

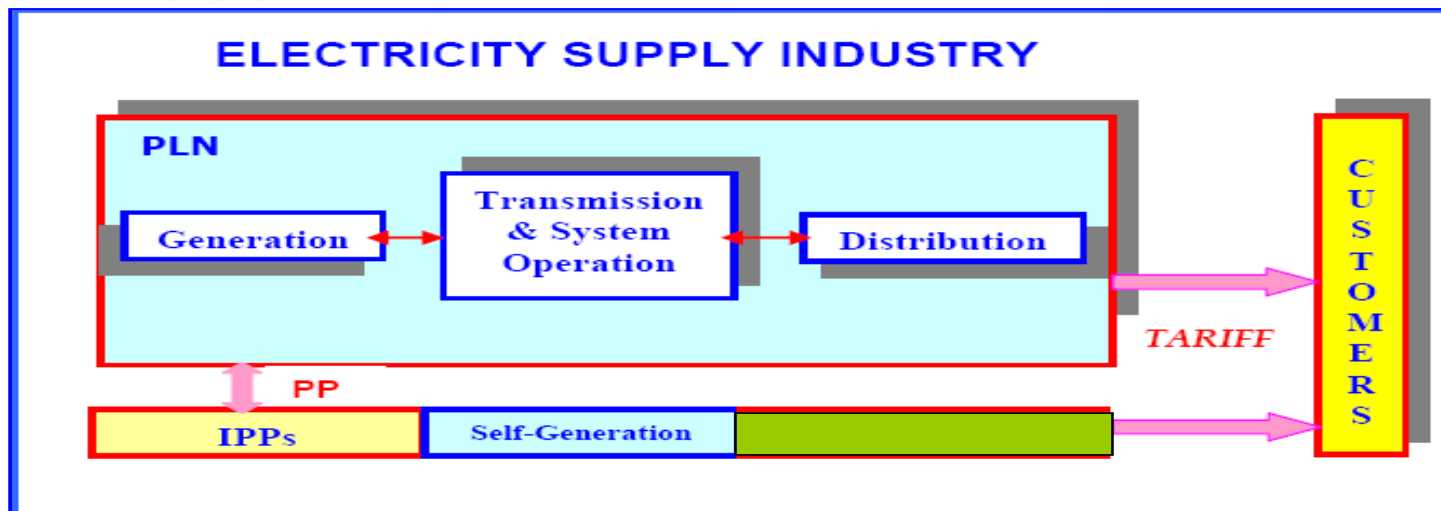
Pricing Practice in Indonesia Electricity Service

Indonesia Service Dialogue
25 July 2013

Objective

- ▶ Three areas of problem that need to be addressed by adopting more market-friendly regulations in Indonesia's electricity sector
 - Market structure that restricts the development of this service
 - The absence of effective regulatory arrangement and legal framework
 - Financing of operation. The current tariff structure neglects cost-recovery and economic principles
- ▶ The paper focuses on the third problem
 - The tariff structure that is not economically sustainable.

