scheduled COD in 2011**

- C. Kanchang of Thailand 28.5%
- EdL of Laos 25%
- Ratchaburi of Thailand 25%
- Bangkok Express Way of Thailand 12.5%
- Shlapak Group of USA 4%
- PT Construction of Laos 4%
- TEAM of Thailand 1%

All financing from Thailand

- **Xeset-2 (76 MW) domestic use.**
 - **EDL 100%**
- **Nam Lik 1-2 (100MW) COD in 2010 for domestic market**
 - **CWE Corporation of China 90%**
 - **EDL of Laos 10%**

All financing from PR of China



Hydro Power Projects under Construction

- **Xe Kaman 3 (250MW) scheduled COD in 2012**
 - **EdL of Laos** **15%**
 - **Viet-Lao PIDJS of Vietnam** **85%****All financing from Vietnam**

- **Nam Ngum 5 (120MW) scheduled COD in 2011 for domestic market**
 - **Sinohydro Corporation of China** **95%**
 - **EDL of Laos** **5%**

- **THPP-Expansion (280 MW) scheduled COD in 2012**
 - **Nordic Hydropower of Sweden/Norway** **20%**
 - **MDX/GMS of Thailand** **20%**
 - **EDL of Laos** **60%****60 MW will be for domestic market**

- Hong Sa Lignite (1,800 MW) scheduled COD in 2014
 - Ban Pu of Thailand 45%
 - Ratchaburi of Thailand 35%
 - LHSE of Laos 20%
- Houay Lamphan Gnai HPP (88 MW) scheduled COD in 2014 for domestic supply, owned by EDL
- Nam Khan 2 HPP (127MW) scheduled COD 2014, for domestic supply, EDL

- Xekaman 1 (468 MW) Lao-Viet PI&JSC, Viet Nam 100%, 20% of Energy Output for domestic
- Namsana HPP (14 MW), EDL 100%, All Energy output for domestic
- Nam Ngiep 2 HPP (180 MW), EDL 10%, All Energy output for domestic



Hydro Power Projects under Development

- **Nam Ngiep 1 (260 MW)**
 - **Ratchaburi of Thailand** 25%
 - **LHSE of Laos** 20%
 - **Kansai Electric of Japan** 55%
- **Nam Theun 1 (520 MW)**
 - **Gamuda Berhad of Malaysia** 45%
 - **EGCO of Thailand** 35%
 - **LHSE of Laos** 20%
- **Nam Ngum 3 (460MW)**
 - **MDX/GMS Power of Thailand** 27%
 - **LHSE of Laos** 23%
 - **Ratchaburi of Thailand** 25%
 - **Marubeni Corporation of Japan** 25%
- **Nam Ou cascades(7) development: 1,143 MW for domestic market**
 - **SINOHYDRO** 85%
 - **EDL** 15%

Xe Kong 4 (528 MW)

Regional Oil of Russia	85%
EDL/LHSE of Laos	15%

Xe Kong 5 (250 MW)

Regional Oil of Russia	85%
EDL/LHSE of Laos	15%

Nam Kong 1 (238 MW)

Regional Oil of Russia	85%
EdL/LHSE of Laos	15%

XePian-XeNamNoy

- **SK Eng& Const. of Korea** **85%**
- **LHSE of Laos** **15%**

1,320 MW on the Mekong river at Pakbeng

**1,410 MW on the Mekong river at
Luangprabang**

1,260 MW on the Mekong river at Sayaburi

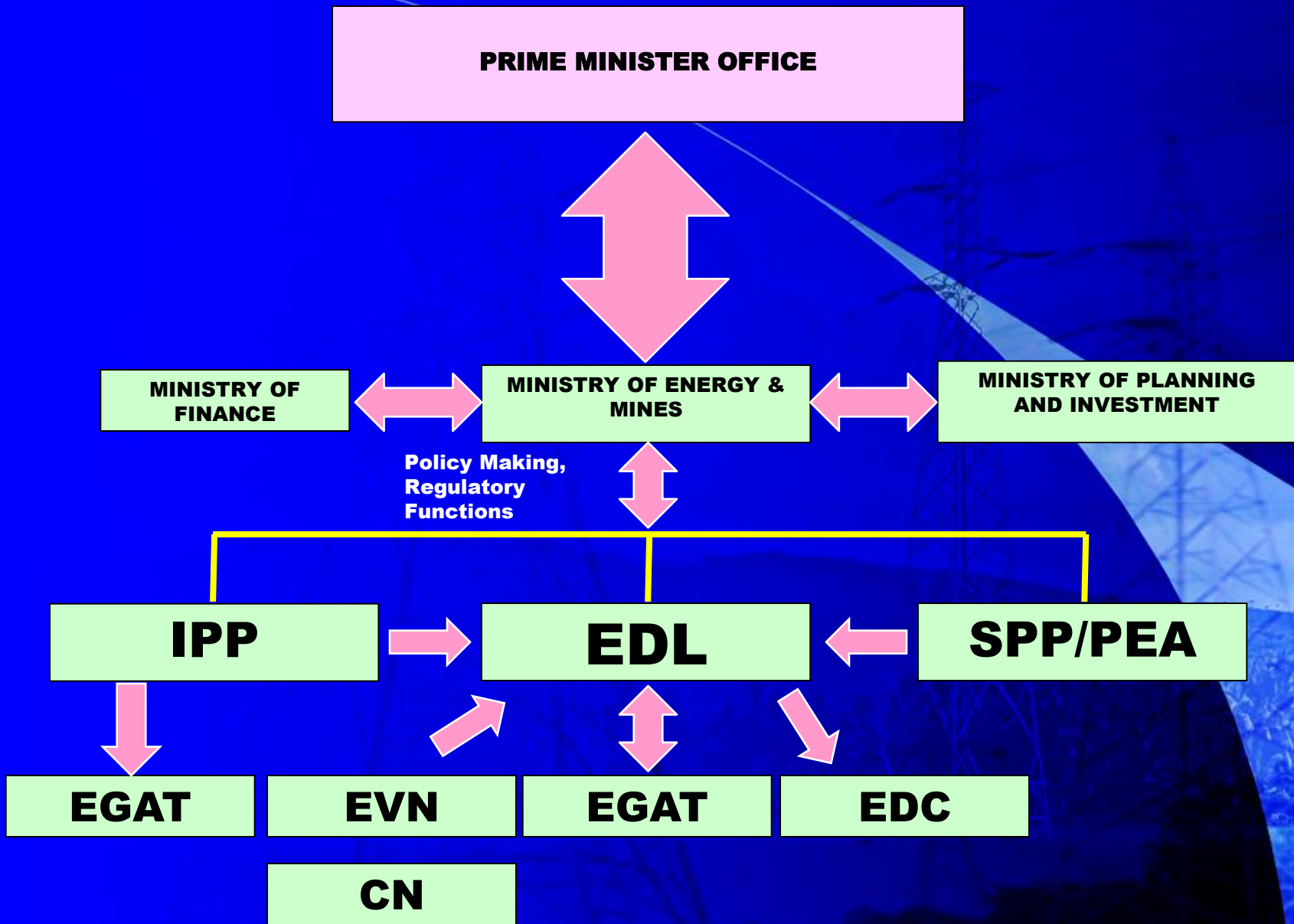
1,320 MW on the Mekong river at Paklay

1,000 MW on the Mekong river at Sanakham

**2,330 MW on the Mekong river at Bankoum
(Lao-Thai border)**

800 MW on the Mekong river at Ladseua

**360 MW on the Mekong river at Done
Sahong**





Power Purchase Agreement (PPA)

- **Export-Import Power Purchase Agreement (NNG1 and Xeset)**
- **Import Power Purchase Agreement (CN, EVN)**
- **Domestic Power Purchase Agreement**
- **Export Power Supply Agreement (EDC)**
- **Domestic Power Supply Agreement (for Industries..... In following Categories)**