Current Arrangement of Electricity Services

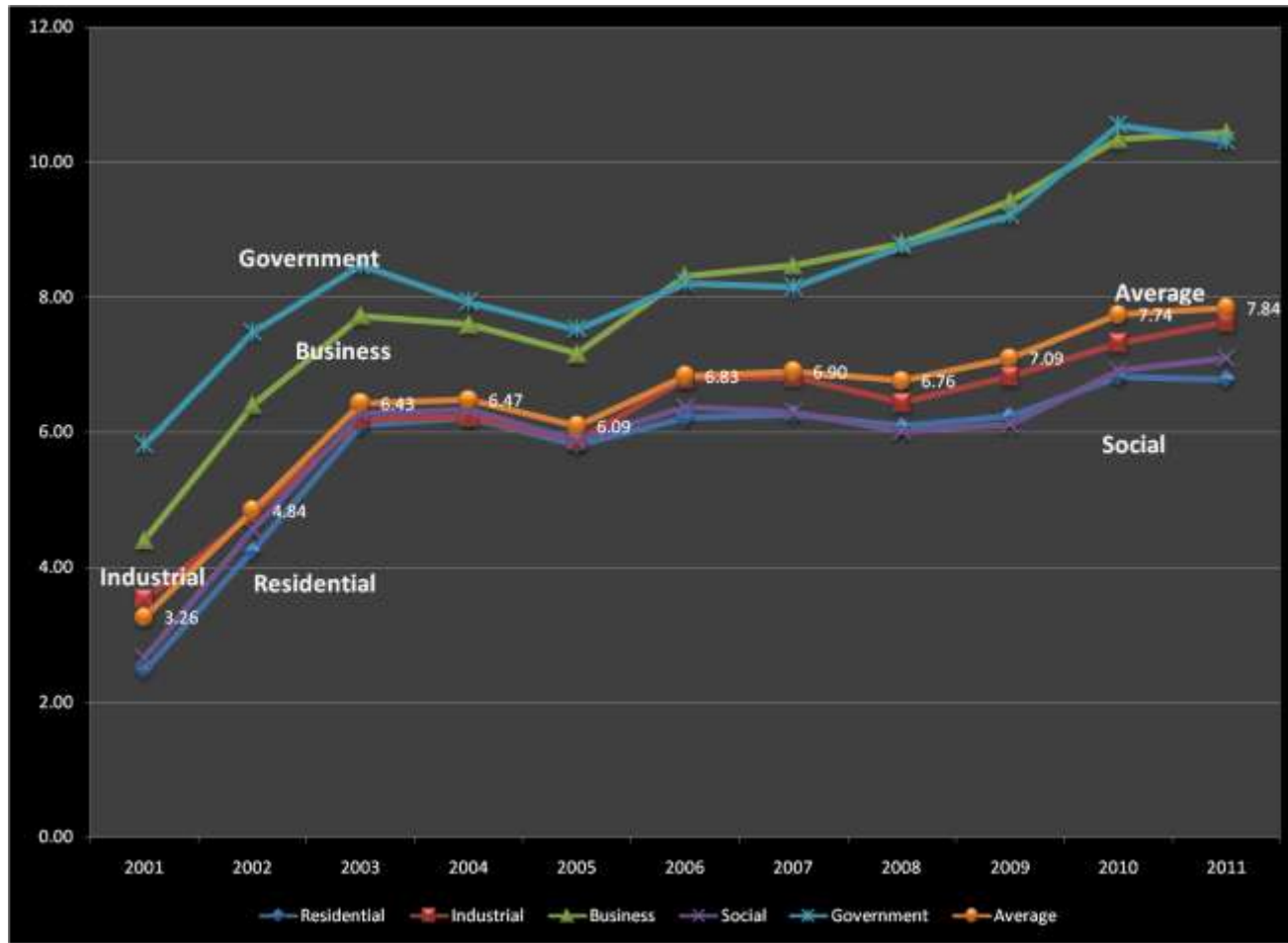


- ▶ PLN is the only company allowed to operate in all part of electricity services: generation of power, transmission of power and distribution and sale
 - Generation has been partially liberalized by allowing IPPs; currently there are 28 IPPs
 - Transmission and distribution are closed to other providers
- ▶ New Electricity Law 2009 opens-up the possibility
 - Time is needed for supporting institutional and legal frameworks

PLN's Tariff Structure

- ▶ Classification of tariff rate based solely on consumer characteristics. The groups are further classified based on maximum power installed for the customers
- ▶ Each group pays different basic charge and utilization charge. The basic charge is higher for customers with higher power installed in their premises, while power utilization is priced progressively according to monthly usage
- ▶ Residential customers tend to pay, on average, lower than other groups
- ▶ No other characteristic used in determining electricity service pricing
 - No geographical variation
 - No peak-off-peak tariff differentiation
 - No automatic adjustment to incorporate economic shocks
 - No voluntary additional charges for renewable energy

PLN Tariff Schedule



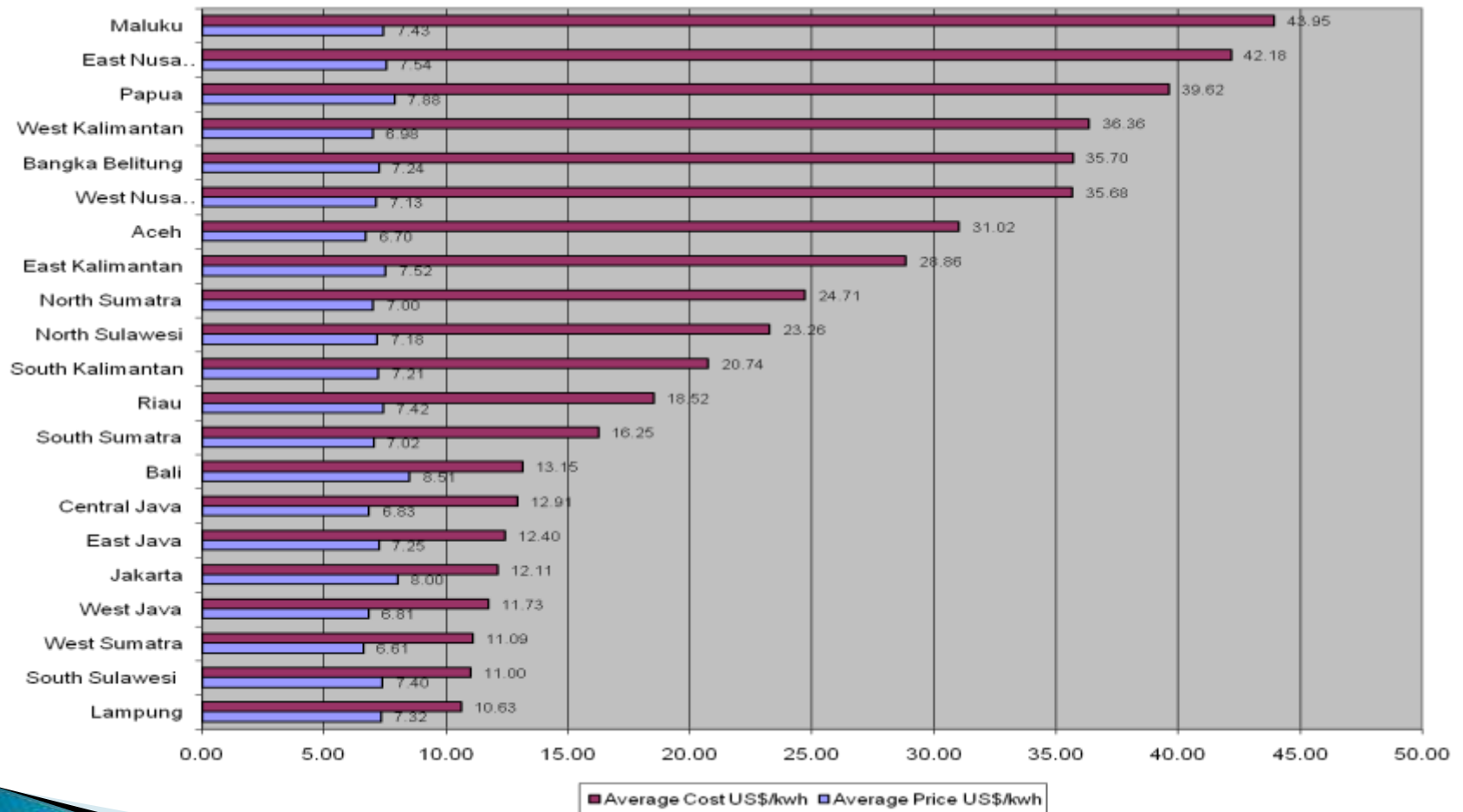
Cost Structure

PLN Cost Structure by Type of Power Plants (US Cents)

	Fuel	Maintenance	Depreciation	Others	Personnel	Total
Hydro	0.23	0.31	0.93	0.05	0.19	1.71
Steam	5.49	0.21	0.67	0.03	0.07	6.47
Diesel	92.17	4.97	1.67	0.20	0.98	99.99
Gas Turbine	23.02	0.80	0.90	0.03	0.10	24.85
Geothermal	7.76	0.08	0.69	0.02	0.16	8.71
Combined Cycle	9.63	0.30	0.56	0.03	0.04	10.56
Average	10.28	0.43	0.70	0.03	0.10	11.55