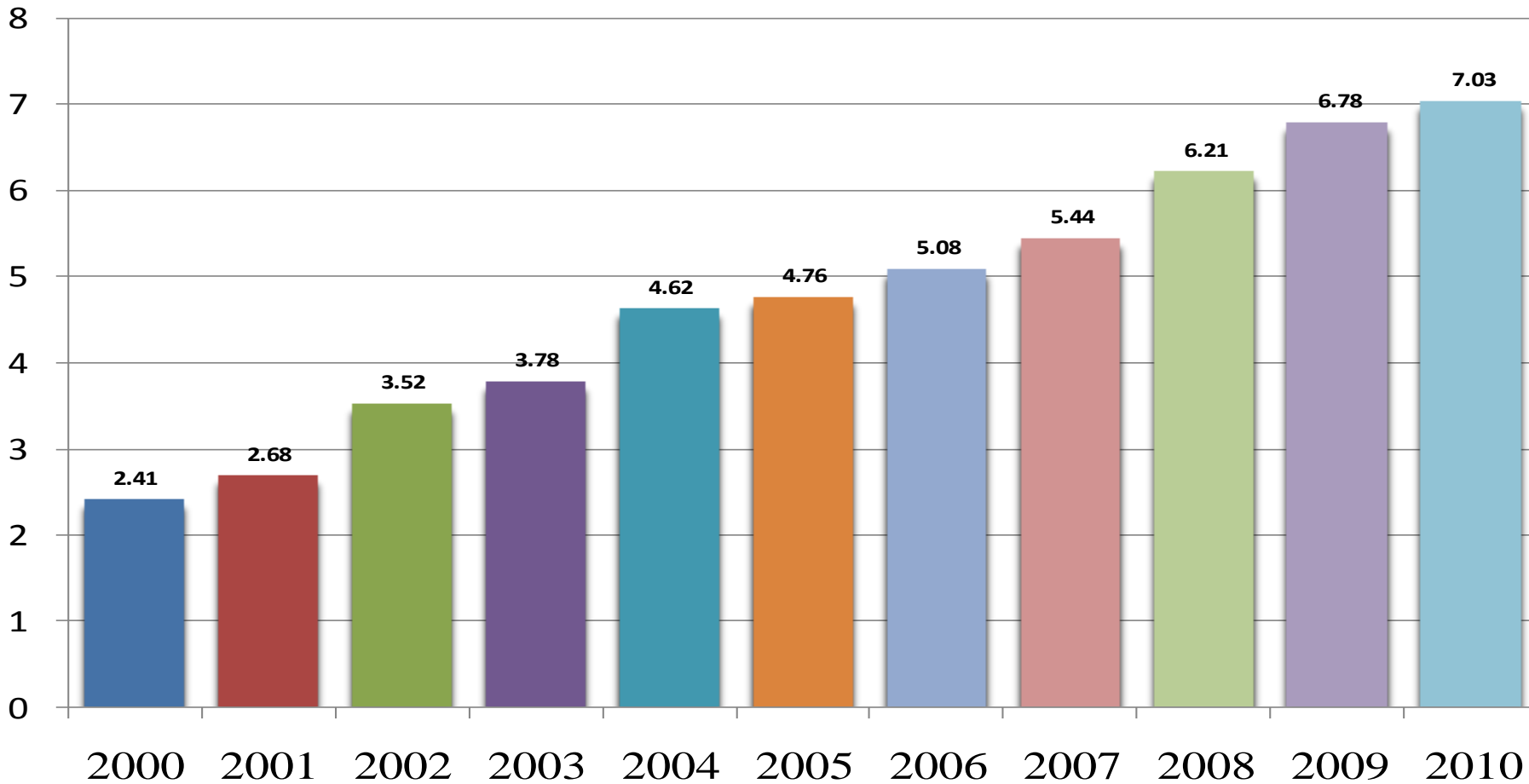
Energy tariff in Lao PDR (LV and MV)

Category	2008	2009	2010	2011	2012
<u>Residential (LV)</u>	Kips	Kips	Kips	Kips	Kips
from 0 - 25 kWh	177	203	234	269	331
26 - 150 kWh	293	301	310	320	442
More than 150 kWh	773	773	773	773	780
<u>Non Residential LV</u>					
Irrigations	345	362	380	399	471
Gov. Offices	684	674	665	656	781
Industries	616	607	599	591	692
Business	835	835	835	835	998
Diplo & Inter.Agencies	1,077	1,077	1,077	1,077	1,152
Entertainments	1,106	1,106	1,106	1,106	1,152
<u>MV</u>				HV=647	HV=647
Irrigations	293	308	323	340	424
Industries	524	516	509	502	623
Gov. Offices	581	573	565	557	703
Business	700	700	700	700	808



Average Domestic Electricity Tariffs

US Cents





**Thank you very much for
your Attention**