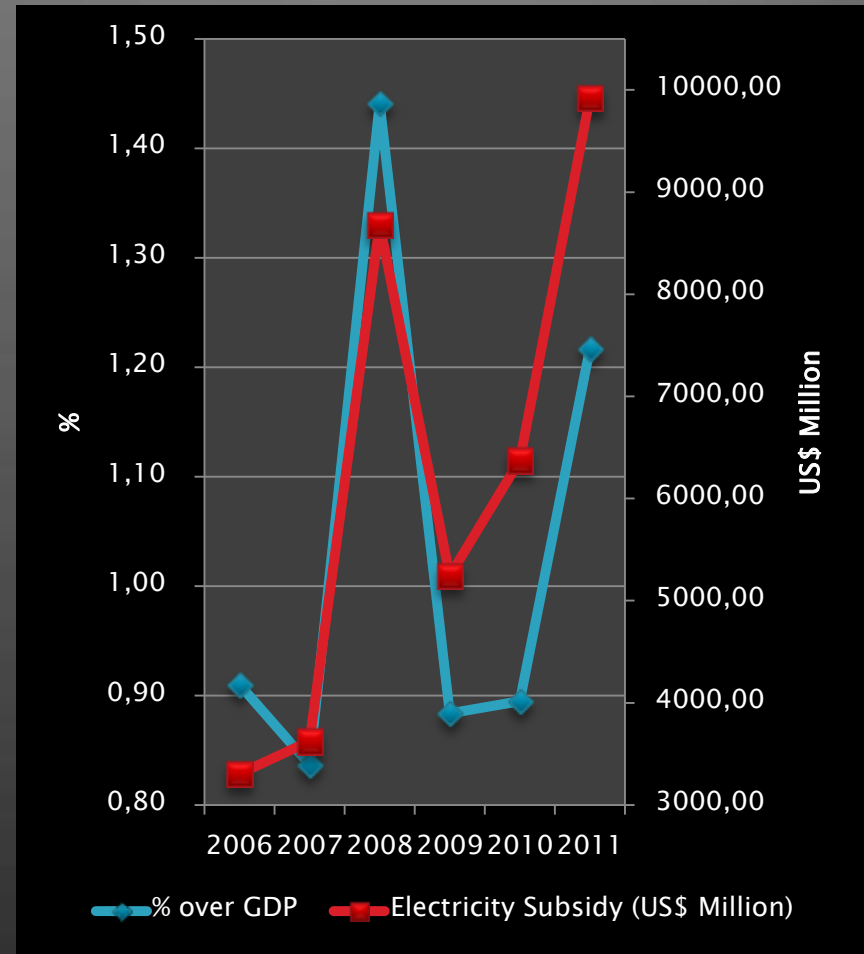
- ▶ Electricity service is marked by high cost of generation and transmission
- ▶ Electricity generation depends a lot on expensive primary sources
 - Two-thirds of generation still comes from oil fuel
 - During the last 10 years, the price of oil increase by almost 1000%, bringing the cost of generation of diesel plants to rise by over 800%
- ▶ Big variations in costs of production across different regions
 - Due to differences in the use of primary energy sources

Regional Cost–Revenue Comparison



Subsidy

- ▶ The big discrepancies between selling price costs of operation has resulted to heavy subsidy
 - Automatic price adjustment is no longer in place; PLN needs to wait for several years before the adjustment takes place
 - When price of fuel increases in 2008, only after two years, the price changes; resulting in heavy fiscal burden
- ▶ The only mechanism available to reduce subsidy is by having inter-group subsidy
 - High-power groups pay higher than low-power
 - Residential groups pay lower than business and industries
 - It is not enough to cover the gap



Some Recommendations

- ▶ Part of electricity problems come from pricing that neglects cost–recovery and sustainability
- ▶ PLN needs to shift to cheaper primary sources
- ▶ The government needs to reintroduce automatic tariff adjustment by having two components of tariff
 - Base tariff for certain period, say 2 years
 - Adjustment tariff to take account exchange rate fluctuation, fuel price shock; reviewed quarterly
- ▶ Tariff structure should incorporate various features
 - Peak and off–peak time
 - Geographical differences
- ▶ Subsidies that go to residential groups tend to encourage inefficient consumption
 - Revising formulation of subsidy by taking account costumers profile, not only power usage